ROLE OF LIBRARIES IN NATIONAL DEVELOPMENT

Papers of the
42nd All India Library Conference
Calicut
December, 21-24 1996

Edited by
R P Kumar
Divya Srivastava
S P Gupta



Indian Library Association
Delhi

1996

ROLE OF LIBRARIES IN NATIONAL DEVELOPMENT
Papers of the 42nd All India Library Conference
December, 21-24 1996

ROLE OF LIBRARIES IN NATIONAL DEVELOPMENT

Papers of the
42nd All India Library Conference
Calicut
December, 21-24 1996

Edited by
R P Kumar
Divya Srivastava
S P Gupta

Indian Library Association
Delhi

1996

© INDIAN LIBRARY ASSOCIATION 1996
ISBN 81-85216-30-4

Cataloguing-in-publication data : KUMAR, R.P., SRIVASTAVA, D. and GUPTA. S.P. Eds.

Role of Libraries in national development
Papers of the 42nd All India Library Conference, December 21-24, 1996, Calicut; New Delhi, Indian Library Association, 1996. 463 p.

Libraries-National development; Library Services; Libraries-National Policy; Library Associations; Libraries-Information Technology; CD-ROM; Libraries-Networking.

ISBN: 81-85216-30-4

Can be ordered from:
The General Secretary, Indian Library Association,
A/40-41, Flat No. 201, Ansal Building
Mukherjee Nagar, New Delhi-110 009
(Ph: 7117743)

Price Rs 650.00
US $ 65
£ 40

Laser typeset and Printed by Printo Craft, 1811-A (IInd Floor) Giani Bazar,
Kotla Mubarakpur, New Delhi-110003 Telephone : 4697536

CONTENTS

Editor's Note

Section 1: ***Library as Tools of Democracy***

Literacy movement and library service for the neo-literates and illiterates. — *Amit Kumar Bandyopadhyay.* *1*

Library: Preparing the society for a healthy nation — *Keya Basu.* *12*

Making information accessible to various sections of the society — *More Saraswati* *18*

Indian library system and national development — *K.C. Dabas, N.S. Gill, Sheela Dabas* *24*

Role of libraries in national development — *K. Andhra Matha* *36*

Role of libraries in national development — *Dr. N.C. Ghatak* *46*

National information and role of libraries in India — *Dr. Biswanath Panda.* *57*

Libraries and librarianship in Uttarakhand: A perspective — *Dinesh Chandra Goswami* *66*

Impact of library services in national development — *K.M. Krishna* *73*

Role of public libraries in promoting literacy programmes in Tamil Nadu: A comparative study with JSN — *K.T. Dilli, Manorama Srinath* *77*

Libraries for socio-economic development : Proposal for a Malabar Studies Collection — *M. Parameswaran.* *86*

Information policy for India — *Dr. S.L. Sangam* *94*

Information for risk and crisis management: The role of community information services — *V. Vishwa Mohan* *102*

Information needs and the use of library resources of social science research scholars of K.K. Handiqui Library of Gauhati University — *Dipika Chaudhury* *106*

Section II : *Library Services*

Adverse influence of cash crunch on information services and development — *Dr. V. Venkataramana, Dr. Mohd. Burhanuddin, N. Varatha Rajan* 111

Role of state, central, divisional and district libraries in the national development — *Dr. R.S. Balekar.* 119

An analytical and practical approach to rural library service — *Naresh Boonlia.* 130

Use of stategic marketing techniques in promoting public library services —*Khaiser Nikam* 138

Role of rural community library in national development in India — *P Anuradha* 147

Role of public libraries in distance education with special reference to Rajasthan — *Dr. H.B. Nandwana* 154

Public libraries and recreational needs -*More Saraswati* 160

Power development in India and role of power sector libraries : P.F.C. Library and Documentation Centre — *Shankar Singh* 167

Role of a library in medical education: An evaluation of Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) Library, Kerala — *Bijimol Joseph* 173

Assessment of services of the humanities libraries in India: A users' survey — *Dr. M. Kanakachary* 184

Status of educational college libraries under Nagarjuna University jurisdiction : - A study — *P. Swarna Kumari* 193

Educational services and developed school libraries: Fulfilling a goal towards national development — *Mary George Chacko* 204

Library extension service : A holistic approach to the national development — *J. Abraham, N. Arumugam, J. Mahendran* 211

School libraries in Delhi : A study — *Sunil Kumar* 222

School libraries in Karnataka State : What they ought to do in national development — *P.G. Tadasad, B.S. Maheswarappa* 226

Standardization of bibliographic records in college libraries
— *Dr. B. Ramesh Babu* 232

Section III : *National Policy*

National development through library legislation in India
— *S.C. Srivastava* 240

Financial resources in the Indian library legislation:
A study — Dr. *S.R. Ijari* 245

Tamil Nadu library legislation for the national development:
A warning to library professionals — *V. Thillainayagam* 258

Section IV : *Voluntary Agencies*

Marathwada Library Association
and its role in education - A case study — *More Saraswati* 273

Vidyarthi Shayak: A bridge for rural students
— *C.P. Pharande* 279

Services to children by voluntary agencies in Madras:
A situational report — *Dr. A. Amudhavalli, Dr. R Samyuktha* 284

Section V : *Role of Technology: Computer*

Technology and the library
— *Manju Kant* 291

Role of information technology in information
management — *Abdul Majid Baba* 298

Impact of information technology on social development.
— *N. S. Gill, K. C. Dabas, Sheela Dabas* 305

Information technology and community development
— *Padma, V. Upadhya* 323

Information dissemination through multimedia
resources — *Dr. Chandra Bhushan S.* 329

The mainstream infotech to unleash a new global economy
— *S. Venugopal* 336

Application of information technology in library and
information services: Trends, issues and strategies
— *D.B. Ramesh, B.K. Dalai, M.K. Seth, J.R. Sahu* 341

Library and information networking: current services and trends — *Abdul Rashid* 353

Scope and challenges of networking libraries in India — *Sarita Sharma* 364

Role of electronic and communication media in networks of libraries and information centres in India — *S.S. Pawar* 374

Internet and Java: Overview — *S. Swaminathan, S.A. Mathias* 384

Five years of on-line access centre — *V.S. Deodhar* 390

Use of databases in library automation — *Dr. B.U. Kannappa Nair, M. Vijayakumari, H.S. Siddharana Swamy* 405

Use of CD-ROM Products: A review — *Dr. Sangita Gupta* 412

Role of E-mail in library automation — *O.N. Chaubey* 418

Document delivery systems — *Dr. A. Amudhavalli, C. Floreace* 427

Priorities in information management systems for agricultural research and development in India — *Prof. R. Raman Nair* 431

Towards digital libraries — *Dr. S. Humayoon Kabir.* 445

Impact of information technology on library personnel: An analytical study of university and engineering college libraries in Tamilnadu and Pondicherry — *K. Nithyanandam, Dr. Manorama Srinath* 454

Author Index 463

Subject Index 464

Preface

As information services to readers have developed in the last twenty years, a key factor has been the change in the profile of a typical librarian. The librarians are now more numerous, better qualified, and more likely to be a part of a team. The growth in scientific literature demanded an intermediary who could ease for the professionals the chore of arranging that literature and finding items for them. Subsequently, the literature accumulated to the point where sophisticated methods for these tasks, which at heart remain the same, needed to be developed.

The involvement of specialized librarians using these techniques followed. The information explosion of the post-war period has required rapid changes in the librarians' methods; and the library profession adapted itself to keep pace with it, and to keep abreast with the changing information environment. Some other developments that have led to the improvement needed in access to the literature are new technology, the growth of postgraduate education, and integration and co-operation amongst libraries.

With the advent of computers, in the last two decades, the computer is now firmly entrenched in all but the smallest libraries-some medical libraries use a computer in their house keeping routines and many more use the distant computer based information services. The chief effects have been, on the one hand, to make light of time-consuming tasks, leaving the librarian more time to devote to users, and on the other, to bring more elaborate services, formerly impracticable, within the reach of most medical libraries. The librarians now have some powerful tools to hand.

The interaction of these influences means that, for most library users, their access to information has expanded enormously. The libraries co-operating in regional groups, and pooling their resources, can provide better service than in isolation.

The proceeding papers have been arranged under five sub-heads namely, Library as tools of democracy, Library Services, National Policy, Voluntary Agencies, Role of Technology: Computer.

Under each head papers are arranged according to sequence of their acceptence.

The document is provided with an author and short subject Index. Key words of subject index have been picked up form title and headings and subheadings of every articles.

Views expressed in the articles are of authors themselves and they have been printed as such without any alteration. The association or editorial board is no way responsible for the thought content of articles.

The editorial members are thankfull to the staff members of the AIIMS Library for their co-operation and all of the other collegues and friends for their constant help in bringing out the present document.

Thanks are also due to our printer M/s Printo Craft for doing the job satisfactorily in a record time.

R P Kumar
Divya Srivastava
S P Gupta

ROLE OF LIBRARIES IN NATIONAL DEVELOPMENT

K. ANDHRA MATHA*

ABSTRACT

The paper emphasises the role of libraries in National development through dissemination of information for socio-economic development, decision making, political, economic, academic, scientific and technological advancement. The progress of every aspect is linked with the availability of right information at right time.

Discusses the information needs of a developing society and the relation between information and society which is considered as a social right, a social function.

Describes in detail the role of information in education Research and Development, Industry and production, planning and policy making. Suggests the source of information for the industrial development and reliable mode of communication. The role of public libraries and the need for modern technology is also enunciated.

Suggests that it is important to give due attention to the need for developing manpower capable of carrying out research methodologies including the emerging area of quantitative techniques in the information area will be necessary. The information professional should acquire different types of knowledge for the effective function of information centres.

INTRODUCTION

According to Dr. S.R. Ranganathan "a library is a public institution or establishment, charged with the care of collection of books, the duty of making them accessible to those who require the use of them and task of converting every person in its neighbourhood into a habitual library goer". Library acts as spiritual guide and saviours of human soul. It has established itself as a vital organ for human education. Impact of Libraries in our social life needs no elucidation. A well organised network library system can supply the most efficient and effective information and it is the key for national development. It plays a distinctive role in the communication system.

* Library Assistant, Dr. V.S.K. Library, A.U. Waltair

The role of libraries in society has been changing over the centuries. It is matter of historical fact there has been a gradual increase in dependence of the society on libraries for its information requirements. On the other hand libraries have also been positively responding to the increasing demands of the society. At present the libraries are deemed as "centres of learning" and as "centres for dissemination of information" and also as "communication centres". This changes in the environment of libraries is not a new phenomenon. It can be observed thoughout the history of libraries. In response to the changing environment, libraries have been experimenting with different tools/ techniques from time to time.

LIBRARIES AS TOOLS OF DEMOCRACY

OBJECTIVES OF LIBRARY

The major objective of the library is the provision of information. For socio economic development, information is an indispensable resource. The supply of correct and precise information in time helps the policy makers in making maximum use of the available resources as also in avoiding duplication of work. Similarly a research and development programme can be accomplished successfully only if required information becomes available as and when it is needed. Without proper and complete information, no worthwhile decision can be taken. Infact no progress is possible without the support of information. The progress of every type is linked with the availability of right information at right time, access to it as also its dessemination is of vital importance.

By providing a variety of reference and information service a library can enhance the utility of its resources and thereby increase the potentialities of the society and make it a learned society of tomorrow. With courage, ability and professional skills library may contribute to the enhancement of creative potential of the society and lead it to the goal of becoming a 'learned society'.

INFORMATION AND SOCIETY

Information is a social right, a social function. Its aim is to make people more aware, to give them full understanding of the economic and political dimensions of the problems on both the national and international planes. and of their ability to participate in the decision-making process.

The present division in the society-at the international, national or local levels - between the North and the South, between the West and the East, between the rich and the poor is nothing but the manifestation of mal-distribution of information. The information rich are materially rich, the information poor are materially poor. It is not the natural resources. it is not more of industrial infrastructure, it is not even the manpower potential of a country that makes it rich, it is the information resource that endows it with power, with other resources. hence the goal before any society today is to become information rich.

The basis of knowledge is information. Information which is the result of a meaningful response to a stimulus, when correlated, synthesized and stratified during the course of time becomes knowledge. To be able to make a wise decision one should be aware of all the facts concerning the situation or the problem pertaining to which decision is to be made. So sound decision-making also depends on the information made available being relevant accurate and up-to-date.

The essence of education is the imparting of knowledge, which in a way is same as transfer of information, primarily through a teacher. The recent trend in education is the introduction of teacher substitute in place of teacher-student situation, resulting in correspondence course (Open Universities), programmed instructions and audio-visual texts. In this context the importance of information is much more as the emphasis is more on newer media of communication and self-study than on the teacher.

The crucial role that information plays can be gauged from the vast areas of human activities in which it finds applications that include growth of knowledge and wisdom, decision making and management, research and development, manufacture and industry, education and training and academic writing.

INFORMATION NEEDS IN A DEVELOPING SOCIETY

The contribution of information to development cannot be doubted any longer but its quantification is extremely difficult in different developing societies. Every developing society has its priorities and therefore it is even more difficult to define the optimum levels or resources which could be devoted to the information input at either

local, regional or national level. Developing countries require information systems of their own which suit the type, capacities and the producers and users of information. The emphasis should be on knowledge most needed for social and economic development.

The role of a library in modern society is to educate the community in the widest sense. The librarian has something common with the editor of a newspaper rather than with a school teacher. He must acquire recorded knowledge that is worthwhile, useful and significant to the specific community he serves. The library provides ample opportunity for the development of correct social attitude and unfoldment of the personality of the group, the nation and the society at large. Socialisation of education will lead to socialisation of the masses. To achieve this objective, socialisation of the public libraries also necessary as the public library represents the best opportunity for self education of majority of the adults, who do not go in for higher education beyond secondary stage. It is the social function of the library to provide book service to the community. Library is the only organised social institution which fosters the reading of books. Libraries or organised collection of information exist to serve as an access point to facilitate the use of information that represent recorded knowledge for the purpose of learning. The concept of libraries as "Knowledge Resource Centre' is fast coming up in the developed countries.

ROLE OF INFORMATION IN INDUSTRY FOR ECONOMIC DEVELOPMENT

Information is an important resource in the creation, maintenance and development of any industry. It is a commodity which attains its true value to society only when it is utilized in the production of goods and generation of services. As the amount of information service utilized by a given industry or technology is a measure of technological excellence and degree of industrialization of a nation, such studies may prove helpful in the evaluation of the same. They will help in planning and designing of future information and centres in undertaking user studies and strengthening the existing service and centres.

TYPES OF INFORMATION NEED IN INDUSTRY AND SOURCES

Industrial information itself is a broad-based topic. Information seekers in general consult published and conventional sources of information such as encyclopeadias, hand books, monographs, reviews,

abstracting and indexing periodicals, journals etc, if the information sought, is on a particular industry on some industries 'topic', the relevant-information is not usually available in the above mentioned conventional sources. In such cases one has to obtain the information and data from various less conventional sources which include unpublished sources. Such situations generally arise with techno-economic information, though quite often technological information like details of processes or machinery and equipment is also not available in standard books.

These less conventional sources of industrial information come in various forms such as irregular mimeographed publications, reports of meetings, papers read in seminars, feasibility studies, project reports, market reports, hand written manuscripts as well as oral communications. We can also take news letters, survey reports on industries prepared by various agencies of central or State Governments. Tariff Commission reports, impact schemes and prospect sheets prepared by the small Industries Development organisation, annual reports of the R & D institutes engaged in industrial research or information available with them in the form of know-how expertise or experience, technical analysis reports prepared by organizations dealing with industries and various reports prepared by public or private consultancy organizations etc as less conventional sources of such information.

Techno-economic information mainly encompasses information on manufacturing units, their capacities, production, demand, consumption, targets of capacity and production prices, export, import etc.

The conventional sources of such information are annual reports of various organizations involved in industrial development, government publications like 'Guidelines for industries", 'Statistical Abstracts India" "Annual Survey of Industries', 'Monthly Statistics of Foreign Trade of India', etc. In the present situation the need for information availability neednot be over emphasized. To serve that purpose efficient date communication is a must to conduct the business across the country and around the globe. E-Mail (Electronic Mail) is a cost effective and reliable mode of communication. It is the best mode for a company's growing demand for fastermore efficient information access, transmission and management. Any enterprise having world-wide or nation-wide operations, can have latest information on the availability of their stocks, funds and other resources, so that it is able to deploy the same for more successful and profitable

applications. Electronic Mail has virtually vital role for the commercial world. At present *ICNET*, UUNET, AXCESS, GEMS - 400 (VSNL), ERNET, XEE-Mail, (Datapro group), NIGMAIL-400, INDMAIL, (CMC) are the operating E-Mail services in India.

PUBLIC LIBRARY SERVICES

The public library system was evolved and developed in India by Dr. S. R. Ranganathan. According to him public library system means "an integrated nation-wide network of public libraries giving free library and information services to one and all of the citizens- literate or illiterate, rich or poor, rural or urban".

The Unesco Manifesto for public libraries stated "The public library is a practical demonstration of democracy's faith in universal education as a continuing and life-long process, in the appreciation of the achievement of humanity in knowledge and culture."

The vital role public libraries can play in a country's programmes for development and national re-construction, particularly in areas such as spread of education, dissemination of information, utilization of the leisure time in purposeful activities. as well as in programmes for its overall socio-economic development, has been well accepted and well demonstrated in developed as well as developing countries all over the world. Education of the individual is essential for the development of his mind and capacity to make sound and major judgements and thus function as an enlightened and well- informed citizen. Informative education or self education occupies a very significant place in one's life simply because of the process of education does not end with one's formal education, rather real education starts at the point where formal education, rather real education starts at the point where formal education ends. This process of self-education is life long which requires no class room attendance and leaves the individuals to read whatever they like and at a time and place convenient to them. A public library undoubtedly is the most suitable institution for this purpose simply because if a library is an essential adjunct to school, college or university, it is an essential adjunct to the world outside.

To be effective in its role and to discharge its responsibilities in a cosmopolitan manner a public library continuously strives to know its community well, acquire and organise those documents which would best meet the needs of its users and provide all such services,

lending, reference, extension, etc. For achieving these objectives, it is located centrally and in comfortable and pleasant environment and has staff who are keen to take all possible steps to serve the clientele with dedication and commitment essential for the purpose.

One of the means of making public library resources available to public themselves is by involving people in various types of projects of the library system. The selection of documents in a public library can be done by organising small books exhibitions and calling users to come and visit the exhibition and make selections. Such process although appears to be a free wheeling, the process has to be planned in a methodical fashion. The library should be a mission oriented organisation charged with utility of its collection organisation charged with utility of its collection. It should make a kind of consumer interest analysis and keep profiles of changing community demand and interest. This requires an excellent qualitative as well as quantitative approach in getting the feed back from the users. The library should take to advertising of its services and its collections. The public library network must be designed in relation to national, regional, research and special libraries as well as libraries in schools, colleges and universities.

At present a public library shall in principle be free of charge. The public library is the responsibility of local and national authorities. It must be supported by specific legislation and financed by national and local governments. It has to be as essential component of any long-term strategy for culture, information provision, literary and education. To ensure nationwise library co-ordination and cooperation legislation and strategic plans must also define and promote a national library network based on agreed standards of service. By providing adequate information services to local enterprises, association and interest groups and by facilitating the development of information and computer literary skills, the public library may play a vital role for the development of individual and social groups.

ROLE OF TECHNOLOGY
MODERN TECHNOLOGY

Library system may be conceptualized as a dynamic store-house of knowledge which are made available to an inquiring mind (user) as per his or her requirements to generate the knowledge. To search a pertinent piece of information library utilizes its catalogue. Due to the knowledge

explosion, this control is also being helped by various bibliographic tools and resource sharing via networking or otherwise of the electronic data bases. Modern technology provides help in the form of digitalized information storage and electronic media. The use of such devices is emerging as an acceptable solution provided libraries adopt to this socio-technical change. Computerised networking shall provide access to almost all knowledge available though resource sharing among the scattered units of knowledge storage region-wide, nation-wide and hence world-wide. The CD-ROM technology in mainly being used in the area of bibliographic databases.

Information is an important National resource for developing countries like India. Its sharing is necessary for national development. The central information bodies like DESIDOC, INSDOC, BARC, ISI, ICSSR etc., are disseminating information in their respective fields. NICNET, INDONET and SIRNET are supporting these organisations for transmitting the information effectively from one source to another. Some of the organisations are utilising the CD-ROM system in India. BARC, National Atlas and Thematic Mapping Organisation (DST), British Council, National Institute of Oceanography, INSDOC and National Aeronautical Laboratory are using CD-ROM facility through the data bases of INIS, National Atlas of India, Whitaker's book bank, Acquatic Sciences and Fisheries Abstracts (ASFA), Science Citation Index and Library and Information Science Abstracts (LISA). Among the above databases National Atlas of India database is the indigenous product of India. These are advisable for quick and fast information sharing. An overview of the existing practices in many of our information centres, that there is an immediate need for redefining our goals and objectives and to restructure our programmes in the emerging context. The information sector is a major player in the socio-economic development of the society at the individual, institution and government levels. The nature of work and activities in all kinds of information systems and institutions is changing rapidly and will continue to change. Resource sharing is necessary to centralise the information processing systems and to reduce the communication gap among the libraries. To have an efficient control over the explosion of the volume of literature and knowledge and to avoid the duplication of knowledge the Resource sharing is essential. For improving the mobility of data and to develop the flow of information among the special information centres/libraries and other types of libraries resource sharing is inevitable for developing countries like India.

CONCLUSION

In situation in developing countries in general and in India in particular has to expand and advance knowledge by providing current information because like any other field of activity there is lack of technological development, insufficient funds and traditional attitudes which resist any change. Today's need therefore would be to involve the people and make them aware of the developments around and thereby bring the changes in a developing society. Knowledge of information will have to be shared effectively through various channels of communication and libraries and librarians will have to play a vital role in doing so.

Due to world wide economic depression and inflation, the production costs and subsequently the subscription price of scientific periodicals are touching abnormal figures and thereby making it practically impossible for a single library to procure on its own all worthwhile materials relevant to its users. Most of the libraries of developing countries are yet to recognise the inadequacy of the traditional techniques in respect of speed and accuracy as compared to the improved quantitative characteristic and economic efficiency of newly available mechanised technology.

In the present circumstances it is important to give due attention to the need for developing manpower capable of carrying out research on information problems. For this a thorough knowledge of research methodologies including the emerging area of quantitative techniques in the information area will be necessary. Knowledge of information resource and their reference value is essential for the effective functioning any information professional. It is equally important for the information professional to be able to design, develop and implement different types of databases.

The present world is becoming radically different from that in the past, due to the rapid proliferation of information net work services, digital communication, computers and databases would form a solid infrastructure to provide strong motivation and the right climate for creative people to think and act more positively in the areas of their specific interest. The information professional should acquire different types of knowledge for the effective function of information centres.

As we approach 21st century, the electronic medium will increasingly become the medium of choice for the increasing number of people who will create, organise, store, access, retrieve and distribute information in electronic form.

REFERENCES

1. BECKER, J: Libraries, Society and technological Change, Library Trands, Vol. 27(3), p.409 1979.
2. KARKI, M.M.S : Information needs of Indian Industry, Annals of Library Science and documentation, Vol. 29(1), p.8, 1982.
3. MURTHY, T.A.V.: Techno-Economic Development Library Herald, Vol. 22 (4), p. 211, 1984.
4. NIRMAL MALHOTRA: Information Services and User Response, University News, Vol. 31 (2), p.12, 1994.
5. PRASHER R.G. : Library Information and its Communication ILA Bulletin, Vol. 23(3), p.98, 1987.
6. RANGANATHAN, S.R. : Reference Service and bibliography, Vol. 1 Madras, Madras Library Association, p.25, 1940.
7. SPURGEN, C : Techno-Economic Faasibility Report in small industries Development, Its preparatation and use Library Herald, Vol. 22(4), p. 183, 1984.
8. SRIVASTAVA, A.P. : Role of University Libraries in India Today. Library Herald, Vol.6, p70-77, 1964.
9. SUBBA RAO, C.V. : Role of Libraries in Developing Countries for Rural Uplift, ILA Bulletin, Vol. XVI, 1-2, p.25, 1980.
10. SUBRAMANIAM. S: CD-ROM. A New Electronic Media for Document Storage and Retrieval, Herald of Library Science, Vol. 34 (1-2), p.10, 1995.
11. (LATE) Dr. TEJOMURTY A & DR. KAUSHIK BOSE: E-Mail in India, CLIS observer Vol. 12, No. 1 and 2, 1995.
12. WAHID, A : Library inforamtion system (LIS) use of computers in circulation control, Library Herald, Vol. 25 (2-3), p.53, 1986.

ROLE OF PUBLIC LIBRARIES IN PROMOTING LITERACY PROGRAMMES IN TAMIL NADU: A COMPARATIVE STUDY WITH JSN

K. T. DILLI*
Dr. MANORAMA SRINATH**

ABSTRACT

The illiterates can neither take part in the development programmes nor contribrute anything to the society. As a result the National Literacy Mission launched a number of literacy programmes to literate the age group of 15-35. One such programme is Jana Sikshan Nilayam (JSN). Through this the neo-literates are provided with reading rooms, reading materials post-literacy and continuing education and awareness programmes etc. It is felt that more JSNs should be established to cater to the needs of neoliterates. The part-time librarians under the purview of Branch librarians are also carrying out the same objective of JSN. Hence it is felt that JSN should be merged with the Directorate of public libraries. This would reduce the wastage of men, money and materials.

In this article I try to drive home the point that the preraks of JSN may be merged with the Directorate of public libraries. This would reduce the honorarium being paid to preraks, since the preraks and the part-time librarians are working in achieving the same goal in two different direction of eradication of illiteracy and providing continuing education. This would enable the NLM to appoint more part-time librarians to serve better in providing continuing education to more neo-literates.

INTRODUCTION

The fundamental problems faced by the Indian society at present are poverty and illiteracy. "Mass illiteracy is our sin and shame and must be liquidated", said Mahatma Gandhi and he also emphasized the need for universal basic education for children and evolve programmes of adult education which would strenghten the social and cultural regeneration and national struggle for freedom.

* Librarian, Loyola College, Madras-600 034
** Reader, Dept. of Library and Information Science, Univ. of Madras, 600 005.

It is alarming to note that even after eight Five Year Plans around 50% of Indian population still remains to be illiterates and this would hamper the development as a whole.

The chief architect of modern India, Jawaharlal Nehru viewed the literacy as the tool of development and eradication of illitercy was considered crucial to the conquest over poverty and the healthy functioning of the government system.

LITERACY AND DEVELOPMENT

The massive illiteracy of the teaming million of our country is posing enormous problems viz, social, political, economic and affecting all the developmental activities to a great extent. The symbiotic relationship between education and development is now being examined by the policy makers and planners.

In 1971 illiterates in the age group of 15-35 years were about 100 million. To eradicate illiteracy, a massive adult education programme, known as 'National Adult Education Programme' (NAEP) has been launched all over the country in 1978. The NAEP had the following three basic components:

a. Literacy

b. Awareness and

c. Functionality

It is ture that a large segment of our adults cannot take active part as well as contribute in the process of social reconstruction and national development because they are literate.

LITERACY AND PUBLIC LIBRARIES

Adult literacy rate in the world increased from 69.5 percent in 1980 to an estimated 77.4 percent in 1995 and it is expected to reach 80 percent by the year 2000. The number of adult literates rose from 2 billions in 1980 to an estimated 3 billions in 1995.

Their numbers may reach 3.4 billions in 2000 A.D. and 4.2. billions in 2010 A.D. if the current trend of progress could be maintained.

Dr. S.R. Ranganathan defines a public library as "a institution mentioned for and by the community primarily for the social purpose

of providing easy opportunity for self-education through out the life of every person of the community".

The public library as a centre for storing and disseminating information the availability of appropriate reading materials is a very inportant factor. The availability of materials is also very important for the fostering and learning of literacy skills. It is true that the lack of reading materials in the local languages has vast and serious implications for the fostering of literacy. Here the public library, the people's university, plays a vital role in extending cooperation by providing reading materials in the local language. The 'National Policy on Education 1986, Stresses the importance of adult education.

The following are the objectives of 'National Policy on Education', (NPE) 1986.

(i) Establishment of continuing education centres of diverse kind to enable adults to continue education of their choice.

(ii) Workers' education though the employers, trade unions and governments.

(iii) Wider promotion of books libraries and reading rooms.

(iv) Use of radio, T.V. and films as mass as well as group learning media.

(v) Programmes of distance learning.

And even the Programme of Action of National Policy on Education elicites the importance of libraries in promotion of adult literacy and continuing education. The following are the objectives of Programme of Action.

(i) Establishment of Jana Sikshan Nilayam.

(ii) Organisation of systematic programmes of workers' education.

(iii) Extension programmes which include mass education, systematic 2 courses of continuing education for the work force and the professionals. Distance learning techiques will be widely used for this purpose.

(iv) Programmes of book promotion and provisions will be made to open libraries and reading rooms in educational institutions and they will be opened to the public in the evenings.

(v) Non-formal programmes of vocational and technical education will be organised on a large scale.

a. Jana Shikshan Nilayams

It is understood that the neo-literates would tend to forget what they learn, if they are not provided continuing education. The National Literacy Mission (NLM) to support the above objective established Jana Shikshan Nilayams (JSN) all over the country in 1988. The main objectives of the JSN scheme are:

1. Provision of facilities for retention, continuing education and application of functional literacy.
2. Dissemination of information on development programmes.
3. Promoting recreation and healthy living.
4. To organize evening classes for three to four hours per week, library, reading room and Charcha mandals etc.

The persons incharge in carrying out the JSN programmes are called preraks. They would be paid an honorarium of Rs. 200 p.m. They have to carry out the following tasks.

1. To organize post-literacy and continuing education programmes.
2. To distribute reading materials.
3. To motivate local voluunteers to open library and reading rooms.

To highhight the importance of literacy, the United Nations declared the year 1990 as 'International Literacy Year' (ILY) and the World Conference on 'Education For All' (EFA) by the year 2000 was held at Jomtien, Thailand in March 1990.

With a view to eradicate illiteracy the Government of India launched 'National Literacy Mission' on 5 may 1988. Through the NLM, the literacy programmes reached every length and breadth of our country. Following this Kerala has become the first fully literate state in India. The total literacy declaration was made on 18th April, 1991 at Kozhikode.

It is high time that the librarians played an important role in Joining hands with other agencies to root out illiteracy from our

society. To cite an example The National Literacy of Canada encourages librarians across Canada to :

— Take a look at their libraries to see if there are activities to support and promote community literacy Programmes.

— Identify the role that libraries play not only in supporting literacy programmes but also in helping the newly literatre to expand their horizons.

It is therefore, the duty of the library managers to revamp the whole public library programmes to support the literacy Campaign in joining hands with the government.

When we compare the registered public library users of India with the other developed countries, we find that we are much far behind in realising the importance of the public library and its role. The following statistical figure of UNDP-1996 would support the statement.

Registered Public Library users (in Thousands) (1986-92)		
Japan	-	16,038
France	-	16,497
Germany	-	881
Spain	-	4,089
India	-	1

LITERACY PROGRAMMES IN TAMIL NADU

Adult literacy and non-formal education are the two important education strategies for achieving Universalisation of primary education. To achieve cent percent literacy, the government of Tamil Nadu launched the total literacy Campaign - a societal mission - in 1991-92 to mobilize all sections of the society to eradicate illiteracy among the adult in the age group of 15-35.

To achieve this the 'Total Literacy Campaign Programmes' have been divided in to three phases to cover the entire districts of Tamilnadu.

In the first phase 7 districts were taken to benefit 18.94 lakhs illiterates and in the second phase eight more districts were taken in to benefit of 30.66 lakh adults and the remaining districts were taken in the third phase to benefit 30.66 lakh more adult illiterates. Around 1175 JSNs have been established invarious districts of Tamil Nadu to carry out the above objectives. The JSNs come under the control of the government, Universities and voluntary agencies.

It is a true fact that the literacy rates for Tamil Nadu has been steadily increasing and higher than the rest of the states of India. Even the female literacy rates have more than doubled between 1961 and 1991 from 21.06 percent to 52.29 percent.

The following is the chart of literacy rates from 1951 to 1991 of India in%)

Year	Total	Male	Female
1951	19.74	29.00	2.82
1961	30.11	42.96	16.32
1971	36.49	48.92	23.00
1981	43.56	56.37	29.75
1991	52.11	63.86	39.42
	For Tamil Nadu		
1991	63.72	74.88	52.29

The main centre based programmes in Tamil Nadu to eradicate illiteracy are as follows:

1. Rural functional literacy projects.
2. State adult educational programmes.
3. Adult education centres run by voluntary agencies.
4. Jana Sikshan Nilayam
5. Total Literacy campaign (TLC)

A. ARIVOLI IYAKKAM

In order to make Tamil Nadu, the second fully litereate state in the country next only to Kerala, 'Arivoli Iyakkam' a movement to light in the life of illiterate was founded. The Arivoli Iyakkam experiment has now engulfed Tamil Nadu like a weave and has become an important symbol of hope, faith and conviction in the efficacy of the campaign mode of literacy. IT has brought people belonging to all walks of life, all political parties, all faiths and beliefs to work together for the cause of Arivoli Iyakkam. As such it has promoted emotional, social integration, linguistic integration and communal harmony.

B. STATE RESOURCE CENTRE AND LIBRARIES

The state Resource Centre of Tamil Nadu has been playing a crucial role in Arivoli Iyakkam in supporting this programme with resources. It has been providing academic and technical resource support in shape of design and production of teaching - learning materials, charts, posters etc. It has also undertaken significant initiative in the field of mass programme of Functional literacy for involvement of college and school students belonging to N.S.S. and N.C.C. Besides other agencies in eradicating illiteracy in Tamil Nadu Public Libraries also play a vital role in the achievement of the above objective. In accordance with the Tamil Nadu Public Libraries Act, 1948, the department of public libraries offer an efficient public library services throughout the State According to the section 5 of the Tamil Nadu public libraries Act, 1948, there are at present 18 district central libraries, 1091 part-time libraries and 1542 branch libraries including 9 mobile units in the state.

C. JSN Vs BRANCH LIBRARIES

It is generally felt that the objectives of both JSN and public libraries are one and the same. It is estimated that one JSN may be established for every 5000 person (4to5 villages). In the same way a branch library may be set up for a population of 25,000 and above and in rural areas for a population between 1000 and 5000. The total number of JSN and Branch Libraries established in Tamil Nadu are 1175 and 1542 respectively.

The following figure would supplement the above statement.

State district	Population Total (1991)	Total Literacy rate (1991)	Percentage of rate	Number of JSN	Number Branch Libraries
Tamil Nadu	55638316	30383416	54.60	1175	1542
Madras	3795028	2753094	51.81	38	126
Chengai MGR	4620967	2654763	51.09	125	121

In the above statistical table we find both that JSNs and Branch libraries are lesser in number as compared to the population as a whole. To the population of 5,56,38,316 at least 9952 JSNs and 9968 branch libraries are needed to run the literacy programmes successfully.

The delivery stations, in other words part-time libraries are attached to public libraries. These part-time libraries are normally attached to nearby branch libraries. It is manned by part-time librarians and they are paid a honorarium of Rs. 200 p.m. They are the incharge of opening reading rooms and supply of reading materials. It is estimated around 1091 part-time libraries are functioning in Tamil Nadu to carry out the objective of literacy for all.

CONCLUSION

The role of public libraries in adult education would open 8 new vistas for open universities and distance eduation. It is expected that 'National Adult Education Programme (NAEP) should make use of the services of public libraries, devoid of this it is feared that in the absence of proper library services most of the new-literates would slowly relapse in illiteracy.

It is evident from the information supplied that both JSN and part time libraries are different government agencies striving to achieve the same objective of continung education to the

neo-literates. To achieve the said objective effectively the JSN should be merged with the part-time libraries. This would reduce the wastage of money, time and materials by bringing the preraks under the control of Directorate of public libraries and merged with part-time librarians.

The eminent Indian economist Dr. V.K.R.V. Rao while mentioning about the literacy and development said, "without adult education and adult literacy, it is not possible to have that range and speed of economic and social development, which we require, nor is it possible to have that content or equality or tone to our economic and social development that make it worth while in terms of values and welfare. A programme of adult education and social development".

IMPACT OF LIBRARY SERVICES IN NATIONAL DEVELOPMENT

K. M. KRISHNA*

ABSTRACT

The importance of libraries and their services in fulfilling the information needs of users of all categories has been presented, and their role in national development is highlighted. Application of computers and information technologies in library networking and resources sharing are considered very essential to provide access to worldwide information.

INTRODUCTION

In our country, the concept of library is not new. Even in prehistoric times, Nalanda University, Patna near had a well established library for 10,000 students and 6.000 teachers. But the invasion of muslim rulers destroyed not only the library but the entire university. So the importance of knowledge can be reflected through the existence of library. It has unique role in the collection, preservation, and dessemination of knowledge. They are the gate keepers of the global knowledge. Still we have in existence prehistoric knowledge through and archieves libraries i.e. Khudabaksh oriental library at Patna, Rampur public library, Rajasthan oriental research library at Jodhpur, Saraswati Bhavan library at Varanasi etc..

With the contemporaneous explosion of knowledge has challanged the researcher, educator and scientist to preserve the out comes of knowledge for further use and pass on from one generation to another. So again the importance of library can be realized with an its only objective to select, collect, preserve and dessiminate knowledge to multicatagory of users.

Three broad categories of libraries i.e. public academic and special are unique in the dessimination of knowledge to their respective

* Assistant Librarian, S. K. N. College of Agriculture
Rajasthan Agricultural University, Jobner-303329

users. Besides these, national library and documentation centres has also been set up to cater to the needs of users at national level irrespective of socioeconomic and state boundaries. In our country, a network of libraries are playing vital role in providing latest information to the needy users speedily, accurately and timely.

Due to increasing number of books/documents in the libraries and limited library personnels, it is not possible to provide cent per cent information available in the world speedly and timely. However, the introduction of computers and related products such as CD ROM have drastically changed the resources and manpower problems.

LIBRARY SERVICES

Time is precious, unidirectional, and can't be recycled. Its value can be realized in the library. The multicatagory of users i.e. researcher, scientist, managers, professionals etc. are always in need of relevant documents accurately, speedly and timely. It is again the library technical services i.e. cataloguing and classification are the most important part before handing over the documents imformation to concerned users. Searching every possible information services which could minimize time and cost factor both. However, the present existing information services e.g. SDI, CAS, Indexing Abstracting, translation, databases, reference and referral services are all economical and saving users invaluable time.

It has been seen that different catagories of libraries are providing information to their clients from their own collection. Still most of the libraries have not uptodate collection due to limitation of budget. The implimentation of various international/regional/national/local information systems and networking would play key role in proper resource mobilization and solve the problem of resource management. Similarily special libraries should also be connected to computer terminals so that inter disciplinary research could be made possible.

Public libraries have vital role in social, educational, recreational activities of the society at national/regional/local levels irrespective of cast, region and language. These are directly responsible of large number of people. but there is still need of computer networking in public libraries so that users could access every possible information through resource sharing. Most of the public libraries have invaluable collection of manuscripts. If computer networking is provided to all

public libraries, the users could access the manuscript knowledge for their research work irrespective of state boundries.

Since three decades information explosion compelled the libraries to provide limited information within the resource available in the library. In order to overcome this problem; various information and networking system are being developed with an objective to acquire and promote every possible information for nation's interest. NISSAT, INSDOC, AGRIS, INIS, MEDLAR, INFLIBNET. NICNET, EURONET, CALIBNET, DELNET etc. are all important existing information system and networking to meet the requirements at international/national regional/local levels. Further, ther should be developments and implimentation of national rural information system alongwith regional centers for rural communities with an intention to transfer social/academic/scientific/ technical/cultural recreational knowledge. The implimentation of this system would certainly meet the requirements of the rural people and bring out drastic change in the socio economic development of rural comunities for national interest.

The concept of resource sharing has now become reality and essential due to ever increasing number and in the cost of documents. The outcomes of inter-library loan service is unsuccessful at larger scale and confined to local level only. This is due to time lag and misplacement of documents. To overcome this problem reprographic services should be extended at larger scale. This service should be comercialised and provided through national agencies. The establishment of national micrographic film and reprographic centre would be extremely useful and solve the problem of resource sharing and thereby mobilizing the information speedily and timely. Besides this the functioning of information systems/centers/ networkings are all streamlining the concept of resource sharing.

No doubt the CD ROM facility has drastically changed the service of traditional library to modern one. The budget limitation, space problem, increase in number of books and their cost have compelled the librarians to share with the new technological products. CD ROM is really a resource sharing product and economical This facility should be provided to all leading libraries. Catalogues of all library should be compiled in CD ROM and accessible to all libraries.

Overall present study reflects the importance and scope of library services for nation's development. Importance and utility of libraries

can be realised only when each possible services are catered to users accurately, speedily and timely. The various implications and suggestions of the present study are;

1. Library is ultimately responsible for collection preservation and dessimination of knowledge for nation's interest.
2. Efficiency of library services are based on users satisfaction.
3. Centralised cataloguing and classification services should be implimented for speedily and timely works.
4. Estabilshment of national micrographic film and reprographic center would certainly solve the problems of resource sharing, inter library loan services economically.
5. Information systems and networking are no doubt costly but useful for resource sharing.
6. Establishment of national rural information system for rural communities would promote socioeconomic development of the country.
7. Library services should act as a catalyst between users and information available.
8. Library acquisition policy should be based on user's requirement and promote national economy.
9. Information technology and telecomunication facilities are useful for streamlining the library services, resource sharing and speedy dissemination of information.

REFERENCES

1. BLAXTER, K. L. and BLAXTER, M. L. The individual and the information problem. Nature, 246;1973.p.336-40.
2. KRISHNA, K. M. Need of information principles and their importance in academic libraries of India. IJILIS, 6 (3-4); p.281-85., 1993.

INDIAN LIBRARY SYSTEM AND NATIONAL DEVELOPMENT

DABAS K.C.*
GILL N.S.**
DABAS SHEELA***

ABSTRACT

Defines development & discusses its complexities. Traces historical development & points out that library is both the product of research, scholarship, cultural maturity and also an agent of development. Explains information, knowledge, causes of information explosion and sources of information. Emphasizes the role of libraries in the manifestation of intellectual resources and in avoiding the duplication in research efforts. Criticizes colonial policies and describes the national library system. Discusses the theme of the topic and points out that the development and underdevelopment is the consequence of the capacity to generate and utilize information. Discusses political development and explains how public libraries proved to be the foundation of our democracy, and information as tools to safe guard it. Emplains culture and exphasizes how libraries preserved our cultural heritage, promoted indology and furthered the cause of education, scholarship, research and R&D. Defines social development and points out the role of education and libraries. Discusses economic development and growth. Explain the role of libraries in extending agricultural research and training. Discusses the role of information in the growth of industrial, trade, commerce & financial sector during the period of globalization, liberalization & privatisation. Discusses administrative development and states the role of information in administrative training, organizational development and sustainable development. Suggests that each village should have a library and it should work with rural services to achieve its goals. Concludes that libraries have played a key role in safe guarding our democracy, preserving our cultural heritage, bringing social and demographic changes, self-sufficient in food grains, industrial growth and administrative development.

INTRODUCTION

Development, be it of individuals, of groups or an entire nation is a multidimensional and complex process involving major changes

* Assistant Librarian, M.D. University Library, Rohtak, Haryana, India.
** Lecturer, Department of Computer Sc. & Appls., M.D. University, Rohtak, Haryana, India.

or transformations in social, cultural, economic, political, administrative & even environmental aspects of a nation, both at micro and macro level. It is a very complicated phenomena of so many interrelated, interdependence and interconnected components that a line of demarcation between various dimensions of development is impossible. It is also difficult to have a universal parameter which can show cause effect relations among various factors and development. Development is a continuous process (1).

In the historical process of development man discovered alphabets, developed writings & books containing information. This led to the development of research, scholarship & culture. In order to perceive, anticipate, monitor, record, educate and equip people to meet the challenges of time, man created many institutions, library is one of them. The history of library is as old as the history of mankind. Library is both, a product of development & an agent of development. The printing press, industrial revolution, the world wars, the universalisation of education led to the proliferation of knowledge & information (2).

Information is a human product which can be facts, figures, diagrams, verbal or recorded, processed or unprocessed, good or bad. It is a knowledge developing resource. Information absorbers process it with already known knowledge to themselves and renew, regenerate or assimilate the information to useful knowledge for the benefit of mankind. Knowledge is the highly processed form of information. It is a human source which has the ability to consolidate the valuable results of human thinking and civilization. It is a totality of understanding of nature and its features for improved quality of life of human society (3).

The substantial part of this information is found recorded in documents such as books, journals, research papers, thesis, periodicals, patents, monographs, bulletins, pamphlets, annual reports, surveys, official records, archival materials, files, commissions reports, addresses, procedures, enactments, decisions, statistical sources, audiovisual materials, micrographic sets. Secondary sources e.g. dictionaries, encyclopaedias, handbooks, guides directories, etc. (4).

Ready access to information irrespective of its carriers is vital for individuals as well as national development. The right information when it is needed and in the form in which it is needed is essential to improve the ability of person concerned. For this purpose libraries (public, academic & special) information centres & document centres

carry heavy duty and responsibility for the selection, acquisition and dissemination of information. The librarians use their tools, techniques and secondary products to serve their respective clientels. Literature awareness is necessary for the scientists of developing countries to avoid duplication of research efforts (5).

LIBRARY SYSTEM IN INDIA

The economic, political and cultural policies of colonial India were suited to the needs of alien administration rather than those of national development. The independence, the institutional framework, the U.G.C., the library schools, the library associations led to the library movement. At present we have a public library system covering all the state & union territories with mandatory support in 9 states/. National library at Calcutta, National Science library at Delhi, National Medical Library Delhi, Indian Agricultural Research Institute Library Delhi, National Archives, National Museum also serve as public and national repositories in respective fields. Govt. libraries, special libraries, polytechnical, engineering, technical libraries & ICSSR, INSDOC, DESIDOC, NASSDOC are also part of this system (6). Library Networks e.g. NISSAT, ERNET, NIC, ICMR, INDONET, INFLIBNET etc., school libraries, 90 library Schools, 8210 College libraries, 215 University libraries, the library Associations are the partners of Indian library system (7).

LIBRARIES AND NATIONAL DEVELOPMENT

National development presupposes a groupwise, well balanced, coordinately integrated development in all sphere of the life of a nation. Development strategy calls for the optimum utilization of man, material, machinery, minds, money, methods, markets, movements and messages (INFORMATION). The criteria of developed, developing & underdeveloped is nothing but the capacity to generate and utilize information (8). The intellectual resources of a nation are intellectual faculty of the people & Information. Libraries make possible the manifestation of intellectual resources by disseminating primary information or providing access to primary information through secondary sources. Development in different dimensions is the result of this manifestation (9).

POLITICAL DEVELOPMENT

Political development seems to consists of increasing rationality,

awareness, secularization, equality & democratic participation in affairs of the society. Libraries established and organized by our people during freedom struggle played effective role in raising the awareness of the people against injustices of the alien rule. Still libraries are answering society's questions where? what? when? who? and how?

Libraries have provided an opportunity to our freedom fighters and visionaries to discover India through past records and provide for India a parliamentary democracy based on secularism and socialism. Public libraries are also based on democratic principles. These provide services to all the citizens of a town, city, state or whole of India irrespective of any considerations (10). Democratic and human right environment is conducive for human development. This environment is possible in the society where access to information is easy.

Democracy to be real must satisfy three requirements. A well informed citizenry, equal right to participate in the affairs of the state and accountability (11). Our democracy is based on the consent of the governed and that consent has been proved free and well informed through widest dissemination f information about the working of the govt., its institutions and the conduct of the functionaries to enforce accountability. Our biggest achievement is that our democracy has stood the test of time and we survived as a largest democracy of the world for the full 50 years (12).

CULTURAL DEVELOPMENT

Cultural component of development is so broad that it includes every aspect of human life except biological. The real enemy to development is people and their culture. Investment in human resources is more important than land, labour & capital. Scientific and technological information is the only panacea to remove the ills of the people and their culture (13).

Our ancient libraries at Nalanda, Taxila, Patliputra, Banaras, Kanchi etc. worked as ancient seats of learning and attracted renowned scholars from Megesthenese to Maxmueller. Our libraries still continue to function as the repository of the literary, historical and cultural heritage of our society. National library at Calcutta is acquiring the whole documents produced in India and recorded literature on our country produced any where in the world. This knowledge promotes study, research and development of Indology (14).

It is said that an ordinary teacher tells, a good teacher explains but an excellent teacher inspires, so is also true with books. Many famous books e.g. "The child and the state in India" by M. Weiner. "The wild swang" by Jung Chang, "Asian Drama" by Gunnar Myrdal, "The death of economics" by Barbara Woottons, "Das Capital" by Karl Marx, "Women education in developing countries' by Elizabeth. M. King etc have inspired policy making in India (15). Some of the libraries are using information technology to meet the challenging demand of information. This technology will provide a solid infrastructure, motivation and right climate for creative people. They would be able to keep well informed about previous findings in their areas of interest and will devote full time for creating new things (16). Human development report of UNDP suggests three indicators of human development e.g. per capita income, state of health & nutrition and access to learning capacity. All the three aimed to make better human conditions which is very essential for human development (17).

HUMAN RESOURCE DEVELOPMENT

The ministry of human resource development (HRD) aims to get the best out of the people and enables them to bring out the best of themselves and their lives. All organizations are constituted of people and the different organizations are the constituents of nation. The education, health, workskills, environment, woman empowerment and a sense of belonging have a direct bearing on their performance which in turn reflects on that of a nation (18). The Education Commission 1948-49 stressed the need of learning by doing instead of class room teaching. In teaching learning process the libraries of 8210 colleges, 215 Universities & institutions of higher learning and training are playing the role of heart, laboratories, scholar's workshops, temple of learning etc. of the respective institutions. The effectiveness of a library depends in its ability to keep pace with the activities of the parent body in the fulfillment of its objectives because the library is not a prime mover (19). The Kothari Commission (1964-66) also emphasized that no new college or university should be opened without adequate library facility. This has resulted in the production of the second largest scientific & technical manpower. Our country has produced leaders, administrators, professionals, intelligentsia, journalists, religious leaders., jurists etc which are mobilizing public opinion to regenerate cultural values against communalism, corruption

and other social ills which have been entered into the very bone & narrow of our motherland (20).

SOCIAL DEVELOPMENT

Social development deals with improvement in the social well being of people through education, health service, housing facility and regulatory measures. Our development policy imply social dynamics as a precondition for development. Formal education alone is not enough to muster social change. Informal programmes such as adult education, mass literacy mission, distance education, health for all, poverty alleviation, environment protection, family health & welfare, need the help of some viable agency. Public and academic libraries are supporting all the programmes and also opening their gates for distance learners and neo literates (21). Education works as contraceptive for women. Schooling of the girl child raises marriage age, standard of living, women autonomy and reduces child mortality, inequality and poverty. It helps to get rid of superstitious and fatalistic attitude towards divine will. Population time bomb is the major problem. Total literacy like Kerala state & better quality of life are the only panacea to neutralize it (22). Public awareness has compelled the govts. to adopt regulatory measures e.g. universalisation of education, abolition of bonded & child labour, prohibition, old age pension, workmen compensation act, environmental protection act, free education of girls, reservation for socially backward classes etc which in turn is due to information service.

ECONOMIC DEVELOPMENT

Economic development without growth is impossible. Growth implies sustained increase in a country's output of goods and services (GNP). It is estimated that 60% of the total growth is due to human resources. Education operate as a catalyst which helps to produce larger and better quality of product with less labour. Due to separation of work from knowledge or power inequality increases and a vicious circle of poverty starts. Low literacy-high disparity-weak economic base-low urbanism—literacy and so on (23). India's economy is in transition so share of agriculture income in total national income is declining. Our economy is utilizing scientific and technical knowledge in an increasing measures in developmental activities and progressing towards an information (24). Economic development is the remedy

for socio-economic, political and administrative development. Information services are helping in forecasting, planning, identifying tends, defining objects, choosing strategy, building coalition, consenses and selecting specific measures (25).

INFRASTRUCTURE DEVELOPMENT

Infrastructure includes a basic framework of services and facilities without which that sector can't be developed. It is widely accepted that infrastructure deficiencies and inefficiencies are chopping the very vital of our nation. Economic infrastructure includes services that are public utilities e.g. power, telecommunication, drinking water, sanitation, roads, dams, canal works, railways, ports, airports, waterways, financial institutions, agri-business, information technology etc. Knowledge, wisdom and information is necessary to find out what is lacking and what is actually needed. Librareis play a vital role in this direction.

AGRICULTURE AND RURAL DEVELOPMENT

Agriculture is not a mere technological phenomena of cultivation but it is a social & cultural phenomena which provides a bed rock to the entire process of development. It contributes 40% of national income and provides livelihood to 75% of total population and 90% of rural population living in 5, 76,000 villages (26).

Under the guidance of ICAR the IARI with active collaboration of AGRIS, agricultural universities and research institutes provided information regarding agriculture inputs e.g. fertilizers, seeds, breeds of animals, pesticides, animal health, equipments, water. Agriculture Credit e.g. loan advances, fisheries, marketing, storage, distribution. Agriculture Technology e.g. labor saving, energy. Marketing e.g. product planning, forecasting, salesmanship, practices. Extension Education e.g. literacy, living modes, innovations, sources of information etc (27). All this information changed mode of production and scenario of harvesting and post harvesting.

This in turn made possible green, white & blue revolution a reality. Agricultural information services with their multiplier effects, combined with other programmes such as IRDP, JRY, RWACD, Panchayati Raj, Jana Shikshana Nilayas, Developmental Communication etc. revolutionized the village life. Villagers in some states are living like urbanism.

INDUSTRY, FINANCE & TRADE

Information services are playing a key role since the govt. has adopted the policy of Globalisation, Liberalization & privatization. It raised industrial growth and mobilized saving for industrialisation and made balance of payment favourable (28).

RESEARCH AND DEVELOPMENT

Libraries played a key roles in the research activities of the universities R&D activities of the industries & applied research activities of the technological institutes. Application of information technology in librareis and information centres has expedited the process of information handling. About 50 libraries are providing computerized information services in India. Networking facility has tremendously extended our capacity to share national & international information and thus promoting our research work. (29).

ADMINISTRATIVE DEVELOPMENT

Administrative development covers both administrative and organizational aspects. The former implies the creation, improvement and enhancement of administrative capabilities, the other is identified with organizational change and development. The Lal Bahadur Sastri Academy of Administration, Indian Institute of Public Administration, States Institute of Public Administration, Schools of Public Administration & Management etc are promoting administrative skills merely because of the active support of respective libraries. For effective administration and organization information of the external as well as internal environment is very essential. Well informed decisions give benefits in the form of larger quantity and better quality of out put. If information set up is based on the information needs of the users and is scientifically developed to cover all aspect of informational handling then only it can provides reliable information and serves the purpose of a good MIS (30). Our Planning Commission is using district level grassroots information through NIC to strategies the destiny of 950 millions people. Sustainable development is possible only through information about the existing resources and by changing organizational structure & set up. A harmonious relations between development strategy & eco-system is also possible with the help of information. Library movement has encouraged some states to boost rural development

through mass participation of local people. Public Library will play key role in motivating people to participate (31).

SUGGESTIONS

Community information service should be based on the information needs of the society and should use various information storage & retrieval techniques. Every Indian village should have its own library and it should work with the close cooperation of agriculture extension, health & other rural services.

CONCLUSION

Indian library system has helped us to know our past, equipped for the present and prepared the ground for development by increasing our curiosity, awareness, rationality, creativity and feeling of equality, equity, justice, secularisation, democratisation, Libraries have contributed immensely in the promotion of education, science & technology, research R&D activities which in turn provided dedicated human resources for all walks of life. Libraries as catalyst have motivated people to change and absorb the latest technology. The Green, The White & The Blue Revolutions and the higher Industrial Growth are the results. The information which libraries provide is the power and foundation of our democracy. No doubt we may not be able to make our presence felt in global scenario but we have achieved a lot in the last fifty years which has updated the standard of living, mode of living, life style, physical and material aspect of life, socio-economic conditions, spiritual and cultural quality of life and human development of our masses.

REFERENCES

1. SAPRU, R. K. Development administration. Sterling Publ.; N. Delhi. p5. 1994

2. SHASTRI, R.S. Public libraries: Modernisation and development. ILA Bull. 30.1.2.1994; p3-7., 1994

3. GOPINATH, M.A. Information technology, knowledge processing and libraries of the future: An interrelated information service to the knowledge IN Sabir Hussain & Zamarrud Hasan S; Ed., Reading material on academic libraries : Management and operations. ASC AMU; Alligarh, 1995.

4. MANGLA, P. B. Library education in developing countries : Pertinent issues. JI Lib. & Inf. Sc. 5, 1: p1-31. 1980.

5. AGUOLU, C. C. The concept of bibiolographic access to scientifc information and knowledge in developing countries. Int. Lib Mov. 12,1; P 19-30., 1990.

6. MANGLA, P. B. Information system and services in India : Trends & Prospectives. Jj. Lib & Inf. Sc. 14.2; p 83-97., 1989

7. QASIM, S. Z. Universities in the changed scenario. Uni. News. 34:31; p 14-16., 1996.

8. KARISIDDAPPA, C. R. & PADHI P From Information explosion to information technology. Ind. Jl. Inf. Lib & Soc. 2.2; p 141-172. 1989.

9. BHATTACHARYYA, G. Development of professional manpower for information services : A model Jl. Lib & Inf Sc. 4.2. p 127-143., 1979.

10. RANGANATHAN, G. Public library movement in Tamilnadu with special reference to eight point programmes. Her. Lib. Sc. 34, 1-2; p 42-50., 1996.

11. SAWANT, P. B. Foundation of democracy. Vidura 33.3; p4-5., 1996.

12. SORABJEE, S. Information is power. Vidura 33;3; p 15-19, 1996.

13. AGADA, J. Towards people oriented development in the third world: A case for relevant library services. Int. Lib. Mov. 12, 3; p125-130, 1990.

14. RAMAN NAIR, R. National library : A historical perspetive. Int. Li Mov 9, 1; p8-21, 1987.

15. MUZEMINIL, M. Be taught to be studious, Uni-News. 34, 22; p21-24, 1996.

16. NOSE, H. Creativity and information services. Her Lib. SC 34, 3-4; p244-245, 1995.

17. DALAL, K. L. Ed. Human development : An Indian perspective Har Anand Publ: New Delhi. p4., 1991.

18. RAO, T. V. Human resources development. 1996. Sage Publ.; New Delhi. p. 394, 1996.

19. KAPOOR, A. L. Place of librarian in decision making in Indian Institute of technology. Delhi: A case Study Jl. Lib & Inf. Sc. 4, p24-40., 1979.

20. DAHIYA, Bhim S. Communalism and corruption: The need for critural renaissance. The Tribune 16th August 96. 116, 227; p8., 1996.

21. CHANRAIAH, I. Library in Distance Education. Her. Lib Sci 33, 1-2; p 14-19., 1995.

22. JEFFRY, Roger & Basu, A. M. Girls schooling, women's autonomy and fertility change in South Asia. Sage publ.; New Delhi; p339., 1996.

23. RAZA, M. Education, development and society. Vikas publ.; New Delhi. p88., 1990.

24. RAJAGOPALAN, T. S. An integrated information stytem for socio economic development of India. IASLIC Bull. 28, 4; 1983; 1143-1150, 1983.

25. HAAK, J. JOSEPHINE, H. B. & MIYATATU (Gleng) Information services and economic development: New opportunities for collaboration. Jl Lib. Adm 20, 3-4; p57-81, 1996.

26. PARIKH, R. Agriculture for rural development. Uni News. 34 23; p 1-5, 1996.

27. OZOWA, V. N. Nature of agricultural information needs of small scale farmers in Africa. Her Lib. Sc. 34, 1-2; p 3-10, 1995.

28. BAX, J. Economic future of India. Uni. News. 34. 28; p16-20, 1996.

29. GAYAS-Ud-di n Information Networks & systems in India. Res. Sha. & Inf. Net. 8's; p 119-136, 1993.

30. RACHANDRAN, K. K. Management Information System: A study in University. Uni. News 34, 23; p6-9, 1996.

31. KURUP, V.S.R. Plan to boost rural area development. The Tribune Sept. 1, 1996. 116, 243; p8, 1996.

32. KAULA, P. N. Some hints in the developing of college and public libraries. Her. Lib. Sci. 34, 1-2; p92-97, 1995.

33. SHARMA, S. D. Towards a new India, Sterling Publ.: New Delhi: p5., 1994.

INFORMATION FOR RISK AND CRISIS MANAGEMENT: THE ROLE OF COMMUNITY INFORMATION SERVICES

V. VISHWA MOHAN*

ABSTRACT

Presently the human society is facing crises of population explosion, ecological imbalances, exhaustion of natural resources, rendering the globe to bean empty and uninhabitable one, dreadful diseases such as AIDS. There is political crisis, socio-economic crisis, cultural crisis, and crisis of character and leadership leading to total collapse of nations. It is facing and going to face the worst crisis human society has ever faced 'save the globe' is the need of the hour. Therefore, there is a need for generation of awareness on the part of the human beings, in general and the ignorant and illiterate in particular towards the emerging local, regional, national and global risks and crises for their better management. The paper discusses the role of community information services in dissemination of 'information for risk and crisis management'. It emphasises that the Central and State Departments of Information and Broadcasting should take initiate and resume primary responsibility in this regard and the public libraries should render community information services with an emphasis on 'Information for Risk and Crisis Management'. It stresses the need for interpersonal communication for dissemination of such information.

INTRODUCTION

In proportionate to the advances in science and technology to solve human problems and increase his comforts and facilities there is an increase in risk and crisis at individual and global level. Every technological innovation has a negative side effect and proves to be an element of anti-nature. Of course, technology cannot be blamed for the emerging risks and crises. It is indiscriminate use and abuse of technology which cause crisis. The ecological imbalances are shear consequences of the modern technology. There are several risks and crises emerging in the socio-cultural spheres due to various social, political, economic and behavioural reasons, besides the natural crises. But, the human is helpless as his desires and needs press him to exploit

* Dept of Library & Information Science, Osmania University, HYDERABAD

everything and anything at the cost of anything, even at the cost of his own life and the life on earth. Therefore, Prof Purushotham Reddy, an environmentalist from Osmania University, in an informal talk said, "Human being is the most dangerous species nature has ever produced. It has a suicidal instinct, which no other creature has." To a large extent it (human being) is either ignorant or indifferent towards risks and crises which are caused by itself. Presently, it faces crises of population explosion, ecological imbalances, exhaustion of natural resources, rendering the globe to be an empty and uninhabitable one, dreadful diseases such as AIDS. There is political crisis, socio-economic crisis, cultural crisis, and crisis of character and leadership leading to total collapse of nations. It is facing and going to face the worst crisis human society has ever faced, **'Save the globe is the need of the hour.'**

Therefore, there is a need for generation of awareness on the part of the human beings, in general and the ignorant and illiterate in particular towards the emerging local, regional, national and global risks and crises.

Appropriately, UNESCO, PGI (1) is working towards Information and Communication on Risk and Crisis Management. The recent Regional Meeting on the Global interdisciplinary approach to training, information and communication on risk and crisis management at Paris during 20-22 November, 1995, is one of the important activities of PGI. This indicates the intensive concern of PGI towards the current and prospective Global risks and crises.

There is an urgent need to develop information (data) base for crisis management. Especially on the extent of the emerging global risks and crises to create awareness on the part of the common man whose participation in crisis management is very essential. There should be wide and extensive communication on Global risks and crises through all media of communication in general and inte-personal communication in particular, because, inter-personal communication is more effective at grass-root level and in case of illiterates.

ROLE OF COMMUNITY INFORMATION SERVICES

In view of the above, the role of community information services in this respect would be indispensable. Because according to Joseph Donohue (2), one of the earliest creators of Community Information

services, Community Information (CI) is information needed to cope with crises in the lives of individuals and communities. Explaining this definition, he has identified two types of information provided under CI service:

(i) Survival information such as that related to health, housing income, legal protection, economic opportunity, political rights, etc.; and

(ii) Citizen action information, needed for effective participation as individual or as member of a group in the social, political, legal, economic process.

The above definition by Donohue clearly indicates that 'information on risk and crisis management' is part of community information services. Further, community information services will be more effective for the dissemination of 'information on risk and crisis management' because it ensure inter-personal communication and more closer interaction.

For dissemination of 'information on risk and crisis management', the State and Central Governments' Information and Broadcasting Departments have to take initiative and assume primary responsibility in collecting, organising and disseminating information through all possible media at their levels. Secondly, the Departments have to provide all library and information centres in general and the public libraries in particular with exhaustive and extensive information on each and every significant regional, national and international/global level risks and crises in all important fields such as environment, health, politics, etc. The local level risks and crises will be dealt with by individual libraries. The national library and the state central libraries may have to back up the activities of the Central and State Departments of Information and Broadcasting respectively.

There is also a need to establish a Centre of Cyndinics on the lines of the European Institute of Cyndinics aiming at promoting the new science of dangers : Cyndinics.

The organisations and the Library and Information Centres which are involved in providing of 'information on risk and crisis management', need to collect, organise and disseminate extensive information on:

* Nature of the risk/crisis

* Scope of the risk/crisis
* Causes of the risk/crisis
* Implications/evil effects of the risk/crisis
* Extent and future projections of the problem
* Prospective remedies/strategies
* Individual's action or participation
* Statistical data on the problem (i.e. the risk/crisis)

The public libraries at local level may organise lectures by eminents in the field of the risk/crisis or by a trained volunteer or the librarian himself at regular intervals, so as to keep the members of the locality abreast of the developments in various risks and crises of local, regional, national, and international or global concern.

CONCLUSION

Interpersonal communication has more advantages, such as clarification of doubts, drawing attention of the audience, persuasion, etc. Therefore, 'information on risk and crisis management' can effectively be disseminated through community information services in library and information centres, primarily provided by lecture or personal interaction method.

REFERENCES

1. 'PGI Activities: Regional meeting on the global interdisciplinary approach to training, information and communication on risk and crisis management ...' General Information Programme: Unisist Newsletter 23 (3) p.3-4. 1995.

2. Donohue, Joseph C. 'Community information services- a proposed definition' Community Information Politics: Proceedings 39th ASIS Annual Meeting edited by S K Martin. Washington : American Society for Information Science, p.126. 1976.

INFORMATION NEEDS AND THE USE OF LIBRARY RESOURCES OF SOCIAL SCIENCE RESEARCH SCHOLARS OF K.K. HANDIQUI LIBRARY OF GAUHATI UNIVERSITY

DIPIKA CHAUDHARY*

ABSTRACT

Knowing user's view is necessary to evaluate the library services. A study was conducted on the "Information needs" and "Use pattern" of social science scholars utilising literature at the K.K. Handiqui Library. Analyses the data relating to library service, collection etc. Offers suggestions for further improvement of the library.

INTRODUCTION

Information is the essential ingredient in decision making, it has always been an important commodity but its role, status, form and structure has been changed. The need for improved information systems in recent years has been made critical by the steady growth in size and complexity of organizations and data.

Library techniques are serving as a spring board from which researchers are diving to the ocean of knowledge for seeking more advanced techniques to cope with rapidly emerging requirements for more subtle and detailed access to information. As the areas of enquiry grow more specialized, research becomes more complex and the consequent library problems increase. So knowing user's view is necessary to discover the extent to evaluate the library service, readers interest and reader's expectations. Through users survey we can know their information requirements and reading interests and what should be done to make effective use of the library resources.

The Gauhati University was established in the year 1948 and it is the oldest University in North East. Krishna Kanta Handiqui Library is the Central library along with a number of departmental libraries.

* Executive Co-ordinator, Tata Information Systems Ltd., Bangalore

The study was conducted among the social science research scholars working in the Gauhati University. There are total 64 social science research scholars become member of the library from 1993-96.

OBJECTIVES OF THE STUDY

The main objectives of this study are:

(i) To assess the utility of library services to the users.

(ii) To assess the satisfaction of the user regarding the collection and services of the library.

(iii) To know about the limitations of the library services and systems.

(iv) To introduce new methods and scientific communication system.

METHODOLOGY

For this study questionnaire method was used and data were collected from 20 scholars.

LIBRARY SERVICES

Library services being offered by the Gauhati Universiy continued to be conventional and largely outmoded.

The services provided by the library are:-

(i) General Service

(ii) Reference Service

(iii) Reprographic service.

(iv) Documentation service on demand.

(v) Orientation programme for the fresh students.

(vi) Recently computerised information service is introduced with the CDS/ISIS and ILMS packages which is limited for back vol. periodicals and thesis, but it is going to be introduced in other sections also in the near future.

LIBRARY COLLECTION

The K. K. Handiqui Library is the oldest University Library in the North East with a total collection of 2,41,783 of documents.

Total Books and Journals on Social Science

BOOKS

Anthropology	-	6,476
Business Management	-	255
Commerce	-	6,990
Economics	-	10,090
Education	-	7,940
Geography	-	3,792
History	-	7,600
Law	-	2,715
Linguistics	-	840
Political Science	-	11,180
Psychology	-	957

JOURNALS

	1993-94	1994-95	1995-96
Anthropology	24	26	18
Business Management	17	10	10
Commerce	2	2	1
Economics	16	8	2
Education	8	2	1
Geography	25	28	17
History	2	2	2
Law	23	1	19
Linguistics	2	3	3
Political Science	17	10	10
Psychology	1	4	5

OBSERVATIONS

i) Use Pattern of Different Types of Information Resources:

The analysis of data helped to come to the conclusion that the social science scholars are mainly interested in books, current and back vol. Periodicals and reference books. Dissertation and thesis are their second preferences.

ii) Adequacy of collection

Sl. No.	Documents	Adequate	Partially adequate	Inadequate
a)	Books	30%	35%	35%
b)	Current Periodicals	35%	40%	25%
c)	Back Vol. Periodicals	25%	50%	25%
d)	Reference books	25%	55%	20%
e)	Thesis/Dissertation	25%	25%	50%

On analysis of the data it has been found that for 30% users books and for 35% users current periodicals are adquate enough to satisfy the requirement pertaining to their research work.

Regarding other documents most of them are not adequate for the scholars.

iii) Information need and library collection

Most of the social science scholars feel that the library collection is not adequate to meet their research need. For the scholars it is not possible to complete their research work without going other advanced libraries.

Library Service

As the library service is largely outmoded so the scholars are not fully satisfied. Only 40% scholars get the benefit of reprographic service and other 60% make the use of other services like reference service, documentation service and computerised information service. As there are no provisions of latest addition list of books, newspaper

clipping service, inter library loan service, current awareness service, translation service etc. So scholars are deprived off to fulfill their research need. Most of the scholars opined that they are helped by the library staff.

CONCLUSION AND SUGGESTION

Even though the study is based on limited data the following suggestions have been provided:

(i) As the majority of scholars prefer to use current periodicals which must be continued. And for the benefit of the scholars resource sharing and inter library loan should be implemented in the regional, state and national level.

(ii) It was found from the analysis that the collection of books and other reading materials are not adequate for the scholars to meet the research work, so it is expected that the University authority will provide sufficient fund and the library should procure reading materials by utilizing library funds which is collected from the users as library fee, library fine, caution and disposal of unwanted materials.

(iii) The documentation service has the greatest responsibility of the quick dissemination of the information between the author and the user. So the provision of documentation service is very important alongwith the provision of current awareness service to keep the scholar abreast of recent development.

(iv) For the better use of the existing library materials orientation programme should be given to the scholars. Because most of the scholars prefer to get instruction in the use of library materials.

REFERENCES

1. AGRAWAL, A. and CHAKRABORTY, H. K. "Information needs and use pattern of Earth Science scholars of Banaras Hindu University". In: Indian Journal of Information Library and society 8 (3-4): pp. 219-227, 1995.

2. DOYLE, L. B. Information Retrieval and Processing. Los Angeles, Melvil Publishing Company, 1975.

INFORMATION POLICY FOR INDIA

Dr. S. L. SANGAM

ABSTRACT

Defines the concept of Information Policy. States the recommendations of the various commissions and committees appointed by the government of India since 1950s to improve the library and information facilities in India. Explains the present status of Library and Information facilities available at the national level in different areas of science and technology, social sciences and humanities. Discusses the objectives of the national integrated information policy for India describes the different policy issues such as user needs, information resources information products and services, manpower resources, standardisation and international co-operation. Concludes by emphasising the role of government in framing such an integrated National Information Policy for the country.

1. INTRODUCTION

Curras Emilia (1) rightly stated "Information is compared to air water and fire as a fundamental factor in the development of the human being and of humanity itself, because it is fundamental to the development of instinct and intellect. It is recognised that information, as a vital resource, is a factor of production-land, labour, capital and organisation. It is said that the western society, is heading towards an information economy, in which the main principle is the pre eminence of theoretical knowledge as source of innovation and of policy making for the society. This in turn, is reflected in the economic sector by a shift from goods producing to service oriented industries, dominated by scientific managerial, professional and technocratic class.

This is equally true in the case of developing countries, not withstanding their present rather slow state of economic progress. We have to reckon with the fact that knowledge and socio-economic development are inserparable. The application of scientific, technical and societal knowledge is the key factor responsible for the western

* Reader, Department of Library and Information Science, Karnatak University, Dharwad-580003. INDIA

nations present level of industrialisation, rate of productivity and standard of living. In the post industrial society, information and knowledge are truly signified as the very life blood and serve as the basic fuel, driving the society to further advancement.

National Information policy for India and Agenda for Information policy have been disscused by Rajagopal and others(2, 3). In a country like ours, we require a common and integrated National Information Policy. In the present paper an attempt has been made to propose an integrated national information policy for India.

2. CONCEPT OF INFORMATION POLICY

Information policy is a broad general plan of action to be adopted by an organisation or government. For example national economic policy, or more narrowly, there are policies which in effect are a series of guidelines on specific topics or in descrete areas, such as science policy or information technology policy. Such policies can be enacted by the legislature or the courts or emerge from international organisations and regulatory bodies.

According to UNISIST-II Main working document (4) A National information policy is a set of decisions taken by a government, through appropriate laws and regulations, to orient the harmonious development of information transfer activities, in order to satisfy the information needs of the country. A national policy needs provision of necessary means/instruments (financial, personnel, institutional) for concrete implementation. In many cases, there will be conflicts of interest over aspects of information policy both within and between countries.

3. COMMISSIONS AND COMMITTEES

Various commissions and committees have been appointed by the Government of India to review the Library and Information situation in India . These committee reports and recommendations are worth mentioning.

The Krishnan Report (1955), the Thacker Report (1958), the recommendations of the Estimates Committee (1959), the Ranganathan Report (1959), the recommendations of the Working Group on Scientific Research of the Planning Commission (1959), the Kothari Committee Report (1960), the Lazer Report (1964), the Ray committee Report

nations present level of industrialisation, rate of productivity and standard of living. In the post industrial society, information and knowledge are truly signified as the very life blood and serve as the basic fuel, driving the society to further advancement.

National Information policy for India and Agenda for Information policy have been disscused by Rajagopal and others(2, 3). In a country like ours, we require a common and integrated National Information Policy. In the present paper an attempt has been made to propose an integrated national information policy for India.

2. CONCEPT OF INFORMATION POLICY

Information policy is a broad general plan of action to be adopted by an organisation or government. For example national economic policy, or more narrowly, there are policies which in effect are a series of guidelines on specific topics or in descrete areas, such as science policy or information technology policy. Such policies can be enacted by the legislature or the courts or emerge from international organisations and regulatory bodies.

According to UNISIST-II Main working document (4) A National information policy is a set of decisions taken by a government, through appropriate laws and regulations, to orient the harmonious development of information transfer activities, in order to satisfy the information needs of the country. A national policy needs provision of necessary means/instruments (financial, personnel, institutional) for concrete implementation. In many cases, there will be conflicts of interest over aspects of information policy both within and between countries.

3. COMMISSIONS AND COMMITTEES

Various commissions and committees have been appointed by the Government of India to review the Library and Information situation in India . These committee reports and recommendations are worth mentioning.

The Krishnan Report (1955), the Thacker Report (1958), the recommendations of the Estimates Committee (1959), the Ranganathan Report (1959), the recommendations of the Working Group on Scientific Research of the Planning Commission (1959), the Kothari Committee Report (1960), the Lazer Report (1964), the Ray committee Report

(1967), the UNESCO Mission Report by Lazer on a National Information System for Science and Technology (1972), and the document on the framework of a National information system in science and technology presented by the NCST panel on scientific information at the Regional seminar on Approach to Science and Technology Plan, New Delhi, May 21-23, 1973) Report of the Planning Commisison Working Group on Modernisation of Library Services and Informatics for the Seventh FiveYear Plan (1985-90), have all considered the problem of organising scientific information services at the national level. The Department of culture, Government of India set up a committee on National Policy of Library and Information System. Its first meeting was held on 9-10 December 1985 and the last meeting on 14-15 February 1986 in Calcutta. It highlighted the role of libraries in the New Education Policy. The final report entitled 'National policy on library and Information systems- A presentation' was submitted to the Ministery of Human Resources Development on 30th May 1986. Still Government of India has not accepted the recommendations contained in the document.

4. ILA AND IASLIC CONFERENCE

Indian Library Association discussed the National Information Policy at the 30th All India library conference held at Jaipur in 1984. Also one of the recommendations made during 37th All India Conference of ILA held at Madras during Dec. 4-7, 1991 state as follows.

"A national information policy is necessary for development of a nation and it would help in coordinating the different sectors of activities such as Agriculture, Industry, Scientific research, Social Science research. For this purpose, it is recommended that a National Information Policy should have the following input:

(i) Analysis of information needs of users at all levels and to forecast the future demands;

(ii) Allocation of responsibilities for building information infrastructure to meet these needs;

(iii) To foster the development and utilisation of institutional, sectoral, national and international information sources needed to meet the future needs;

(iv) To maintain a broad database facility to accommodate the totality of information needs of users;

(v) To provide computer facilities for rapid information retrieval and dissemination;

(vi) To improve co-ordination between existing national and international organisations and information systems;

(vii) To promote research and development for efficient information management, processing, retrieval and dissemination.

IASLIC organised its 11th an 12th conference on the themes relevent to national library and information policy. The theme of 11th IASLIC conference held at Dharwad, Karnatak in 1977 was planning of national information network' and that of the 12th IASLIC conference held at Roorkee in 1979 was National information policy'. On behalf of ILA and IASLIC a draft policy statement was submitted to the government of India in 1985.

5. PRESENT STATUS

We can group the existing facilities available in India as follows:

Central bodies: Like INSDOC, DESIDOC, Library and Information Centres of Bhabha Atomic Research Centre, Indian Agriculture Research Institute, National Medical Library of DGHS, Patent office, Bureau of Indian Standards and Indian Council of Social Science Research.

Central Government Departments: Like Indian Meteorological Department, the Geological, Botanical, Zoological and Anthropological Surveys of India, Govenment research establishements and state government departments dealing with Agriculture, Forestry, Public health, Animal Husbandry, Transport, etc.

Science Agencies: Like Electronics Commission, Atomic Energy Commission, Space Commission, Indian Council of Agricultural Research, Indian Council of Medical Research, Council of Scientific and Industrial Research.

Academic Institutes: Which have become centres of advance teaching and training in science and technology like the universities, Indian Institute of science, Indian Institutes of Technology, Indian Statistical Institute, etc. which have well developed libraries.

Defence R&D Organisation (DRDO): Defence Scientific Information and Documentation Centres: Indian National Scientific

Documentation Centre (INSDOC), National Social Science Documentation Centre (NASSDOC), Small Enterprises National Documentation Centre (SENDOC), National Information System for Science and Technology (NISSAT) National Information Centre (NIC), and various sectoral centres under NISSAT.

NETWORKS

NICNET: National Informatics Centre Networks is a satellite based communication Network to process Government information. Presently, NIC has become a name of national and international repute with a series of successes and scoring a proud record of first by developing a computer network for government "management information system". Now it is having more than 200 technical personnel serving over 40 ministries/departments of the government of India and their associated organisations through a computer network of more than 20 minicomputer based remote stations connected to a host system, Cyber 170/730, which is presently the biggest computer in the country procured through a substantial grant from the United Nations Development Programme.

INDONET: A data network for the computer user community, designated as INDONET has been engineered by Computer Maintenance Corporation, a public sector undertaking of the government of India. The major objectives of INDONET are, distributed data processing, software export, bank computerisation, and computer consultation.

INFLIBNET: University Grants Commission based on the recommendations of a committee on national network system has planned to develop information and library network (INFLIBNET) to be designed to work for linking libraries and information centres in universities and other institutions of higher learning including colleges and R & D institutions in the country.

Other networks like educational and research network (ERNET), Integrated services digital networks (IDN), CALIBNET, BONET, DELNET have also been established.

7. OBJECTIVES

The main objectives of an information policy statement is to:

(i) identify the user needs;

(ii) intensify bibliographical control of all types of information resources;

(iii) identify the information products and services;

(iv) development of manpower;

(v) standardization in all the components of library and information centres; and

(vi) promote international information co-operation.

8. GOAL OF INDIAN INFORMATION POLICY

The goal of the National Information Policies/strategies and action programs is to attain optimum utilisation of scientific, technical and economic information of both domestic and foreign origin, as a development resource, for the economic and social growth of India.

The policy issues that need attention are as below.

a) Policy regarding user needs

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO RECOGNISE USERS, THEIR IDENTIFICATION AND INFORMATION NEEDS.

The users have different needs for information depending upon their functions, responsibilities and duties and their extent of involvement in their respective programmes. The user groups include government officials in a wide ranging spectrum from top policy making a planning levels, legislators and parliamentarians to executive and operational officials; industrial entrepreneurs; managers of business and industry; scientific and technical personnel, skilled workers at different levels in agriculture, industry, practitioners in medicine, grass root level persons in villages and in rural setting, and the general public.

b) Policy regarding Information Resources

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO MANAGE THE COUNTRY'S RESOURCES OF SCIENTIFIC, TECHNICAL AND ECONOMIC INFORMATION.

Two varieties of sources of information are readily recognisable viz. i) Documentary sources, and ii) Non-documentary sources-formal channels, informal channels.

c) Policy regarding Information products and services

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO INTENSIFY THE INDIGENOUS GENERATION OF SCIENTIFIC, TECHNICAL AND ECONOMIC DATA AND INFORMATION.

Most of the products such as current awareness bulletins, in dexing and abstracting journals, consolidation and repackaging publications and similar others, prepared in the context of research. Specialised services in business and industry include information digest services for managers at the levels of strategic planning, control and operations. Translation of foreign language material in to Indian languages.

d) Policy regarding Information sector manpower

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO PROMOTE THE DEVELOPMENT OF ADEQUATE MANPOWER IN THE INFORMATION SECTOR.

Progress and sophistication in the design, development and operation of information systems in the country can come only with a quality manpower, and capable of achieving targets.

e) Policy regarding standardisation

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO RECOGNISE THE STANDARD TECHNIQUES, METHODS, PROCEDURES, HARDWARES AND SOFTWARES.

Any plan of Co-ordination, system management; networking, etc will be meaningful, only if the constituent parts canform to a cartain degree of uniformity in organisation and co-operation. Compatibility can be achieved by standardisation of techniques, methods, procedures, hardwares and software, services. Standardisation alone will facilitate pooling, sharing and exchange of resources and facilities, towards optimisation.

f) Policy regarding International Information Co-operation

IT SHALL BE THE NATIONAL POLICY OF THE GOVERNMENT OF INDIA TO PARTICIPATE INTERNATIONAL PROGRAMS WHICH FACILITATE EQUITABLE EXCHANGE OF INFORMATION.

Exchange mechanism where such smooth flow of information does not operate at present, there should be bilateral and multilateral arrangements to establish exchange relations. In areas such as technology, economic and trade, development service and many other areas, information flow is never free. Even open information does not flow because of lack of proper exchange relations.

9. CONCLUSION

At present there is hardly any national programme of library and information service for the development of library and information activities by the union government, state/union territory governments and by other agencies in the country. As a result, existing programmes generally ad-hoc, unrelated to one another and continue to develop through out the country in an un-coordinated way. In some cases, this lead to incompatible systems and even counter productive activities. For this purpose it is highly essential that immediate steps be taken to ensure that future development of the nation's library and information resource would occur in a cohesive manner according to a national plan based on a national policy for library and information service. This national policy is going to serve as guidelines for the development and improvement of library and information services in the country in the years to come.

REFERENCES

1. EMILIA, C.: Information as the fourth vital element and its influences on the culture of people. International Information, Communication and Education. 6(2): 1987, p.194.

2. RAJAGOPALAN, T. S. and RAJAN, T.N. National Information Policy for India. IN: Handbook of Libraries, Archives & Information Centers in India Ed. by B.M. Gupta et al New Delhi, Information Industry, 1986.

3. RAJAGOPALAN, T. S. and RAJAN, T.N. Agenda for a National Information Policy. IN: Handbook of Libraries, Archives and Information Centres in India Ed. by B.M. Gupta et al. New Delhi, Information Industry, 1986.

4. UNESCO Inter-Governmental Conference on Scientific and Technological Information for Development, UNISIST II, Paris, May, 1986.

LIBRARIES AND LIBRARIANSHIP IN UTTARAKHAND: A PERSPECTIVE

DINESH CHANDRA GOSWAMI*

ABSTRACT

Uttarkhand is an administrative unit of U.P. It consists of nine hill districts of Garhwal and Kumaon divisions. Historically, geographycally, culturaly, economically and as well as anthropologically the entire region is different from other districts of plains.There is considerable variation in education, library facilities and quality of library service. People of this region are patriotic, intelligent, honest, hardworking and self respectable. Literacy rate is high (60%) in the region but avenues for employment are very scarce. In comparison to most Indian states, there is no public library act in Uttar Pradesh. Only district public libraries and their (branch level) block libraries are providing library facilities only for name sake to general public There is no separate authority for the development and maintenance of the public libraries in the Uttarkhand region. Condition of academic libraries in the region is far from satisfactory. Only special libraries are providng better services to their readers. As far as library science education is concerned the students of the area are dependent on other universities in the plains. So there is urgent need for the establishment of the new libraries and improvement and proper maintence of existing libraries in the region. Education is considered as human capital and investment. The same can be said for libraries since they are the integral part of the learning process.

INTRODUCTION

The entire Himalayan region stretching from Kashmir to Arunachal comprises Indian states such as Kashmir, Himachal, Sikkim and Arunachal and autonomous regions like Gorkhaland and nations such as Nepal and Bhutan. There is one exception- the nine mountain districts of Garhwal and Kumaon which are part of the state of Uttar Pradesh. The upsurge for statehood in this area is as much a part of the relentless logic of the political economy of the such regions as of their cultural and ethnic exclusivity. What makes Uttarakhand is not just its geography but its history, culture and

* Department of Library and Information Science, Lucknow University, Lucknow-226007

social anthropology. The proposed Uttarakhand state spreads over an area of 51,122 Sq. Km. consists of nine districts Chamoli, Uttarkashi, Pauri, Tehri and Dehradun in Garhwal division and Pithoragarh, Almora, Nainital and Udham Singh Nagar in Kumaon division, having 59,26,146 population (in 1991) almost equally distributed in both divisions. More than 75% population of the area is engaged in agricultural activities, 70% population is living below poverty line and 46% population of the area has been migrated to plains. In Uttarkhand there is wide spread poverty and backwardness. Road transport and communication are lacking, people are condemned for living hard life. Indeed the borders of the regions with China and Nepal should have made it sentinel of our national security. The people inhabiting the hills are educated, intelligent and hardworking besides being patriotic and loveable. Higher rates of literacy as well as lack of avenues for employment in the mountain region led to the emergence of a unique political economy which has sometime been termed as the money order economy.

PUBLIC LIBRARY SERVICE IN UTTARAKHAND

Uttarkhand region is an administrative part of the Uttar Pradesh, which do not have a well knit library system as compared to the states like Andhra Pradesh, Tamil Nadu, Karnataka, Maharastra, West Bengal, Manipur, Goa and Haryana which have enacted library legislations. Hundreds of public libraries and reading rooms exist in the region, but as a matter of fact, they are being run by different departments of the goverment at Lucknow without any coordination among them.

Every district of Uttarakhand region has one district public library, except few other block level public libraries in the region, but all the district libraries are functioning in isolation without any coordination with the state central library. The state central library which is located at Allahabad, has organised training/reorientation courses for the librarians cum clerks working in approximately 6000 Intermediate Colleges of the state during 1987-88, but it is unable to perform, however, the functions expected of an apex library because of lack of administrative control and coordination with the district libraries, and their branch libraries.

Public library development in Uttarakhand has been mainly through government efforts, but the present public library system in the region includes both government and voluntary libraries. About

40 public libraries are known to have spung up during the last fifty years.

RRRFL scheme assistance to public libraries is one of the good financial source for purchase of books. In the year 1986-87 a sum of Rs. 3000/-has been made available to assist 20 selected public libraries in the Uttarkhand region to built up their reference collection. The work done by Doon Valley Library Association in the development of public libraries in the region is worth mentioning.

Probably the most potent factor which caused the infantile 'paralysis' in the library movement is the government's reluctance to recognise the library profession and its unquestioned faith in the ability of Education Department, the bastion of red-tapism and conservatism, to run the libraries.

Libraries like many other facilities in the country, have an urban orientation. This is the result of the working of the normal law of demand and supply. A library came up where there was a demand for it.

In the small towns of hills, the libraries, where they exist, are by no means up-to-date and officially staffed, and more often than not the local bodies are satisfied providing some newspapers and obsolete books. These books are usually fiction and pander to the very human tendency of preferring fiction to fact. No organisers of the library movement, however, can afford to forget that the main functions of the library are informational, educational and recreational. The great mass of semi-literate and illiterate adults scattered throughout the length and breadth of our land, must have acress to the knowledge. It is our great responsibility of seeing that our citizens receive the fundamentals of education in the shortest possible time no money spent on this should be considered wasteful.

LIBRARIES IN ACADEMIC INSTITUTIONS

Libraries attached to academic institutions in the Uttarakhand region are as under :-

1.	Universities (including one agriculture university)	3
2.	Degree/Post Graduate Colleges	35
3.	Intermediate Colleges and High Schools	872

4.	Basic Schools	6832
5.	Technical Institutions	23

SCHOOL LIBRARIES

There is no standard and uniformity in the growth and development of school libraries in the Uttarakhand region as a whole. Leaving some central schools and convents, even the privately run schools like Guru Ram Rai Public School charging heavy fees, do not provide library services properly. As far as State Government, Municipal and aided basic and junior high schools are concerned, majority of them do not have any library in any form through the library fees is charged from the students by most of these schools.

In the chapter 12 of Education Calender of U.P. Board of High School and Intermediate it has been specially provided that every higher secondary school will be given recognition when it will have a library attached to it, but infact, the situation of school libraries in secondary school is far from satisfactory. Only 55% intermediate colleges have libraries in one form or the other. Thus 45% inter colleges do not have libraries at all. Those inter colleges which do have library facilities, the libraries are managed by a single person designated as librarian cum-clerk, who has to look after the office work of the college as well as the library. According to a survey conducted by Department of Education U.P. in 1987, it was revealed that among the colleges where libraries exist, only 2% are spending more than Rs. 5000/-for the purchase of reading materials. 34% college spent about Rs. 1000/-, 20% spent Rs. 2000/- and only 7% spent more than Rs. 2000/- on the purchase of reading materials during the financial year 1986-87. In 37% intermediate colleges where library exists, not even a single paise was spent on the purchase of reading materials during two proceeding financial years inspite the fact that library fees is charged from the students; only 11% librarian cum-clerk trained semi professionals, who are only a certificate holders in library science. This survey shows the negligence and pathy of the authorities towards school library development in the state in general as well as in the Uttarakhand region in particular.

In this modern age, education is not one of mere instruction by a teacher. The pupils should have the thrill of finding

information themselves from the books. This calls for a variety of books. This is best done by making the school library service a mandatary service.

COLLEGE LIBRARIES

Colleges in the Uttarakhand region either directly controlled by or affiliated to Universities. There are about 35 Post Graduate or Degree colleges in the region. Most of them have libraries but only few Government colleges are getting non-recurring grants for their libraries. These college libraries do not get any recurring grant for the library from the Gopvernment. Hence they have to depend on library fees, charged from the students which is very neglegible inorder to meet the actual requirements.

UNIVERSITY LIBRARIES

Universities are the organs of civilization, they are intellectual pioneers of culture, and the santuries of the inner life of the nation. They act as the conscience of the community and the custodians of the rich heritage of the people. They act as an agent of great change in the overall development of the society. As far as Uttarakhand region is concern there are only 3 Universities viz, Hemwati Nandan Bahuguna Garhwal University, Srinagar Garhwal, Kumaon University, Nanital and Govind ballabh Pant Agriculture University, Pant Nagar. All these three Universities in the region are getting recurring grants from University Grants Commission for their libraries. Besides the nominal recurring grants from the State Government. Though the Central Government and U.G.C. Have equated the pay scales of the college and University librarians with those of teachers in the year 1980, state government has sanctioned U.G.C. scales from 1.1.1986 only for the university and college Librarians in Uttar Pradesh.

All the university libraries in Uttarakhand region are situated in separate buildings and trying to fulfil the requirements of their respective clienteles. As we know to inculcate in every student a love for literature is an essential part of education. The library hour, often neglected in schools, is perhaps more important than many hours devoted to formal education. If properly guided and stimulated, a student may find the library hour a more rewarding period at school or college. Above all, it will set him on a path of discovery, which in a sense is the essential purpose of education.

SPECIAL LIBRARIES

Among the categories of special libraries in Uttarakhand there are many libraries attached to central and state government research institutes, medical and engineeing colleges. There are a number of good special libraries, viz Forest Research Institute Library, ONGC Library, survey of India Library in Dehradun and Lal Bahadur Shastri Administrative Academy Library at Mussoriee. All these libraries are adequately financed with sufficient and well paid staff.

LIBRARY SCIENCE EDUCATION

With science and technology introducing us to new storage device, information technology has developed into a science that provides easy and quick access to all kind of information. This technology has added a new dimension to library science. Information is no longer sought in books and periodicals. It is stored on tapes, microfilms cassettes, catridges, electronic media etc. The librarian today is a professional who works with these latest storage devices, besides carrying out his traditional work of cataloguing, classifying and indexing of other books and materials in addition to the interacting with the public.

CERTIFICATE COURSE IN LIBRARY SCIENCE

Uttar Pradesh Library Association is running a four month certificate course in library science since 1959, which is recognised by Government of U.P. examinations are being conducted by the Registrar, Department of Examinations, Education Department. At present only one branch of this course is working at Dehradun in Uttarakhand region. This course is open to those candidates who have passed intermediate examinations of any recognised institutions. Total number of seats available at this centre is 40.

In the entire Uttarakhand region has to depend on universities in the plains for other higher courses in library science.

CONCLUSION

The present setup of libraries and facilities for library education in the Uttarakhand region are not satisfactory. As Dr. P.C. Joshi, a noted economist and sociologist in his recent book on Uttarakhand

makes the point that this is the only region in the Himalayan belt that does not enjoy political and administrative autonomy. There is disillusionment with the new middle class.

The library movement's ultimate aim should be to reach not merely the urban population, but the vast rural population just emerging from its age old illiteracy and looking around eagerly for something to read. A library atleast a mobile one, should be brought within of every motorable roadside town in the region:so with the objectives to disseminate knowledge by providing reading and instructional facilities in such branches of learning it is must to pay special attention to the improvement of social and economic condition and welfare of the people of the hill areas of Uttarakhand particularly for their intellectual, academic and cultural advancement. Because we know that libraries are the means by which human beings secured the record of their thoughts and achievements; they preserved their tradition and guaranteed their laws. They gave continuity to faith and sustained religion; they were the prime instrument for the development of learning. Libraries may not create a civilization; but a civilization cannot exist without libraries.

REFERENCES

1. HUTCHINGS, .F G. B. Librarianship a short manual. Oxford, 1969.
2. Report of the U.P. Education Department regarding reorientation of Inter College Libraries cum clerks. Allahabad, State Central library, 1987.
3. The Times of India, Lucknow. November 20, p3, 1994.
4. The Pioneer, Lucknow. October 6, p6, 1995.
5. The Pioneer, Lucknow. August 24, p15, 1996.
6. The Hindu Speakes on Libraries. Edited by Ravi, N. Madras. Kasturi, p5, 1992.

LIBRARIES FOR SOCIO-ECONOMIC DEVELOPMENT : PROPOSAL FOR A MALABAR STUDIES COLLECTION

M. PARAMESWARAN*

ABSTRACT

Malabar studies is the name proposed to refer to all study and research activities with Malabar as a nobal centre. This should be considered as a subdivision of the broader subject Kerala Studies. Even though there are certain recent efforts for holding conferences, organizing special collections in libraries and compiling bibliographies on Kerala Studies no such attempt has been made so far specifically on Malabar. Area studies and research programmes with Malabar as the nodal centre can contribute much to developmental programmes in Malabar. Moreover, Malabar has its own folk tradition which is reflected in the ritualistic arts like thira and theyyam, in the northern ballads such as that of Othenan and Unniyarcha, and in the martial arts like Kalarippayattu. Document collection on these cultural aspects will helps us to appreciate them and preserve them.

We have to collect and preserve many historical documents relating to the royal dynasties of Malabar and the famous Mappila rebellion of 1921. Hence a Malabar studies collection should be developed and maintained in the Calicut University Library. A periodical bibliography on Malabar should also be started. It is suggested that the Documentation Section of C.H. Mohammed Koya Library can take up this work.

WHAT IS AREA STUDIES

Area studies encompass several fields of humanities and social sciences in a multidisciplinary approach to the understanding of contemporary society in some specific area. The subjects included within the purview of area studies are history, geography, political science, sociology, anthropology, economics, literatue, lingustics and fine arts. In other words area studies concentrate on social sciences and humanities rather than science and technology.

* Reader & Head, Department of Library & Information Science, University of Calicut Calicut University P.O.

Area studies require language competence. This has two implications (1) The researcher should have knowledge in the vernacular (2) The research worker must have access to the collection of literature published in local language. The second implication has direct bearing on the library collection.

DEVELOPMENT OF AREA STUDIES IN AMERICA

Area studies is in fact a Western concept, more precisely an American concept. It is the result of various efforts to study non-westen societies and their cultures in the American universities. The studies on non-western areas by American societies intended to achieve the following purpose. (1) to enlarge a studies contact with varieties of human experiences (2) to enable his to see his own culture in perspective (i.e. from different view points).

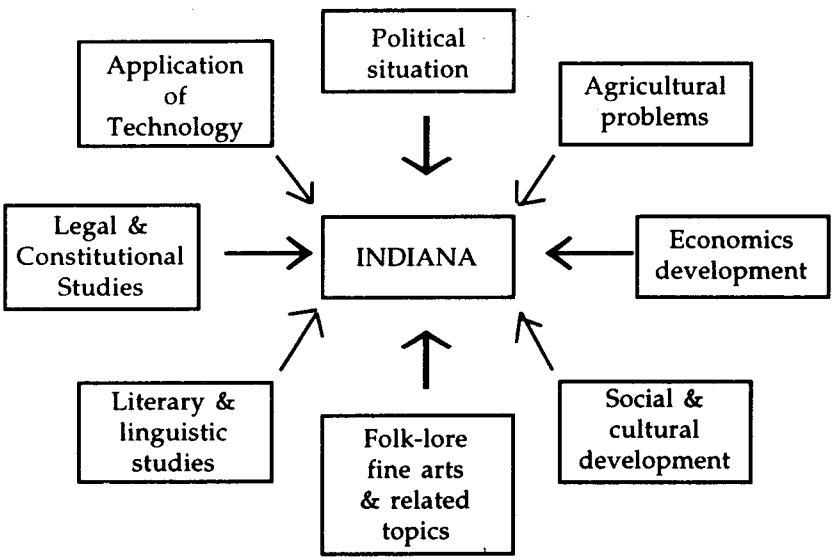
Interest in the part of American Universities in coordinated research and teaching on specific foreign areas by scholars from various disciplines dates back 1930s with the establishment of a number of programmes on Latin America. It may be pointed out that there were efforts in British and German Universities even long before that to study and do research on Indology. However such studies were restricted to a limited extent to understand the ancient wisdom of India recorded in the literature of religion and philosophy. Area studies in USA attempt a more integrated approach by specialists of different disciplines. The Committee on World Area Research established in 1946 by the Social Science Research Council aimed at sponsoring surveys and studies of area research. The Rockfeller Foundation, the Carnegie Corporation and the Ford Foundation are the three institutions which provide grants for area studies and research in American Universities.

S.R. RANGANATHAN'S VIEW ON THE DEVELOPMENT OF AREA STUDIES

According to Ranganathan area studies are new disciplines developed as a result of clustering. Clustering is one of the different modes of formation observed in the universe of subjects. In this mode of formation there is a core entity of study such as a person, an area, an entity or a phenomenon. Inputs, view points, or works on it come from diverse fields of study. This feature is like clustering around a nodal idea.

Ranganathan preferred to use the word Indiana to refer to the area studies with India as nodal idea. This can be schematically represented as shown in figure 1.

Fig1. Clustering as seen in Indiana



DEVELOPMENT OF AREA STUDIES IN INDIAN CONTEXT

In developing countries like India, area studies have another dimension. Studies and research on specific geographical areas provide us an integrated approach or holistic view to our development programmes. For example proposals for hydro-electric projects should be reviewed against the pros and cons of environmental problems.

The Ministry of External Affairs Library and the Library of the Indian Council of World Affairs are two libraries in India which are specialising on area studies collections. Since Indian Universities have many research programmes related to many regional problems, the significance of area studies has been understood and appreciated. University libraries have started to build up area studies collections on a regional basis.

DEVELOPMENT OF KERALA STUDIES

Traditionally Indology is the name used by the Westerners to refer to the study of ancient culture of India. In the modern context, since area studies have a wider connotation than the study of culture and philosophy, Ranganathan's terminology (in Indiana) is more suitable to refer to the area studies with reference to India. Similarly Kerala studies and Malabar studies are the terms proposed to refer to the branches of area studies with Kerala and Malabar as the nodal ideas respectively.

The term Kerala studies has already gained acceptance in higher education and research. The indirect evidences for the development of a new discipline are the following (1) quantity of literature published or anticipated to be published in thenear future in the emerging field of study (2) Conferences held on the subject (3) research topics selected within the field of knowledge in university departments and other research institutions (4) academic departments of the Universities or other institutions of study and research established in the field of knowledge.

So far there is no primary literature comprehending the whole field of study referred to as Kerala studies. Since area studies are subject bundles formed of a set of subjects, the publication of comprehensive documents covering various aspects of Keral studies will take sometime. However a five volumed conference proceedings uncorporating extended abstracts of the papers presented has been published in 1994. The conference was titled International Congress on Kerala Studies and sponsored by A.K.G. Centre for Research and Studies, Thiruvananthapuram. So many publications dealing with some aspect of the development of Kerala have come out, on topics such as economic development of Kerala, social situation in Kerala etc. Bibliographies on Kerala studies have been published by Kerala University Library and Legislative Library of the Government of Kerala based on their own collections. Kerala University is regularly publishing a quarterly periodical bibliography on Kerala studies in a cyclostyled form. Kerala University Library has a separate Kerala studies section with valuable documents. The Library of the Centre for Development Studies also has a copious collection of documents on Kerala Studies. The University of Kerala has recently started a Centre for Kerala Studies with a University Professor in charge of

the centre. There are couple evidences for the emergence of Kerala Studies as a branch of area studies.

DEVELOPMENT OF MALABAR STUDIES

Use of the term Malabar Studies has not yet got acceptance. However, there are indirect evidences to show the emergence of this new branch of area studies. A perusal of the list of topics included in the publication of abstracts of the International Congress on Kerala Studies published by A.K.G. Centre for Research and Studies, Thiruvananthapuram, in 1994 shows that many topics are exclusive studies on Malabar area. A perusal of the ongoing research topics in the University of Calicut also show that many topics are exclusively on Malabar area. The souvenirs brought out by Malabar Festival Committees in Calicut also include topics mostly on various aspects of Malabar. These are certain indications that a new branch of area studies is emerging. This new branch of area studies, viz., Malabar Studies is to be regarded as a branch of the broader field Kerala Studies which in turn is a branch of Indiana. This relationship of these subjects may be shown as indicated in Figure 2.

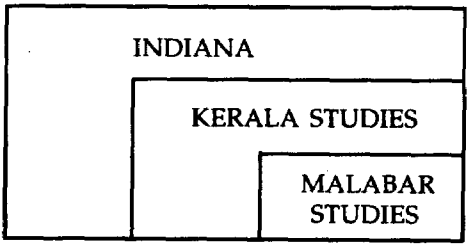


Figure 2. Relation between Kerala Studies and Malabar Studies

NEED FOR COLLECTION DEVELOPMENT AND BIBLIOGRAPHICAL SERVICE IN MALABAR STUDIES.

Whenever the economic backwardness and lack of industrialisation in Kerala are discussed, it is conveniently forgotten that Malabar area is more accutely suffering from lack of tranaport facilities and development programmes. Tranvancore, Cochin and Malabar are the three regions of Kerala State. Due to certain historical reasons the overall development of Malabar region was less when compared to the developments taken place in Travancore and

Cochin. Clamour for special programmes for the development of Malabar area is well reflected in the headings of the daily news papers. The educational backwardness of Mappilas (Muslims of Malabar) has not so far been tackled satisfactorily. It has been accepted that Malabar requires a master programme for the development of transportation, communication, education and other facilities. Area studies and research programmes with Malabar as the nodal point can contribute much to such developmental programmes. Various departments of the University of Calicut have undertaken several such research projects. A comprehensive library collection and compilation of bibliography on Malabar studies are pre-requisites for all such study groups, research projects and development programmes. Such library services will provide an integrated approach and holistic view to the entire research programmes.

Malabar has its own folk traditions which are evident in the ritualistic arts like thira and theyyam and in the northern ballads such as those describing the heroic acts of Othenan and Unnivarcha. Studies on such cultural aspects will enable us to understand our tradition and preserve them. The folk literature is written in vernacular and not available from standard publishers. Special efforts are needed to acquire them and organize them as a library collection.

In this year we are celebrating the platinum Jubilee (75th years) of the Mappila rebellion or Malabar rebellion of 1921. Several studies, discussions and seminars are being organised on this topic of historical importance. Lot of historical documents are available on this historical event which should be preserved in microforms and made available.

The historical records of the royal dynasties such as the Arakkal dynasty and Zamorrins are to be collected and preserved.

Considering all these points it is essential to start a Malabar studies collection. The C.H. Mohammed Koya Library of the University of Calicut is the most appropriate centre to take up this work.

ORGANISING THE COLLECTION

The collection should include English as well as Malayalam books. In addition it should also include books of Tamil and Arabic and other languages which may have historical and social significance with reference to Malabar.

There should be liberal policy for collection development because some of the rare documents may not be available from normal trade channel.

The collection should include the following subjects:

1. economics
2. sociology
3. anthropology
4. history
5. language (books on dialects, word usage etc.)
6. literature (creative literature of social significance and critical studies on such works and their authors)
7. place name studies
8. agriculture
9. folk literature

The list of subjects is indicative, but not exhaustive.

The two sources of income for purchase of books are 1) grant from state government 2) UGC grant. Special assistance should be sought from state government and UGC for developing area studies collection. Initial expenditure will include the cost of shelves and catalogue cabinets. The collection may be started as part of maintenance section, but in due course it may be separated as Malabar studies section. One Assistant Librarian and one Professional Assistant will be enough to maintain this new section.

Compilation of Malabar Bibliography may be entrusted with the documentation section. It should be remembered that the value of a bibliography lies in its uptodateness. Hence the bibliography should be published as a quarterly.

CONCLUSION

The organization of a Malabar Studies collection and the preparation of a periodical bibliography on Malabar studies can contribute positively to the study and research projects on various

aspects of malabar. These library activities can also facilitate the overall economic and social development of Malabar. Hence the C.H. Mohammed Koya Library of the University of Calicut should take up these activities and show an example to the newly developing Malabar University of North Malabar.

REFERENCES

1. HARRIS, C. D. Area studies and library sources. In: T H Sien and H W Winger, Ed. Area studies and the library: The Thirteenth Annual Conference of the Graduate Library School, May 20-22, 1965. University of Chicago press, Chicago.

2. KRISHAN KUMAR. Theory of classification. Ed 2. Vikas, New Delhi. p. 195, 1981.

3. PARAMESWARAN M. Kerala studies collections and the need for a union catalogue. In: International Congress on Kerala Studies (Thiruvananthapuram) Abstracts. V3, 1994

4. SUKUMARAN NAIR, W. Area studies collection neglected aspect of libraries in Kerala. Paper presented in: International Congress on Kerala Studies, 27-29 August 1994, Thiruvananthapuram. Session 55. Library movement and bibliographical control.

LIBRARY : PREPARING THE SOCIETY FOR A HEALTHY NATION

KEYA BASU*

ABSTRACT

Education is the most important factor for a healthy democracy and no problem facing our country is more important than illiteracy. As a member of the society, the library professionals have a responsibility in eradicating the illiteracy in our country. This may be done by offering service as formal education support centre, independent learning centre, informal education centre. The library should also participate in the community development activities. It is the duty of the library personnel to involve people over issues that concern them. Literacy is a basic right to the welfare of the nation. In every historical era, the power of written word was felt, without which a high state of civilization and culture was impossible.

INTRODUCTION

All the great civilizations of the world had been great because of their being remotely or directly connected with the offers of knowledge - library. The earliest known library existed nearly 3 millennium B.C. in the Babylonian town of Nippon. Ptolemy I Soter's library at Alexandria (3rd Century B.C.) is a well known fact which places Egyptian civilization in India is also known to have thrived on the strength of library known to have existed at Nalanda. The education of common man is very essential in the successful functioning of democracy. If the electorate does not realise its rights and duties towards the country, it will fail to contribute in the making of a nation. The mind of the grassroot level citizen of India needs proper grooming in order to identify himself in the perspective of a pluralistic culture of this country. The younger generation of modern India, armed with education backed by multifaceted libraries, can make positive impact in the strengthening of democracy and in turn a stronger nation.

Knowledge is power. In India the tradition of learning has been prevailing since vedic age. In present time, information has great

* Geological Survey of India

economic and social value. It is an important tool for the proper functioning of a democratic country. Information has immense importance in production, growth and well being of a nation. "How freely and how equally citizens have access to knowledge determines how freely and how equally they can share in the Governing of our society and in the work and rewards of our economy. Question of access to knowledge, and to the information on which knowledge is based, have an special importance today. As our need for knowledge grows, our dependence on complex sets of institution and mechanism to supply it becomes greater" (Lacy : 1986 : 1).

The traditional concept of library system has been changed. Now the library professional should be ready to accept new responsibilities to meet society's changing needs and demands. They have to accept responsibility for self-education of individuals, encouraging national integration to make democracy stable and safe, promoting cultural contacts etc.

Literacy, the ability to read and write, has assumed an importance in the developing country like ours. The literacy status in India is 52.21 per cent (according to 1991 Census). Due to the lack of widespread literacy, our country men cannot enjoy the full fruit of nation's progress. Government does not get any feed back from the people, whereas literacy encourages feedback which helps to run the Government. If the only purpose of literacy is to provide that one can write his name and read it in print, then libraries have little importance. Libraries serve the developing country by infusing reading habit to the common people. Functional literacy means that one can read newspaper, popular periodicals etc. We often make the mistake of designing libraries solely for those who are most able to use them. In our country public library should play an important role in providing-services to adults, children and those who have difficulty in using library materials and services. In rural Library the librarian may serve as a teacher because in rural areas library personnels are not so much overloaded by regular library services. Dr. S. Radhakrishnan's statement supports the view "In the old days teachers of India were themselves librarians and they were held in highest esteem" In West Bengal many rural/primary unit libraries serve as an adult education centre. Now libraries are considered as vital social institution for mass education instead of mere recreational centres. Non-formal education programme which caters to the need of drop-

outs, working children and adults can be offered by the library.

No problem facing out country is more important than illiteracy and ignorance, and no organisation brings more resources to the literacy movement than librarians. The libraries should play vital roles in the development of social and democratic values and ideals, in the eradication of illiteracy and retention of newly acquired literacy. No advancement is possible with uneducated people. In this information age classrooms and libraries are the real weapons of democracy.

To meet the society's changing needs, libraries accepted new responsibilities. Now the earlier concept of library service i.e. to serve a few scholar has been changed. The public libraries in our country may serve as:

1. Community Resource Centre;
2. Independent Learning Centre;
3. Formal Educational Support Centre;
4. Educational Centre for Children;
5. Information Centre for Physically Handicapped;
6. Informal Education Centre for Illiterate Women.

COMMUNITY RESOURCE CENTRE

We, the library professionals are not aware of the fact that direct relationship prevails between community development and a healthy democratic society. It is the duty of the librarian to involve people over issues that concerns them, through discussion, seminar etc. The library may encourage community activities of all kinds and thus create opportunities for responsible and voluntary initiative. This may include formal and informal adult education. Student, volunteers who are interested can take the responsibility. From such type of voluntary groups, the individual will be able to take the larger responsibility.

In a particular community the library should establish relationship with other community agencies and organizations, which will be very helpful for the development of the library in the community. The librarian should also be able to relate positively with the people in the community. The library should serve as a social centre with the aim of making readers of non-readers and creating the desire for good reading. But it is very

sad to say that many librarian give services when they are asked to do so. A library's community is composed of different kinds of people who have different educational and economical background. Therefore, their approach to library service varies considerably. To recognise their differences the librarian should have a clear knowledge about the community, its different characteristics, resources. Community development service may be of different types :

COMMUNITY INFORMATION CENTRE

The library in a particular locality may become a clearing house for current information on community organizations, services etc. it should respond to the community problems. It may provide specialized services both inside and outside the library building, such as job information for a community with high unemployments. The library may create local directories, maintain files of service agencies and local organization to help the unemployed mass. Access to this information helps individuals to become self-sufficient. Users will have a none stop centre to get information about local issues, organizations and services and keep abreast of local issues.

COMMUNITY ACTIVITY CENTRE

The library should be a central focal point for community activities, meetings etc. It must work closely with other local agencies, libraries to provide a co-ordinated programme of cultural, social, educational services. The libraries may organise programmes like book exhibition, book-discussion groups, community issues forum, quiz, cultural programmes, health information, health testing programmes etc. The community members then discuss their divergent views on issues and current topics and receive some social services.

To serve as a community development centre successfully following steps may be taken :

i) Community study

ii) Identification of needs, demands and interest of the individual in the community

iii) Identify community resources that can be used and match them with needs.

iv) Disseminate those resources to the user

v) Organise informational and educational programmes at regular interval.

INDEPENDENT LEARNING CENTRE

The library should extend their supports to the individuals of all ages and classes, so that they can make use of these library services for the development of their knowledge, self improvement, job-related development, cultural interests etc. They should be provided with relevant books, information by the library at their needs.

FORMAL EDUCATIONAL SUPPORT CENTRE

The public libraries and in case of rural area, primary unit/rural libraries can be alternative study site for student. Due to the lack of fund many schools have no library, if there is any, the condition is very poor. The library staff should help them to identify an appropriate learning path, determine needed resources, and obtain those resources from the library's collection or if possible through interlibrary loan. The library should serve students of all ages in meeting educational objectives established during their formal course of study. The library may function as an educational information centre providing occupational counselling to help them to build their career. They may involve students in training programmes, adult education, continuing educational courses. It will help them to learn some thing new and to identify their values.

EDUCATIONAL CENTRE FOR CHILDREN

The library should encourage young children to develop an interest in reading and learning through services for children especially those from weaker section of the population. Here traditional concept of library material may be changed by introducing toys, besides books. Library may collect used toys from well-off section of the society. This type of library service helps to inculcate interest in the mind of a child about library. It promotes lifelong use of the library and contributes to the library's image as an educational centre for individuals of all ages and classes.

INFORMATION CENTRE FOR PHYSICALLY HANDICAPPED

This type of user are relatively few in number. They are scattered over a large geographic area. They have needed very specialized and costly library materials and services. Therefore, it will not be economically feasible to provide such service by a single library. Here resource sharing and active financial support of the Government and different voluntary agencies are needed very much.

EDUCATION CENTRE FOR ILLITERATE WOMEN

In our country literacy figure for male is 64.13 whereas the figure for female is 39.29 (1991 Census report). Therefore, the urgency for women education is more. If they become literate and have minimum education, it will be helpful for proper upbringing of our future generation. The National Policy on Education and programme of Action gives high priority to the education of women. Providing education to the women ensures the contribution of this large segment of our population towards socio-economic developments. It is not possible for them to accept formal education from schools, but this objective can be successfully achieved by the library. If librarians are too busy with their jobs, then volunteers can be employed for this purpose. Programmes on health information, child rearing will be very helpfull for them.

Being a developing country, no library in India has enough fund, staff on collection to fulfill all aims with excellence, so each library should cooperate with other libraries by showing their resources, services and ideas. Library professionals must join with the other literacy providers to pressurise the state, Central and Private agencies to promote active development of literacy. Planners should provide required fund for the functioning of the literacy programmes in library. If librarians cooperate more meaningfully among themselves, they will be in a better position to exert leadership in community development service.

CONCLUSION

The cheapest and richest mode of educating the common man is through the libraries. It's wealth is certainly huge and its costs a mere peanut to avail the bounties of knowledge. Literacy campaign has been greatly successful in Kerala and West Bengal due to the

Government's interest in setting up of libraries. Literacy campaign will not succeed without the support of libraries. The most important facets of a library today is its role as "Community activity Centre" and "Educational Center for Women". The aspects which library backed volunteers should need to stress upon are (i) women, (ii) Physically handicapped (iii) Cultural uplift and recognition of India's multinatural wealth (iv) problem awareness among the less privileged people and awareness of the facilities available to them, (v) educating for health care and (vi) the vocational education support.

Education is the most important factor for healthy democracy, therefore it is the responsibility of the elderly citizen to spread it. We can do a lot towards making a healthier democracy and a stronger nation. Let us take at least one step today for a brighter tomorrow.

REFERENCE

McCLURE C.R Planning and role setting for public libraries American library Association, Chicago., 1987

LITERACY MOVEMENT AND LIBRARY SERVICE FOR THE NEO-LITERATES AND ILLITERATES

AMIT KUMAR BANDYOPADHYAY*

ABSTRACT

Lack of literacy, science awareness, and power of reasoning causes the country to be a victim of religious radical forces and separationists. No developmental project can be successful when the majority remain in the dark. We should waste no time in eradicating the curse of illiteracy from our country.

Functional literacy refers to the ability to read write calculate and solve one's own problems. For real library movement we need to make our people literate. But to retain literacy, libraries are needed.

Literacy movement must be linked with libraries. It can help to retain literacy, develop reading habit, supply reading materials, provide information, organise extension services for the illiterates and neo-literates, make people informed and conscious. At first the library materials should be taken to the literacy centres. Neo-literates be given free library service. They should be made involved in the extension programs. Illiterates can be served with posters, charts, film shows, radio, T.V., A-V materials and information and advice services. Services need be user oriented. There is shortage of appropriate reading materials in local languages. Materials prepared by different Government departments be sent direct to libraries.

Staff training for organising extension and information services be arranged. 10% of library book budget be kept reserved for neo-literacy materials. One hour per day should be kept fixed for programs for the neo-literates in a library.

INTRODUCTION

The term literacy refers to the ability to read write and do simple calculations. The expansion of the term literacy to include understanding, critical analysis, and ability to grasp knowledge from print and to put it to use has evolved over the years. There are two levels of literacy-basic literacy and functional literacy, which represented skills for coping with daily living. In 1985 U.S. Secretary of Education, William J. Bennet said 'In functional terms literacy is the ability to read, write,

* U7A-C5, Tarabag, Burdwan, W.B., 713104.

speak, listen, compute and solve problems in situations that confront adults in every day life.' (Mathews, A.J.)

Literacy is the pre-condition of successful library movement. Traditional libraries are of no use to illiterates. So, for real library movement we need to make our people literate. But to retain literacy, libraries are needed. Many attempts of literacy movement have become a failure because libraries were not involved.

To construct a society without illiterates, we need to develop an integrated network of library system throughout our country with the mission to help the illiterates and neo-literates to develop and retain their literacy level and to make them informed citizens.

We need to open post literacy centres in each library giving free service to one and all of those who have attained the minimum literacy level from the training campus and the drop-outs of the primary schools.

FUNCTIONS OF PUBLIC LIBRARY

According to S R Rangathan, a public library should help the life-long self-education of one and all; it should freely furnish up-to-date facts and information on all subjects to one and all; it should contribute to productivity drive; it should distribute, in an unbiased and balanced way, all shades of recorded views and thoughts to one and all, as a help in the discharge of their political functions in respect of local, national and international affairs; it should work for continued social well-being, as the agency in charge of all socialised recorded thought. (13).

Long back in 1953 in the Regional Seminar on the Development of Public Libraries in Africa, Barbara Mullane expressed the view that one of the functions of the public library in Africa should be to follow up mass education programs by providing books of all types, so that what has been learnt in adult education classes is not immediately forgotten again through lack of reading material. (Murison, W J).

According to Satyen Maitra, the libraries can help in:

(a) retaining minimum literacy and developing working literacy;

(b) helping the neo-literate to know about his/her environment and to control it;

(c) raising the standard of living of the poor neo-literates and in developing a healthy and favourable environment;

(d) developing a mind with full potential of investigation reasoning and judgement; and

(e) elevating use of leisure hours.

In the first phase of literacy movement the main function of the public library and its staff would be to make propaganda of the need of literacy movement.

In the second phase of literacy movement, i.e. in post literacy programme, the library can taken a major role to retain the literacy attained and to extend it. The library can supply books and other reading materials suitable to neo-literates to make them able to read and solve their problems.

Special programmes should be taken by the libraries to attract the neo-literates in the library.

The library staff should contact the literacy centres around it with the news of the library.

The neoliterates normally come from such family environment where there is no reading culture. The reading habit should be developed through the special programs for the neoliterates.

At first the library materials should be taken to the literacy centres. "If the poor can not reach near to education, education itself must go to the ploughman, factory workers and other places."- Swami Vivekananda)

There should be no subscription or deposit or other restriction for the neo-litreates to use the library.

Extension programs like cultural programs, drama, recitation and music etc. should be organised and the local neo-litreates should be encouraged to participate in such programs. Film show, seminar, discussion, exhibitions, lectures, study circles, reading hours etc. should be organised to attract the neo-literates and illiterates into the library.

Films can be shown on latest developments in using advanced agricultural appliances, new hybrid seeds and various techniques adopted in foreign countries for transplanting, high yielding etc. The

content of the discussion groups should be about the importance of basic education for children, women's education, government's developmental activities etc.

For a changed society we need literacy movement, popular science movement, co-operative movement and cultural movement at the same time. We need to involve more and more people in such movements through integrated and co-ordinated approach. Public library, which is called as the peoples' university can be the coordinating centre of all such movements in a locality.

The library staff should talk with the local people and try to identify the hindrances on the way of their development and try to arrange seminars to eradicate such hindrances.

The purpose of literacy movement is to give persons literacy to a level to be able to use the education in solving daily problems. They should be made socially conscious. Discussion should be organised to help the neo-literates in betterment of their life and livelihood. Discussions and film shows should be organised on agriculture, animal husbandry, fisheries, public health and hygiene, science awareness, environment and social problems.

LIBRARY PROGRAMMES FOR THE ILLITERATES

The library has some responsibility for the illiterates as well. The following may be of help to the illiterates;

Big charts illustrating developmental schemes.

Documentary films showing social, economic, agricultural and health and hygiene problems and their solutions.

Attractively arranged posters, photographs and maps etc.

Radio and TV News programs.

Propagation of government activities through A-V means

Providing information and materials on local health, family welfare, agriculture, fishing and other traditional professions such as pottery, weaving etc.

PROBLEMS OF ILLITERATES IN GETTING INFORMATION

Many of the problems that illiterate and neo-literate adults face

involve the inability to obtain the information they need and want and the inability to understand and interpret it. This limits their ability to meet the demands that family and society place upon them. These adults has the right to wide spread access to programs that will help them where they live and that responds to their particular situations. Libraries are the perfect vehicle to provide assistance in this area of need. (Strong).

NEED OF INFORMATION

Information is a basic input to all developmental activities. Availability of information expeditiously and pinpointedly supports all decision making process at all levels. Relevant information accelerates the pace of national development. An informed citizen is an asset to a democratic system of government and the proper utilization of information can improve the quality of life of citizens.

RIGHT TO INFORMATION

According to the National Policy on Library and Information System drafted by RRRLF(12) "Every citizen must have the right to obtain the information he needs irrespective of his physical, social and economic condition".

According to Bengal Library Association (2) "Right to free public library service to read and to acquire information should be guaranteed as one of the fundamental rights of the citizen."

Our libraries need be smart enough to convert themselves to Community Information/Resource Centre. (BANDYOPADHYAY)

According to Prof. C.P. Vashishth (17) "The people should have timely access to relevant information, pertinent knowledge and opportunities to learn and adapt appropriate technology. No development programme will ever succeed if people for whom it is meant do not understand, appreciate and participate. The provision of Rural Library and Community Resource Centre can provide the necessary base for all development programs aimed at raising the standard of living of our rural people".

"That information is a vital factor for socio-economic development, is not yet within full understanding of our planners and administrators" (2).

COMMUNITY INFORMATION

According to the Working Party on Community Information, 1979 (18) "Community Information Service can be defined as services which assist individuals and groups with daily problem-solving and with participation in the democratic process. The services concentrate on the needs of those who do not have ready access to other sources of assistance and on the most important problems that people have to face, problems to do with their homes, their jobs and their rights".

Community Information may cover a very wide field of our day to day needs; e.g. information on housing and other loan system, location and facilities of rural banks, prices and availability of various agricultural inputs and also fishery and cottage or small-scale industry inputs, local market for their products, ... Panchayat and Cooperative Society facilities, hospital services and so on.

ADVANTAGE OF COMMUNITY INFORMATION CENTRE IN LIBRARY

According to Barun Kr. Mukherjee (8), wastage and expenses on running parallel agencies may be minimised with the maximum utilisation of resources. All sorts of information may be available under one roof. With the cooperation of all agencies, necessary supporting documents may be available in one place. Expertise for organising information materials and handling queries are available with the professional staff. Libraries will automatically become popular with wider user base.

COMMUNITY INFORMATION SERVICES

Straight forward information : The majority of queries will require an answer giving purely factual information, e.g. the address of another agency.

Explanation: Explaining the wording of a document or letter.

Advice : some clients will require advice on a course of action. There may be options and the library staff should have the knowledge to advise on one rather than another.

Practical aid : Helping to fill in forms or write/read letters.

Active referral : It is essential that the library staff make initial contact and follow-up referrals to lessen the chances of the drop-out.

USER ORIENTATION

Perhaps we hav since long been serving the 'system' with scanty concern for the all-important user. The professional content of our library house-keeping are, till to-day, discipline-oriented. Inspite of some consciousness at some levels, we have not yet developed fully a user-oriented attitude. The most fundamental change required in the strategy of our thinking and actions is to strive in full measure to establish the much needed support and complete compatibility between the library system and the users' fast developing need in terms of 'kind', 'content', and 'equality' as well as the time factor. (Dhanpat Rai). From within the working hours of a library, one hour should be kept fixed for neo-literates' programs. The disadvantaged do not use the library. The reasons why they do not use includes illiteracy, ignorance, apathy and hostility. To serve efficiently, the libraries should know the sociological, economical and cultural background of the community thoroughly. In India eighty per cent of people live in villages, several tribal communities live in remote places such as forests, hill sides etc. Libraries can do a tremendous job through its various out reach programmes to develop literacy among villagers and tribal people." (Rao, Dittakavi Nagasankara).

READING MATERIALS

Sufficient number of books and other reading materials and audio-visual materials suitable to neo-literates should be collected in each library. A certain percentage of the library budget should be allocated for the purpose.

While selecting reading materials, for neo-literates, we should keep in mind the literacy level, economic background, social and environmental conditions, and possible ways of livelihoods.

Selecting materials for literacy programs involves the judgement of quality and also the level of reading difficulty of a particular book.

While selecting the library materials, both print and non-print, importance should be given to their daily needs and the contents should be related to survival skills. There should be documents on agriculture, horticulture, bee-keeping, fishery, weaving, carpentry, pottery, cottage industry, primary health and hygiene, environment pollution, children's education, family welfare, communication system, music, art etc.

TRAINING

Workshop should be organised in every district with the persons involved with libraries, literacy movement and other concerned persons to discuss on the programme of action to be taken.

For organising proper extension programmes the library staff need special training and cooperation and financial assistance from all the concerned departments.

Training is needed to impart knowledge on the objective of literacy movement, mental structure of the adult participants, their awareness and capabilities, criteria for selecting books for the neo-literates, grading of reading materials based on literacy levels, methods of organising and conducting seminars, group meetings, reading circles, debates, handling A-V materials etc. The local Voluntary organisation, NSS, Panchayats etc. should join hand and help the libraries.

Department of Mass Education should provide special grants to libraries for purchase of furnitures, shelves and materials for neo-literates. Ten percent of the book budget of a library should be kept reserved for neo-literacy materials.

CONCLUSION

Social reform is not to be secured by noise and shouting, by complaints and denunciation; by the formation of parties or the making of revolutions; but by the awakening of thought and the progress of ideas. We cannot think of a better 21st century unless we do something for the illiterate mass of our country through literacy drive and library movement.

REFERENCES

1. BANDYOPADHYAY, A. K. Public libraries of West Bengal - a proposal for their upliftment towards the 21st century. (In Subbarao C V and others, Preparing libraries for the 21st century : Seminar papers - Fortieth All India Library Conference, Goa University Library, Goa, January 5-8, 1995. Delhi, Indian Library Association, P123-135, 1995.

2. BENGAL LIBRARY ASSOCIATION. National policy on library and information system - a note submitted by the Bengal Library Association. 1985.

3. CHATTOPADHYAY, D. P. An interim report on the National Policy on Library and Information System in India. March, 1986.

4. KESAVAN, B. S. Library services in a developing country. In All India Library Conference 26, 1980, New Delhi - Souvenir.

5. MAITRA, S. Library janasiksha. (Bengali). Bengal Library Conference (42) (Maldah) Papers. P17-20, 1993

6. MATHEWS, A. CHUTE, A. and CAMERON, C. A. Meeting the literacy challenge : A Federal perspective. Library Trend. 35, P219-241., 1986.

7. MUKHERJI, B. K. User service in public libraries : "community information service - the challenge of the day". Ranganathan Centenary Workshop on Public Library System in West Bengal, Calcutta, Papers. p 32-37., 1992.

8. MURISON, W. J. The Public Library. 3rd ed. London. Clive Bingley, 1988.

9. NANDA, B. R. Libraries in a developing society. In All India Library Conference, 26, New Delhi - Souvenir. ILA. P. 30., 1980

10. RAIDHANPAT. User-orientation of library system for developing societies. In All India Library Conference, 26, New Delhi - Souvenir. ILA P. 31-35., 1980

11. RAJA RAM MOHAN ROY LIBRARY FOUNDATION, National policy on library and information system - draft policy statement. 1985.

12. RANGANATHAN, S. R. Library manual.

13. RAO, D. N. Library services for the underserved. ILA Bulletin 17, 2, P135-138., 1981.

14. SOHAN SINGH. Library services for a developing society. In All India Library Conference, 26, 1980, New Delhi - Souvenir. ILA. p. 15-17.

15. STRONG, G. E. Adult illiteracy: State library responses. Library Trends. 35, P243-261., 1986

16. VASISHTH, C. P. Quality life through libraries. 38th All India Library Conference, Bhubaneswar, Presidential address ILA, 1992.

17. WORKING PARTY ON COMMUNITY INFORMATION. Community information : What libraries can do. London. Library Association, 1980.

MAKING INFORMATION ACCESSIBLE TO VARIOUS SECTIONS OF THE SOCIETY

MORE SARASWATI*

ABSTRACT

The present study discusses the role of public library for making good citizens of a nation. The overall development through various programmes such as book exhibitions, mobile library services hospital library services have been suggested. The activities of the Marathwada Library Association such as adult education, essay & reading competition, role of library in eradication, have been discussed.

In the 19th century the common man become conscious for the Ist time of his democratic right to govern himself. Why every readerhis/her information?

RIGHT TO FREE ACCESSES

Before invention of printing press, library was treated as private property of kings and Jahagirs and not for every one, because once the document was lost, it is lost forever. There was no copying machine. For copying a document it was life long process.

FREE PRIMARY AND COMPULSORY EDUCATION

As per the Indian constitution free primary compulsory education is the aim of our nation. It is foundation education on which life long education is based public library emphasises on illiterate, neoliterate services to children and adults.

INFORMATION FOR CHILDREN

Early in life good habits are cultivated creating reading habits and using library needs childhood guidance. Todays child is tomorrows responsible citizen who will one day rule the country. Therefore reading habits must be developed for making good citizens. India

* Asst. Librarian, Dr. Babasaheb Ambedkar, Marathwada University, Aurangabad. (M.S.).

is democratic form of Government. Public library also democratic form of Government which runs by the people, for the people and of the people.

NO DISCRIMINATION

In the eyes of law, all individuals are treated equal. Public library as being the democratic ideals does not discriminate the users. Without the equality, fraternity and liberty democracy cannot be in existence. Public Library also does not deny the information on ground of caste, class, age, gender or occupation. As public library is a social institution it is for society. Unlike the academic library it does not restrict the users to use the library. Library is information centre to all for illiterate, neoliterate, researcher professionals. Activities are run by public library to children such as exhibitions, reading competitions.

Public library provides services to rural, urban people. Therefore, adult education, mobile library services, information regarding the service problems, replacement, retirement benefits, medical services, job training, employment workers compensation, recreation services provides public library.

Services not denied to aged people. They want relief from their homes, tension and responsibility. They are deprived from the society but public library reduces their tension at least for some period. Public library educates illiterates, neoliterates, children, adult and various citizens public library not only imparts knowledge but it refreshes the mind of the people. It reduces the tension and gives an opportunity to "Laugh and be Merry", "Live and let others Live".

DEFINITION OF PUBLIC LIBRARY

A.L.A. defines "Any library which provides general library services without charge, to all residents of a given community, districts region. Public Library makes its basic collections and basic services available for the population of its legal service area. A library is accessible to all resident of a given community".[3]

Public Library acts for welfare of the individual and the state.

Public library is the best media of information to every-body.

SERVICES FOR RURAL AREAS

The villagers may most of them are illiterate. They can not avail worldly wisdom which transcends the little learning of library. Learning through films, pictures book talks.

Marathwada Library Association provides information services to the children. As per UNESCO manifesto for public libraries right to access to information is the basic right of an individual in a democracy. The people are governing the nation by voting; obviously they could be able to take right decision and adult franchise needs right decision for electing the people. Public libraries aim as other library is to give right information at right time to the right reader in minimum time and minimum cost. Childrens also are important part of the society. Marathwada Library Association creates, develops, motivates the reading habits through various activities such as:

KUMAR WACHAN SPARDHA (Reading competition)

As per the constitution of Marathwada Library Associations one of the aims and objectives article 2.9 to create reading habits Kumar wachan Spardha Marathwada Library Association constitution, Bombay trust Act No. A.F. 13; Aurangabad No. B18-59.

Lectures are arranged by Marathwada Library Association on 17.10.78 at Shri Saraswati Bhawan Society's hall the programme was inaugurated by Shri V.S. Page, Ex-Chairman Vidhan Parishad.

Library conferences hosted by M.L.A. as it is a part of continuing service. The participants have get together and discussions regarding the library profession regarding pay scales, service conditions problems.

ADULT EDUCATION

Marathwada Library Association enlighten the rural people through reading. Irradication of illiteracy is one of the major problem which M.L.A. fights for regularly.

ESSAY COMPETITION

Marathwada Library Association arranged for college students. Because many students do not read apart from their syllabus. For creating the interest through inspiration, motivation this programme

is arranged. M.L.A. select a subject and prizes for winners are of Rs. 101/- 25 & are distributed.

SERVICES TO STUDENTS

New education policy : Today education is not only teacher oriented but library oriented. As per the new education policy ,library is the heart of the education. Marathwada Library Association conducts the C. Lib. classes, encourages research in LIS.

ROLE OF LIBRARY IN ERADICATION

Marathwada Library Association aims to maintain more & more libraries in cities & villages also. Because India is developing country in literacy. Ignorance and illiteracy are the curses, the social evils. Marathwada Library Association through public libraries educate the people.

READING COMPETITIONS ARE ORGANISED

Marathwada Library Association organises reading competitions for children. It was international children's year and Marathwada Library Association declared its programmes of Kumar Wachan Spardha. To develop reading habits and create environment, inspiration amongst the children. The competition started from the early childhood only. Reading habits must be developed. Reading for pleasure leisure and fulfilling the recreational needs the reading competition is arranged.

In this competition, a child is required to read the books of his choice, which are not text books. The children must write a note on the book in the note-book and the information about the book by mentioning the serial number Author, Title, from where they collected (source of the book period of reading. And their own reviews regarding the book. The children have to write in their own handwriting. This makes reading as well as writing reviewing about the books automatically his/her hunger for reading is stimulated. Those who are winners secured prizes in cash. For Ist prize Rs. 101/- second prize Rs. 71/- and third prize Rs. 25/- is distributed to them.

Criteria for participation in Kumar Wachan Spardha : Reading competition:

(1) Each district's who are 16 years of age group and middle class children (2) . He must apply in the prescribed form through the Headmaster. The details in the prescribed form are full Name, Address. They have to submits the term before 5th September and submitted to the Secretary of Marathwada Library Association, Aurangabad. Time for the competition is 20 minutes. Apart from text books he should read (3) General review/remarks regarding the books.

HOSPITAL LIBRARY SERVICES

Marathwada Library Association started the service to the patients from 23-10-78 at Medical College Hospital, Aurangabad. To recreate and forget their pains of the patients but those who are admitted in the wards. The readers patients are given 1000 book every years. 290 books are borrowed on loan from other libraries, and at Swami Ramanand Tirth Medical College, Ambegogai also providing the library services.

MOBILE LIBRARY SERVICES

Marathwada Library Association arranged the library services on wheels for rural people. The service is started 1959. Diwali issues were circulated. Mobile Library service as per Thomas Landau

"Mobile libraries are collection of books arranged on vehicles and so staffed as to provide a library services capable of being directed to communities which are often thought not exclusively rural".

Even non members those who pay in advance Rs. 5/- per month can avail mobile library facility. Diwali issues are issued for four days Diwali issues are issued in 5 centres. District Aurangabad, Bihar, Nanded, Parbhani Osmanabad.

One person is appointed for each centre, circle of 10 villages is chosen. The person visit by circles.

Every year 200 books added to each centre due to wear and tear. 50 villages and 50 libraries were established.

Association collected the amount for mobile library from donation and requested the Rotary Clubs and Lion's Clubs respectively.

Four villages interested to establish new library in their village.

GRAMEEN GRANTHALAYA PRASAR YOJANA

"Books for all" is the aim of Marathwada Library Association Rural people are not exception to this criteria. Next step of mobile library service works for rural village people in special and urban people. "One village one Library" is the motto of M.L.A. where there is no public library village libraries are started one person is incharge of that area, who moves on bicycle to 100 villages and cities every day.

CONCLUSION

Man is a social animal. The overall developments are possible only because of the society. Public Library is a social institution to all. It does not discriminate the people on any ground. It provides information for making good citizens of a nation through various programme such as book exhibitions, mobile library services, recreation and every walk of like public library provides information to one and all.

Marathwada Library Association provides information to one and all to children, adults, patients by arranging various activities as reading competitions, essay competitions. Public Library service is not for the chosen few but to one and all.

NATIONAL INFORMATION AND ROLE OF LIBRARIES IN INDIA

Dr. BISWANATH PANDA*

ABSTRACT

This is an age of Scientific inovation and competition for knowledge. Knowledge and scientific development are the key to human progress. The socio-economic and political conditions of India have to be improved to come in par with other advanced countries. The national information system which plays a key role for the development and success of a country have to be strengthened. The people of India now face a number of natural adversities. Her rural population are in a state of total neglect. The plans are more urban-oriented. The libraries and information centres in the country are mostly in the urban areas. There is no well-knit information service to cater to the present needs of the users. A wide range of training facilities have to be provided. Specialists are to be trained to undertake the different activities of the national information programme. We should develop intimate relation and cooperation with the foreign information and documentation centres to fulfil our needs and deficiencies. The success of the national information much depends on the active efforts of the librarians and information scientists and also the amount of interest taken by our national and provincial governments to fulfil their target and give clear-cut directions in future for the promotion of national information.

INTRODUCTION

We are now passing through a time when there is a keen competition for acquiring variety of knowledge through the different media of information. Information is the source of knowledge and knowledge is the key to human progress. The effective application of right knowledge in science, technology and industry can change the socio-economic conditions of the people and can also promise them the higher standards of living. The specialists, economists and scientists who work ceaselessly to improve the socio-politico-economic conditions and scientific knowledge need the wider dissemination of information in their field of work and research. They worry themselves most to find out the new skills, models, techniques, ideas, patents and discoveries to meet the different problems arising in the present day world. The

* University Librarian, Borhampur University, Orissa.

population increase, drought, inflation, political instability, labour and agricultural problems are the burning issues before the leaders and administrators of India to-day. This requires the immediate collection of correct statistical informations to examine the cause of these problems and suggest the appropriate measures to improve the overall conditions before they worsen further. The immediate problem is the collection and coordination of information and then promotion of their causes to achieve the national welfare.

Besides the above situation that prompts us to collect information, the educated elite of India are also apt to acquire information from various libraries and institutions to refresh and make their knowledge and mind up-to-date. That is why this end of 20th century is called the era of scientific dissemination of knowledge.Every day we find the rapid expansion of sciences, technology, discovery and inventions which cause to generate prolific information materials. Side by side the tremondous industrial break-through of the present time of the century has further added to the production of voluminous scientific literature, pamphlets, books, journals and other useful informative micro-documents. Now the basic point is how to frame our library policy to ensure that these national informations are well pooled and delivered to the users either through macro and micro documents, radio, telephone, television, video tapes, computer or other sophisticated means at any time on demand. If this is not well organised the development of India cannot be hoped for the better.

RURAL POPULATION AND THE PROGRAMME OF NATIONAL INFORMATION IN INDIA

Another crux is that India is facing a big dilemma today. It is either to concentrate on urban areas or rural areas. On this vital point our national plans and programmes are not clear-cut. In the past forty years good libraries have come up. But the imbalances have crept into the system, caused by the absence of a sound national policy and a sustained national perspective. So far the status of the library, its clientele, its acquisitions and its national grant have largely been urban-oriented. Our illiterate mass largely dwell in rural sector and the people of the urban sector only make use of the published materials to a great extent. The school libraries are in a state of neglect and public libraries short of funds. The college libraries are either in town, cities or urban belts. Therefore all the published materials are far away

from our rural population. All the libraries in India are not manned by trained librarians. The trained and qualified librarians have not been accorded with the status due to them. The inter-library cooperation and resource sharing channels have not yet been well developed for facilitating the maximum use of available resources.

It is now high time that India should immediately switch over to make all her developemental projects for the toeming millions of her rural population for showing the progress of the country at international level. The problem is not so easy as we think. It is not to make a project to print some material, place them on their hands and then leave it to take care of itself. We have to apply various techniques to rouse their specific interests. A number of rural libraries should be established and equip them with proper aids and materials to take these people up with us and gradually bridge up the communication gap betwen the urban and the rural people. The rural people, also through the libraries, should be provided with their required published materials at fairly inexpensive rates to develop creative interests in them. Another thing is that the rural libraries should have audio-visual facilities, film programmes, photo-albums, attractive posters, computer education to attract the common mass in large numbers. We can cite the example of Kerala here. Kerala had made some headway in implementing her rural library consciousness programme, a fairly successful one. Of course her advantage being her rural population are far more literate than the other states. Similarly in other states our library policy should be fairly extended to our rural population who in gradual course of time will play vital role in the programme of national information. If our national leaders faithfully and liberally finance the rural library developments then by the end of this century we may see some progress in the programme of national development.

PLANNING OF NATIONAL INFORMATION IN INDIA FOR DEVELOPMENT

Over forty years the pioneers in the field of library movement and development in the country have tried to have full force library system. But this could not be achieved. As a result planning of national information in India is facing a number of difficulties and shortcomings. But it is a fact that national information system is very much required in the educational, scientific and cultural spheres of the country. It

has high impact on the socio-economic structure too. Whatever may be the initial difficulties the national information programme has to be adopted with available resources to cater to the information needs of the divergent users.

Now let us find out how to achieve our goal. At the first instance we have to determine the aim and objectives of the national information system. This should be built on the basis of realistic and reasonable use of available resources. The planning should incorporate the following features.

(a) All the available and useable information resources of the country have to be well integrated by the appropriate bodies.

(b) Better plans have to be devised for the best utilisation of the information resources both at state and national levels.

(c) The information services may be extended to the individual and the governments.

(d) The state and central governments should librally finance for its successful working and survival.

(e) The academic, research, special and pubic libraries should be given proper opportunities for the successful implemontation of this scheme in the country to meet the information requirement sof the users.

(f) Branch libraries should be opened in the rural areas for the penetration of national information into the rural core.

(g) Computerisation of regional libraries and on-line services at reasonable distance may be planned for information management and delivery according to need.

(h) Statisticians and specialists should be appointed to evaluate the success of the scheme and suggest for the improvement.

(i) Our national plans should give due importance to the spread of national information system in the country.

(j) Inter-library cooperation and resource sharing activities should be well integrated among all libraries in the country.

Since the impact of information service depends on the nature of the users and their needs, the governments should establish and

develop national information policy reflecting the information needs of all groups within the community and of the national community as a whole.The national information policy, its development and its operation plan for all components should be established under appropriate legislation with liberal budgetary provisions.

ORGANISATION OF NATIONAL INFORMATION

The national information system should be organised in a planned way. Emphasis should be given on the collection of information in the field of scientific research, industry, trade commerece, education, economics and culture. Such collections should be delivered to the users through the libraries and documentation and information centres. It should have also a well coordinated network of collection and information retrieval services. The necessary national infrastructure should be granted for its working. The efficiently working institutions who share the responsibilities of collecting, storing, processing, sharing, abstracting and retrieving and as well as evaluating analysing and disseminating the information contained in their collections should be well organised and financed for delivering the national information in a better way. Therefore, it is urged on the central government to have a national planning policy and methodology which can serve as a basis for the establishment of a model plan for documentation and library services in India.

NATIONAL DEVELOPMENT AND NATIONAL INFORMATION

The development of national information in a country should have good rapport with her national development activities. In fact, the tempo of national information service is a factor of the intensity of the country's research and developmental efforts. In India, although organised and institutional research has their origin in the eighteenth and nineteenth centuries, it is only with the attainment of independence in 1947 that a new spurt was given to it. The number of scientific research institutions increased from a couple of hundreds at the time of independence to about 2500 in 1995. A rapid industrial growth has been witnessed in the planning period of the last 48 years.

In the educational field there are more than 142 traditional Universities, 28 Agricultural Universities, 10 institutes of national importance and 36 deemed Universities now offering degrees and diplomas in the country. As a consequence there has been a demand

for active library, documentation and information services at all levels local, regional and national. These evergrowing demands were largely met by the services offered by the libraries attached to those institutions. The establishment of Indian National Scientific Documentation Centre (INSDOC) in 1952 is definitely an important landmark in the development of documentation and information services in India. From its very beginning-INSDOC has been offering document supply, bibliographic and translation services to scientists, academicians and others. They also give documentation training for providing trained personnel to our libraries and documentation centres. Dr. Rangnathan sensing the need for special course in documentation, established the Documentation Research and Training Centre (DRTC) at Bangalore in 1962. The Department of Science and Technology (DST) has been active in implementing the programme of developing a National Information Systems for Science and Technology (NISSAT). In order to build up the man power strength for effective operation of NISSAT, DST has been sponsoring short-term training courses in documentation and information services also. Added to it the Information and Library Network Centre (ILNC) an autonomous Inter University Centre of U.G.C set-up at Ahmedabad under INFLIBNET programme (started by U.G.C. in 1991) is imparting computer training to Library personnel with an aim to modernise the University Libraries in India. The aim of U.G.C. is to gradually computerise the stock and services of all the University libraries in India and put them in modern lines for providing quick informatiion services and adopt resource sharing to check wasteful investment.

BASIC REQUIREMENTS OF NATIONAL INFORMATION

It is now felt that sufficient man power, computer establishments, telcommuniation net works and reprogrphic facilities are in great demand to meet the requirements. The institutions that will separately and collectively meet the demands will be through the libraries, documentation/information centres, data bases and banks, clearing houses, deposit centres and translation centres etc. To design, operate and maintain the structure of it and to meet the variety of demands a wide range of specialists are to be trained to constitute the total man power force for the national information system. To operate the national information mechinery information scientists with high academic and professional background such as Engineering, Technology and Medicine with specialisation in the differnt areas of work and

research will have to be entrusted with the work. Besides this the computer specialists, system analysts and mangers, technical writers and editors, reprographic specialists, translators, subject specialists etc. are also necessary to set in motion the national information meachinery in the country in full speed keeping pace with the need of the hour.

CONCLUSION

In a vast country like India with a developing economy, federal structure of the government, autonomy of the provinces, the national information activities of various research and information centres are widely scattered. The organising work of NISSAT promises for inter-linking and coordinating the dispersed subsets of information sources, systems and services into an effective information net work under an overall coordinating agency with a national information policy for guidance. Special attention should be paid for evolution of literature, extraction of pertinent information and data and analysis of information in depth for meeting the high quality of service expected of information systems in the present time. The available facilities should be strengthened to build up expertise and provide education and training for sufficient number of qualified information specialists to take care of the present and future man power requirement of NISSAT. The existing and proposed national information centres should constitute high level of organisations. There should be well-equipped centres taking the responsibility of coordinating, organising and providing information services at national level covering a wide range of subjects and national endeavours. There should be also ample facilities for training and research in information field, provide advisory service and technical assistance and develop relation and cooperation with foreign documentation and information centres.

The personnel employed in the information centres should operate the work categorised as (1) production and operation (2) design and development (3) applied research and (4) background research. The production and operation category should have largest share in the man-power for production, operation and maintenance of the information system. The design and development personel should undertke the task of smaller operational units. The applied research branch will back up the development and design effort and will provide the means of bringing the findings of the background research.

The applied research workers will collect the background research findings to analyse and synthesize these for the benefit of the design workers. In the above I have envisaged a concrete plan and have given some vital suggestions and proposals for implementation and working of a national scientific information system at present in India. To make it a success active cooperation should come spontaneously from the experienced librarians, information scientists and users of information because they can build up a strong national information infrastructure at the initial stage. They can also provide easily, economically and efficiently the rapid access to the information needs of the scientists, engineers, technologists and researchors in the academic fields in a successful manner. Indeed the economic and technological developemnt of India and the wide expansion of national information much depend on their sincere work and efforts. At the same time the central and state governments should upgrade their positions and give them appropriate status and salary to encourage them to work devotedly in the building of the nation. The state and central governemnt also should awaken to the needs of the hour and through the successive implementation of the different projects and plans go forward with broad library policies giving importance to successful working of the national information in the country for her overall development and well-being. No doubt India is emerging as big power in the world and a big player in the global market. Its computer producation both hardware and soft-ware have to be improved to compete the international standard. Her academic, special and public libraries should be put on modern lines with upto date database for delivery at any time to its users. It is sure that if our libraries will work in right directions we will witness a faster rate of growth in the development of the country.

REFERENCES

1. Herald of Library Science, Vol. 34, No. 1-2. January-April, 1995.
2. Library Science with a slant to Documentation Vol. 32, No. 3, September., 1995.
3. Library Science with a slant to Documentation, Vol. 32, No. 4, December. 1995
4. Library Resources and Technical Services Vol. 39, No. 2, April 1995.

5. Information Today & Tomorrow (ITT) Vol. 14, No. 1, Jan-March, 1995.

6. Library and Librarians Vol. 1, No. 2, December, 1977.

7. AIU 26th ed. 1995.

ROLE OF LIBRARIES IN NATIONAL DEVELOPMENT

Dr. N. C. GHATAK*

ABSTRACT

Libraries are the continuing education centre & developing the nation spreading education & culture. These are the resource sharing & public community centre. They fulfil the recreational, academic and research needs of the country people. Advanced Information Technology has uplifted the service quality to cater information nation wide exhaustively & quickly. To establish the right to get information and transborder dataflow there must be a national policy on library and information services. Due to lack of finance and proper management many libraries are suffering, though some are advanced and rendering the best services to the nation. To overcome the problems there must be proper step by social awareness campaign & funding the library projects.

INTRODUCTION

Books are for use, is the first law of Librarianship & Library is comprised of books & other non book materials. So Librarianship is mostly the management of knowledge. Knowledge served by the libraries to the nation as a whole democratically. Knowledge exhibits the features - self knowledge & giving knowledge to the others.

Libraries as Tools of Democracy

Libraries are the store house of knowledge varying in nature & collection such as-

National Archives- Procure, preserve & serve to the national & local level. Microfilm is used to serve people. Information collected & after a gap of time it is served & the information gathered under some condition.

National Library - Procures, processes, conservate & serve at the National level by collecting documents published in the country &

* Librarian, Medical College 88, College Street Calcutta-700073

abroad. Advice other libraries as a national body Publish National Bibliography of the country.

Public Library - Run by the State. Collect & disseminate knowledge to the local people.

Academic libraries- College & University libraries for information to the students & Teachers & Research Scholars, serving technical, Scientific & Social Science & humanities subject areas information as needed by them.

Special Libraries - Established for special category of public. As Medical Libraries, Engineering libraries etc.

The above stated libraries serve the information needs of different areas such as Education, Planning, Policy making, For Industrial need, Health, Environment etc.

The Social purpose of libraries are to arrange services for professional, scientists, academics as well as the mass illiterates also to overcome from illiteracy by library extension programme to the illiterates and neoliterates also. Helping readers to develop skill & learning ideas. Involving readers in active work of libraries.

Role of public libraries are their social commitment & upgrading the society, erradicating poverty of the people by learning, broader idea gaining and implementing idea in the respective field. Development of library is interconnected with educational, cultural & industrial development of a nation.

Industrial development, culture etc. are responsible for creating social pressure for changed library services in any country.

Libraries are tools of Democracy in India. As democratic processes advancing in India since 1947 library & information service is also advancing in the changing need & demand of the people and servicing accordingly for the growth of Democracy & grwoth of the country also.

Information need & Role of libraries in education & culture- Education can be achieved attending formal courses in Schools & Colleges & through self education by correspondence education. To gain knowledge books & non books are required and these can be procured from libraries. Here libraries are the agent of spreading education in the Society by their services.

Libraries are also occupying role in higher education. Science & Technological education & research need Laboratory & Library to bring broad idea systematically by consulting books & multimedia system of information. Without library oriented education system it can not become fruitful. Libraries are also self education centre.

Culture is a part of social life. Culture is through heritage and record knowledge. So libraries are spreading cultural education by recorded knowledge serving the nation & developing cultural education of the Nation. Libraries are the laboratories for cultural research.

Services: Services given by libraries are book loan, Reference service, Document delivery services, Multimedia and services, user education & orientation services, current awareness services, selective dissemination of Information services, Indexing services, Translation & Abstracting services, online & Database services, Reprographic services, Resource sharing services etc. Resource sharing in library services help the client to get more and more information quickly & exhaustively & it is also economical.

Area of resource sharing are-

(a) Document - Cooperative storing, Inter library loan etc.

(b) Personnel - Manpower, Resource personnel.

(c) Services - On line database services, Translation, Reprographic, Indexing services.

Barrier to resource sharing -

Psychological - Unwilling, fear, personality etc.

Lack of information &

experiences - Lack of knowledge of user

Economic - Fund scarcity.

Geographical - Distance

Technical - Lack of bibliographical tools, Incompatibility of equipments, Lack of trained staff etc.

These are creating barrier to resource sharing.

Role of Technologies : - Modern Information Technology have a great role on information transfer and dissemination of it to the people quickly and exhaustively. The Information Technology (IT) has turned this world into a global village. It can be said quoting from the poet, W.B. Yeats-

All changed, changed utterly

A terrible beauty is born -

W.B. Yeats, Under Saturn

Computer is an electronic media which has connected the World by Telecommunication link connecting computers of different libraries forming a Network of Computers and via these computers database searching, computer conferencing etc. is done.

Net works are used for sharing information of distant libraries to the user of home & abroad.

Communication technique and use of the tools for Communication in society is uplifting and here library is taking active part in the National development by communication of ideas throughout the world in every sphere of life of the community.

Libraries are not now for a select group of readers, but actively engaged in resource sharing via online. Audio visual aids and Multimedia have given the opportunity to serve a large people exhaustively & quickly by quick communication of ideas. Advancement of IT have given this chance of communication in a large scale in the country & abroad for the global people.

Few specialised Scientific and Technological libraries are using the media of communication by E-Mail system, FAX, Telephone, Radiopaging, Cellular Phone & Telex system etc. It has given the chance to develop the country by -

(a) Planned Socio economic activities.

(b) Guided Science & Technological researches according to the need of the nation.

(c) Improved IT & storage media & transfer of information by various Multimedia.

Suggested Plan for Rural Development, implementing the plan by Information Technology:-

Rural development in the area of-

(a) Transport, Irrigation, Sewerage, Environment.

(b) Business, Industry

(c) Education & Cultural development

(d) Community Health development by Preventive and Social Medicine management measure.

There should be rural Information Centre (RIC) at the block level. RIC in Co-operation with State and Central Govt. organise information and cater it to the indigent people for national development.

It will function in the area of-

(a) Creating Databases

(b) Employ expert to cater information

(c) Point out information need

(d) Channel of Information

(e) Information gathering habit of users.

Role of R & D Organisations-

In R&D Organisation Research and information flow is continuous, like ICAR, ICMR, CSIR are engaged also to make sizable inputs towards science & development in rural areas.

So in the area of rural development by extension programme various departments of the Government like Agriculture, Health, Labour Department etc. are taking part by catering & utilising information management system of IT.

By demonstration, Film show by extension officer and health worker for health education and upliftment of health condition etc. done by the Health Department, catering information by rural health centre. Here library can take a vital role for success of the mission.

National Policy - A national policy regarding Library and information services must be taken. At present it is in the area of

suggestion and recommendations only but no strict fruitful policy is there & it is necessary to take a decision by the Government through law for the proper development of information needs of the country. This policy should provide necessary means by financing and technical help by personnel in respective areas for the proper implementation of the policy.

At present Library legislation have been passed in the 10 states of the country. These are-

1) Tamil Nadu - 1948
2) Andhrapradesh-1960
3) Karnataka - 1965
4) Maharastra 1967
5) West Bengal - 1979
6) Manipur - 1988
7) Kerala - 1988
8) Haryana - 1989
9) Mizoram - 1994
10) Goa - 1994.

Without legislation there are free & good library services in some part of the country. These are - Tripura, Pandichery, Chandigarh, Himachal Pradesh, Jammu & Kashmir etc.

Purpose of Library Legislation:- To arrange free public library system & services to all people of the country. Fund arrangement by the Govt. to run the library function is a must by law.

Integrated library service among all libraries small & big etc. by mutual co-operation of the libraries.

Central & District level administrative body formed by law.

Book published in the state must be submitted to the State Central library and from the published book of the year book list must be prepared by the State Central Library.

Forming Standards and Administrative bodies & Reference Services etc. should be formed by law.

Govt. is bound to pay even in emergency period for smooth running of the Library system and services in operation.

Fund is allocated in the yearly Budget. Surcharge may be implemented in the budgetory process for library services.

Library advisory committee suggested to collect surcharge.

At present Central Government is paying a matching grant to the State Govt. through Raja Ram Mohan Roy Library Foundation (RRLF).

In 1990 February, Indian Library Association & RRLF jointly organised a National Seminar at Delhi under the Chairmanship of Dr. V. Venkatappia to from a Model Bill for the Public library system & services. It will be - (a) Free library services to all. (b) Expenses will be from Government grant and cess. (c) For a fruitful library services there must be inter-library co-operation.

Role of Raja Ram Mohan Roy Library Foundation (RRLF)

RRLF initiates for a National policy on Library and Information services. It has recommended to the Government of India to establish a Central Statutory Co-ordination board to formulate information policy of the nation and to co-ordinate the programmes of the states of India. RRLF would be the apex body for the National Information policy & system.

RRLF recommended

(a) To establish a national Bibliographical centre in the National Library

(b) To convert the National Library, Calcutta into the National Library of India.

(c) To make public library system universal within 21st century.

(d) To allot 6% of University & College budget for the academic libraries.

(e) To apply modern Information Technology for the Library services.

National Information System for Science & Technology (NISSAT)

Under DST, NISSAT was established in 1977. NISSAT has established 4 sectoral centres in the country for its functioning in Science & Technological information system.

UGC-University Grants Commission is helping the Academic Library System to modernise for better services for the Conservation of Knowledge for the development of the nation. Dissemination of knowledge by Teaching. Publishing Knowledge in the book & serials. Extending Knowledge by helping Research activities. Extending Knowledge to the more & more people -UGC has created a Network for University library system called INFLIBNET. INFLIBNET will serve the academic people for the extension of knowledge.

Role of the Planning Commission - It has suggested for upgrading Library and Information services and recommended.

(a) To access existing library services and assess the need by the 21st century.

(b) To identify problems and remedy for it.

(c) To suggest feasible development of library and information services by 2000 A.D.

(d) To specify the objectives of library & information services for the maximum development of the nation.

Planning Commission has given stress to the Electronic Commission's activity and to do the best services by it National Informatics Centre has been set up at New Delhi and serving the nation quickly & exhaustively by online connections.

NIC has a branch centre in every district of the country. It is trying to set up a centre at the Block level & it should also be in rural areas.

National Network for Library

The National network of Library & Information Centres shall include the following to form a Network.

National Library

State Library System

Public Library system

Academic Library System

Research Library

Government Library System

Dr. Ranganathan's suggestion-Dr. S. R. Ranganathan suggested that there should be tripple national central libraries with a parallel system at State level.

(a) National Copyright Library

(b) National Dormitory Library

(c) National Service Library (viz. Agriculture Science, Health Science, Asian languages etc.)

Censorship vis-a-vis freedom & equality of access to information :-

There are censorship & copyright Act etc. But Libraries are the free communication centre. There is no censorship in communication of ideas and man to man ideologies connection. Libraries are serving the social information need & helping to develop the society. Libraries are doing their duty by fulfilling the demand of the nation through a series of action -

(a) Procuring, assembling, arranging, preserving and servicing book & non book materials & Multimedia systems to promote learning and education.

(b) Providing services to all spheres of life and for all round development for the people of the country.

(c) Ensuring freedom and equality of access to information.

So to safeguard and respect the library services all barriers to communication & service must be erradicated to develop the nation.

F. Voluntary agencies - There are many voluntary agencies to spread education & literacy. They are doing work in the respective field to develop the nation and inspite of that illiteracy and poverty is there and making a lot of problem for the total development of the nation as a whole. To overcome these problem social awareness campaign should be implemented specially to literate people and to

overcome from poverty by self sufficiency. These can be done by the libraries and for this library should be properly funded to do all these activities.

I shall conclude quoting Prof. W.L. Saunders "..... a country such as India, where at one end of the information spectrum is the use of a computer Network, serving advanced scientific activity; and at the other, the need to disseminate information on simple agricultural technique, to tens of millions of illiterates at village level. What is the role of the Librarian & information worker .... and what are the implications for professional education & training?"

So we can say, higher education can not be fruitful without basic education. Same is the case when we say about library and information system & services. It can be fruitful if the basic rural libraries are developed then advanced library services must be effective for the development of the nation as a whole.

REFERENCES

1. GANGOPADHYAY, S.M. - Public library and library legislation, West Bengal State book board. Calcutta, 1996.

2. KUMAR, G - Library development in India, Vikas Publishing House Pvt. Ltd., 1986.

3. GERARD, D - Libraries in society: a reader, Clive Bingley, London, 1978.

4. 6th IASLIC Conference, Trivandrum, 1965 : Organisation and responsibility of the library in Academic and Scientific institutions of India & the librarian's role.

5. 7th IASLIC seminar, Burdwan, 1976: Library's role in research & development in the Indian context.

6. BURTON, P F. - Information Technology and society; implications for the information professions, Library Association Publishing, London, 1992.

7. LINE, M B, Mackenzie, Graham & Prytherch, Ray-editors. Librarianship & Information work Worldwide - an annual survey, Bowker-Saur, London, 1991.

8. DOSSETTI, P. editor - Handbook of special librarianship & information work, 6th ed. Aslib, London, 1992.

9. ROBERTS, S A - Cost management for library and information services. Butterworths, London, 1985.

ADVERSE INFLUENCE OF CASH CRUNCH ON INFORMATION SERVICES AND DEVELOPMENT

Dr. V. VENKATARAMANA*
Dr. MOHD. BURHANUDDIN**
N. VARATHA RAJAN***

ABSTRACT

Many support services such as Library and Information services of higher education have been seriously effected due to dwindling financial allocations partly owing to faster rate of inflation and precariously to meet the needs of higher education. The current abilities of funding sources are hanging precariously to meet the needs of higher education and research. The bulk of both development and recurrent funding comes from the government grants, but the dwindling economies have adversely effected the basic services. There is an urgent need to develop strategies through demonstrated greater cost efficiency and evaluation of essential service. Systematic determined approach through best solutions and technological changes, the cash crunch can be sorted out to derive the benefits of higher education and research.

INTRODUCTION

The Western Press in recent times highlighted the educational environment relating to finance management in respective countries with captions such as "Chancellor resort to closure" "Pay-by-results loom in higher education" "Millions cut for Science" "Capital funds cut 30.8 per cent", "Funding by numbers provokes Greek University fury" "Campuses urged to strip assets". The press media in India, though does not seem to pay higher attention to the Indian education system, the situation is no better than the western world. A news item in Greece says "Greek university chancellors have agreed to close their

* Dy. Librarian, University of Hyderabad, Central University P.O., Hyderabad-500 046
** Asst. Librarian, University of Hyderabad, Central University P.O., Hyderabad-500 046
*** Asst. Librarian, University of Hyderabad, Central University P.O., Hyderabad - 500 046

universities for a day in protest at the governemnt's higher education policies". The chancellors have been accusing and criticising the education ministry's ineptitude and retreat for its policy resulting in later sums of money vital for the improvement of higher education are in danger of being lost. In the United Kindgom the maintenance grant allocations for the year 1996 witnessed an increase of 3.4 per cent over the previous year and this was in relation to the increase in student numbers. At the same time the capital funds allocations suffered 30.8 per cent cut.

CASH CRUNCH

There is very little that has been done by the chiefs of the Indian universities as most of the vice-chancellors are appointed by the political bigwigs and are subjected to fear crisis of loosing their foot hold of the universities. A pall of gloom has descended in the year 1992 upon the Indian universities. The worst ever financial crisis seriously effected the higher education and the effects of central government's economic measures crippled the already limping budgets of the India education system. The Central Universities, funded by the Union government through the University Grants Commission, even could not escape the cash crunch bites and the financial crisis tremors adversely shaken the foundations of the state government run universities as well. The imposition of financial austerity measures of the Indian union and also state governments enforced cruel cuts in the expenditure on books, journals, laboratories and other central facilities of the Universities.

INFLATION INFLUENCE

The state of higher education in particular university education suffered a great deal in the recent past five years in the budgetary allocations. The cuts imposed on education exceeded over 15 per cent during the financial year 1992-93 and continue to govern similar situation even during 1995-96 financial year. The annual inflation rate recorded as high as 13 per cent during the year 1992-93 over the previous two years. On top of this inflation, there was a sharp increase in the fixed costs, such as wages, allowances, steep escalation in capital expenditure, continuous recession and the after effects of rupee devaluation have devastated the education services and in particular library and information services.

DIMINISHING TREND

The university education system has been silently marching towards silent death towards development as well as grants allocations to the central universities also. The state governments have drastically cut the resource allocations to the state government run universities. Even the central universities funded by the University Grants Commission are subjected to pruning and much of the allocations are being spent on staff salaries, dearness allowances and other monetary benefits. In order to illustrate the crippling library and information services used to regard as most essential to any institution of higher learning are presented hereunder. The statics in Table showing Journal acquisition costs indicate thought provoking environment. The day to day diminishing institutional finance show the magnitude of the resource crunch and ill-effects on the information sources and consequent academic and research endeavors progress.

Table 1
PRICE ESCALATION TENDENCY OF JOURNALS
UNIVERSITY OF HYDERABAD
1994-1996

Discipline	No. of Jls subsc ribed 1994	Expe- nditure 1994 Rupees	No. of Jls subsc- ribed 1995	Expe- nditure 1995 Rupees	No. of Jls subsc- ribed 1996	Expe- nditure 1996 Rupees	Cumul- ative increase in expen diture %
Chemistry	48	15,67,595	45	17,72,076	38	18,69,415	119.25%
Physics	33	14,17,186	33	16,52,285	26	18,34,240	129.37%
Maths & Comp. Sc.	153	18,32,122	152	21,57,243	107	21,35,985	116,58%
Life Scs	100	18,49,926	101	20,88,933	70	19,97,814	107.79%
Social Sc.	169	4,45,064	167	4,96,979	113	4,80,823	108.03%
Humanities	135	1,15,024	111	1,23,706	119	1,33,000	115,57%
Generalia	62	97,788	51	1,01,985	34	94,000	96.13%
Total	700	73,24,705	660	83,93,207	507	85,45,274(Ave)	113.25%

Note: Three year cumulative position showing yearwise and disciplinewise Journals subscription expenditure together with number of Journals acquired by the University of Hyderabad Library is presented.

The academic and research scenario in the University Grants Commission funded Central University of Hyderabad shows that the financial provision despite cash crunch did not suffer any cut in the maintenance grant of previous year's levels of allocation, but still shows decrease in the subscription status effecting the ongoing research endeavors.

Table 2
CUMULATIVE JOURNALS DELETION TREND UNIVERSITY OF HYDERABAD
1994-1996

Discipline	Average Jl. Price 1994 Rupees	No. of Journals Subsc-ribed	Average Price 1995 Rupees	No. of Journals Subsc-ribed	Average Price 1996 Rupees	No. of Journals Subsc-
Chemistry	32,658	48	39,379	45	49,195	38
Physics	42,963	33	50,069	33	70.547	26
Maths &	11,974	153	14,192	152	19,192	107
Life Sciences	18,499	100	20,682	101	28,540	70
Social Sciences	2,633	169	2,974	167	4,255	113
Humanities	852	135	1,114	111	1,117	119
Generalia	1,577	62	1,999	51	2,764	34
Average cost	**15,879**	**700**	**18,629**	**660**	**25,087**	**507**
Total no. of journals						

Note: Average cost of Journals subscribed disciplinewise is presented to indicate the reflections of the University's scientific endeavors and the importance attached to the library and information services. The thrust areas are also indicative in the financial allocations.

The library and information services are helpless and suffering at the cost of the information needs of the research scholars and scientists. In order to analyse the status of decreasing Journals acquisition at the university of Hyderabad library, the statistics of discipline wise annual subscription values are presented in the figures 1,2 and 3 corresponding to the year 1994, 1995 and 1996.

ANNUAL INVESTMENTS OF JOURNALS UNIVERSITY OF HYDERABAD 1994-1995-1996

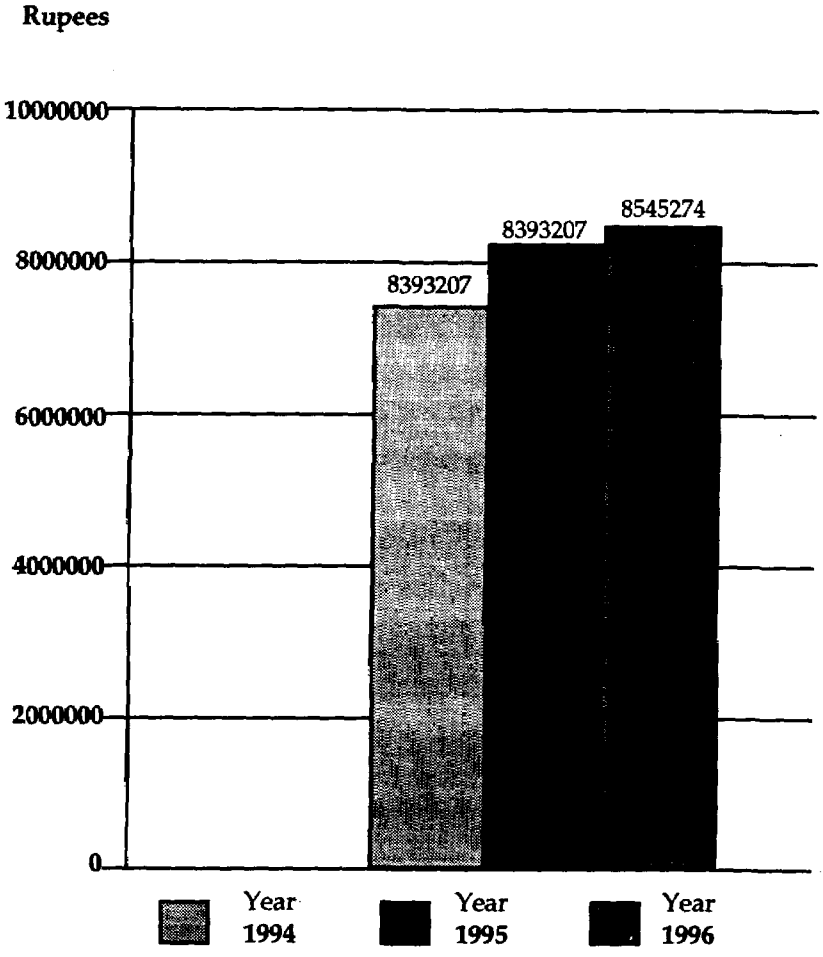


Fig. 1

Note: The three year expenditure shows steady higher allocations over the previous year indicates the importance given by the university for the research and development. The thrust areas are also projected as an evidence of current research in progress.

GRAPHIC PROJECTIONS OF EXPENDITURE UNIVERSITY OF HYDERABAD 1994-1995-1996

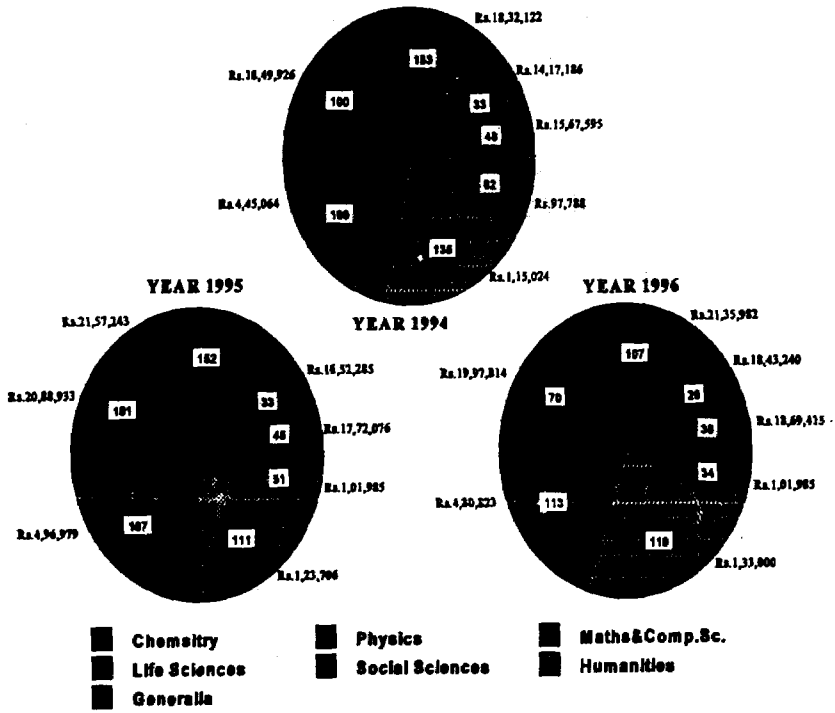


Fig. 2

Note: Three year Journal subscriptions and expenditure ratios are projected in the graphic presentation. The trend being the lower number of Journals and higher expenditure. The status of each discipline expenditure as well as number of Journals indicates the thrust areas of the

EXPENDITURE ANALYSIS

An analysis of the expenditure and the number of journals being acquired by the University of Hyderabad library shows reduction in the number of journals form 727 in 1994 to 523 in 1996 whereas the expenditure does not correspond to the decreased acquisitions. The journals acquisition cost during corresponding 3 years shot up by over Rs. 12.23 lakhs. The expenditure on Journal acquisition was Rs. 73.71 lakhs during 1994 while the expenditure in 1996 was Rs. 85.95 lakhs. The University of Hyderabad being a central university funded liberally by the University Grants Commission, it could afford increased allocations for journals acquisitions despite budgetary cuts at various stages. The point is that the central university funded liberally by the University Grants Commission, it could afford increased allocations for journals acquisitions despite budgetary cuts at various stages. The point is that the central university could not continue the status of 1994 journals subscriptions for 1995 as well as 1996 despite considerable higher financial allocations. The increase in journal budget does not help ease the financial stringency. When this is the situation with the generously funded university, what would be the status of funds starving state government run universities in India. How does the information needs of the research scholars and teachers are met under the prevailing crash crunch? Are there any other alternative information sources available to the user community? It may be possible to make the resources available to the users provided there is some other institutional library or agency such discontinued journals with respective libraries. It is a certainly that much of the enthusiasm of the research community is being subject to bury on its own-which may be detrimental to the development of the institution and also to the nation as well.

ADVERSE DEVELOPMENT

The question being whether there is any role for the development of library and information in the so called institutions of higher education-universities? How does the research community continue their research endeavours? If the present tendency of deletions and further deletions in the acquisition status of further reading materials continue unabated, there may be no salvation to the cause of higher education and research - the certainity being a big zero in the advancement of knowledge and science in the Indian continent. Even library automation essentially needs financial support without which

the horizon would be quite gloomy to look at and the development world have to suffer at the cash crunch in the Indian union. A stage has come now that the intellectuals have to collectively respond to the grave situation and workout plans to ensure the utilization of research potential of the higher education and research institution. Unless the diminishing trends are checked at the appropriate level, it would be very difficult to retrieve from entering the primitive state. It is essential to harness the rich research potential to the common good of the mankind.

CONCLUSION

An over view of the financial situation faced by higher education in India demands in depth cost analysis and other means, for proper diversification of funding sources to reduce the shortfall in the government support of grants. The current levels of funding is clearly inadequate and the severe limits are making the means of research and development crippled. The higher education enrollment continue to expand at rapid rate necessitating wider range of function. The scarce resources need to be augmented to support higher education and the dependent information and library services through increased levels of cost efficiency. Many costs in basic support services in higher education are increasing much faster than the rate of inflation causing serious changes in the educational facilities. Technological changes too face major problems in the costs of technical equipment. All these factors demand urgent need to address the resource and expenditure problems through a national body which can monitor the funds flow in tune with the changing trends.

AN ANALYTICAL AND PRACTICAL APPROACH TO RURAL LIBRARY SERVICE

NARESH BOONALIA*

ABSTRACT

Critically evaluates the present state of rural development. Establishes information as the underlying factor. Advocates for the need of Rural Community Centres to provide rural library services. Also suggests a working plan in terms of what, why and how of Community Centres.

INTRODUCTION

Plus ten parliament elections have proved it beyond any shadow of doubt that democracy has taken roots in India. This largest democracy in the world has entered into its 50th year of Freedom and a government based on parliamentary form of government.

Democracy is almost invariably defined in the jargon as a government of the people, by the people and for the people. But today what we witness as a democratic system was a far cry from Abraham Lincon's conception of a democracy. Perhaps the system requires much more than access to ballot box. Because the success of democracy largely depends upon two essential ingredients, education and information.

The 11th parliamentary elections underline the above fact. The congress openly acknowledge the defeat owing to a lack of communication. There was a severe gap between the masses and the rank and file of the ruling party. Such a statement should be understood very correctly. Here the word masses referees to rural masses.

INDIA - A COUNTRY OF VILLAGES

India largely comprises of villages. Mahatma Gandhi was the champion of this simple truth. He always uphelped that India is in

* Librarian, Shri P. S. B. Govt. College, Shahpura-311404 Distt. Bhilwara (Raj.)

its villages. Villages are the very heart of India. Though the rate of urbanization is upwardly mobile from 11% in 1901 to 25.72% in 1991, still a vast majority continued to live in the villages.

VILLAGES IN THE NATIONAL SET UP

Since the majority of Indian population still lives in villages, they form the largest single target for Industrial products market economy system. On the other hand, this large chunk also suppplies the much required man-power to the industrial infra-structure. The most significant contribution of this group is the production of grain, oil seeds and cotton. It is they who keep the home-fire going in every house hold. They are the ultimate producers as they provide raw material for almost every thing for an ever expending economy of a developing nation like India, their is the most important contribution. Above all they are the largest vote bank, hence they wield tremendous influence on the political scenario of our country too. It is they who throw out a government or usher in a new one.

PLANNING FOR THE MASSES

It is suprising that such a large group which has tremendous potential and contributes nearly 40% to the gross national income was ingnored by the planning process for a very long time. When the trickle down theory proved futile, according to which development at the top will gradually trickle down to the bottom automatically, the Planning Commission woke up to the emergency. Ultimately the masses, the weaker sections, the rural masses were included in the planning process. A number of schemes were floated for their benefit. Today, every political party, every government has its eye on this vote bank and impossible promises are made for their upliftment.

PARTICIPATION IN PLANNING

Though this under priviledged group is given top priority by every government, yet the endeavours do not bear fruit. This group continue to struggle for existence. The reason is the rampant corruption at every level. Late Rajeev Gandhi as Prime Minister admitted that only 22% of the budget alloted for the poor reaches them. This is a naked truth and unfortunate situation indeed.

INFORMATION IS VITAL

As a matter of fact the target group does not know about the programmes and schemes formulated for them by the government. Naturally the benefit is taken by these who know about them and the middlemen too.

Mr. Jose Kananaikil, Director of the Programmes for SC, Indian Social Institute, New Delhi has assessed the situation very correctly. According to him, "An important aspect of the whole process is the availability and communication of information. Information is power and when information is with held from those who have a right to it, it becomes a manipulative power in the hands of those who possess it. Most of the inefficiency and lack of accountability in our country can be avoided if proper flow of information is allowed."

FLOW OF INFORMATION

Proper flow of Information means the right information to the right person at the right time. If we want to reach the people we must go directly to them. For this, a direct link between the benefactor and the beneficiary is very vital. In other words, the government, the planners and the rural masses must come together on one platform. It is in this context that rural library service has assumed special significance. This important factor can be achieved by establishing village libraries, or so called Rural Library Service.

RURAL LIBRARY SERVICE

Rural library service is not a separate branch of librarianship. It can be regarded as a regional activity of public library service in the developing country side or the rural areas, so to say.

Historically speaking, the origin of public library system and, as its adjunct, rural library service can be traced to the first decade of the 20th century in the princely state of Baroda, Sir Sayaji Rao Gaekwad introduced in 1910 a scheme of integrated public library service with the help of an American librarian, W.A. Baden. It comprised a central library, village libraries and mobile libraries.

But, rural library service is a post independence phenomenon. Library legislation in five states, Five Year plans with more

provision for more funds for library services, growth of social or Adult Education movement and the establishment of Raja Ram Mohan Roy Library Foundation are the contributing factors in promoting rural Library Foundation are the contributing factors in promoting rural library service in the country. But, it did not make much headway in the absence of a practicable worked out plan.

It appear that the government was never seriously motivated in providing library service to rural areas. Restrospectively, in 1957 the ministry of education, Government of India, appointed an advisory committee for libraries. This committee recommended the extension of public library service to the blocks, Panchayats and the villages. Again in 1964, the planning commission set up a working group on libraries. The working group recommended the establishment of libraries at various block headquarters and in every village which has a population of 5,000 by the end of the fifth plan.

And now, at last the formulators of five year plans have made provisions in the 8th plan for establishing one lakh Rural Community Centres in different panchayats. The Union Ministry of Rural Development and the Department of culture under the Ministry of Human Resource Development have jointly agreed to provide library service at each of these Rural Community Centres.

But we have entered into the final phase of the 8th plan and there is not much time left to implement the scheme in a planned and effective manner. It can safely be surmised that the vast funds will be thrown to various departments and several voluntary organisations for utilization before an expiary date. And the funds will be utilized in a haphazard way for the sake of statistics only - this is a time honoured practice in India.

WHAT OF RURAL COMMUNITY CENTRE

As has already been said the rural library service is not a separate branch of librarianship, but it is identical with that of public library service. The difference is only in emphasis. And, hence, the major functions of the Rural Community Centre can be recognised as to provide scope for education, information and recreation to the rural masses.

These functions provide us a guidline as to what a Rural Community Centre should be?

1. These centre should play the supporting role for formal, non-formal and adult education programmes. This will largely depend upon the type of reading material and informations stored in these centres. The priority should be given to such items which are closely related with the daily needs of the local people.

2. Information can be made available on distance education from open schools and universities and correspondence courses for drop out students. Even, arrangements to fill up proper forms and applications can be made available at these centres. Guidence for professional courses can also be arranged for interested students at such centres. So, there are many aspects of this scheme. This is a multi-face project.

3. The Centre must provide information on :-

   (1) Journey facilities, various routes of buses/trains alongwith their timings and fares. Reservation services can also be rendered at such centres.

   (2) Health services: Hospitals with special services, facilities and references in the cases of dangerous diseases and emergencies.

   (3) Agricultural advice: Information about new developments, crops, seeds, fertilizers, pesticides etc. can be handed out to farmers. Stock positions and rates of various stockists can also be made available.

   (4) Latest developments in other crafts, popular and useful in the villages should also be considered.

   (5) Availability of programmes of centre/state governments, provisions i.e. facilities, subsides etc therein for the rural masses.

   (6) Information related to games and sports, such as various tournaments, competitions, rural games, rules, records and achievements etc. can generate tremendous potential in rural areas.

   (7) Involvement in cultural activities is another very active and creative project. Information about festivals, fairs specifically

organised to promote folk art, songs and dances; cattle fairs etc. will be appreciated. Local artists and craftsmen should be encouraged and introduced to the Academics and other art centres.

(8) The Centres should be equipped with news papers, useful popular journals, maps, books, televisi' n etc.

(9) Informations about employment opportunities and training facilities alongwith employment notifications, guidence and application forms should be provided by these centres.

(10) Above all a very important function of the centre will be to survey, assess and communicate the specific problems and needs of the villages to the state/central government and planning commission. Such information can be sent to the local authorities and other voluntary organisation also for immediate help.

WHY OF RURAL COMMUNITY CENTRES

A rural community centre set up along the lines suggested above will definately attract the entire community. The people will come to the centre to look for new information or to confirm some fact. It will cater to everybody's intellectual hunger.

The centre will play a vital role in their social, cultural, physical, mental and economic development. This concept of centres will fill up the communication gap. it will work as a direct link between the rural areas and the national planners government and voluntary organisations.

It is hardly necessary to stress that Rural Community Centre with multi-dimensional activities will be the forum for building up an enlightened, well informed, cultured and progressive society in the country.

HOW OF RURAL COMMUNITY CENTRE

To develop such viable, active and volatile community centre is a problem. How to set up such lead centres is the crux of the affair. Large Funds and constant maintenance and monitoring is required to run such centres. Naturally these centres will have to look up to

the generosity and kindness of thenational planners. As the government has already decided to open one lakh such centres in the different panchayats with the provisions of library services, our task is made easy.

To make if further simpler, it will be appropriate to quote Mr. C.P. Vashishth, Former President of I.L.A. He suggested that, "A number of other Ministers, Departments and programmes e.g. Agriculture, Adult Education, Health & family planning, social welfare, Environment, fertilisers, National literary Mission are also concerned with rural development. Almost all of these ministries, Departments and specific programmes are obliged to have their on resource centre as back up service for their personnel. It will be quite an expensive task to develop and maintain a dependable and exhaustive Resource Centre under individual Ministry, departments, programme. Instead of maintaining and exclusive Resource Centre for achieving their goals, it will be worth while to pool the resources of these different ministries, departments etc. Under one umberalla and build up a common Rural Community Resource Centre with proper accomodation, Equipment, trained personnel with supporting staff, and with regular supply of necessary funds to buy books and other information materials. All these Ministries and Departments could contribute information and funds to maintain the Rural Community Centre and thus become partners in giving quality life to rural masses."

Accordingly, under one common programme Rural community Resource Centres should be established in every Panchayat. There shall be a district Resource Centre at district headquarters and than one state Resource Centre. The functions of these District Resource Centres will be to arrange the informations and other facilities and funds for those rural Community Resource Centres on the one hand and to co-ordinate between the centre and the Government, Departments, Institutions and voluntary organisations on the other.

The implementation of this programme should not be rushed. The whole programme should be phased out conveniently. In the first phase the scheme should be launched in one district and tested. The net should be spread over the state afterwards.

It will not be out of context to suggest here that the Indian Library Association should voluntarily come forward and accept the challenge of establishing these rural Community Resource Centres. As it is in

the professional interest of the ILA, it should and it can implement the scheme in true perspective, more cautiously and more judiciously. I vehemently propose that the gaunt let is worth picking up.

REFERENCES:

1. BARUA B.P. Rural services in India. In K.M. George, ED. Indian Libraries : trends and perspectives. Oriente Longman; Calcutta, P.163-173.
2. KANANAIKIL J ED. Seventh plan and development of weaker sections. Indian social Institute; New Delhi. p.XII-XIV.
3. REDDY K. V Rural Development in India (Poverty and Development) Himalaya; Bombay.
4. VASHISHTH C.P. From the President. ILA newsletter. 10'; 1993; pp.2

ASSESSMENT OF SERVICES OF THE HUMANITIES LIBRARIES IN INDIA: A USERS' SURVEY

Dr. M. KANAKACHARY*

ABSTRACT

There is no Directory of the Humanities Libraries in India though there are more than 500 libraries spread over the country. In this paper 350 humanities libraries are identified. No comprehensive survey of the users has been conducted so far in India on the collection, services, facilities etc. available in the humanities libraries. An all-India survey of the users of the humanities libraries has been conducted by an individual and the results are presented in this paper.

INTRODUCTION

In India there is a long and rich tradition in the humanities and humanistic scholarship, as well as a great deal of interest in western thought and studies. There are a large number of institutions working in the different areas of humanities and with which are associated a great number of scholars and learned people. It is felt however that these institutions and their libraries despite their valuable heritage and collections, do not have the capability to meet the needs of scholars in providing proper access to their resources. Resources are scattered in various institutions throughout the country and for want of adequate bibliographical control and proper organisation and means to access them by scholars who may be working far away, remain hidden and untapped.

THE PRESENT STUDY

There are over 500 institutions in India connected with humanities studies and scholarship, apart from the regular universities - all of which have humanities departments. Nearly 350 institutions have been identified. The present study has been taken up to assess the user-satisfaction on the services provided by the humanities libraries in India. during 1993-94.

* Asst. Librarian, Central Institute of Engish & Foreign Language, Hyderabad-500007.

METHODOLOGY

A survey has been conducted in order to assess the satisfaction of users (of humanities libraries in India). For this purpose, a questionnaire was designed and distributed to the library users of humanities associated institutions in India. The institutions for the survey were selected on the basis of their representation of the various fields of humanities to ensure a sufficiently wide coverage and also fair geographical coverage. Though more than 350 institutions were identified, the number included in the survey had to be limited to ten with reference to many factors including time and costs on the part of one individual. On the whole 850 questionnaires were distributed on a random sample basis, out of these only 510 questionnaires were returned. The institutions surveyed were the Adyar library and Research Centre (Madras), American Studies Research Centre (Hyderabad), The Asiatic Society of Bengal (Calcutta), Bangiya Sahitya Parisad (Calcutta), Bandarkar Oriental Research Institute (Pune), Central Institute of English and foreign Languages (Hyderabad), Central Institute of Indian Languages (Mysore), Indian Council of Historical Research (New Delhi), Lalit Kala Akademi (National Academy of fine Arts) (New Delhi), and Sahitya Akademi (National Academy of Letters) (New Delhi). The author of this paper made personal visits to each of these institutions to collect data through the questionnaires and interviews with users, at each library over a period of time spending around two weeks at each of them. The respondents were asked to indicate their profession and on that basis were catagorised as teachers, researchers, students and 'others' - the last a general category of journalists, freelance writers, artists, dancers, sculptors, music instructors and other members of the public interested in the humanities.

DATA ANALYSIS

The total number of respondents from the various humanities institutions surveyed was 510. Table 1 presents an institution-wise distribution of the respondents, and also shows the number of respondents in individual categories of teachers, researchers, students and 'others'.

The total number of teachers was 183 out of the 510 respondents or 35.88 percent, researchers were 153 in number or 30.00 percent, students were 48 in number, i.e. 9.41 percent, and 'others' were 126 in number, i.e. 24.71 percent.

Students in general were a small group, while teachers and researchers formed the majority of the respondents, and a fairly large chunk of 'general' users was in the 'others' category.

The respondents were asked to indicate from a list of library services, which were the ones they had used in connection with their work. Table 2 shows the details.

On the whole 87.45 percent of the respondents used the document borrowing facility, while 70.19 percent consulted the library collection; 62.94 percent indicated use of photocopying services, and 49.41 percent reference and information services. Reservation of books, referral service and inter-library loan were less used with 36.66 percent, 32.94 percent and 21.56 percent of the respondents indicating utilisation of these services.

The service most frequently used was that of borrowing of books and periodicals; 91.80 percent of teachers, 88.88 percent of reseachers; 79.16 percent of students and 82.53 percent of the 'others' category indicating that they did so. Consulting the library stock/collection was also high on the list of services used 80.87, 69.28, 47.91 and 64.28 percent of teachers, researchers, students and 'others' utilising the document collection for reference. This was followed by photocopying services which were cited by 76.50, 68.62, 41.66, and 44.44 of teachers, researchers, students and 'others' respectively.

Statistical testing; Chi-square test was done in testing the independence betweeen categories of users and library services they use. Table 3 shows that the corresponding Chisquare value is 22.7510 which is grater than the critical value (table value) (28.87) at 5% level of significance and 18 degrees of freedom. This infers the rejection of null hypothesis that they are independent. That is one can say that the categories of users and library services are dependent.

The library services most used by the user groups very, depending on the particular user group.

CONCLUSION

With its rich, diverse and hoary traditions and cultural heritage, it is India's prime responsibility to organise the information resources

and create better infrastructural facilities so as to provide satisfactory services in the field of humanities.

Realising the increasing trend in the humanities research and the growing demands of the users for information in the humanities, the Committee on National Policy on Library and Information System appointed by the Ministry of Human Resource Development, Government of India under the Chairmanship of Prof Chattopadhyaya, has recommended in its report submitted to the Government in 1986 that 'Special libraries in Social Sciences and the Humanities and in language areas should be organised in similar systems to that of science and technology, and databanks should be developed in the various subject areas'. Approval of the report is an urgent step of the Government so as to provide satisfactory services to the humanities users in the best possible manner. The national associations in library and information science profession have to take necessary steps in this matter.

REFERENCES

1 KATZEN MAY and HOWLEY S M Recent Initiatives in Communication in the Humanities. London: British Library, 1984.

2 RAMAIAH L S and KANAKACHARY M Eds. Documentation and Bibliographic Control of the Humanities in India. New Delhi: Aditya Prakashan, 1992.

3 UNESCO. NATIS Design and Planning of National Information Systems: A Paper for Government Planners. Paris: Unesco, 1976.

4 URQUHART D J Needs of the Humanities: An Outside View. Journal of Documentation 16. pp. 121-131.

Table 1 : Institution-wise Distribution of the Respondents

Institution	Teachers	Researchers	Students	Others	Total
Adyar Library and Research Centre (Madras)	6 H (10.91) V (3.28	13 (23.64) (8.50)	8 (14,54) (16.67)	28 (50.91) (22.22)	55 (100.00) (10.78)
American Studies Research Centre (Hyderabad)	25 H (48.08) V (13.66)	26 (50.00) (16.99)		1 (1.92) (0.79)	52 (100.00) (10.20)
Asiatic Society of Bengal Calcutta)	4 H (12.12) V (2.19)	10 (30.30) 6.54)	4 (12.12) (8.33)	15 (45.46) (11.91)	33 (100.00) (6.47)
Bangiya Sahitya Parisad (Calcutta)	9 H (21.43) V (4.92)	13 (30.95) (8.50)	10 (23.81) (20.83)	10 (23.81) (7.94)	42 (100.00) (8.24)
Bhandarkar Oriental Research Institute (Pune)	7 H (17.07) V (3.83)	6 (14.63) (3.92)	3 (7.32) (6.25)	25 (60.98) (19.84)	41 (100.00) (8.04)

Table-1 (Contd.)

Institution	Teachrs	Researchers	Students	Others	Total
Cental Institute of English and Foreign Languages (Hyderabad)	90 H (67.67) V (49.18)	34 (25.56) (22.22)	5 (3.76) 10.41	4 (3.01 (3.17)	133 (100.00) (26.08)
Central Institute of Indian Languages (Mysore)	19 H (36.54) V (10.38)	18 (34.61) (11.76)	2 (3.85) (4.17)	13 (25.00) (10.32)	52 (100.00) (10.20)
Indian Council of Historical Research (New Delhi)	8 H (22.86) V (4.37)	14 (40.00) (9.15)	8 (22.86) (16.67)	5 (14.28) (3.97)	35 (100.00) (6.86)
Lalit Kala Akademi (National Academy of Fine Arts) (New Delhi)	2 H (9.09) V (1.09)	5 (22.73) (3.27)	2 (9.09) (4.17)	13 (59.09) (10.32)	22 (100.00) (4.31)
Sahitya Akademi (National Academy of Letters) (New Delhi)	13 H (28.89) V (7.10)	14 (31.11) (9.15)	6 (13.33) (12.50)	12 (26.67) (9.52)	45 (100.00) (8.82)
	183 H (35.88) V (100.00)	153 (30.00) (100.00)	48 (9.41) (100.00)	126 (24.71) (100.00)	510 (100.00) (100.00)

H= Horizontal V=Vertical
(Figures in parenthesis indicate percentage against the total)

INSTITUTION—WISE RESPONDENTS

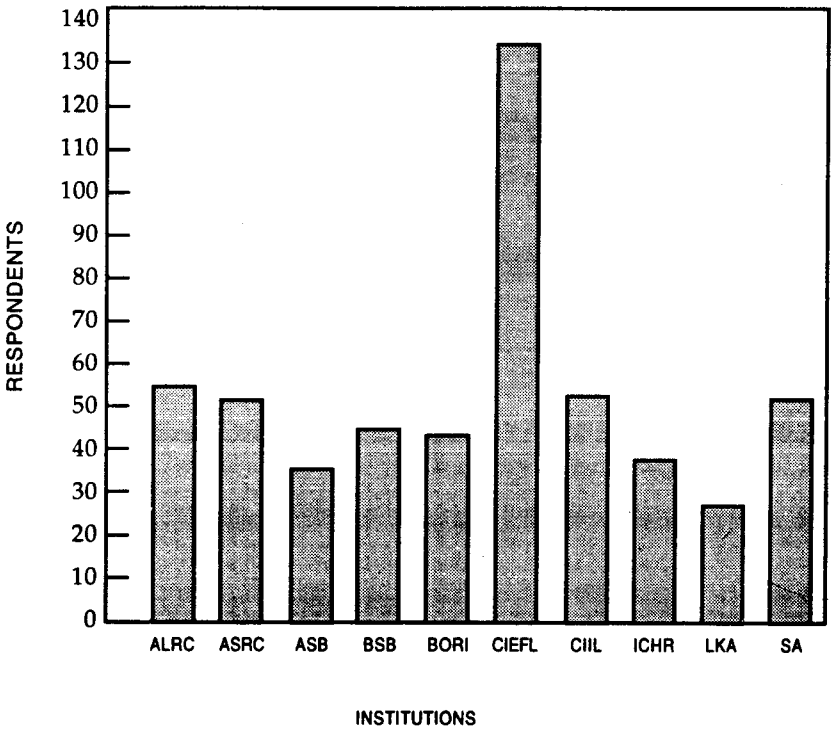


Figure-G Table 4.1

Table-2 : Library Services Used

N = 150

User Group		Library Services							
		Borrowing of books/ periodicals	Consulting library stocks	Use of Inter library loan services	Reservation of books	Photo-copying service	Reference and Information service	Referral service	Total Respon-dents
Teacher	H	168 (91.80)	148 (80.87)	54 (29.50)	87 (47.54)	140 (76.50)	112 (61.20)	70 (38.25)	183
	V	(37.67)	(41.34)	(49.09)	(46.52)	(43.61)	(44.44)	(41.66)	
Researchers	H	136 (88.88)	106 (69.28)	30 (19.60)	64 (41.83)	105 (68.62)	83 (54.24)	55 (35.94)	153
	V	(30.49)	(29.61)	(27.27)	(34.23)	(32.71)	32.94)	32.74)	
Students	H	38 (79.16)	23 (47.91)	3 (6.25)	7 (14.58)	20 (41.66)	13 (27.08)	9 (18.75)	48
	V	(8.52)	(6.42)	(2.73)	(3.74)	(6.23)	(5.16)	(5.36)	
Others	H	104 (82.53)	81 (64.28)	23 (18.25)	29 (23.01)	56 (44.44)	44 (34.92)	34 (26.98)	126
	V	(23.32)	(22.63)	(20.91)	(15.51)	(17.45)	(17.46)	(20.24)	
Total	H	446 (87.45)	358 (70.19)	110 (21.56)	187 (36.66)	321 (62.94)	252 (49.41)	168 (32.94)	510
	V	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	

H=Horizontal V=Vertical
(Multiple responses recorded)
(Figures in parenthesis indicate percentage against the total number of the respondents in each group)

Table-3 Library Services Used

User group	Borro-ing of books/ pdls.	Consul-ting Lib. stocks	Use of ILL	Reserv-ation of books	Photo-copying service	Refer-ence & Info-service	Refe-rrel serv-	Total
Teachers	168	148	54	87	140	112	70	779
Researchers	136	106	30	64	105	83	55	579
Students	38	23	3	7	20	13	9	113
Others	104	81	23	29	56	44	34	371
Total	446	358	110	187	321	252	168	1842

Chi-square value = 22.7510 degrees of freedom = 18
table value = 28.87 level of significance =5%

EDUCATIONAL SERVICES AND DEVELOPED SCHOOL LIBRARIES: FULFILLING A GOAL TOWARDS NATIONAL DEVELOPMENT

MARY GEORGE CHACKO*

ABSTRACT

The growth in publication of childrens literature is the effort to bring books to children in the last half century. In many developed countries this resulted in the information of many school libraries within the framework of the school. The basic need of learning through reading has now been extended into services of understanding and assimilation backed up by the electronic media. To function efficiently the school librarian has to (a) know children's literature and reading habits (b) understand child psychology (c) be conversant with the curriculum and innovative methods of teaching. Here a emerger of school teacher and libraian takes place. However, in India, the role of the school libraian has been greatly undervalued.

This paper presents a general profile of some developed school libraires in India and a spectrum of various educational services rendered to the user; the projection of the school library as a well managed information bank of the future. Information access to students at the right age shapes their future, academic and vocational, promoting national development.

SCHOOL LIBRARY AND THE STUDENT

The school is the introduction of the child to the social system outside the family apart from inculcating in the child, social and moral values, the need for specific education in subjects such as the arts, science and technology, is very important. In the last decade which can be called the information era, the library became in the single and most important teacher and the role of the traditional teacher changes to that of a guide with the library as the common, vital sources.

The tremendous success of the school library and the public library, especially for children can be rightly attributed to children's librarians in the West. In India children's libraries

* Librarian, Loycla High School, Pashan, Pune-411008

are not given much importance but the trend is fast changing. Children develop and respond better when treated as individuals and given full freedom to persue reading of their choice and leisure.

SELECTION OF BOOKS: KNOW CHILDREN'S LITERATURE

The most important educational service rendered by the school librarian is the right choice of books based on various psychological factors. Traditional story books such as "Cinderella" and "Snow-white" still retain their charm among children. Now they are available in new varieties and editions. The librarian should from time to time survey the book market to update the existing books, bring in new books and inform the children through visual posters and during story hours.

Update of reference service should be accorded top priority to keep pace with the knowledge explosion. This should also include maps, picture files and films.

With tremendous research in educational technology better methods, innovative educational techniques are being incorporated into books. A good financial outlay or budget plan enables the librarian to make maximum utilization of the funds and acquire books for curriculum studies.

SERVICES PROGRAMMES

The traditional library pattern is a section for elementary school, young adult section for high school and junior college (+2) and an exclusive adult department for teachers and other dependent users.

The use of library facilities upto the Secondary School level was carried out and it was found to be success. The open access system being adopted, it was found that many students used books above their level. This also promoted greater awareness and provided vital data regarding varied student tastes and identified areas of interest.

REPROGRAPHIC SERVICES

The varied use of Xerox machines have been explored in the educational context at the school level primary importance to teachers

for day to day preparation of their classes is maximum. A book lent out and usually retained for a long period is a dead utility and follow up querries from other teachers, are loss of valuable service time. This service carried out at the experimental level was highly appreciated and the demand for specific information almost tripled, showing suppressed motives.

In subjects such as History and Geography, Arts and Biological Sciences, Physics and Chemistry it was found that using transparency sheets instead of paper for Xeroxing photos, charts, etc. was useful for OHP presentations and provided an effective teaching aid.

Many teachers expressed their inability to use 35mm Slide Projectors due to lack of technical know-how and lack of dark curtains for the classroom. The economic viability of the 35 mm slide facity has not been examined right but the potential of providing real life situations in the class room is tremendous.

LIBRARY EDUCATION FOR THE STUDENT

Free/Open access use of the library will be heavy but reading will be random and usually on the read-forget, pleasure and entertainment basis. From comics and story books to general books, it is random selection and results in scanning with occasional interest-read areas. A library week sees primary children use the facility more and concentrated reading. For secondary students the thrust area has been more on novels and general magazines like sportstar and National Geographic.

Proper guidance leads to greater motivation leading to success and satisfaction. The usual mode is to provide reading guidance to querries raised. Explaining to the child the various books available, new editions, pictorial meaning and thereby enhance the receptivity of the child has reaped a rich dividend in better academic performances of the students.

In High School and Junior College, the student seeks answers to personal, academic, general knowledge and adolescence problems and books on development and social issues need to be developed as an integral part of the school library.

Summer and midterm vacation camps have proved beneficial in (a) good response generated which is seen in the number of children applying (b) Secondary School students reading 2 books a day one

usually a novel (c) making the student conversant with effective library use.

Middle School library projects such as reference, search, word search, location of sources, use of the thesaurus have proved very popular and academically useful. However extensive research in formulating library exercises for school students, gradewise needs to be formulated for effective implementation.

LIBRARY PARTICIPATION PROGRAMMES

The enrichment of school curriculum has found its answer in programmes involving active participation. At primary level this had led to "story hours". Reading aloud has improved the childs power of assimilation and expression.

At secondary level the students are more interested in games, hobby clubs, drama. However a big group visits the library during holidays, extra school hours and optional holidays. Access to the library for a short extra school period is beneficial. Most librarians have active participation with the students, regular teachers, language teachers and a small fraction of parents. The trend now is to advice parents to visit and see the library selection so that they can influence reading patterns at home of their children.

The full contribution that can be provided to the "exceptional student" by the library in terms of development has yet to be fully explored even though the educational aspect has been researched at length.

HUMAN RESOURCE DEVELOPMENT

There is a traditional belief that use of the library at school level is beneficial in creating an adult reader. However surveys show that some tend to be readers of news papers and magazines but for the professional community school reading has greatly influenced their reading habits, as the school library need is met with the public library use for adult information needs.

INTERNATIONAL EDUCATION POLICY AND THE SCHOOL LIBRARY

The basic idea is to serve the curriculum in 'support services', but some countries feel it supports promotes only reading (Japan,

Sweden). This type of a policy has critical implications for resulting services. New formats of information (multimedia, audio-visual and electronic) and change in educational technology (personlised learning, independant study, resource based learning) are necessary to educate students for a complex world. This makes it imperative for policy makers to understand how the school library is crucial in implementing the educational shift from text bound, teacher centered examination oriented education to education of higher quality, increasing knowledge, inquiry skill and acquisition of life learning skills.

School library policies are principled-they can be rationalized as integral to octualization; practical-maximise teachers' ability to impart education and students to aquire learning. It is basically support service and learning laboratory (Knuth, R, 1995). professional - they support changes in methodology and acrriculum reforms.

In India, the Kothari Commission (1964-66) emphasised the acute need for developing school libraries even at rural level. However much has yet to be achieved.

CULTURAL, EDUCATIONAL AND SOCIAL DEVELOPMENT

School libraries play an important part in creating society that reads as a habit. It constitutes the base of the pyramid of development leading to a literate society where moral, social and ethical values prevail- a "Critical thinking society" as seen in the National Education Policy agenda.

Hence it can be concluded that school libraries are essential in the making and building up of citizens capable of existance in and contributing to an "Information Society". Without information there is no development.

ACKNOWLEDGEMENT

The author is grateful to Anil S. Mutkekar of Barr. Balasaheb Khardekar Library, Shivaji University, Kolhapur for his encouragement and constructive criticism.

REFERENCES

1. BENST, N.E.-Trends in School library service : lib. Jour. 76, 1685-1689, 1951.

2. CALVERT, P.J. - Library effectiveness - Search for a social context : J. Lib. Inf. Sc. 26 (1), 15-21, 1994.

3. CARROLL, F.L.-An international childrens literature : UNESCO. Jour. Inf. Sci. Lib. Arch. Admn. 15-20, 1979.

4. DANKERT B-We learn not from school but from life. School librarianship in Europe. Jr. Lib. Inf. Sci. 26 (2), 99-103, 1994.

5. DO AMARAL, S.A. - Library Services for Social Development. Some considerations. IFLA Jour. 21, 19-24, 1995.

6. EVERITT, J L, R-Breaking down the barriers. Provision of European literature to children by British Public Libraries.

7. EYRE, G : Local management of schools and school library services - J. Lib. Inf. Sc. 25 (1) : 33-41, 1993.

8. GAVER, M.S. - Effectiveness of centralized school library services in elementary schools. lib. Quart. 31, 245-256, 1961.

9. HERRY, M. New model librarians : A question of realism Jr. Lib. Inf. Sc. 25 (3) : 137-142, 1993.

10. KNUTH, R. - Five International Organisations linking children and books - IFLA Jour. 20, 428-440, 1994.

11. KNUTH, R-School librarianship and macro level policy issues : International perspectives. IFLA Jour. 21, 290-298, 1995.

12. KRUGER, J.A. - Managing media centres in Secondary Schools. : 22nd Ann. Conf. Intl. Assocn. Sch. Lib., Odeloide, 1993.

13. MALECHE, A and Abigali, K - The library as an education. at tool02nd Ann. Conf. Intl. Assn. Sch. nibrn, Kenya, 1978.

14. MILLER, M-National Planning for school library development : 14th Ann. Conf. Int. Assm. Sch. Libn., Jamaica 1985.

15. MILLER, M. An education for school librarianship. Catholic Library World 60(2), 76-80, 1988.

16. MUNGO, K.M. -Promoting school library as a centre for communication - 12th Ann. Conf. Intl. Assn. School Libn. Germany, 1983.

17. PARKER, A.M. -Navigating the nineties - challenges and opportunities for school library services. Pub. Lib. Jour. 7 (1), 7-9, 1992.

18. SIONG, W.K. The school library : Centre for life long learning : Proc. Ann. Conf. Intl. Assn. Sch. Lib. Michigan, 1994.

19. WITMER, E.M.-School library studies and research Lib. Quart. 6 : 382-404, 1936.

LIBRARY EXTENSION SERVICE: A HOLISTIC APPROACH TO THE NATIONAL DEVELOPMENT

J. ABRAHAM*
N. ARUMUGAM**
J. MAHENDRAN***

ABSTRACT

In the developing countries like India, Universities and Colleges as the centres of learning for higher education have responsibilities to serve the national goals and promote the well being of the society in the present state of social, economic and educational development. The Library is an integral component of higher education and a significant partner in the construction of knowledge and ideas, teaching, research and extension. This paper analyses the Library's role and its development in the context of teaching, research and extension activites of higher education programmes. And also describes Dr. S. R. RANGANATHAN's module of extension service in libraries of Universities and Colleges and reviews its adaptability in the developing countries.

INTRODUCTION

Education is usually regarded as the acquisition of knowledge which involves the aggregate of all the processes that a person develops the abilities, attitudes and other forms of positive values of the society in which he lives. Education has been always accorded an honourable place in Indian society. The system of education has undergone to a great change and the education has been considered vital to the national progress. In developing countries like India, Universities and Colleges have the responsibilities for the social, economic and educational d evelopment of individuals as well as society in general. Especially in developing coutries it should be organised, developed and

* Assistant Librarian, Gandhigram Rural Institute-Deemed University,
** Deputy Librarian and Head, Gandhigram Rural Institute-Deemed University, Gandhigram 624 302, Dingigul Anna Dt. Tamilnadu.
*** Archives & Documentation Mgt. Librarian-II PSG Inst. Medical Science Research, Peelamedu, Coimbatore-4

administered in accordance with objectives which reflect the specific needs and aims of nation.

MODERN UNIVERSITY EDUCATION

The modern University education began in India with the incorporation of universities in three presidencey towns of Calcutta, Madras and Bombay in 1857. The Indian University Act 1904 empowered the universities to equip and maintain libraries and the Syndicate to inspect affiliated colleges periodically. As a result the libraries were improved and provisions of book service to students, research scholars and teachers were made in the universities and colleges. But in the past, Indian has nourished vigorous culture and great institutions of learning namely Taxila and Nalanda-the manastry universities which had rich libraries. The new education policy viewed that the modern universities as social insitutions should evolve an intergrated pattern of relationship and values in order to make education an effective instrument of social growth. The universities so far have failed to respond the changing needs of society. Therefore the universties must fulfil the needs and objects that society expects from the universities. The modern university with a large faculty, tremendous enrolement and huge resources in a developing country like India is expected to be in the position to make a significatant contributions to the development of the nation. The universities have now become a service institution, accountable for every aspect of its performance to the society.

UNIVERSITY LIBRARY

A well established and well equipped library is a sine quonon for modern higher education. The modern university library itself is a significant partner in the conservation of knowledge and ideas, teaching, research and extension. Thus the library is not only to help instructional function but it does a good deal in aid of research-an another major function of the university. The university Library was once regarded as a storehouse of reading materials collected for the purpose of preservation but now significant changes have taken place in the outlook of university administrators, research scholars, teachers and students. They have been active force in teaching and research and an integral and important component of university setup. M.A. Galfand states that the fundamental role of library is educational. It

should not be a mere storehouse of books attached to a reading room, but as a dynamic instrument of education. It feeds the intellct of the student and encourage the research. The object of library as understood today is to assemble, preserve and administer books and other educational material in an organised manner to promote enlightment through guidance and stimulation.

UNIVERSITY LIBRARY AND SOCIETY

The active realisation of the purpose of university libraries has been made by the University Grants Committee (UK) in 1921 as "the character and efficiency of a university may be gauged by its treatment of its central organ-the library". The university library provides an obsolutely fundamental service, without which the University would cease to function as a centre for teaching and research. The University library precisely is to provide facilities for study and research for members of its own institution, but a university library has also a duty to its local community and to members of other insititutions of higher education.

A UNIVERSITY LIBRARY

(1) procures books and journals and other micrographic and non-book materials needed by the staff and students of its own university

(2) processes these materials so that they are usable and retrivable -recording, arranging and maintaining and

(3) creates the amenities for their use such as adequate accomodation, liberal hours of opening and services like Reference and Information services, Reprography and photocopying etc.

PROLIFERATION OF SCIENTIFIC LITERATURE

There is an enormous amount of published information. In the last few decades the scientific literature has been phenomenal. The scientific literature includes books, monographs, handbooks, encyclopedic works, dictionaries and treaties on scientific works and so on. The tremendous increase in scientific literature makes information service extremely important and library services vital in order to make all or even a significant part of the available information is made use of and to ensure that nothing worth while in a particular field is missing.

DOCUMENTATION SERVICE

Documentation service emphasises nascent micro thought to the specialist reader which secures, assembles and presents all the information that relates to specific subject areas in usable form. Periodicals and journals contain latest development in Science and Technology. Many libraries spend a larger part of their budget for subscription to Periodicals than on purchase of books. Documentation service includes a good translation service and indexing of published information also. A modern library is not a passive repository of printed materials. It has to be live and dynamic institution and has an obligation to serve the members of the society rather than wait for them to come to the library. Libraries have been an integral part of the social framework no longer limited to accumulating materials for a selected group of readers. Thus the modern Library and Information Centres should be charged with the responsibility of making available the resources to a larger portion of the society in the least possible time.

UNIVERSITY LIBRARY DEVELOPMENT

With every increasing enrollment in Universities and colleges, the demand for library service has been constantly growing. The university and college libraries have now to cater for diversified needs of under graduates, post graduates and research scholars. The UGC been giving high priotity to the development of library facilities in the universities and colleges. It provides funds for the construction and expansion of library buildings, purchase of equipment and furnitures for the libraries and purchase of books and journals.

The University committee in 1938 recommended that larger grants should be made to libraries. The University Education Commission (1948-49) pointed out the importance of libraries in higher education as "Library is the heart of all Universities work. Lectures and tutorials must be supplemented by work in the Library". There is considerable increase in the number of universities and colleges since 1947. The government has become fully conscious of the role of higher education and set up University Grants Commission (UGC) in 1956.

The milestone in development of libraries in higher education was that the recommendations of high power committee of University Grants Commission headed by Dr. S. R. Ranganathan in 1957 regarding standards in norms for library buildings, library staff and their status

etc, were accepted by University Grants Commission. The Kothari commission (1964-66) recommended that as to increase self study facilities for students, the well equipped and well organised library with adquate number of reading seats is necessary. The present system of education has undoubtedly failed to satisfy the pressing and vital needs of national life. It is neither in consonance with economic and social situations nor with ever emerging problems and ever changing national cirumstances. As Universities represent major investments in the development of human resources, the university of today cannot be a isolated institution or an island inaccessible for the main masses. They should provide the access to the recorded knowledge which the society has accumulated through the centuries of experience to one and all.

To have access to the world of recorded knowledge the people of the country should have education and literary awareness. In this process the library is in a special position to provide opportunity and the necessary materials for self-chosen and self-directed education. The role of a well organised and functionally integrated library system in the development programmes of urban and rural areas need not be emphasised. Due to the rising cost of publication and the limited available resources, the availability of funds for the development of libraries in the Universities and Colleges remains the major problems along with the problems of organisation of libraries, proper utilization of library resources, training of library staff and so on. With a view to study these problems various commissions and committees have been appointed and to advise the government on the development of libraries in Universities and colleges and the measures in the most effective utuilization of existing facilities and such other matters to be of importance in this area.

LIBRARY EXTENSION WORK

The University Library as the service institution make its services available to the general public in extending the frontiers of knowledge in all walks of the human life, It is not sufficient that the library does efficient services like Reference and Information services but what is further needed is that the library should do many other things which fall in fringe of library service. The libraries that offer no other service than lending books for reading at home or in their reading room fail to make effective use of the library resources and services.

According to S.R. Ranganathan the extension in libraries includes (1) institution of reading system by arranging to have books read out to groups of illiterates, (2) organisation of reading groups, book discussion programmes (3) holding of public lectures of local or topical interest followed by the showing of slides or movie pictures (4) preparation and distribution of a select book list on the subject of the talk, (5) display and exhibition of books on topics of local interest. (6) celebrating of local festival and special days of the year dedicated to persons or ideas & (7) Arrangement for dramatic performances.

Extension service is said to be a specialised form of activity reaching a particular group of people or reading community or users who are aware and or unaware of availability of resources and services in a library. The concept of extension is to eradicate user's ignorance, to create awareness and to promote the desire to explore the library facilities.

UNIVERSITY LIBRARY EXTENSION

University Libraries should now-a-days develop extension services in addition to the normal work of library such as provision of books, reference service etc. The objective of extension service is that library services should reach more and more people. Extension service in libraries is designed to stimulate demand for reading books. According to Dr. S.R. Ranganthan library being an social centre is to encourage reading.

The value of a library depends upon how much and how best it is used. The library has not only to increase its utility but also to carry its message to doors of many people who, for some reason or other, do not use it at all. It has also to help and encourage those who do use a library in a bettery way. The term library extension is self explanatory and calls for the library service to step beyond its traditional boundry to make best use of library resources. The non-use of libraries may be ascribed to chiefly three reasons : (1) ignorance of service (2) prejudice or misconception and (3) the absence of desire to read books. In order to stimulate reading interest among public and to bring book and reader together, librarians felt the necessity of extension service. Library extension service is a process of taking better libraries to more individuals. This is done with the help to various internal and external aids, which calls for efficient organisation and mangement, and also an understanding of books and of people.

Libraries have great responsibilities in communicating information and stimulating interest in the users through book exhibitions, display methods, guides and handbooks in order to promote the use of libraries. Seminars, study circles, group discussions, symposia and intellectual concerts are other sources of activity which may be useful in disseminating information and broadening the mental horizons of library users. Organisaing exhibitions of library collections on special occasions as a regular feature in the libraries is a useful device for stimulating and addressing readers and informing them about the library's holdings. As a part of extension activity, libraries could organise lectures and cultural programme also.

LIBRARY AND INFORMATION CENTRE FOR SOCIAL AND ECONOMIC DEVELOPMENT

Library and Information Centre makes available full and free use of books and other non-book materials, disseminates information contained in the books and other graphic materials and promotes maximum use of them.The mottos of the library in the words of Dr. S.R. Ranganathan are "Every reader his/her book and every books its reader". Library is a repository of wisdom and knowledge of the past and the present where persons of all ages can seek knowledge. The libraries collect books not only for the sake of collecting but also put them to use. Now a days the library aims to maximise the utility of graphic records for the benefits of the society. It offers the readers free access to create and sustain people's interest to the best thought of the world so that they may develop their personality. The proper development of mind is possible only by making accessible the best available thought and the latest reading materials to intellectual needs of the readers. Therefore the library should acquire and make available all the classics and standard works.

The modern library has got the responsibility of providing facilities to the citizens to make best use of their leisure time which is otherwise wasted in superfluous pursuits. Library channalises the energies of the people in right direction by coverting them into potential readers. There are many kinds of libraries for different purposes. Public libraries serve the gerneral needs of general public in cities, towns and villages. Academic libraries comprising school, colleges and universities cater to the needs of institutions in carrying out its programme namely teaching, research and extension. Research libraries serves to the needs of research and

development organasations and special libraries meets the needs of various business and industrial organisations.

LIBRARY OUTREACH SERVICES

The term 'outreach' has proved to be a more than an adequate substitute of extension despite its undoubted popularity, both in the terminological sense and as a potential means of reaching the disadvantaged people. Nevertheless no general all purpose definition of 'outreach' has ever been coined. The operational concept the term 'outreach' is defined as "Activities or programmes undertaken in addition to or in the place of ordinary library service with the intention of reaching a disadvantaged population. Out reach is thus a process where by a library service discovers the true needs of the community it serves and becomes fully involved in supporting community activities whether or not centred on library premises.

LIBRARY EXTENSION SERVICE: RETROSPECTS AND PROSPECTS

Today the library has wide and varied responsibilities for promoting scientific and technological progress, social and cultural developments of the individuals and well as society at large. Public libraries as centres of learning aim at encouraging the effective use of books and other graphic mistrals by dissemination of knowledge through reading guidance and by provision of reading materials etc. This does not mean that the readers will visit the library on their own and make use of it, but the library also has to take utmost care to attract the readers to its purview. Therefore the library should adopt some methods and techniques in order to promote the reading habits and maximum use of the library and its resources.

During recent years, the growth of libraries as an indispensable tool for adult education has been very much felt in many countries namely U.K. Germany, U S A, Canada, USSR etc. In India howevery adult education agencies have yet to recognise the potential role of the libraries in carrying out of the adult education programme. The libraries equipped with audio visual aids, and new communication and information technology medias can successfully carry on extension activities to geneal adult public. Academic libraries can offer effective library service to the community by providing access to its resources wherever it is required.

As Gidwani has put it" the functions which an average University Library performs are essentially traditional and pedestrain. The library hardly organises any extension activity or does it provide reprographic services". The librarian must devise various methods both to attract readers and to retain them. Adult Continuing Education programme should be linked with providing library facilities which is now neither accessible to the neo-literates nor suitable to their needs. Providing such post literacy facilities would prevent those who complete Adult Literacy Programme relapsed into illiteracy after some time. Illiterate adults will naturally be unable to keep pace of the technological advancement of the country unless they are prepared to the recreptive to such reforms and innovations, Adult literacy can make effective contribution towards the removal of superstition, ignorance and diseases which are the by-products and ills of illiteracy. Adults have an immediate role to play in the national development whereas children at school may take some years to nature. Thus adult education contribute the full participation of masses in the developmental; activities and mobilize them for active role for social, economic and political and cultural changes. There is a good reading material readily available at a reasonable price for the neo-literates. Unless these readily available literature could not been tapped out, there is a real danger of those who are educated realising into the uneducated state.

INDIAN SCENE

The library service to the educational programme is not new to India. There were good libraries in ancient India in famous centres of learning at Patalipura and Nalanda etc. In the medieval period of the history the possession of books become a matter of prestige for some sections of the society. The term "extension" carries different meaning in different countries. It had been called as "extra library activities" or "co-library service activities. In this sense, it can be said that the concept of library extension activities was existed in one form or other within a narrow or wider field since the early days of public library.

According to Shri. T. Pandmanbhan the extension activities of libraries were rendered in Tamil Nadu during AD 1743-1837 such as books are read out to illiterates and disabled. The Maratha king established countries around Thanjavur district where the pilgrims to Rameswarm were provided free food and other facilities. In such

countries persons who are literate were employed for whom salary was paid in the measure of rice. They read out Ramayana and also Pachagam for the aged and illiterate pilgrims.

CONCLUSION

The role of the Library and Information Centre in the enhancement of the quality of life of the people can bot be over emphasised. The library out reach services dealing with illiterates, disadvantaged and deprived should be organised and designed to suit the specific used group to the main purpose of libraries as provider of knowledge and information which are staregic resources for the socio-economic growth and development of the nation. The university libraries in India even today have failed to keep up to the expectations inspite of the increased resources and sufficient funds are available to them. The various education commissions and committees voiced its concern over the academic library system consisting of schools, colleges and universities are as far behind the minimum standards. In recently the extension component is emerged as third dimension of university activates apart from teaching and research. Realising the university education in formulating and achieving the national goals and to promote the well being of the community, the programme of universities should intimately over with extension services for their realisation. The library extension services supplement and strengthen the information transfer and provide access towards optimum utilisation of the resources of the universities and collages in realising the national objectives of higher education in India.

REFERENCES

1. ABRAHAM J : Library outreach services for socio economic Development at the Grass root level "in Muthusami (M) and Cegan R, Ed. Librarian: A socio Ambassador. Madras: Tamilnadu Library Association, pp 116-121. 1995

2. BENGE RONALS C. Libraries and cultural change Londan; Clive Bingely, 1970.

3. GALFAND M A. Universities for developing countries. Delhi: Universal publication, 1974.

4. HOULE CYRIL C. Libraries in adult and fundamental education : Report of the malmo seminar. Paris: UNESCO, 1951

5. KHANNA J K. Library and society. Haryana Research Publication, 1991.

6. LIBRARIES IN SOCIAL EDUCATION : Report of the national seminar, Delhi : Indian Adult Education Association, 1956.

7. MUTHUSWAMI M and VENGAN R Ed. LIBRARIAN : A SOCIO AMBASSADAR. (Seminar paper of second Tamilnadu Library conference, (Palayamkottai), 1995. MADRAS : TLA, 1995.

8. National policy on education : Programme of action, Delhi, Ministry of Human Resource Development, Govt. of India.

9. National conference on how to secure 100% literacy in India, Souvenir, Bodhy gaya, Magadh university, 1994.

10. RANGANATHAN S R. Education for leisure, Ed4. Bombay, Asia Publishing House, 1981.

11. TREHAN G L. Changing concept of Libraries and Librarians. in Sonmgani K C and Narian V Ed, Librarian and libraries, Jaipur Sanmath Pustakalaya Trust, 1973.

POWER DEVELOPMENT IN INDIA AND ROLE OF POWER SECTOR LIBRARIES : P. F. C. LIBRARY & DOCUMENTATION CENTRE

SHANKAR SINGH*

ABSTRACT

The present study has been based on progress of power development in India. The growth of Indian Electricity Sector has been discussed. Objectives of the Power Finance Corporation are given. P.F.C. library & documentation centre has already been engaged in the power sector studies and other information activities. This article went on to describe the infrastructure setup, collection development, various library services.

INTRODUCTION

Electricity is the most commonly used form of energy. It is probably one of the most vital infracture inputs for economic development of a country. Indeed it is the fulcrum on which rests the future pace of growth and development. The demand for electricity in India too is enoromous and is growing steadily. The vast Indian electricity market today offers one of the highest growth opportunities for private developers.

PROGRESS OF POWER DEVELOPMENT IN INDIA

Since the independence the Indian Electricity Sector has grown manifolds in size and capacity. The generating capacity has increased from a meager 1362 MW in 1947 to about 83,288 MW today. The total length of transmission lines is of the order of over 4 Million CKT. Kms. as compared to 29,271 CKT. Kms in 1950. The number of villages which have been brought on a power map are over half a million representing about 85% of the total villages in the country as compared to only 3061 in 1950. Though the country is bestowed with abundant

* Assistant Manager Library & Documentation, Bangalore

energy resources, these are not being put most optimum use mainly due to the financial resource constraints. Mobilization of resource for achieving self-sufficiency in the electricity sector assumes high priority.

THE POWER SETUP IN INDIA

Electricity is in the list of concurrent subjects in the India Constitution i.e. the formulation of National Power Policy is the responsibility of the Central Govt. while the actual development work is to be executed by the power generating/supply agencies, state electricity boards/ departments within the frame work of these policies.

PUBLIC SECTOR POWER UTILITIES

The public sector power utilities can be divided into two major categories-Central Sector and State Sector.

In the Central Sector the construction and operation of power generation projects are entrusted—NATIONAL THERMAL POWER CORPORATION (N.T.P.C.)

Some other utilities are: - Power System Training Institute (PSTI)

Programme of rural electrification are within perview of Rural Electrification Corporation (R.E.C.). The Power Finance Corporation (P.F.C.) provides term-finance to power projects.

There are two joint venture power corporations under the administrative control of the MOP namely Naptha Jhakri Power Corporation (N.J.P.C.) and Tehri Hydro Development Corporation (T.H.D.C.)

STATE SECTOR

In the State Sector, the generation, transmission and distribution of electricity is undertaken by either the respective "State Electricity Board (S.E.B.) or the State Power Dept. In some states 'State Power Corporation in has also been formed for elecricity generation out of 25 states, SEBs have been formed in 18 states. In the remaining of states electricity generation, distribution is undertaken by 'State Power Dept.

POWER FINANCE CORPORATION

Power Finance Corporation was setup in July 1986, as a development finance institution dedicated to the power sector. It however commence

operations in 1988 and since then it has sanctioned about Rs. 9,100 crore and disbursed upto Rs. 5580 crore for different power projects in the country PFC only link to state utilities or the State Electricity Board (SEB's). It has now decided to includs control utilities like NHPC, NTPC, BHEL, joint sector projects, and the private sector in its list of borrowers.

CORPORATE OBJECTIVES OF P.F.C.

The main objective of PFC is to function a vital catalytic force, with a comprehensive rote of promoting optimal power development and there by ensure balanced growth of all segments of the power sector, including supply of power in terms of quality, quantity and reliability and bring about improved effencies and institutional development.

— Studies Scheme Experiments and Research activities associated with various aspects of technology in power development and supply.

— Promotion and Development of other energy sources including alternate and renewable energy sources.

— To promote, organise or carry on consultancy in therelated activities of the company.

P.F.C LIBRARY & DOCUMENTATION CENTRE

Library & Doc. Centre which is a part of P.F.C is a resource library for power sector studies and other information activities. It was upgraded in 1995 to function with the framework of the organizational policies of PFC and also to provide information services SEB's

THE INFRASTRUCTURE SETUP

— Resource Centre

— Collection

— Technical Processing

— Computerised Services

— Dissemination of Information

— Library Cooperation

— Networking
— Internet working
— Training/Seminar
— Equipment Support

COLLECTION DEVELOPMENT

Under the collection Development Programme latest and important documents on various subjects are being procured. This programme includes print material and electronic material like Video, Multimedia, CD-ROM etc Foreign publications and journals including training and workshop manuals, standards, IEC and Govt Policy Documents are being updated. Model Private Power Agreements EMCAT Training Materials and Private Power Development Policies are the special area of the collection. The library has excellent collection on management, Law, Taxation, Capital Market, and Information Technology.

LIBRARY SERVICES

With the help of well equipped electronic machines the library is providing following services:

— Circulation
— Document Copy Service
— CAS
— Audiovisuals Service
— SDI
— Power News Services
— Press clipping Service
— Indexing/Abstracting
— On Line Acess to PFC/DELNET/INTERNET

FUTURE PLANS

1. To build a comprehensive collection for Power and Finance Sector.
2. To maintain uptodate information on Govt. Policy, guidelines on Power Sector.
3. To coordinate Power Sector Libraries and Documentation Centre.

4. To provide refrral services to the user.
5. To publish News letter on latest development on Power & Finance Sector.
6. To organise Training Programmes and Seminars for Power Sector Library professionals.
7. To provide specialised current indexing and abstracting services.
8. To maintain Digital Library efficiently.

ANNEXTURE-I

Information Need Of P.F.C. Professional

1. Company/Industry/Commercial Information.
2. News Information.
3. Law Reference Information.
4. Gazettee Notification.
5. Govt. Regulations Reference Information.
6. Export & import policy information.
7. Foreign Exchange Rates Information.
8. Credit Rating Information.
9. Capital Market Information
10. Banking Information.
11. Financial News.
12. Who's Who and Professional's Information.
13. Population Information.
14. General.

ANNEXTURE-II

Important Documents and Source of Information

1. Govt. Of India Policy on Power Sector	:MOP/CEA/CBIP
2. National Power Plan	CEA

3. Five years Plan	PLANNING COMMISSION
4. Budget & Economic Survey	MOF
5. World Bank Reports	IMF
6. ADB Reports	ADB
7. TERI Energy Directory	TERI
8. Performance Report of SEBs	PLANNING COMMISSION
9. Power Sector Highlights	ECONOMIC TIMES; BUSINESS STANDARD; PTI ECONOMIC SERVICE; TERI, ECONOMIC & POL. WKY; ELECTRICAL INDIA
10. Rating Profile ICRA, CRISIL	
11. Conference & Seminar Proceedings	TERI, CBIP, PFC, CII
12. R.B.I. Circulars and Bulletins	RBI
13. Power News	BHEL, TERI, PFC, CPU, EMC
14. P.P.A.	MOP, PFC, USAID
15. Contract Agreements	IMF;ADB;PFC
16. SEBI Guidelines	SEBI; NABHI AND TAXMAN; ACAL,ICSI PUBLICATIONS
17. B.P.E. Guidelines	B.P.E.
18. Technical Journals	BHEL, NTPC, SIMEN, IEEE, ELECTRICAL INDIA, CEA
19. Training Materials	P.F.C; EMCAT; USAID; PFEIFFER, COGEN.

PUBLIC LIBRARIES AND RECREATIONAL NEEDS

MORE SARASWATI*

ABSTRACT

Public library, being a social institution helps in recreational needs through various programmes has been described. This article has suggested the 'motto of public library is to fulfill the recreational needs of people'. Some parameters such as 'aesthetic expression', 'rhetoric expression', 'Channel of communication' have been included. Activities of Balwant wachanalaya have been given.

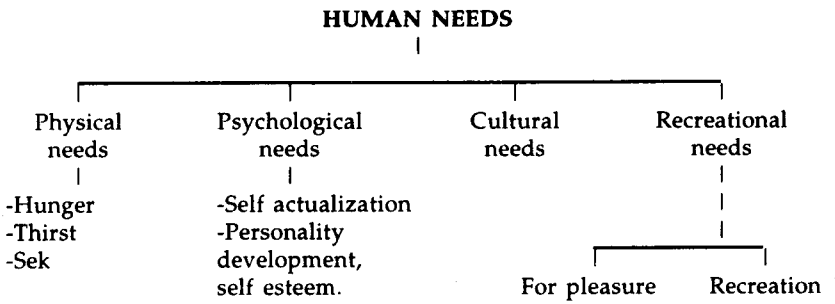
INTRODUCTION

From cradle to the grave man is a social animal. For socialization, he stays in society. He develops laugh in the society. Because Laughter is the medicine of mental tension. In recreation only as individual laughs.

Recreation provides adjustment to the environment and stresses. Every individual wants to be free from the routine work. So we use leisure time in recreation. If the recreational needs are not satisfied an individual becomes a victim of frustration which causes social evils. For smooth running of society physical needs as well as psychological needs must be fulfilled. Amongst the other needs recreational needs are having its own importance. Recreation of the medieval nobility includes the traditional activities of leisure such as hunting riding and play at combat. Technological industrial revolution that gave birth to modern times and has dramtically changed the political, social and recreational needs of modern people. Needs are defined by Rom Harrer and Roger Lamp :

"Needs that which is necessary for an organisms health and well being[1]".

* Asstt. Librarian Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.



RECREATIONAL NEEDS :

To fulfill recreational needs of people is the motto of public library.

Recreation is essential to the growth of children. Psychologists stress on the many emotional disturbances of later years originate with childhood difficulties and can not over come these difficulties. But through recreation it solves the problems. Due to the broken home over protection, lack of love of the parents, the child disturbs. Public library comes to the rescue of it.

GETTING RELIEF

Recreation provides release, relaxation and freedom. Public libraries are agencies for the recreation.

Adolescent period is one of the tremendous step for the emotional and intellectual development of the individual, several major emotional and intellectual development of the individual perform in this age. Teenage recreation must be adopted to this emotional need of the youth.

ECONOMICALLY AND SOCIALLY DEPRIVED PEOPLE

The condition of any individual makes him feel boredom. There is a basic need for the joy.

Some extra money is needed for the commercial recreation such as movies, picnic, swimming pools, transportation and park going, but using the public library is recreation in minimum cost which is used maximum level. Recreation Service is a basic social and cultural need.

FOR SOCIAL ADJUSTMENT

Recreation is rescue from day to day life. to cope with the pressure of life Leisure is a chance for self renewal. Man victimizes by various

problems. To find any escape other than alchohal reading is good for the society, family and for himself. Book collection on various aspects historical, cultural, psychological, sociological and health. Recreation is plesasurable activiity feelings and emotions releases from stress because it is pleasurable activity. Fairchild says, "Any activity pursued during leisure either individually or collectively that is free and pleasureful, having its own immediate appeal not impelled by delayed reward beyond itself it gives".

RECREATIONAL NEEDS FOR POOR

People can not afford money for the commercial recreation. Library is social and service oriented institution for one and all.

Recreational need is correcting social and cultural inquiries. When time is passed in reading it is way for good citizen life.

AESTHETIC EXPRESSION

Recreation gives aesthetic expression. Nesbit John A says-

"Recreation often imports aesthetic, creative, emotional intellectual, physical and social benefits to the individuals"[4].

RHETORIC EXPRESSION

While going through the literature and biographies an individual get rid of the frustration.

REDUCES ANXIETY

Public library arranges programmes such as book exhibition, story tellings, debates, group discussions, celebration of special days it reduces anxiety.

NO DISCRIMINATION IN RECREATION

Equal opportunity is provided in recreation. Public library provides opportunities to one and all, on equal footing, without discriminating the individual on the grounds of race, colour, caste, creed or colour.

Self Actualization needs are fulfilled by recreation. Recreational activities which includes walking, talking with friends to have reciprocal communication, enjoying parties, smoking, park going and reading at home or at public library.

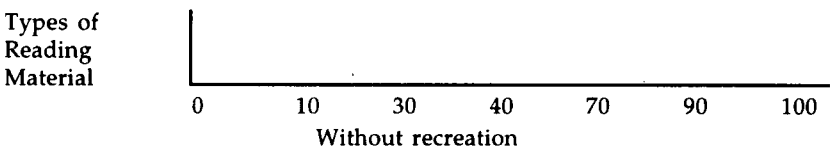
ENHANCES MENTAL AND EMOTIONAL HEALTH

Intellectual development : Public libray is an agency which helps in overall development of an individual it is an amusement.

ROLE OF RECREATION IN MEMORIZING A LEARNING MATERIAL :

When part Vs whole learning is recitated in some intervals that too with recreation. The learnt materials is recited for a longer period.

A curve for recitation with recreation and without recreation :



CHANNEL OF COMMUNICATIONS

Public Library helps to fulfill the communication needs. The reciprocal channel with the author and reader, and staff and readers. It changes the routine environment and overcomes disguised mood anxiety and frustrated life.

PUBLIC LIBRARY AND RECREATION

Unlike academic libraries public library is not only for chosen few. But it is far one and all. It is run by public; for the public and of the public.

Anderson says-

"Public library is one which is open to any of the public and is usually free of any charge paid as so much for service. It is usually supported by a local rate and grant from the Government".

Public Library is community center for social, recreational and cultural activities to all classes and masses. It is University of Public.

Public Library plays important role in recreation.

RECREATIONAL PROGRAMMES IN PUBLIC LIBRARY

Recreational services are run out by public.

READING FOR PLEASURE

Book liberate the minds of people. Reading cultivates a person into a better citzen, better family members.

Foe healthy personality developments of students faster desirable traits of citizenship and contribute to the healthy personality development.

MAGAZINES : NEWSPAPERS

Fairy tells, biographies, sports literature poetry and novels are Solac for mental worries for adults and children also UNESCO Public Library Manifesto expresses to -

"The Public Library is concerned with the refreshment of man's spirit by the provision of books for relaxation and pleasure with assistance with provision of up-to-date technical scientific and sociological information".

BALWANT WACHANALAYA

Balwant Wachanalaya was established on Ist August 1920. Lokmanya Bal Ganagadhar Tilak was died on this day. It is located in Auranpura, Aurangabad. Aurangabad is a land of saints. Aurangabad is a part of Marathwada region of Maharashtra State. It is famous for world famous Ajanta and Ellora Caves. It is developing very fast - industrially, socially, economically and educationally. For abdetaling the knowledge and recreational purposes public libraries are established. Balwant Mofat Wachanalaya is one of them. It was established in the rememberence of Lokmanya Bal Gangadhar Tilak who died on Ist August 1920. Late Anantrao Wagmare and other social workers had been to Bal Gangadhar Tilak's funeral function and thought that for the sake of his name public library must be established. It was in a tent only. The floor was cleaned with cowding and these people use to clean themselves. The papers (News) from these social workers, freedom dighters use to bring their own papers and use to collect the papers from the people after their reading and used to keep in the library. That

was Britisher's period. They asked these social workers to have Nizama's photo into library. But they denied to do so. Therefore, the grant was denied for the library.

These library eminent personalities purchased own plot and build up the building in Aurangpura which is the centre of the city. People come there for various reasons and visit the library.

The Library members are as follows:

1. Children 00
2. Magazine section members 320
3. Adult members 400

Children come to the Library during the Diwali and summer vacations more in number.

ACTIVITIES IN BALWANT WACHANALAYA

Debating competitions for children on Ist August are organised. On this occasions the visitors, audience from all sections of the society attend the same.

NATIONAL FESTIVALS ARE CELEBRATED

On Independence Day and Republic Day various talks are arranged. People get rid of the routine work and recreational part from the library is performed.

BOOK EXHIBITION

New books are exhibited in the big hall people come to know the new arrivals. Balwant Wachanalaya is popular public library which recreates.

CONCLUSION

From womb to tomb manisa social animal. He socializes in society. He releases tension by recreation.

Recreations refreshes the mind. He gets rid of the routine work. Recreation is the important need of the society. Recreation plays crucial role in learning for social adjustment. It reduces anxiety for self actualization, aesthetic expression, rhetoric expression and

therapeutic one which is a way to reduce antisocial acts. The leisure period which is wasted in slum areas, over crowded areasland bad company. Public library helps in recreation which is essental in our life.

Balwant Wachanalaya is one of the best libraries in Aurangabad which recreats one and all. It does not discriminate on the grounds, religion class or caste.

REFERENCES

1. ROM HARREER and ROGER LAMP. "Encyclopedic Dictionary of Psychology, Basil Blackwell Publications, Great Britain, p. 408, 1983.
2. MAK KAPLIN, "Leisure in America : A Social Inquiry", New York, p.19, 1960.
3. FAIRCHILD: Dictionary of Sociology.
4. BENJAMIN B. WOLMAN, ."Paychology, Psychoanalysis and Neurology, Vol. 9. Van Nostra and Reinhold New York, p. 401, 1977.

ROLE OF A LIBRARY IN MEDICAL EDUCATION: AN EVALUATION OF SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY (SCTIMST) LIBRARY, KERALA

BIJIMOL JOSEPH*

ABSTRACT

The study evaluates the present state of the SCTIMST library with respect to its administrative set up, organisational efficiency, library collection, technical processing, services, personnel and physical facilities. Data was collected through questionnaire, personal observation of the functioning, facilities and services of the library and examination of relevant files and records maintained in the SCTIMST library. The data collected was analysed. It is found that only a small number of books are added every year. Most of the medical books are to be procured from abroad and are prohibitively costly. The major part of the fund is utilised for acquisition of periodicals. The library functions on all days except a few public holidays. It offers orientation programmes for new members to introduce them to the techniques of using catalogues, method of searching indexes and abstracts and so on. The reprographic section works during the library hours. Circulation of computer based monthly bulletin of publications added to the library, routing of content pages of journals and display of new books and journals form part of the current awareness services provided by the library. There is the facility of providing references from Medline databse in the field of interest of the users. The library undertakes bibliographical services and compiles bibliographies on request from the readers.

INTRODUCTION

Libraries devoted exclusively to medical literature have existed since the formation of institutions, societies and schools oriented to the study of medicine. Medical libraries are essential for the organisation and retrieval of the vast and continuously expanding fields of knowledge in health science and thus to the effective delivery of health care. They serve the medical profession with

* Librarian, Alphonsa College, Palai, Kottayam Dt., Kerala.

medical literature and meet the demands of medical students and doctors in the country who serve a great cause in the combat against disease.An effective and dynamic information system is the prime need of a medical educational institution which should provide for the collection, organisation, storage and retrievals of information. Realising the impact that the library can have on the standards of medical education, the Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) maintains a well-equipped library for the provision of a comprehensive service to the medical staff and students. An evaluation of the library and information services of the SCTIMST is attempted in this paper.

SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY-BRIEF PROFILE

SCTIMST was established by an act of Parliament in 1980. It bears the name of Maharaja Sree Chitra Tirunal who ruled the State of Travancore from 1932 to 1948 when the state opted for merger with the Indian union. The origins of the Institute reach back to 1973 when the Royal Family of Travancore gifted a multi-storyed building to the people, and the Government of Kerala resolved to develop the gift as the Sree Chitra Tirunal Medical Centre for medical specialities. The growth of a Biomedical Technology Wing followed quickly at the Satelmond Palace, Thiruvananthapuram.

The concept and achievement of uniting technology and medical sciences within a single institutional framework was regarded sufficiently important by the Government of India to declare it as an Institute of National Importance. The Act lays down the objectives of the Institute to be the promotion of biomedical engineering and technology, demonstration of high standards of patient care and the development of post-graduate training programmes of the highest quality in advanced medical specialities and biomedical engineering and technology. The Act confers statutory powers on the Institute for organising post-graduate courses and awarding degrees, diplomas and other academic titles. The post-graduate programmes of the Institute cover subjects in medical sciences and biomedical technology and endeavour to produce medical scientists and technologists who will be heirs of a joint culture and whose concern for patient welfare

will transcend old intellectual boundaries. The departments of clinical and laboratory sciences in the Hospital wing have initiated a number of research projects in their respective disciplines supported by national granting agencies such as DST, CSIR and ICMR.

OBJECTIVES

The study was conducted with the objectives of assessing the present state of the SCTIMST library with respect to its administrative set up, organisation efficiency, library collection, technical processing, services, personnel and physical facilities.

METHODOLOGY

The methodology adopted for the study consisted of collection of data through questionnaire, personal observation of the functioning, facilities and resources of the library and examination of relevant files and records maintained in the SCTIMST library.

ANALYSIS

Administrative set-up

Although the librarian is the actual working head of the SCTIMST library, there is a library committee for controlling and guiding library activities. The committee consists of 6 senior members of the organisation, and is concerned with the planning and administration of the library, supervision of the work of various sections of the library and solving their various problems. The librarian is a member of the committee and is the convener as well as secretary of the committee.

Library collection

The majority of the collection in a medical library is journal literature, about 2/3 journals and 1/3 books. Usually journals are used intensively in a medical library, thereby diminishing the necessity of having a large up-to-date book stock.

Book selection

In SCTIMST library, the library committee acts as the book selection committee. The committee members consult the subject experts for the selection of books. The heads of departments also select books

for the library. All possible source materials such as publisher's catalogue, book seller's catalogue, book reviews etc. are consulted for book selection.

Book Acquisition

The orders for books are given directly with the publisher and also with the book sellers. The important suppliers of medical books to the library are Allied, Narosa and B I Publishers. A rate of discount of 10 per cent is usually given to the library for the books supplied. The library also receives books as gifts from various institutions. The library receives 90-95 percent of books which are ordered.

Book Collection

Data relating to the new books added to the collection for the previous five years are given in table 1.

Table 1. Acquisition of books at the SCTIMST library

Year	No. of books added	Total No.
1987-88	146	6184
1988-89	484	6330
1989-90	241	6814
1990-91	338	7055
1991-92	171	7393
1992-93	-	7564

Table I shows that only a small number of books were added every year. It may be because most of the medical books are to be procured from abroad and are prohibitively costly. Moreover, the major part of the fund is utilised for acquisition of periodicals.

The book collection is mainly comprised of 13 subject groups. They are: Anesthesiology, Biochemistry, Cardiology and Cardiac surgery, Immunology and Haematology, Microbiology, Radiology, Thoracic surgery, Neurology, Pathology, General Medicine, and General books. The collection of General Medicine includes books on General Surgery, Pharmacy, Nursing, Physiotherapy and Gynaecology. The

General collection consists of disciplines such as Library science, biomedical engineering, Computer science, Statistics, Art and Photography, Hospital Management, etc.

Collection of reference books

The library has a collection of about 50 general reference books such as encylopedias, dictionaries, directories and hand books while the number of medical reference books comes to more than 700 including serials. It is noticed that many of the general reference books are out-dated and many which are a must for a special library are not available. It has been observed that the library has acquired a good collection of reference books on cardiovascular sciences, neuro sciences and related disciplines. The subject reference books which cost more than Rs. 2000/- and undersized books are kept separately in a closed collection.

Technical Processing

All the books received in the library are properly classified and catalogued. The books are classified according to the Dewey Decimal Classification Scheme. With regard to cataloguing the library catalogue provides author, title and subject entries so that different approaches to a book are possible. It is found that the average time taken for a book to be processed and made available for use after its receipt in the library is between one to two week.

Periodicals

The number of periodicals subscribed in the SCTIMST library during the five years is given in table 2.

Table 2. Subscription of Periodicals

Year	Number
1987-88	220
1988-89	189
1989-90	195
1990-91	193
1991-92	194

It may be noted that the number of periodicals subscribed has decreased from 220 in 1987-88 to 194 in 1991-92. The amount utilised for journal subscription for the year 1987-88 was Rs. 6 lakhs while in 1991-92 it was Rs. 15 lakhs (Table 3). Though the amount utilised for journal subscription in the year 1991-92 is more than double that of 1987-88, the library could not subscribe to the same number of periodicals because of the exorbitant rise in the prices of periodicals over the last many years.

The majority of periodicals subscribed to the library are subject periodicals with 12 general periodicals meant for general reading. It has been observed that orders for periodicals are placed towards the end of the current year. The library gets the periodicals directly from the publishers and also through agents. The important suppliers of periodicals to the library are Allied, Narosa, S. Karger and Universal.

The library faces problems in acquiring periodicals through agents. It has been reported that the replacement copies are not received in time.

The SCTIMST library maintains the kardex for keeping the records of periodicals. When all issues in a volume are received, the periodicals are bound. The library has more than 10,250 bound volumes of periodicals in its collection.

Non-Book Materials

With regard to non-book materials the library has more than 15 video cassettes; microfilms and microfiche together total around 390. The library has a television set and a VCR. The audio-visual unit which was added to the library during 1990-91, became operational with the acquisition of video cassettes on surgical and investigative techniques.

Stock verification

A committee of faculty members nominated by the director conduct the annual stock verification. Classified computer print out of books is used for this purpose. It was found that during 1990-91, 15 books and one bound volume of periodicals were found missing and in 1991-92, 4 books and 2 bound journals were missing. Recently it was decided by the library committee that for books which cost more than Rs. 2000/- the staff should be made responsible for loss and the amount should be collected from them.

Library Services

The information services of the SCTIMST library function with a view to disseminate quickly and effectively the current literature resources available in the library.

Working hours

The SCTIMST library functions on all days except a few public holidays. The working hours of the library is from 9.00 am to 8.00 pm on working days and on Saturday and Sunday it is from 9.00 am to 4.00 pm.

Borrowing of library materials

The library provides the facility of lending books. Reader's tickets-four book cards and two journal cards-are issued to the members of faculty and P.G. students for purpose of borrowing books from the library. Two book cards and two journal cards are issued to research scholars and paramedical staff. The books and bound volumes are issued for two weeks and loose journals are issued for one week. Reminders are sent to the readers who have not returned books in time.

An average of 25-30 books are issued daily and it is also found that an average of 20-25 books are returned everyday. The number of books consulted per day comes to 50-60. For books which are in circulation the library provides the facility of reservation of books.

Non-print materials such as video cassettes are not loaned to the readers.

User Education Programme

The SCTIMST library offers orientation programmes for new members to introduce them to the techniques of using catalogues, method of searching indexes and abstracts, shelf arrangement, use of non-print media resources and other services available for users. Lectures and demonstration methods are followed for this purpose.

Reprographic services

Photocopying services is one of the most frequently required elements of user services in the SCTIMST library. The reprographic

section works during the library hours. No separate staff is provided for this purpose. It is found that photocopy of an average of 300-350 pages are taken a day. An average of 20-25 requests are received per day. A charge of ps. 50 per page is collected for photocopying the material. The library experiences a heavy demand for photocopies of articles from journals available in the library. Requests for photocopies of articles from other institutions in the locality and outside the state are also met by the library. The seven-year-old reprographic facility of the library received a fillip with the addition of a heavy duty photocopy machine HCL Finesse 5210 ZOOM. The students and faculty are not satisfied with the photocopying facility in the library, and suggested that there should be an inprovement of this facility.

There is one microfilm reader for the use of microfilm and microfche. The audio visual unit which was added to the library during 1990-91, became operational with the acquisition of video cassettes on surgical and investigative techniques. The unit organised the screening of video films on medical topics received from the Embassy of France on loan.

Information Services

Circulation of computer based monthly bulletin of publications added to the library, routing of content pages of journals and display of new books and journals from part of the current awareness services provided by the library. Since most of the readers are not in the habit of consulting catalogues, the display of new text books and reference books assumes great importance.

Selective Dissemination of Information (SDI) service is not provided by the SCTIMST library. But there is the facility of providing references from Medline database in the field of interest of the users. The library undertakes bibliographical services and compiles bibliographies on request from the readers. Services like translation service, newspaper clipping service etc. are not provided. The library does not bring out any publication of its own.

Library Automation and Computerised Information Service

The availability of Medline on CD ROM has made it possible to provide MEDLINE directly to clinicians by offline simply and economically, without the associated problems of telecommunications and on line use charges.

In SCTIMST library the work connected with the creation of retrospective and current machine readable catalogue of books and periodicals, which was undertaken with Micro ISIS software version 2.3 was completed during 1991-92. As part of the plans for total library automation, the system requirements of the library were identified and the PC in the library was upgraded to a LAN (Local Area Net work) server with three terminals and two CD-ROM drive attached.

Subscription to Medline on Compact disk was made to cover the period from 1966 to date which will give a major impetus to the information services like CAS, SDI services and retrospective literature searches undertaken by the library. The users themselves can make use of the computer and the searches can be carried out. The library staff assist the user in carrying out the search and for changing the disks. If the reference is relevant the printouts of the particular topic will be provided on request. The library charges a fee for the searches on CD-ROM. A one-hour search costs Rs. 20/- and a one page print out Rs. 1/-. The library receives the disks regularly every month. The library has plans to buy the current contents on floppy disk with abstract and also BIOSIS on CD-ROM. The on-line service also may come into use in the near future.

On the conversion of the existing databases from Micro-ISIS to LAN based system after suitable additions and modifications, the library will be able to computerise all house keeping operations like acquisitions, periodical subscriptions, circulation of books and periodicals and serve the research and teaching departments.

The library has acquired the SANJAY, an augmented CDS/ISIS package for library automation. The user module of the SANJAY helps the library staff to carry out daily routine and assist the library users in the areas such as circulation control, acquisition control and on-line catalogue.

The library organised a two-day workshop on MEDLARS conducted by the National Informatics centre in association with the Institute. It aimed at increasing awareness among the users of medical information of the possibility of on-line information retrieval facility offered by MEDLARS through the National Informa;tics Centre. Seventy four delegates from the Medical College, Trivandrum, Regional Cancer Centre, Trivandrum, Dental College, Trivandrum, and the Institute

participated in the programme. A demonstration of the on-line service through NICNET and NICMAIL was held at the NIC state centre.

Library Finance

The main source of finance for the SCTIMST is the grants from the Central Government and every year a substantial amount is spent for the purchase of books, periodicals and other library equipments. The detailed budget allocations for the SCTIMST library for the years 1987-1992 are given in table 3.

Table 3. Budget allocations for SCTIMST library for the years 1987-1992

Head of account	1987-88 Rs.	1988-89 Rs.	1989-90 Rs.	1990-91 Rs.	1991-92 Rs.
Books	3,00,000	2,50,000	2,50,000	2,50,000	2,50,000
Periodicals	6,00,000	6,00,000	90,000	13,00,000	15,00,000
Serials	50,000	60,000	35,000	30,000	
Binding	30,000	25,000	65,000	20,000	
Equipment and Stationery	20,000	15,000	-	-	-
Others	-	-	-	-	50,000

The data in table 3 shows that the amount spent for periodicals has been doubled while the amount spent for books has been lessened compared to the year 1987-88 and the amount spent for purchase of books remains the same for the last few years resulting in a small addition to the library collection as seen in table 1. With regard to periodicals, eventhough the amount has doubled in 1991-92 compared to 1987-88, the library cannot subscribe to the same number of journals as shown in table 2. Other important items of expenditure are serials, binding, stationery, etc.

Library Personnel

The staff in the SCTIMSt library include six professionally qualified personnel and three non-professional staff members. Four of them

hold the Masters Degree in Library Science. Among the non-professional staff, there is one cleaner, an attender and a typist. In addition to this, four graduate apprentice trainees with first class degree in library science are recruited every year for a period of one year under the Apprentices Act. They are assigned the job of replacement of books, periodicals, book processing, shelf rectification, various computer activities etc. The professional staff members in the SCTIMST library are provided ample opportunities for increasing their qualifications, and brushing up their knowledge by attending seminars, conferences, refresher courses etc.

Physical facilities

At present the SCTIMST library has no separate building of its own. The library functions as a part of the main building and it is centrally located. The plinth area of the library is 16000 sq. feet. There are 10 rooms for the use of the library. The number of seats provided in the library for readers is 50. All sections of the library function in the same floor. The circulation counter is near the entrance. The library has no separate reading room. The bound journal section is situated a little distance away from the main part of the library.

The library has adequate number of lights and fans and is properly ventilated. The users suggested that lighting arrangements need to be improved in the bound journal section as it is difficult to search for journals after 6.00pm. the library also has drinking water facility and toilet facility. There are plans to have a separate building for the library.

The Institute library is being designated as one of the twenty one centres in the country to be linked with the medical literature Analysis and Retrieval system through the National Informatics Centre.

ROLE OF PUBLIC LIBRARIES IN DISTANCE EDUCATION WITH SPECIAL REFERENCE TO RAJASTHAN

Dr. H. B. NANDWANA*

ABSTRACT

Public libraries have been serving the masses for a long time. With the coming-up of open universities and their gaining popularity the public libraries have a defined role to play-to serve the non-formal students. The students of distance education are spread far and wide for whom the universities cannot provide library facilities. These students have to rely on the public libraries for the secondary and reference material.

This paper examines the history of distance education in Rajasthan and examines the role public libraries should take upon to cater to this large needy groups. The paper also makes some suggestions which, if accepted, will be of great help to this unattended group.

INTRODUCTION

Distance education in India at the University level started in 1962 in the form of correspondence courses offered by Delhi University through its School of Correspondence and Continuing Education. At present there are around 50 universities offering correspondence courses in India. The first open university to be established in India was the Andhra Pradesh Open University at Hyderabad in 1982. Indira Gandhi National Open University was established in 1985 Delhi. Nalanda Open University in 1987 at Patna (Bihar), Kota Open University (Rajasthan) was established in 1987 at Kota (Rajasthan). Yashwantrao Chawan Maharastry Open University was established in 1989 at Nashik (Maharashtra), Bhoj Open University in 1992 at Bhopal (Madhya Pradesh) and Baba Saheb Ambedkar University at Ahmedabad (Gujrat) in 1994. The Government of India had adopted a policy of establishing one open university in each major state of India.

* Head of the Deptt. of Library and Information Science Kota Open University, Kota (Raj.)

Distance education needs no introduction because of its development and availability of literature in the field for the last more than two decades. Literature on the role of public libraries in distance education is very limited. With the changing educational environment and socio-economic conditions in India, the public libraries will have to play a vital role in the field of open learning. Public libraries are social centres for the community with services for recreation, information and education to public without discrimination. At present the public libraries are considered as appropriate agencies which provide all possible services for self education. Public library and distance education are co-related with each others. In this paper attention has been made to examine how far public libraries can co-ordinate and cooperate the distance learners engaged in open learning system.

PUBLIC LIBRARY SET-UP IN RAJASTHAN

The public library services in Rajasthan are provided by two agencies viz-

State government-The state government manages the state central libray, divisional libraries, district libraries, tehsil libraries and village libraries. The libraries of information centres are also managed by the directorate of public relations government of Rajasthan. At present there are one state central library; 5 divisional libraries; 27 district libraries and 9 tehsil libraries. The divisional libraries located at Jaipur, Jodhpur and Bikaner also extend reading room facilities. There are aproximately 93 private libraries in the state.

Private agencies-Private public libraries are managed and financed by private bodies.The state government also provides grants-in-aid to private libraries. Municipal bodies have also established public libraries in some towns and cities of the state.

DISTANCE EDUCATION IN RAJASTHAN

At present Rajasthan has six universities-3 teaching and affiliating universities located at Jaipur, Jodhpur and Udaipur; one innovatime model university which is expected to work as resource centre for college at Ajmer; one Agriculture Univeristy at Bikaner and one Open University based on distance education model named as the Kota Open University at Kota. Four deemed universities - Vanasthali Vidyapeeth, Vanasthali; Birla Institute of Science and Technology at

Pilani; Shramjivi Vidyapeeth at Udaipur and Jain Vishwabharti at Ladnu (Nagour).

The Kota Open University came into being by an act enacted by Rajasthan state legislature in the year 1987. Before the establishment of this University the correspondence courses were offered by the Rajasthan University, Jaipur and the Mohan Lal Sukhadia University, Udaipur. In order to strengthen and achieves better co-ordination of the vast scattered resources of distance education in the state. The government of Rajasthan decided to transfer the Institute of Correspondence Studies and Continuing Education Jaipur and the College of Correspondence Studies at Udaipur to this University along with their assets. At present in Rajasthan Kota Open University is the only institution based on distance education model. The courses offered by the University are shown in the table-1 :

Table-1

S.N.	Courses offered
1.	B.A. and B. Com.
2.	Diploma in Library and Information Science
3.	Bachelor's degree in Journalism and Mass Communication.
4.	Diploma in Labour Laws, Industrial Relations and Personnel Management.
5.	Diploma in Tourism and Hotel Management.
6.	Bachlor's Degree in Education.
7.	Certificate course in Computer Programming.
8.	DIM, ADIM, MBA
9.	Ph.D.

The total yearwise enrolment in various courses during 1993-94, 1994-95 and 1995-96 the enrolment has been 8879, 7750 (except B.A./B.Com.) and 10,143 (Approximately) respectively.

LIBRARY NETWORK OF KOTA OPEN UNIVERSITY

To provide library services to the distance learners, Kota Open University has a network of libraries. The University has two categories of libraries :

(i) The Central Library located at the University headquarter at Kota; and

(ii) The regional and study centre libraries at regional centres and study centres.

The central library caters to the needs of academic and administrative staff of the main university besides serving the editors unit writers etc.. Directorate of Regional Services provides a statewide network of academic support services for the students. There are six regional centres located at Jaipur, Ajmer, Udaipur, Jodhpur, Bikaner and Kota and 30 study centres located at various districts of the state. Library facilities are made available to the distance learners by the libraries of the regional study centres. Out of the six regional centre of the University only 5 regional centres (except Kota) have their own libraries. There are small libraries with limited collection of books at study centres. These libraries provide library services to students up to some extent. The self instruction material provided to the distance learner is not complete in itself. The distance learners have to depand on some text books reference books and journals. The libraries at regional study centres can not cater to so many students due to several constraints such as staff, space, furniture and budget etc. The accommodation available to the libraries is also very limited. There is a lack of qualified and experienced staff. Proper user services are also not provided. This students in remote and rural areas staying far away from the study centres can not make use of the library services. Libraries of regional centres open during in office time and libraries of study centres open during counselling sessions. Generally students can not use resources available in the study centre libraries because libraries at study centres are losed after counselling sessions. According to the philosophy of distance education attendance of students at councelling sessions is optional. It is not possible for the distance universities to equip regional and study centre libraries with sufficient number of books, reference books, journals in various subjects for the students enrolled in various programme. It is also impossible to appoint qualified staff at regional and study centre libraries. To fulfill the above conditions, financial burden will increase and distance education programmes will became costly for distance learners. Thus the question before us is How can distance institution provide library services to distance learners? The only alternate is public library.

PUBLIC LIBRARIES AND DISTANCE EDUCATION

Public libraries are often called the university of people. Only public libraries open its doors to distance learners. Academic libraries do not held the distance students. Distance learners have to depend solely upon the public libraries for their studies. In these circumstances, it will be pertainent to examine how far public libraries can help the distance learner? Here it is also necessary to examine the factors responsible for the proper development of public library network in the state in support to distance education.

Library Legislation

Good network of Public libraries is a pre-condition for success of any distance education programme. The establishment of a network of public libraries became a logical and necessary part of the public library services, and the effective and efficient library services to the distance learners can be accepted on the statutory basis. For this purpose the enactment of legislation is necessary for the state.

Collection Development

The major part (more than 75%) of the collection in public libraries are fictions. Adequate number of text books, reference books collection is necessary for supporting distance learners. Distance education institutes must supply the self instructional material to the public libraries so that students canmake use of the materials. Public libraries from national to local level should acquire the multiple copies of text books so that public libraries can act as resource centres.

Application to Modern Technology

Besides the print material public libraries should acquire radio, video, cassettes recroders, television, microfilms and computer etc. because multimedia has a very important role in open learning.

Manpower Development

Libraries should appoint professionally qualified and experienced staff. They are to be trained in the field of distance education. This way librarians can act as teachers. They can guide to the distance learners.

SUGGESTIONS

1. To strengthen the public libraries in the state enactment of legislation is necessary in the state.
2. Public libraries can have resource sharing agreement with national and state open universities and academic libraries.
3. Public libraries in existence should be strengthened.
4. The state government as well as the central government should provide sufficient grants to the public libraries.
5. Library oriented education is necessary for distance learners. For this purpose open universities should redesign the curriculum of courses.

REFERENCES

1. ASSOCIATION OF INDIAN UNIVERSITIES, Hand book of Distance Education, Delhi. 1986.
2. DASGUPTA (RK). New Education and Libraries, Herald of library science. 25(1-2) Jan-Apr, 1986. pp. 46-56.
3. JAGANNATHAN (Neela). Libraries in Open Universities of India.Issues and problems. University News XXX, 35, 109-117, 1992.
4. KEEGAN (D). Foundation of Distance Education. London, Crown Helm, 1986.
5. KOTA OPEN UNIVERSITY : A profile. 1996.
6. VERMA (LN); Public library services in Rajasthan. In Verma and Agarwal, Ed. Public library services in India. Delhi, Himanshu Publication, pp. 93-107.

ROLE OF STATE CENTRAL, DIVISIONAL AND DISTRICT LIBRARIES IN THE NATIONAL DEVELOPMENT

DR. R. S. BALEKAR*

ABSTRACT

The present study discusses the role of State, Central, Divisional & District library towards the National Development. The Public Library System has been analysed for achieving the National Development. While describing the functions of State, Divisional, District library proper attention is given on the state libraries act such as Maharashtra Act Tamil Nadu Act, (1948) & Andhra Pradesh Act (1960). It has been suggested that Library System upto district level should be directly under government control.

INTRODUCTION

India and other developing nations through planning have ventured into transformation of its traditional society into modern scientific and technological society. This transformation is to be achieved by democratic method, through parliamentary system of Government. But this cannot be possible without access to the printed media. It is accepted that only printed media can lead people into new vistas of science and technology.

A sanskrit verse says "eating, sleeping, fear and to have a sex are common in human beings and animals, it is human intellect which differentiates a human being from animals" And for intellectual development of human being public libraries are essential. Because these can provide access to knowledge.

PUBLIC LIBRARY

"A library which is opened by the state with legislative support out of public funds and services of which are available to all free of charges". This concept of public library was pleaded by Dr. S.R.

* 6/86, Mhada Complex Patwardhan Hospital, Samor Banshilal Nagar, Aurangabad, 430005

Ranganathan and UNESCO Manifesto for public libraries. But provision of funds and mere establishment of libraries by legislative support will mean little, if their use is not ensured and access to them is not guaranteed to every user. Any educated user living in small village should be able to borrow through his village library any book from any library in the country. Then only it can be known as a public library service.

PUBLIC LIBRARY SYSTEM

A public library is appropriate agency to provide adequate facilities for self education to all citizens. It has to be organised in such a way that all demands of the users are properly and fully satisfied. This can be possible through integrated library network. A legislative sanction to establish such network is necessary to obtain faithful results.

An ultimate aim of library network is to establish an integrated, comprehensive and efficient public library service for the state. The success of library services depend upon a system which mobilizes resources maximises the utilisation of such resources and provides services to all on equality basis. Since all public libraries have common objectives, these should be linked up with each other for several useful purposes legally to form a network. The extra-ordinary cost of various resources made libraries to share there resources rather than duplicating them. British library system is a notable example of network.

A public library of whatever kind on becoming a part of a system assumes a new role of being vital link connecting the base with the full resources of the system and through it the resources of the state and if possible, of the nation. In India, networking of libraries started in Baroda state earlier and then Fyzee committee report of Bombay Government tried to establish such network in the Bombay state.

The basic objective of public library network should be to integrate the services of public libraries in such a manner that every citizen of the state should be able to draw upon the resources of any library for the purposes of information, education, vocation, aesthetic appreciating and research. The main objectives considered to achieve for an ideal goal of the system are :-

a) to ensure that all communities, cities, talukas, towns, villages are provided with basic library services.

b) to vitalize the existing regional resources and system and to form inter-state network compatable with each other and with the national information network.

c) to provide adequate and specilised services to children, blinds, physically handicapped, illiterates, neo-literates, the poor, and linguistic minorities.

d) to bring co-operation and co-ordination amongst all existing libraries - Public, Academic and Special.

The linking of public libraries in the state in hierarchical order to achieve an ideal goal is necessary for purposeful and effective administration of a system. The actual organisation and provision for the public library system should be - the state central library at the apex level with Divisional libraries to assist it. District libraries at the District will be linked with Divisional libraries at the top and taluka Block, and village libraries and mobile units will be linked up to District libraries. A revenue pattern of administration should be followed to develop public library system. All these units should be under the administrative control of state central library at the Apex. Thus the state library system can be organically structured with specified and demarcated areas. There are definite advantages in having unified library system. The isolated library service now a day is always expensive, insufficient, and also inadequate. This isolationism could be removed by co-operation and co-ordination among libraries. In this age of information explosion, a structural pattern of libraries leading to development of depositories and resource sharing are the methods to solve this problem.

STATE CENTRAL LIBRARY - (SCL)

The state central library which is at the top of the structure within the state has distinct role to perform. It is not only to serve the communities of the State by maintaining a large collection of books for their use but also to render advise, organise supervise, inspect and supplement all other libraries in the State. The State central library stand in the second order of the array of the National library system. The first order array of the national library system is the National Library, Divisional libraries in the third order and District libraries in the fourth order of array.

In view of the significant role of these libraries play in the development of a country for promotion of educational, social and cultural activities, the Government of India have adopted a scheme under Ist five year plan for improvement of library services in the country. Under this scheme it was intended to assist in building up of library services in the State. The scheme also included establishment of children libraries in every state. This improvement of library services scheme came into force in 1952, but it made its mark during Ist and 2nd plan. The term integrated library system was coined during Ist plan. Govt. of India assisted the states in establishment of State central libraries. As a result of this provision state central libraries have came into existance in almost all states.

The story behind the establishment of SCL differs from State to State. A pattern of entrusting the work of SCL and regional libraries to existing public libraries was developed in India due to the examples of Bombay State. In many cases existing public libraries have designated as SCL in most of the States.

In Maharashtra, the SCL was established under management and control of Asiatic society, Bombay in 1949, it is now under Government control since 1995. The Maharashtra Public library Act 1967 prescribed for the establishment of SCL, but does not stipulate for the functions and its expected role in the system.

The Tamil Nadu Act (1948) omits to specify for the establishment and functions of SCL, but designates the Conemara Public Library, Madras as SCL.

The Andhra Pradesh Act, (1960) provides for SCL and through rules designates the Asia Library, Hyderabad as SCL. The West Bengal, Kerala, Manipur Acts also stipulates for SCL. But the provisions of Karnataka and Haryana are more specific and stipulates sections of SCL and functions of its units.

The practices and provisions with regard to SCL vary from State to state. The position by and large is that SCL do not have statutory authority. These are usually controlled and administered by State Government directly. The entire finance for these libraries comes from the Government revenue. The result is that they cannot enjoy any statutory autonomy and acts as any department of State.

The position of SCL's in India is still far from satisfactory. They have a pivotal function to perform in public library system of the states. As such they should be strengthened to the utmost in their resources, but it is regratable that most of them failed to fulfill their legitimate functions. In majority of the cases they have not developed beyond the functions of the public libraries for the cities in which they are located and they are neglecting their responsibility to divisional libraries and whole public library system. This was the major cause of non-establishment of public library networks in the States.

EXPECTED ROLE OF SCL

It is expected that the SCL must act as an apex body and provide leadership to all libraries in the State. It has special duties to perform alongwith well organised reference and research facilities. The Advisory committee for Libraries (Sinha committee) and Dr. S.R. Ranganathan have made more or less identical recommendations about the functions of SCL. The Fyzee Committee report also stipulates functions of Central Library and regional libraries. On the basis of these provisions the main functions of the SCL should be:-

i) to maintain and develop collection of books and newspapers published in the State received under the Press and Registration Act 1867.

ii) to be a conservatory of materials concern with the state's culture and composite culture of India.

iii) to be a main source of reference materials for scholars and research workers.

iv) not act as an authority for compilation of state bibliography of all books, periodicals, newspapers and other reading materials in other libraries of the State. This shall include special bibliographies for the use of scholars and research workers, childrens and blinds.

v) to serve as a focal point and an organising agency for inter library co-operation including inter library loan at State, Regional and National level.

vi) to be a organising centre for the State and inter-state book exchange.

vii) to be a agency for compiling and maintaining the state union catalogue.

viii) to provide and organise bibliographical and documentation services for the state legislature and Government department.

ix) to maintain well equipped reference section and provide statewise reference service. The reference collection includes standard national and international works, State and Central Government publications, institutional publications etc.

x) to organise book exhibitions and library conference, workshop, seminars, refresher courses for the working library professionals, writers, illustrators of children and braille work.

xi) to organise State technical Bureau and undertake activities such as computerised, centralised cataloguing, classification and rendering technical assistance for such activities to libraries in the State.

xii) to maintain and organise library services for handicapped, blind readers, and patients of hospitals until such sections and services are provided by the City and District libraries.

xiii) to collect and preserve old and rare manuscripts, books, periodicals in the State language.

xiv) to supervise Divisional and District libraries and to see whether their functions are properly performed.

Since the major function of SCL is that connecting reference and research work, it must have professionally qualified head as a librarian and professional staff to look after these functions. A key post is that of a state library, who must not only here the requisite knowledge but he should be familiar with the material available at the other libraries also. The State librarian and his assistants must be able to answer the challenges posed by a library of this nature.

In the present context of political and economic conditions in the Country it is not expected to implement all these functions fully. But mere enumeration or assignment of functions without creation of machinery i.e. provision of funds, manpower, will simply be a wastage and remain on paper only. This is what happening today.

It is obvious that hereafter this SCL is going to be used by many scholars and researchers in an increasing measure. Hence it is necessary to plan the SCL with modern amenities right now to meet the challenges of the tomorrow.

DIVISIONAL LIBRARIES

A question with regard to the establishment of the Divisional libraries and their role in the system is very important for consideration. The concept of Divisional libraries is recent one. In 1929, at England, Carnejee United Kingdom Trust encouraged an idea of regional co-operation among libraries. For this purpose public libraries in the region started inter library co-operation voluntarily. Later public library and museum Act 1964 gave legislative support to the regional co-operation, which was resulted to develop regional centres.

In India, the concept of regional centres was first discussed in Bombay State. The Fyzee committee report recommended to establish three regional centres for regional language collections and to provide leadership to library movement of the region. Accordingly in 1947, then Bombay Government established three regional libraries at Ahmadabad, Dharwad and Pune for Gujarati, Kannada and Marathi languages. The concept of regional libraries could not be developed, though these libraries were established.

A vast country like India with research material scattered all over in different languages should have decentralised and co-ordinated system of bibliographical and information service. The national agencies specialising in specific subject fields centralised with the task of bliographical and information work of their subject fields. This system of special libraries as was developed in India. In the similar manner bibliographical and information services of the State should be decentralised at Divisional level to solve various problems in connection with the bibliographic organisation and control of library services.

The State-re-organisation based on linguistic population in 1957 stressed the need of regional centres and replaced the language concept by geographical concept. The Act of Maharashtra and Andhra Pradesh only provides for the establishment of Divisional libraries. However, both the Acts does not stipulate about the functions of these libraries and their role in the system. These libraries were under the management and control of Government without any statutory autonomy.

ROLE OF THE DIVISIONAL LIBRARIES

The Fyzee committee report has prescribed functions of SCL and provided some functions for these libraries limited to their region. Broadly speaking, the functions of divisional libraries should be -

i) to assist for the preservation and collection of rare books, manuscripts, periodicals available in the division.

ii) to collect and preserve books, and other reading material printed and published in the Division.

iii) to develop local history collection of the division

iv) to prepare bibliographics and union catalogues of books available in the public libraries of the division.

v) to act as a model for all libraries in the division and to set standards for public library service.

vi) to act as a link between State central library at the top and District library at the down.

vii) to supply books on loan to all public libraries in the division according to their needs through their district libraries.

viii) to provide books and other reading and reference material to scholars and research workers.

ix) to assist public libraries in their book selection.

A well planned and organised Divisional library system is bound to make library services more comprehensive and more efficient than before.

DISTRICT LIBRARIES

The scheme of establishment of District libraries was introduced in 1951 and included in the Ist and 2nd Five year plan. District libraries has given a role of town library for the district headquarter as well as nucleus centre for library service in the whole district. All states established these libraries under government control. But then Bombay Government neglected to establish these important units of service under Government sector and recognised existing public libraries as District libraries. After implementation of Maharashtra Act this method

was continued. Only Vidarbha region of the Maharashtra have Govt. district libraries and remaining State have recognised. District libraries run by the voluntary bodies.

Since the establishment of these libraries, these are weak, ineffective, carring on routinework, instead of being vital activising centres in the — intergrated library service organised at the State level. The library Advisory committee recommended that the district library should occupy pivotal position in the public library system.

It is expected that State library Department should concern itself with co-ordination and broad policy decisions at the State level. And the taluka, block, and village libraries and mobile units should receive active support and guidance directly from the District library.

The District has been the most vital administrative unit in India for the last 150 years. This tradition is sure to be further strengthened in the interest of administrative efficiency and convenience. District officers such as District collector, District superintendent of Police, District Education Officer etc. enjoy enough administrative authority and play crucial role in the district administration of the Country.

ROLE OF DISTRICT LIBRARIAN

The District librarian must play a comparable role in the matter of administration and implementation of public library development programmes in the district. He must enjoy pay and status comparable to those gazetted officers in the State educational service. He should be directly responsible so far as local operations are concerned, to the District library committee or authority. District Librarian should have two distinct functions.

a) District librarian should be chief executive officer with regard to planned projects of library development in his district, and for this purpose he should have adequate authority to inspect, supervise and guide all town, block, taluka and village libraries in the district.

b) District librarian should be responsible for the efficient administration of District library and for using the same as a model and training centre for librarians in the district. He must be assisted by duly qualified assistants.

The Library Advisory committee in its report recognised the important position of the District librarian. The above suggestion with regard to the status and functions of the District librarian spells out practical necessary for the implementation of idea and this definitely shows a way of the morass in which we are caught up. No scheme, for less an elaborate new scheme of public library service can have any reasonable chance of success unless it is entrusted with the general pattern of administration. The District officer fully responsible for a specified type of district wide public activities, is the most important and effective executive among functionaries in the State business. And on the spot, inspection for the purposes of guidance and control is an accepted principle of educational administration in this country. A library executive at the district level is an indispensable pre-requisite for the public library development in the country.

FUNCTIONS OF DISTRICT LIBRARIES

The District libraries are not only supposed to provide lending and reference service to the district town but also to administer and supervise the entire district library system. These libraries were entrusted with the work of providing library services to the rural areas through book deposit centres. The main functions of these libraries should be:

i) to provide set of books to rural libraries or to book deposit centres.

ii) to assist neo-literates and literates by providing reading material suitable to them

iii) to provide free reading room and lending facility at the district headquarter.

iv) to arrange book exhibition for introduction to new books for rural population.

The Library system upto district level should be directly under Government control. And at the below district level responsibility of library services should be entrusted to the libraries of the voluntary organisations, and local bodies such as village panchayats, municipal councils and municipal corporations Rapid expansion of facilities for part-time education distance education and introduction of vocational and technical training facilities have created a kind of fresh demand for public library service. The rapid increase in the population of towns also created a demand for public library service. The experiences

of library Acts implemented in ten states should be carefully studied and their experiences with necessary modifications should be followed by other states.

Ultimately development of public library system should no longer to treated as a subject for argument. We should now work for this purpose, and for working, there should be clearcut and adequate programme included in the 9th five year plan. This 9th plan should be supported by government of India. It should not be left on the Vims of the State Government, though it is a State subject. A proposal to add "Libraries" in the concurrent list of the constitution should be moved for immediate effect.

REFERENCES

1. All India Public Library conference on 8th Plan on public library development. Status report on development of public libraries in States and Union territories, Calcutta : RRMIF, 1989.

2. Andhra Pradesh Act Review Committee: Report (1976). Hyderabad : Dept of Pub Lib. 1978.

3. Bombay Library Development Committee Report (1939-40) Bombay; Govt. Pub: 1940.

4. CHAKRAVARTY NC Proceedings of All India Library Conference Patna. Delhi: ILA, 1966.

5. India Advisory Committee for Libraries Report (1958) Rev ed Delhi; Manager of Pub. 1961.

6. ROUT R.K. Ed. Library Legislation in India. Problem and prospects. New Delhi: Raliance, 1986.

7. UNESCO Public Library Manuals. Public Libraries for Asia: Delhi Seminar, 1956.

SCHOOL LIBRARIES IN DELHI: A STUDY

SUNIL KUMAR*

ABSTRACT

The present study reveals the condition and services rendered by the school libraries of Government of N.C.T. of Delhi. Survey method has been adopted for this study. The size of the sample selected for the study was 100. It highlights the problems of school libraries in Delhi. It also suggests the suitable measure for smooth functioning and proper development of library services in school of Delhi Government.

INTRODUCTION

Library is the heart of an educational institution, be it university, a college or a school. But, when we talk of an academic library, our focus is generally on college and university libraries. The significance and potential of a school library are yet to be realised fully. Study of school library system has largely been absent in the curriculum of Indian Library Schools also. Indifferent attitude of the school administration towards their library has only aggravated the already unsatisfactory conditions of the school libraries of Government of National Capital Territory of Delhi.

OBJECTIVES OF THE STUDY

The objectives of the study was the following :

- To assess the present situation of school librarians of Delhi.
- To highlight the problems of school libraries and try to bring them to the kind attention of decision makers.

METHODOLOGY

In May-July, 1995 an Inservice Training Programme for school librarians was conducted by the State Council of Educational Research

* Senior Lecturer (Library Science), State Council of Educational Research & Training, Varun Marg, Defence Colony, New Delhi-110 025

and Training (SCERT) of Delhi. The author, being a coordinator, took this opportunity to interact with the participants of the programmes and conducted a survey of their school libraries. 100 school librarians were provided a structured questionaire for the survey during the training programme. 98 of these returned the questionnaire with required information. Results of this survey are by no means complete as libraries covered, were only Government school libraries. But, by and large we can generalise the situation of Delhi. Data obtained in this manner along with informal discussion with other school librarians has brought forth some striking features of the school libraries in Delhi.

FINDING OF THE STUDY

Most of the libraries in the Government schools of Delhi are not very poor in their collection as more than half of the libraries have a collection of more than 10,000 documents. 15% of the libraries have around 15,000 documents, while about 30% libraries have less than 5,000 documents.

Dewey Decimal Classification (DDC) is more popular than Colon Classification (CC) in schools of Delhi, as 57% of school libraries are using DDC. Only 14% libraries are using CC 28% libraries are arranging books according to their subjects in alphabetical sequence. It was opined by most of the librarians that predominant position of DDC is due to its ease of use.

One negative aspect revealed in the survey shows that a little less than half of the libraries have no catalogue. It was largely attributed to the shortage of funds and facilities. About one third of the libraries are using classified catalogue while the rest have a dictionary catalogue. Rules of catalogue codes have been modified in various cases according to local needs.

Only about two third of the libraries have open access to library collection for student. This is again, not reflecting a healthy growth of libraries as it is observed that children tend to visit library more frequently in case of open access, where they can freely pickup every book of their interest. In closed access systems they hesitate to visit library unless it is very essential. This may ultimately contribute towards hampering the development of reading habits and a library culture in them.

On the service aspects, performance of Government school libraries is not very promising. Excepting some elementary reference service, the only other service provided is circulation. Library instruction to students is again not a common phenomenon.

For circulation purpose, register system is followed by an overwhelming majorities of libraries. Only about 10% of the libraries follow Browne Issue System for this purpose. Generally, a student can get two or three books for a period of two weeks at a time, while in the case of teachers and other staff members this limit gets relaxed.

All the school libraries are manned by only one librarian. They are housed in a single room with a seating capacity that varies from 20 to 50. Annual budget provision for acquisition of books varies from Rs. 3,000 to 10,000 depending upon the number of students enrol in the respective schools. Sometime contingency grants are also provided by the administration. It is significant that procurement of books can be made only out of the list of approved books of the Directorate of Education, Delhi Administration. This severely curtails the role of librarian in the collection development of the school library.

5. PROBLEMS FACED BY LIBRARIANS :

Although the school libraries in Delhi are at an advantageous position in comparison to their counterpart in many other states, where schools have no librarians, are yet not in a satisfactory state of affairs. They have many problems like other libraries, but some specific problems are :

- Lack of additional library staff;
- Selection of books by central authority, etc. can be highlighted.

6. SUGGESTIONS FOR IMPROVEMENT

A school library has a significant role to play in the development of personality of a student. It can serve its purpose only with adequate resources. Therefore,

(1) A school library should be provided with enough grants to adequately serve its users.

(2) Only a trained librarian should be entrusted with the responsibility of a school library.

(3) Wherever the library is not well organised (i.e. not classified and catalogued), special efforts should be made to atleast organise the documents properly.

(4) Efforts should be made to abolish closed access system in the school libraries besides keeping it open after school hours for its effective use.

(5) Government should take initiatives for improving school library system by providing sufficient staff, suitable place and proper resources, its utilisation.

SCHOOL LIBRARIES IN KARNATAKA STATE: WHAT THEY OUGHT TO DO IN NATIONAL DEVELOPMENT

P. G. TADASAD*
B. S. MAHESWARAPPA**

ABSTRACT

Highlights the importance of secondary school education and discusses the present educational system in Karnataka state. Stresses the need for effective and efficient libraries at the secondary schools in Karnataka. Enumerates the approaches that could be followed in providing library services. Points out that emphasis be given in developing the collection, recruiting qualified librarian, providing adequate budget and library building. Concludes that the library professionals and educationists should come forward to make necessary improvements in raising standards of school libraries in Karnataka state, so that these can contribute in national development.

INTRODUCTION

Education is one of the prerequisites for overall development of a nation and most important for achieving rapid economic, social, technological progress and in bringing better social order. The ultimate success of every nation be it developed or developing or underdeveloped depends largely on educational level of people and on the systematic diffusion of knowledge.

In India education is imparted at three levels - elementary, secondary and higher. The system of education in India, which is based on Maculay's principles, is being challenged by changing needs of changing society. Since independence, Government of India, has set up several educational committees and commissions. All these have highlighted the importance of libraries in schools to develop in each student the capacity and desire to use library and develop reading habits.

* Lecturer, Department of Library and Information Science, Gulbarga University, Gulbarga-585 108

** Professor and Chairman, Department of Library and Information Science, Gulbarga University, Gulbarga-585 108

SECONDARY SCHOOL EDUCATION

As the efforts towards achieving universalisation of primary education programme progressed, the demand for provision of more facilities for secondary education increased. The secondary education should help the children for their overall personality development and prepare them to become enlightened and responsible citizens of India. The role of secondary education is crucial and important. Hence it should promote intellectual development, contribute to the national integration, promote physical and mental health, assist to become economically competent, to move towards emotional maturity and develop spiritual growth among students.

AIMS AND OBJECTIVES OF SCHOOL LIBRARIES

The aims and objectives of school libraries are to:

a) Awaken and develop interest in reading;

b) Help children to become independent in finding and selecting information relevant to their studies, interests and hobbies;

c) Develop ability to learn through self-study;

d) Encourage reading habits and inculcate a life long liking and longing for new knowledge;

e) Make provisions for materials needed for teaching work;

f) Help an individual to develop his/her overall personality;

g) Serve as a stepping stone to the use of all the resources of any library;

h) Contribute to the fulfilment of educational aim of the school; and

i) To give civic and social training in observance of democratic principles

Hence, the school library should act as hub of all the activities, and further as intellectual workshop centred around students and teachers.

EDUCATION IN KARNATAKA: A PROFILE

As per the 1991 census, the literacy rate in the state is 56%, with 67% male literacy and 44% female literacy. There are twenty districts

in the state with Bangalore (urban) has the highest literacy rate (76.27%), followed by Dakshina Kannada (75.86%), Kodagu (68.35%), Uttara Kannada (63.73%), and Shimoga (61.53%), while Raichur has least literacy rate (35.96%), preceded by Gulbarga (38.54%), Bidar (45.11%) and Bellary (45.57%).

Navaneetha Rao Commission (2) reports that there were 42,791 primary schools in the state at the end of 1992-93, in which 71.91 lakh children were enrolled and 1.41 lakh teachers were engaged in teaching. There were 11,763 lower primary and 790 higher primary schools in 1956-57 which increased to 24,984 and 17,807 respectively during 1992-93. The school-pupil ratio was 1:205 at the lower primary education and 1:133 for higher primary education, while the teacher-student ratio was 1:51 during 1992-93. There were 13.82 lakh students enrolled at 4861 high schools with 4110 teachers accounting for a teacher-student ratio of 1:34.

The present education system in Karnataka consists of ten years of primary and secondary education of which primary education is compulsory. At the secondary level each student is required to study three Modern Indian Languages and three compulsory subjects - Social Studies, Science and Mathematics. After SSLC, the students either opt for two year PUE or three years Diploma/ITI/NTTF or any other vocational courses. At PUE level they opt for either Arts or Science or Commerce. Those who have opted Science at PUE level prefer to go to Medical, Dental, Pharmaceutical or Engineering and Technology courses at graduation level, while others continue their graduation in their respective courses.

According to Navaneetha Rao Committee Rao Committee Report (3) out of every 100 children who enter the lower primary schools only 42 complete the full term and only 25 take secondary education, of which only 17 avail PUE and 8 will complete their graduation.

Ramaiah (3) claims that the school libraries are investment for national development. So, the question is what role the School Libraries can play?

WHAT SCHOOL LIBRARIES OUGHT TO DO

"The real importance of libraries in education is that they are placed where one finds out and where one learns how to find out...

it is essential to education that every one is brought into contact with a good library throughout his whole period of tuition, that he is taught to use it until it becomes second nature to him to do so, and that he carries this characteristics through with him into later life" (4). The libraries can achieve this by:

a) Securing, organizing and providing books and other reading materials used in teaching and instructional programme;

b) Providing study and reference materials required for supplementary class room instruction;

c) Providing the materials needed by teachers for teaching;

d) Keeping advanced level study materials for the benefit of those teachers who are doing research work;

e) Creating an awareness among the students that libraries may contribute to their intellectual development;

f) Instructing students in the effective and efficient use of the library and its resources by orienting them;

g) Imparting the skills in locating and using the library resources;

h) Talking to students in calling their attention to the importance of library services;

i) Encouraging students to develop the habit of self-education;

j) Stimulating reading habits among students through counseling, library talks, book exhibitions and cultural events;

k) Conducting competitions for students by employing library centred tools like story telling, group discussion, debate, essay competition, quiz etc.;

l) Exposing the students to Audio-Visual materials;

m) Employing computers and other technologies to prepare ground to develop awareness in each student the usefulness of these in information retrieval;

n) Familiarising each student with the modes of efficient communication;

o) Extending facilities to teachers and students for utilizing leisure time;

p) Developing in each student the capacity and desire to the use the library not only at schools, but throughout their life.

In making these, a reality and promoting the national development, the school libraries in Karnataka state need to have a good collection, qualified librarian, adequate provision for finance and library building.

COLLECTION

The collection cannot be built in a day. It can be developed over a period of time through constant efforts and effective guidelines. Still, developing the collection in the secondary school library is a more complex task, as the students are at 'pre-puberty state' (5). Hence, the library needs to have a collection development policy, that aids in furthering the educational aims, intellectual development, national integration physical and mental health, economical competence, emotional and spiritual growth of students.

QUALIFIED LIBRARIAN

A professionally qualified person, having an additional qualification in the art of education has to be appointed. He/She must be as much an adept in child and adolescent psychology as the teacher (6). He/She should be made responsible for overall functioning of the library.

FINANCE

Finance is the sine qua non of all the activities. The school authorities should provide the necessary finance to render effective library services. Adequate annual budget should be made available for the library in the beginning of the academic year.

LIBRARY BUILDING

The libraries should be given proper accommodation where at least one tenth of students can sit and future expansion is possible. It should receive the maximum natural light and ventilation. The library should be well furnished and equipped with modern technologies, that should attract the student community to stay for longer hours in the library.

CONCLUSION

School libraries can be called as institutions endowed with the responsibility of meeting the educational needs of their users, particularly needs of children - often referred as citizens of tomorrow. The school librarians are expected to deliver the services effectively. The library professionals and educationists of the state should come forward to make necessary improvements, to raise the standards of school libraries of Karnataka, in making them ideal libraries, to contribute to the national development.

REFERENCES

1. TREHAN G.L. School Libraries in India. IN: Handbook of Libraries, Archives and Information Centres in India edited by B M Gupta et al. New Delhi, Information Industry, pp 92-104, 1984-85.

2 Report of the Karnataka Universities Review Commission, 1993 (T NAVANEETHA RAO). Dharwad, Karnataka University, 1994.

3. RAMAIAH L.S. School Libraries in India: An Investment for National Development. IN: Academic Libraries: Role in the National Development edited by Dorothy Issac et al. Madras T R Publications, pp 25-34, 1993.

4. ASHWORTH W. Education and Libraries. **Educational Library Bulletin,** 37: Spring, p 6, 1970.

5. WALKER MAXINE Books Selection in Secondary School Libraries. Australian Library Journal, 22(8): Spt 1973, p 291.

6. JOSEPH AGELINA GEORGE. Developmental Programme for Elementary School Libraries in India. Herald of Library Science, 24(1-2): Jan-April, pp 11-15, 1985.

STANDARDIZATION OF BIBLIOGRAPHIC RECORDS IN COLLEGE LIBRARIES

Dr. B. RAMESH BABU*

ABSTRACT

Introduces the concept of standards, standardization and bibliographic records. Stresses the need for standardisation of bibliographic records. The present status of college libraries in India has been outlined. Various factors affecting the standardisation of bibliographic records are enumerated. The paper identifies the ways and means towards the feasibility of standardisation in the light of emerging INFLIBNET, operation of local and regional level networks, exploitation of existing telecommunication and computer facilities. Explores the possibility of converting retrospective collection into machine readable catalogues. Emphasises the need for reorienting existing manpower to suit the purpose.

INTRODUCTION

Standardisation is not new to librarianship although we hear of it more and more these days. It is one of the inevitable by-products of the technological advance. Bibliographic organisation/control in the context of libraries refers to the systematic organisation of information about the holdings of the library. Catalogues are the important and integral part of the bibliographic organisation system. A practicing librarian of today has felt the urge to adopt the standard catalogue code, identification of orders and acquisitions by the ISBN and fall in line with ISBDS (International Standards for Bibliographic Description) and other related standards. The pressure for standardisation has been felt even more with the advent of computers, and its applications to library operations, which has been characterised as an instrument of standarisation.

* Reader, Department of Library and Information Science, University of Madras, Madras-600 005

CONCEPT OF STANDARDS & STANDARDISATION AND BIBLIOGRAPHIC RECORDS

STANDARD

Standards and Standardisation are fundamental to many aspects of modern life and various fields of knowledge. Library and information services more particularly bibliographic records is not an exception to this.

There are various definitions in the literature for a standard, but all of them point out to the common feature of promoting economy, utilisation of resources, increasing productivity and reducing wastage.

Webster's Third New International Dictionary defines Standard, in general, "can designate... any measure by which one judge a thing as authentic; good or adequate... standard applied to any authoritative rule, principle, or measure and to determine the quantity, the weight or extent or especially the values, quality, level or degree of a thing".

STANDARDISATION

Standardisation means the establishment of certain standards based on intrinsic properties or qualities of any given commodity or intellectual activity.

Standardisation recommends:

(1) To prevent avoidable wastage of resources and manpower;

(2) To ensure uniformity, reliability and excellence of product quality;

(3) To enhance safety, speedy and productivity;

(4) To achieve overall economy and efficiency.

BIBLIOGRAPHIC RECORD

Any record consisting of bibliographical details of documents can be termed as bibliographic record. It may be a library catalogue, or an indexing periodical or an abstracting periodical, or a documentation list or a bibliography either in printed or in machine readable form. For the purpose of this paper "Library Catalogues" has been considered as bibliographic records, which are amenable for standardisation.

A comprehensive bibliographic record means the selection and presentation of bibliographic elements such as author, title, collaborators, imprint, collation of a document in a standard of and a unified way. The bibliographic elements of a document can be grouped under the following heads:-

(A) Elements that relate to authorship;

(B) Elements that describe the item including the physical description (i.e. title, imprint, collation etc.,)

(C) Elements that give unique identification of the item SSN or ISBN)

(D) Elements that relate to the subject content of the item (Subject headings or Class numbers)

A number of catalogue codes and standards are available for the preparation of manual and machine readable catalogues, like AACR II ISBDS, and various machine readable cataloguing format such as UK MARC, LC MARC, UNI MARC, MAL MARC and the like. Above all we have common communication format (CCF). These aim at the control and exchange of bibliographic information. The main objective is to make universally available the basic bibliographic data on all documents published in all countries.

NEED FOR STANDARDISATION OF BIBLIOGRAPHIC RECORDS

Standardisation is one of the inevitable by product of technological advance. The need for standardisation is of pressing urgency due to the growth of communication, information transfer process, its internationalisation and the development of mechanised information system. It is indispensable if co-operation is to be effected in the development of information services.

Standardisation activities in the field of library and information services can be applied to the following areas:

(a) Information products like documentation lists, bibliographies etc.,

(b) Description and presentation of bibliographic records.

The need for standardisation of bibliographic records is due to the following reasons :-

(1) Increased trend towards resource sharing, networks and inter library loans etc.

(2) Increased trend towards automated information retrieval systems and models;

(3) New trends and dimensions in information handling;

(4) Escalation of prices of documents and shortfall of budgets.

BENEFITS THAT ACCRUE BY STANDARDISATION OF BIBLIOGRAPHIC RECORDS

(1) Saving professional catalogues time;

(2) Minimising the frustration of the personnel who had to write the bibliographic data in long hand.

(3) Providing more flexibility in work flow in training and revising.

(4) Providing smooth workflow in checking authority file

(5) Ensuring better quality control

STATUS OF COLLEGE LIBRARIES IN INDIA: A SCENARIO

In India there are about 7000 colleges comprising of undergraduate, post-graduate, autonomous and composite colleges, offering courses in Arts, Humanities, Sciences and Technology. Invariably they are provided with libraries although in varied degrees of effectiveness and functionality. a large number of colleges enjoy the privilages of being supported by the UGC, that has placed the librarians at par with the faculty (but the hard truth is that their role in the administration, and in other benefits presents a gloomy picture). But on the other hand, when we examine these libraries, with regard to physical facilities, staff pattern, financial matters, services rendered, furniture building for library etc, there are variations. In other words, college libraries in many cases are not properly furnished. In many colleges one can notice inadequate and insufficient building space physical facilities. It is not an exaggeration, to say that except librarians, the other supporting staff, if any do not possess any professional qualifications. At times persons to be unfit elsewhere in the college

will be posted to the libraries. Sometimes a clerk or attender is made incharge of the libraries. Under these circumstances a college librarian has to operate in an environment where education administrators, faculty and students often fail to recognise the role of the library in relation to the educational objectives of the college.

FACTORS THAT AFFECT STANDARDISATION OF BIBLIOGRAPHIC RECORDS IN COLLEGE LIBRARIES

The following factors can be identified that come in the way of standardisation of bibliographic records in college libraries :

(a) Lack of uniformity in cataloguing practices

(b) Lack of uniformity in classification practices

(c) Adoption of catalogue codes and classification schemes with local variation.

(d) Variations in maintaining the physical forms of catalogues

(e) Attitude of librarians/management etc.,

(f) Attitude of users/user behaviour towards catalogues

(g) Non-existence of catalogues.

(h) Lack of sufficient trained man-power

TOWARDS THE FEASIBILITY OF STANDARDISATION

Even though the standardisation process can be ardous. It must be pursued. There is no valid reason that it cannot be achieved, ofcourse problems always prevails. If future is taken in the sense of an expectation of progressive development or advancement then there is an evidence, even in the beginning of seventies, quite a few developments are far reaching implications in the cataloguing practice. In fact some of the events seem to have taken the catalogues by complete surprise and the full implications are yet to be realised. What is more important is that most of the events like the launching of cataloguing-in-publication (CIP) and cataloguing-in-source (CIS) programmes, development of MARC formats of various countries namely LC MARC, UK MARC, MAL MARC, UNI MARC etc. ISBD (International Standards for Bibliographic description and CCF (Common Communication Format) have not only come in quick

succession but they promise to make the future of maintaining the bibliographic records much more meaningful and eventful. In this connection the recent developments may be recalled with regard to Indian context.

INFLIBNET (Information and Library Network)

In India the INFLIENET has been set up by the University Grants Commission in the year 1988. It is to be a co-operative computer communication network for linking libraries and information centres in universities, deemed universities, institutions of national importance and colleges. It is a major national effort to improve information transfer, and a co-operative network. It will contribute to pooling sharing, optimization of resources, facilities and service of participating libraries and information centres. It is a massive programme towards modernization of libraries within the country. It is estimated that the major colleges in the country would be linked with this programme One of the main objectives of INFLIBNET is to optimise information resources utilization through shared cataloguing, catalogue production, inter library loan service better and effective collection development and avoiding duplication to the extent possible. Since a sizable number of college libraries are included in this project it is but neutral a standardised for

FORMATION OF LOCAL NETWORKS OF COLLEGE LIBRARIES

Consider the city of Madras. There are about 40 degree colleges offering similar courses resulting in the acquisition of stereotyped titled. There is every possibility of forming a local level network for the creation of machine readable catalogues. Each participating library has to be automated so that the preparation of bibliographic records would be possible on co-operative basis. They have to adopt the format similar to that of INFLIBNET, which facilitate these libraries to contribute at National level. A series of local and regional level network such as DELNET, CALIBNET, PUNENET and MALIBNET are in operation.

UTILISATION OF TELECOMMUNICATION AND COMPUTER FACILITIES

We are not in dearth of technology. The Govt. has developed and extended the latest telecommunication and technological facilities. For example the operation of NICNET, SIRNET and other related

networks. The UGC which is assisting college libraries has already made provision for providing financial assistance to plan and to execute library automation. Taking stock of its provision and fast changing trends in information storage, processing and retrieval, college libraries have to come forward to prepare or convert their records of holdings into machine readable form on a standard format to INFLIBNET. Since the college libraries are to be linked with this nationwide network atleast by 2000 A.D. as estimated by the planners of this programme.

RETROSPECTIVE CONVERSION OF EXISTING COLLECTION

One may point out regarding the retrospective conversion of existing collection in the college libraries into machine readable form. If libraries forming a local level network can create a machine readable catalogues in a phased manner. Ofcourse, it amounts reclassification and recataloguing to suit the purpose of network.

In this context, one may recall the message of Dr. S.R. Ranganathan's "Principle of Osmosis". The whole process involves trained manpower time and resources. But in the long run it would result to the ultimate production of machine readable bibliographic records that would facilitate the exchange of bibliographic data at national or international levels.

MANPOWER TRAINING

In order to plan and create machine readable catalogues, there is a need for thorough training of the existing staff in the application of computers and information technology. For this purpose, INFLIBNET, has proposed to improve the existing library staff by providing training in the field of automation and computerisation of libraries. This will be an ongoing activity and a training cell has been established at Ahmadabad, which is now imparting training for the library staff drafted from the university level in the first phase of action. It may also be entended to the college librarians in due course of time. In addition to this, DRTC, INSDOC and NISSAT are conducting short-term courses.

CONCLUSION

Efforts should be directed towards creating a system for the international exchange of bibliographic information for which a national

agency in the country of origin of the publication would prepare and distribute the same. The effectiveness of the system would be dependent on the standardisation of the form and content of the bibliographic description. Hence one may join in the optimism expressed by the Canadian Task Group on cataloguing "the old idea of world-wide exchange of bioliographic data, with each country responsible for the production of data on its own publishing output, and the newer concept of data exchange in machine readable form are now closer to being operational. The development and adoption of international standards must have top priority in any such co-operative venture and especially in a computerised one".

College libraries are being developed with the assistance of UGC. Most of these libraries are to be linked with the network structure of INFLIBNET in due course of time. Hence it is necessary for standardisation of bibliographic records in college libraries. It is high time for the college library authorities/librarians to come forward to think of developing and participating themselves towards the standardisation of their bibliographical records.

REFERENCES

1. ABDUL HUQ. A.M., Standardisation in Cataloguing; its role in better service and communication. *In:* March of Library Science, edited by Velaga Venkatappaiah, New Delhi; Vikas, pp. 195-201, 1979.

2. National Information Policies and Programmes: 37th All India Seminar Papers Delhi: Indian Library Association, 1991.

STATUS OF EDUCATIONAL COLLEGE LIBRARIES UNDER NAGARJUNA UNIVERSITY JURISDICTION-A STUDY

P. SWARNA KUMARI*

ABSTRACT

This article gave importance to libraries of the Educational Institutions of the Nagarjuna University Jurisdiction Development aspects of the B. Ed. College libraries are analysed. Comparative analysis between aided, un-aided and minority institutions has been done. Different aspects such as infrastructure, sources, services have been discussed.

INTRODUCTION

The progress of a Nation depends on the quality of its people which in turn depends upon how well. The Youngrestrs are moulded by their teachers. If the teacher is good his student product well keep the Nation on a prograssive part. Unless the same teacher well produce will responsible for the path to the hell. The teacher plays a very important role in a educational institutions.

The present study gave more importance to libraries of the Educational Institutions of the Nagarjuna University Jurisdiction. Nu. U came into established in August 1976 as a natural culvination of the aspiration of the people of the Central Southern Coastal districts of A.P. to pursive P.G. education nearer to their houses, rather than go to distant places.

The A.U. P.G. Centre was started in 1967 in a way catured to these needs and it is in the fitness of things, that a university should grow from this Center, So it was in 1976. The University was established and named as N.U. It is quite significant, that the great Buddhist pre ceptor and philosopher Acharya Nagarjuna founded a University on pre banks of Krishna, some centuries ago

* Deptt. of Library & Information Science Andhra Pradesh University, Vishakhapatnam (A.P.)

and made at a great centre of learning attracting a large number of teachers and students from distant part of world.

B.ED EDUCATION IN ANDHRA PRADESH

The Andhra Pradesh the Educational training College was first established in the year 1894 at Rajahmundry with the help of British Government. After sixty six years then Chief Education Ministry of Andhra and a great lover of education Dr. P.V.J. Raju Maharaja of Vijayanagaram donated his palace for the educational institution. These are the only two training colleges in A.P. establishment of teacher training colleges are a recent development and even in the last two three years. It appears to be a boom.

N.U. was established August 1976. At the time its inception, The N.U. had only ten departments whih it had inherited from the A.U.P.G. Centers and its jurisdiction was limited to 29 colleges situated with in 20 KMS-cum Research facility on the campes and ten affiliated colleges having P.G. courses and has its jurisdiction extended to the three revenue districts of Krishna, Guntur, Prakasam, bringing into its fold 1,2 affiliated colleges, and nine educational institutions are established.

METHODOLOGY

The present study consists of B.Ed. College libraries affliated to N.U. purposively for 2 reasons.

1. According to the 1991 census the Second highest population in the State was the Guntur District.
2. Aided Colleges are lesser than the un-aided and minority colleges.

The analysis of study attempted at two levels, near library administration level and student level. Separate Schedules were prepared both Libratian and Management and they were distributed to them. The data was collected from Primary and Secondary sources. To collect Primary data I have approached all B.Ed. College libratians and library users.

OBJECTIVES OF THE STUDY

1. To study the development aspects of the B.Ed. College libraries.

2. To analise the different aspects such as aided, un-aided and minority institutions.
3. To bring the comparative analysis between aided, un-aided and minority institutions. Different aspects like Infrastructure, sources, services etc. was considered for the present study.
4. To formulate suitable recommendations for better library spectum in the B.Ed. Colleges of N.U. area.

The B.Ed. College libraries affiliated to N.U. area covers various aspects about the type of library services., that are existing in the different B.Ed. College Librarian also the problems like adequacy of sources, services and other infrastructural facilities.

ANALYSIS

TYPES OF B.ED COLLEGES

For encouraging women to join B.Ed. education. The U.G.C. has given permission to start B.Ed. Colleges exclusively for women and Co.Educational Colleges under aided, un-aided, minority institutions. It is evident from table I that of the B.Ed. Colleges a majority of them reported that they have co. education and few are for women.

It may be stated that starting of B.Ed. Colleges exclusively for women is a welcome step, as many of the women will be having an opportunity to continue their education beyond degree level.

COURSES AND SUBJECTS IN B.ED. COLLEGES

Educational Institutions come under control of the University alongwith other higher educational training institutions. The educational institutions also offer school, tuter, Degree and other higher level courses.

Out of 9 B.Ed. Colleges one aided college offers B.Ed., M.Ed. M. Phil. ph. D. Courses.

As regards to the curriculars educational institutions come under the University control alongwith other higher educational authorities. B.Ed. Education is divided in to two categories, science & social science in science faculty maths, physics and biology are the subjects.

STRENGTH OF STUDENTS

Strength of students will play a part in the development of library facilities in any institution. If the student strength in crease, Automatically the facilities like seasing accomodation in library issue and return of the books and reference services will be increased by the institutions. Teachers require new books and reference books for better teaching. It is evident from the table 3 that students strength is high in the un-aided colleges and minority institutions compared to the aided colleges.

INFRASTRUCTURE

The location of the libraries in the B.Ed. Colleges is shown in table it is a known fact that proper and sufficient accomodation for the libraries is very essential for better maintenance and organisation of the collection of books and other documents so as to satisfy the minimum needs of a reader to the minimum extent possible.

Out of the nine B.Ed. Colleges only five colleges have undependent building for the libraries and four colleges libraries occupy seperate rooms in the main building.

Usually the libraries are divided into various sections for the convenience of the administration. The collection in the libraries is kept in different sections for easy and difinite accessibility to users. For Ex: Book kept in general section are issued to readers for further study at their places, book kept in reference section are to be used in that section only, books kept in text book section are for ready availablity in the library and so on. So libraries cater to the needs of the readers.

A pure collection and display of books and other materials ould not serve any purpose unless the library is provided with sufficient seating arrangements for the readers to utilise the available information according to their requirements.

Out of nine B.Ed. College Libraries, Six College libraries are provided seperate seats for staff and students of the remaining 3 college libraries separate seats were not provided for staff & students.

ACCESS SYSTEM/FURNITURE

To mode of access to Library materials is another important factor which makes. Makes the use of library materials more meaningful in-order to satisfy, The first three lanes of the library Science that is, books are for use, Every reader to his/her book, Every book it's reader. The libraries should adopt the open access system in preference to closed access system.

Four college libraries are following open access system and five are following closed access system.

The acquired documents should be displayed systematically on book shelves which will enhance their use by readers in libraries, Along with the book growth, there should be increase in the book shelves in the B.Ed. College libraries, two types of book shelves are used, viz. wooden and steel.

SOURCES OF FINANCE

Most important factor in the development and functioning of a library is the availability of the finances required. Generally libraries are funded by the State Government, Management, Donations and U.G.C.

Most of the aided, un-aided and minority colleges function on grants through management. One Un-aided college runs on grants through donations as well as management and one minority college works on grants through U.V.C. and management. All un-aided colleges function on grants through management only.

LIBRARY STAFF, LIBRARY COMMITTEE

For better organisation and systamatic functioning of the libraries, professionally, trained personnel are very essential through the libraries, that are operated by the untrained staff members. All that he/she can do certain extent issue and return of books by primitive methods. For attending technical works in the libraries such as classification & cataloguing if books provision of reference services preparation of bibliographics etc. These Staff members are unfit, as these tasks can be carried out only by trained staff.

In all B.Ed. College Libraries should have a library committee. A committee is a body consisting of certain persons, which is assigned a particular job. Such committee advises the Librarian in matters in which public participation essential.

Function of library committee involves library building, library finance, book collection, library rules library staff, library standards, library accounts, library policies etc.

SELECTION PROCEDURE, CLASSIFICATION/CATALOGUING

Book selection policy in B.Ed. College libraries is mainly based upon principals recommendations, on the Heads of Departments, teaching staff, library Committee members and librarian. The Documents acquired by the libraries should satisfy the needs of not only the present but also the future users.

Out of nine B.Ed. College Libraries in five College Libraries selection of books is done by Heads of Department and teaching Staff's recommendations.

For Utilisation of Library documents a systematic is essential. There are many type of classifications for the arrangement of books in libraries. In B.Ed. College libraries followed these types that is C.C., D.C. and serial N.U. are used.

Out of 9 B.Ed. College Libraries Seven College Libraries were following D.C. and other two college libraries are following serial No. of acquiring documents.

In cataloguing out of Nine B.Ed. College libraries 8 were following the scheme of AACR., and one was following partial system.

LIBRARY WORKING HOURS

In any library the important aspect for the proper utilisation of the library facilities is its working hours. Generally the working hours in the libraries of B.Ed. Colleges five to six hours a day and certain B.Ed. Colleges are run by shift system.

STOCK VERIFICATION

In B.Ed. college libraries the stock verification is an essential factor. It has its own merits. It is used for collection of need based

books and removal of un-used books. Out of nine B.Ed. College libraries almost a all college libraries are conducted stock verification once in year. One College library conducts stock verification twice in a year.

CONCLUSION & SUGGESTION

The growth of B.Ed. Colleges in the post independence period had been very slow. One B.Ed. College was functioning for a period of decade. Later in 1980's however, their was tremendous growth in B.Ed. Colleges. As also B.Ed. Qualifications was made essential for teachers who were working in schools and colleges still the growth of B.Ed. education is increasing more and more year after year. Such growth may be perhaps to commensurate the demand for trained teacher and in the increase of number of schools.

It was found in my work that starting of B.Ed. Colleges exlusively for women is a welcome sign as many womens are having an opportunity to continue their education beyond degree level. As per my study majority of B.Ed. colleges established for Co. Education only.

English & Telugu Medium of Instruction are there are all colleges. Students generally like to continue their education in the both medium in which they easily understand.

All B.Ed. Colleges offer subjects like sciences and social sciences. In Science faculty maths physics and biology.

In the B.Ed. Colleges which do not have proper library building accommodation should be given highest preperance for constructing a permanent building for the Library.

The B.Ed. College libraries should have at least threee sections, there may be text book, general collection and reference and news paper sections.

College libraries were following closed access system, but all college libraries have to provide an open access system that is very useful to their users.

The Budget in the minority colleges is more than other colleges. To conclude there is a need more funds in aided college libraries.

It is observed that in all B.Ed. College libraries the growth of books and periodicals collection is very less, because of lack of funds. The State Government has to provide sufficient funds to all B.Ed. College libraries to pruchase sufficient books and periodicals, New papers and other general books.

For the Utilisation of Library documents a systematic arrangement is essential. In my study the majority of B.Ed. College Libraries followed the DC Scheme of classification. The rest followed the serial number system. So these college libraries should also provide D.C. Classification, so that it becomes easy to arrange the books.

To put the books in use, a mechanism is needed to make the users aware of there availability in the Library. In my study the majority of B.Ed. College libraries were followed scheme of AACR. Other college libraries follow the serial number system. But in these college library have to provide AACR system that is easy to locate their books.

Cataloguing can be maintained different forms. In my observation majority college libraries were using the card form. These college libraries were also use of book form which is more convenient.

In B.Ed. College libraries for lending books to readers. There are different charging systems in practice that is ledger, New York and Browne systems. In my observation, The majority of B.Ed. College libraries were using the ledger system only. Only few college libraries were using the New York system but all colleges should use New York system. That leads to easy charge and discharge of the books.

The State Government through its ministry of Social Welfare is providing grants for purchasing books in the B.Ed. College Libraries. In my observation the majority of B.Ed. College libraries were using the New Yark System but all Colleges should use New Yark Charging system. That leads to easy charge and discharge of the books.

The State Government through its Ministry of Social Welfare is providing grants for purchasing books in the B.Ed. College libraries. In my study only one College library was having the book bank and other college libraries were not having book bank due to lack of grants for this purpose. But all College libraries should provide book banks for B.C. S.C. ST students.

In present day scenario the cost of books is very high and the Library grants are very low. No one library can purchase all the books that's why B.Ed. College libraries should provide inter library-loan service in the users.

REFERENCES

1. ARUN KUMAR "Higher Educational role of libraries in India", University News, August 31, No.35, Page No. 23-26, 1992.
2. ARUNGUPTA, K. Teacher Education today, Page 1-7, 1984.
3. ARUNGUPTA, Teacher Training Institution steeling Pub. New Delhi, P.No. 32-39, 1984.
4. BOSE "Brief History of Development of Teacher Education" Page No. 34, 1978.
5. DATTA "A Practical guide to library Pro "Bombay, Aisa Page No. 70-12, 1970.
6. ERIC, Professional and Technical Education No. 5, Page No. 29, 1994.
7. GANDHI, "Library as a social system" University news, Aug. 31, XXX, No. 35, Page No. 37-39, 1992.
8. I. L. A. Bulletin Books for colleges of Education Libraries, a Corporation Aquestion Plan, XIV, No.1-4, Page No. 5051, 1978.
9. KUHNUR, B. "Resources sharing in university libraries" The International scene, News, Aug 31, XXX No.35, Page No. 93-97, 1992.
10. MEIBALAN, S. "Collection Development and ets' Problems A case study' Pondicherry University Library, University Aug. 31, XXX, No.35, Page No. 124-135, 1992.
11. PENNA, C.V. Unesco Manuals for Libraries The planning of Library and documentation services, Ed By P.H. Sewell, P.H. Sewell, Paris, UNESCO, 1970.
12. RANGANATHAN, S.R. Library Administration'', Sarada Ranganthan Endowment for Library Sciena, Bangalore, 1989.
13. Prof. SOMA R. P. "Role of University Libraries in Supporting Research A case study of the Andhra University Library, 1984.
14. THEHAN G.L. "Administration in Library Management" New Delhi, Sterling Pub, 1969.

15. Bulletin of Higher Education, Vol. 11, No. 1,2 & 3 Pages No. 29-33, Feb. 1988.

16. Education and Training of users of Scientific and Technical Information, UNISIST, guide for teachers, UNESCO Pub.

Tabel I Strength of Staff and Students In B.Ed. College Libraries

Aided Colleges Staff & Students		Un-Aided Colleges Staff & Students		Minority Colleges Staff & Students	
20	200	8	160	14	200
15	240	9	160	9	160
8	160	8	160		
		10	160		
43	600	35	640	23	360

Table 2.
Budget for last five years
Aided colleges & Libraries

Sl. No.	Year	College Budget	Library Budget	%	College Budget	Library Budget	%	College Budget	Library Budget	%
1.	1988-89	30000	6000	2%	32400	8500	2.6%	6000	15000	2.5%
2.	1989-90	31000	6500	2%	32400	8500	2.6%	60000	15000	2.5%
3.	1990-91	32000	7000	2.1%	32400	8500	2.6%	60000	15000	2.5%
4.	1991-92	32000	7000	2.1%	32400	8500	2.6%	60000	15000	2.5%
5.	1992-93	33000	8000	2.4%	32400	8500	2.6%	60000	15000	2.5%
UN-AIDED COLLEGES										
1.	1988-89	10000	4000	4%	20000	5000	2.5%	160000	10000	6.2%
2.	1989-90	12000	5000	4%	22000	6000	2.7%	240000	10000	4.16%
3.	1990-91	16000	5000	3.1%	24000	8000	3.3%	320000	10000	3.12%
4.	1991-92	18000	125000	6.9%	2600010000		3.8%	180000	10000	5.5%
5.	1992-93	25000	13000	5.2%	2800012000		7.1%	140000	18000	12.4%

MINORITY COLLEGES

1.	1988-89	120000	22500	1.8%	65000	5000	7.6%	110000	3000	2.77%
2.	1989-90	120000	23500	1.9%	65000	5000	7.6%	120000	4000	3.33%
3.	1990-91	120000	24000	2%	85000	5000	7.6%	140000	5000	3.5%
4.	1991-92	130000	24000	1.8%	65000	5000	7.6%	140000	5000	3.5%
5.	1992-93	130000	25000	1.9%	65000	5000	7.6%	180000	7000	3.88%

THE ROLE OF RURAL COMMUNITY LIBRARY IN NATIONAL DEVELOPMENT IN INDIA

P. ANURADHA*

ABSTRACT

The role of rural community library towards National Development in India has been described. Parameters like Objectives, Agencies involved, Information Channels for rural development have also been explained. Information needs of Indian Villages are included. Role of audio-visuals & electronics in rural libraries is described. stress is given on information dissemination through rural libraries.

INTRODUCTION

The new technologies and their benefits are not reached the farmers and artisans in our country. Especially the rural mass must be exposed to new technologies. It is also time to develop the Rural mass to utilise information. The Rural Development as a whole depend on the attitude to information. But in many developing countries people are more interested in the control of information rather than in the spread and free access to information.

No doubt, the government's technology policy statement (1983) in our country encouraged the correct mix between mass production and production by masses in our approach to development, in order to alleviate poverty and hunger. Though, we have progressed from a low productible agricultural society to an information society of high productivity, yet to realise to utilise the Science, technology, and Information resource methodologies available in our country.

It has been axiomatic that Science, technology and education are indispensable ingredients for national industrial and economic development. Science and technology can improve the effectiveness

* Junior Research fellow, Department of Library and Information Science, S.V. University, Tirupati (A.P.)

of utilization of Natural resources and capital, while education is concerned with the development of human resources.

Our government has articulated several national policies since Independence in all the critical areas of development. Especially, the Five year plans launched several schemes for the growth and development of rural agriculture and industry. But these were not properly utilised by the rural mass. Lack of information is the main root course for slow development in our country. Therefore, there is every need to open Rural community centres at every village. So as to provide the required information for the growth of rural India.

NATIONAL DEVELOPMENT

The National development of any country mainly depend on socio-economic cultural change. It is the knowledge that bring change in socio-economic cultural progress in any part of the world. Where there is fast growth of Information transfer these, the society achieve every success which in terms uplift the national reputation in every walk of life.

The national development of a country depends on the economic plans proposed and adopted from time to time. In India Five Year Plans are in progress. At present Eight Five year plans are completed and the Ninth-Five year plan will see the light of the day.

OBJECTIVES OF RURAL DEVELOPMENT

The main purpose of Rural Development programmes in our country is to achieve;

1. To increase rural production and productivity;
2. To have greater socio-economic equity;
3. To maintain balance in social and economic development;
4. To have community participation in the process of national development programmes.

Further, the components of Rural Develop are:

1. Physical development - such as communication, transport. sewage, irrigation, energy, forestry, animal conservation, environment, etc.

2. Economic development - Agriculture, business and Industry, etc.
3. Social development - Education, culture, spots and political activities.
4. Health development - Nutrition, Sanitation, community health, preservation of water and air pollution and others.

AGENCIES INVOLVED IN RURAL DEVELOPMENT

Everyday rural environment is changing. Many government and non-government agencies are active and are responsible for change.

These include, Block Development Office, Panchayat system agencies; Area Development Officers or organisation; Government departments; Financial institutions; Political parties, Trade Unions, Kisan organisations, Youth and student organisation, and others.

The second type consists of organisations who collect information from several sources and repackage them for public consumption. All India Radio, Doordarshan; Newspapers, Periodical Organisations/ agencies; Educational institutions; and public libraries come under this category.

INFORMATION CHANNELS FOR RURAL DEVELOPMENT

The agencies mentioned above are dissaminating information through various channels. These are as follows:

1. Radio, Television, Cinema, Government and non-government publicity organisations and their media.
2. Banks, Co-operatives, business organisations, insurance agencies;
3. Schools, colleges, public libraries, community centres and personal involved therein,
4. Doctors, health centres, magicians etc.
5. BDO, regional development organisations, gram sevaks, social education organizers, etc.
6. Political parties, professional associations, etc, women, Youth and student organisations.
7. Religious organisations, religious assemblies, persons, etc.
8. Festival theatre, Yatra, Exhibition, personal visits, bazar, Markets, meetings, etc.

9. Newspapers, Journals, books and other documentary sources.
10. Club, bathingghat, temple site, etc.

INFORMATION NEEDS OF INDIAN VILLAGES

It is well documented that India has a phenomenal potential in horticulture, not only to meet the growing nutritional demands of many of the population, but for export. We were looking at some of the problems in really stimulating very large growth in horticulture in the country. We have identified problems of marketing, problems of storage and transport, of organising production, of getting quality in parts like hybrid seeds and came to the conclusion that there were organisational, institutional, technological solutions to all these problems.

Information on rural industrial needs is tied up with the basic needs of the people of that area. Information regarding the flora, fauna, topography, forest landuse patters, water resources, etc. should be furnished by these centre so that "appropriate" small scale industry may be started by the rural people.

The implementation of this strategy, there are four major issues related to information.

1. To look at the way land is being used in the districts now, and ask ourselves, and ask the farmer because he is the one to make decisions, as to whether he is utilising his land and water for the most productive puropses.

2. The second type of information that we need which is very important, which we have not discussesd much about, is the commercial information.

3. The third type of information is the technical know-how for taking these crops to improve cultivations or improved varieties or improved methods.

4. The fourth is marketing information to the former, to make decisions.

RURAL COMMUNITY LIBRARIES

It is well-known that information and communication play an important role in the soci-economic and technological development

of the country. Libraries can play an active centres for dissemination and storage of information to all categories of rural inhabitants using the various media of communications and more to the rural folk, who are the real promoters of national economy and cultural change.

The many facets of information needs are rural housing, electrification, agriculture, poultry, animal husbandary, co-operation, economic and social upliftment, etc.

The library information and documentation centres can serve the community by providing the following services;

1. Supplying information to the extention officers who are actively denoted to the social services.
2. Providing information to decision makers when more decentralisation of decision process allowed, they could also help to draw the feed back on programmes relayed.
3. Providing translation services in the local languages.
4. Co-ordinating T.V. Programmes with the demonstration programmes, in announcing the demonstrations and distributing literature connected with it,
5. Acting as storage centres of essential and important information.

ROLE OF AUDIO-VISUALS AIDS IN RURAL LIBRARIES

Audiovisuals are merely the aids or resources, ie. materials whic are employed to improve the quality of the message. Audio-Visuals are a part of subject of Education Technology.

1. Audio visual aids are physical objects.
2. Audiovisuals consist of print matter projected and electronic resources such as slides, video and computers.
3. Audio visuals are material products which may be used or misused.
4. Audio visuals improve the quality of the message, they impart audio and visual dimensions to it.
5. Audio visual aids exist without regard to group dynamics and individual differences.
6. Audio visuals are products of technology alone. They are technical gadgets.

7. Audio visuals stand alone. These are unrelated articles.
8. Audio visual aids are different for different topics and subjects.

They fit in a curriculum.

It was believed that more people could be educated faster and better without multiplying the number of teachers, classrooms, and associated resources.

ELECTRONICS IN RURAL LIBRARIES

There may be a lot of debate for the use of electronics in rural libraries. At present we must think of the use of Information technology in rural areas.

Rural development planning monitoring role and scope of information technology to stream line and improve the information flow and analysis can be debated at length. The computerized Rural Information system project (Crisp) was launched in 1986 by Government of India. To assist district Rural development Agencies (DRSDA) on Information processing (IP), related to poverty elemination scheme, at district level. The Information collected from blocks and panchayats, can be processed and dissminated at district level. Use of computers will facilitated agricultural advancement and can reach to rural people with the help of such rural network.

The rural libraries of tomorrow may be developed much more with the extention of telecommunication facilities in these areas. The Villages are being connected with telephones. We can hope that with the technical advancements, much more sophisticated technology will be developed. Wireless telephones of tomorrow may facilitate communication facilities in these areas.

The rural libraries of tomorrow can be expected to be inter linked with cordless telephones with much more sophisticated technology. Especially Rural libraries will have much role in the rural development in the years to come through communication services. Such as NICENET, ERNET, I-Net and Internet.

In this electronic age the role of Information technology will be of much useful for collection, preservation and dissemination of information needed by Rural mass. This will in turn will help to build National development at country level.

CONCLUSION

The present government of India, is planning to make the right to education a fundamental right. Prime Minister, Mr. H.D. Deva Gowda, underlined the crucial role of education in the prevention of human rights violations and said universalisation of education could ensure equalisation of opportunities which was a major human rights concern.

So also, right to information is a fundamental right. Further, we are living in an age of information society. Hence, without information, there is no progress or development in any part of the world. In particular, developing country like India need suitable information system to provide basic information for the growth and development of rural education, economy, industry etc. Therefore, the development of Rural community libraries alone will help to develop the National a whole in our country.

REFERENCES

1. GIGGEY, SHIRLEY; Rural Community Resource Centes: A guide for developing countries, London Macmillian Education Limited, 1991.

2. KAPOOR, S.K. (Ed.); Eighth IASLIC Seminar papers and proceedings: Library and information systems for Rural Development, Calcutta, IASLIC, 1979.

3. KUMAR, K.L. Educational Technology. New Delhi, New Age International (P) Limited, 1996.

4. NATARAJAN R.; Education, Science and Technology for National Prosperity. *University News.* Vol. XXXIV No. 36. 1996.

5. RADHAKRISHNA, S and IVENGAR, T.K.S. (Ed.); Technical Information service for developing countries, Bangalore, IIS, 1977.

6. SWAMINATHAN, MS (Ed.); Information technology; A dialogue, Madras, Macmillan India Limited, 1993.

7. VASHISTH, C.P. (Ed.); Libraries as Rural Community resource centres. Delhi, R.R. Publising Corporation, 1995.

USE OF STRATEGIC MARKETING TECHNIQUES IN PROMOTING PUBLIC LIBRARY SERVICES

KHAISER NIKAM*

ABSTRACT

This article deals with the use of marketing as a technique in promoting the use of Public Library Services. Explains the concept of "Marketing as an exchange process". Defines "Strategic Marketing and the essentials for applying competitive strategies". Emphasise the application of 'Situation audit'. Consumer Segmentation' and marketing mix. Suggests the use of three highly significant strategies in catering to public library users. Such as 'Differenciated Marketing' Undifferentiated marketing' and 'Concentrated marketing.

INTRODUCTION

Libraries and information centres are the dynamic agencies of change. They have the potential to enthuse and exite humanminds. The public libraries of 2000 A.D. have a very active role to play in shaping the future of the modern social set up. The traditional techniques followed so far, by the public libraries will have to be replaced by innovative machanisms and strategies to serve the users of public libraries. The public libraries have to use various management techniques and tools to fulfil the user needs. Marketing of library products and services is one such handy tool which can be used effectively to promote public library use.

MARKETING AS EXCHANGE PROCESS

Libraries are non profit making proactive organizations. They form an integral part of the social sector, which consists of social agencies like hospitals, museums, schools, colleges etc. These agencies have started considering the implimentation of some of the tools that have made it possible for profit making organisations to operate

* Reader/Chairperson, Department of Library and Information Science, University of Mysore, Manasagangothri, Mysore-570006.

efficiently and profitably. One of the tools which is appropriate is marketing. Until recently the usual tags that have been applied to marketing are public relations or promotion (Conduous, 1983, p.408). Many thought marketing was notapplicable to the non-profit institutions like Libraries and Information centres.

Marketing as a technique is based on the central concept of 'exchange'. It is a 'Process occurs by which two parties freely give something of value to one another to satisfy some of their needs and wants' (Kotler, 1980, p.17). This is the basic model of marketing. Where as in the classical model goods or tangible objects are exchanged for money. One of the moves of Kotlar and Levly(4) has been to include the intangibles, so'an exchange takes place whenever something of value - whether money, goods, information or attention - is offered for something else in order to satisfy a need' (Rachman and Romano, 1080). In a much wider sense the library services and products are included. Libraries offer books, movies, audio-visual materials, answers to questions, storytime for children in return for user time and attention. As stated by Candous (1), marketing has been an intensive promotional campaign aimed to draw in consumers.

Marketing process relies not only on promotional campaign under taken by the libraries but also on well defined marketing strategies.

STRATEGIC MARKETING

Marketing is an integral part of total planning process. Strategic marketing makes use of many of the concepts and functions of strategic planning. Strategic marketing techniques ensure viable market positions and programmes for the survival and success of the library or information centre.

Strategic marketing has been defined by Kotler (1980;50) as "A managerial process of anlaysing market opportunities and choosing market positions, programmes and controls that create and support viable business that serve the organization puroposes and objectives".

SITUATION AUDIT

The strategic marketing process starts with an environmental and resource analysis and situation audit, which allows the library or information centre to identify opportunities which are in line with the basic mission of service. A SWOT (Stregth, Weaknesses,

Opportunities and Treats) analysis and an organization market system analysis can also be used at this stage. A SWOT analysis will not only identify the library's opportunities, but also the threats facing it in the external environment and the organization internal capacity (resources and soon) to deal with these in terms of its strengths and weaknesses. Any proposal must not only be in line with the library's or information centre's mission, but they must be able to draw upon the organization's existing skills.

CONSUMER SEGMENTATION

Strategic marketing opportunities for libraries and information centres are analysed by considering market segmentation, the size and growth rate of the client base, consumer behaviours, possible exit barriers and some forms of measuring and forecasting the attractiveness and effectiveness of such services in the future.

A market is attractive if: 1. It is of good size - that is, if people will use the services; 2. it has the potential for growth; 3. It is cost beneficial on both a short term and long term basis; 4. there are adequate financial and technical resources and a competent and trained staff; 5. there are low exit barriers; and 6. the service is in line with the library mission.

It may be the case that an opportunity satisfies most of these criteria, but that it has to remain temporatily inactive or dormant until, for instance the financial or technical resources can be found or staff trained to provide the service.

Market segmentation, identifies various targetmarkets or particular group(s) for who the services are designed. This is followed by competitive positioning, which consists of researching competitors' services and the needs of the target market in order to find a market or market niche. This will decide whether the library or information centre is in a strong or weak competitive position. Whether theprogramme is attractive and whether there is a high or low alternative coverage.

Once a target market has been defined and the service's competitive position determined, a market strategy is planned. This constitutes the development of marketing goals and objective such as enhancing the quality of library service and its satisfaction level. Funds need

to be mobilised to the marketing budget. Innovative services augmented to meet the new markets should have the important values explained to staff before commencing the service.

MARKETING MIX

Four P's or marketing mix according to Mc Carthy(5) consists of product, price, place and promotion is the key to marketing strategy. From the view point of libraries and information centres, product refers to services and other special features offered, the way they are offered and level of service. Price refres to whether a fee is attached to the product/service such as charge for on line search or photo copy and whether there are price modifiers such as discounts or allowances. Place refers to the logistical provision of service and locations of service points. Promotion involves the advertising and publicity campaigns, the message communicated, the media used and the timing of such promotional activities in a affordable and realistic manner.

KINDS OF MARKET GROUP(S)

There are four types of segments in a Public library and information market.

1. Need markets
2. Geographic markets
3. Product markets
4. Demographic markets

NEED MARKET

Need market is made up of individuals and groups, who have common need. The needs of the library users are varied and many Users' demands can not be satisfied just by lending books. Their consumers have diverse needs for facsimile services, information in varying formats (like videotext, encyclopedias or serials), for house bound services, story telling session or on line information services to name but a few. Yet there are some groups with in the library's or information centre's community who have similar needs. The need markets for a home bound service would be frail, the physically

impaired, those people who are convaleseing at home from illness, surgery or hospitalization, young and old patients with terminal illnesses who are living at home, elderly people who no longer drive and for whom public transport to the library is inaccessible and others who for some reason or the other can not regularly visit the library.

GEOGRAPHIC MARKETS

Geographic markets are composed of all those consumers who live in a region or a particular geographic locality. Geographic markets determine the type, size and siting of library and information centres together with their opening hours and services offered Public librarians will actively seek out geographic locations in need of libary services and serve them accordingly. For instance, residents living in outer metropolitan areas may need later opening hours than those living in the inner city as their travelling time home will be longer. Later opening hours allow families to visit the library as a unit. However, the dense population of inner cities will demand that library opening hours are longer than those of outer metropolitan areas or semi rural localities. Rural areas with isolated pockets of user population may be best served by a mobile library facility.

Each segment has its own particular characteristics. The need market for a house bound service will differ from that of a geographical market requiring a mobile service.

PRODUCT MARKET

Product markets are determined on the basis of a particular product or service demanded by the public library users. In these libraries a product market may be those people who have a need for information. This may be further divided into those segments who have a demand for, say technical or community information.

DEMOGRAPHIC MARKETS

Segmentation of library consumers on the basis of demographic characteristics is one of the most popular methods used in public libraries. They are often associated with clear markets may be identified by age, nationality, social needs such as pursuing particular hobbies, sports or other forms of entertainment, or physical needs like the physically impaired who may need ramp access to the library.

The above divisions are only basic and very broad categories. In practice the library professionals have to deal seperately with each identifiable segment of the library market. Individual strategies need to be designed for each subset of the library consumers. The Library or Information Centre manager should be aware of their market segments' current and potential future size; their major consumers and potential customers and their locations and their customers current levels of awareness of the range and levels of existing services, their needs and motives for using the services and their concepts of what they may regard as being competitive alternatives to library services.

The essence of market segmentation lies in satisfying the end user and not in the product or service. Each individual users is assured of a service which satisfies as far as possible his/her individual needs rather than a mass market offering.

The drawback of satisying individual needs is that it is not cost-effecive. Instead the library or information centre manager must look for broad classes of users who have similar and common requirements. This is called customer's product requirement. A typical examples of such cases are the weekly story telling sessions for pre-school children. Such sessions may satisfy numerous needs, which the librariean would not have thought of. Such sessions provide an opportunity for the parents and children to come out of their houses and interact with each other.

MARKET STRATEGIES

There are three main strategies which are commonly used in market targeting. (1) Undifferentiated marketing, (2) Differentiated marketing, (3) Concentrated marketing.

These startegies assist in evaluating, selection and concentration of those market segements which the library has targeted to serve.

Undifferentiated marketing

Mass marketing is the other name given for undifferetiated marketing. The libraries focus upon what needs are common to all people. Services are designed and offered which appeal to the braoadest number of users. These services could be lending services, inter-

library loan services, and reference services. The libary attempts to achieve excellence in these general services. Undifferentiated marketing is often reference services. The library attempts to achieve excellence in these geeral services. Undifferentiated marketing is often pursued in times of financial constraints. This is the time when special services cannot be offered and basic services are consolidated. Costs associated with the providing of special services can be saved.

Differentiated Marketing

In differentiated marketing the libraries decide to cater to individual segment of the market. Separate programmes are designed to serve atleast two subsets of library users at a given point of time. In public libraries this may mean offering services to children, youth, business community etc. with the help of specialist librarians such as children, youth and business specialist librarian in each subject area cited here. This facilitates each specialist librarians to manage a variety of programmes to suit the diverse needs of different library users. The objective of this strategy is to provide services for specific needs which will strengthen the library's overall identity in the community and increase its use. However there are costs associated with this. Special services means additional staff, administrative and promotional costs etc.

In differentiated marketing some library services may be heavily promoted. These are called saturate segments others may be designated as hold segments. In this case services are offered but not heavily promoted.

Concentrated Marketing

Niche marketing is the other name for concentrated marketing. Concentrated marketing occurs when the libary and information centres concentrate upon small number of submarkets. Instead of spreading the services thinly, being all things to all people, the library or information centre provides in depth services in a few areas, solving a small percentage of the market place.

The libraries and information centres consiously and purposefully decide to serve the target market and set out actively to serve these areas only. This kind of greater concentration in a specific area helps the libraries to achieve a strong market position because of the greater knowledge of its market segments needs. For example a special library

may decide to concentrate upon a selective dissemination of information service and a high speed reference service. This would be the main goals and objectives and all the staff would be aware of these priorities within the information centre or library and their primary duties would centre around these. Values such as efficiency, speed and individual needs would form part of the libraries corporate culture.

After giving due consideration to several target markets, financial resources and the level of staff expertise, the libraries may decide to establish a new libray service. The establishment of a new library or information service requires procedures to be put into place, staff to be trained, policies ad routines to be established. All this takes time. To begin operations with a wide market base is not a effective stretegy to adopt. Later, when all operations are running smoothly a decision can then be made as to whether to broaden the base. This is called a segment "roll-out" strategy.

The above mentioned strategies are not the be all and end all of all library services provision. No one strategy is superior to other. In adopting a particular target strategy, the library or information centre manager must base his/her decision upon the type of library, the financial, technical and human and information resources available; the availability of competitive services; user and potential user needs, and the types of services having the potential to be offered. The library or information centre manager must then decide which strategy is the most attractive given the constraints and opportunities of the library and information centre's external environment and its own strengths and weaknesses.

REFERENCES

1. CONDOUS, C. Non-profit marketing - libraries' future. Aslib proce., 35(10) Oct, p. 407-417. 1983

2. KOTLER, P. Parinciples of marketing. Engle Wood Cliffs: Prentice Hall, 1980.

3. KOTLER, P. Marketing Management, Analysis, Planning, and Control. Engle Woord Cliffs: Prentice Hall, 1980.

4. KOTLER, P. and LEVY, S.J. Broadening the concept of Marketing. Journal of Marketing, 33 (10-15) Jan, 1969.

5. McCARTHY, GRACE. Promoting the in house library. Aslib Proce., 44(718), July/August 1992. p289-293.

6. RACHMAN, D AND ROMANO, F. Modern Marketing. Illinois: Dryden, p.4. 1980

7. WEINGAND, DARLENE.E. Ed). Marketing for Libraries and Information Agencies. New Jersy: Ablex, 1984.

FINANCIAL RESOURCES IN THE INDIAN LIBRARY LEGISLATION: A STUDY

Dr. S. R. IJARI*

ABSTRACT

Indian library legislation has been defined and also the need of financial resources towards the Indian Library Legislation. Model library Acts/Bills are given year wise. Public Libraries Act in India has been tabled critical analysis regarding collection of library cess has been given. Opinions of professional experts are also included. The revision of model Public library bill has been suggested.

LIBRARY LEGISLATION

To establish any organisation or institutiion financial resources are essential and necessary. Without the support of money no institution can be established or run properly. Therefore, finance plays a viatal role in the growth and development of public libraries.

Great Britain, which enacted the first public library act in 1850, introduced the concept of cess collection from the public, and utilise that amount for the library services. The main intention of the British Government was that the money collected from the public in the form of cess, be utilised for providing reading materials freely to community at large. After 69 years of experience the British Government came to know that with the cess collected, it was very difficult to maintain and provide the library services to public at large. Therefore, the Government removed the cess in 1919 and said that it was the duty of the Government to provide funds to establish, maintain, and develop the public libraries. The British Government considered that public library services are essential services to the society. This concept of British Government is followed by all the countries.

* U7A-C5, Tarabag, Burdwan, W.B., 713104.

INDIAN LIBRARY LEGISLATION

Library Legislation provides a legal basis to establish, maintain and develop the public library services and right to finance through cess as in the form of tax. The prime objective of the legislation is to collect cess and utilize the same for providing public library service to the community free of cost.

According to Dr. S.R. Ranganathan, to make away public fund permanently year after year a particular service should necessarily have legislative sanction. If we leave it to executive, we know the ups and downs that library finance will have to under go. Any thing based on legislation is more stable, that is our experience. Therefore, it is suggested that the public library finance should be legislation based.

MODEL LIBRARY ACTS/BILLS

It is advisable to study the opinions expressed by professional experts and the recommendation of the committees and commissions appointed by the Government of India on Public Libraries Act.

MODEL LIBRARY ACT, 1930

Dr. S.R. Ranganathan, the architect of Library Legislation and the father of the library movement in India, drafted the 'Model Library Act, which was presented to the All India Educational Conference, held at Benaras, in 1930. In this Act he suggested to collect the funds through cess on house and property.

In 1942, on the request of Indian Library Association, he drafted another bill called as Model Public Library Bill', in which he converted all the compulsory clauses into permissive ones. This bill was presented to the Fifth All India Library Conference, held at Bombay, in 1942. This bill was discussed at length, but it could not get the due consideration. Again, this bill insists to collect the funds through cess.

MODEL PUBLIC LIBRARIES BILL, 1963

The Model Public Libraries Bill, 1963, was sponsored by the Central Government of India, by appointing a committee in 1960,

under the Chairmanship of Dr. D.H. Sen. This Committee was appointed as the out come of the recommendations made in 1959 in the Report of Advisory Committee for Public Libraries. This bill, supports to collect the cess to establish, maintain and develop the Public Library System in the State.

MODEL PUBLIC LIBRARIES BILL, 1966

Planning Commission Government of India brought out another Model Library Bill in 1966. Again, this bill also supports the cess rate for the maintenance and development of public library system in the state.

MODEL PUBLIC LIBRARIES ACT, 1972

Model Public Libraries Act, 1972, was the outcome of the All India Seminar on Public Library System, held at Bangalore, from 28-30 April, 1972, under the guidance of Dr. S.R. Ranganathan.

It was also suggested that the fund required to run the public library system he raised through cess.

It is presumed that all the above Model Library Acts in favour of library Cess for the establishment, maintenance and development of public library structure in rural and urban areas of the state.

LIBRARY LEGISLATION IN STATE

After the independence, the individual states have so far put into the Statue Book of their Public Libraries Act, with beginning of Madras State, with the untiring efforts of Dr. S.R. Ranganathan in 1948.

The following table is providing the detailed information on the Public Libraries Acts in different States.

TABLE - 1
Public Libraries Act in India

S.No.	Name of the State	Year
1.	Kolhapur State	1945*
2.	Madras Public Libraries Act	1948

3.	Hyderabad Public Libraries Act	1955*
4.	Andhra Pradesh Public Libraries Act	1960
5.	Karnataka Public Libraries Act	1965
6.	Maharashtra Public Libraries Act	1967
7.	West Bengal Public Libraires Act	1979
8.	Manipur Public Libraries ACt	1988
9.	Kerala Public Libraries Act	1989
10.	Haryana Public Libraries Act	1989
11.	Mizoram Public Libraries Act	1993
12.	Goa Public Libraries Act	1994

*After the reorganisation of States in 1956, Kolhapur and Hyderabad Acts were merged with the Maharashtra and Andhra Pradesh States respectively.

The above table provides a picture of the Public Libraries Acts and their year of establishment in different states. Each Act made a provision for financial resources to run the public libraries.

The actual provisions made in Acts are briefly described as under

i) Madras Public Libraries Act, 1948 :

   a) Library Cess on Property or House tax;

   b) Contributions, Gifts and income from endowments;

   c) Special grants from Governments :

   d) Fine and others; and

   e) State Government shall contribute to District Central Libraries, a sum not less than the cess collected.

2) Andhra Pradesh Public Libraries Act 1960 :

   a) Library cess on Property or House tax ;

   b) Contributions, Gifts and income from endowments;

c) Special grants from Governemnts; and

d) State Government shall contribute to Zilla Granthalaya Samasth a sum not less than the cess collected.

3) Karnataka Public Libraries Act, 1965 :

a) Library cess :

i) Tax on Land and Buildings ;

ii) Tax on entry of Goods (Govt. withdrawn); (Note; State Govt. is providing Compensation);

iii) Tax on Vehicles (Not implemented);

iv) Tax on profession, Trades, Calling and employments (Not implemented);

b) State Government shall make annual 3% of the land revenue collection of the district to D.C.L.s.;

c) Contributions, Gifts and income from endowments;

d) Grants from Governments; and

e) Fines and others.

4) Maharashtra Public Libraries Act, 1967:

a) State Government shall contribute the Library Fund every year a sum not less than 25 lakhs;

b) Special grants from the State Government;

c) Any Gift by the Govt. of India; and

d) Contributions, Gifts and income from endowments.

5) West Bengal Public Libraries Act, 1979;

a) Grants which the State Government may make for the general maintenance;

b) Contributions, Gifts and income from endowments; and

c) Any amount collected by LLA Rules.

6) Manipur Public Libraries Act, 1988 ;

a) Grants which the State Government may make for the general maintenance;

b) Contributions, Gifts and income from endowments; and

c) Funds collected through LLA Rules.

7) Kerala Public Libraries Act, 1989 ;

a) Grants which the State Government may make for maintenance;

c) Provident Fund, Superannuation Fund; and Welfare Fund and other Funds of the Granthasala Sanghom transferred under sub-section (2) of section 38; and

d) Library Cess.

8) Haryana Public Libraries Act, 1989

a) Library cess may levy every local body;

b) Grants which the State Government may make for maintenance, improvement and development;

c) Special grants from Government ;

d) Contribution, Gifts and income from endowments;

e) Any amount collected by LLA rules.

9) Mizoram public Libraries Act, 1993;

a) Grants which the State Government may make for establishment and maintenance.

10) Goa Public Libraries Act, 1993 :

a) Library Cess

(Note: The State Government shall levy a Library cess in the form of a surcharge on the Excise duty ... at the rate of 0.50 paise per litre of Indian made Foreign Liquor and at the rate of 0.50 paise per builk litre of beer).

b) Special grant from the governments; and

c) Contributions, Gifts and income from endowments.

While observing and analysing closely into the existing Public Libraries Acts regarding provisions of the financial resources are made as under:

1) Library Cess :

   a) Madras; (b) Andhra Pradesh; (c) Karnataka;

   d) Kerala; (e) Haryana; and (f) Goa.

2) State Government Grants (Budget);

   a) Maharashtra; (b) West Bengal; (c) Manipur; (d) Kerala and (e) Mizoram.

(Note: Kerala Public Libraries Act is peculiar in nature that it collects grants from Statement Government and also made a provision to collect through cess.,

3) Common Features :

   a) Special Grants from Governments ;

   b) Contributions, gifts and income from endowments

   c) Amount collected through LLA Rules.

CRITICAL ANALYSIS

The Public Librareis Acts of Tamil Nadu, Andhra Pradesh, Karnataka, Kerala, Haryana and Goa prescribe the collection of Cess.

It is an experienced fact that the cess is not only inadequate but also decreasing every year. Public Library is a growing organism and as such it requires continuous flow of funds and should increase every year for providing modernised library services.

The Maharashtra, West Bengal, Manipur, Kerala and Mizoram Public Libraries Acts have removed the library cess and the State Government has taken the responsibility of providing necessary grants required by the Department of Public Libraries.

The majority of the State Governments are relevant to pass mandatory legislation that will increase the tax burden. The Central Government is also reluctant to make permanent commitments. In our country, the subject libraries comes under the State list and it is the responsibility of the State Government to enact a library legislation. This may be the main reason most of the State Governments are not introducing the Public Libraries Act

FACTORS FOR INADEQUATE AND DECREASING FINANCIAL SOURCES

It is a proven fact that based on experience of the past 48 years since the Tamil Nadu Public Libraries Act (1948), the cess is not only insufficient but also decreasing, which checks growth and development of public libraries. Due to this reason U.K. Government had removed the ress rate in 1919.

1. Library cess is inadequate for the development of public library structure but also decreasing every year.
2. Tax payers are not promptly paying the taxes. Therefore, the cess amount tends to decrease.
3. Inspite of the provision made under the Acts to enhance the cess rate from time to time, the Government contribution has not been raised.
4. The granting of concessions to the farmers who are subject to natural calamities - draughts and floods.
5. The State Governments are not paying promptly the matching grants from the land revenue.
6. The cess collection authorities are not paying properly the amount collected through cess to the LLA authorities.
7. The State Government is not providing Speial Grants to Public libraries for providing proper services to the community.
8. Another reason is that it is not a revenue patching department to invest money on them.
9. The people are also not pressurising the State Government in enforce the Public Library legislation.
10. Fund collection through public donations, gifts and endowments may not help, (Except Tamil Nadu and to some extent Karnataka).

(ii) The Kerala Public Libraries Act (1989), Clause (30) states that the Government may make every year a grant to the State Library Council a sum which shall not be more than one percent of the amount alloted to the education in the State. Such a negative statement should not be used in the Acts, and it may affect adversely towards financial sources.

All the above points discussed reveal that the cess pattern should be discontinued as it is not helping to develop the public library system in the State.

OPINIONS OF PROFESSIONAL EXPERTS

It is well established fact that the cess collected amount is inadepuate for the development activities of the public libraries.

Some of the professional experts have expressed their opinions to get more funds from different avenues to support the growth and development of public libraries.

REPORT OF THE EXPERT COMMITTEE ON PUBLIC LIBRARY STRUCTURE, GOVERNMENT OF GOA 1978

The Government of Goa constituted a State Level Committee, under the Chairmanship of Prof. K.S. Deshpande, to suggest the improvements in Public Library. System in Goa, Daman and Diu on 14th December, 1978. Regarding the finance the committee recommended as under :

State Government shall set apart every year 10% of its budget on education for the development of a well oriented library system in the State. This amount shall be spent entirely on the construction of building, buying books, furniture and equipments required for public libraries.

The establishment charges shall be borne out of the general fund of the State. (Consolidated fund).

PUBLIC LIBRARIES IN KARNATAKA : THEIR SCOPE AND DEVELOPMENT (1982)

This document was prepared by Prof. P.K. Patil, the then Director, Department of Public libraries, Government of Karnataka in the year 1982. He suggested that at least 5% of educational budget be devoted for developing all types of libraries in the state.

MODEL PUBLIC LIBRARY AND INFORMATION SERVICE ACT, 1995

The Central Sectional Committee of the ILA, in collaboration with Prof. P.K. Kaula Endowment, organised a National Seminar on Library

Legislation, held at Tenail (Andhra Pradesh), on 12th August, 1995, under the guidance of Dr. Velaga Venkatappaih. Hedrafted the Act, containing the following recommendations regarding library finances :

LIBRARY CESS

1) Library cess be levied and collected by the agencies which collect the taxes and it be remitted to the State Fund:
   1. Entertainment Tax
   2. Professional Tax
   3. Vehicle Tax
2) Library Cess collected on property tax and House Tax.
3) The State Government should contribute an amount not less than the total amount of cess collected on the above said three areas.
4) Six and half percent of the education budget.

EXPERTS OPINION

Some of the experts in library profession expressed opinions in different forums that per capita income may be considered for library fund.

OBSERVATIONS

The above views are expressed by the experts in different forums to agument more funds towards the growth and development of the public libraries. Regarding the percentage on education budget seems to be more and State Government may not agree for such provisions. Secondly, Karnataka Public Libraries Act, 1965, includes cess on Professionals and Vehicles, but the State Government did not implement these provisions of the Act, because it will be more burden on the part of the tax payers. The Government may have same view on entertainment tax also.

TAMIL NADU EXPERIENCE

As described earlier Tamil Nadu Public Libraries Act, 1948, is the first of its kind in the Indian context. The Act was drafted by Dr.

S.R. Ranganathan, removing the compulsory clauses in it. Some Clauses are not clear and some are creating confusion. At that time, the concerned Minister said that amendments may be brought for such clauses. Accordingly, some amendments are also made. But the collection of fund through cess is retained inspite of its non-helpful nature.

The Directorate of Public Libraries, Madras, has introduced new ideas in support of the cess rate with the prartical experience of Director It is impossible in maintain and develop the public libarary system with library cess.

SUGGESTIONS :

The Public Library is an agency for continuing education and helps to develop social and economic activities at the national level. It has therefore, to promote the reading habits of elite by providng good reading materials. For this purpose there should be continuous flow of funds. The following suggestions may be considered :

1. The State Government should recognise this department as one of the essential departments of the state. As such it is the responsibility of the State Government to provide sufficient funds.

2. Voluntary organizations should be involved to cooperate in this noble cause.

3. The officers of the department should initiate and influence rich persons, industrialists and banks to donate generously for the cause of uplifting the urban and rural areas by providing reading materials to the populace.

4. No doubt that RRRLF is providing grants to different states in the development of public library system. It may be requested to provide still more grants generously for the improvement of book collection, purchase of mobile vans and construction of buildings for public libraries.

5. The Officers in the department should involve the public at large to consider the Public Library as one among the other institutions in the community.

CONCLUSION

With the practical experiences of the existing Public Libraries Acts proved that the concept of cess collection is not helping to improve the public library services. Such practice should be discontinued and modifed accordingly in the existing acts.

The Committee on National Policy on Library and Information System (1986), recommends that each State Government should enact its own library legislation. Such act should contain a Clause stating that finance for library development should be funded by each State Government from its general fund. Further it suggests that the Central Government should revise the Model Public Library Bill.

In short, the ensuing act should have a clear clause stating that the State Government should make necessary budgetory provision for establishment; maintenance and development of public library system and also raise the funds from philanthropists.

REFERENCES

1. CHAKRABARTI, B; General look at library legislation. In Public libraries in developing countries: Status and Trends, Ed. by P.K. Mahapatra & V.K Thomas, New Delhi, Vikas, 1996.

2. Report of the Expert Committee on the Problems and Prospects of the Central library with a plan for the public library structure (Chairman: Prof. K.S. Deshpande) Panaji, Goa 1980.

3. HOMBAI, G.B. & CHANDANGOUDAR, S.H.: Financial resources of the Indian Public Library System. In Education through Public libraries: Practical approach, Ed. by C. Palanivelu and K.S. Raghavan, Madras, 1991.

4. India, Ministry of HRD: National Policy on library and information System - A presentation (Chairman: D.P. Chattopadhyay) New Delhi, Author, 1986.

5. PALANIVELU, C; Public Library movement in Tamil Nadu, In Education through public libraries : Practical approach, Ed. by C. Palanivelu and K.S. Raghavan, Madras, 1991.

6. PATIL P.K. : Public libraries in Karnataka : Their scope and development. Bangalore, Dept. of Public Libraries, 1982.

7. RANGANATHAN, S R & Neelameghan; A Ed: Public Library System in India, Sri Lanka; UK, USA. Bangalore, DRTC, 1972.

8. VENKATAPPAIAH, V: Model State Library Policy and legislation, Ithanagar, Autor, 1995.

NATIONAL DEVELOPMENT THROUGH LIBRARY LEGISLATION IN INDIA

S. C. SRIVASTAVA*

ABSTRACT

The role of library legislation towards national development is explained. Further it has been explained that public library may cater the demand of community needs and may prove a place for the use of documents. Library legislation in India have been listed. National development by means of functions of public library are descrabed. The arrangement being made by the central State or local government for achieving the economic growth of the country are explained.

The Society consists of a very wide range of people from various vocations age, sex, social order, urban and rural areas. Human development has been discribed as a process of enlarging human capabilities and choices. Apart from basic necessities such as food, clothing and shelter, other human choices include long life, good health, adequate education and participative decision making. Thus human development is multi-dimensional involving political, social and economic elements. It is not, therefore, surprising that all countries do not rank identical on the income scale and human development scale. Sometimes the differences in the ranking are quite striking. A development strategy focused on human development seeks, therefore, to insure for as large a section of the soceity as possible an acceptable standard of living.

As per constitution of India it is stated that every citizen should get equal right or opportunity for the development of his social, economic and political status. He should get the right and opportunity for his educational and cultural development. These developments are not possible if the public is illiterate. We have got the right to literate ourselves and this opportunity should be given to the people by the Central Government as well as State Government.

* Dy. Librarian, M.M.M. Engg. College, Gorakhpur

EDUCATION

Education means systamatic training and instruction, to give intellectual and moral training. Education is a social activity aimed at the realization of social values as well as individual self realization generating to live a better life. Education is the most powerful means in the human resources development for the quality life of every individual. It is an investment in man for the quality improvement which reflects its pivotal role. It is said that the wealth of a nation consists in the superior mind and the superior minds are supposed to be the product of universities/higher or technical education. Tehnical education has got a very important role in the development of our nation. It is the most powerful means to bring about social, political and economic changes.

LIBRARY

In latin "LIBRARIA" is a place where books and written documents are kept, but at present it selects, collects and distributes books and documents (Information) to meet the demands of intellectuals. It is one of the important Institutions which help to build up the nation. It has a paramount roll in education. It is recognised as the treasure house or the Bank of knowledge. It is a centre for authentic information, research activities and an institution for life long education for the development of individuals as well as for the country. Library collects useful and reference materials in the form of printed books, journals, Photographs, reports, patents, microforms, magnetics tapes, discs, etc.

Developing society needs library facility. It is high time that the Government should establish a network of integrated public library system, both in urban and rural area for dissemination of knowledge and information to the massess so as to bring nearer the goal of socialistic pattern of society of India.

The Library is an agency for disseminating knowledge contained in a collection of books, journals and other reading materials/documents. The library work is primarily a social service.

PUBLIC LIBRARY

The public library is a product of democracy and a practical demonstration of faith in the universal education as life long process.

They are primarily intended to serve the educational needs of adults, children and women, Public library provides equal opportunities for access to information to every one in the community without any distinction of class, creed, age, sex and level of literacy and education.

Public library should readily cater to the demand of community needs and become a place for the use of reading materials.

The UNESCO Seminar on the "Development of Public Libraires in Asia" held at Delhi in 1953 recommended the following for public libraries :

(1) "Development of adequate public library service for the use of all people on a free and equal basis, supported by national public library legislation, improvement of training facilities status and salaries of librarians, adequate production and supply of reading materials through the establishment of national production centre, and

(2) Provision of services for the children by all public Libraries" Public library must be free in all respects to all"

UNESCO defines a public library servce as "one which authorise legislation and is open to the public without charge and is financed out of the public funds".

Accroding to Ranganathan. The public library service should:-

1. Help the life - long self-education of one and all.
2. Furnish uptodate facts and information on all subjects to one and all.
3. Provide harmless and elevating use of leisure to one and all.
4. Acquire and arrange source materials for research.

FUNCTION OF PUBLIC LIBRARY

The basic function of a public library is to educate the people, to provide the relevent inforamtion required by the reader/people. In other sense we can say that the purpose of a public library in the modern society is to educate the community by dissemination of knowledge and to satifsy the occupational needs of our society. The public library provides an opportunity to enjoy the benefit of reading

and must provide good means for book production and adequate facilities for reading of books, journals, magazines and other reading materials and also encourage creative writing for the society.

The use of library collection can improve quality of life of the society. Public libraries are national resources for the transfer of information and knowledge. The function of the library in society is to maximize the social utility of graphic records for the benefit of the individual and improvement of the society. In the nature of socio-psychological system a personal knowledge becomes social knowledge i.e. the knowledge possessed by a society.

LIBRARY LEGISLATION IN INDIA

There are 25 states and 7 Union Territories in India. Even after about 50 years of our independence only following 10 states have so far passed public library act, though the library legislation is essential in every state for smoth development of the country.

1.	Tamilnadu	1948
2.	Andhra Pradesh	1960
3.	Karnataka	1965
4.	Maharashtra	1967
5.	West Bengal	1979
6.	Manipur	1988
7.	Haryana	1989
8.	Kerala	1989
9.	Mizoram	1993
10.	Goa	1993

For the economic growth of the country, development of human being as well as Nation in all aspect, it is suggested that the following arrangement should be made by the Central, State or Local Government.

(1) Free education to all at least primary and secondary education level.

(2) Technical and higher education facility should be made available to the needy person.

(3) Library legislation should be passed by the Government in the rest of the states for the development of public libraries in state, districts, tehseel, block, punchayat and village level with mobile library facilities.

(4) Public library should be computerised.

(5) Networking facility should be introduced among all the public libraries.

(6) Provision for the free exchange of information /documents by printed catalogue, union catalogue, list of new arrivals list of current periodicals, current contents, Abstracting and indexing services should be made.

(7) Communication facility on a very nominal rate for the exchange of new ideas on Science & Technology for research & development for national development should be made.

(8) Development of reading habit and library culture among children and young people, for national development should be made.

(9) Provision of children library or children section in all the public library should be made.

(10) T.V. Radio and oter electronic media and communication facilities should be available to users for national development.

(11) Sufficient funds for public libraries for national development.

REFERENCE

1. LIMAYE, C.B. Public libraries and adult education. 28th All India Library conference 20-23 Oct. 1982, Lucknow.

2. TRIPATHI, VIRENDRA·Adult education and public libraries. 28th All India Library conference, 20-23 Oct. 1982, Lucknow.

3. SRIVASTAVA, S.C. Resource sharing of Information in Engg. & Technical Institutions in Uttar Pradesh, 40th All India Library Conference Jan. 5-8, 1995 Goa.

4. RANGARAJAN, C. Human development and economic growth, University News V. 34. N 4, 1996.

TAMILNADU LIBRARY LEGISLATION FOR THE NATIONAL DEVELOPMENT: A WARNING TO LIBRARY PROFESSIONALS

V. THILLAINAYAGAM*

ABSTRACT

History of Tamilnadu Public Library System (TPLS) from 18 July 1949 to Date is traced and ups and downs of the library service in the State are given with friendly warnings to library enthusists with special reference to professional librarians under the following headings : 1 Library legislation, 2 Management, 3 Personnel, 4 Service units, 5 Learning materials, 6 Service to users, 7 Finance, and 8 Role of Indian Library Association,

PROPOSITION

Public Library Acts must attempt to have 1 State Library Council, 2 Practicing Librarian as the Head of the Department and 3 Professional staff from the inception of the Act. The Act and Rules must specify the norms for (1) Opening of Service Units, (2) Acquisition, and maintenance of learning materials, (3) Service to users, (4) Library Finance and (5) use of Delivery of Books (Public Libraries) Act of 1954 as amended and Registration of Books and Periodicals Act of 1867 as amended.

CONTENTS

1 LEGISLATION

11 What, Why, How?
12 Ranganathan ...
13 Seminar
14 Golden jubilee..
15 Dreams
16 MPL Act
17 Acts in States
18 Effects
19 Warning

* First Professional Director of Public LIbraries (1972-82) Retd. 34 VOC Thidal, Cumbum (Tamilnadu) 625 516. STD (04554) 21597.

2. MANAGEMENT

21 What, Why, How?
22 Professional
23 Administrator
24 Bureaucracy
25 Ex officio DPL
26 SLC
27 LLAs
28 Abolition
29 Warning

3 PERSONNEL

31 What, Why, How?
32 DPL
33 Exofficios/OSDs
34 Staff
35 Unit
36 Vacancy
37 Bibliographies
38 Reference Service
39 Warning

4 SERVICE UNITS

41 What, Why, How?
42 Five levels
43 Connemara
44 DCLs
45 City CLs
46 Branch Libraries
47 Subscription libraries
49 Warning

5 LEARNING MATERIALS

51 What, Why, How
52 Connemara
53 PRB Act
54 DBAct
56 Local Library Authority
57 Stock in Branches
58 Binding
59 Warning

6 SERVICE TO USERS

61 What, Why, How?
62 Reference Service
63 Books
64 Periodicals
65 Newspapers
66 Conferences
67 Patrons
68 Evaluation
69 Warning

7 FINANCE

71 What, Why, How?
72 Library Cess
73 Rectification
74 Government grants
75 Plan grants
76 Capital expenditure
77 Staff expenditure
78 Cess for Learning ...
79 Warning

8	ILA	9	REFERENCES
81	What, Why, How	91	What, Why, How?
82	Five year term	92	Arulvelan ..
83	Central Act	93	Connemara...
84	Acts in the States	94	MPL Act
85	State Library Council	95	Ranganathan
86	No LLAs	96	Palanivelu...
87	Department ..	97	Thillainayagam
88	Coordination	98	Unesco
89	Warning.	99	Venkatappaiah

1 LIBRARY LEGISLATION

11 What, Why and How?

Modern Governments formed on the basis of universal suffrage aim at legislation on each aspect of life of people to get Best result for the maximum number at the least cost? Hence library service also tries to have library service based on legislation as a tool for national development - the theme of XLIIth. All India Library Conference of Indian Library Association (ILA) in Dec. 1996 at Calicut. What are we doing towards these aspects?

12 Ranganathan Remembered

We have celebrated 105th Birthday of Dr. S.R. Ranganathan (SRR) - the father of Indian Library Legislation on 12.08.96 at Delhi Pragati Maidan and other places by the enthusists of library service.

13 Seminar on Library Legislation

We also conducted 3rd National Seminar on Library legislation by ILA on 10/11.08.96 at the instance of Prof. P.N. Kaula, President of ILA to reiterate our resolve to have Central and State Libraries Acts before the end of this century.

14 Golden Jubilee of Independence

We also celebrated Golden jubilee of our Independence on 15.08.96 at Delhi Red Fort and other places worth the name for the country.

During these celebrations, we highlighted the efforts of National Literacy Mission to have universal literacy to prepare ourselves for the 21st century. But we failed to rope the library movement as in the case of Russia after October Revolution in 1981!

15 Dreams of legislation

Starting from 1933 by SRR to date by his followers, we are dreaming to have Central and State Library Acts in the Country. What are the effects and defects?

16 Madras Public Libraries Act

Madras Public Libraries Act came into force from 1.4.1950 as a pioneering attempt at the instance SRR and T.S. Avinasilingam Chettiar, the then Minister for Education who was a beneficiary of library service in the Madras University Library headed by SRR.

17 Acts in other States

Since then we had Public Libraries Acts in Andhra 1960, Karnataka 1965, Maharashtra 1967, West Bengal 1979, Manipur 1988, Kerala 1989, Haryana 1989, Mijoram 1993 and Goa 1994. Other States are preparing for the same.

18. Effects and defects

The dreams of SRR the Five Laws of Library Science-have not become a reality due to inbuilt defects of Acts passed so far. What are the remedies?

WARNING

Hence let us warn the ups and downs of TPLS to help the library enthusiasts to ward off the same for the guidance in future. What are they?

MANAGEMENT

21 What, Why and How?

Management is the art of using available resources rationally for the purpose of achieving certain goals and objectives of the organization with the specific aim of 'Best result for the use of maximum number with the least efforts?'.

22 Professional

Knowing the art of the same, Baroda Maharaja brought a professional librarian-in William Alanson Borden from America as the first Director of Public Libraries of Boarda as early as 1910.

23 Administrator

As an able administrator Erlam Smith, the then Director of Public Instruction (DPI) of Composite Madras State in 1933 refused to work as Ex-Officio Director of Public Libraries (DPL) !

24 Bureaucracy

The bureaucracy in the name of economy and in the garb red tapism blandered in 1948 by making DPI as Ex Officio DPL and the District Education Officers (DEO's) as the Ex officio Secretaries of Local Library Authorities (LLA's) in Ms No. 627 Education dated 28 Feb 1950. What are the effects?

25 Ex Officio DPL

The term 'for the time being' spoiled the library movement in Tamilnadu for the next 22 years from 14.50 to 31.7.72!

26 State Library Committee

The Ex Officio DPL saw that the term "the Committee shall meet at such times' restricted to six times on 28 Nov 1950/10 Mar 1952, 27 Jan 1953, 14 July 1955, 13 Aug 1958 and 14 Feb 1961 during first Eleven years and do nothing useful to the library service. No meeting was held during 1972-82. It could have met once or twice after 1982 if it is formed!

27 Local Library Authorities

With all respects to the members of the LLAs during 1950-1972 they did no useful work except utilising their influences in the appointment of staff; purchase of books, manipulation of finance etc.

28 Abolition of LLAs

Subject to correction, no other Departments of Government except Libraries carry on one or other authority for the service to the public.

Hence the LLAs were allowed to lapse themselves from 1972 as recommended by the Library Reorganisation Committee headed by

Subbarayan, an Ex Chairman of Madras LLA (who was one of the Ex Commissioner of Corporation of Madras City).

29 Warning

Hence it is warned that no LLAs need be created as recommended by Model Acts. The Library Service can be carried on by a professional practing librarian as in the case of School/ Collegiate/Nonformal/Examination/Technical Education Directors in Tamilnadu !

3 LIBRARY PERSONNEL

31 What, Why and How?

He is a professional librarian who had acquired/prescribed library qualification as well as minimum experience in actual administration of library service as in the case of Medical/Engineering Professions. He must have confidence and enthusiasm for the library service.

32 Director of Public Libraries

The DPL who is having prescribed professional qualification and experience only must be appointed as in the case of Ve Thillainayagam the first professional Director who worked during 1972-82.

33 Ex Officios and OSDs

No person either as Ex officio's (1950-1972) or as Officers on Special Duty (1982 to date) should be allowed to enter the precinets of administration of library service.

34 Staff of the Department

The staff to each and every post of the Department should be appointed only when they are professionally qualified. They must be recruited through State Public Service Commissions.

35. Personnel Unit-Single versus multiple

The staff of the Department should form as one unit for uniform service conditions. There should not be multiple units as obtained now in Tamilnadu which has created confusion at the instance of some CSDs.

36 Vacancy-Lapse

No post should be kept vacant. No post should be allowed to lapse as obtained now in Tamilnadu whatever may be the reason for the same.

37 Bibliographies-Portraits

Professionals should devote their energy and time for the betterment of library service. No person should aim to get favour and promotion by compiling bibliographies of VIPS who are in-power i.e. Director/ Vice-Chancellor/Minister/Chief Minister or exhibiting the pictures of the VIPs in their tables/rooms/offices etc as practised by some!

38 Reference Service

Personnel of the Library Department must be ready to render long term reference service including their seniors. Silence/non complaint of some to seniors like SRR (as observed by him more than once) does not speak well of the Department.

39 Warning

Any non performance of legitimate duty to the library cause as long as one draws salary in the name of library service is a crime.

Here it may not be out of place to mention the observation made by Napoleon as "There is no greater immorality than to occupy a place you can not fulfill "recorded by VETHI in SRR's. Colon classification. Edition 3 1950 Part II Schedules of classification received on 1.4.1950, when he was staudying Diploma in Librarian ship at the Madras University!

4 SERVICE UNITS

41 What, Why and How?

The service units must be opened understanding the need of the people of the area giving preference to the viability considering the finance available and demand of users. Here the formula given by SRR must be kept in mind.

42 Five levels

The service units can be catagorised into five levels ie State Central Library! (SCL) 2 District Central Library (DCLS), 3 Branch Libraries, 4 Librachine Services and 5 Delivery Stations either from level 4 or 3.

43 SCL-Connemara

The CPL founded in 1896 become the SCL from 1.4.50 under the MPLA.

The observation under the heading Connemara Library-a-doddering Centenarian in Indian Express-Madurai dated 6 Sep 1996 Highlighting the lapses -1 Vacant posts, 2 Disorganised sections, 3 Multiple method of classification, 4 Inevitable loss of books, 5 Overdue of books, 6 Non working of computers purchased in 1991, 7 Binding system, 8 Acquisition of books under the Delivery of Books Act of 1954 etc require critical review.

Refusal to give information about Connemara as recorded in Ananda Vikatan dated 8.9.96 requires clarification.

44. District Central Libraries

DCLs are opened at the head quarter of each revenue district. Some are yet to be organised on the basis of bifurcation/ trifulcation of some districts. They remain as honorary symbols rather than service units. The District Library officers (DLO's) who are having their offices at DCLs rarely step into the DCL and give directions regarding proper service.

45 City Central Libraries (CCLs)

Of late, we advocate the information of CCLs. It is a moot point to consider the viability with reference to finance and use of the readers.

46 Branch Libraries

Branch libraries are opened not on any norms prescribed by SRR. The pressure of members of the LLAs and competition to open 100th library in their district decided the opening of new library. Even the Professional Director could not remedy the defects.

47. Librachines

Librachine services were introduced in earlier period in Madras, Coimbatore, Madurai, Tanjore etc. They are intented to serve the readers who could not frequent the libraries. Some of them are now used only by the persons in power.

The vehicles provided for the LLAs as mostly used by others rather than for library purpose.

48 Subscription Libraries

Subscription libraries remain unaided. They can serve to supplement and complement the services if suitable program is chalked one !

49 Warning

Opening, maintenance and improvement of each service unit requires professional norms rather than laissez-faire attitude. They should be regularised in the Rules framed under the Act.

5 LEARNING MATERIALS

51 What, Why and How?

Books, periodicals, Newspapers and other non-conventional materials are the core materials of library service, which will pave way for the national development.

52 Connemara

As the SCL, it has to acquire learning materials, process them and arrange the same for use of readers as per the norms of Five Laws of Library Science.

The observation made in Indian Express Madurai 6 Sep 1996 as summarised in Section 43 needs rectification.

53 Press and Registration of Books Act of 1967 (PRB Act)

Connemara should become the Registry of Books as per the PRB Act as Practiced in SCL of Andhra Pradesh

54 Delivery of Books (Public Libraries) Act of 1954 (DB Act)

Connemara receives learning materials under the DB Act from 10 Sep 1955. But they are not acquired properly after 1982. The lack of co-ordination between State and Central should be reviewed.

55 Tamilnadu State Bibliography-Tamil (TSB)

Tamilnadu is the pioneer in publishing language bibliography from 1951 at the instance of VETHI.

From 1964 to 1980 it was published regularly (monthly Roneo Copies/printed Annual numbers) to help the service units in the State. It has not been continued after 1982 with the exit of VETHI.

56 Local Library Authority

As authorised by the Rules, the LLA acquired books from 1950 to 1974 with no prescribed norms. However they held 50 lakhs of volumes at the end of 1973-74.

Centralised purchase of Books was introduced by the Professional Director in 1974. During 1974-1980 about 10,000 titles in English/Tamil with 20 Lakhs of copies costing about Rs. 120 lakhs were added to the stock.

The addition of books under OSDs carry no norms whatsoever.

57 Stock in Branches

DCLs distribute copies to the Branch Libraries depend upon the availability of titles and copies. There no comprehensive basic stock in any of the branches.

58 Binding of leanrning materials

VETHI Introduced a novel colour scheme of binding in the Connemara. Accordingly the books that will lent were bound in brown calico with Green colour side papers as of the carpet of Lower House of Legislature. While Reference materials were bound with Red rexine with Rose colour side papers as in the case of carpet in Uppar House of Legislature

59 Warning

Methodology for acquisition of reading materials, processing, classification and cataloguing etc must be defined in Rules so that the money spent must be useful to the public.

6 SERVICE TO USERS

61 What, Why and How?

Learning materials become effective only when the readers, the books and the staff meet purposively.

62 Reference service

The first and last function of a library is to help every reader to find his materials pinpointedly exhaustively and expediously. This is called Reference service. This kind of service we lack even now! Professionals must come forward to do the same.

63 Books

Books must be arranged in classified order in each service unit. Though we find this classified order in DCLs and SCL to some extent, most of the branch libraries have their books in Accession order as the staff lacks confidence in library service though they draw salary etc on the last working day of each month! This requires immediate attention.

64 Periodicals

Periodicals are acquired locally depend upon the availability of titles and finance for each unit with no norms whatsoever. If possible, these can be got by donation as done in some units even now.

65 Newspapers

Newspapers also are acquired locally as in the case of periodicals. Most of our users frequent the libraries only for newspaper reading. They must be persuaded to use books.

66 Library improvement conferences

As Sundaravadivelu organised School Improvement Conferences during 1954-1966 as the Director of Public Instruction, his juniors who

moved to the Department of Public Libraries as OSD's have tried the same with some success.

67 Patronage

The scheme of patronage-getting of Rs. 1000 and above from individuals and institutions-also was introduced to supplement the pancity of funds.

VETHI contributed Rs 1001 to the Madurai District Central Library on 20 Nov 90 and got the Diploma of patron on 30 May 96 by post !

68 Evaluation

It is for consideration to evaluate the compaign of conferences and patronage in relation to PMEST utilised from the side of staff. If we collect the arrears of library cess (about Rs. 26 crores in 1996), we need not go round with begging bowl!

69 Warning

Hence it is warned that the learning materials acquired should be served to the public in suitable methods. Users must demand library service as a matter of right for the cess paid by them.

7 LIBRARY FINANCE

71 What, Why and How?

The library finance is derived from three ways ie. 1 Library Cess collected. 2 Government grants (equal to the cess collected, and 3 miscellaneous sources.

72 Library cess

The library cess levied, collected and remitted to the Department is always in arrears. The Ex officios paid no attention as they have no time. The Professional Director raised the Collection to Rs 127 lakhs during 1977-78 from Rs 45 lakhs during 1972-73. It is reported that Rs 26 crores are in arrears in 1996 !

73 Rectification

The Department must take immediate action in consultation with Education Secretary, Finace Secretary and Rural and Urban Development Secretary etc to collect the arrears.

74 Government grants

From 1950 to 1982, the Government were playing grants equal to the Library cess collected. Now it is diverted to meet the expenditure on staff.

75 Plan grants

No plan grants are received now as obtained in the earlier periods for libraries.

76 Capital expenditure

As suggested by SRR, Centre must come forward to meet non recurring capital expenditure on Buildings, Furniture etc.

77 Staff expenditure

Expenditure on staff must be met by the State as obtained now and as any other Department of Government

78 Cess for Learning materials

The library cess colleted should be spent wholly for acquiring learning materials.

No part of cess should be diverted on capital expenditure as done now.

79 Warning

It is a moot point to consider whether 10% of Education budget can be earmarked for library budget !

8 Indian Library Association

81 What, Why and How?

ILA which is in existence since 1933 must aim to work on the lines of the Library Association and(London) American Library Association.

82 Five Year Term

The term of the President must be increased to 5 years instead of 3 years so that he can understand, plan and implement programmes of new orientation.

83 Central Act

The ILA in collaboration with other professional associations must aim to get Central Act so that there can be coordination among the State Public Libraries Act.

84 Acts in the States

The remaining states other than the States enumerated in section 17 must work in unision to have Public libraries Act in their States. Professionals must do lobbying work with sympathisers of library movement.

85 State Library Council

ILA must work to have broadbased State Library Council for each State as per the Acts as well as the Rules.

86 No Local Library Authorities

The days of Local Library Authorities have vanished with the change of attitude of men in public service.

87 Department of Public Libraries

Hence each State must have a Department of Public Libraries headed by a practicing librarian as the DPL.

88 Coordination

It is a moot point to consider whether the different systems of library service can find a voluntary coordination in the interest of library service for the national development.

89 Warning

The professional collegues are warned to have Central and State Acts before the end of this century to avoid criticism from future generation !

91 What, Why and How?

The ideas, observations, suggestions etc of the following references are freely absorbed for the cause of library movement.

REFERENCES

1. ARULVELAN etc Eds. Ranganathan-Kaula Awardee 1994 Ve Thillainayagam 1995.

2. CONNEMARA LIBRARY: A dodering contenarian (Indian Express-Madurai-6 Sep. 1996.)

3. MADRAS PUBLIC LIBRARIES ACT OF 1948.

4. RANGANATHAN, S.R. Indian Library manifesto 1990.

5. PALANIVELU, C and RAGHAVAN, K S Eds. Education through Public Libraries, 1991.

6. THILLAINAYAGAM, Ve. Development of Public Library Service in Tamilnadu (in Tamil), 1981.

7. UNESCO. Public Library Manifesto 1994.

8. VENKATAPPAIAH, V. Model State Library Policy and Legislation 1995.

MARATHWADA LIBRARY ASSOCIATION AND ITS ROLE IN EDUCATION : A CASE STUDY

MORE SARASWATI*

ABSTRACT

Marathwada Library Association, a Voluntary agency, engaged in the library science education both formally and informally. Its objectives, scope and role in education are given. Its association with Maharashtra Kamgar Kendra is also given. Various prizes for the successful candidates in library science exams are listed. Its programmes dealing with library education are included.

"Association word is derived from the English word to Associate" which means to unite or bring into relation those persons who share actively in anything as business, enterprises of undertaking. It means to unite or to combine the persons with common feelings, pursuit and thought."

Library Association is a voluntary agency like other professional associations.

As per the Oxford Reference Dictionary - "Acting done or given of ones own free will not under compulsion working or done without payment of an institution maintained voluntary contributions or voluntary local education authority"

LIBRARY ASSOCIATION'S ROLE

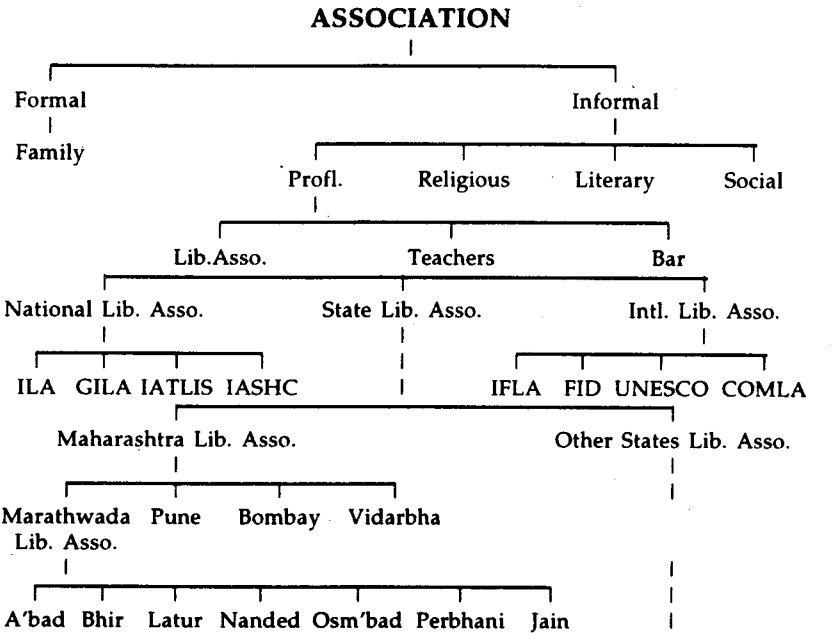
Education teaches us to learn to get information. It shapes the life of human beings. It is a life long process.

In the informal education it consists professional education. Continuing education General education and adult education.

For improvement of the library professional education and adult education has lion's share.

* Asstt. Librarian, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad-431 004.

For improvement of the library professional status and betterment of Librarians, Library Associations play an important role.



Madan Somnath says-

"All associations are generally organised for the propagation of a cause as well as to educate the public about the state affairs. The professional associations additionally work for projecting a proper image of the profession and also to explain its role and importance in the national life".

OBJECTIVES AND SCOPE

1. To know whether the Marathwada Library Association guides the functioning of the Libraries efficiently and according to Library Science.

2. To assess the improvement of professional status and academic qualifications of the Library workers.
3. To examine the library education programmes.
4. To evaluate the library education activities such as to do publicity of librarianship by organizing book exhibitions, lectures, seminars and conferences.

The paper is limited to the Marathwada Library Association.

MARATHWADA LIBRARY ASSOCIATION

Marathwada is one of the parts of Maharashtra. Maharashtra Library Association established in 1921. Pune, Bombay, Vidarbha and Marathwada Library associations are included in the Maharashtra Library Association.

Marathwada is the birth place of the saints. It is underdeveloped area, financially and educationally also. Due to the tyranny of Nizam and Britishers it was underdeveloped. Therefore some social workers thought abut the education of Marathwada people. Therefore, they started some schools and libraries. From 1920, Libraries were established. Balwant Mofat Wachanalaya at Aurangabad and Lokmanya Wachanalaya, Naldurg came into the existence. Dr. B.R. Ambedkar started Milind College Library in 1950.

For creating the library consciousness among the people in Marathwada and establishing libraries Shri. R.A. Saraf, the then Assistant Curator conducted the survey of Libraries in Aurangabad city. But this area was far behind from the Library movement.

At that time the Hyderabad Library Act was in force in Marathwada region in 1955. But due to the non proper utilization he thought to implement the act properly to establish new libraries and conduct the library science short term course. It was the need of the hour. He arranged meetings of library enthusiastics at Aurangabad on 30-11-1958 with the view to establish the Marathwada Library Association.

Sarvashree Saraf, Puranik, Ujalamkar, Kunturkar and Wadijikar were the pioneers for giving guidance about the Marathwada Library Association and its functioning. On 29-6-1959 Marathwada Library

Association was registered. And resolution was passed to start Library Science training courses to improve the quality of Library Science education.

While narrating the role of Library Association in education, Chopra, R.N. emphasizes.

"The term used for the association, responsible for the workers the accumulation and dissemination of general information concerning Library and the establishment and propagation of general standards in Librarianship".

Regarding the Library education it is narrated in the Marathwada Library Association which was registered as Marathwada Vibhash Sranthalay Sangh. Its registration number is 8-18-59 which covers seven districts namely Jalna, Bhir, Osmanabad, Parbhani, Nanded, Latur and Aurangabad; and headquarter is at Granthalay Sadan, Radha Mohan Colony, Aurangabad. It aims to conduct Library Science classes "To guide the professionals" in functioning of libraries efficiently.

The Marathwada Library Association's constitution, article 2.5 "To improve the professional status and academic qualifications of the librarians and library workers".

From 1959 Library Science course started at Aurangabad. The courses started at various centres as under :

Sr. No.	Centres	Years of starting LTC course
1.	Aurangabad	1960
2.	Latur	1973
3.	Parbhani	1983
4.	Ambejogai	1983
5.	Tuljapur	1986

MAHARASHTRA KAMGAR KENDRA

For the workers and students Library Science training course started at Maharashtra Kamgar Kalyan Kendra, Aurangabad in collaboration with Marathwada Library Association from 1970.

In the constitution it describes- "Try for improvement of Library workers quality and salary".

VARIOUS PRIZES FOR THE SUCCESSFUL CANDIDATES IN LIBRARY SCIENCE EXAMS.

Late P.B. Bhalerao Prizes instituted in 1986 are given to those candidates who secured highest marks in Reference Service at B. Lib. Sc. level and highest marks in M.L.I.Sc.

Amount for the various prizes paid in cash is as under:

For M.Lib.Sc. ..... Rs. 101/-
For B. Lib. ..... Rs. 101/-
For LTC ..... Rs. 51/-
For SSC ..... Rs. 51/-

Professor Brahamanand Deshpande Memorial Prizes for Library Training class students is also given.

PROGRAMMES OF LIBRARY EDUCATION

Library education not only includes black board, chalk and techers' lectures, but it includes organizing the conferences. It is the part of a continuing education, in which recent trends are discussed.

Marathwada Library Association's objective is "To organise meetings, conferences, lectures, discussion". It hosts the Conferences at various districts of Marathwada. Associated or affiliated institutional members take the responsiblity of conference organisation.

CONFERENCES ARRANGED BY THE MARATHWADA LIBRARY ASSOCIATION

Marathwada Library Association in its constitution (Article 3.5) clearly mentions:

Every year the conference will be held by Marathwada Library Association and arranged in various districts of Marathwada Association or affiliated institutions.

Marathwada Library Association also organises book exhibitions, encourages research in Library and Information Science education and inter disciplinary fields.

CONCLUSION

Marathwada Library Association takes part in library science education activities both formal and informal. It organises seminars, conferences in collaboration with district or regional Library Associations, and encourages research in library and information science.

Only a single Guide in LIbrary and Information Science is available in Marathwada and all Ph. D. seats are filled up by the residential Ph. D. Students. Many library professionals can not complete their Ph.D.s in LIS; Therefore, Marathwada Library Association may take efforts for the recognization of guides from Maharashtra or outside also.

REFERENCES

1 JAIN, R.C. : "Professional Associations and Development of Library Science" Delhi, Metropolitan, p.1.

2. JOYCE, M. Hawking Ed. "Oxford Reference Dictionary" Oxford University Press, Bombay, 1987, (p. 918).

3. SOMNATH MADAN : "Dictionary of Library and Information Science", Anmol Science Publications, New Delhi-1988, p.65.

4. CHOPRA, R. N.: Dictionary of Library Science", Anmol Publications, New Delhi, 1990, p.306.

5. Marathwada Library Association. Constitution Societies Trust Registered No. NG/Society/3, Aurangabad, 1959.

6. Marathwada Library Association. Constitution Sociaties Trust registered No. NG/Society/3, Aurangabad, 1959.

SERVICES TO CHILDREN BY VOLUNTARY AGENCIES IN MADRAS: A SITUATIONAL REPORT

DR. R. SAMYUKTHA*
DR. A. AMUDHAVALLI**

ABSTRACT

The services of the Voluntay agencies in different spheres of social development are recognised. The role of voluntary agencies in India is described. The voluntary agencies engaged in Madras towards child welfare have been identified. Services have been suggested in terms of free schools, learning, disabilities and behaviour disorders, child health, nutrition etc. A comparison between voluntry agencies and public library has been attempted.

1. INTRODUCTION

Amongst the varied social and welfare organisations, voluntary agencies seem to be very active in different spheres of social development. The most interesting include the child care and welfare programmes protecting the neglected and deprived children by different voluntary agencies all over the world at local, national international levels. The obvious reason for this being that children are the backbone and futuure asset of any nation's progress. Hence, it was decided to identify such agencies engaged in services for children and their role to this cause in Madras.

2. ROLE OF VOLUNTARY AGENCIES IN INDIA

A voluntary organisation is defined as 'a registered society and a public trust associated with the chosen specific cause/purpose and not run for profit to any individual or a body of individuals'. Voluntary Agencies (VAs) constitute the kingpin of the machinery for the implementation of welfare programmes. VAs have two critical roles to play in the development process-as promoters of social change at

* Librarian, Meenakshi College for Women, Madras.
** Reader, DLIS, University of Madras, Madras.

the community level and as advocates of social awareness at the state and national level.

The VAs vary in their aims and ideals, quality of personnel and standard of services from old well established organisations with a distinguished record of dedicated service at one end to a few new organisations which have sprung up to take advantage of government grants available for specific welfare activities at the other. Similarly there is also a wide range of variation in the resources at the disposal of these organisations. The level at which these organisations funcion and the range of their activities also vary; some are All-India organisations concerned with a wide range of activities; others are at the district or sub-district level. Information about the activities of VAs are not easily available except for those which are receiving grants-in-aid or those which are licensed by law for running orphanages or homes for women.

Over 5000 VAs are known to be receiving grants from the Central Social Welfare Board and a much larger number is probably fuctioning with their own resources derived from religious and charitable organisations, private donations and gifts. The NGO Directory for Tamil Nadu by ICCW with assistance from UNICEF-Madras reveals that there are more than 1000 child care organisations in the state of Tamil Nadu and Union Territory of Pondicherry. This directory provides data regarding the number of organisations offering different types of services and the type of beneficiaries.

It can be said that they play major role in solving social problems like poverty, crime, terrorism, unemployment, homeless and needy women, children and old people to a large extent with no bias and any discrimination.

3. VOUNTARY AGENCIES IN MADRAS - SERVICES FOR CHILDREN

Poverty, illiteracy, over population, rapid urbanisation, migration of families and refugees, break up of families, marital instability, and a host of other psycho-social factors are the basic issues of neglect of children. Faced with these monumental problems, the VAs engaged in services for children are targeted to initiate, upport, protect and ensure children their basic rights to survival, physical,mental and social development and opportunities to grow to their full potential against neglect, abuse and exploitation.

The second edition of 'SAHAYA' brought out by Joint Action Council for Women (JACW), Madras contains valuable data covering the special services available for women and children in the Madras city. the catalogue of service catagories helps to identify the welfare programmes for children under the broad heading 'SERVICES FOR CHILDREN'. Under this heading there are few sub-catagories (service-based). The list of institutions for each of this specific sub-catagory is provided alongwith a summary of the services rendered by all those agencies.

3.1. SERVICES FOR CHILDREN

3.1.1. FREE SCHOOLS

A number of schools provide scholarships, fee concessions, free text books, special coaching for slum children, nursery, primary and higher secondary classes for day-scholars from surrounding areas both in English and Tamil medium of studies. Some of them are residential schools. A few of them are technical schools for girls offering needle work, embroidery, printing and book-binding and coaching for SSLC examinations. Vocational training programmes in typing, short-hand, accounting and allied subjects are also being offered by some of them.

3.1.2. CHILDREN WITH LEARNING DISABILITIES AND BEHAVIOUR DISORDERS

Child guidance clinics are present for children with developmental, behavioural and emotional problems. Treatment for personality disorders, adjustment disorders, psychosomatic ailments, mental retardation is provided. Assessment of growth and development of normal children and care of children handicapped by epilepsy, care bral palsy and mental retardation and IQ testing facilities are available.

3.1.3. CHILD HEALTH & NUTRITION

Free medical care,nutrition and health programmes for nursing and pregnant mothers, supplemntary feeding and immunisation for babies, rural health centres, peripheral pediatric clinics, health centres with mini hospital facilities, nutrition rehabilitation centres to treat malnourished children and educate mothers in nutrition are provided by a number of centres.

Creches and balwadis provide child care, feeding and education of children of mothers from low income group.

Some institutions offer free food, shelter and clothing, medical care, free schooling in nearby schools, and professional colleges for abandoned destitute and orphaned children.

Guidance and counseling is provided for juvenile delinquents and problem children referred by juvenile courts and the public. The child labourers development programmes offer non-formal and continuing education, recreation health services and saving schemes.

3.1.4. RECREATION AND HOLIDAY CAMPS

Recreation centres, holiday camps, learn to-live together camps for children of low income groups are organised. Holiday camp site for destitute children is maintained throughout the year by the ICCW, Tamil Nadu branch. Opportunities are created to develop talents and skills, coaching is given in music, gymnastics, phsical education, tailoring and computer usage. Children's libraries are present in a few of these centres.

3.1.5. SPONSORSHIP, ADOPTION AND FOSTER CARE

Under the non-residential education, financial assistance of Rs. 300/- to 1200/- per month is given to bright children as well as handicapped from low income groups. Incountry and/or inter-country adoption of children-new born to ten years old is arranged. Legal formalities are taken care of and advise is also given on legal implications of adoption. Foster care is arranged and financed for children between two to twelve years old.

4. VOUNTARY AGENCIES VERSUS PUBLIC LIBRARIES

One of the objectives of VAs are to promote dissemination of knowledge and information and to educate public regarding child welfare/development programmes on a scientific basis. Advocacy, awareness nd networking is one of the projects of VAs to meet the above aim which will ultimately enhance the quality of life for children. To this end, VAs organise seminars, workshops, coordinate joint programmes with other NGOs engaged in services for children on child-centered themes and on organisational development for NGOs and professional social workers. These VAs are largely dependent

on public support and encouragement in overcoming the social problems of children. This warrants for public consciousness both in urban and rural society. Awareness campaigns and publicity programmes though are undertaken by these Vas, it is felt and suggested that a Public Library by its definition and objectives is an organisation ideal and suitable for VAs to coordinate in accomplishing their goals.

A Public Library (PL) is a social institution operating in a dynamic environment of aspirations, expectations and ideologies existing to serve the information needs of the public. A PL is an environment which can change considerably in relatively short periods of time and often have an enduring influence and work in a subtler way. In view of PL's objectives to educate, entertain and inform its user community, besides its routine and regular document and information delivery, offers extension services to reach the underpriviledged group of the society. Extension activities are a sort of partial service offered mostly as an optional programme. However, being a social institution and more popular among the cross-section of the population in the local area, a PL can easily coordinate with the other social agencies like VAs engaged in social welfare programmes.

Moreover public library service comes under the jurisdiction of state government which is responsible to tackle such social grievances. The government though cannot implement all prograsmmes by itself can undoubtedly take cognizance of the situation and identify varied agencies, institutions and individuals and extend its full support to provide men, material and financial resources. The government through its public library system ought to extend its arms and act as a catalytic agent in promoting child welfare programmes initiated and undertaken by the varied VAs towards different service catagories.

PL system have an extensive network of service points both in urban and rural areas, well established and supported by legislation can easily offer extension programmes in the interest of VAs without even any additional staff or finance. PLs can be used as the best media centres of community information to the local area thereby increasing the effectiveness expected by the VAs and play a greater role in carrying information to each and every part of the area.

5. CONLUSION

What is lacking in all these activities towards social reformation include: lack of coordination, duplication, information policies,

legal provisions, interest and support, recognition, manpower, training and orientation, funds, equipments, materials and buildings etc. A proper planning and cooperation can enhance the services for the neglected children who with proper guidance and encouragement can make a more positive and stable society in future. PL system in collaboration with the VAs can yield better results. One encouraging feature in this regard is the support extended by the Raja Ram Mohan Roy Library Foundation (RRRLF) established in 1972 and fully financed by the Department of Culture, Government of India. The basic idea behind the establishment of this Foundation is to reach the rural areas in cooperation with the state governments and other non-governmental organisations and voluntary agencies engaged in promotion of services to the masses. RRRLF supports to develop children's libraries of children's section in public libraries. The scheme of financial assistance to VAs providing public library services was transferred by the Department of Culture to RRRLF from the year 1986-7. This assistance is given to purchase books, furniture and equipments and construction of library building if the total number of books in the library is less than 5,000 and on a sharing basis.

Many more such support and cooperation from PL system can enable the VAs to go a long way towards their goals.

REFERENCES

1. ANNA NAGAR TIMES, July, 1996. P. 12.
2. BAJWA, G.S. Human rights in India: implementations and violations. New Delhi, Anmol, 1995.
3. CHILD CARE ORGANISATIONS IN THE STATE OF TAMIL NADU AND THE UNION TERRITORY OF PONDICHERRY: DIRECTORY. Madras, ICCW, 1994.
4. INDIAN COUNCIL FOR CHILD WELFARE. Tamil Nadu Newsletter. Volume 2, No. 2, October 1995.
5. MADAN, G R. Indian social problems. Volume 1. Ed. 3. New Delhi, Allied, 1983.
6. SANJAOBA Naorem, Ed. Human rights: principles, practices and abuses. New Delhi, Omsons, 1994.

7. AHUJA Ram. Social problems in India. New Delhi, Rawat, 1992.

8. SAHAYA DIRECTORY OF WELFARE, HEALTH AND SOCIAL PROBLEMS IN THE CITY OF MADRAS. Ed. 2. Madras, JACW, 1990.

VIDYARTHI SAHAYAK SAMITI: A BRIDGE FOR RURAL STUDENTS

C. P. PHARANDE*

ABSTRACT

Vidyarthi Sahayak Samathi, a pioneering institute in the field of voluntary agencies, its establishment, aims and objectives are given. Among the facilities-living at low cost and food at a subsidised rate etc. are prominent one. Dignity of work and inculation of self respect, are qualities embedded in the students. Beneficiaries of the Samiti express their gratutude throughout. Samiti by stooping in leaninacy to society, acquired high regards. With the goals achieved until now, Samiti sustains futher activities towards betterment of society.

The city of Pune, which is presently rapidly coming up as a cosmopolitan city, is known as cultural capital of Maharashtra state. It is equally known as a seat of learning for centuries together. Until fast-coming industrialsation, it was famous as a pensioners and students Pune. It was city of bicycles also, now which changed to city of automobiles.

With all its changes, it has still retained its importance as a seat of learning. The stream of rural students is all the time coming to this city, for good education. Now a days students from outside states as well as from foreign countries also, have attracted to this city in search of quality education.

The enormous population of the student community, created new problems of lodging and boarding on large scale. The students coming from outside state and foreign countries, are in a position to afford higher payments for food and shelter. Whereas those native of Maharashtra, born and brought up in rural areas, are not in a position to pay the higher charges.

FOUNDATION OF SAMITI

The inability of the rural students, was visualised by a visionary, Dr. Achyutrao Shankarrao Apate, four decades back, who, during

* Asstt. Librarian. Jayakar Library, University of Pune, Pune-411007.

his higher studies at France in fifties, experienced a novel scheme, in which, students coming from poor families and from rural area, were provided with shelter and food at a lower cost. After completion of studies, he came back to India. The faith he developed on the nation to help the poor students, kept him uneasy.

This uneasiness culminated into formation of "Vidyarthi Sahayak Samiti", in 1956. Initially, the students coming from villages and from poor families, were provided with food by the pious families on turn by turn basis. There were only four-five students, seeking benefit of this facility, in the begining. And only two or three persons, impregnated with the ideas of Dr. Apte. They took the task a with zeal and gradually day by day the samiti started growing.

PRESENT STATUS OF SAMITI

The small sapling of Samiti, has now grown up into a full Bunyan free, with its three branches of hostels, accomodating more than 400 students, studying in various disciplines.

1. Lajpatrai Vidyarthi Bhavan, 103 A, Senapati Bapat Road, Pune 16, (1968)
2. Ladies Hostel, 1137/13, Model Colony, Pune-16, (1970).
3. Gents Hostel and Samiti Office, 1182/1/4, Shivajinagar, Pune, 5, (1980)

CONSTITUTION OF SAMITI

The Samiti has been registered with the Public Charitable Trust with the number E-219, Pune. It's registered office is located at 1182/1/4, Fergusson College Road, Pune-411005.

The number of trustees shall not be less than five and more than thirteen. Presently, there are thirteen trustees, comprising of-Three permanent, Two elected by the advisory council, Two elected by the members, Three elected by committee of workers and Three co-opted.

A person donating Rs. 100/- will be designated as a sympathiser. A person donating Rs. 250/- will be a member, and a person donating Rs. 1000/- will be a permanent member of the Samiti.

COMMITTEE OF WORKERS

For the purpose of smooth functioning in day-to-day activities of the Samiti, committee of workers have been constituted. The worker, who works voluntarily, regularly and actively for meeting the following goals of the committee.

a) Serving on one or more sub-committees.

b) Collecting funds.

c) Aiding students educationally, culturally etc.

d) Organising activities in furtherance of the aims of trust.

AIMS AND OBJECTIVES OF TRUST

The objective of the trust shall be education and it will carry out following activities.

a) To render aid in the form of cheap board, lodging and other amenities, irrespective of caste, creed or religion, to the poor and deserving students in colleges and other institutes of higher learning in Pune.

b) To help the student to develop their personality and charcter and to inculcate in them a sense of discipline and dignity of labour.

c) To do all such things as in the trustees opinion would be conducive to the furtherance of the objectives.

AMENITIES IN HOSTELS

Normally two or three students are accomodated in one room. They are provided with cot, mattress with cover and pillow, Table and chair with independant lamp, wardrobe and shelf for books.

Besides this in community hall-newspapers, magazines, reference books etc. are provided T.V. sets and other indoor games are also there for their entertainment, outdoor games and cultural activities forms integral part of hostel life. Medical aid, medical check-ups etc. are provided.

Food and Shelter is provided at the surprisingly low cost, Rs. 160/- charged monthly for the food, which covers two times meals, break-fast and milk in the morning time.

Towards room rent Rs. 250/- are charged per term, i.e. Rs. 500/- for the entire academic year.

Presently normal mess charges in Pune, are between Rs. 400 to 600/- per month and lodging charges on cot basis between Rs. 500 to Rs. 900/- per month.

EARN AND LEARN SCHEME

This low living cost is achieved by adoption of earn and learn scheme. The society also extends its helping hand by providing small jobs to these students. The job comprises right from reading and writing for disabled to the household work. The student is expected to work normally four hours daily, by adjusting his work time with college hours.

They have to get up early in the morning and perform morning prayer and exercises. Turn by turn, they have to help in arrangement of meals. Thus they are exposed to self reliance and the dignity of labour is embedded in them. That helps to develop their self confidence.

BENEFICIARIES OF THE SAMITI

During last 39 years more than 6500 boys and more than 1000 girls have taken advantage of these hostels. Due to firm discipline and notion of self respect, most of them have aquired good status in the society. In order ot repay the debt of Samiti marginally, they try to help Samiti with every possible means.

SAMITI STOOPS TO CONQUER

Philonthropist in the society, without any desire of publicity, are coming ahead to help out the cause of Samiti. The flow of donations is coming from the ordinary.people in the society as well as from foreign bodies.

The Samiti is working at the cause of poor and needy students, who are future pillars of the country. Samiti neither believes in any dogmas nor in pomp of social service. The Samiti is formed of volunteers of humanity and lovers of social cause. Samiti believes in pragmatic values.Naturally society has realised its importance and in order to recognise the work of the founder of Samiti Dr. Apte, University of Pune conferered upon him honorary D. Litt. in 1990.

AND MILES TO GO FURTHER

Samiti is going to sustain its activities after conquering hearts of the society. It has cherished to work for total social upliftment.

On academic front they have started "Beyond Friendship" a bi-annual, enriched with the knowledge from various disciplines. Jayakar Library of University of Pune contribute its share by providing abstracts of the theses submitted for Ph.D. degrees.

Then the "Darshan" a bi-monthly of the Samiti keeps reporting of the activities and programmes of the Samiti.

Destitutes and devastated in the society are eagerly waiting for the new plans of the Samiti. Some steps also have been taken to fulfil the demands, schools for orphans, shelter and jobs for widows and divorced womans, have been started by the trustees of the Samiti. This is how, Vidyarthi Sahayak Samiti, is performing its role as a voluntary agency, in the field of education.

REFERENCES

1. Vidyarthi Sahayak Samiti : Scheme for Mangement and Administration. (Booklet)
2. Annual Report of Vidyarthi Sahayak Samiti, 1994-95.
3. Vidyarthi Sahayak Samiti, Brochures and leaflets.
4. Dicussions with Managing Trustee Shri. Rajabhau Patwardhan.
5. Letter of honour presented to Dr. Achyutrao Apte, by the University of Pune.

APPLICATION OF INFORMATION TECHNOLOGY IN LIBRARY AND INFORMATION SERVICES-TRENDS, ISSUES AND STRATEGIES

D. B. RAMESH*
B. K. DALAI
M. K. SETH
J. R. SAHU

ABSTRACT

Trends, goals, strategies and application of Information Technology (IT) like Videotext, Teletext, Compact disj, Tele-communications, Networking. Full text databases, Multimedia technology, etc. in library and information services (L & IS) are presented.

0. INTRODUCTION

Mankind is now nearing the threshold of the 21 century through the third inustrial revolution. In this context the US Sociologist, Peter F. Drucker has envisioned that, "today the real controlling resource and the absolute decisive factor of production is neither capital, nor land, nor labor, it is knowledge". A library possesses almost all the factors of an industry or a service institution. The Primary purpose of a library is to provide its clients with increased access to knowledge base that is growing at accelerated pace. For this purpose, it is vital that the library's resources - human, material and fund are to be used in the most effective and efficient manner by providing right information to the right user, at the right moment and in the right manner. Literature explosion as a natural outcome of cast amount of research and the increase in the number of users and varieties of their needs have made the modern librareis highly complex and specialized in term of collections services by emerging trends in the application of electronic media for wide-spread distribution of information is forcing the libraries to undergo

* Library & Documentation, Regional Research Laboratory (CSIR) Bhubaneswar (Orissa)

a substantive structural modigications. The demands of users are forcing the application of new technologies, new modes of access, storage and new techniques of search. Access to knowledge and assistance to its access are the main functions of libraries that, perhaps, will determine their survival in the electronic age. Modern networking system which will determine their survival in the electronic age. Modern networking system which enables the interlinking of libraries and information centres, thus paving the way for resource-sharing.

1. TRENDS IN INFORMATION TECHNOLOGY

Changes in society and demands for information utilization have forced the information profession to look for more effective and efficient methods for processing, storing and retrieving of information. Information is recognised as powerful resource and commodity for a nation's economic development. Furthermore, the economic and political values of information become more recognized, and their management becomes even more crucial. To cope up with these challenges, librarians and information professionals have applied information technologies in their areas of work. These technologies are being applied principally for the improvement of intellectual, physical, speedier access of library resources and access to larger databases and also for improvement of intellectual, physical, speedier access of library and also for generation of more authentic and accurate information. Magnetic tapes, floppy diskettes and CD_ROM provides large data product/storage capacity and retrieval facilities. Advancement of electronic information systems provided opportunities of interlinking personal computer with distant computers at local, regional, national and international levels. Through tele-communication networks, access to International Databases are available for searching information on various subject fields through global vendors like DIALOG, STN, BRS, ORBIT, etc. With the advent of INTERNET it is now possible for remote transmission of texts and graphics, video clips, animated clips and multimedia transmission of the entire data. The various types of products of electronic publishing available through electronic libraries provides texts, graphics, and multimedia documents over Local Area Networks (LAN) and Wide Area Networks (WAN).

1.1 TELETEXT : Teletext system is a sequence of numbered information pages, or screen full of information, broadcast cyclically

over a television channel. The user may chose for required page using a Teletext decoder. ISBN Teletext setup connections very rapidly and then transmits data many times faster than telex. Teletext or gateway systems use colorful graphics and varied content to appeal to the home users especially where several members of the family may operate the system. It provides a gateway to a number of on-line sources of information. The content of these systems resembles a magazine which offer news, weather and reviews of books, films, etc.

1.2 VIDEOTEXT : The Videotext offers a favourable medium for transfer of information. It bridges the gap between paper and microform media to the terminals and computers. Videotext has good storage density and has versatile format. 12 videodisks can hold up to 54000 frames per side for a total 60 minutes playing time. This is estimated to be equal to about 14,000 pages of printed text. Digital Videotext will be much more flexible than ordinary Videotext. It is an eletronic system which uses a VDU to present computer-based information in a user-accessible visual form.

1.3 COMMUNICATION TECHNOLOGY: Recent development in the automation of libraries continues creating networks of geographically separate libraries for resource sharing. It is basically a transmission system for linking computers over a restricted geographical area. It is a combination of cables, computers, processors and interface softwares which interconnects computers and related devices and regulates the flow of information traffic among these devices. Computer networks are expected to play an increasingly important role in the librareis for resource sharing and management. Libraries are now busy in finding ways and means of exploiting the technology at their disposal to access their own and other library catalogues, CD_ROM services, commercial on-line services and various other local and remote network information-resources. Management benefits of flexibility and expandability characteristics of LAN are very essential for library services. The application of Local Area Networks (LAN) can be enumerated as follows:

i. data entry, word-processing can be economically done under local control at a work station;

ii. on-line searching, loading and downloading of search results;

iii. E-mail or text messages can be sent; and

iv. help to share resources such as data in hard disks/CD-ROMs/ optical disks, SDI/CAS information service to the readers.

1.4 MULTIMEDIA TECHNOLOGY (*MM*) : Multimedia (*MM*) is a unique development both for library staff and to the users. MM can be defined as an integration of several media. i.e. Text, audio, video, graphic, animation etc. In the computer society. MM refers to the programmes that uses more than one method of communication to the users. It allows the users to browse and navigate quickly any type of complex information. It has optimum freedom for the users. It offers innumerable possibilities for teaching and learning of any subject with any mode. It serves the purpose of different levels of users. It can be single stand alone system or multiuser system. MM service is totally a new dimension that is going to be added to the way of information dissemination.

1.5 NETWORKING TECHNOLOGY : Computer networks have wide area communication facilities with following protocols such as - Public Switched Telephone Network (PSTN), Public Data Network (PDN), Satellite Data Networks (SDN), Network of Leased Lines (NLL) and Integrated Service Digital Network (ISDN). The computers of two different Institutions/Libraries are connected to each other by a wire path which is dedicated to these systems for the entire duration of data communication. Presently many countries have set up dedicated Public Data Networks (PDN) for data transfer, which work on a packet switched mode, where in a physical line can be used more efficiently by multiplexing message packets from a number of sources. Satelite networks are broadcast networks where a message transmitted by one station and heard by all other stations. ISDN is relatively a new concept where a single network may be used for a number of services i.e voice, data, facsimile etc. by means of the existing telephone network. It can establish atleast two simultaneous independent calls on the existing pair of telephone lines. In this network data files from one library to other will be transmitted at a high rate of 64000 bps. Following are some important communication and library networks established/underdevelopment in India:

I-NET - Recent technological developments in the DOT have laid a firm foundation for the provision of new and modern services by means of Integrated Services Digital Network (ISDN) and Pocket Switched Public Data Network (PSDN), called as I-NET. It is an ideal

network for users whose data traffic does not justify a dedicated network. E-mail is also possibile on it and also provides international conductivity to important data networks outside the country through the Gateway Packet Switched Services (GPSS) of the Videsh Sanchar Nigam Limited (VSNL), India's overseas communication services at Mumbai, Chennai and New Delhi PADS (Packet Assemblers/ Dis-assemblers) ensure access at 300-2400 bps to the gateway and external networks.

SIRNET - It is a special network system of CSIR laboratories and other R & D institution in India. Its ultimate aim is to connect the entire scientific community of the nation with the national library system and the international links to achieve efficient scientific communication. The services proposed to be available on it are E-mail, file transfer, document transfer, access to indigenous and international databases. INSDOC. Delhi node of SIRNET has access to over 1800 international databases on 15 different hosts through VSNL'S GPSS facility. It operates through I-NET which is the main national data network.

ERNET - It was started by the Department of Electronics as a part of UNDP for academic and research work with initial participation from IITs, IISc, NCST and DOE. The aim is to enhance national capabilities in the areas of design, development, research education and training etc.

NICNET - is designed primarily for government, information network, to promote the collection storage, analysis, transmission, and exchange of data at districts, state headquarters and central ministries at Delhi for use in planning, management and monitoring of projects and different government sponsored programs. It can also be used during natural calamities to obtain help and information. Although it is meant for use by the government departments, it does have the potential for use by the library and information community by providing dial-up access to CD-ROM databases of the US National Library of Medicine, MEDLINE, Biotechnology Abstracts, COMPENDEX etc. It is possible to mount databases on one or more of the mainframes of NICNET for on-line access by users in government departments, R & D institutes supported by the state or central government etc.

INDONET - is a commercial distributed computer network to provide access to the considerable computing and software resources

of CC Ltd., a public sector company in India. Its main objective is to provide computing power and software to users who cannot afford partly or fully investment in this area. It has three IBM mainframe at Bombay, Calcutta and Chennai. Its Bombay node is connected to VSNL's GPSS enabling computer-to computer communications via network abroad.

INFLIBNET - It is a computer communications network linking libraries in universities and colleges in the country and libraries in institutions affiliated to theCSIR, ICMR, ICAR, DRDO and Government Departments. It is envisaged that INFLIBNET will network 184 universities and 23 institutions, 6100 colleges and 200 libraries affiliated to other organisations. It is being planned as a multi-service network and will provide catalogue based services, access to databases and document supply services and facilities for computer mediated communications. It is designed to operate four different levels. i.e. national, regional, sectoral and local. The National Centre will coordinate the entire activities and services.

CALIBNET - It is envisaged to cover 38 science and technology librareis in Calcutta metropolitan area. It will have access to the VSNL, Bombay through Indian Public Switched Data Network (PSDN). Each of the participating libraries is expected to automate their book acquisitions, cataloging, serials control, fund accounted and circulation control. It will also provide on-line access to the international databases.

MALIBNET - It covers 6 major academic institutions. It produces two on-line databases i.e. current serials in Madras database covering 300 librareis and contents database covering articles published in 300 journals available in Madras libraries. It also provides abstracts of articles, e-mail including international conductivity, document delivery, on-line etc.

DELNET - Its main aim is resource sharing, creation of commonly usable databases and communication between libraries with the help of automation and networking. It has network of 35 libraries in Delhi area: DELNET E-mail, file transfer, union catalogue of serials, database of holdings of individual libraries, etc. On-line search services offer a number of databases to the users for on-line access through telecommunication links. An user can directly access the databases residing on the host compute from a computer terminal using a

communication package and communication links in two-way interactive mode.

COMPACT DISK TECHNOLOGY : The CD-ROM technology is available only for about last 10 years and has become really popular in the last five years. As per the CD-ROM Directory 1995, 14th edition published by TFPL, London, there are about 9551 CD-ROM databases of 1990 publishers from 45 countries created by the 2445 database providers on 270 subject areas. As things stand today, storing digitized or electronic form providers on 270 subject areas. As things stand today, storing digitized or electronic form of books, music, periodicals, encyclopedias, games, education materials, movies and much more on CD-ROM seems the order of the day. The CD-ROM storage capacity of 680 MB is likely to be increased ten times within the next few years. Digital Video Disk (DVDs) the double-layer high-density CDs with storage capacity of 7.4 GB to 10 GB are expected soon. They will have the added advantage of running audio and video apart from text. In the near future CD-Recordable will be available. They will be useful in CD-Publishing, On-line storage of text, Audio and Video and archival backups. Compact Disk Video (CD-V) is a video disc originally introduced as an entertainment medium competing with VCR and broad casting services but presently used for professional and data storage. CD-ROM remains the most important development in disk storage media since the introduction of Winchester technology.

FULL TEXT DATABASES : Full text databases are becoming more popular. It is not difficult or expensive to obtain a personal account, but the cost of using these services can act as a barrier to routine use by students and the general public. It is now technically feasible to effect a marriage between text processing systems, communicating with each other through computer networks and satellite communication for distrinution. Books and journals in electronic format structured for storage and presentation enabling search the complete content of the book for retrieval of the required information. It helps minimizes timeand cost-effective than publishing on papers.

2. APPLICATION OF INFORMATION TECHNOLOGY IN L& IS ACTIVITIES

The world has been witnessing knowledge and information explosion during the past few decades. The library started from paper

and is going towards the paperless functioning. The tremendous growth in different fields of knowledge has created a great difficulty to have access to the desired literature with manually operated devices. The traditional concept of librarianship has been changed due to the changing needs of the modern society and constant development in the field of science and technology. Today every job performed in the library needs automation for prompt result and action. The libraries and information centre in India are influenced by the modern technology used in information handling, such as - Selection, Acquisition and Processing; Storage, Maintenance and Physical access; Dissemination of information and Development of information products; and Utilization of information. Due to rapid application of Electronic media in the above said areas, a significant changes have been observed in the working environment of library and information centres. A number of present library routines like-Acquisition, Circulation and services like CAS, Reference services, etc. will undergo a considerable change in the new outfit as most of these service will be automatically generated from the databases in the electronic library and the user's will, have direct access to them without librarian's intervention. Librarian's are in a position to meet these challenges and provide information to their users with the help of IT without any fear, frustration and failure. With the covergence of computer and communication technology and emergence of multimedia, integrating text, voice and video processing, an explosive synergy has materialised, giving birth to a series of products for a paperless environment.

3. GOALS AND ISSUES

The formation of plans and programmes for the future development of L&IS should be guided by the following broad goals, issues and directive principles as enumerated below:

i. Providing for the evolution of a knowledge based information society should be the prime national goal.

ii. Right of access to information by every citizen of the country.

iii. Developing a national grid of information systems and services to ensure free flow of information with linkages to global systems.

iv. Designing and developing user-friendly on-line information systems and services to provide easy and multi access to information.

v. Adopting and evaluating the newly emerging information technologies to exploit their potential for effective processing, storage, retrieval and the dissemination of information.

vi. An integrated, comprehensive data compilation, validation analysis and quickly accessible to provide reliable inputes to national planning and developmental activities.

vii. Prompt and efficient back up support for information usage by way of documents delivery and dissemination of inforamtion in easily digestible and usable from by all categories of users.

viii. Developing a highly motivated, skilled and competent workforce to manage and operate effectively the comple and comprehensive L&IS.

ix. Libraries at local and national level should form resource sharing groups under Local Area Networks (LANs) and Wider Area Networks (WANs) for maximum utilisation of money, men, materials and to avoid unnecesary duplication.

x. Efficient documents delivery system.

4. SOME STRATEGIES

Development in information technology and telecommunication networks, the information scenario heading for paperless library. a positive marketing approach to L&IS should be incorporated will involves the following:

i. To set up a national centre on user studies.

ii. Design and development of information services and products responsive to be precisely detemined information requirements of vaious segments of users.

iii. Active promotion of L&IS for optimising utilisation of resources and services.

iv. Induction of information technology in organised manner to ensure system compatibility, connectivity, monitoring and evaluation of the computerisation and networking programmes.

v. Stimulate and promote an harmonious programme of Human Resource Development to the changing and divese needs of L&IS.

vi. To Promote technological installations like Networking, Teletext, Telex, Fax, Videotext, On-line access, CD-ROM, E-mail, and others for free access information.

5. CONCLUSION

All this can only auger well, and give hope of steady progress in the challenge of utilizing new technologies for better access to knowledge and information in the country's thurst towards academic, economic and social progress. The computer and communication technology, is passing through a period of ectreme evolution and development. The new development with respect to information technology will change the information cycle dramatically. Users will access information, bibliographic databases and even primary sources wherever they ae located, without country barriers, and without visiting a library. The library and inforamtion centres will have to employ more and more information technologies to cope up with the rapidly multiplying literature demand all over the world. There appears to be a continuously growing number of innovations in the field of Communications and Information Technology which can be applied to the library and information work for speedy, accurate and exhaustive information processing. It is therefore, imperative that L&IS personnel should be well conversant with the new technologies and their application in inforamtion science. So in this age of limiting factors like space, money, manpower and materials, etc. there is an urgent need for inter library cooperation and resource sharing. Mutual exchange of information and resources sharing will be the motto of our professionals ethics and it has to be nourished in future for growth and healthy development of our libraries. Finally, when it is all accomplished, the computer becomes a tool in the service of librarianship. The computer presents us with both a challenge and an opportunity. We have a responsibility to use it to the advantage of our profession and most importantly to the users of our libraries.

6. BIBLIOGRAPHY

1. RAMAIAH C.K, SINGH A.K AND RAJENDRA V. Video Discs and their. Applications. IASLIC Bulletin. 32,2; 1990; 60.

2. KEMPARAJU T.D Manpower Development in the Library and Information Science-Present and Future Needs in the Context of Emerging Technology. Annal of Library Science & Documentation. 37,2; 1990; 63-66.

3. VISWANATHAN T. Application of Information Technology in Libraries, Annals of Library Science & Documentation. 38. 1: 1991; 1-7.

4. VISWANATHAN T. Information Management in Library and Information Centres in India. Iaslic Bulletin. 36, 4; 1991; 141.

5. RAMADEVI B. Information Technology and Information Services-A Scenario. Desidoc Bulletin of Information Technology. 11.4;1991;5.

6. VISWANATHAN T. Library Networks in India. Annals of Library Scicnce & Documentation, 38, 2; 1991; 39-52.

7. ARORA J. and KAUR S. Recent Information Technology and Other Impact on Dissemination of Information. Annals of Library Science & Documentation. 39, 1; 1992; 12-18.

8. HARAVU LJ. Library Automation & Networking in India - an Overview of recent developments. Annals of Library Science & Documentation, 40, 1; 1993; 32-40.1

9. SINGH H.S. Libraries for the Future. Iaslic Bulletin. 39, 1; 1994; 39-42.

10. DHAKA R.P.S. and ARORA Electronic Library; A Myth or a Realty. Annals of Library Science & Documentation, 42, 4; 1995; 152-159.

11. PHONDKE G.P. Changing Scenario of the Information World. Iaslic Bulletin. 40. (1); 1995; 37-48.

12. BOREIEYAN R. & RAMADEVI K.A. Library Automation and Information Networking System. Library Progress(Intl). 15, 1/2); 1995; 17-21.

13. ABDUL R. Library automation - an overview. Library Science with a Slant to Documentation & Information Studies , 33, 1; 1996; 45-54.

14. SUBBA RAO S. CD-ROM Technology; World Scenario and Indian Experience. Information Today & Tomorrow, 15, 2; 1996; 3-16.

15. LAHIRI A. Information Market Scenario in India. Information Today & Tommorrow, 15, 1; 1996; 17-30.

ACKNOWLEDGMENTS

The authors are thankful to Prof. H.S. Ray, Director, Regional Research Laboratory, Bhubaneswar for encouragement and permission to present this paper.

DOCUMENT DELIVERY SYSTEMS

DR. A. AMUDHAVALLI*
C. FLORENCE**

ABSTRACT

The traditional concept of document delivery service is to provide the borrowing facility of a library's collections or from else where (inter-library loan) for the users. These days electronic transmission is also referred to as document delivery service. This paper attempts to identify the emerging modes of document delivery services to the user community. The impact of information technology and telecommunication seem to have largely altered the access to information both by laymen and experts. The new modes of document delivery have added value to the information which has been highlighted in the paper.

INTRODUCTION

Traditionally speaking document delivery service includes only lending service. This means the routine circulation job offered in any and every library.But with the extended concept of the document delivery service, the scope of this service has gone much beyond the delivery of hard copies or the original documents.

Thus, the general and broad form of document delivery service includes delivery of both the primary and secondary services. Generally, providing primary sources (full-text) is the circulation job, though access to full-text databases (original) is made available though not widely, in a limited way.

No library is self-sufficient to manage on its own. Interdependency on other libraries is inevitable. Library cooperation had always been the only solution to overcome this. With the introduction of photocopying facility, the cooperative ventures took a different phase of activity. The library cooperation and exchange programme amongst the participating libraries to supplemetn the resources moved into 'own your copy' rather than the 'lending' agreement.

* Reader, Dept. of LIB. & INF. Sc., University of Madras, Madras-600 005
** Librarian, Women's Christian College, Nungambakkam, Madras-600 006

MODES OF DOCUMENT DELIVERY SYSTEM

From the early 1960s onwards, libraries/information centres have switched over mechanised processing and dissemination of information. The influence of information technology on library management and operations has resulted in changes in the mode of consulting and delivery of library resources. Access to information across borders in no time to browse and/download has become a common practive. Electronic journal and other such electronic access to large databses have revolutionised the modes of delivery of information.

Networking at local, regional, national and international level have opened the flood gates of information. Telecommunication and satellite communication have made it possible to take the information to the door step of every individual user. Network service providers are springing up across the country. They offer an array of host computers, in turn, provide gateways to a multitude of databases, archives of information, discussion forums and public domain (free) software.

Miniaturisation of computers has revolutionised information handling. Sitting at one's desk, information can be sought quickly and easily through the national and international networking. Today, many users employ poweful microcomputers and workstations, which enable them to 'travel' electronically through a variety of devices to reach other computers. Via a matrix of interconnected networks, they transfer files to their own computers for their personal use, and exchange all types of information - bibliographic and non-bibliographic - electronically with users world wide.

The network landscape continues to change as the number and size of networks increase. Many fear that the increased commercial use will lead to increased prices, change the network's focus, and stifle freedom of speech. Thus far, the net effect has been to open up access to wider community.

INTERNET

The Internet, the collection of computer networks that now spans the globe, has become an important part of information infrastructure. Librarians and individual users who gain skills

in using the Internet will be posed to take advantage of the rapid changes in information technology and delivery that are taking place, and have the opportunity to enjoy access to a wide array of information and reference sources that are being made publicly available.

Internet merely feeds on the existing repository of information. By providing extremely flexible and wide access, the Internet makes itself popular and highly useful. Apart from the online access and transfer of information that is possible across networks, the tehnology that is available makes it possible to store massive quantities of information in easily retrievable form.

With Internet usage and and publication of electronic resources growing at a phenomenal rate, however, a wide range of graphic-based software tools are now evolving, making the rudimentary, command-mode applications seem cryptic. These new seamless, easy-to-use, point-click multimedia interfaces provide a new look for basic Internet functions (client/server facilities) such as World Wide Web browsers (WWW), Gopher and WAIS.

The World Wide Web, often referred to as, the Web, or WWW, is a distributed multimedia hypertext document system. This means information on WWW be located on computer systems around the world. The Web is the most recently developed and fastest growing service for locating and retrieval of information on the Internet. Gopher was one of the first services to address the problem of locating electronic information by providing a text menu interface to a variey of Internet services.

WAIS-Wide Area Information Sever is a client-server system that provides search access to archvies of full text documents located on hundreds of computers throughout the Internet. WAIS differs from Gopher because the system provides for Full text indexing; Natural language searching; and Relevance feedback.

It is obvious that the modes of 'Document Delivery Services' have not only become multi-faceted but sophisticated with the application of technology.

The CD-ROM and compressed video, for example, provide ways of storing textual as well as pictorial data in a compact manner.

Multimedia technology allows the incorporation of video and audio into the computer storage and replay facility. Electronic libraries that exist in virtual cyber space can use the multimedia to deliver data innovatively.

CONCLUSION

The utility of these services are not fully exploited by the developing countries. The developing nations lack adequate infrastructure facilities to make use of the technological advances applied in information handling. It seems to deprive the developing countries with information access to the sophisticated and wide range of information resources in different disciplines. However, the situation has improved recentily, particularly in India, and that is quite encouraging for the user community. Information could become 'value-added' data only if delivered to a user at the right time and also in a consumable form - solution to a problem. Moreover, it is believed that even at 2000 AD. conversion to paperless society remains to be a remote phenomenon.

REFERENCES

1. Vardaman, George T. Effective communication of ideas. New York, Van Nostrand, 1970.
2. Dorkick, H.s. The ourlook of international information. American Review. V.27 (4), 1982, pp. 55-7.
3. Line, M.B. On the design of information systems for human beings. ASLIB Proceedings. v.22, 1970, p.p.320-335.

FIVE YEARS OF ON-LINE ACCESS CENTRE

V. G. DEODHAR*

ABSTRACT

This article has defined the online computerised information retrieval. It's history is also included. Indian Scene in the field of Online access is included in details. Centres such as NISSAT (effort (NACID) is gyam. Finding from NISSAT & cash flaw has also been tabloed. A statistical analysis has been conducted regarding Online Search, Vendorheisc distribution, break-up of search by Databases, cost analysis.

INTRODUCTION

Computerised information retrieval is now a well accepted mode of gathering information most upto date information with a span of over thirty years, on wide areas of knowledge ranging from science, technology, social science, business, trade company information to finance, news papers within a few minutes time by interactive searching and at a reasonable cost. Moreover many areas are covered with easy searching. For establishing this idea in user community, the efforts of NISSAT at National level, organisations such as NCL, BHEL, DESIDOC, CFTRI at local level and agencies like Informatics India Ltd. in propagating the idea, arranging users training programmes, seminars, lectures cannot be ignored. They are wholly responsible for the online information services in the country.

WHY ONLINE

Information is a commercially exploitable product. It has to be procured/generated, communicated and used properly. It is 'unscare' resource and continues to grow at an explosive rate. The tasks of locating and communicating information present the following problems.

- large volume of information causes overload at the processing end,

* Scientist, NACID, National Chemical Laboratory, Pune.

- increasing time lag between generating and publishing information
- interdisciplinary nature of growth in science poses problems in locating the desired information
- proliferation in the growth of primary and secondary journals present problems in bibliographic control
- language and other communication barriers

HISTORY

The concept of using machines for storage and processing of information can be traced as far back as 1960's. In late 1960's online bibliographic databases were made available as a byproduct of primary printed publications. The world's first computer produced periodical Chemical Titles-was introduced by Chemical Abstract Service (CAS) in 1961. It has covered 750 chemically oriented journals. Each article was indexed by author and keywords with a reference to the journal in which it has appeared. The computers were used for typesetting. Use of computers for typesetting made it possible to accommodate more material in a machine readable form. The creation of machine readable databases helped in providing alerting services. This was beginning of a significant change in information retrieval. The machine readable databases were manipulated further to produce a variety of products such as indexes in printed forms for manual searching. The 1970's witnessed the extensive use of computers in information handling.

The creation of machine readable databases like Chemical Abstracts, Biological Abstracts, Index Medicus by secondary information services coincided with the development of long distance telecommunication networks like Tymnet and Sprintnet in USA. The online search concept as in industry started when two organizations viz. M/S Lockheed under M/S Dialog Information Services in 1972 and M/S System Development Corporation (SDC) in 1973 provided software and necessary computing facilities to enable the database to be sorted and searched interactively in batch mode through telecommunication networks.

INDIAN SCENE

India is not behind in adopting new technologies in information handling. Dialog in 1972 and Orbit in 1973 introduced computerised

information retrival on commercial basis. In India INSDOC under NISSAT project arranged a demonstration of online access to the ESA/IRS database from terminals installed in Bombay in November 1976. Encourged with this successful demonstration, INSDOC submitted a proposal to the Government of India for setting up ESA/IRS terminals in India. However, the proposal to the Government of India for setting up ESA/IRS teminals in India. However, the proposal could not be implemented. During 1979-80 an experimental project was undertaken by the Information Centre for Aeronautics in NAL Bangalore to access ESA/IRS databases in online mode between Paris-Frascati and offline between Paris-Bangalore. In 1985 NISSAT launched a feasibility study for establishing online information retrieval centres in the country. This job was entrusted to CMC. Some other institutions also started using mechanical telex machines available in the organisation as common facility, for information retrieval. Informatics (India) Pvt. Ltd. Bangalore, an Indian company was instrumental in setting up online access centres in several institutions/concerns. Some of them were BHEL, DESIDOC, CFTRI and NCL.

National Chemical Laboratory (NCL) established contacts with one of the largest database vendor viz. M/s Dialog Information Services, Palo Alto, California USA, for interactive searching of international databases in 1984. The mode of access was telex. One year later similar arrangements were made with M/s STN International a subsidiary of Chemical Abstracts Service, Washington USA. Upto June 1988 this facility was for R and D work of NCL staff only.

EFFORTS OF NISSAT (NACID)

The changed scenario in information handling has also been well received in India. Both users as well as information providers are paying due attention to this development. National Government under NISSAT/Department of Scientific and Industrial Research (DSIR) has initiated to set up of five online access centres to use computerised database online in 1987. These centres are called as NISSAT Access Centres for International Datacentres (NACID) and are situated at the following places.

- Central Leather Research Institute (CLRI), Chennai
- Indian Association for the Cultivation of Sciences (IACS) Calcutta

- Indian National Scientific Documentation Centre (INSDOC) New Delhi
- National Aerospace Laboratory (NAL) Bangalore
- National Chemical Laboratory (NCL) Pune

During 1993-94 four more NACID centre have been established at

- Ahmedabad Textile Industries Research Association (ATIRA) Ahmedabad
- Centre for Cellular and Molecular Biology (CCMB) Hydrabad
- Kerala State Industrial Development corporation Limited (KSIDC) Thiruvanantpuram
- Victoria Jubilee Technical Institute (VJTI) Mumbai

The functions of these centres have been identified as:

a) To maintain the facility for online access to international database

b) To assist the users in actual formulation of queries and conduct the search

c) To conduct training courses and user orientation programmes in query formulation and search techniques.

d) To collect interest profiles form potential users and provide SDI services

e) To promote use of online interactive facilities and therefore to promote and communicate relevant publicity materials.

f) To recover costs from the users as per the policy laid down for the centre

g) These centre will cater to the needs of the country.

TECHNOLOGY IN INFORMATION HANDLING:

A vast array of electronic gadgets have been produced to store, organise and communicate the information world-wide at a very fast speed. The rapid advancement in computers, storage media and software packages for processing information has eased the situation considerably. It has been possible to convert large volumes of information and data available in abstracting and indexing services in science and

technology into machine readable form called Databases. The databases can be searched with the help of computers at a very fast speed. Advancements in telecommunication systems have made it possible to access these databases from a multiplicity of remote terminals and to establish online dialogue with the host computers for searching, retrieving and outputting the results.

In 1984 the NCL started online information services to in-house users. The mode of access was the common telex facility available in the organisation-a mechanical telex machine operating at the speed of 50 baud. With the approval of NACID at NCL by NISSAT a Message Communication Terminal (MCT) WIE Writer was procured for the centre. During 1989 telephone facility with ISTD became operational and the search became easier as the speed was 300 baud, six time faster than the speed of telex. The communication cost was on pulse rate basis doing 1990 Videsh Sanchar Nigam Ltd. Mumbai extended GPSS/PAD for Pune and the speed allowed incremented to 1200 baud. In addition to this the tariff was also revised from pulse rate to Rs. 4=00 per minute and Rs. 2=00 for 640 characters of volume. Due to increase in the communication speed four times and revising the tariff, the communication cost component of the search lowered considerable. The introduction of INET of Pune Telecom in 1991 the access cost. Implementation of the Phase two of INET the speed available now is 9600 baud. This will further reduce the searching time ultimately reducing the cost of the search.

National Information System for Science and Technology (NISSAT) Department of Scientific and Industrial Research (DSIR) Ministry of Science and Technology Government of India provided financial support to these centres Financial support was primarily meant for procuring equipment for online searching such as telex, PC, Modem etc. to engage additional staff to run the services of the centre; arrange training programmes for the staff of the centre; procure search tools and other related material, publicise the activities and give subsidy to users of the services. For NACID NCL NISSAT provided Rs. 11,84,327.00 as grant in aid from 1987-88 to 1994-95. During this period the centre earned Rs. 20,12,581.77. The following Table No. 1 shows the breakup of the Grants in aid received from NISSAT and the revenue generated by the centre. There is a steady growth in the revenue. The total amount of Grant in Aid is nearly half of the revenue generated by the centre.

FUNDING FROM NISSAT AND CASH FLOW OF THE CENTRE

Table : 1

YEAR	*GIA FROM NISSAT*	*CASH FLOW OF THE CENTRE*
1987-88	1,79,000.00	-
1988-89	2,43,000.00	2,000.00
1989-90	1,00,000.00	27,976.10
1990-91	2,08,470.00	1,51,550.00
1991-92	1,00,000.00	2,39,906.00
1992-93	1,64,400.00	4,34,532.57
1993-94	68,310.00	5,30,000.00
1994-95	1,21,147.00	6,26,617.00
Total	11,84,327.00	20,12,581.77

The centre engaged the staff to manage the activities, procured the equipment, search tools and has incurred an expenditure of Rs. 28,93,037.61. The breakup of this expenditure on different heads is given below in Table No. 2

Table : 2

Expenditure Head	**Amount**
Salaries to the staff	481061.14
Travel	59099.00
Supplies and Materials	306695.75
Airconditioner	22809.00
Equipment	162219.00
Furniture	25589.72
Operating cost	1835564.72
Total	2893037.61

PAYMENT MADE TO VENDORS

Table : 3

Period	Knight-Ridder Inf.		STN International		Avg Exchange Rate
	US $	Rs.	US $	Rs.	Rs.
1990-91	1191.05	22477.25	11015.84	211504.13	Rs. 19.20
1991-92	1400.21	37631.72	6474.24	179559.00	Rs. 25.92

1992-93	3064.82	98317.00	6929.97	217340.00	Rs. 32.41
1993-94	6579.12	206968.00	4631.36	119451.00	Rs. 33.19
1994-95	6484.21	211554.00	9584.33	302671.00	Rs. 32.17
Total	18719.41	576847.97	28635.71	1030525.13	-

The Table 3 above gives the statement of payments made to M/s Dialog, M/s STN International towards the payment of online search charges between 1990-91 to 1994-95. There is a steady increase in their bills which indicates that the services offered by the centre are being availed by the user community. The idea of "Information isfreely available but not free" or "one has to pay for information" is well accepted by the user community. Details of 1988-89 to 1989-90 are not taken in this table as that was the beginning of the centre and it was to establish it's identity as Access Centre.

Communication Charges Incurred

Table No. 4

Period	Amount in	Duration in	Volume in K
1990-91	12778.00	1398	33910
1991-92	15362.00	1220	52410
1992-93	19704.00	1544	66640
1993-94	25069.00	1722	76514
1994-95	56481.00	3982	452447
Total	129394.00	9866	681921

Use of GPSS and INET facility by the centre is on increasing side. Number of searches carried out and the time taken for the search and information downloaded indicates that in lesser time more and more information is being downloaded after carring out the search. This is ultimately resulting in lowering the cost for the search to user. Table 4 shows this.

The NACID at NCL Pune became operational in 1987. It was formally inaugurated on 25th May 1989 by Dr. L.K. Doraiswamy, the them Director, NCL. Since then the centres is conducting online searches regularly and about 3768 topics have been searched as given below. Telex, PSTN, GPSS and INET access modes were used. The centre has access to DIALOG, USA, STN International USA and Dataster Switzerland. The centre has acquired all the important search

tools and database chapters which are accessed regularly. The following table gives number of searches made from 1988-89 to 1994-95.

ONLINE SEARCHES CONDUCTED

Table : 5

PERIOD	NO. OF SEARCHES			
	IN-HOUSE	OUTSIDE	DEMO	TOTAL
1988 - 89	8	5	-	13
1989 - 90	150	94	18	262
1990 - 91	163	132	10	305
1991 - 92	135	175	15	325
1992 - 93	283	311	9	603
1993 - 94	355	548	14	917
1994 - 95	412	921	10	1343
Total	1506	2186	76	3768

VENDORWISE DISTRIBUTION OF SEARCHES

Table : 6

PERIOD	NO. OF SEARCHES				
	STN	DIALOG	DATASTAR	DEMO	TOTAL
1988 - 89	2	11	-	-	13
1989 - 90	103	141	-	18	262
1990 - 91	239	56	-	10	305
1991 - 92	269	49	-	7	325
1992 - 93	370	224	-	9	603
1993 - 94	524	393	-	-	917
1994 - 95	973	349	11	10	1343
Total	2480	1223	11	54	3768

BREAK-UP OF SEARCHES BY DATABASES (1988-1995):

During 1987-1995 over 100 databases were searched for requests. Chemical Abstracts (CA) ranked the top in the list. Over 2365 searches were made in CA followed by SCISEARCH (378), BIOSIS (196), DERWENT WORLD PATENT INDEX (187), MEDLINE (138), Registry/Chemname (124), Thomas Register (87), DERWENT BIOTECHNOLOGY ABSTRACTS (73), PTS (52), and Compendex (35).

Table : 7

DATABASES	STN	DIALOG	TOTAL
AGRIBUSINESS	-	6	6
AGRICOLA (10, 110)	-	6	6
AMERICAN BUSINESS DIRECTORY (531, 532)	-	4	4
ANALYTICAL ABSTRACTS	-	1	1
API ENERGY BUSINESS NEWS	6	6	-
APILIT	-	3	3
APIPAT	-	3	3
AQUATIC SCIENCE ABSTRACT	-	1	1
BEILSTEIN	19	-	19
BIOSIS	10	186	196
CA, CAOLD, HCA, LCA	2354	11	2365
CAB ABSTRACTS	-	13	13
CANCERLIT	-	2	2
CASREACT	2	-	2
CHEMICAL ECONOMICS HB	-	2	2
CHEMICAL BUSINESS NEWSBASE	-	4	4
CHEMICAL INDUSTRY NOTES	-	3	3
CHEM-INTELL	-	2	2
CHEMLIST	73	-	73
CHEMNAME	-	2	2
CHEMPLANT PLUS	-	9	9
CHEMSEARCH	-	3	3
CLAIMS/U.S. PATENT	-	59	59
COMPENDEX PLUS	1	34	35
CONFERENCE PAPERS INDEX	-	3	3
CONSUMER DRUG INFORMATION	-	1	1
CORPORATE AFFILIATION	-	1	1
DERWENT BIOTECHNOLOGY ABSTRACTS	-	73	73
DERWENT WORLD PATENT INDEX	-	187	187

DIALOG COMPANY NAMEFINDER	-	4	4
DIALOG COMPANY NAME FINDER	1	1	
DIALOG DIALMAIL	-	35	35
DIALOG JOURNAL NAME FINDER	1	1	
DIALOG PRODUCT NAME FINDER	4	4	
DIALOG PUBLICATIONS	-	4	4
DIALORDER	-	2	2
DIPPER	1	-	1
DISSERTATION ABSTRACTS	-	1	1
DMI/FI CONTRACT AWARDS	-	1	1
D AND B FINANCIAL RECORDS	-	1	1
EMBASE	-	11	11
EPO PATENT IMAGES	-	83	83
ERIC	-	4	4
FINDEX	-	2	2
FINE CHEMICALS DATABASE	-	1	1
FOOD ADLIBRA	-	1	1
FOOD SCIENCE AND TECHNOLOGY ABSTRACTS	-	2	2
GEOARCHIVE	-	1	1
GEOBASE	-	1	1
GRANTS	-	1	1
ICC BRITISH COMPANY FINANCIAL DATA	-	4	4
IHS INT. STAND & SPEC.	-	4	4
INPADOC	-	1	1
INSPEC	-	9	9
INTERNATIONAL PHARMCEUTICAL ABSTRACTS JANAF	1	-	1
JAPIO	-	2	2
KOMPASS ASIA/PACIFIC	-	44	44
KOMPASS CANADA	-	33	34
KOMPASS EUROPE	-	82	82

KOMPASS UK	-	45	45
MDF	1	-	1
MANAGEMENT CONTENTS	-	1	1
MATHSCI	-	1	1
MEDLINE	51	87	138
METADEX	-	1	1
MOODY'S CORPORATE NEWS	-	9	9
MSDS-CCOHS/OHS	71	-	71
NAPALERT	-	7	7
NISTTHERMO	1	-	1
NTIS	-	1	1
ONTAP CHEMICAL ECONOMICS HANDBOOK	-	2	2
ONTAP DERWENT WORLD PATENT INDEX	-	2	2
ONTAP EMBASE	-	1	1
ONTAP KOMPASS ASIA/PACIFIC	-	1	1
ONTAP MEDLINE	-	1	1
PAPERCHEM	-	2	2
PASCAL	-	1	1
PHARMACEUTICAL AND	-	2	2
HEALTHCARE PHARMACEUTICAL NEWS INDEX	-	1	1
PHARMAPROJECTS	-	2	2
PIERS EXPORTS (U.S. PORTS)	-	7	7
PIERS IMPORTS (U.S. PORTS)	-	11	11
PIRA	-	1	1
PSYCINFO	-	5	5
PTS AEROSPACE	-	2	2
PTS INTERNATIONAL FORECAST	-	6	6
PTS PROMT	-	39	39
PTS US FORECAST	-	5	5
REGISTRY	122	-	122

REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES SCISEARCH	-	378	378
SOCIAL SCISEARCH	-	1	1
SRCI	-	191	191
STANDARDS & SPECIFICATION	-	7	7
STNMAIL	3	4	7
TEIKOKU DATABANK : JAPANESE COMPANIES	-	1	1
TEXTILE TECHNOLOGY DIGEST	-	1	1
THE AGROCHEMICAL HANDBOOK	-	6	6
THOMAS REGISTRY ONLINE	-	87	87
TSCA CHEMICAL SUBSTANCES INVENTORY	-	6	6
ULRICH'S INTERNATIONAL PERIODICALS DIRECTORY	-	2	2
US PATENTS FULL TEXT	-	37	37
WORLD TRANSLATION INDEX	-	1	1
TOTAL	2710	1945	4655

TOPICS SEARCHED DURING 1.4.1990 TO 31.3.1995

The average search time has come down to 2.34 minutes from 4.9 minutes in Chemical and Biological Sciences group, to 5.36 min. from 10.3 in Medical Sciences; to 3.67 from 7.7 in Engineering Sciences and 5.92 min. from 8.0 in Trade/Business Group. There is a reduction in duration between 1/3 to 1/2 whereas the number of topics searched has been increased between 3 times to 11 times. The communication speed has raised to 2400 baud from 1200 baud. This shows that the staff has gained sufficient expertise in carring out the searches economically. The Table 8 below indicates this.

Duration

Table : 8

	Year	Topics	Duration (Min.)	Avarage
I Chemical and Biological	1990-91	273	1358	4.9

Sciences				
	1991-92	285	676	2.4
	1992-93	531	1148	2.16
	1993-94	858	1606	1.87
	1994-95	1016	2373	2.34
II Medical Science	1990-91	9	93	10.3
	1991-92	24	280	12.66
	1992-93	50	316	6.32
	1993-94	44	142	3.22
III Engineering Science	1990-91	7	33	7.7
	1991-92	9	70	7.7
	1992-93	9	149	16.55
	1993-94	50	135	2.77
	1994-95	43	158	3.67
IV Trade/Business	1990-91	6	48	8.00
	1991-92	11	45	4.09
	1992-93	13	136	10.46
	1993-94	180	281	1.56
	1994-95	66	391	5.92

Hits Per Topic

Table : 9

Subject	*Period*	*Total Hits*	*Per Topic*	*Topics*
I chemical & biological Sciences	1990-91	17357	63.60	273
	1991-92	13660	47.72	285
	1992-93	24263	45.69	531
	1993-94	18028	21.02	858
	1994-95	32547	32.04	1016
II Medical Sciences	1990-91	760	84.40	9
	1991-92	693	28.88	24
	1992-93	1325	26.50	50
	1993-94	1798	40.87	44
	1994-95	4606	88.58	52
III Engineering Sciences	1990-91	148	21.14	7
	1991-92	890	98.88	9

	1992-93	806	89.55	9
	1993-94	1702	34.04	50
	1994-95	222	5.16	43
IV Trade/Business	1990-91	93	15.50	6
	1991-92	43	3.9	11
	1992-93	54	4.5	13
	1993-94	806	4.78	180
	1994-95	1011	15.32	66

Online searching it is not always true that one should get the answer to his/her query. At times the negative result are needed to establish the claim. The table 9 above indicates the average number of hits per topic searched This table is included for the record's sake.

COST ANALYSIS

Table : 10

	period	Topics	Hits	Cost	Cost/	Cost/	Ex.Rat
I Chemical Biological Sciences	1990-91	273	17357	216991	797	12.50	18.60
	1991-92	285	13660	167085	585	12.23	25.92
	1992-93	531	24263	291617	549.18	12.01	32.41
	1993-94	858	18028	251606	293.24	13.96	33.19
	1994-95	1016	32547	234477	230.79	7.21	33.17
II Medical Science	1990-91	9	760	3579	397	4.71	18.60
	1991-92	24	693	11150	464.58	16.08	25.92
	1992-93	50	1325	20374	409.68	15.37	32.41
	1993-94	44	1798	9943	225.97	5.53	33.19
	1994-95	52	4606	28323	544.67	6.15	33.17
III Engg. Science	1990-91	7	198	2557	365.29	17.28	18.63
	1991-92	9	890	17658	1962.0	19.85	25.92
	1992-93	9	806	19950	2261.0	24.75	32.41
	1993-94	50	1702	33835	676.71	19.88	33.19
	1994-95	43	222	17629	409.98	79.41	32.17

IV Trade and Business	1990-91	6	93	2885	480.81	31	18.63
	1991-92	11	43	2781	252.82	64.57	25.92
	1992-93	13	54	4947	380.53	91.61	32.41
	1993-94	180	806	47755	265.30	59.25	33.19
	1994-95	66	1011	41508	628.91	41.06	32.17

The above table indicates per topic and per hit cost. The conversion rate has gone up from Rs. 18.60 to Rs. 33.17 the increase is nearly double. The per topic cost has gone down between one half to one fourth but in the case of Trade/Business category it is more than double. The reason being the high cost of these databases. The cost of hit per topic has also gone down to 1/4 incase of chemical biological sciences group but on increasing side inother categories. This is because of the high cost of these databases.

REFERENCES

1. V.G. DEODHAR and R.S. SINGH. Online Information Retrieval. A Chapter from Current Trends in Information Technology p. 109-122, New Delhi, 1993.

2. NISSAT Access Centre for International Datacentres (NACID) Progress Report (unpublished)

3. Government of India, Ministry of Science and Technology, Department of Scientific and Industrial Research - National Information System for Science and Technology (NISSAT) Detailed Project Report (1985-90) p.7-8, 47-49.

IMPACT OF INFORMATION TECHNOLOGY ON LIBRARY PERSONNEL: AN ANALYTICAL STUDY OF UNIVERSITY AND ENGINEERING COLLEGE LIBRARIES IN TAMILNADU AND PONDICHERRY

K. NITHYANANDAN*
Dr. MANORAMA SRINATH**

ABSTRACT

The present study has been aimed to examine certain vital questions which help to access the skills and attitudes of the employees towards automation and the oppertunities provided for the staff to equip themselves with the expertise in automation. The analytical study on staff of University Libraries and Engineering College Library in Tamilnadu and Pondicherry have been conducted. The institution wise distribution of respondents has been illustrated by a pie diagram. Various training programmes have been tabled.

INTRODUCTION

The widespread use of computer technology in every field of human endevour has emphasised the need to acquire expertise in handling computers. This phenomena has attracted the attention of planners, policy makers, academicians, professionals in every field of knowledge. Library professionals are no exceptions to this. The rapid growth of the potential users of the Library, their diversity of information requirements and information explosion has made the manual library operations increasingly inadequate and incapable of providing the relevant service. Hence, automation in dissemination of information has become inevitable. The innovation in telecommunication technology has made possible the transmission of information at such a great speed that the universe has been labelled as "Global Village". The promotion of the concept of Global Village dramatically increased the role of the libraries.

* Librarian, Pondichery Engineering College, Pondicherry-605 014.
** Reader, Department of Library Science, University of Madras, Madras-600 005

All the above factors triggered an awareness among the library professionals in India that equipping themselves with expertisein information technology, is very essential for their survival. It is not an exaggeration It is felt that the library professionals were facing the danger of losing their profession by the invasion of computer scientists in information management. Hence it was inevitable for the library professionals to acquire a sound knowledge in computerised information management. This fact has been evident from the increasing number of professionals enrolling themselves for participation in workshops and summer schools in library automation.

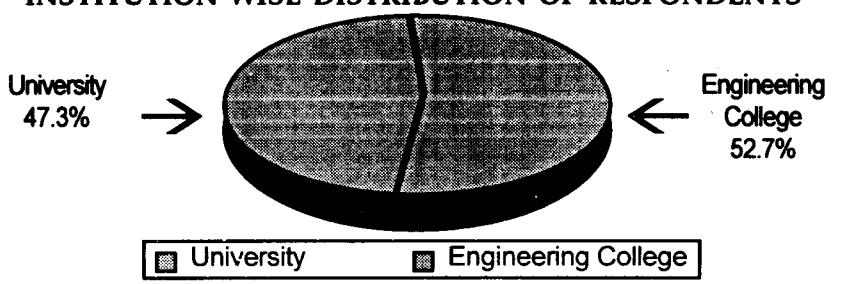
In the above context it is essential to assess the prevailing conditions in libraries regarding effective handling of information and the impact of automation in the functioning of libraries. The present study has been aimed to examine certain vital questions which help to assess the skills and attitudes of the employees towards automation and the relation between the organisational factors and the opportunities provided for the staff to equip themselves with the expertise knowledge in automation.

METHODOLOGY

Sample of the Study

This study concentrates on two different systems of library viz., Unoversity Libraries and Engineering College Libraries. The Library Professionals of these libraries are in three levels of management namely Librarian, Deputy Librarian, Assistant Librarian. Library Assistant, Professional Assistant etc. have been included as the sample of this study. Four hundred and seventy questionnaries were distributed out of which three hundred and seventeen individuals (i.e. nearly 67, 5% out of the total sample) responded.

PIE DIGRAM
INSTITUTION WISE DISTRIBUTION OF RESPONDENTS



Pie digram indicates institutionwise distribution of the respondents. It is seen from the pie diagram that out of two major educational institutions, the respresentation of respondents from the engineering colleges predominates (52.68%) over the respondents represented from the University Libraries.

Table - 1
Designation Vs computer courses undegone

Designation	Course undergone	Nature of course		Not undergone any course	Total
		Certificate course	Diploma course		
Librarian	48 (69.56%)	26 (54%)	22 (46%)	21 (30.44%)	69
Dy. Librarian	12 (75%)	4 (33%)	8 (67%)	4 (25%)	16
Asst. Librarian	32 (40.5%)	22 (69%)	10 (31%)	47 (59.5%)	79
Library Asst.	29 (45%)	15 (52%)	14 (48%)	35 (55%)	64
Technical Assistant	62 (70%)	20 (32%)	42 (68%)	27 (30%)	89
Total	183 (58%)	87 (47%)	96 (52%)	134 (42.2%)	317

Table 1 represents the number and percentage of the employees who have undegone computer courses. 67% of the Deputy Librarians and 69% of the staff who are designated as Technical Assistants have undergone diploma courses. Out of 317 respondents 183 i.e. 58% have undergone courses in computer.

It can be inferred that the higher level of staff such as Librarians and Assistant librarians have more opportunities for equipping themselves with knowledge in computer than the lower level of staff.

Table - 2
Designation Vs Training programme attended and its impact

Designation	Training programme	Impact Excellent	Good	Poor	Not applicable	Total
Librarian	40	22	8	10	29	69
	(57.97%)	(55%)	(20%)	(25%)	(42.03%)	
Deputy Librarian	10	6	1	2	6	16
	(62.5%)	(60%)	(20%)	(20%)	(37.5%)	
Assistant Librarian	32	21	6	5	47	79
	(40.50%)	(66%)	(19%)	(16%)	59.50%)	
Library Assistant	22	16	2	4	42	64
	(34%)	(73%)	(9%)	(18%)	(66%)	
Technical Assistant	64	7	31	26	25	89
	(72%)	(11%)	(48%)	(41%)	(39%)	
Total	168	72	49	47	149	317
	(53%)	(43%)	(29%)	(28%)	(47%)	

Table 2 shows that among five levels of designations nearly 72% Technical Assistants have attended the training programmes. Among them 31 respondents (48%) feel the training programme received by them are quite good in improving their knowledge in handling the computers. Next, nearly 58% of librarians attended the training programme attended by them as excellent.

It is inferred from the analysis that though more number of technical assistants have attended the training programme than their supervisors. Employees level of designation has no influence on their enthusiasm or urge in attending the training programme.

As per the table 3 it has been identified that overall 47.32% of employees opinion is that the management's encouragement for participating in training programme is adequate. But more percentage of the lower level employees (e.g. Library Assistant) seems to think that it is inadequate.

Table - 3
Table showing Designation Vs Employees opinion on managements encouragement for undergoing training programme

Designation	Adequate	Inadequate	No Opinion	Total
Librarian	52 (15. 36%)	12 (17.39%)	5 7.2%)	69
Dy. Librarian	10 (62.5%)	4 (25%)	2 (12.50%)	16
Asst. Librarian	42 (53.16%)	21 (26.58%)	16 (20.25%)	79
Lib. Assistant	23 (35.94%)	31 (48.43%)	10 15.63%)	64
Technical Asst.	23 (25.84%)	31 (34.83%)	35 (39.33%)	89
Total	150 (47.32%)	99 31.23%)	68 (21.45%)	317

As per the table 4 it has been identified that overall 47.32% of employees opinion is that the management's encouragement for participating in training programme is adequate.

Table 4
Table showing Designation Vs Employees opinion on managements encouragement for undegoing training programme

Designation	Adequate	Inadequate	No Opinion	Total
Librarian	52 (15.36%)	12 (17.39%)	5 (7.25%)	69
Dy. Librarian	10 (62.5%)	4 (25%)	2 (12.50%)	16
Asst. Librarian	42 (53.16%)	21 (26.58%)	16 (20.25%)	79
Lib. Assistant	23 (35. 94%)	31 (48.43%)	10 (15.63%)	64
Technical Asst.	23 (25.84%)	31 (34.83%)	35 (39.33%)	69
Total	150 (47.32%)	99 (31.23%)	68 21.45%)	317

Table - 5
Designation Vs Employees reasons for not having knowledge in Computer Training

Designation	Manage-ment not to depute	Non-Sanctioning of leave	Cannot afford to spend money	All the three reasons	Family Problems	Not Interested	Both	All the collective reasons	Not applicable	Total
Librarians	-	-	-	-	2 (2.89%)	6 (8.69%)	8 (11.59%)	-	69	16
Dy. Librarian	2 (12.50%)	-	-	-	-	-	3 (18.75%)	-	16	5
Asst. Librarian	4 (5.06%)	5 (6.33%)	3 (3.79%)	18 (22.78%)	4 (5.06%)	-	5 (6.33%)	-	79	39
Library Asst.	22 (34.37%)	6 (9.37%)	6 (9.37%)	5 (7.82%)	5 7.82%)	2 (3.13%)	2 (3: 13%)	4 (6.25%)	64	52
Technical Asst.	4 (4.49%)	3 (3.37%)	2 (5.40%)	4 (4.49%)	4 (4.49%)	-	12 (13.48%)	8 (8.98%)	89	37
Total	32 (10.09%)	14 (4.42%)	11 (3.47%)	27 (8.53%)	15 (4.73%)	8 (2.53%)	30 (9.46%)	12 (3.78%)	-	149

It could be observed from the table that the major reason for not talking part in computer training was unwilliness of the management to depute the staff, particularly the lower level staff such as Library Assistant and Technical Assistant etc. have been given little opportunity by the management. Next major reason is management is not willing to sanction leave for undergoing the training programme. Apart from these two reasons the otehr reasons such as economic constraint, family problem has been mentioned only by a very less percentage of staff.

In general, the staff have shown a keen interest in acquiring knowledge in the new technology spending their money even if the management is not willing to depute them. the staff who have not undegone the training said that the major reasons for not undergoing the training programme was the unwillingness of the management to depute them with salary.

Table - 6
Designation Vs Attitude of the employees regarding automation

Designation	Preference to work in comp.		Work made Easy			Speed of work is increased		Work load reduced		Accuracy of work			
	Yes	No	Easier	Harder	No Change	Yes	No	Yes	No	Less	More	No	Total
Librarian	59 (85.50)	10 (14.85)	49 (71.01)	11 (15.94)	9 (13.05)	49 (71.01)	20 (28.99)	61 88.40)	8 (11.60)	18 (26.08)	43 (62.32)	8 (11.60)	69
Dy. Librarian	12 (75)	4 (25)	10 62.50)	4 (25.00)	2 (12.50)	10 (62.50)	5 (37.50)	10 (62.50)	6 (37.50)	3 (18.75)	9 (18.75)	4 (56.25)	16 (25)
Asst. Libn.	61 (77.22)	18 (22.78)	52 (65.63)	20 (25.32)	7 (8.86)	52 (65.83)	27 (34.17)	52 (65.83)	27 (34.17)	23 (29.12)	42 (53.16)	14 (17.72)	79
Lib. Asst.	56 (87.50)	8 (12.50)	34 (53.13)	26 (40.63)	4 6.24)	34 (53.13)	30 (46.87)	36 (56.25)	28 (43.75)	22 (34.37)	36 (56.25)	6 (9.38)	64
Tech. Asst.	81 (91.01)	8 (9.09)	34 (57.30)	26 (6.74)	4 (35.96)	34 (57.30)	30 (42.70)	36 (60.67)	28 (39.33)	22 (15.73)	36 (48.32)	6 (35.95)	64
Total	269 (84.86)	48 (15.14)	196 (61.83)	67 (21.14)	54 (17.03)	196 (61.83)	121 (38.17)	213 (67.19)	104 (32.81)	50 (25.24)	173 (54.57)	64 (20.19)	317

Note : Computed figures in Paranthesis denote percentage

It is clear from the above table that almost all the levels of staff have shown keen preference in working in a computer based environment. Majority of them have registered positive answers regarding various aspects of automation such as job is made easier, speed of work increased, work load reduced and the accuracy of work is increased.

Table - 7
Designation Vs Employees opinion regarding introducing new technology

Designation	Like and Dislike			Need for Adopting new technology		Learning new things too fast			The paces with which the new technology adopted			Progress of the Library due to adoption of new technology			Total
	Enjoy-ment	Dislike	No onion	Yes	No	Yes	No	No opinion	Too fast	Too slow	Just right	Too fast	Just right	Too slow	
Librarians	49 (71)	6 (9)	14 (20)	62 (90)	7 (10)	60 (87)	5 (7)	4 (6)	24 (35)	15 (22)	30 (43)	21 (30)	36 (52)	12 (17)	69
Deputy Librarians	8 (50)	3 (19)	5 (31)	12 (75)	4 (25)	8 (50)	4 (25)	4 (25)	8 (50)	4 (25)	4 (25)	6 (37)	5 (31)	5 (31)	16
Assistant Librarian	47 (59)	12 (15)	20 (25)	61 (77)	18 (23)	52 (66)	14 (18)	13 (16)	30 (38)	28 (35)	21 (28)	10 (13)	31 (39)	38 (48)	79
Library Assistant	29 (45)	10 (16)	25 (39)	56 (87)	8 (12)	48 (75)	10 (16)	6 (9)	8 (12)	32 (50)	24 (37)	12 (19)	28 (44)	24 (37)	64
Technical Assistant	49 (55)	16 (18)	24 (27)	44 49)	45 (50)	71 (80)	5 (6)	13 (15)	14 (16)	57 (64)	18 (20)	25 (28)	12 (13)	52 (58)	89
Total	182 (57)	47 (15)	88 (28)	235 (74)	82 (26)	239 (75)	38 (12)	40 (13)	84 (26)	136 (43)	97 (30)	94 (23)	112 (36)	131 (41)	317

As per the table it has been found that 71% of the staff belonging to the highest level of hierarchy have expressed that they enjoy working with computer than the staff of other levels. But in general , staff in all levels seems to enjoy working with computer.

When the staff were asked whether the library should adopt new technology as quickly as they can afford to, most of the employees said 'yes'. When thery were asked whether they feel that they are expected to learn too many things too fast, most of them said 'Yes'. When they were asked whetehr they are satisfied with the pace with new technology was introduced in their work areas, most of them said it is 'too slow'.

When the staff were asked to evaluate the progress of the library due to the adoptation of new technology nearly 41% of the staff felt that the progress is "too slow".

Table - 8
DESIGNATION VS INVOLVEMENT IN DECISION MAKING IN IMPLEMENTING NEW TECHNOLOGY

Designation	Involvement in decision making on incorporation of new technology			Need for involvement of staff in descisions about acquiring new systems		
	yes	No	No opinion	Yes	No	No opinion
Librarian	100	-	-	80	6	10
Dy. Librarian	62	12	25	50	12	37
Asst. Librarian	62	26	11	77	7	15
Lib. Assistant	34	30	36	62	22	16
Tech. Assistant	26	40	34	43	38	19
Total	54	25	21	65	18	16

As per the table it is clear that involvement of the staff in decision making, in introducing new technology has been based on the hierarchical structure. Since the Librarians being the top management, 100% involvement of all the Librarians has been recorded. Similarly the Deputy Librarians who are in the next line of hierarchial structure have also been involved.

The staff in different levels have voiced their opinion that their suggestions must be considered while taking decisions regarding the introduction of new technology and in acquiring new systems.

AUTHOR INDEX

Abdul, Rashid 353
Abraham, J 211
Amudhavalli, A. 284, 427
Andhra Matha, K 36
Anuradha, P. 147
Arumugam, M 211

Baba, Abdul Majid 298
Balekar, R.S. 119
Bandopadhya, A.K. 1
Basu, Keya 12
Boonlia, Naresh 130
Burhanuddin, Mohd. 111

Chacko, Mary George 204
Chaubey, O.N. 418
Chaudhury, Deepika 106

Dabas, K.C. 24, 305
Dabas, Sheela 24, 305
Dalai, B.K. 341
Deodhar, V.S. 390
Dilli, K.T. 77

Floreace, C. 427

Ghatak, N.C. 46
Gill, N.S. 24, 305
Goswami, D.C. 66
Gupta, Sangeeta 412

Humayoon, Kabir 462

Ijari, S.R. 245
Joseph, B. 173

Kanakachary, M. 184
Kannappa Nair, B.U. 405
Krishna, K.M. 73

Mahendram, J. 211
Maheswarappa, V.S. 226
Manjukant, 291
Mathias, S.A. 384
More, Saraswati 18, 160, 273

Nandwana, H.B. 154
Nikam, Khaiser 138
Nithyanandam, K. 454

Padma 323
Panda, B. 57
Parameswaram, M. 86
Pawar, S.S. 374
Pharande, C.P. 279

Raman Nair, R. 432
Ramesh Babu, B 232
Ramesh, D. B. 341

Sahu, J.R. 341
Sangam, S.L. 94
Seth, M.K. 341
Shankar Singh 167
Sharma, C.V. 329
Sharma, Sarita 364
Sidharama Swami, H.S. 405
Samyuktha, R. 284
Srinath, Manorama 77, 454
Srivastava, S.C 240
Sunil Kumar 222
Swaminathan, S. 384
Swarnakumari, P. 193

Tadasad, P.G. 226
Thillainayagan, V. 258

Upadhyaya, V. 323

Venkataramana, V. 111
Venugopal, S. 336
Vijayakumar, M. 405
Vishwa Mohan, V. 102
Varatharajan, M. 111

SUBJECT INDEX

CD-ROM 412
Crisis Management 102

Database 405
Delhi 222
Distance Education 154
Document Delivery System 427

Extension Services 211
E-Mail 418

Financial resource 245

Gauhati university 106

Humanities 184

India 57, 94, 147, 167, 432
Information dissemination 329
-- management 298, 432
-- needs 106
-- policy 94
-- services 102, 119, 341
-- technology 291, 298, 305, 323, 336, 341, 454
Internet 384

Java 384

Karnataka 226
K.K. Handiqui Library 106

Librarianship 66
Libraries 12, 36, 46, 57
--Academic 193, 204, 222, 226, 232
--Central 119
--State 119
--Divisional 119
--District 119
--Rural 130, 147
--Power Sector 167
--Digital 446
Library automation 405, 418
--legislation 240, 245, 258
--personnel 454
--resources 106
--services 173
--system 24
Literacy movement 1

Malabar 86
Marathwada Library Association 273
Marketing techniques 138
Medical education 173
Multimedia 329

Nagarjun university 193
National development 24, 36, 46, 73, 119, 147, 204, 211, 226, 240
Networking 353, 364, 374

Online access 390

Pondichersry 454
Power development 167
Public library 77, 138, 154, 160

Rajasthan 154
Recreation 160
Risk 102

Society 12, 18
Socio-economic development 86
Sree Chitra Tirunal Institute 173
Standardization 232

Tamilnadu 77, 284, 454

Uttarakhand 66

IMPACT OF INFORMATION TECHNOLOGY ON SOCIAL DEVELOPMENT

N. S. GILL*
K. C. DABAS*
SHEELA DABAS*

ABSTRACT

Information is the most recognized resource for socio-economic, scientific and technological progress of mankind as a whole. During recent years, increase in information has led to increase in the demands of the users. Libraries are the major information centres leading to this information revolution. Due to prevailing financial and space crisis in alsmost all the Indian libraries, it is reasonable to think of promoting information technology to meet out the challenges posed by increaing information needs and exploding information. Sharing of resources by automating all library operations, using good means of communication and exchange of information, and for providing every needful service at these information centres is the timely action for optimum utilization of existing resources.

This paper presents the real meaning of information technology, its past and current developments, and its impact in the social sphere through its information centres (libraries). Resource sharing in contxt of libraries has also been appreciated and justified as it will save lot of foreign exchange, encourage users of library by providing the desired information of their interest at the lowest cost, maximum comfort and convenience. Emergence of various library networks and their need has also been discussed.

0. INTRODUCTION

Today, Information Technology is the most widely talked concept in all walks of life of the scientific world. Strictly speaking Information Technology is the modern science of gathering, storing, manipulating, processing and communicating information. Computer technology and communication technology are two main supporting pillars of this technology and the impact of these two in the information storage and dissemination is vital. It is next to impossible to deny the importance

* Assistant Librarian, M.D. University Library, Rohtak, Haryana, India.
** Lecturer, Department of Computer Science & Applications, M.D. University, Rohtak, Haryana, India.

of Libraries as information centres in the educational, cultural agricutural, scientific and technical disciplines of the world. Information needs are increasing day by day and today every person is intending to be information-oriented. Thus libraries have to be the main information centres. A library as an information centre is intended to meet the demands of the users for its effctive functioning. It is quite necessary and demanding to assess the users satisfaction with the available resources and modern services. Thus for entire satisfaction of the day-to-day users, the information centres have to be fully equipped with all types of facilities supporting and automating all the library services and operations/activities.

A new revolution, namely, Information Revolution (also known as Information Explosion) has shaken tremendously the society of the world. This revolution is bigger than its earlier Industrial Revolution. Information explosion may lead to even bigger social consequences than that of industrial revolution. The industrial revolution transforms the pre-industrial society into industrial society where we witness changes within a very short period which we could not even think in prior to 1800 years of known history. Now we have to witness more comprehensive and encompassing changes emerged as a result of information explosion. Information technology will work out its way as well as course of action. Parallelly this is related with the overall development of society. It has been noticed that financial and space crisis are prevailing in almost all the Indian libraries. It has become essential to think over it and to consider the ways of resolving this problem. One of the solutions is to encourage promoting inforrmation technology leading to sharing of resources by automating all library operations, using good means of communication and exchange of information, and providing every needful service at these information centres. Promoting resource sharing among the libraries in India as well as worldwide is possible by developing network of libraries, storing and disseminating information, and offering computerized information services to various types of users looking into their requirements. Investment in this direction will definitely bring the world to the table of your information centre. So, this objective is certainly a very good, timely and reasonable step in the right direction of social as economic development

Introduction of information technology has influenced very significantly our work culture. In the real sense, information people

are highly respected than the non-information people. The current development and advancement in the information technology has also brought the libraries and offices to homes as their work-places. Almost all types of organizations are going to change beyond their expectations. Information has also strengthened us in taking decisions in a more scientific way. Thus very fast technological change will definitely accelerate social development

1. INFORMATION EXPLOSION

The term information is not quite new but was coined in 1961. There are numerous versions of its definitions. There should be a common consensus about the information that information means knowledge. The information can be a bit or a para or a page or a book which enables an individual, a group of people or an organization to solve its own problems, finding its solutions and deciding course of action. Undoubtedly, there has been a tremendous growth of information in recent years which may be termed as Information Revolution or Information Explosion. Information explosion can be judged from the increasing production of books and literatures per year. According to some conservative estimates the production of books is about 60 millions per year in all languages around the world.

If we perform a survey of goods available in the market, we will find the information as a most unusual item. We have to deal with it very carefully. It is often costly to create but quite cheap to reproduce at different nodes of information centres. Information is identified as both national and international resource for socio-economic, scientific, cultural and technological progress of mankind as a whole. Even. the richer and technologically sound countries are not in a position to collect and deal effectively all the important information generated allover the world even in a specific field of interest. As we know that information can be easily shared, so it is often bought by organized grous such as libraries and then shared freely among the members of the library users. Here, the information technology has played a very positive role in this direction for managing all the library activities/operations and services. The switching to the use of digital technology for creating, formatting, storing communicating and displaying information has further accelerated the dissemination of information. Electronic reproduction and

distribution of information seems to be virtually costless especially in comparison with the costs of creating and formatting information in the first instance. Precious information may be of different types and thus comes in all sizes. It is the choice of a consumer at different times who wishes to acquire a unit of information as a small piece of information or in a very large size. Thus, we arrive at a conclusion that Industrial age has completely been replaced by information revolution and information explosion promises to change the routine of world.

2. DEVELOPMENTS IN INFORMATION TECHNOLOGY

We have already mentioned the Computer Technology and Communication Technology as the two main components of the information technology. Tremendous developments are taking place in both of these and is develping day by day. It seems that if these developments continue in future, it will certainly enrich the mankind to the extent they had never dreamed.

All schools, colleges and universities are making remarkable use of the increasing development of information technology. Increase in satellite channels dedicated to education and training has also benefited to the whole reader community by offering very cheap and quality education at a very low cost. Interactive training programmes through cable TV are also on the increase which is also a positive sign in the direction of information seekers.

Introduction of multimedia has thrilled the users of it. Honestly speaking, multimedia is a combination of text, graphics, pictures and animation. There are many certain applications in which the same was very much demanded. Use of multimedia has also been encouraged in many of the information centres also. Beginning of electronics universities wherein all the educational programmes are conducted through electronic media and satellite channels is also gifted by the fast developing information technology. Trainings based on Artificial Intelligence was also very demanding and the same is also a very good and significant mark in the development of information technology.

Now, let us discuss some details of the current developments in the computer technology as well as communication technology.

DEVELOPMENTS IN COMPUTER TECHNOLOGY

Tremendous development are taking place in the field of computers. In the computer technology both hardware and software are equally important. However, we will stress more on the computer hardware developments and less on software developments.

CURRENT HARDWARE DEVELOPMENTS

How fastly the computer hardware is changing, can be judged from the information needs and the technological innovations taking place in the surrounding. The following are some pertinent developments in the computer hardware:

- Increased memory, faster processors, cheaper mass storage, and overall reduction in price.
- Increase in parallel computing techniques in searching bibliographic databases.
- Use of specialized coprocessors for bibliographic information processing applications such as text compression and string matching.
- Popularity of PC-based networks over minis and mainframes.
- Development of lap-top and hand-held PCs with cellular in infrared networking capabilities.
- Increased use of speech and touch-sensitive screens.
- More usage of disk storage than tape storage due to decrease in price.
- Direct read after write is possbile using a digital disk having the size 12" which is laser written and laser read disk.
- Digital image processing (DIP) systems, similar to FAX machines but faster than, for processing large number of document images.
- Laser video disk which includes analog optical disk and reflective video disk.

CURRENT SOFTWARE DEVELOPMENTS

India has earned a good name in the software industry and is know world-wide today to its sharp and dedicated Indian brains. Developments on software side can be judged from the following :

- Wide use of UNIX, CASE tools and object-oriented programming.
- Acceptability of Windows environment (For example, Windows'95 is the latest window-based platform suitable for the new entrants).
- Visual Basic/C/C++ as the development tools for various applications
- Increase in full text databses with images/graphics, generative and cognitive-graphics.
- Introduction of Natural Language Processing and hypertext databases.

Software development skills are on the rise alongwith the suitable development tools. Parallely according to one of the United States survey more dollars are spent on maintenance than on software development. For this quantitative and qualitative studies are underway to develop a qualitatively best software product within a minimum cost. Besides, there is also lack of dramatic changes in software due to high investments of development and high costs of expert manpower.

COMMUNICATION DEVELOPMENTS

Communication technology is also changing very rapidly. This development can be judged from the following major technological innovations.

a) There is a very fast development in the traffic devices. Non-voice traffic, namely, data graphics through FAX, E-mail, and File-transfer, etc., are growing very fast than voice traffic, namely, telephones, telex, etc.

b) Packet-switching networks are quite popular and expansion of packet-switching networks has also led to fall in the charges of inland and international calls with continuous improvement in quality and range of facilities.

c) Value-added networks are also very popular. The increased use of the channels of value-added networks (VANs) for on line access to databases is really appreciable and its poularity is also on the rise.

d) Wireless communication systems are also within the reach of limited users. Some more advanced research is continuing in the development of wireless communication systems which will certainly benefit the user community.

e) Designing and development of intelligent pocket computers has also become the necessity of a certain class of users. Development of intelligent pocket-computers with built-in communication facilities are also underway and may be commercially available for use.

f) Use of PABX systems itself is very useful and use of PABX system connected to public telephone exchanges (e.g. CENTRIX) which successfully compete with traditional PABX systems is really appreciable.

g) Use of ISDN (Integrated Services Digital Network) is also gaining popularity in the network spheres.

h) Data transmission centres with lesser capacity were earlier available and recent further development of higher and higher capacity digital transmission channels is in pipeline.

This fast developing change in communication technology will heavily influence computer specifications because of excessively used on-line networks, which have become quite common today. There is also a lack of standardization in the field of telecommunication and still seems to persist.

FUTURE DEVELOPMENT IN THE AREA OF IMAGE PROCESSING

It includes the area of audio and video including digital optical systems. These systems are heavily desired in many applications. The area of image processing is the thrust area for computer researchers which have certainly satisfied the world with such gifts from time to time. This development is also expected to affect the working of the library operations to a greater extent. So their use is mainly more relevant to libraries. The following are some developments expected in the coming years in the area of image processing.

a) For archival storage of documents, microfilm systems will be replaced by document image processing digital optical storage which will be a great achievement indeed.

b) Use of electronic media is very much expected and thus replacement of 16 mm & 35 mm films with electronic media is almost expected.

c) Digital HDTV (High-definition TV) is also expected in the near future which will be enriched with most of the functions electronically.

d) Developments in the area of CD-ROMs is also continuing CD-ROMs are presently being used as a transfer medium but CD-ROMs with high performance searches in multi-user environment are very much expected in the near future.

e) CD-ROM networks with OSI (Open System Interconnections) architecture is also in the process and is perhaps may be available for use.

f) Introduction of portable CD-ROM readers and CD-TV was also initiated few years back and a great success has been achieved on this front also.

g) Presently traditional magnetic disks are in use in the area of video-systems but expectedly in the near future optical disk will dominate in this area also.

h) Interactive Optical Disks with sound, text and graphics are expected in the coming months and these will be extremely useful for libraries also.

i) Conventional video is also expected to be replaced by digital video which will certainly be enriched in its smooth and flexible functioning.

The technologies of optical video systems like CD-ROMs, are also included in the computers group by the books and periodicals on computer technology. In the field of journalism, IT is generally meant as a technology used for information dissemination which includes the technologies and systems like microfilms, CD-ROMs, microfiches, computers, information networks, etc.

3. APPLICATION OF INFORMATION TECHNOLOGY IN LIBRARIES

The library is the main information centre which can make use of the fast developing IT for the benefit of mankind as a whole. The librarian's preference of IT should include all those technologies which are expected to be used in the library activities/operations and other library services for: Collection, Processing, Storage, Retrieval and Dissemination of recorded information. The fast developing information technologies have showered almost every area of application including libraries. In case of libraries, these are of good use in the following environments.

a) Library Management

Library management include the following activities which will certainly be geared up by the use of these fast IT developments: Classification, Cataloguing, Indexing, Database Creation, Database Indexing,

b) Library Automation

Library automation is the concept of reducing the human intervention in all the library services so that any user can receive the desired information with the maximum comfort and at the lowest cost. The following are certain activities which can certainly be automated with a greater ease using the IT developments:

i) Organization of all library databases

ii) All housekeeping operations of library.

c) Library Networking

Now a days, use of networking concepts is on the climax and certainly it has to be appreciated after debating the benefits offered by the use of networking. Almost all offices are in the demand of getting the same implemented for proper use information as a resource starting from one node in India and the other node Overseas. There are various such offices, namely, Banking, Insurance Offices, Libraries and so on. In case of libraries, it can be used for resource sharing and information dissemination.

d) Audio-Video Technology

It includes photography, microfilms, microfiches, audio and video tapes, printing, optical disks, etc.

e) Technical Communication

Such type of communications include technical writing, editing, publishing, including DTP systems, etc.

If we watch all the above technological innovations in context of libraries, then we find the same worth going for it. In context to libraries, it has benefited in the following manner :

- On-line dissemination of information.
- Remote browsing of libraries through networks and teledelivery of documents.
- Increase use of CD-ROMS and other new portable storage media.
- Increase in image databases and multimedia publications.
- Availability of music or video material for listening and viewing.
- Reduction in technical processing of classification, cataloguing, and indexing etc.
- Availability of customized and user-friendly information retrieval systems.
    - It has become possible by the use of expert systems and hypertext methods.
- Increase is accuracy and relevance of the information.
- Excellent access to library database.
- Increase in library networks.
- Availability of on-line stock information and electronically placement of orders.
- Increase in library services as per the expectations of its users.
- Increase in value-added services of libraries.
- Improvement in retroconversion of catalogue data of major libraries into machine-readable format.

- Increase in use of non-paper (electronic/magnetic) and composite media.
- Increase of skills and positions of the library staff with the increasing IT develpments.

Information needs are increasing day by day. Libraries are the main information centres for the various types of users. Libraries have been growing very fast in number and size during the last four decades. They cater to the needs of various types of clients. There are various types of libraries catering to the needs of specific class of users and these are: Institutional Libraries, Government Libraries, Research Libraries, Public Libraries, Departmental Libraries, University Libraries, College and School Libraries, Kid's Libraries.

Different types of users may have different types of needs at different times. During the recent years, increase in information has led to increase in the demands of users. It has been noticed that in this era of information explosion, libraries in India are not properly equipped to handle and retrieve information effectively. Financial and space crisis still persists in almost all the Indian libraries. One of the good options with us it to promote the sharing of resources by automation & networking. With this objective in mind the efforts for the establishment of library network can be initiated. The main objectives of establishing such library networks are

I) To promote resource sharing among the libraries by developing a network of libraries, storing and disseminating information,

II) For offering computerized information services to users with at higher convenience and reasonable price

III) Coordinating efforts of suitable collection development and reducing unnecessary duplication in the library operations.

IV) Lubricating all the complex as well as ordinary services of the library.

V) Proper documentation and uniform information retrieval at different nodes.

VI) Reducing the overall efforts which would have been spent in absence of networks for developing individual library applications.

Promotion of such types of library networks is encouraged by NISSAT, Department of Science & Technology. Government of India, by providing lot of financial aids. For example, DELNET library network is the first operative library network sponsored by NISSAT.

HARDWARE REQUIREMENTS FOR LIBRARY NETWORK

Developing a good library network is a very difficult job. The following points need to be considered for successful establishment of library network:

- Number of participating libraries
- Applications areas
- Data volumes
- Future expansion/growth
- Networking needs
- Information needs of each participant library

For establishing any library network a feasibility study is conducted keeping in view the aforesaid requirements analyzed. Usually, it was observed that acquisition of hardware by the libraries should be directly related to the number of records created in machine readable form per year and not to the size of collections in libraries. For medium-sized libraries, it is suggested to buy Pentium-based machines to cover their database creation jobs. NISSAT also provides modems to certain libraries involved in the network which greatly help in the promotion of E-mail facilities desired by all libraries.

SOFTWARE REQUIREMENTS FOR LIBRARY NETWORK

Though it is not a very difficult assignment of developing an independent library network meeting one's requirement with the help of dedicated team of software developers and library experts but for the sake of uniformity it becomes necessary to organizeand create the databases as per the standardized norms which have been laid down after long and tiring deliberations. A couple of years ago, NISSAT used to distribute the UNESCO software, CDS/ISIS to the Indian libraries free of charge but at present may be providing at nominal charges. There are several software for the creation of union

catalogues e.g. LIBRIS software, developed by Frontier Information Technology Pvt. Ltd., Hyderabad. This is used for creating database of union catalogue of books for DELNET library network TECHLIBPLUS and BASISPLUS softwares developed by Information Dimensions, Inc. Of USA are also gaining popularity in library automation.

STANDARDIZING ATRIBUTES IN DEVELOPING LIBRARY NETWORK

Some uniform standards should be decided and implemented for the sake of uniformity as well as for maintenance service purpose. Some of the following standards are listed as follows:

a) Format of Input and Output,

b) Communication format for interchange of bibiographic data,

c) Authority Files

d) Language scripts into Roman script or any other script

e) Forms of headings : Micro-subjects, etc.

f) Bibliographic description : Mandatory & Optional data elements

g) Scheme of Classification and Subject Headings

h) Thesaurus

i) Search/Command Language

j) List of identification numbers, codes and abbreviations

k) Data input for Abstracting & Indexing.

For effective and successful networking, standard bibliographic data should be available in machine readable form with the participating libraries, so that the same can be accessed on demand within no time. So, the network should provide every possible and desired help to participant library in the areas including Acquisition, Serials Control, Books and Journal Maintenance, Circulation (Issue, Return, Reservation), User services, Creation & Maintenance of bibliographic databases, Hardware/Software Requirements, Union Catalogue Preparation, Current Awareness and SDI Services, Authority Data Compilation, Subject Profiles Construction, Abstracting Services, Inter-libray Loan and User Services, Document Transfer/Copying Facilities, and Access to Control, National & International Databases.

Various databases are created keeping in view the application areas the library network is intended to serve. Usually, on-line library networks will include the following databases :

a) On-line union catalogues of books in member libraries

b) Union list of Current Serials

c) Journal Master Database

d) Database of Indian Specialists

e) Multi-lingual Books Database

Using the above databases, it is possible to offer various types of on-line services including : Union Catalogue of Books, Union List of Serials, Indian Specialists : A Who's Who, Multilingual Books, Directory of Member Libraries, List of Standards followed by any new member library, Library Network Information.

Besides, it is possible to extend the facilities on the library network for offering other services like:

- Training Programmes on available library softwares.
- Providing reference facilities to participating libraries,
- Courier Services,
- Inter-Library Loan Service,
- E-mail Service,
- Video-Text Service.

There are also other services which are quite useful and these are :

a) Bulletin-Board Services (BBS)

Information about popular lectures/talks, conferences, seminars etc. which are organized by various institutions can be given on a bulletin board. A network offering this facility will provide a facility for posting notices about such events so that others can read them. Participating members can also highlight some breakthroughs achieved by them on bulletin board so that other members working on similar fields can respond and react accordingly.

b) E-Mail Services

E-mail software is installed in the computer for adding this facility on the network. Mail-boxes for library network members can be opened in the computer. Just by dialing e-maill number, one can post messages meant for others members and at the same time retrieve massages received from others. This service will be of particular help in case an institution wants to send notices/messages to several institutions. It is also suggested to subscribe to ERNET (Education and Research Network) and Internet so that the library network membes can exchange E-mail with others in India or even abroad.

c) Video Text

Home transaction systems use computers that take orders from thousands of customer terminals and respond by sending information to the customer. This is also quite useful at many times.

d) Video-Conferencing

For the various economic purposes it has gained the world-wide popularity. As a result of this, we can interact with different persons having same taste at different parts of the world. For example, if leaders from different countries are to meet at a place, using this technology all the leaders can interact with each other sitting in their own office. This interaction has to be coordinated by a person deputed for this purpose.

EXPECTED PROBLEMS AND SUGGESTED SOLUTIONS IN DEVELOPING A LIBRARY NETWORK

We human beings have become habitual of doing the job in the traditional way. Even after knowing that change is life still we resist in accepting a quite new assignment. Establishing a library network is also a such type of assignment. In the initial stages of developing a library network, the following problems may arise:

a) Inputs may not be received from various libraries and if reminders are of no use, then monthly meetings may help in this direction.

b) Due to non-availability of computers data may be received in either typed or handwritten. Further it may cover very less fields i.e. incomplete information, which need to be exercised again and again until it is up-to-date.

c) There may be non-availability of telephone connections in libraries which has to be subscribed even by putting additional efforts.

d) There may be short of funding and shortage of staff which is to be tackled somehow. We ahve to seek financial assistance from institutions like Planning Commission, UGC, NISSAT, DST, DOE etc.

e) Lack of supervision, coordination and cooperation among the staff members.

f) Library professional need to be trained in this area while the users are to be educated in the use of computerized libraries and information centres. This is an important activity without which library automation will not succeed.

INDIAN SCENARIO OF LIBRARY NETWORKS

Even after this tiring and tedious process of developing net works, a number of metropolitan library networks were initiated with the help of National Information System for Science & Technology (NISSAT), Department of Scientific Industrial Research DSIR), UGC (University Grants Commission), Department of Science & Technology, Planning Commission of India, Government of India, and were successful in this process. Among the metropolitan/city networks include.

a) Calcutta Library Network (CALIBNET)

b) Delhi Library Network (DELNET)

c) Bombay Library Network (BONET)

d) Madras Library Network (MALIBNET)

e) Ahmedabad Library Network (ADINET)

f) Pune Library Network (PUNENET)

g) Bangalore Library Network (BALNET)

h) Mysore Library Network (MYLIBNET)

Almost all these are doing their best and are adding more and more facilities from time to time as a result of rapid and fast technological development in the area of information technology.

4. CONCLUSION

In this paper we have discussed the serious issues intended towards the social development. The same issues have been and can be resolved with a greater easy and comfort by using the fast developing information technology. Information technology (IT) has benefited in many respects like resolving financial crisis by developing library networks and resource sharing, saving researcher's time by providing easier access to the desired information, resolving space crisis, reducing or eliminating duplication research efforts, meeting challenges posed by information explosion, satisfying increasing and varying information needs of the developing economy, etc. A small and comprehensive guideline has also been provided which may be of some help for the establishment of new library networks. It has also been stressed that one time investment in information technology in the major information centres like libraries will certainly bring a social change.

REFERENCES

1. REDDY Y.N. Impact of Information Technology on Libraries. University News. Sept. 1992, p.11-13.

2. KAUL N.K. DELNET : The First Operational Library Networks in India. DESIDOC Bulletin on Information Technology. 16, 2; 1996; p.24-34.

3. MURTHY S.S. Information Technologies in LIbraries - A Futuristic Perspective. DESIDOC Bulletin of Information TEchnology. 14, 5; 1994; p.3-12.

4. LOWRY CHARLES. Ed. Managing Technology : Creating An Open Market For Information. Journal of Academic Library. 21, 6; 1995; p.467-471.

5. KUMAR R.P. Frontier's In Modern Information Technologies and Public Libraries in India. International Library Movement. 12, 1; 1990, p.40-47.

6. SUBRAMMANIA M.S CD-ROM- A New Electronic Media For Document Storage and Retrieval. Herald of Library Science. 34, 1-2; 1996; p. 10-13.

7. HICHEY T B The Impact of Electronic Publishing On Academic Libraries. DESIDOC Bulletin on Information Technology. 16, 1; 1996; p.9-16.

8. YERKEY A. N A Course In Digital Libraries. DESIDOC Bulletin on Information Technology. 16, 1; 1996; p.31-39.

9. MURTHY S.S Library Networks in India-An Overview. DESIDOC Bulletin on Information Technology. 16, 1; 1996; p. 3-9.

10. KUMAR P & ARORA O.P. Information and Library Networks (INFLIBNET) Programme. DESIDOC Bulletin on Information Technology. 16, 2; 1996; p.11-12.

11. THAKBRE S.R Ahmedabad Library Network. DESIDOC Bulletin on Information Technology. 16 2; 1996; p.35-46.

12 RAGHVAN R & RAGHVAN J Notable Features of MALIBNET. DESIDOC Bulletin on Information Technology. 16, 2; 1996; p.47-56.

13. Mitra AC. CALIBNET : On strem. DESIDOC Bulletin on Internation Technology 16, 2; 1996; P 35-46.

INFORMATION DISSEMINATION THROUGH MULTIMEDIA RESOURCES

DR. CHANDRA BHUSHAN SHARMA*

ABSTRACT

A common reader today receives information through different sources of which the printed and the televised forms are the most popular. The proportion by which the print and television media have expanded within the last decade is unprecedented. The audio medium perhaps remains neglected with a back seat because it is inseparably assimilated by the television media.

The process of media integration had wide implications: video gained and audio lost rapidly. One such integrative technology was born not very long back in the form of hypertext and has within no time developed into 'hypermedia'. This medium assimilates the most widely used of media forms i.e. printed form with the most popular of media forms the audio-visual form. This all-encompassing multimedia technology has already made a privileged place for itself in the literate world. This paper examines the reasons for the unparalledled success of hypermedia in information dissemination and wholesome reader experience.

INTRODUCTION

Modern world is an information world. Research and development activities are pursued by a large number of people world over. Research is in progress in one or the other area of human activity at one place or the other. It is difficult to keep track of developments in all areas. Any person having access to the latest information is considered priviledged. Person having knowledge about the resources which contain the appropriate information is no less privileged.

Developments in telecommunications have made it possible to transmit information through the satellites and reach a particular person or through relay broadcast reach a group. It has become common to view a function being held thousands of miles away on our television sets or view a news-worthy incident exactly when it is takingplace. Developments in computer application conjoined with

* Head Department of English & Office-in-Charge, Central Library, Kota Open University, Kota (Rajasthan) 324 010.

the telecommunications has made it possible to transfer information through different media viz. textual, visual (still as well as moving), audio etc. to people residing in other parts of the globe within no time.

ACCESSING ON-LINE INFORMATION

The most frequently used utility on the network in the academic sphere is Electronic mail (E-mail). E-mail facilitates the messages typed by the user travel instantly over the network to reach the person sender has addressed to by typing his/her address. Different nations have their own networks but to reach someone abroad one has to approach the 'Internet'; a network which connects all networks. This transportation is made possible through the same medium which carries telephone messages. At the moment this process is quite expensive.

Because of the expanding infiltration of visual medium (namely television) in our societies literacy in visual medium has grown and we are accustomed to learning from the visual medium. To enhance understanding use of this medium is very important. In the sphere of audio the development of stereo system might have beefed up its popularity among music fans but its impact on information dissemination is debatable. Stereo-system pherhaps does not enhance communication content if we do not include different instruments and music as important. In that sense addition of colour is comparable to production of stereo system. Movie fans often like to view old classics but I have never seen a movie enthusiast viewing a sound-less movie. In movie world the invention of eastmancolour did not bring about as great a change as the additon of sound. The divinding line still remains the same - single medium versus bi-medium movie. The truth is that the combination of media to convey the message has acceleraed comprehension and communicability. The technology which has made possible merging of different media (besides other qualities) to be presented on the same platform is known as 'multimeddia'.

Computer scienntists (hardware and software) have together made it possible to mix informaion created in different media and then merge them to present before the reader/viewer on the same platform. Once the information has been created it can be rached to the readers through optical fibre network. French government has launched 'autoroute d'information'; in Canada 'Stentor' and in Britain

some American companies have been entrusted with the job of linking household through optical fibre network to provide wideband access. To connect households through optical fibre network instead of the traditional copper wire will enable multimedia traffic. Those who are fortunate to have access to networks and tools like Internet and World-wide-Web will be the champions of tomorrow. The success of private institutions has proved beyond doubt that parents and students are ready to pay for qualiity education. Bates (1995) rightly suggests "...private sector edutainment could cream off much of the money that now goes into student fees and the contract funding on which many public institutions have increasingly come to rely." Multimedia on-line information has already taken off and it is certainly going to beat all other media of communication but some nations particularly the less advanced are going to face resource crunch and may not be able to develop networks for information dissemination in very near future.

MULTIMEDIA CD-ROM

As an alternative to on-line information the Compact Disk (CD) technology has provided an alternative. Philips produced the first CD in 1985 and since then a number of agencies have started producing CDs. The quantum of information stored on this medium in these few years has already surpassed the information stored on other forms in many times this period. The complete Constituent Assembly debates and Parliamentary debates of India has been compiled on one CD weighing about fifty grams which for the last fifty years has been occupying space of large size shelves of our libraries. Similar other publications like newspapers (e.g. The Times, The Telegraph, etc.), large bibliographies (e.g. distance education database), dictionaries and the like which have only textual material have appeared in large numbers. These are strictly speaking not multimedia documents but only hypertexts because they provide non-linear access to only textual information.

Some documents e.g. Encyclopaedia Britannica which have been available to readers in the printed form for decades is now available in multimedia form stored on CD New dimensions have been added to the text. In reading about different scripts readers can hear the way a particular sound is pronounced by the native speaker. National anthem, names of prominent towns, forms of address and greetings besides the speech of a few prominent statesmen are 'merged' with

the write-up about that country. The information is not unfloded in a mundane manner but is provided on demand in the medium asked for. And all this has not come at any extra cost.

Encyclopaedia which used to cost, and the printed version still costs $800 is available for $50. To allocate eight hundred pounds for a set of encyclopaedia each year is not within the reach of libraries in the modern world of information particularly in the developing world. But dispensing with fifty poundsfor a new CD of the latest verion of encyclopaedia won't pinch the pocket. Increase in the number of users makes on line information costlier whereas increase in the number of CD-ROM users makes it cheaper. The production cost of CD-ROM has already climbed down. It requires only about three hundred pounds to produce a 600 Mb master disk with ten copies and every additional copy can be made for one pound.

DURABLE, QUALITY INFORMATION

Do we need a new version of the encylopaedia every year? Yes, if we want to be up-to-date on our information. It is not only important that the information is made available but what is important is that the information asked for is up-to-date and complete. Every day new information is added to all fields. Somewhere a coup takes place and the whole policy of the nation changes. A sports event of a region or the world is organised and new records are made. How long will a reader have to wait to get the complete information? Perhaps months. The news items appearing in newspapers, radio or television do not have complete information and they do not fulfil the conditions of 'Quality'. If publications like the Statesman Year Book or the International Who's Who can be considered quality information the reader may have to wait for a year. And even when the book arrives the reader won't be able to see the event in action.

Compact Disks are produced of 1-2 mm thick plastic of 12 cm diameter. It is a world standard agreed by Philips and Sony named as 'High Sierra Group' and the standard later awarded Information Standard Organisation (ISO) 9660. This means that any CD-ROM can be played on any machine produced by any company. CD can hold 600 Mb of data which is equivalent to 1,75,000 typed pages or 1,600 floppy disks. The CD carries the exact quality of the master copy unlike the other recording devices which have at least slight reduction in quality. In the context of modern nations with ancient civilisations

like India which has large collection of rare material on 'bhoj patra' and 'non-acid proof paper which has much shorter life-span information contained in these can be transferred through optical scanner on to CD ROM and made available to common users which is presently not possible. Reuse of the CD does not affect the quality as their is no physical contact made with the disk. Since the 50's when the magnetic tapes arrived the medium has been used for storing different types of information but the risk of losing the data has been great because of the life expectancy of the magnetic medium which is roughly one year. But with the invent of optical storage device (of CD etc.) it is expected the medium will be much more durable than the magnetic storage device. The only dangers to CD are from high temperature and humidity. High temperature and humidity can damage the CD by physically deshaping it or oxidize the protective layer. However dust and rough handling which used to be the commonest factors affecting the disks can do little harm to the CDs. CDs are also virus free and ae helpful where users are allowed to work on their own disks.

From the study it is apparent there is no paucity of information which readers in different parts of the country wish to access but because of high prices and also paucityof storing space it has not been possible to make available these resources. Compact disk technology has definitely made this possible. However, we should be aware that already the catalogue of CD-ROM has grown quite large and in very near future it will be quite difficult to locate and identify the most appropriate CD. The strategy for the libraries can be to procure CDs which require relatively less updating like the encyclopaedias, back issues of periodic publications and simultaneously acquire reference databses. It has been mentioned that CD-ROM is most useful in areas where large amount of data is required like bibliographies. Libraries should consider procuring CDs on areas which they cater to. For example the libraries catering to distance open education must procure the International Centre for Distance Learning CD-ROM. This is already an unavoidable source of information for open distance learning. The Distance Education Database (June 1996) has information on 31.694 courses offered by 986 institutions world-wide. The database has details of the courses as well as the institutions offering these courses. The database contains information on 8,733 articles published in journals or presented in conferences organised on distance education. The user can search for an article/paper author-wise or editor's name-

wise and the entry contains information on publications details including year of publication, a short abstract, accession number of ICDL library etc. The search can be made by any word of the author name, title or year of publication. The June 1996 version an update of the Distance Education Database (january 1996) has information added on 19 institutions, 562 resources, and 1,235 courses. This is perhaps the biggest database on distance education available at the moment.

LIMITATIONS

One of the most important and admirable quality of multimedia resources in the ability to hold large amount of data. It can carry large chunks of information. This has also become one of the limitations of on-line information. Even after spending hours the reader finds hardly any information worth the name. This is happening because users tend to put anything and everything on the network. Users are already getting overburdened by 'junk mail'. This is however not true of CD-ROM. Besides, sometimes because of bandwidth limitation it becomes difficult to traverse through Internet based transmission.

As mentioned CDs have been of great use in finding names of resources but still it has not been made possible to store all information on the CDs. The limitation of providing the actual resources breeds frustration in the users.The user cannot have access to the complete article because the database is already so big that there is no scope for including complete text of publications. The state of knowing about resources but unable to read it breeds frustration.

CONCLUSION

Everyone involved in the process of information collection and learning will wish to have access to multimedia resources available through the network either inside the nation or if funds permit internationally. This is because multimedia resources are capable ofproviding total learning experience which other resources are not. This is true of self learning situation as well as institutional set-up. However in the absence of the facility to be on the information super highway the best compromise is to procure and read from the CD-ROMs now available in abundance in the educational and information market.

Financial planning with CD-ROM will be easier than on-line communication. Hopefully our libraries will have affordable access to 'network' and our readers will be able to benefit from multimedia resources in the times to come.Till we do not afford to log on to the network the best compromise is to bank on the available CD-ROMs for the information.

REFERNCES:

BARTENBACH, BILL. 'CD-ROM challenges and opportunities : Issues of concern to librarians - An introduction' in INSPEL, vol. 28, no. 3, (1994) pp-298-36.

Bates, A.W. 'Strategies for the future' in Telematics for Education and Traning, Paul Held and Walter F. Kugemann (eds.) Proceedings of the Telematics for education and training conference, Dusseldorf/ Neuss, 24-26 November 1994.

Netherlands: IOS press. Pages 15-25.

International Council for Distance Learning (June 1996). Distance Education Database. Milton Keynes : Open University.

International Council for Distance Learning (January 1996). Distance Education Databse. Milton Keynes : Open University.

Sharma, C.B. Multimedia approaches to teaching literature. Unpublished Ph.D. thesis, University of Hull, UK. (1994)

INFORMATION TECHNOLOGY AND COMMUNITY DEVELOPMENT

PADMA V. UPADHYA*

ABSTRACT

The paper describes the role of information technology in community development. The process of community development involves decision makers, planners, and extension workers. The information obtained from block level infiormation systems is highly useful. Also discribes the sources, uses and services which may be offered by the BLIS. Concludes with the openion that IT may be used as tool to reach the unreached and make the development programmes a success.

1. INTRODUCTION

Any community does not exist in a vacuum. Our rural communities which is primarily based on agriculture and other farming products forms the large portion of Gross National Product. Eventhough our GDP shows a rapid growth, the living standards of the rural community is still below the margin. This shows that GDP alone can not be taken as a measure of growth. The development of the community mainly encompasses the following areas.

- ★ Agriculture
- ★ Health & Hygiene
- ★ Communication
  - i) Transport
  - ii) Postal/Telegraph/Telecommunication
  - iii) Mass Media
- ★ Education/Literacy, adult education, continuing education etc.

* Librarian, Manipal Institute of Technology, Manipal-576119

- ★ Indigenous Knowledge
- ★ Technology Transfer
- ★ Environment related awareness
- ★ Development Projects and Policies
- ★ Economic Issues like money saving, marketing etc.,
- ★ Political awareness
- ★ Water supply and sanitation

Therefore community development requires free and adequate flow of information to achieve national development and progress. Availability, transfer and utilization of right information by/for the right user at the right time will no doubt help to achieve the task of progress.

The computer a tool and product of information technology is the source which can play a vital role in performing this task of availability & transfer of information effectively and efficiently. The pace with which the computer technology is changing any organization can readily possess this tool for efficient planning & providing services to the concerned.

2. ROLE OF INFORMATION TECHNOLOGY & COMMUNITY DEVELOPMENT:

Community development is for the people and carried out by the people. In the whole process of development activity man is the prime concern who takes the decision to perform the task & accepts the task.

Thus the process of community development involves :

1) Decision makers, planners
2) Development program implementing agencies/organizations
3) Extension workers/field workers
4) Beneficiaries of the development programs & activities/ adoption of the innovations.

At present the information flow is only downward and the one way communication does not provide proper information about the

activities being implemented or to be implemented & its impact on the community. This has caused failure of the most of the development programs.

The major reasons for this are :

1) Informatin gap

2) Communication gap.

Hence Information Technology plays a vital role to systematically organize the data/information, enable to retrieve the required information and communicate to the right person at the right time. The IT has great relevance for Government & socio-economic development programmes.

The IT will encourage regional activities also aprt from centralized operation of the development activities. At present in India National Informatics Centre has emerged as one of the prime centre for Government Information & Activities. the network Of NIC is NIC NET. This network is based on the four Super Computers in four regions connected in a packet switched mode involving 60 terminals, 20 main frame in the state capitals & 400 micros in the Districts. CRISP-(Computerized Rural Information System Project) in and GISTNIC of NIC are the three network & system which function to, gather the data related to Government activities and other statistical information. Unfortunately these systems are not accessed by the rural community as their access is limited to the level of districts. Now with the advent of end user applications, it is the due time to adopt the computer at least at the block level, store the relevant data/information for the benefit of all the categories i.e.,

1) Administrator/planner/Decision Maker.

2) Institutions & agencies implementing the development activities.

3) Extension workers/field workers both Government & Non-Government.

4) End users/beneficiaries/adopter etc.,

3 WHAT INFORMATION CAN BE STORED, PROCESSED & RETRIVED FROM THE BLOCK LEVEL INFORMATION SYSTEMS (BLIS)

1) Statistical data relating to population, age, relegion, employment literacy, education, housing etc.,

2) Socio-Economic data relating to economic activity, social amenities like water, sanitation, communiction facilities transport, post office, telephone, recreational facilities etc.,

3) Agencies engaged in development activities like health, women development, housing employment etc.,

4) Environmental Information

5) Voluntary & NGOs engaged in development programmes

6) Agencies & Authorities funding the development programmes

7) Personnels available in the area

8) Field/Govt. workers engaged in the development activities

9) Systems followed in agriculture & farming

10) Rural medicine

11) To have indigeneous knowledge system i.e. In the community there are people having a great deal of local knowledge.

12) Information about government departments etc.,

All these information available in BLIS will be highly useful to all the catagories of user.

The IT will no doubt help to develop the BLIS at different blocks at Taluka level integrating the different areas coming under its perview.

The BLIS will then enhance the activities of NICNET, GISTNIC, CRISP etc.

The BLIS located at different blocks identified by the Government authorities can be integrated along with the other available information providing centres like Public Libraries, cooperatives, voluntary agencies, mass media etc for effective functioning. This integrated BLIS will then be connected to the district NICNET centre. This information

system will enable to save the time & labour and lead to effective & efficient decision making & proper utilisation of the human, animal, land & environmental resources.

4 SOURCES FOR BLIS

1) Persons-for developing indegenous knowledge source
2) Govt. bodies/institutions
3) Village panchayats
4) Educational instituion
5) Voluntary agencies/Non govt. organizations
6) Documentary sources
7) Published/unpublished Govt. reports/records etc.
8) Field/extension workers
9) Other private organisation intented in community development
10) Funding authorities/agencies for development programmes

5. USES OF BLIS

1) Administration/planner/decision making
2) Funding agencies/authorities
3) Organizations implementing the development programms
4) Field/extension workers
5) End user/adopter etc.
6) Development workers

6. SERVICES WHICH MAY BE OFFERED BY THE BLIS

Other than common library services sources the BLIS can enagage in provinding the following services to its community.

1 Couselling
2 Advocacy

3 Continuing education programme service

4 Referral

5 Reference Services

6 Outreach programms like

i) Demonstration Conducting exhibitions

ii) Video film show at different places creating awareness about litercy/education, health etc.

7 Publication services list of different types like statistical, pamphlets, brouchers etc.

i) Posters

ii) Directories

iii) General awareness programmes

7 CONCLUSION

In this information age, due importance must be extended towards the village community which forms the building of block for development. Their awareness to thei own programmes is essential to make it utlilise properly. IT may be used as tool to reach the unreached and make the development programmes a success. The Block level information system no doubt will help the activities by providing training information to the required. Therefore now it is our duty to see that government authority must make their effort to suggest and to develop the proper information system for their use to provide better service to the community and overcome the problem of information and communication gap to achieve the real success.

INTERNET AND JAVA: OVERVIEW

S. SWAMINATHAN*
S. A. MATHIAS**

ABSTRACT

This paper deals today's hot topic called "Internet and Java". It starts with basic concept of Internet and Its service provider called World Wide web. It gives statistics about the growth projection of the Internet and WWW. This growth projection Indicates that the Internet was not smooth sailing. But, In the summer 1995, a small High-tech electronics company called Sun Microsystems unleased a radical new programming language on the Internet called Java. Java Promises to break the different barriers of the Internet users. Hence, this paper concentrates its basic concept, software-architecture, compatability and its highlights.

INTRODUCTION

The Internet, a worldwide network of networks, connecting over 42,000 networks in 130 countries has about 70 million users worldwide and is expected to grow to 200 million by the year 2,000.

But surfing the internet was not smooth sailing. One could surf for hours at stretch and unable to find the needed information.

Enter Java the whole scenario is about to change. Java promises to break the barriers between different computer chips, allow programs to be compatiable with all operating systems and types of computers.

With Java adopted as the standard language for the internet and the world wide web. We are about to witness to next revolution in computing.

BASIC CONCEPT OF INTERNET

What is Internet. What does this connote to the common man? Is it hardware or software or a language? It's none of these. The Internet is a network of Interconnected computer systems spread

* Executive Co-ordinator, Tata Information Systems Ltd., Bangalore
** Asst. Librarian & Information Officer IIM, Bangalore

across the glob and is the largest network of computer in the world providing many services. This information super-highway enables the following.

1. Any one from any part of the world can connect to the net and access almost an unlimited number of databases.
2. Users on this global network can exchange electronic mail with one another, with message delivered instantaneously in many cases or in a few seconds or minutes.
3. People can talk to one another on-line.

WORLD WIDE WEB:

A major Information service provider in the internet is world wide web (WWW, W3 or Web). The major feature of the web is powerful and flexible underlying protocol able to carry multimedia data, and the ready availability of inexpensive user-friendly web Hypertext browsers. Browsers are user "Interface Programs" capable of presenting "web pages" (the collection of information transmitted at one time for display and interaction on screen) attractively on different kinds of computer systems.

The figures speak for themselves: In January 1993 the web had just become public and by March 1995 it represented over 4.8 TB of traffic permonth-a quarter of everything travelling on the Internet back bone.

The web and its browsers can support online services eg:

* Information retrieval in the form of text with layout, images, sound and video
* Hyper text
* Forms completion
* E-mail
* Rapid Integration with other applications

GROWTH PROJECTIONS OF INTERNET:

Internet is fast gathering more credence as it continues to grow. IDC pegged the population of the Internet users world-wide at 93 million by the end of 1996. By 1999, a compound annual growth rate of 39 percent

will increase the users to 200 million. Business users numbered around 30 million in 1994, and individual users totalled eight million. However, IDC estimates that the individual market is growing at rate of 59 percent while business use is growing at rate of 31 percent. In 1999, Individuals will account for 82 million Internet users.

WHAT IS JAVA

Java will turn Internet and its graphical sub-universe the world wide web into one giant computer. The net and the web will become a common storehouse for billions of data-plus-application units. One can download the required application from the net' into one's system, use it and it will be deleted automatically from the system after the use.

Java represents the holy grail of computer science-a universal global operating system. A programming language that allows one to pick up and choose applets from the internet, which are embedded on a web page and run the system.

Java is general-purpose, object-oriented computer programming language that offers special features along with the power and flexibility of the internet.

There are "Four" different types of programs one can write using java

* Applications
* Applets
* Content handles
* Protocol handles

JAVA APPLICATIONS

Java Applications are standard alone programs that require the assistance of the java Intrepretor to run. The hot web browser is an example of java application.

JAVA APPLETS

Are small applications that are embedded on the web pages. Applets are more security-conscious that java applications there are many restrictions on the behaviour of applets.

A Java applet requires a browser or another Java application to run. Java applets are given piece of screen real estate (in which to draw) and thread of execution.

Content handlers are protocol handlers and are special purpose jave programs that allow web browsers understand new data types such as quick time movies, voice recognition or photo CD data and new protocols like MIDI. These types of java programs make it possible for java-compliant web browsers to dynamically handle new type of data.

SOFTWARE ARCHITECTURE OF JAVA

The Java byte codes are independent of any underlying architecture. Character sets are unicode based for Internationally potable applications. If one uses certain I/O classes, one can render data portable on Java code. For examples the data input stream and data output stream classes utilise external data representation to normalise one's data to a network format. (In other words, data can be used by many different types of processor and machines) The portable java run-time system will soon be available, including solaries, windows 95 and windows NT, sun os4.1 and digital unix (osf/1)

COMPATABILITY WITH DIFFERENT TYPES OF SYSTEMS:

The microprocessor which is inside every computer understands only the machine codes. i.e. one and zeros. Programmers use what is known as source code. This source code is then converted into machine codes the microprocessor understands. However, this machine code varies from one chip to another. A compiler is used to exectute this conversion ro translation. This is usually done in the software developer's office. The translated version is what one buys as the software to be installed on the system to run it. Hence an application converted into the machine code for an Intel Chip will vary from the version for a motorola chip, which will be different from the version for spark workstation.

Java solves this problem of converting source code into machine code, which is known as the Interpretation, by a simple technique. Java is combination of a compiled and interpreted language. First the source code is compiled, using conventional system, into machine-cdee- known as byte code in Java language. While any other software compiled is different for different computers, the compiled version

of Java is identical for all computers. This byte code is actually compatiable with a computer that exists not as hardware, but software.

JAVA VIRTUAL MACHINE (JVM): JVM is an interpretor which converts the byte codes into the machine codes suitable for the specific chip of the computer being used. This eases the job of the programmer, developing programs. One need not worry whether the computer is an IBM pc, Macintosh, workstation or any other type.

SOURCE CODE
BYTE CODE FOR JAVA VIRTUAL MACHINE

INTEL PC	MACINTOSH	INTEL PC
WITH WINDOWS 95	SYSTEM 7.5	OS/2

HIGHLIGHTS OF JAVA

1. JAVA will enable the convergence of all the world's software and hardware platform into one. This means the user will no longer have to worry about the hardware, the CPU, or the software used on the pcs, machintoshes, workstations or minicomputers build around different mircroprocessors. A software application written in java-workprocessor or spreadsheet, multimedia tool or virtual reality designer-will run perfectly well on every computer.

2. JAVA will unite the two elements of computing that have always been separate in the past: Data and applications. Data in the form of business letters, design or charts is stored without any linkages to the applications like wordprocessing, spreedsheet or CAD/CAM programs that are needed to create, modify and manipulate. Java will not enable programmers to attach applications to the data and that they working on into a single piece of application.

CONCLUSION

In the near future, the use of Java will transform the net Into a despository where all the data and application software, a user needs, will be available. The saying the net is the computer will come true. Java will make all software compatible with all the hardware. Within short duration of its launch, JAVA has become the most popular interfacing software to hit the Net with almost 1,00,000 people down loading programmes.

REFERENCE

1. ROSE, MARSHALL T. Introduction to Internet Management 2nd Ed. USA., Prentice Hall, 1991.

2. DERN, D. P. Internet Guide for New Users. Newyork., Addison Wesley Publication, 1994.

3. HOFFMAN, PAUL E. Internet: Instant Reference. New Delhi., BPB publication, 1995.

4. LEMAY, L. Teach youself Java in 21 days. USA., Sams Publication, 1996.

5. ARNOLD, ENE. Java programming language. USA., Addison Wesley, 1996.

LIBRARY AND INFORMATION NETWORKING: CURRENT SERVICES AND TRENDS

ABDUL RASHID*

ABSTRACT

Resource sharing-by mean of Library and Information Networking has been described. Current services and their trends have been attempted. Access to central bibliographical databases & record supply has been explained. Trends Included order catalogue system, document deloping, distributed processing,.

INTRODUCTION

Libraries have been sharing resources with other libraries in the form of consortium, inter-library loans, etc. This enables users to access another libraries's materials which they need and which are not available in their own locality. This is the earlier form of library networking that librarians are very familiar with. In the same spirit of serving the users, libraries begin to explore new ways to cope with user's growing information needs. The advent of new technology such as computers and networks offer a new way of delivering users' requirement. Indeed, the computer network as a new tool has given library networking its new meaning" to support all forms of communication between libraries, between libraries and their users, and between libraries and their suppliers" (Smith, 1992, xii). The librarians' and the libraries' vision of serving the users is essential in uderstanding this emerging form of library networking as a challange towards more dynamic information and library services.

2. SERVICES

The interest over library networking centres around the wide range of services it can offer to the library and its users. The earlier systems have primarily served as a tool to manage the internal library

* Sr. Asstt: Librarian Regional Engineering College, Hazratbal, Srinagar-190 006

functions and have continuously expanded to provide various information facilities between and among libraries and other institutions. The discussion below provides a description of these two levels of services, within and among libraries. However, the internal services identified are not necessarily exclusive to an individual libraries operations, the growth of network services has led to an overlap between internal and inter-organisational services.

INTERNAL SERVICES

The brief overview in this paper has elaborated on the automation of library functions which have usually been undertaken manually. The library management systems (LMS) provide the facility to perform internal library functions such as acquisition, cataloguing, circulation, serials control, etc. This capability is actually expanding to cover other services like public information. Rowley lists down a comprehensive list of both traditional and new services available through the LMS:

"ordering and acquisitions, cataloguing, online public access catalogues, circulation control, and serials control, often with supporting modules dealing with management information, interlibrary loans, and other areas such as community information" (Rowley, 1993, 3).

Kimberley (1990) identifies additional features of LMS in Table 1. These include electronic mail, other office automation programs, downloading facilities, etc. Some of the packages included in this table have been selected from some of the popular systems identified in the market survey in 1990-91 (Blunden-Ellis, 1992). This table also highlights the varying capabilities of the different packages.

Table 1 Sample library management systems and their integrated modules

LMS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
CAIRS LMS	Y	Y				Y		Y		Y	Y	Y	Y	Y	Y			
CALM	Y									Y	Y	Y	Y	Y				
Tin LIB	Y									Y	Y	Y	Y	Y	Y			
Library PAC										Y	Y	Y	Y					
Sydney										Y	Y	Y	Y	Y				
Datatrek	Y									Y	Y	Y	Y	Y				

Source : Extracted from Kimberley, R. (1990) Text Retrieval, a Directory of Software

The delivery of these services are better enhanced with certain features present in LMS. They have varying attributes which determine the ease with which a package can be learned and utilised by the users, the facility of integrating it with other applications or using it on a different device. etc. The most recent generation of LMS provide more user-friendly characteristics with their user-defined reports and consistent, graphical user interface (GUI) for integrated modules (Table 2).

Table 2. Generations of library management systems

	Ist Generation	2nd Generation	3rd Generation
S/W Language	Proprietary	C, Assembler	4GL
O/S	Proprietary	Vendor-Specific	UNIX, DOS
DBMS	Proprietary	Proprietary	Entity-relational Object-oriented
Communication	Limited	Some interfaces	All standards
Import/Export	None	Limited	On-board
Hardware Platform	Locked	Vendor family	Multi-vendor
3rd Party S/W	None	Some	Unlimited
Reports	Fixed format	Fixed format	User-defined
Colour	None	None	Yes
Capacity	Limited	Improved	Unlimited
Module Integration	None	Bridges	Seamless
Architecture	Share	Shared	Distributed
Interface	Command-based	Menu-based	GUI-based

Source: Rowley, J. (1993) Computer for Libraries, 3rd ed.

In view of the trends towards seamless software packages, there are two main "thrusts" which program developers and vendors are looking into. These are: (1) search for standards that will enhance interoperability of systems and portability among different hardware; and (2) need for enhanced user interface which promote transparency of the network. There are some standards being considered, i,e, Search

and Retrieve (International Standards Organization or ISo standard) or Z39. 50, CD-RDx (CD-ROM Read Only Data Exchange), SFQI (Structured Full-Text Query Language) and DXS (Silver Platter).

Legend :

A	:	Downloading software
B	:	Electronic mail software
C	:	Graphics software
D	:	Image processing software
E	:	Spreadsheet software
F	:	Accounting software
G	:	Financial modelling software
H	:	Word processing software
I	:	Videotex
J	:	Acquisitions
K	:	Circulation control
L	:	Cataloguing
M	:	Open public access catalogue
N	:	Serials control
O	:	General DBMS
P	:	Other
Q	:	CD-ROM
R	:	Chemical structure software

These are intended to segregate the search interface from the database "in client/server architecture" and, therefore, allow users to access various databases using a common search interface.

INTER-ORGANISATIONAL SERVICES

The essence of the earlier forms of resource sharing is strengthened with the use of computer networks in libraries. Users and library staff are able to access more information from organisation within and outside their locality. These services may be categorised as "access to central bibliographic databases and record supply; interlibrary lending and document supply; acquisitions; information retrieval and online searching; and professional communication" Stone (1991, 133-135).

The first four benefits are closely associated with traditional library activities involving external groups for the purpose of providing

access to the catalogue, (facilitating interlibrary loan, answering reference questions, etc. The last item refers to a new facility which makes the library system a channel through which professionals can interact with colleagues for advancing ; their knowledge.

Each of these services are described below with some examples which are mostly drawn from the UK experience.

ACCESS TO CENTRAL BIBLIOGRAPHIC DATABASES, AND RECORD SUPPLY.

Copy cataloguing is cost-effective alternative for the library. The central bibliographic databases may be perceived as a collection of these existing catalogues which libraries can "copy" via electronics means. Through the library network, it is possible to obtain information from other bibliographic record databases `or' bibliographic record creation cooperatives". An example of these is Consortium of University Libraries (CURL) which provides access to an integrated database of UK MARC records from its seven member libraries. This system is centrally funded and therefore, provides free access to other Universities.

Remote access to other library's open public access catalogue is also part of this service. Many universities throughout the UK have made their OPAC's accessible through GANET. , UK's joint academy network. Using this academy network instead of "charged public network" or "private leased lines" is a cost-saving scheme. These academic ventures are beneficial in terms of cutting down and staff time dedicated to cataloguing. These resources may be utilised for other direct user service. Also, from the users and they are able to search through several sources of information from remote detabases without having to go there physically. One of the present difficulties though is that users need to switch to a different set of search commands or menus as they changed database.

INTER-LIBRARY LENDING AND DOCUMENT SUPPLY

Recognizing the limited budget for materials, libraries, best alternative is interlibrary lending. There is a facility in the computer network called electronic mail (or e-mail) which allows users to send messages to other users on the network. With e-mail, users can send their request to the libary. The libraries in turn can inform the users

about the status of their request using the same facility. The processing of requests can be done manually, i.e. forwarding a request from to the other library, etc. or through sophisticated online "reciprocal borrowing" (Smith, 1992, xii) between organisations.

In the UK, there are over 60 libraries which cater to interlibrary loan request via e-mail (Stone, 1991). This is efficient and effective in so far as handling requests internally, e.g. informing students about arrival of book, date, due, etc. However, these requests cannot be forwarded to the British Library's Document Supply Centre (BLDSC) via e-mail because of the UK Copyright Act. This Act requires the signature of the requester to be affixed on the request form for photocopies. This difficulty in implimenting a fully integrated library loan may be attributed to the unique role of BLDSC. Ninety percent of interlibrary loan requests are directly addressed to the BLDSC primarily because it is relatively easier than having to search through the various OPACS IN JANET which use different search languages.

ACQUISITIONS MANAGEMENT

Getting the materials at the right time, especially when users badly need it, is a real pressure in materials acquisition. The process of checking availability and placing orders may be done more efficiently through direct communication with booksellers and other suppliers using electronic data interchange (EDI). The use of EDI is becoming a trend in placing orders for any type of goods in general, not only library materials (Rowley, 1993, 41). An order can be directly transmitted from the library's computer to the supplier's computer system through a telecommunications connection.

The Book Industry Communication (BIC) is the group which is responsible for coordinating efforts in developing EDI in Europe. The standard which BIC developed for EDI implementation is already being used by 70 libraries using BLCMP. These libraries transmit and receive orders through BIC EDI formats (Rowley, 1993, 299).

INFORMATION RETRIEVAL AND ONLINE SEARCHING

Aside from the different libraries' OPAC's users can also access a wider range of databases. They can access local community-related information (social events and programmes and schedules, etc.) through some library management systems. There are also external services

including bulletin boards, mailing lists, electronic journals, other bibliographic indexes, etc. from business and non-profit organisations. These services may be available through online access or CD-ROM.

There is a growing number of remote databases availabel online, like DIALOG, DATASTAR. Accessing these through JANET proves to be more cost-efficient for the academic community. It also saves the user from dealing with any possible technical communication problems.

The issue of charging online access is important because it can inhibit users from searching these commercial databases. The academic community has its own scheme to lessen this negative impact. Library Staff are trained properly and accurately conduct search query for users. In the case of BIDS. (Bath Inforamtion and Data Services), individual users are free to access its Science, Social Science index, etc. This scheme encourages the users to utilise these databases more frequently. There is better information service with universities taking the central accountability rather than passing the charges down to the individual users.

Being able to download searched results is an important feature of doing online searches. BIDS provides a good facility in downloading retrieved records using the e-ail. There can also be problems like in the case of OPACS in JANET. Manual editing of downloaded search results is necessary to delete menu screens which are by default also included inthe output file.

The CD-ROM is a good alternative to expensive online searching, INSPEC, for example, is available on CD-ROM and online through DIALOG. The content of the CD-ROM version may not be as updated as frequently as the online database but the cost reduction associated with CD-ROM utilisation outweighs such limitation. With the networked CD-ROM, large databases are made availabe on a wider distribution. A survey in 1992 conducted by the Soth Bank Polytechnic indicated that sixty percent of academic libraries had already established or were planning to set-up CD-Network (AKeroyd, 1992, 3).

PROFESSIONAL COMMUNICATION

The e-mail facility is very useful in sending interlibrary loan requests and for receiving downloaded search results from online databases. In addition to these, it provides users direct communication

with their colleagues French (1990, 419) highlight that scientists initial source of scientific information, for example agricultural information, is people in the same field of study E-Mail provides this direct and easy access to a number of collegues within the same profession. This can be a very enriching opportunity to have regular exchange of ideas and experiences.

The bulletin board (an elextronic version of an ordinary bulletin board) is also a useful facility for this level of information exchange. For the librarians, there is the JANET User Group for Libraries or JUGL.

With all these services, the end-users can simply stay within their working areas and still satisfy their information requirements.

TRENDS

The libraries constantly aim to provide better services to their users. As such, efforts are being made to explore new technologies and enhance organisational links to mutually support these developments. Figure 1, highlights some of the significant trends in library networking, namely "cooperation among utilities, wider access catalogue, document delivery, distributed processing, and information chain" (Rowley, 1993, 300-302).

The two main entities as already identified by Smith (1992, xii) in the introduction (section 1 namely the users and suppliers, are presented in this figure as end-users and book trade/publishers, respectively. Libraries as an entity is shown as a separate entity although it is a component of the utilities to simplify the idea of distributed processing which is discussed below:

COOPERATION AMONG UTILITIES

Collaboration between and among utilities remains one of the driving forces in library automation. This becomes apparently beneficial in attempting to maximise the use of resources and to explore new technologies. Some of the examples include the Linked System Project in the US; UTLAS (University of Toronto Library Automation System) agreement to serve as OCLC" regional network affiliatge", joint project of RIG (Research Libraries Group) and OCLC on the formulation of "OSI (Open Systems Interconnection) library applications protocols (Rowley, 1993, 301); and BIBSYS; (University Libraries cooperative

in Norway) project on the use of OSI Store and Retrieve protocol (Husby, 1992, 37).

WIDER CATALOGUE SYSTEM

Having a different search language for each library's OPAC presents some difficulty for the users. There is a need for a common search interface so that it appears to the usersas if they are using a single database. This extends to making OPAC's and documents delivery appearing seamless to the users. There are several ongoing projects both in the UK and the US. In the UK, these include SALBIN (Scottish Libraries Cooperative Automation projet), CURL, LIBERTAS's Interlibratas Access and Transfer Module. In the US, example of these are CARL (Colorado Alliance of Research Libraries), MELVYL (University of California's Library System), ILLINET (Illinois Libraries Information Network) Online.

DOCUMENT DELIVERY

This refers to the delivery of full text document which is very important add-on to being able to access data. Several projects have explored the use of electronic delivery of the text of journal articles, like the American Association for the Advancement of Science, OCLC's delivery of electronic journal (Rowley, 1993, 302). Project Quartet in the UK investigated the workability of new approaches and applications for managing electronic documents (Truck, et, al, 1990, 257).

DISTRIBUTED PROCESSING

Utilities are finding means of sharing some processing to their participant libraries. Most of these utilities are still available through terminal-host arrangement. Research Library Group (RLG) and OCLC are standardising thier software which handles the "user interface, data manipulation and display facilities" so that this can be used in local work-stations. Thus their main computers will operate primarily as file servers in a wide area network.

The CD-ROM is another alternative in this development. The catalogue data can be downloaded onto a CD-ROM and then distributed. This has been introduced by ULTAS and Online Computer Library Centre (OCLC)

INFORMATION CHAIN

This relates to the expansion of relationships between publishers and book trade. Cooperation may vary depending on the type of materials such as book, electronic documents and journals, etc. The Book Industry Communication (BIC) for instance will be promoting "new standards for bibliographic databases" (Rowley, 1993, 301) that will satisfy the requirements of both libraries and book trade. There is a parallel effort in the US which involves the US Book Industry Systems Advisory Committee (BISAC). BISAC is developing a standard which will conform with the retail sector.

CONCLUSION

Electronic library networking promotes the basic concept of resource sharing among libraries to fully satisfy users' information requirements. Conscious of this fact, the new tools that bring in dynamic information services are better accepted and understood. With the computer network the users are provided access to more facilities and resources within and outside their local library. These developments materialise and are further improved not only through the advent of new technologies but with the concerted efforts of bibliographic utilities and libraries.

REFERENCES

1. AKEROYD, J. : The impact of networking on libraries *Serials* 5(2), 1992 p. 33-39.

2. BLUNDEN-ELLIS, JOHN: A market survey of library automation system vendors (1990-91). *Programme* 26(2), 1992 p. 139-164.

3. FRENCH. B. : User Needs and Library Services in Agricultural Sciences. *Library Trends.* 38(3), 1990 p. 415-441.

4. HUSBY, OLE: Sr-a protocol for open library and Information Systems" *In Smith, J.; Information Networking '93 using the network, proceedings of the first Annual Conference on Information Networking (18-20 May 1993, London* Meckler, 1993.

5. RASHID, A. : Implications of Networking on Library Services. *Proceedings of Impact of IT on Libraries; a national workshop. (6-11 August, 1995, Karnataka)* Karnataka, Surathkal REC, 1995.

6. RASHID, A. : Networking and Libary & Information Work . *Proceedings of the 20th All India IASLIC Conference 26-29 Dec. 1995, Lucknow) Lucknow, IASLIC, 1995.*

7. ROWLEY, J. : *Computers for Libraries,* London Library Association Publishing, 1993.

8. SMITH, JOHN W.T. (ed) : Networking and future of libraries: *Proceedings of the UK office for Library networking conference.* (2-5 April, 1992, London) London Mackler, 1992.

9. TUCK, BILL (et al) : *Project Quarterly, Library & Information Research Report 76, Cambridge,* University Press, 1990.

MAINSTREAM INFOTECH TO UNLEASH A NEW GLOBAL ECONOMY

S. VENUGOPAL*

ABSTRACT

The paper describes the role of technology. The infotech can help government systems become more effective in their day to day operations. The connection between economic development and information infrastructure development will be so compelling that developing countries will have to invest in this area on a war footing basis. Concludes with the recommendation that developed countries should not make use of the developing countries for marketing their own products.

ROLE OF TECHNOLOGY

In two pioneering essays published in 1956 and 1957, Robert Solow set forth a theory that *technology,* not capital or increases in the work force, *is the key factor in economic growth.* For more than three decades, his theory has influenced a generation of economists, and won him Nobel Prize for Economic Science in 1987 (Marshall 1987). As the Agrarian Revolution was overtaken by the Industrial Revolution, the latter has now been succeeded by the Information Revolution. While the Industrial Revolution transformed our understanding of human capacity in relation to energy and matter, the Information Technology (InfoTech) Revolution is transforming our understanding of human capacity in relation to time and distance. And moreover, the faster and more pervasive flow of information across the planet suggests that knowledge and inforamtion are destined to constitute a more important production factor than labor, raw materials, or capital. These two features of the technological revolution are already visibly revolutionizing business practices and they promise a less visible, but still crucial, social revolution in the future (Richard 1996). Observing keenly the impact of Infotech on the society, Drucker (1994) has predicted an economic order in which knowledge not labour or raw material or capital, is the key resource; a social order in which

* Bharathidasan University Library, Tiruchirapalli-620 024, India

inequality based on knowledge is a major challenge; and a policy in which government cannot be looked to for solving social and economic problems.

INFORMATION EDGE

Knowledge, more than ever before, is power. A country that can best lead the information revolution will be more powerful than any other. The information edge is equally important as a force multiplier of "soft power". "Soft power" is the ability to achieve desired outcomes in international affairs through attraction rather than coercion. It works by convincing others to follow, or getting them to agree to, norms and institutions that produce the desired behaviour. Soft power can rest on the appeal of one's ideas or the ability to set the agenda in ways that shape the preference of others (Nye and Owne 1996). There are two conceptual problems with which the developing countries have not come to grasp, let alone overcome. First, they could not shake off outmoded thinking clouding their appreciation of information as power. In assessing power in the information age, the importance of technology, education, and institutional flexibility has risen, whereas that of geography, population, and raw materials has fallen. The second conceptual problem has been a failure to grasp the nature of information. All the information in the world will be of no avail, unless we can use it intelligently and wisely. The technologies provide the ability to gather, sort, process, transfer, and display information about highly complex events that occur in wide geographic areas. The explosion of inforamtion has to be harnessed for productive/constructive purpose of building a more humane, more just and more harmonious society.

LABOUR MARKET

A fast-changing society poses major changes for people who have difficulty adjusting to new situations, but it is a wonderland for enterpreneurs — those imaginative and energetic self-starters who can recognize emerging needs and create ways to fill them (Cornish, 1996). In recent years, entrepreneurs have developed thousands of new occupations. In the new economy, the job, as we know it, will cease to exist. While jobs evaporate; work will persist and be done by individuals hired for a particular project and assigned to that

project's team. Ours will be an economy of one-person organizations. Driven by technology and by the trend toward specialized knowledge in the work force, business organizations will have to become information-based. Information is data endowed with relecance and purpose. Converting data into information thus requires knowledge, and knowledge, by definition, is specialized. The inforamtion-based organization requires far more specialists overall than the command-and-control company we are accustomed to. The information-based organization will pose its own special management problems (Drucker, 1988) :

1. Developing rewards, recognition and career opportunities for specialists.
2. Creating unified vision in an organization of specialists.
3. Devising the management structure for an organization of task forces.
4. Ensuring the supply, prepartion and testing of top management people.

MANAGEMENT

Cybertech may reduce hierarchy in organizations. Even entry-level employees may communicate directly with the CEO, providing ideas for improvements as well as critiques. Infotech offers countless tantalizing possibilities, but to use it effectively requires finding the right equipment and giving the right people the right training. Managers stimulate their employees to think beyond tranditional job descriptions and parameters. Ideas and suggestions are sought from all ranks. Provincialism, elitism and territorialism are not acceptable. The company encourages cross-training for its workers and education for both employees and their families. All employees understand that continual efforts to gain knowledge and skills are valued by the organization (Ettorre, 1994). Successful managers of the future will have better people skills than the average executive today.

NEW AGENDA FOR DEVELOPING COUNTRIES

Ineffective government is one of the primary causes for the major development failures of the past decades. The infotech can help government systems become more effective in their day-to-day

operations. The increased access by citizens of developing country to information through low-cost, widespread communications systems will inevitably lead to greater government accountability, transparency, and even democracy. The major tasks that should get prioritized on the Agenda are: raising awareness to understand the significance of infotech to national interests, creating conditions for the supply of information infrastructure, creating conditions for the demand of information and ensuring the fulfilment of the needs of the most vulnerable groups.

Let the developing countries make no mistake that the infotech are not luxuries, but are stragegic factors of development. The correlation between economic development and information infrastructure development will be so compelling that developing countries will have to invest in this area on a war-footing basis. To attract private investment, developing countries will have to make serious efforts on two fronts: information-friendly and investment-friendly environments. Countries have to concentrate on developing infrastructure on the demand-side also, that is, in areas such as education, technical literacy, and computer literacy.

CONCLUSION

The mainstream infotech is bound to boost the economy of the country that realizes and exploits technological potentials. Japan, Taiwan and Koreas act as role models for business entrepreneurs. Undoubtedly, the infotech is a double-edged sword. The developing countries should assess their own strengths and weaknesses, and accordingly seize themselves of the unprecedented opportunities, and the threshod competitiveness is the major challenge. Strategic alliances are the only solution. Let us pause for a moment to the end result of liberalization in India. Many multinational organizations have established hitech industries thanks to the conducive climate. Here the accent is not on the capital, but on the technology. Development infrastructure (communication, electricity and transport) is the prerequisite, but involves massive investment. Precious little could be done without the friendly financial support from the World Bank. The developed countries should not make use of the developing countries for marketing their own products, for this process is bound to boomerang. Unless the living standards and purchasing powers of the people in the developing countries are improved, consumer

markets may not sustain. The developing countries could no longer push the infotech to the sideline, but to integrate it in the strategic developments. It becomes increasingly important for the developing country to enhance its ability to find, absorb, digest, and operationalize knowledge, and to become a learning nation.

REFERENCES

DRUCKER, F. "The Coming of the new Organization." Harvard Business Review (January/February). Reprinted in The American Review (April), 1988 pp.2-7.

DRUCKER, F. "The Age of Social Transformation". The Atlantic Montly (November), 1994 p.53.

ETTORRE, "Where will the New Jobs Come From?" Management Review (August), 1994 pp. 12-17.

GORNISH, "The Cyber Future: 92 Ways Our Lives Will Change by the Year 2025". The Futurist (January/February), 1966 pp. 1-15.

KIECHEL III. "A Manager's Career in the New Economy." Fortune (April), 1994 pp. 68-72.

LIBICKI, "The Emerging Primacy of Information." Orbis (Spring), 1966 pp. 261-276.

MARSHALL, "Nobel Economist: Robert Solow." Science 238, No. 4828 (Novembe), 1987 pp. 754-755.

McGEADY, "The Personal Internet: Ultimate Freedom, Risk, Responsibility." Harvard Conference on Internet and Society (May 29-31), 1996 pp. 1-7.

NYE JR. JOSEPH S. and WILLIAM A. OWNES. "America's Information Edge". Foreign Affairs (March/April), 1996 pp. 20-36.

RICHARD, "Connecting Developing Countries to the Information Technology Revolution." SAIS Review (Winter-Spring), 1966 pp. 93-107.

PRIORITIES IN INFORMATION MANAGEMENT SYSTEMS FOR AGRICULTURAL RESEARCH AND DEVELOPMENT IN INDIA

Prof. R. RAMAN NAIR*

ABSTRACT

The paper surveys the application of computer and communication technology to support information management for agricultural research, education, extension and development in India in the recent past under the support and leadership of CGIAR, ISNAR, ICAR and other organizations. Evaluates existing systems and points out the failure to modernise library systems to function as the heart of information systems as the caause of ineffectiveness of our major programmes in the field. Attitudinal changes required are discussed and suggestions for improving the situation put forward.

INTRODUCTION

Agriculture forms the backbone of our economy and despite concentrated industrialisation it is the source of livelihood for over seventy percent of our population. Agricultural research develops technologies that can increase food production and agricultural information systems access, store and disseminate the knowledge generated by research to the extension worker and also to the farming community. Dr. R.S. Paroda, the Secretary of Department of Agricultural Research and Education and Director General of ICAR has stated the importance of library and information systems in agricultural development in one of his recent addresses to agricultural scientists thus. As a concequence of rapid developments taking place in science and technology, there is a virtual information explosion the world over. For achieving an optimal utilization of these developments, it is essential that the scientist in the Indian National Agricultural Research System have a quick access and free exchange of information at local, national and international levels. The Global Village, Shrinking World, Digital Revolution etc are some of the

* University Librarian, Kerala Agricultural University, Trichur-690654

terms being used to describe the importance of information. In the fast developing world, time is a crucial factor and availability of timely information is necessary to provide cutting edge to provide the success of any research programme. Fortunately with the phenomenal development in computer technology we are in a position to accomlish the task of the information management so that the information is both integrated, and disseminated and shared.

The role of information in agricultural development was recognised in India even from the beginning of this century. Indian Council of Agricultural Research (ICAR) which is the apexorganization at national level for the promotion of science and technology programmes in the areas of agricultural research and education established in 1929 has generation of knowledge and dissemination of information as its main objectives. The following are its mandates.

* to plan, undertake, aid co-ordinate education, research and its application in agriculture, agroforestry, animal husbandry, fisheries, home science and allied sciences.
* to act as a clearing house of research and general information relating to agriculture, animal husbandry, home science and allied sciences and fisheries through its publications and information system, and instituting and promoting transfer of technology programmes.
* to provide undertake and promote consultancy services in the field of education, research training and dissemination of information in agriculture, agroforestry, animal husbandry, fisheries, home science and allied sciences.
* to look into the problems related to the broader areas of rural development concerning agriculture, including post harvest technology, by developing post harvest programmes with other organizations such as ICSSR, CSIR, BARC and the universities.

The explosive developments that occurred in the last decade in Information Technology created a growing awareness among those concerned with agricultural development also of the important contribution agricultural library and information systems can make to the farming community not only by increasing yield level of crops but also for alleviation of its economic status.

3. SUPPORT FROM CGIAR AND ISNAR

The initiative and support for the establishment of the agricultural library and information systems and networks in India as well as other developing countries came from Consultative Group on International Agricultural Research (CGIAR) and International Service for Naitonal Agricultural Research (ISNAR).

3.1 CGIAR

Consultative Group on International Agricultural Research (CGIAR) is an informal association of 48 public and private sector members that supports a network of 16 international agricultural research centres. One of those centres, ICRISAT, is located in Hyderabad in India. The world Bank, FAO, UNDP and UNEP are the co-sponsors of the CGIAR. The mission of CGIAR is to contribute through research to promoting sustainable agriculture for security in developing countries. ICRISATsupported by CGIAR is also part of a global agricultural research system. It also forms the nucleus of anf provide leadership in national agricultural information system in the subject areas mandatory to it.

3.2 ISNAR

International Service for national Agricultural Research (ISNAR) was established in 1980 at Hague within the framework of CGIAR which work for strengthening of national agricultural research systems in developing countries. ISNAR works closely with national agricultural research systems to develop adequate institutional structures and improved research planning and management capabilities. It gives stress to the effective management of the resources available to the country. Major areas of work of ISNAR are formulation of research strategies and policies, program development. resources development and management, monitoring and evaluation of research projects, ensuring that research results are tested by farmers, and the identification and implementation of effective linkages between national and international research activities.

During the last one and half decade of its existence ISNAR worked closely with national agricultural research systems of developing countries. ISNAR found that the weak library systems and the resultant ineffective information management in agricultural sector is a common feature of the developing countries. Facilities

for a two way flow of information between research and extension are found to be lacking or minimum. Linkages with university faculties of agriculture, public corporations and private sector are also not very efficient. Relationship of research systems with farmers; the vital component in research and development is extremely poor. ISNARfound that traditional library services in agricultural research, education and extension is to be converted to information systems providing effective services using computer and communication technology. This only can enable can enable national agricultural sector to utilise research results already obtained by the international agricultural research centres and other international and national organizations. Similar weakness was identified by Indian Agricultural Research System while reviewing the agricultural research of the second half of the eighties. Hence in the beginning of nineties ICAR started supporting computerisation of library and information services of research institutes under it.

Recently there is a growing awareness among those concerned with agricultural development of the important contribution agricultural library and information systems can make to the farming community not only for increasing yield level of crops but also for alleviation of its economic status.

4. AGRICULTURAL RESEARCH INFORMATION SYSTEM (ARIS)

In the beginning of nineties ICAR started supporting computerisation of library and information systems of research institutions established by it and also state agricultural universities with the aim of improving research management by bringing information technology culture to scientific community. For this ICAR has established a separate division clled Agricultural Research Information Centre (ARIC) at its headquarters. Under the division ICAR started the project called Agricultural Research Information System (ARIS) with the financial aid of World Bank for National Agricutural Research project (NARP). Collaboration among scientists in India, systematic access to research information available in India as well as in other countries, better project management of agricultural research and modernization of the office automation tools used by the scientists and administrators are the major goals of ARIS programme.

ISNAR gave the required guidance and technical support to ICAR for the establishment of ARIS. Initially an expert group consisting of members from ISNAR and ICAR was formed to formulate a strategy for implementing ARIS programme. The expert group conducted extensive visits to ICAR institutes and state agricultural universities to understand the information needs of agricultural scientists, assess how far the present library and information systems are effective in timely dissemination of required information, and to formulate plans to modernise and vitalise the systems. The grop gave a phased plan for implementation of the ARIS project. The expert group also examined the aspect of creating the ARIS network. It studied in detail the data communication alternatives available in India and gave necessary recommendations for a network that exist in close cooperation with other information systems and networks.

ARIS programme envisages point to point connectivity to all state agricultural universities, research institutions under ICAR, project directorates, national research centres and zonal research stations through a wide area network (WAN) using dial up, leased lines and V-SATs. Initially the proposed WAN will utilise the existing facilities of Educational and Research Network (ERNET) and National Informatics Centre Network (NICNET). Besides the infrastructural facilities ARIS consists of the following five information modules as per the plan envisaged.

* Agricultural Research Management Information System (ARMIS)
* Agricultural Research Personnel Information System (ARPIS)
* Agricultural Research Financial Information System (ARFIS)
* Agricultural Research Library and Information System (ARLIS)
* Training Manpower in the Field of Information technology

Financial aid of World Bank under NARP will be closed by 1996. But ARIS programme is of long term nature. Hence ICAR proposes to incorporate it in the National Agricultural Technology Project (NATP) to be funded by the World Bank. Provision for support will be there in the Ninth Plan also.

ARIS programmes implemented up to the present succeeded in generating a wide interest in library and information technology and also in the use of computers and communication equipments among agricultural scientists. ICAR has already established point to point connectivity for E-Mail to about seventy institutes under it. ICAR has also conducted several computer training programmes under ARIS project in the areas of data communication and networking, prsonal computer trouble shooting, E-Mail Windows, and also on procurment of computer and network equipments for enhancing the connectivity through wide area networks.

4.1 AGRICULTURAL RESEARCH MANAGEMENT INFORMATION SYSTEM (ARMIS)

ARMIS will provide information to research managers on different resources maintained under various databses using computerised management tools and software packages. It will enable generation of reports related to specific aspects that can facilitate decision making. Procurement of equipments and inventory, providing connectivity system operation and overseeing and information on parliamentary questions and answers will come under this module.

Explosive developments are occurring in information technology industry. Hence computer and communication hardware and software become obsolete within no time. So continuous upgradation of hardware and software acquired at various institutions under ARIS programme will be inevitable. ICAR has included about 300 Krishi Vegan Kendras in the list of sites to be connected with WAN for E-Mail and other services. Before long the connectivity will be extended to each and every scientist engaged in research in ICAR institutions and agricultural universities in the country. Providing point to point connectivity will require equipments such as UNIX and LAN servers, printers, UPS, VSATs, modems, routers and leased lines.

A local area network connecting about thirty computers has been already installed at ICAR headquarters. E-Mail and file transfer services are available between these nodes and ICAR institutions and 150 countries of the world through a UNIX server at present. The E-Mail addresses of all important officers of ICAR, about 70 ICAR institutes are functional. The remaining institutions will are expected to be connected within a shortwhile.

A number of VSATs have been installed in various ICAR institutes and agricultural universities for hooking to WAN and INTERNET. For effective utilisation of their capacity creation of local area network is a must which also serves another objective of providing connectivity to each scientist working in a particular institute. But many institutions lag behind in effectively utilising the systems and equipments allowed to them. It will be better if ICAR forms a group which evaluates and monitors the activities of receiving agencies. For smooth working of ARIS network ICAR proposes to develop its own resources. Initially help from external agency will be taken up. ICAR will be forming an Information systems unit which will be responsible for the day to day management of the network in order to ensure its high uptime and usability. It will also coordinate among ICAR institutes and universities to have free and useful information exchange over the network. It will be creating sub units in each of the campuses to take care of the local management without much dependence on external agencies.

4.2 PERSONNEL INFORMATION SYSTEM (ARPIS)

Under ARIS there will be a personnel information system and recruitment system of ICAR. Already a software had been developed for that purpose. Data of approximately 5000 agricultural research scientists has been entered in the databse. The databse will be updated continuously.Before long the system will be extended to scientists working in state agricultural universities and also for other supporting staff. A software for the recruitment system of the Agricultural Scientists Recruitment Board is also under testing.

4.3 AGRICULTURAL RESEARCH FINANCIAL INFORMATION SYSTEM (ARFIS)

Financial information system consistsof three areas namely monthly accounts, monitoring of grants to All India Coordinated Research Projects and General Provident Funds. Computerisation and consolidation of monthly accounts was undertaken to tackle the problems of monthly accounts from voucher level. Suitable proformas were developed and circulated by ICAR to institutes and universities. Based on suggestions received from them they were revised. Necessary codes were also developed for various institutes, accounting heads and funding sources. necessary software for voucher level data entry

was developed and distributed for generation of data to test run the programmes. A manual of computerisation of financial information was also prepared at ICAR.

The system for monitoring grants to All-India Co-ordinated Research Projects consist of three parts: budget allocation, release of grants, and audit utilisation certificate. Preliminary data in respect of budget allocations were collected from the concerned sections dealing with respective research projects, in respect of their sub centres and budget allocations. the data was codified after making a comprehensive list of institutes. A software has been developed for release of grants to universities based on respective demands. The financial information system developed under ARIS is being implemented at all ICAR institutes. A training programme on it was also organised at NAARM in Hyderabad.

4.4 AGRICULTURAL RESEARCH LIBRARY AND INFORMATION SYSTEM (ARLIS)

Agricultural Research Library and Information System (ARLIS) is envisaged as the most important module under ARIS programme. According to the Report of the Working group on Agricultural Research and Education for the Ninth Plan under the chairmanship of Dr. R.S. Paroda, modernization of libraries in ICAR institutes and State Agricultural Universities will be the major exercise to be carried out during the Ninth Plan. All libraries will be fully computerised and linked to the IARI library which has been identified as the National Agricultural Library.

In any education and research information system the store of information of permanent value exist in libraries. In all other division bits of information or raw information required at various stages of research process only will exist and the access processing and authentication can be manged by computers and communication systems with minimum possibilities. Quantum of storage of such information required at a time is also less. When the data processed there gives final result or product and the information is packed for future use it is transmitted to a permanent store which manages collections of knowledge by scientifically organising and disseminating it in time to support research and extension. Such stores which are the modernised libraries or information systems have to manage in

computer memories unlimited quantum of information. Those who manage such stores have to continuously watch worldwide generation of knowledge in areas on which specialists of the institution work so that duplication can be avoided saving valuable financial and human resources. So for keeping the knowledge watch, accessing information from electronic libraries world wide, organising and managing huge quantum of recorded knowledge collected in print and electronic memories, and for quick and efficient dissemination of required information highly sophisticated computer and communication hardware and software will be essential for the ARLIS.

Libraries have to become the heart of every institute and university campuses. IARI library is envisaged as the central hub of the wide area information network planned at present. Unless the information contained in the libraries could be put in the ARIS network effectively the sytem will be body without soul. Preparing databses of collections existing in institutes and universities is to be complted within a specified time limit if ARIS is to be fully effective. Thus automation of libraries and their networking will form a major part of ARIS. Of the estimated cost of 100 million rupees for ARIS fifty percent is proposed to be utilised for automating libraries and for preparation of electronic publications and databases to be stored in library systems. Ten percent of the amount is proposed to be utilised for training the required library and information service professionals and also training the scientists in searching retrieving their information from the modern systems. The remaining forty percent is meant for hardware software items and their maintenance.

4.5 TRAINING OF MANPOWER

Training of the scientists on the use of computer and communication equipments for various day to day activities and also retrieval of information required for research from libraries, databses and networks is nother important goal of ARIS. Besides this ARIS had to train library and information managers to access, store and disseminate information speedily and effectively to our scientific community using the tools and techniques of current technology. Under ARIs various training programmes are being planned for agricultural scientists, library and information managers and other technical manpower at institutes and universities. Besides this research

scholars and are to trained continuously, ICAR has already imparted training on day-to-day use of computers, networking PC trouble shooting, MS Windows, E-Mail, Information and library management, etc to more than 100 staff members working in institutes and universities.

Library and information system being the most important module of ARIS programme ICAR has given special emphasis on training library and information service professionals. A group of library professionals were already given intensive training at Hyderabad under ARIS programme. Besides this to keep the ARIS network running sufficient people from each campus also will be provided adequate training for setting up various information servers and online databses, and administration of Novel Netware to manage LAN and UNIX networks. This will also include training on management of modems, VSATs and routers, basic PC hardware configuration and trouble shooting.

5. INFORMATION SUPPORT FROM ALLIED SECTORS

Various information systems and networks exist in India under Government of India and other organizations. Some of the information systems specialise in specific areas of interest to the agricultural sector. Some covers agriculture and allied subjects and are also used at present by agricultural information systems. Some international organizations also offer information services in agricultural and allied subjects through their Indian offices.

5.1 NIC AND AGRICULTURAL INFORMATION

The National Informatics Centre Network started in the mid eighties under Planning Commission connects approximately 750 earth stations with links to all district headquarters and a number of public sector undertakings. It supports various specialised information systems and connects many agricultural universities participating in such programmes. Some of the important management information systems implemented by NICNET in agricultural sector are; agricultural census, agricultural input survey, agricultural commodity, prices movement and market arrival monitoring, crop statistics, seed management, fertiliser production and consumption, irrigation water deliveries, monitoring of reservoir levels, program monitoring for rural development, land records system management

of food economy, wheat and rice procurement, foodgrain stock and price, sugar information, public distribution etc. These information systems of NICNET are of immense value for agricultural research and development.

5.2 INFORMATION ON TRADITIONAL AGRICULTURE

General Information Service Terminal - National Informatics Centre (GISTNIC) is a project of National Informatics Centre (NIC). It has developed an electronic library on traditional sciences and technologies in India which is continuously updated and is accessible online. Two of the major areas covered by it are related to agriculture. They deal with the following areas.

* traditional Indian agriculture, agronomical methods, practices and implements.
* traditional irrigation, water resources management, and hydrology and ground water management.

The Gistnic database covers traditional irrigation methods, ground water direction methodology, canal irrigation, river irrigation, water lifting and distribution mechanisms, and irrigation of hilly areas and deserts. Traditional methods of testing and preparation of various methods of soils, preparation and preservation of seeds, pest control manures, plant propagation, traditional implements, post harvest process, agronomical methods, crop patterns etc are also covered. GISTNIC is an unique source of information for agricultural scientists who are concerned with sustainable development.

5.3 BTIS NETWORK

Department of Biotechnology under Government of India established Biotechnology Information System (BTIS) in 1986 for harnessing the scientific knowledge in various interdisciplinary areas of biotechnology and its dissemination to scientists working in several frontier areas at research and development organizations. It comprises specialised information centres in the following six identified areas of biotechnology.

* genetic engineering
* animal cell culture and virology

* plant tissue culture, photosynthesis, and plant molecular biology
* oncogenes, reproduction physiology, cell transfor mation, nucleic acid and protein sequences
* immunology
* enzyme engineering, immobilised biocatalysts, microbial fermentation and bioprocess engineering

To store and analyse information powerful computer and communication facilities have been established in the apex centre at Department of Biotechnology and at distributed information centres functioning at various universities and other institutions. The BTIS network provides facilities for E-Mail, interactive massaging, and file transfer, remote login, UUNET connectivity and Dialogue access. BTIS maintains various databanks on genetic resources required for scientists working in the areas of molecular biology and genetic engineering.

5.4 ERNET Support

Educational and research Network implemented by DOE with UNDP support has over four hundred organizations connected to it within India and also neghbouring countries. They include many agricultural research institutes, universities, organizations and specialised information systems at national and international level. Services of INTERNET can also be accessed through ERNET. There are also many other organizations and networks in India like VSNL, INET, etc., which offers network services and access to international libraries and agricultural information systems.

6. NEED FOR ATTITUDINAL CHANGES

Establishment of computer and communication networks and processing, transfer and access of data required for day-to-day activities and processes of research will not make a system an information system. An information system should have at its centre a store of specialised information organised for use. It is the responsibility of information service professionals working at such centres to access and collect information at these stores and disseminate information required for research without wasting the time and effort of the scientist.

The chances for positive information flow can be ensured only if appropriate linkages are established, and the responsibility for collection, storage and dissemination of information is entrusted to the group with specialisation in library and information science. In a developing country like India eighty percent of information of value to location specific research will be existing in traditional mediums only. At least for another decade printed publications will continue to be the most important means by which scientific links can be foged between research going on in different localities. Hence the people who manage libraries or information have to provide services belending the traditional and electronic mediums and methods. Unfortunately all these aspects are disregarded in most of the campuses in India where modern information systems are being established. In the enthusiasm given by the computer and communication equipments we often forget the purpose of those tools in an information system. But machines can do no magic. Automation of libraries is a preliminary for any research information system. Eighty percent of the existing knowledge. recorded in traditional mediums are to be documented in electronic mediums. Required packets of information should be acquired from worldwide stores cost effectively for our systems. Without all these an information system will be a system without any information of permanent value.

If an Agricultural Information System at the national level is to be really functional and useful the library and information professionals must wok in close cooperation with the scientists doing research in agriculture. While the scientist is an expert in the subject involved and can be expected to know which information is most relevant in a given situation the agricultural librarian or information scientist is an expert in the organization and management of information resorces.There is a need for better understanding of the role of librarians and information scientists. Identifying and entrusting to the librarians and information specialists their areas of activity has beocme very essential in our situations to extract maximum utility of the resources we spend for establishing information systems. Achieving a better understanding between the scientists and librarians is going to be one of the important challenges the decision makers in agricultural sector at the national level have to face in the coming days which will be market by explosive developments in information technology.

REFERENCES

1. ADIMORAH ENO. Problems of scientific information work in developing countries. Information Scientist, 10 (4), 1978.

2. BOSE P.C. National Agricultural Research Information System. In National Information Policies and Programmes. New Delhi : ILA, 1991.

3. INDO AMERICAN AGRICULTURAL LIBRARY SURVEY AND STUDY TEAM. Final Report on the ICAR institutes and agricultural university libraries. New Delhi : ICAR, 1969.

4. Indian Council of Agricultural Research. Annual Report 1985-1995. New Delhi, the author

5. KAUSHIK K.K. Agricultural transformation in a developing economy. New Delhi : Kanishka, 1993.

6. KERN K.R and JONES (RK). The need national agricultural research has for communication support. ACE Quarterly, 67 (4), 1984.

7. NAIK K.C. Agricultural education in India : Institutes and organizations. New Delhi : ICAR, 1964.

8. RAMAN NAIR R. Agricultural and Farm Information Network for Kerala. In HUman relationships in Librarianship. New Delhi : ILA, 1995.

9. RANDHAWA M.S. History of agriculture in India. New Delhi : IARI, 1983.

10. SARKAR G. K. Agriculture and rural transformation in India. New Delhi : OUP, 1995.

11. SINGHAL V. Handbook of Indian Agriculture. New Delhi : Vikas, 1995.

12. THORPE P. Impact of new information technology in the developing countries. Journal of Information Science, 8 (5), 1984.

ROLE OF ELECTRONIC AND COMMUNICATION MEDIA IN NETWORKS OF LIBRARIES AND INFORMATION CENTRES IN INDIA

S. S. PAWAR*

ABSTRACT

The role of electronic and communication media towards the Libraries Network alongwith Information Centre in India, has been described. The objectives of a library network is included. The communication Network such as NICNET, INDONET, VIKRAM has been described alongwith Information Network such as BTISNET, ERNET, CALIBNET, DELNET, INFLIBNET. Access to International Data Networking has been explained in detail.

We are now entering the era of advanced communication, when we will be able to communicate with anyone, any where, at any time. After 1980s a marked change in technological developments especially computers and telecommunications have come forward in various forms of electronic modes of communications. This paper gives a brief account of the various networks that are being developed in India using computer mediated communication facilities and of some Asian regional networks of interest to India.

INTRODUCTION

In the present world of expanding communication facilities, information is an extremely important commodity. The key role for information centres and libraries (LIC) in education and research demands that they must harness information technology (IT) to encourage the library users to make better use of traditional information resources and to develop new methods of access to information through varieties of services for attracting a wide range of users. Librarians are in a position to meet the challenges, and provide the information resources to the users with the help of ITs without any

* Librarian, CAS in Geology Punjab University Chandigarh-160 014

fear, frustration and failure. Multi-media (MM) is no longer a futuristic technology which is, not only available now but also, affordable. The kind of results till now a dream could be achieved through MM from point of information sale to market presentation, research, training, publishing, audio, video, audio-video production for information storage and retrieval (ISR). A MM is a unique development, both for library staff and the users.

The modern information communication technology has brought a revolution in various operations of libraries. Since 1960s libraries and information centres are using technology in general and computer in particular to automatic a vide range of administrative, public and technical services. Now the library world is being acclaimtised in computer environment for acquistion of documents, serial control, circulation control, indexing and abstracting, and information storage and retrieval. Thus computers and telecommunication has capabilities to transmit vast amount of information and data over long distance at high speed has provide a break through in the field of resource sharing and other forms of library networking.

RATIONAL FOR NETWORKING

Collection of a library could be broadly classified into two groups — one satisfying the core interests of the institution to which the library belongs, and the other serving peripheral interests. Faced with financial crunch, while a library could restrict acquisition of materials in the peripheral areas, it tries its best not to shed anything from its core acquisition list. Therefore, in a collective development situation, it is logical for a library to look up to other institutions for meeting its peripheral interest.

The collection in the libraries with the limited budget at their disposal, this approach holds promise of reading the drain on precious foreign exchange resources. Libraries in India subscribe to only about 18000 titles out of 50 thousands plus worthwhile science and technology journals, the approach could also help in extending the present base of journal acquisitions at the national level. On the other hand development of new horizons of knowledge and growth of interdisciplinary activities have stimulated differentiation and proliferation of demand pattern - adding a new lead to library and information services.

OBJECTIVES OF A LIBRARY NETWORK

A library network may have any of all of the following objectives:

- To rationalize acquisitions and to optimize utilization of information resources;
- To promote and support adoption of standards in library operations;
- To improve the efficiency of housekeeping operations; and
- To generate new services and to improve the efficiency of existing ones.

NETWORKING DEVELOPMENT IN INDIA

Though the utility and importance of networking were recognized at the governmental level about a decade ago. The commissioning of the communication satellite INSAT 1B has resulted in a number of applications, including broadcasting and data communications. Some of the factors responsible for the promotion and support of such efforts in development of library networking in India are:

- Growth in awareness of the need for resource sharing.
- All-round resource crunch
- Increase in computer installations or access facilities in library environment and enhancement of the skills of library professionals.
- Improvement in computer communication facilities within and across geographical regions, and availability of general data networks like NICNET, INDONET and INET.
- Creation of facilities for Electronic Mail by the ERNET, SIRNET (Network of the Council of Scientific & Industrial Research being set up by INSDOC.

The library network development in India has taken the following three broad directions :

1. Development of Metropolitan Area Networks (MAN) in cities like Bombay (BONET), Calcutta (CALIBNET), Delhi (DELNET), Madras (MALIBNET, Pune (PUNENET).

2. Development of country wide networks like the INFLIBNET (for university libraries) and DESINET (for defence laboratories).

3. Development of sectoral facilities like the BTISNET (Biotechnology Information System Network) etc.

COMMUNICATION NETWORK

NICNET

The network has been developed to provide computing and communications infrastructure for planning and decision-making by the Government. The network interlinks four regional nodes (New Delhi, Pune, Bhubaneshwar and Hyderabad all with NEC S-1000/10) with 32 nodes at State and Union territory level (Super mini ND-500, mins, super micros and LAN clusters), and 439 district headquarters (IBM PC AT compatibles).

The network applies spread spectrum multiple access techniques and uses C-200 series micro-earth stations (Model C-201 transmits at 9600 bps receives up to 9600 bps). The master earth station links the master and micro-earth stations. Within a city, leased data circuits and dial-up PSTN lines are used whereas, within a building, the terminals are distributed over Rs 2320 cables or dedicated lines using the drivers.

Besides handling of numeric management data, the NICNET has taken initiatives on STI as well. It has entered into a MOU with the National Library of Medicine USA and provides services on MEDLARS. The centre subscribes to a large number of databases on CD-ROM like COMPUINFO, OSHROM, Cancer-CD and collaborates closely with NISSAT and BTIS programmes.

INDONET

This is the first commercial computer network being evolved by the CMC Limited, Hyderabad. It is designed for intercity communication of data transmission. This networks has adopted IBM's system Networks Architecture.

In the first phase, its centres have been created at Calcutta, Bombay, Madras, Delhi and Hyderabad with the access points in the cities of Bangalore, Ahmedabad and Pune. It is expected its centres to grow to hundred within a year or two. It would operate as a STAR

Network with control point at Delhi using packet switching Technology for routing data from Central Station to other Centres. The Bombay node of INDONET has been connected to the international gateway of Videsh Sanchar Nigam Limited (VSNL), thereby facilitative entry to Public Data Networks of other countries.

VIKRAM

It is the packet switched public data network piolted by the Department of telecommunication Govt. of India. This network would consist of 8 switching nodes and 12 remote access points with its network Management Centre at Delhi. The nodes at Bombay, Calcutta, Delhi and Madras and other nodes and access points will be connected by telecommunication channels and switching nodes or exchange would perform the function of providing communication connection between calling subscriber and called subscriber. Also, it is planned to load NUCSSI database on INDONET and NICNET for on-lines search and retrieval services. The VIKRAM has already offered its infrastructure to NISSAT for pilot experimentation on library networking.

INFORMATION NETWORKS

BTISNET (BIOTECHNOLOGY INFORMATION SYSTEMS NETWORKS)

Under the BTIS programme, Microvax-II systems in 10 specialized information centres in genetic engineering, cell culture, virology, plant tissue culture, photosynthesis, plant molecular biology, oncogenes, reproduction physiology, cell transformation, nucleic acid and protein sequences, immunology and bio-process engineering are being linked through micro-earth stations and X.25 protocol. The network is also accessible through PCAT systems in user centres, 23 of which have been identified so far. The entire BTISNET basically would piggy back on NICNET for communication infrastructure.

ERNET

This is a computer Networks for academic and research community in India which started with 8 leading institute of Science, National Centre for Software Technology (NCST), and DOE. It aims at overing a number of scientific and industrial disciplines. The communication service offered by this network would include electronic mail, file transfer, remote long-on database access and bulletin board.

CALIBNET : CALCUTTA LIBRARY NETWORK

CALIBNET covers libraries in Calcutta metropolitan area. These libraries are clustered in the Jadavpur, Chowringhee, Rajabazar and Ballygunge areas. It also included medical libraries, National library and ISI. Here libraries are to be automated first and networked. It would automate the nodal libraries and create a library service organisation for providing global users services such as authority control, editing of shared catalogue and training and consultancy for libraries.

Within individuals libraries, the automated functions are cataloguing, serials control, acquisition, circulation and local user services.

The networking will provide globally, the current awareness series, SID, union catalogue and access to national and international networks.

The implementation plan has been divided into two phases.

First Phase: All institutions within the Jadavpur University (JU) cluster and some nodes of Rajabazar cluster such as Department of Radio Physics, Bose Institute and Saha Institute of Nuclear Physics are covered.

Second Phase: Ballygunga Science College, Medical Libraries, National Library, ISI and remaining libraries of Rajabazar cluster are covered. The target date for fully operational Phase 1 has been set as March, 1990.

The salient features of CALIBNET are as under:

1. Scope : Library Automation and Networking

II. Functions/ Modules: Serials control, Circulation, Cataloguing, user services, resources sharing - user services, access to National - PDN, Access to International - PDN, Document Transfer

III. Coverage:

	Phase I	Phase II	Total
Academic libraries	2	18	20
Medical libraries	-	8	8

	Research institute Libraries	6	-	6
	Govt. libraries	-	4	4
		8	30	38
IV. Configuration:	Mainframw	1	-	1
	Mini	-	4	4
	PC/AT	8	24	32

The connectivity of this network at Second Phase is shown in Figure 1.

DELNET - DELHI LIBRARY NETWORK

In February 1989, CMC Ltd. was entrusted with the job of conducting a feasibility study of DELNET. CMC carried out the study and prepared the report which was considered by a Steering Committee headed by Dr. S. Vardarjan in June, 1989. According to this study the Delhi will have the following features.

I. Objectives :

i) To enhance the level of service

ii) To enhance the scope of services to the end user

II. Function/ Modules :

1. At the library level

a) Acquisition and fund accounting

b) Serials control

c) Books and journals maintenance

d) Circulation

e) User services

f) Creation of bibliographic database

2. At global level

a) Union catalogue

b) CAS and SID

c) Authority control

d) subject profiles

e) Abstracts

III. Services :

1. Inter-library user services
2. Document transfer/copy facilities
3. Access to National/International databases

IV. Networking :

The data communication requirements in the system would be as under:

a) Process to Process Communication
b) File Transfer
c) Electronic Mail
d) Remote Logic

The library system which will provide wide information services are defined as Class A system. These will be connected to the Packet Switch with X-25 network interface. The othr library systems are defined as Class B system and these will be connected to the nearest Class A system. This Packet switching network has been shown in Figure 2.

INFLIBNET (INFORMATION AND LIBRARY NETWORK)

It is a computer communication network of libraries and bibliographical information centres. This project is a major national effort to improve capability in information transfer and access that provide support to scholarship, learning research and academic persuits. It is a cooperative network and will contribute to pooling, sharing and optimisation of resources facilities and services of libraries and information centres of various Universities, research and development institutions and national organisations like CSIR, ICAR, DRDO, ICMR, ICHR, AICTE, DOT, DOE. ICSSR Etc.

It is a major programme towards modernisation of libraries and information centres in India with application of computer and communication technologies. It is a multiple function/service network which would offer catalogue based services, database services, document supply services, collection development and communication based services.

There will be a national centre for managing over seeing and co-ordinating the affairs of the network and four regional centres which will maintain regional union catalogues apart from databases on projects, institutions and specialists.

At the sector level, U.G.C. information centres, NISSAT sectoral information Centres and other centres which perform national level functions and sevices in specific subjects/disciplines/missions would be included. The sectoral centres would acquire, create and access restrospective and current bibliographic databases and offer a variety of modern information services centres. In all, there will be 150 University libraries, 50 Post Graduate Centres/ autonomous colleges and 200 libraries of R & D institutions/Centres of national importance outside the University-system.

VIDYANET

VIDYANET is proposed as a communication/computer network to meet the needs of the scientists and research workers in the laboratories institutions of national importance in the country. Its basic objectives is to stimulate co-operative research day-today exchange of research information and the execution of joint projects and publications. It also intends to allow users to develop databases on specialised areas like biotechnology, super conductivity and supernova research.

It will be designed to link up institutional computers (Cyber, VAX, DEC, etc.) via telecommunication lines and to provide its users facilities like-transfer of files of any type of data, programme and documents, electronic mail, exchange of immediate messages, access to remote application, databases and libraries.

ACCESS TO INTERNATIONAL DATA NETWORKING

a) **International Chemical Information Network** has been created with the assistance of UNESCO/PGI and in co-operation with UNIDO. It is an international non-profit association of co-operating institutions and individual committed to international co-operation for promoting chemical information. its Secretaniateis now functioning at the first instance, it has published the selected Annotated Bibliography in chemical Information prepared by Y. Wolman of Hebrew University, Jerusallam.

b) **Asian and Pacific Information Networks for Medical and Aromatic Plants (APINMRP) :**

APINMAP should serve as a model for further development of international co-operation in medicinal and aromatic plants. Now

the computerised APINMAP, factual database has been organised with the following components; Plant names, ethnomedical uses, chemical constituents, biological activities and geographical distribution.

REGIONAL INFORMATION NETWORK FOR SOUTH AND CENTRAL ASIA (RINSCA)

Towards end of 1990 a joint meeting of the National co-ordinators for the Regional Informatics Network for South and Central Asia (RINSCA) and the Intergovernmental Informatics Programme (IIP). (RINSEAP) to evolve a lowcost Regional Informatics Networks for Asia and the Pacific with computer communication linkages and access to mutually agreed upon database.

6. SUBJECT COVERAGE

Most of the networks were initially desinnet to cover only science and technology. INFLIBNET is an exception because it is to cover university libraries which are usually multidisciplinary. DELNET also has some participants from social sciences and humanities. However, with the growth of multi-disciplinary activities, the boundaries between sciences, social sciences and humanities are fast disappearing. Therefore, it is expected that in due course the networks will not make such differentiation between subject coverage.

CONCLUSION

Keeping in view the information needs of the various researches. Research organisations, other special and business/commercial bodies some specialised networks covering the field-like steel, mines, banks, railways, airways, oceanography, tourism, etc. may be developed in India just to gain the benefits of modern information technology revolution. India has not yet grow to the desirable extent in computerised information infrastructure. A few Indian scientific and industrial research organisations are now experimenting with the application of information technology to ensure better utilisation of information resource through resource sharing the library networking. However, NISSAT has taken a very significant initiative for the application of computer and communication support services available to the scientists and technologists in India at par with those available to their counter parts in the developed countries.

REFERENCES

1. Accessing S&T Information: NISSAT emerges as key component. NISSAT Newsletter, 9(2), 1990.

2. ADAMS ROY J. Information technology and libraries a future for academic libraries, London, Croom Hlm, 188p., 1986.

3. BHARGAVA GD, Library automation: restrospect and prospect. (In SHARMA RK and TRIPATHI BP Eds. Information handling in libraries in 21st Centuries New Delhi, Ess Ess Publications, p. 17, 1988.

4. Biotechnology Information system NISSAT Newsletter, 9(3), p. 17-19, 1990.

5. Commission of the European Communities. Information market observatory of online database in 1989. Luxembourg: EEC. p.8., 1990.

6. Department of Electronics, India (1988). Project Education and Research in Computer Networking (ERNET): satellite communication requirements of ERNET Project. New Delhi: Department of Electronics. (Unpublished report).

7. Department of Electronics, India (Ad-hoc). Study team on Computers, Office Automation and Data Communication in Eighth Five Year Plan for Electronics Industry. Report Electronics Information & Planning, p. 130-148., 1990.

8. Development of an Information and Library Network (INFLIBNET): Report of the inter Agency working Group. (U.G.C., New Delhi) 1987.

9. GHOSH BK, National information network in developing countries with special reference to India. In: *Herald of Library Science.* V. 18 (1-2), p. 105-112., 1990.

10. LAHIRI A. and SUNDER SINGH BG. Bibliographic database and network, NISSAT Newsletter, 8(2), p.3-16., 1989.

ROLE OF E-MAIL IN LIBRARY AUTOMATION

O. N. CHAUBEY*

ABSTRACT

E-Mail is projected as the cheapest and fastest channel for disseminating information across the globe. Traces the electronic mail and its minimum hardware and software installation requirements and also explains its functioning. Discusses the Governmental and private e-mail services in India. E-mail applications to library and information services are examined. Points out advantages and disadvantages of e-mail.

0 INTRODUCTION

Electronic Mail (E-Mail) is one of the fastest growing segments of communication rivaling the growth that fax experienced in the last decade. Over the last 15 years fax communication has moved from the esoteric to become an expected form of communication. Fax numbers have replaced telex numbers and as LAN e-mail systems began to take hold as an internal means of communication, businesses have come to embrace this type of electronic communication as a means of communicating and corresponding externally with trading partners and others. While PC based LAN e-mail gained popularity as an efficient means of communicating and collaborting, the appearance of wide area network (WAN) commercial online services with user friendly, graphical user interface and e-mail services, enable user to communicate across time and geographical boundaries.

1. WHAT IS E-MAIL

Electronic Mail is the latest in the line of normal postal service, telex and fax system of communication. According to Encyclopaedic Dictionary of Computer Science :-

"Messages which are sent by one user and retrieved by another through an electronic service system, usually through telephone lines or radio transmission. Each user must know the other's identification

* Indira Gandhi National Centre for the Arts, Janpath, New Delhi-110001

number. The E-Mail service is instantaneous." According to The Hutchinson Encyclopedic Dictionary:-

"A telecommuncations system that sends messages to people or machines (such as computers) via computers and the telephone network rather than by letter."

E-Mail may be defined as the communication of textual messages via electronic means. It is used to create and transmit messages electronically addressed to an individual or a specified group of individuals. With its origin, it became an important computer-based network services available to e-mail user for sending and receiving information across the world.

2. **REQUIREMENT FOR E-MAIL:** following is the basic requirement to operate an e-mail system:

21. a PC (AT-286)

22. a Modem (With a Minimum speed of 9.6 kbps)

23. a telephone connection

24. a communication software

25. an account with any of the e-mail providers

There is no other special requirement, except that one serial port on your PC should be free for connecting to the modem. It is always preferable that your modem be of a reputed make (if you're buying one, consider going in for a 14.4 kbps modem. It should cost you around Rs. 10 to 15 thousand). PC AT-286 will work very slow thats why it is suggested that, it should be AT-386 for normal e-mail services.

The number of E-Mail software presently available, are quite a few, some relatively old and others quite new. Some of them are: UUMAIL, SMAIL, SENDMAIL, Z MAILER, MMDF, SVRA, MAIL, DELIVER, Procmail, Mailagent, UU HOSTS, Unpackmaps, Unshar etc. You can choose according to your requirements.

There are many e-mail providers in the country today-VSNL, Dart Net, Axcess, UU Net, Sprint RPG, Xee Mail, Icnet, Wipro BT, NIC etc. Choosing the provider will depend upon the nature and size of your institution.

3. HOW DOES IT WORK

All forms of communication take place between the communicator and the recipient through a communication medium. In most cases where the concept of storage is not there, the communicator, the recipient and the medium have to be in synchronous co-ordination to effect the transfer of the message, e.g., in a telephonic system the dialer, the telephone instrument, the phone line and the recipient have to be present at thesame time and co-ordinate their actions for effective communication to take place. But the modern E-Mail system permits communication between two parties without the parties actually being present simultaneously.

When we talk of e-mail network, we are actually talking of two networks : network of people and a network of computers. The network of people has a unique identity by which he/she can be addressed. This is known as his/her e-mail address. The e-mail address consists of two components. The first is the unique name by which the person would like to be addressed as and the other identifies the computer which the person uses and the path through which it can be reached. An address such as **"Kapila @ ignca. ernet. in"** means a person who likes to be known as 'Kapila' and who can be reached on a computer called 'ignca' through the 'ernet' network that is 'in' India. There could be serveral persons using the same computer for mail purposes. The second component of all their e-mail addresses will remain same and they will be distinguished by their names which form the first component of the address. There is limit of characters in the name of a person e.g. there is a limit of 8 digit in my institute.

To send a message, typically three steps are involved. Suppose you are at Mumbai and wish to send a message to your friend in Delhi. Under such a situation, step one includes entering the address of the person to whom you wish to send the mail. Step two includes typing the message itself and finally step three is when you transmit the message to the e-mail provider's computer. The mail software provided to you will now convey the mail through his own network which lands in his computer at Delhi. When your friend logs into his computer and checks the mail, he'll be notified about your message. He can now retrieve and read it. In this way e-mail network consists of three computers till the final transfer of information takes place.

4. E-MAIL SERVICES IN INDIA

Now a days in India there are so many e-mail service provoders . Some of them are government sponsored networks and others private e-mail service providers have been licensed by the Department of Telecommunications to setup E-Mail networks. Government e-mail service providers are:-

41. ERNET (Education and Research Network): It was established by Department of Electronics, Government of India with the help of United Nations Development Program (UNDP) . About 200 educational institutions and 50 corporate companies are benefiting around the country. Any educational/research institution can become a member paying the appropriate fee.

42. SIRNET (Scientific and Industrial Research Network): It was developed by INSDOC and working with ERNET. Many scientific and Industrial Institutions are linked with this network. It also connects all the CSIR laboratories.

43. NICNET (National Informatic Centre Network): It is satellite based network service, caters exclusively to Central and State Government offices. It is a closed group, and public can't pay for and enjoy this facilities. This NICNET of NIC Delhi provides E-Mail facilities to all its members. The end users of the NICNET services are regional NIC offices, district offices and some government agencies.

44. INDONET: It was developed by C.M.C. Ltd. and it is linked with their offices located in the different part of the country.

Besides all above government Services, many private e-mail network service providers have started functioning in India. Few of them are given beloow:

45. ICNET : The ICNET is Madras based private company offering E-Mail service to public which covers important cities like Mumbai, Delhi, Calcutta, Pune, Ahmedabad, Banglore, Hyderabad and Madras. They do not provide connectivity to other e-mail system. In the case of ICNET, one has to pay roughly Rs. 11,000 per office to be connected, usage charges are very low - Rs. 2 per local message to 2500 bytes and Rs. 15 for a message sent abroad. The ICNET plans to provide connectivity in smaller towns and cities and outside India too.

46. UUNET: The UUNET is a Hyderabad based company offering e-mail connectivity to the USA via Internet. They charge Rs. 15,000 per year towards subscription plus usage charges. It has their networking centres at Mumbai, Delhi, Calcutta, Banglore, Madras. They offer the TCP/IP connectivity to any UNIX computer mail system around the globe and act as the Indian office of UUNET, USA.

47. GEMS 400 : Videsh Sanchar Nigam Ltd., Mumbai has been offering e-mail services called GEMS 400 to public for a fee for the past two years or so. One has to pay Rs. 1,000 initially towards registration and supply of software. Therefore, an annual password fee of Rs. 3,000 has to be paid. Usage charges for GEMS 400 consists of two components. One depends upon the duration of connection of the GEMS 400 computer. It is a single central host system. One has to pay Rs. 4 per minute of connectivity. Secondly, there is a charge on the volume of traffic amount of message transferred to and fro. Against this, one has to pay Rs. 2 for every 640 characters. GEMS 400 is intended to help us get connected to other e-mail systems around the world. Many important countries and their e-mail systems are connected through GEMS 400 which include the following: MCI Mail, A T & T, Sprit Mail in the USA, Keyling in Australia, Omega 400 in Italy, SGMHS in Singapore. It can also be reached by telex, via VSNL's International Telecom Burea (ITB). In all, Gems 400 can be accessed from more than 70 countries through PSPDN.

There are many other e-mail providers in India: Business India Infotech, Sprint RPG, Dart, Datapro etc. All of them provide unique additional facilities on software, which can be considered while choossing your e-mail provider. Though almost all e-mail providers offer global access via Internent, i.e. to send and receive messages from anywhere in the world, the real thing is access to the large number of databases available on Internet. This facility, is at present restricted to academic and research institutions through ERNET.

5. E-MAIL APPLICATION TO INFORMATION SERVICES

51. Online Information Services : By using e-mail, user can send online request. The searched output is delivered at the user's terminal through e-mail. An e-mail user can avail online services cutting across geographical barrier.

52 File Transfer : E-Mail helps to transfer files from one place to another place. File transfer is the process by which data files are transmitted from one computer to another across communication networks such as ernet, sirnet, etc. Files are transferred through different networks till they reach the destination. In this process, files can be downloaded from a remote machine to the local one, uploaded from the local to the remote machine.

53. Message Handline: E-Mail user can send and receive messages to and from remote places. It offers the option of sending messages and reading incoming messages at a time convenient to the user. E-Mail is so flexible that it can operate from one to one communication, for computer conferencing, for sending one message to several people. It can also be used for despatching lengthly documents.

54. Electronic Mailing List: It provides a means for people with a common interest to communicate with each other. They are managed by a computer known as a list server. The first function of the list server is providing the facility for sending messages by e-mail to all those registered with the list (i.e. subscribers) to read. Hence any message addressed to the mailing list is routed to all the subscribers.

Services / facilities provided by e-mail systems are categorised as follows:

i) Message Preparation : Word processing, notebook facilities, annotation of messages received prior to forwarding.

ii) Message Transmission : Timed delivery, directory services, multiple addressing, distribution lists, acknowledgemnet, links to other networks.

iii) Security and Reliability : System security, protection against message lost, encryption, security software and inhibiting hard copy.

iv) Message Filing and Retrieval : Storage capacity, retrieval and archival facilities.

Other e-mail applications including computerised literature search, reference enquiries, phtocopy supply, inter library loan, reserves and renewals document delivery have been offered in different libraries,. As many other organisations, library and information centre is also an administrative unit with service as its main function. The librarian has to correspond with several groups of people like

clientele or users of the library, suppliers of books and non book materials, other library and information centres etc. E-Mail is being used heavily for transmitting inter library loan request and document purchase orders. The OCLC has a system (OCLC ILL) connecting more than 700 libraries which is a dedicated inter library loan system.

In India, INSDOC is offering information services through e-mail on a network known as SIRNET (Scientific and Industrial Research Network). By using e-mail facilities, a person can place orders for all INSDOC services namely online service, document delievery, contents abstract photocopy services (CAPS) etc. and download the outputs.

6. ADVANTAGES

Electronic mail is projected as the cheapest and fastest channel for disseminating information across the globe. Important beneficial characteristics of e-mail are speed, reliability of delivery and security and privacy of messages. It saves the time and increases producitivity of all concerned.

61. E-Mail transfer is very **fast**. It is possible to send messages from Delhi to someone in London just in less than an hour. Actual transfer will take place only in few seconds but the message has to be shifted through intermediary computer which will take time.

62. Messages sent via e-mail are **accurate** and **reliable**. As systems with automatic error correction mechanisms are available, correct information can be transferred.

63. Confidentiality is maintained as each user has a password. All messages in your mail box can be read only by one knowing the password and mail is delivered to individual's mail box, which can be opened only by the intended recipient.

64. E-Mail is very **cheap** when compared to other methods of message transfer. Being a person-to-person communication system, e-mail turns out to be a cheaper alternative to telephone conversation and eliminates the time spent in establishing phone calls.

65. Electronic mail permits communication between two parties without the parties actually being present simultaneously. So it becomes a computer based messaging system.

66. E-Mail is also used at present for informal communications between people separated by geographical distance and time zone defferences. This benefits the users in **saving time**, reducing interruptions and improving communications.

67. Many e-mail networks of universities, commercial agencies, etc. are interconnected through majour networks such as the USENET, INTERNET, ALANET, JANET (Joint Academic Network) and BITNET, which in turn are interconnected through gateway machines. It is possible to send messages, documents from one network to another, only when they are interconnected by means of gateways.

68. E-Mail subscriber can read, copy or delete the messages. He can automatically get an acknowledgement for the mail sent. It is also possible to **send an enclosure** to your mail: enclosures can be in graphic form, images and binary programme files. That is file of information can be downdoaded.

69. Another important advantage of e-mail is its ability to reduce the consumption of paper in office. Memos and reports can be exchanged electronically without using paper. Being a computer base messaging system, files prepared using office automation package can be easily exchanged as e-mail. This facility has the potential of improving office efficiency considerably.

7. DISADVANTAGES

71. Every user of email should have at least a PC, telephone and a modom. He should subscribe to some e-mail service provider which may charge some initial one time charges like registration fee, software cost, installation and training fee etc. One has to pay the monthly bills too depending upon the usage the number of message that were transferred.

72. There is no way of knowing whether there is any urgent message awaiting you. In systems where messages are delivered on your terminal, you need to keep them open daily as a matter of routine.

73. It may be necessary to take paper prints of messages for filing and future references.

74. Generally e-mail is a closed group communication. A fax or telex subscriber can contact other subscribers, but if you subscribe

to an e-mail service your reach is limited to the services to whom you are given connectivity.

CONCLUSION

E-Mail will be very useful and indispensable in future, in reducing paper work and increasing services. E-Mail based services have improved the speed and efficiency of information services when campared to the same services traditionally carried out by post.

Advances in technology have created a boom in e-mail usage. Nowadays inter connection among Networks and e-mail service providers are increasing rapidly. While personal computer-based LAN e-mail gained popularity as an efficient means of communication and collaboration, the appearance of wide area network (WAN) commercial online services (such as compuserve, Prodigy and America online) with user friendly graphical user interfaces and e-mail services, enable users to communicate across time and geographical boundaries.

REFERENCES

1. Buckland, Michael H."Combining electronic mail with on-line retrieval in a library context." Informarion technology and libraries. December 1987, pp. 266-271.
2. Cardmaster, Neville, "E-Mail: solutions that make better sense." Business computer. June 1996, pp. 37-41.
3. Dewey, Ptrick R., ed. E-Mail for libraries. London: Meckler, 1989.
4. Encyclopaedic dictionary of computer science. v2. New Delhi: Anmol Publications, 1989. pp. 16.
5. "E-Mail for a reorganised work culture." The Hindu 13th Feb. 1995.
6. "E-Mail breaking global boundaries." I.L.A. Bulletin 31:1-2 (April-Sept. 1995), pp. 21-24.
7. Hutchinson encyclopedic dictionary. 2nd ed. Oxford: Helicon Publishing, 1994. pp. 264.
8. Hawkins, Donald T. "Information delivery-paper and E-Mail." Online 14:2 (1990), pp. 100-103.

9. Lakshman Moorthy, A., Manoj Kumar and Rajendran V. Electronic document delivery system. In. A.A.N. Raju etc. ed. New vistas in library and information science: papers in honour of Prof. G.V.S.L. Narasimha Raju. New Delhi: Vikash Publishing, 1995.

10. Metallurgical & Engineering Consultants (India) Ltd. Ranchi. "Brining e-mail concept closer". The Statesman 1st Jan. 1996.

11. Patkar, Parag. "A servey of e-mail software." Business Computer September 1995, pp. 100-107.

12. Pillai, M. Ramasamy. Application of e-mail information services. *In.* S.P. Gupta etc. ed., Information Technology and Health Science Libraries: papers presented at the National convention and Workshop, New Delhi, October 13-16, 1993. New Delhi: Medical Library Association of India, 1993.

13. Seshagiri, N. "Computer-the Indian Scene III: the future of computer communications." 2001 Science Today. 24:8 (Sept. 1990), pp. 61-63.

14. Singh, Ranjan Kumar. "E-Mail ke rajamarg per doorsanchar ki chhalanga." Navabharat 26th August 1995.

15. Viswanathan, T. Telecommunication switching system and networks. New Delhi: Prentice Hall of India, 1992.

16. Vyasmoorthy, P. Electronic mail for library community In. A.A.N. Raju etc. ed. New vistas in library and informatin science: papers in honour of Prof. G.V.S.L. Narasimha Raju. New Delhi: Vikash Publishing, 1995.

17. Welch, J.A. and Wilson, P.A. Electronic mail system: a practical evaluation guide. London: NCC/*Wiley*, 1981.

ROLE OF INFORMATION TECHNOLOGY IN INFORMATION MANAGEMENT

ABDUL MAJID BABA*

ABSTRACT

The paper discusses the information needs in general and the role of information technology in the information management. It highlights the steps involved in the information production and reasons of under utilisation of information. It further mentions about the marketing of information services, information needs of organisation, approach to information mangement and approach to information service. Lastly, it states the future trends of information technology.

INTRODUCTION

It was in 1953 that Deniel Bell, a famous Sociologist coined the word Information Society and Predicted natural resources and energy as a commodity. The increasing complexity and competitions in the global market, the vast uncontrolled information explosion, just-in-time delivery systems, and socio-economic and cultural changes are already that the world is now getting tuned to the information era. But what is the situation in India? It has taken almost four decades for us to realize that the new wealth is neither money nor power but information and knowledge.

In this attractive senario, the industry which could exploit the computer and communication tchnologies alongwith the hard working manpower and the resources, to solve the problems due to the information explosion, would definitely become the primeover of the entire world. To be precise, the future lies in the hands of information producing or information vending industry. In narrower terms, information production is nothing but data base making.

One of the benefits of recent rapid changes in computer technology is that government and business organisations have been made aware of the potential of efficient information management. The power of information has been realized by the top executives for shaping

* U7A-C5, Tarabag, Burdwan, W.B., 713104.

policies of organizations as well as meeting the competition in the market. The management has visualized that the ability of science and industry to grow and compete depends to a high degree on the availability of reliable information at the right time. Organisations with good access to information will surely rise shoulder high above others.

Libraries/information centres can play dominant role in the dissemination of right information at the right time and it is only through the libraries that one can have the access to the information. The application of technologies in the libraries have made the task of dissemenating information more easier. There is no doubt in saying that libraries can play a main role in the national development and production.

1. WHAT IS INFORMATION TECHNOLOGY (IT)

It is the combination of four important disciplines.

They are:

(i) Information Science;

(ii) Computer Technology;

(iii) Communication Technology;

(iv) Management Science.

People tend to label the software and hardware industry as the IT industry. A typical IT industry is one which treats information as a commodity and involves economics of information viz. production, costing and marketing, which is the integration of the four above mentioned disciplines.

2. INFORMATION PRODUCTION

Major activities involved in producing and marketing of information are:

(i) Data/information collection;

(ii) Analysis;

(iii) Data processing;

(iv) Information Storage;

(v) Information dissemination;

(vi) Management.

3. REASONS OF UNDER UTILISATION OF INFORMATION

(i) The information user does not either know what information they want nor what value it will be when they get it;

(ii) Individuals do not realise they have an information problem;

(iii) They are unaware of the facilities available in a library/information centre;

(iv) The users have had bad experience of past or present services;

(v) Talking to colleagues is preferable to reading books;

(vi) The information system does not meet the subject requirements of users.

4. MARKETING INFORMATION SERVICES

Information services cannot be effective unless their function and utility are fully understood by users. To highlight the utility of these services, the librarian/information manager should evolve an effective method of communication for marketing and selling the information services to users. Marketing solutions put forth before users of information available. Top management desperately needs information, and by meeting this demand regularly, the librarian can impress upon the higher authorities that information management is an unique and value-added service to the organisation. This information need will be an ideal target for marketing information services.

Marketing should be directed towards information users keeping in view the following channels of communication:

(i) downward communication, used by management for transmitting policies, procedures, corporate goals and objectives to subordinates;

(ii) upward commnication, sent by subordinates to management to meet the objectives etc of the organisation.

Selective dissemination of information should be done regularly and not just when management wants it;

(iii) horizontal communication between people of the same level which also covers selective dissemination of information.

The next important approach is to make oneself knowledgeable about the corporate goals and needs of the organisation one serve.

The overall aim of information service should be to analyse the information needs of the organisation and provide an effective range of information system in support of the work of the parent organisation to find out about the short-term and long term objectives and to identify current and future information needs.

5. INFORMATION NEEDS OF ORGANISATION

Finding information is not difficult. However, the expertise of the librarian lies in the ability to evaluate and analyse what is not there and to organise it in a manner that gives decision makers the best information to meet the challenges of their business and research problems.

6. APPROACH TO INFORMATION MANAGEMENT

To evince interest of users in information service, the librarian must demonstrate through systematic information management that information service is not merely a collection and storage of publications but a vital aspect for decision making in an organisation. Supplying tailor made information to users is one sure way of impressing the utility of information. Once the management gets a "feel" of the vast technical and commercial information and its advantages, it will not only be a regular user of information service but its confirmed supporter as well. By establishing effective information system let everyone know that we manage the firms information needs. Considering the involvement in such an important activity which is targetted towards development of the organisation, the librarian needs to have a befitting status in the organisation. Devotion to duties and evolving various facilities for fast circulation of information will surely help in gaining the coveted status.

7. APPROACH TO INFORMATION SERVICE

(i) Make both, the organisation's goals and the needs as the focus of service;

(ii) Know users needs;

(iii) Information users are decision makers techno- scientists, marketing, administration and finance personnel. Hence, information service should not be menu-type but must be user oriented;

(iv) Selecting and acquiring document and information relevant to these needs;

(v) Organisation and storage of the information acquired;

(vi) In-house publications play a vital role in information management. As vehicles of communication selling information service, they need to be attractively produced. The other important aspect related to their contents which should be concise and limited to few pages. A monthly list of selected articles, daily circulation of newspaper clippings are appreciated by users;

(vii) Knowing sources of information is the backbone of the system;

(viii) Check feedback from information users to evaluate the system;

(ix) Know the latest information retrieval system such as on-line global information search, CD. ROM DATA BASES, Internet etc.

8. FUTURE TRENDS

Now the world is in our net. The world has become smaller and time has shortened with the rapid evolution of communication technology. Informatics can save precious lives.

Unlike the present day library/information centre having a collection of publications, the 21st century library will not be a storage house but will be an electronic access point. the libraries will be riding the "electronic highways" for scanning information through global oneline search.

The fast pace of computer technology has brought the global information at users "fingertips". The gigantic leap of international networkd has connected libraries the world over for fast access of information.

On-line searching of information projects latest trends in various fields and helps decision makers in formulating policies, scientists in new research topics and financial experts towards cost saving measures.

CD-ROM (Compact Disk Read-only-Memory) has changed the library from a collection of publication to a collection of electronic disks. This small compact dike can accommodate about two lac A4 size papers. Books, articles from journals, on a variety of subjects could be located just by pressing a few keys.

Electronic-mail (E-mail), videotext and the latest development of optical dike having enormous storage capacity are the other communication technological vehicles which are available for tapping information.

E-mail on the internet-now that it is becoming widely accessible-is only the latest in a long series of revolutions in communications technology that began with the telephone. We have an idea of what the future might bring: a smooth integration of cable television, the telephone, computers and audio into something people are calling the "Information Superhighway". There are difficulties this integration effort must overcome and, like all visions of the future, it is more than likely reality will be very different. But whatever shape the Information super highway takes, it is clear it will completely revolutionize the way we work and play.

REFERENCES

1. AHITUV NIV and NEUMANN S Principles of Information Systems for Management. 1982. Lowa, William C. Brown.
2. BABA A M Role of Information Technology in Library and Information Services with Special Reference to India. In VASHISHTH CP Ed. Modernisation in Libraries. Indian Library Association, 1988. P 427-431.
3. EIN-DOR P and SEGEV (Eli). Managing Management Information Systems. 1978. Lexingtin. Lexington Books.
4. KENT AK The Information Industry in the Year 2000. 1981.
5. Mc GRAW HW Responding to Information Needs in the 1980s. Wilson Library Bulletin. Nov. 1979; P 160-161

6. RAJAGOPALAN TS Versatile Integrated Information Systems and Services; A Scenario of Current Developments.

7. GUHA B Ed. The Library and Information Science horizon, 1986. New Delhi, Allied P 138-39.

8. SWEENEY D J Marketing : Management Technology on Social Process : Journal of Marketing. 36; 1972.

9. ZORKOCY P Information Technology: An Introduction. Ed 2. 1985 Marshfied, Pitfield. P. 22.

SCOPE AND CHALLENGES OF NETWORKING LIBRARIES IN INDIA

SARITA SHARMA*

ABSTRACT

With the advent of electronic media of information exchange libraries around the world are undergoing the process of computerisation and networking. Indian libraries are lagging behind in this field. Networking in this country got a solid platform in 1994. Since then efforts are being made by a few libraries and the Indian government for information networking. Some people are still skeptical about the benefits of computerisation and electronic information exchange. However, there are some who know that by putting libraries on computer network, the poor condition of information exchange inside organisations and inthe country can be improved but are not informed of the technologies available for networking. This paper is an effort to highlight the advantages of information networking and the overview of the technology involved in it.

Library is the heart of information exchange in any society, be it a country, university research organisation or the world itself. Depending upon the type of collection of resources, its clientele and their needs, a library can be classified as academic, public research, agricultural, medical and so on. The basic functions of all types of libraries are more or less the same - procuring documents, cataloguing the procured documents, systematically placing the documents for easy access to stored documents etc when required.

Earlier, in the library system there were only two popular media of information exchange - paper (texts, pictures, graphics) and sound. With the advent of computers the third medium, known as the electronic medium, with a very promising future appeared in the information exchange domain. This medium, unlike others, is dynamic in nature, specially with the use of On-Line, CD-ROMs and Information Networking technologies. Information management and its retrieval is not only very fast through it but it is very reliable also. With these

* Lecturer, Management Information Systems
Om Kothari Institute of Management, Jain Bhawan, Staturi Road, Kotta-324002

changes, the information needs of the world are changing and so the functions and even the meaning of the library is also constantly being modified.

The use of computers and its networking in the libraries is inevitable in the present pace of information exchange in the world. Libraries of all the technologically advanced countries are networked. India, although leading the field of software development, had its own economical, technical and planning barriers which were not favourable to networking until the first half of 1994. Networking in India accelerated during second half of 1994 and the first half of 1995 with the networking giants appearing in India. Bay Networks came into India in June 1994 followed by Cisco Systems in January 1995 and 3 Com Corp. in May 1995. Ever since the pace of networking has accelerated. Many India based system integrators have emerged as distributors for these networking companies, e.g. Micro Land, Melstar, Tata Unisys Ltd., HCL Comnet, Ramco etc. are very popular with networking companies. These networking companies have got hold of different fields of networking markets. Cisco Systems has world-wide share of 54 percent in routers, Bay is flooding the Indian market with its ethernet products, to capture the LAN market. The falling price of Personal Computer (PC) is certainly a boon for networking because the use of PCs in networking is increasing very rapidly. 70% of the PCs sold in the country are put into network.

So the time is just right for the Indian libraries to be computerised and networked. But it would be a good idea to explore the technical and practical aspects of computerisation before starting the job. This paper is an effort to provide an overview of the network technology and its condition in India.

COMPUTERISATION OF LIBRARIES

Computerisation of a library basically needs installing a computer and developing electronic databases. Databanks of a library information system can be used for address-reference and bibliographic information on documents received by the libraries and electronic catalogue collection and its automatic processing. Databank is supported updated and accessed through telecommunication or local nodes with the aims to search for the requested publications to obtain information. Electronic catalogue serves as a basis for comprehensive libary-information service. Computerised information may be delivered in various ways on magnetic

tapes, diskettes, worksheets and by communication channels in the internal communication format or any other pre-defined format.

It is very important to mention that computerisation does not necessarily mean reduction in manpower requirement, but restructuring the function of library, training the library staff and its customers.

A Personal Computer is increasingly getting accepted in a library system. The reason for this is that a PC can be used as stand alone computer and when needed can be connected to a network system to be used as a terminal to the shared system. PC based LANs are common features in any organisation including libraries.

The main objectives of computerisation are

* better facilities to researchers,
* better communication with people on networks with similar research interest
* quick retrieval of relevant information,
* inter-library loan facilities
* electronic catalogues for information of books, journals or any other reading material
* on-line search facilities to a common database with different indexing keys such as authors' names, subject names, titles of books or articles etc.
* specialised subject area searches on CD-ROMs, and
* accessing international information on *Internet*

CD-ROM TECHNOLOGY

Compact Dist - Read Only Memory (CD-ROM) is an information storage disk. Unlike floppy disks the information stored on the CD-ROM can only be read, nothing can be written on it after manufacturing. To use a CD-ROM on a PC there should be a CD-ROM drive installed on the computer. CD-ROM became available commercially in 1985. Since then a number of CD-ROM producers and vendors have appeared in the market. In the recent past this technology has captivated the library and information community. The advantages of using CD-ROMs are many-folds - high storage space, no accidental erasing of data stored in it, fixed price at the time of purchasing and no recuring

cost of usage, ease to use, very fast searching and retrieval of desired information. It is an excellent publishing medium. The data received on CD-ROM disks can be copied onto hard-drives for general use. Libraries can also implement CD-ROM networks.

Although a stand alone computers can make information handling easy and its retrieval very fast, the networking of computers has many advantages as discussed below.

INFORMATION NETWORKS

Interconnection of two or more computers to exchange data or share resources is called networking. The advantages of networking are sharing resources such as common printers, hard-drive space, modems, CD-ROM drives; exchanging files and sharing databases. Components of a network are *network cards* - Ethernet, ARCnet etc. and their communication protocols; *connecting cables* - coaxial, twisted paid and fibre optic; and *network software* - peer-to-peer software, server-based software.

Networks can connect two computers on the same desk or connects computers around the world. Depending on the type of connections information networking can be of three types : Local Area Network (LAN), such as university library network; Wide Area Network (WAN), such as a national network called Education and Research NETwork (ERNET) of DoT; and International network, e.g Internet. Most important of them is LAN for different LANs can be connected for coverage of larger area.

LOCAL AREA NETWORK (LAN)

LANs are data communication networks in which data is transferred between computers in the early 1980s, LAN technology got acceptance for point-to-point connection within a limited range of area.

For managing a LAN either a network management device can be used or an intelligent terminal can also be used with proper kind of software to perform the task. The LAN management job includes monitoring of communication, network diagnostics, ensuring security, controlling connection for ports and queuing of calls to shared resources and providing usage statistics.

On a LAN system it is required to have a communication software for ensuring error free transmission of data between

computers. There are four possible choices of software: Proprietary, Xerox Network Systems (XNS), Transmission Control Protocol/Internet Protocol (TCP/IP), one of the most popular network protocols which provides vendor independent networking, and Open Systems Interconnection (OSI).

The cable used for connecting PCs in a LAN can be of three types - Ethernet connectivity on coaxial wire, Unshielded (Telephony) Twisted Pairs (UTP_ cabling, and high speed optical fibres.

CONNECTING DISSIMILAR EQUIPMENT IN A LAN

In a LAN system it is very common to have different vendor's machines to have cost-effective solutions for networking. The result of this is incompatibility problems not only in exchanging simplest files, but also of differing screen and keyboard layout in a network environment. There are three options open to get dissimilar equipment connected in a LAN to communicate sensibly by adopting standard *protocols-Emulator Software, Protocol Converter 'Gateways'*, or by *OSI standards.*

Emulator Software are properietary kind of protocols given by one vendor. Here two machines can emulate each other or they can emulate a well known standard, e.g. *IBM's Bisync* protocol for file transfer, for communication. Emulator is used for running proprietary software in order to emulate the connected machines. The disadvantage in this is that the adoption of another vendor's protocol is not practical which can lead to incompatibility. This leads to the idea of "don't buy proprietary" to keep your options open which became practical with the development of *informal networking standards by Xerox, Intel and Digital Equipment.*

Gateway is a device used for providing network communication to a host. It enable several users to access the host by providing protocol conversion in both the directions for communication. A disadvantage of using gateways is that it is restricted to one type of device, e.g. a PC gateway is only used for PCs. Protocol Converters can be described as special purpose gateway. It is build only for the task of translating protocols in both direction which is one of the tasks of the gateways. Gateways also provide the network connection.

OSI, Open System Interconnection, Standards are international detailed standard. If all the suppliers follow the OSI standards, the installation of LAN would be trouble free as only one source and support will be required for protocols.

INTERCONNECTING LANS

LANs can be interconnected using various kinds of devices - *Bridge, Router, Brouter and Gateways: Bridge* is generally known as a Data Link Bridge. It interconnects networks using compatible devices locally or remotely. *Router* can connect two different networks with different protocols. It is capable of linking two different media types. e.g. linking Ethernet with Tokenring. A multiple router which includes bridgin capabilities is known as *Brouter*. Advantage of a Brouter over a router is that when it fails to recognise the protocol of connection, it then bridges the data like *Bridge*. *Gateways* not only physically links the two completely different kinds of systems, but it converts one protocol into another.

INTERNET

Internet is an international network of networks. Over 30,000 networks and other networked machines from 71 countries are connected through the Internet. In each of these countries there is atleast one backbone computer which operates at a very high speed to carry the bulk of traffic load. Other smaller networks are connected to the backbones of their countries. According to the Internet Society, nearly 4 million computer were connected to the Internet at the end of 1994 and this number is growing with a very high rate.

In India, VSNL's Gateway Internet Access Services (GIAS) network of Videsh Sanchar Nigam Limited (VSNL) is working as the backbone network for other networks. VSNL's GIAS network in India has its main Internet Access Node at Bombay which is connected to *Internet Node at* USA via satellite media and to Internet Node in Europe via submarine cable media. The remote *Internet* Access nodes are already there at Pune, Calcutta, New Delhi, Bangalore and Madras. These nodes are connected to the main *Interned Access Node* at Bombay through intercity links provided by DoT.

The advantages of using *Internet* and the variety of information that complete *Internet Services* can offer for libraries, and as a matter of fact for any organisation, are listed below.

E-Mail - The Electronic Mail (E-Mail) facility on the *Internet* is very popular. a user has to type in his message on his terminal and send it to the desired address by giving a few words command. The message will be sent instantly on the *Internet* anywhere in the world

Usenet - This lets a user send messages to a newsgroup which is included in an electronic bulletin board for any one to see it.

Telnet - It is utility very useful for libraries. *Telnet* allows its users to log-on to another system and use various services available on that host. Users can *Telnet* into a huge databases to do research or even *Telnet* into libraries around the world to get information about availability of certain document.

FTP - *File Transfer Protocol* (*FTP*) is used for copying files from remote host to a user's host and vice versa. Many systems connected to the *Internet* have file libraries, or archives and libraries of documents accessible to the public.

Archie - *Archie* is a collection of servers used for searching files at several different anonymous FTP sites. A huge shared database is used for pooling information by archies serves which is updated from time-to-time. A keyword is given for the search.

Gopher - *Gopher* is a menu driven utility that allows its user to search for the information in various information libraries or servers around the world. It is different from *Archie* which only lets user know when the information is found whereas *Gopher* actually gets the information and puts it on the screen.

Veronica - Very-Easy, Rodent-Oriented, Net Wide Index to Computer Archives (Veronica) is a program that can be accessed through *Gopher*. A keyword is entered for Veronica to search for files, *Veronica* then searches and gets all the files matching the keyword and stores them on a temporary *Gopher* menu that user can browse through.

WWW - World Wide Web (WWW) is based on Hypertext. In Gropher menus are linked together and for searching files or documents one has to give a keyword whereas in WWW documents can be linked together. One can read a document and from that document can go to a new document by just pointing the keywords in the original document and can from the new document to another new document and so on. A Web browser can do everything discussed above, such as access files by FTP, read *Usenet* news group. *Telnet* into remote sites, and even travel around the Gopher space.

Mosaic - It is a Web browser which provides an easy way to reach audio, video, text and graphics.

WAIS - *Wide Area Information System (WAIS)* scans *Internet* libraries for a keyword. A weighted master index is returned which provides links to all the sites related to the request. WAIS was developed by a company called *Thinking Machine.*

Equipment needed for connecting to the GIAS are for Shell Account most types of PCs, Communication software, e.g. Procomm/Kermite, and V. 22 bis or V.32 bis modem of TEC standard; and for TCP/P connection PC 486, TCP/TP software stack for Internet access and modern/interface. A router may be needed for Unix/Packed Switched Leased Line Access.

CONCLUSION

Computer and telecommunication technology for the delivery and access of information resources are most consistently used by teaching and research community. For a researcher access to the most recently published information is very important. Presently, even at the graduate levels quick access to relevant information is essential. So global networking of libraries is an important aspect of academic development. Electronic publishing and indexing industries have evolved in the recent past giving a concept of virtual electronic libraries. With these development more and more libraries are implementing electronic catalogues and bibliographic information, and using electronic networks or buying CD-ROMs. Using these facilities retrieval of information is much faster and easier compared to the manual card system.

REFERENCES

BILL B., 'CD-ROM Challenges and Opportunities: Issues of Concern to Librarians-An Introduction', *INSPEL*, 28; (3), 1994 pp. 298-306.

DAVID P. S., 'Interconnecting the LANs, *Computers Today*, 11; (130), 1995 pp. 153 & 155.

ELIZABET M. RAMOS C. and IVONE T., 'Networks of Specialised Information Services in Latin America', *INSPEL, 29;* (1), 1995 pp. 15-32.

Videsh Sanchar Nigam Ltd., 'Gateway Internet Access Services - Global Information Super Highway to Cyber Space', *VSNL's GIAS* information leaflet, December 1995.

TECHNOLOGY AND THE LIBRARY

MANJU KANT*

ABSTRACT

Technology is both an opportunity and a challenge, extending the range of our perception. At the end of 20th century we are facing a tranformation whose consequences are only gradually becoming clear: digital technology is becoming ubiquitous. The new world advances to a tune of zeros and ones. It has dramatically changed our environment and life style, more specifically information technology have a more far-reaching effect in society playing vital role both in library administration and in use of information resources. The challenge for library management is to take account of the forces at work and shape the library of the future so that it might best meet its responsibilities in a fiscally sound intellectually credible way. Electronic libraries will change the traditional function of the library to emphasize the role of providing access to romote information. New information technologies and electronic communication facilities provides oportunities for libraries to play an even more prominent role in the support of teaching, learning and research than before, as information is now the fourth major economic factory equally important as raw materials, labour and capital.

1. INTRODUCTION

After the first and second industrial revolution during 18th and 19th century, we are now entering the third industrial revolution based on the information industry. In the history of mankind there have been four great inventions relating to information communication. The first was writing, began by the Egyptians about five thousand years ago. Second was the development of alphabet by the Greeks about three thousand years ago. The third was the invention of movable type of the Koreans, about seven hundred years ago and developed independently by Gutenberg about five hundred years ago. The last of the great inventions is the stored program of computers conceived by John Von Neumann about forty years ago. Looking for a moment about the time line these four great inventions represent, it was two thousand years between the invention of writing and the

* INSA B. S. Z. Marg, New Delhi

alphabet. About two thousand years elapsed between the developments of the alphabet and movable type. And five hundred years passed between the invention of movable type and the computer. But only forty years have elapsed betwen the invention of computer and today, witnessing tremendous changes which are mind stretching. Early applications of the computer to information problems occurred in laboratory environments with objectives like calculating artillery tables and predicting the weather. Today computers are more powerful than those early computers in everyway, can be held in hand, carried in the pocket and used wherever one goes through the genealogy of large scale integrated-circuit chips, that continually find expanded roles in almost every human endeavor, particularly in the communication and processing of information.

2 DEVELOPMENTS IN TECHNOLOGY

The unabated advance of information technology and the convergence of media, computers and communications will offer new opportunities for providers and consumers of information. It will affect the way we manage and distribute information and will change the definition of learning. New and emerging technologies such as multimedia technology, graphical user interfaces and others will offer a wide spectrum of choices. Clearly, technologies that promote accessibility will play a key role in the management and delivery of information and services. Among these are those that offer some form of telepresence and knowbots. Knowbots, for instance, are intelligent agents that have the capability of roaming the networks to look for the required information from a variety of sources and then to present it in the form required by the user. Expert systems can be used to handle collection development, enquiries and also assist in cataloguing and classification. Multilingual and machine translation systems will allow users to access information in their preferred languages. E-mail and Electronic Data Interchange (EDI) systems will improve communications and order processing. Retrieval standards and protocols will also influence the delivery mechnisms. Libraries should look at how to exploit thse technologies to improve the business processes and services to users. Communications technology and electronic networks will also transform the way we live and work. The world will become a single marketplace and a single source of information. The free flow of information across cultural, social and geographic boundaries will be a reality. In recent months, the Internet has grown

phenomenally to link 20 million users in some 100 countries and is still growing at a rate of 10% a month. We cannot ignore the growth and impact Internet will have on people and so libraries.

The vision of an Information Superhighway is often painted as an unprecedent nationwide and eventually worldwide electronic communications network that connects everyone and everything. Countries like United States, United Kingdom, France, Germany and Japan are investing in developing the Information Superhighway to gain national competitive advantage. Information Superhighway once fully developed will transcend national boundaries allowing individuals to access information and communicate easily with one another in a secure and cost-effective manner also facilitating resource sharing. Users can tap databases, talent and expertise on the virtual network for answer to a query or to peform a task. It will make things easier and more convenient. All these developments will change the way libraries operate. But one should not forget that Information Technology brings more work, with no reduction on the existing tasks. It's (workload) definitely increased because that's a whole new area but it doesn't take away the fact that libraries still have overflowing cataloguing trays. We try to do many of the conventional things as well as all the new ones. They haven't being reaally taken over from the conventional sources, they just add an extra dimension. Electronic developments are a big opportunity because they open up a whole world of information which might not otherwise be available to our users and also reinforce the librarian as the active provider of this information.

3 TECHNOLOGY IN LIBRARY ADMINISTRATION

Libraries are among the first departments within an organization to use computers to automate housekeeping activities, and were able to see the potential of information technology to access remote databses. For a profession infamous for its tradition as custodian and preserver, we have been remarkably farsighted in our willingness to harness new technogies. Automation of library processes enabled existing functions to be performed with more speed and efficiency, but rarely led to radical structural changes. Libraries genrally remain bureaucratic organizations divided by function, e.g. technical services and public/ information services. While technical services may have reduced in size, importance has been maintained by size of budget and the need

to employ specialists able to deal with the library/computer systems interface. The introduction of networking technology, on the other hand, allows new functions to be perfoemed more effectively. While networking will not lead automatically to structural change and innovation, it is clear that libraries need to adopt a flatter, more participatory structure when the impact of informaion technology cannot be largely contained within one section of the service. Libraries have a future, but an increasingly electronic one. The use of computer and communications technology in library administration has received substantial attention over the last two decades. Their effect on one of the larggest and most difficult of the administrative tasks, that of cataloging has been attacked exhaustively in the last few years and much progress has been made. Several systems are in operation now and they continue to be developed and refined.

4 EFFECT OF INFORMATION TECHNOLOGY ON RESOURCES

Although the "future library" will be a direct descendant of its predecessor, its form will be much changed and its functions greatly expanded. Defining and managing the transition is a demanding and exciting opportunity for the most imaginative and energetic leaders of the profession. The quality of library and information service in the years ahead will be largely determined by their skill. But there still remains much to be done to ensure that information resources will actually serve the cause of personal and public progress. The task ahead is one that calls for exceptional management. Needs, priorities, technology, funding, and methods must be brought into balance. Management that can lead with imagination, drawing on the past without replicating it, is required. This is the change of the "new era" of information.

The obligations of libararies to the past, present, and future have converged with great force. Large portions of accumulated collections are physically fragile and require attention. The quantity of new publications has expanded worldwide, and the expectations of users are based on what they now see as technically possible, from fax and E-mail to access files of digitized data and texts. The rise of new fields of inquiry and the shifting organization of knowledge into new configurations present a demanding challenge for libraries, which until now have conducted their collecting and biliographic work on a fixed, historically established base. In addition, uncertainty about

organization and operaions is implicit in a future where the extent and influence of innovation in electronic publishing and telecommunications is not yet fully understood. The form of future library service will be shaped by how well librarians cope with the sheer quantity of published material, the growing number of print and nonprint formats, the escalating requirements of users for access to everything of importance, new and rising costs, and the structural changes in the system of scholarly communication brought on by the intererlated technologies that are transforming the way information is stored, organized, processed, and transmitted.

5 CHANGE FOR THE LIBRARIES

It has been repeatedly emphasized that in the twenty-first century information and knowledge will be the most critical economic resource. Mastery of a body of knowledge will provide us with the competitive edge in the information era. Nations and organizations are placing greater emphasis on knowledge acqusition and access to information to gain and maintain the competitive edge. We are in a situation where we are drowning in an avalanche of information but starving for knowledge. Information is growing at an exponential rate and in a variety of formats, especially the digital media. This, coupled with the changing lifestyles and demands of users, offers a wide array of challenges to information provider. Information technology will bring a fundamental change to libraries, although the impact and the extent of this change is hardly predicatable, libraries should anticipate changes in information provision, information storage information access and reconsider the value which they can add to the information process. While technology trends and developments tend to dominate debate on the future shape of library and information services, they are inextricably linked with political, economic and socio-demographic factors, accountability, quality and value for money are the managerial imperatives in a climate of continuing financial constraint and a diversified customer base. The most important change for the library is that users will be able to access secondary and primary information from their desktop computer at work or at home without any intermediary role for the library. Users will be able to access not only the contents of the library of their parent institution but also the contents of any other networked library, without visiting that library. In many ways the user will be able to do without library as a place, unless the or she needs a specific document that has not been digitized

or that must be examined physically for scientific reasons. The library should develop an information access strategy in close cooperaion with the users. Staff development and training are an essential condition for an electronic library that embodies an added value in the information process.

PARADIGM SHIFTS IN LIBRARIES

Future libraries are seen as one of the key pillars of the national infrastructure to expand the people's capacity to learn and how well these could be positioned to support the various segments of society in the life long pursuit of acquiring new knowledge and skills. The major shifts related to libraries can be summerized in the following table:

Paradigm shifts in libraries

From		To
Custodian of books	- - -	Service-oriented info provider
One medium	- - -	Multiple media
Own collection	- - -	Library without walls
In good time	- - -	Just in time
In-sourcing	- - -	Out-sourcing
Local reach	- - -	Global reach
We go to the library	- - -	The library comes to you

Libraries of the future cater to the variegated needs of the population, the specific need of the different economic sectors and also serve as nuclei for the development of culture and heritage. The ultimate aim of the library of future must be to enable and encourage people to read absorb more information. Concept of library without walls and books without pages' is getting momentum. Future libraries plugging into the computer networks will make it possible the vast amount of information available to knowledge-rich society. Librarian will re-engineer the library to serve changing needs of highly skilled and information literate users to offer more personlized and customized services.

6 CONCLUSION

Information technology and the convergence of media, computers and communications has offered new opportunities for providers and consumers of information. Libraries play a significant role in exploiting these technologies to improve services to its users.

Future libraries need to adopt a more participatory structure, as impact of information technology can not be contained within one section of its service.In the years ahead the quality of library and information service will be largely determined by librarians skills and imagination bringing into balance the needs, priorities, technology and funding. Growing information coupled with the changing life styles and demands of user offers a wide array of challneges to librarians.

REFERENCES

1 DEMPSY L etal. Networking and the future of libraries : Managing the intellectual record. 1995; Library Association, London.

2 PRITCHARD E and SCOTT P.R. Literature Searching in Science, Technology and Agriculture. 1996; Greenwood, London.

3 WELSH W.L. Research Libraries-Yestersday, Today and Tommorow. 1993; Greenwood, London.

TOWARDS DIGITAL LIBRARIES

Dr. S. HUMAYOON KABIR.*

ABSTRACT

Defines digital libraries and discusses the characteristics and storage media. Provides description of several digital library projects, and concludes with a few remarks in the Indian context.

INTRODUCTION

Electronic medium is a powerful tool having vast and wide applications in society. Library community have also responded to the developments of this medium. This is because it has a pivotal role in information transfer and their efficiency and effectiveness. CD-ROM was the first to find application, and later on online databases. Today the internet with hypertext based navigating tools like the WWW (World Wide Web) has opened opportunities for providing better information services.

The digital library concept has emerged very recently and getting deeply rooted in the field of Library and Information Science. In a digitised storehouse of information instead of user coming to the library, the library's vast collection is accessible and available at user's work place. Thus we are in the early stage of a transition from print media to a digital society, A search through LISA and other sources shows that the number of publications which were very few in 1992 and 1993 have increased to hundreds of references in the year 1994-95.

2. DIGITAL LIBRARIES

Digital libraries are defined as "the new way of carrying out the functions of libraries encompassing new types of information resources, new approaches to acquisition; new approaches to classification and cataloguing; intensive use of electronic systems and networks and

* Lecturer, Dept. of Library & Information Science, Mahatma Gandhi University, Priyadarshni Hills. P.O., Kottayam-686 560

dramatic shifts in intellectual, organizational and electronic practices (1). The Working Group of the US Govt. Information Infrastructure Technology (IITA) defines "Digital librareis are systems providing users with coherent access to a very large organised repository of information and knowledge" (2).

"Digital library is a global virtual library - The library of thousands of networked electronic libraries", as given by Larson (3). The Stanford Digital Library project states that the "Integrated digital library will create a shared environment linking everythin - personal information collection to collection of conventional libraries to large data collection shared by scientist. Integrated virtual libraries provide an array of nw services, unifor access to networked information collection". In short, digital libraries are libraries which have a number of machine readable publications and facilities for remote access to several databases. To make it clear further:

- Digital library contains fixed, permanent docuents.
- Digital libraries are based on digital technology
- Digital libraries are used by individuals working at their terminal.

The components of digital libraries are :-

* Local library system with adequate PC's having LAN, local databases in machine readable form, CD-ROM etc.,
* Provision to provide e-mail service, access to servers, and to remote databases etc.,
* Networks including network of networks
* System functions to co-ordinate, manage the entry and to retrieve the data.
* Well trained man power.

3. CHARACTERISTICS

The four important characteristics of digital libraries are (5) :-

a) **Collection:** Digital library collections contain fixed, permanent document. Not only that current libraries have more dynamic collections but digital environment with enable of quick handling of information.

b) **Technology:** Digital libraries are based on digital technologies.

c) Work: digital libraries are to be used by individuals working alone. There is work oriented perspective focussing on group of information analysts, work being done and the documents and technologies that support it.

d)**Transbordering of Information** : Digital libraries breaks thephysical boundaries of data transfers within and outside the countries. The support for communications and collaboration is as important as information seeking activities.

4. STORAGE MEDIA

The common storage media in digital libraries that are presently used are Hyperbooks, CD-ROM and Multi-media.

a) HYPERBOOKS

Hyperbooks are electronic books. It contains text and graphical images. The feature of the text is that it contains embeded links i.e. active text that is connected to other parts of the book.

The advantage of hyperbooks are:-

i) It can be used by a number of users in different geographical locations

ii) Since it has powerful searching and browsing mechanism it is quick and easy to locate with utmost accuracy.

iii) Binding, preservation and shelf maintenance do not exist.

iv) AI and language techniques are exploited in fields such as cataloguing, indexing and abstracting.

b) CD-ROM

it is an optical storage media. CD-ROM is a pre-recorded disc allowing the user for reading only. It has a stroage capacity of more than 600 MB of information and it is cheap and easy to send it to remote locations.

c) Multimedia

Multi-media technology integrates text, images, graphics, video, animation, sound or music. It is interactive on the lines of hypertext and hypermedia.

5. DIGITAL LIBRARY PROJECTS

In 1989, University Microfilms International (UMI), launched the first "full image" periodical database that offered researchers and students bitmapped access to hundreds of magazines with graphs, charts, texts, photos, and illustrations. In 1993 UMI launched an electronic publishing system, pro Quest Power Pages. If offers access to more than 18,000 periodicals and over 7,— newspapers in various formats including microfilm, microfische, online, CD-ROM and magnetic tape. Case Western Reserve University has developed a promising software program that automatically tracks the users of online materials through its campuswide network and eventually will bill directly for royalty charges.

Several digital library projects have been undertaken recently maily in U.S.A. and Europe. A look at a few digital projects given an implication of the future digital libraries (6 to 11).

A) Information Digital Video Library (Carnegie Mellon University).

The objective of this project is to develop technologies for full-content search and retrieval from digital librareis. The project team is creating a test bed to enable K-12 (10+2 level in India) students to access, explores, and retrieve science and mathematics materials from the digital video library combining speech, image and natural language capabilities. it will initially contain 1,000 hours of video.

B) Illinois Digital Library Project (University of Illinais, Urbana Champaign)

Main focus is on providing comprehensive search and display of complete contents of articles from engineering and science journals, obtained in SGML format directly from the major partners in publishing industry. Some of the software and protocols used include Mosaic BRS Search. 239.50 etc.

C) Alexandria Digital Library Project (University of California Santa Barbara)

The goal of this project is to provide access to collectionsof variety of spatial information, including digitised maps, images, air photos, and other graphical information, relating to the countries of Santa Barbara, Ventura and Los Angeles in California State. The

range users include school children, academic researchers and the general public.

D) University of Michigan Digital Library Project (UMDL)

It focuses on earth and space science. A related project the Journal Storage Project will digitise and make available all issued from the first publication through 1990 of 10 economics journals.

E) University of Barkeley Digital Library Project

The goal of this project is to develop technologies for intelligent access to massive distributed collectionsof multimedia documets including photographs, satellite multiple terra byte databases.

F) The Stanford Digital Library Project (SDL Project)

The goal of this project is to develop technologies for a single, integrated and "universal" library, composed from the large numbers of emerging individual heterogeneous repositories, ranging from personal information collections to collections in conventional libraries and large data collections shared by scientists. Technology developed in this project will provide the 'glue" that will make this worldwide collection usable as a unfied entitu, in a scalable and economically feasible fashion.

G) University of California CD-ROM Information System

This system provides online access to a CD-ROM based database through the Web, consisting of published federal (U.S. Govt.) statistics covering 1990 census and foreign trade data, equivalent of about 260,000 books. Roughly 135 GB of data is stored on 270 CD-ROM discs, handled by 45 Pioneer 6 disc CD-ROM jukebox chargers connected to 4 Sun SPAEG workstations.

H) Chemistry Online Retrieval Experiment Project (CIRE Project)

This project is being carried out at Cornell University, to understand issues involved in providing access to electronic library of primary journal articles in chemistry. The project covers five years of 20 primary journals published by the American Chemical Society, consisting of about 4,25,000 pages. The data is maintained in two forms - scanned images stroed an Sony WORM juke boxes and as SGML marked up ASCII files, for each page, stored on a SUN Unix

file server. Anothr SUN machine is used as a print server. The system supports full text; Boolean searching. The system is on an ethernet LAN, with SVG monitor based user terminals.

I. British Library's Initiative for Access

This is a program of 20 development projects, initiated in 1993, to investigate hardware and software platforms for the digitisation and subsequent networking of a range of library materials. The Patent Express Jukebox is one of the major projects - providing in-house access to over one million of the current U.K., U.S., and European patens held on 16 linked CD-ROM jukeboxes, each holding 100 discs containing 800 patents. The software searches and prints high-quality patent copies for users in under two minutes.

J. Unified Computer Science Technical Report Index (UCSTRL, Indiana University)

This builds a centralisedmaster index by polling FTP sites and allows searching of the index and retrieval of the reports. Harvest System of the Internet Research Task Force Group (IRTFRD) on Resource Discovery is designed as an integrated set of tools for managing information resources on Internet by gathering and constructing indexes automatically through test analyses.

K. Wide Area Technical Reports Services (WATERS)

This is another distributed database of computer service technical reports. WATERS is supported by a central server which provides indeding information and performs routing of queries. The reports can be distributed across systems and the endusers can use the system by accessing the central server through WWW.

L. Geltic and Medieval Manuscriopts Project

This is a one year project with a four year continuation support. 44 rare and fragile celtic manuscripts from the Bodlean, Jesus College and Corpus Christ College are being digitised using a Kontron Prog Res 3012 digital camera using 300-600 doi and 24 - bit colour.

M Internet Library of Early Jouranls

This is a digitisation programme involving Birmingham, Manchester, Leeds and the Bodlean library in Oxford. The initial

goal is to provide Internet access to 140,000 page images of substantial runs (minimum 20 years) of three 18th century and three 19th century journals.

N. Electronic Readings in Management Studies (ERIMS)

This is a joint project between Oxfor, Sheffield and Aston Universities and publishers includig Blackwell, O.U.P , Reed Multimedia and Routledge. The objective is the production of Electronic-Reading Packs in Management Studies as an alternative to paper reading packs and short loan collections currently used by the students.

O. Beazley Archive Projects

Beazley archive is an outstanding collection of some 5,000 photographs of Greek vases with associated text records owned by the Faculty of Literace Humaniores. These will be linked to an existing database of 55,000 text records which has been available to registered users for many years.

P. Toyota Project

The Toyota car company has funded a project to create 8,000 colour images of material pertaining to cars from the Bodleand Library's John Johnson Collection of Ephemera. The technique used was **to create 35 mm colour slides and then digitise.**

6. Indian Scenario

India has the expertise to meet the challenge in setting up digital libraries in the country. The infra structure in India is becoming available. Computer networks have been established. E-mail has gained acceptance and popularity, thanks to ERNET, SIRMET and NICNET. Things are moving faster and communication facilities improved very much now. Through Internet it is possible to access any part of "Global Village" and exchange information instantly. India is at the threshold of breaking into Gyberspace and navigate through World Wide Web (WWW). WWWF is the most advanced browsing and search system developed on Internet based on hypertext paradign. With such facilities it is possible to access hundreds of data bases and make information available to the Indian user community.

A number of institutions in India have already made a start and notable among them are the National Informatics Centre (NIC), All India Institute of Medical Sciences (AIIMS), National Institute of Mental Health and Neuro Sciences (NIMHANS) and MGR Medial University. Thus in India it is not a difficult task to begin a network of digital libraries.

7. CONCLUSION

It is clear that the emergence of digital libraries will severely affect the traditional function of libraries, readers, library staff, authors, editors, publishers, book sellers etc. These changes may occur slowly, but certainly in the Indian context. the revolution of digitisation starts with slow pace and accelerates with time. Two International conferences were held on this subject so far in USA. Several projects have been undertaken in developed countries more so in the US universities dealing with design, maintenance and other aspects of digital libraries. The existence of the libraries of the future depends largely on the decisions of the present generation otherwise other professionals start doing our job.

8. REFERENCES

1. POX (E A) et al. Introduction to digital libraries. Communication of the ACM. 38, 4; 1995; 22-28.
2. LYNCH (Clifford) and GARCIA-MOLINA H. Eds. Inter-operability, scaling and the digital libraries research agenda. 12th August 1995. A report on the May 18-19, 1995 IITA Digital libraries workshop.
3. LARSON (Ray R). Design and development of a network-based electronic library, March 2, 1194. University of Berkeley Digital Library Project.
4. Association of Computing Machinery. Communications of the ACM. 38, 4; 1995; 59-60.
5. LEVY D. M and MARSHALL Catherine C. Going digital: A look at assumptions underlying digital libraries. Communications of the ACM 38, 4: 1995; 61.
6. RAJASEKHAR T B. Digital libraries. Information Studies. 1, 4; October 1995; 223-238.

7. FOX E. World Wide Web and computer science reports. Communications of the ACM. 38, 4; April 1995; 43-44.

8. FRENCH J. C et al. Wide Area Technical Report Service: Technical Reports Online. Communications of the ACM. 38, 4; April 1995; 45.

9. LAGOZE Carl and DAVIS J.R. DIENST: An architecture for Distributed Document Libraries. Communications of the ACM. 38, 4; April 1995; 47.

10 CRUM Laurie University of Michigen Digital Library Project. Communications of the ACM. 38, 4; April 1995; 63-64.

11. SCHATZ B. Building the Interspace: The Illinois Digital Library Project. Communications of the ACM. 38, 4; April 1995; 62-63.

12. HASSAN S.W. and Metcalfe T. eds. Digital libraries '94. First Annual Conference on Theory and Practice of Digital Libraries. June 19-21, 1994. Texas A & M University, College Station, U.S.A.

13. Shipman F. *Ed* Digital libraries '95. The second International Conference on Theory and Practice of digital libraries. June 19-21, 1995, Austria, U.S.A.

14. FOX E. A. and LUNIN L. F. Perspectives on digital libraries: Introduction & Practice. Journal of American Society for Information Science. 44, 8: 1993; 441-445.

15. GRAHAM (Peter S). Requirements for the digital research library. College & Research Libraries. July 1995; 331-9.

16. MARTYN (J). Factors affecting the future of libraries. Aslib Proceedings. 43, 9: 1991; 284.

17. MAX (D T). The end of the book? The Atlanta Monthly. September 1994; 61.

18. NEWCOMB (J). Electronic information distribution. Special Libraries. 74, 2: 1983; 152.

19. TEAGUR S. J. Microform, Video and electronic media librarianship. London, Butterworths. 1985.

20. WARNER B. F. and BARBER (Devid). Building the digital library: The University of Michigas UMLIB text project. *Information Technology and Libraries.* March 1994; 2024.

USE OF CD-ROM PRODUCTS: A REVIEW

Dr. SANGITA GUPTA*

ABSTRACT

CD-ROM Technology has solved the problems like storage and retrieval of information. CD-ROM is indestructive, cost effective, reliable, durable, easy to use having large storage capacity. As CD-ROM is a cheaper media of publishing, the publishers prefer to publish the material in the form of compact disks. The libraries without CD-ROM facilities are unable to provide the users, the international publications which are published only on CD-ROM. CD-ROM products relevant to library and information science services are reviewed. In India, only a few libraries and information centres have started offering CD-ROM services to their users. Due to lack of modernisation and financial constraints, CD-ROM facilities have not been developed to the extent they are required in Indian libraries.

1. INTRODUCTION

Computers have brought about a revolutionary metamorphosis in the dynamics of library system. The innovation of compact disc technology has added new dimension to the methods of information handling. CD-ROM is the latest and advancing technology which has influenced the speed at which the information is processed and communicated. CD-ROM firstly appeared as an audio storage medium and later on as an optical data storage device. Research efforts in this field were started in 1920's by various foreign scientists, but CD-ROM came into existence commercially as a storage medium in 1985 only.

1.1 WHAT IS CD-ROM

CD-ROM is a powerful tool for storage and retrieval of large amount of digital data. It is a 4.75 inch format (made up of polycarbonate) and stores 550 megabytes of data equivalent to the capability of 1500 floppy discs or of 2,50,000 text pages. It is a 'leading medium for electronic publishing of material. Information is recorded in a pitted language. The pits are then replicated as holes and flat surfaces into the surface of each copy. The total number of pits on a single disc is almost 2 billion. CD-ROM is not just an important tool for storing reference materials.

* Senior Lecturer, Department of Library Science, University of Jammu, Jammu-180004

Now personal computers equipped with CD-ROM drives can be used to display and playback audio recordings, drawings, photographic materials, etc. CD-ROM is a read only medium. So users can read data from CD-ROM discs but not write data on them. So CD-ROM units are no substitute for conventional magnetic discs as general storage for computer operations.

1.2 WHY CD-ROM IN USE

a) A single CD-ROM disc can store the data equivalent to 1500 floppy discs.

b) It can combine text with audio, graphic images and moving images.

c) CD-ROM is virtually indestructive, neither the data can be lost due to power cuts nor can be erased by magnetic fields. Even the disc cannot be damaged by the scratches or blows.

d) CD-ROM drives are fairly inexpensive and easy to use.

e) Easy to send by mail. In countries where infrastructure is often lacking, where telecommunication is slow and unreliable and where LANS and WANS are not well developed, access to databases on CD-ROM sent by airmail is one of the best ways to provide information retrieval.

f) Access to information is not restricted by password.

g) Very low publishing cost.

h) The libraries without CD-ROM facilities are unable to provide the users the international publications, which are published only in CD for due to being a cheaper media.

i) Effective way of information presentation i.e. with multimedia applications.

j) Error rates are low. CD-ROM specifications typically include a seek error rate of one in a million.

k) Like floppy and hard disk drives CD-ROM drives average prices have dropped each year. In 1991 the average price for an internal CD-ROM drive was about $500. This fell to about $320 by 1993 and is expected to drop to about $100 by 1997.

l) The use of CD-ROM databases is simple. Users can carry out their own searches with a minimum of training and make use of tutorials and help screens.

m) Adoption of international standards by the publishers to maintain consistency.

n) General acceptance of CD-ROM by users.

o) Reliable and durable.

1.3 CD-ROM PRODUCTS/DATABASES

Growth in CD-ROM databases continues to be stimulated by the increasing numbers of drives installed and the opening up of new markets. A glance at the data of CD-ROM market titles from 1987 to 1990 (1987-150, 1988-450, 1989-900, 1990-1500) indicates the increasing demand for this medium. At present about 5000 CD-ROM databases are available in the international market covering the fields of science and technology, social sciences, humanities, business, etc. Interestingly about 25% of above titles on sale are multimedia and several publishers have become increasingly interested in this sector to exploit instructional material.

There are some important reference publications currently available in CD-ROM format. DDC has been introduced in CD-ROM version by OCLC Forest Press. Electronic Dewey is the compact disc equivalent of DDC 20 estimated to be used by 2 lac libraries in 135 countries.

About 500 full text journals are brought out by ADONIS consortium of ten publishers. Efforts are being made to bring out books on CD-ROM through the joint efforts of different private publishers. As an example, one of the commercially available CD-ROMS contains Bhagwad Gita, Koran and Bible alongwith about 60 novels.

Oxford English Dictionary is also available on CD-ROM. A large number of bibliographic databases such as ERIC, NTIS, MEDLINE, Psychological Abstracts, COMPENDEX, Dissertation Abstracts, Library Literature, LISA Applied Science and Technology Index, etc. are available in CD-ROM format. Databases of various international organisations and standardisation bodies and available on CD.

1.4 APPLICATION OF CD-ROM

Application of CD-ROM technology in US library and information centres has increased. According to a survey in 1987 the application rate was 24% of the American libraries while in 1990 it grew upto 50%. As far as the status of CD-ROM technology in India is concerned, only a few libraries and information centres are equipped with CD-ROM facilities. Results of a survey of 84 computerised S&T libraries (fully or partially) in India revealed that only 27 libraries provide CD-ROM facility to the users. That means only 1/3rd of librarie have CD-ROM facility. The survey shows that out of these small number

of CD databases available NTIS, INSPEC, MEDLINE are common to 4-6 libraries.11 Moreover, about 80% of the libraries are having hardly one or two CD databases.

Due to financial constraints, the libraries are not in a position to offer CD-ROM services to their users. Moreover there is duplication of CD databases in libraries. This duplication should be avoided and the money can be spent for subscribing to more databases.

Table-I. List of Libraries Having Various Databases in CD-ROM format.

S. No.	Name of Library	Databases in CD-ROM Format
1.	ATIRA, Ahmedabad	Textile Technology Digest
2.	BARC, Bombay	INIS ATOMINDEX, INSPEC, MEDLINE, PC-PDF
3.	IGIDR, Bombay	SSCI
4.	NCST, Bombay	ACM Service
5.	NAL, Bangalore	NTIS 1983-90, LISA
6.	CMTI, Bangalore	COMPENDEX
7.	IISC, Bangalore	Databases in Medicine, Engineering, Chemistry*
8.	ISRO Satellite Centre, Bangalore	BOOKSHELF, NTIS, INSPEC, COMPENDEX
9.	NPL, Delhi	INSPEC
10.	IARI, Delhi	Biotechnological Abstracts*, CASI Abstracting Service
11.	NII, Delhi	Compact Cambridge : Life Science Collection
12.	NML, Delhi	MEDLINE
13.	NIHFW, Delhi	POPLINE
14.	DESIDOC, Delhi	ASTI, Aldrichem, Books in Print, CTI, Defence Net, ISA, INSPEC, LISA, McGrawhill CD-ROM Science and Technical Reference Set, NTIS, ULRICH Plus, Whitakers Book Bank Wilson Business Abstracts
15.	NSL, Delhi	ASTI, Biological and Agricultural Index, General Science Index. ADONIS
16.	IIT, Delhi	ASTI
17.	NIO, Goa	ASFA
18.	NDRI, Karnal	CAB
19.	NICDAP, Lucknow	POPLINE, MEDLINE, Drug Inf. Sources
20.	BHEL, Hyderabad	NTIS, INSPEC

21.	IIT, Madras	INSPEC
22.	CFTRI, Mysore	FSTA, JBC
23.	FCRI, Palghat	Fluid Power
24.	ARDE, Pune	NTIS
25.	CWPRS, Pune	Compendex Plus, NTIS, CITIS, SWRA
26.	NIV, Pune	MEDLINE
27.	VSSC, Trivandrum	Military Standards
28.	TUL, Bombay	:
29.	SAC, Ahmedabad	:
30.	CLRI, Madras	In the process of acquiring
31.	PID, Delhi	CD-ROM facilities
32.	TELCO, Jamshedpur	:
33.	CSIO, Chandigarh	:

* Names of databases not provided by the institution.

The library and information centres are marching towards paperless system, CD-ROM is a recent addition to the publishing media. The growth rate in number of CD products since 1985 has been astonshing .It is high time that Govt. of India must give immediate concern to the growing need of CD-ROM facility in libraries.

REFERENCES

1. Electronic Library News, 13(5) October 1995, p. 442.
2. FALK H, "CD-ROMS : at the heart of multimedia". The Electronic Library, 11(6) December 1993, p. 420.
3. GUPTA, S., Manpower Needs of Automated Libraries . Delhi : Ess Ess, 1995, pp. 46-49.
4. MALEK H , "Application of CD-ROM Technology in the multimedia library of La Villette Centre for Science and TechnologThe Electronic Library. V13, NS; Oct 1995, P 447.
5. PAHWA A, CD-ROM Technologies and Implementation . In (IRWING, CA. CDROM Strategies, 1991), p. 15.
6. STREGVI. G and KALOYANAOVA, S., "Application of Micro CDS/ISIS and HEURISKO for the preparation of CD-ROMS". The Electronic Library, IV 135; October 1995, pp. 477-478.
7. VISHWANATHAN . T, Books in the Information Age. University News, 326 February 7, 1994, p. 41.

USE OF DATABASES IN LIBRARY AUTOMATION

Dr. B. U. KANNAPPANAYAR*
M. VIJAYAKUMAR**
H. S. SIDDARAMA SWAMY***

ABSTRACT

Effective Organization of the house keeping activities is described by using databases/computer in library. The use of databases in library automation has been attempted relovently. Various library services such as cataloging, circulation system serial control are linked with library automation in this article.

INTRODUCTION

The dawn of computer application is seen through out the length and breadth of the world. It is due to emergence of digital computers. Now a day's computer application is seen in all the field like, Industry, Banking, Traffic control Navigation Meteorology, Medicine etc., The library is also utilize the use of computer application for running library effectively and efficiently. The mechanization of library house keeping functions predamently by computer is known as library automation. The need of library automation is due to the amazing growth of documents, heavy influx of documents added new dimension to users need, greater efficiency. Generally the library automation involves, acquisition system, cataloguing system, circulation system serial control. In each system of library automation many databases are available to run the library smoothly without any barriers.

The databses are nothing but collection of files. The databases are of recent origin. Database is a powerful object-oriented client/server. It is best known for it's intutive user-interface, ease-of-use and powerful high-level constructs.

* Librarian, Sahyadari Arts College, Shimoqa,Karnataka
** Graduate Trainee, Library Section National Aero space Laboratories, P.B. No. 1778, Bangalore-560017 Karnataka
*** Librarian, S.J. M. Institute of Technology Chitradurga-577502 Karnataka

As we know the library automation involves acquisition, cataloguing, circulation and serial control.

ACQUISITION SYSTEM

Acquisition is a primary house-keeping activity of any libraries, which relates all operations involved in the procurement of information sources, starting from request to receive order items to generate accession number through which books are accessed. And also it relates to 5th law of library science "Library is a growing organism". If Acquisition work is done correctly, the library will grow smoothly with out any hurdles. Automated acquisition is immensely significant for the libraries. It provides a base to computerization of other library activities without much labour. It provides for superior follow-up of orders and provides statistical and financial procedures for more efficient management of budget. Among other things it is possible to obtain a list of items on order, lists of newly acquired titles, orders outstanding for long period and summaries of vendor details.

In acquisition system three different database files are used namely

a) order file b) vendor file and c) request file.

Table : 1

ORDER FILE

Field Name	Type	width	dec
Title	char	30	
Author-1	char	30	
Author-2	char	30	
Edition	num	02	
Volume	num	02	
Publisher	char	30	
order date	date	08	
No-of-copies	num	02	
Order-No	num	10	

Key-: Order

Table-2

VENDOR FILE

Field Name	Type	Width	Dec
Vendor-code-no	num	08	

Vendor name	char	30
Vendor address	char	30
Vendor-Tel	num	08
Vendor-Telex	num	10

Key-: Vendor

Table-3

REQUEST FILE

Field name	Type	width	dec
Request no	char	08	
User's name	char	30	
User's-Tel	num	08	

Key-: Request

CATALOGUING

Cataloguing is an important database for the library. Catalogue is key to the collection of library. It provides the principal interface between the user and library collection. Preparing catalogue cards manually is a labour intensive and time consuming process. And hence it needs automation. Catalogue, it relates to different data of books organised by call-numbers, accession number, author, title and various key words.

The era of the automated catalogue system begin with the MARC [Machine Readable Cataloguing] programme of the library of congress. The aim behind computerisation of cataloguing are

i) Accurate, timely recording and maintain of bibliographic data.

ii) Operation and maintenance of both a dynamically organised arranged catalogue and collection.

iii) Reduction in staff time devoted to those aspects of cataloguing not directly related to users.

iv) Increase in speed and efficiency of service to users.

v) Ability of all units of a library system to act in a concerted fashion and to have access to a composite set of data files.

vi) Provision of reliable and accurate statistical data for reporting, managementing and budgeting.

The database file used in this catalogue is

Table - 4

CATALOGUE FILE

Field name	Type	Width	Dec
Call-no	num	03	08
Acc-no	num	08	
Title	char	30	
Author-1	char	30	
Author-2	char	30	
Editor-1	char	30	
Editor-2	char	30	
Edition	num	02	
Volume	num	02	
ISBN	num	10	
Publisher	char	30	
Publishing-year	num	04	
Price	num	06	02
No-of-copies	num	02	

Key-: Catalogue

CIRCULATION

Circulation of information sources is an important part of library services. This section deals very delicately with the user's community. The circulation counter provides two types of materials for providing services to all categories of users namely a) Reserve sequence materials and b) General materials. The reserve sequence of materials are those which kepts seperately for in-house reading or for over-night issue only. All other materials issued out to the users is categorised as General materials.

Circulation control is one of the most widely automated section in libraries. It involves operation like, lists of books issued, returned books, renewed, fine collected etc., It also provides summary statistics on all transactions. When book is issued, the relevant information is stored in the transaction file. The transaction file contains information about all the currently borrowed books from library. Returning the book is a common operation in which we change the status of the book from borrowed to on shelf. At the same time the record is deleted

from transaction file. Inreservation, it contains the information about which book is reserved by whom, when a book is requested to borrow a check is made in the reservation file. If the book is reserved, the user is prompted to return the book. Further a letter is printed and sent to the user who had reserved the book, to take the book immediately.

The database file used in this system are

a) User file b) Document file c) Reservation file

Table-5
USER FILE

Field name	Type	Width	Dec
User-id	num	07	
User-name	char	30	
User-address	char	60	
No-of-books	num	02	
Date-borrowed	date	08	
Date-returned	date	08	
Book-id-no [Call no]	num	03	06

Key-: User

Table-6
DOCUMENT FILE

Field name	Type	Width	Dec
Call-no	num	03	06
Acc-no	num	08	
Title	char	30	
Author-1	char	30	
Author-2	char	30	
ISBN	num	10	
Edition	num	02	
Volume	num	02	
Publisher	char	30	

Key-: Document

Table-7
RESERVATION FILE

Field name	Type	Width	Dec
Title	char	30	
Call-no	num	03	06
User-id-no	num	08	

Key-: Reservation

SERIAL CONTROL

Serial control is considered by many librarians to be one of the most complicated of the technical process carried by a library. Automation in serial control helps in handling and processing of serials more easily, quickly and economically. Serial control forms a primary function of the university library and also for special libraries. Serial control is obsolutely considered to be a sort of mini-library, as serial control involves all the function of the library [ie acquisition, cataloguing, and circulation]. Computerised serial control systems is slightly different from that of a simple book ordering system. Automated serial control system are usually developed and designed independent of book system. Serial are basically subscribed regularly. The cataloguing data include additional information regarding the holdings and is to be regularly up-dated and also information related to holding is to be processed regularly.

The simplest type of serial control is the striagt listing of information regarding each title. In this case the information is entered in the computer and then printed lists are obtained by title, by subject or in any of the sequence. The objectives of an automated serial control systems are to handle the serials and maintain holding lists. In order to achieve the objectives, the system should have the functions like Inputting serial data, ordering new serials, ordering of presently subscribed serials, cancellation of presently subscribed serials if required, accession of individual issues and preparing the various lists.

The database file used in serial control system is

Table-8

Field name	Type	Width	Dec
Journal name	char	30	
Journal-id [ISSN]	num	08	
Subject code	num	10	
Journal-vol-no	num	03	
Issue-no	num	02	

Key-: Journal [Serial]

CONCLUSION

The success of a library depends to a large extent, on the effective organization of the house-keeping activities. Automated library system offers convenient more flexible and comprehensive storage and retrieval of information than manual system. The use of database in automated library system helps to run the library smoothly. The databases are also used in resourcesharing and networking.

REFERENCES

1. NAYAK. A.K.: I.T. Management for libraries, Telematics India, Feb. 1995.

2. ROGER CARTER: The Information Technology handbook, London Heinemann, 1987.

3. PARTHASARATHA, S.: Computer applications to libraries. IRG and Networking, Bangalore, Sarada Ranganathan Endownment for library science, 1986.