Development of Libraries in Pakistan – Bangladesh: 
A Comparative Study

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Lahore, Pakistan
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Development of Libraries in Pakistan – Bangladesh:
A Comparative Study

A THESIS SUBMITTED TO
UNIVERSITY OF THE PUNJAB
FOR THE FULFILLMENT OF THE REQUIREMENT
OF THE DEGREE OF
PH.D IN LIBRARY SCIENCE

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Lahore, Pakistan
2011
DECLARATION

I hereby declare that this thesis is the result of my personal research and is not being submitted concurrently to any other university for any degree what-so ever.

IQBAL HUSSAIN ASAD
Dedicated
To
My Loving Late Parents
ABSTRACT

This thesis "Development of Libraries in Pakistan - Bangladesh: A Comparative Study" is based on historical method of research, utilizing primary, secondary sources and other relevant unpublished material. Personal visits were made to authenticate the recorded information. Libraries now called Information Resource Center are, and well ever serving the entire humanity for its socio-economic and political development. There are store houses of preserved, ideas and experiences of Nations that provide stepping stones for intellectuals’ acceleration. The Libraries have developed to the cave to space age. Libraries represent cultural developments and play an important role in society.

Great cultures have great libraries. They achieve the standards by establishing and utilizing libraries. If we glance at the Muslim’s glorious period, the Caliphs and Emirs ever hurried from their Diwan’s to closest themselves to the libraries and observatories. Unfortunately, the libraries of Pakistan and Bangladesh did not react sharply to the demand of the time with the exception to special libraries of Pakistan and Bangladesh, which had opted new technologies either for the sake of fashion or under some pressure.

Today’s information explosion demands an efficient system of information packaging and retrieval. The inter-disciplinary approach demands technological applications storage and dissemination of information. It is felt that science and technology information services, particularly in Pakistan and Bangladesh will be an important link for progress. They have not reached and or have not geared to needs of the economically and socially less developed sections of their communities that constitute more than 75% of their populations. The information service is intended to sport national development in Pakistan and Bangladesh, as, an alliance for progress. They should be designed to improve rural communities, productive capacity as it is a tool to achieve bargaining power for more resources to be invested.

The new information technology usage has high potential to grow both in Pakistan and Bangladesh. Both have accepted their new information technologies for the use of information and technology. It has been realized that information technology can abridge time, space and dimensions for proper management of
Information. Information society of both countries is challenged by professional skills and proper human capital.

In Pakistan and Bangladesh library software are available with certain problems towards their selection, cost effectiveness, and training facility etc. In Library automation of both countries computer illiteracy, proper planning and retro respective conversion are the problems; hence the library automation is in infancy. Both have started networking and software parks, lack in national commission for libraries, appropriate leadership, non-commensurate funds, non-compatible service conditions and low professional status etc. For further proper development of libraries in both the countries, there should be information system at national level National training Institute, professional, social recognition and dignity allocation if sufficient funds, automation and networking of all libraries. There should be a centralized national information database. Professional associations at national and regional levels should be made effective. Both the governments should contribute formal national groups for developing policies, plans, standards and new technology, information services to pace with 21st century, National software centers, arrange master trainers and allocate sufficient grants for library automation projects.

Library schools of Pakistan and Bangladesh should update their curriculum user's education, in house and online should be started by the libraries. Library professionals should have the opportunity to develop their skills by contributing research articles and getting published their newly generated pieces of knowledge. There should be a close relation between all the stake holders of information societies of both the countries. The government of Pakistan and Bangladesh should make library and information services a part of national development initiative, effort and plan without better qualified staff, the best stocked library and information center cannot provide services up to the expected standards, therefore, both the countries should properly invest for the up gradation of human capital for their libraries development.
ACKNOWLEDGEMENT

All praise and thanks to the Almighty Allah, who gave me all the courage to go through the arduous feat for the accomplishment of this thesis, and also helped me through a very noble, learned and sympathetic personality in achieving this goal.

I avail myself of this chance to express my sincerest gratitude to my highly respectable teacher and guide Prof. Dr. Muhammad Fazil Khan, Chairman, of Library and Information Science Department, Sargodha University, for his thought provoking advice and guidance despite his packed academic and research schedules. His ever smiling face during the academic session as well as the invaluable guidance for this thesis had been an incessant source of inspiration and encouragement to me, without which I would not have been able to complete this project.

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I also express my gratitude to the library staff of the Library Science Department, Punjab University Lahore for their co-operation and assistance.

I am also indebted to my dear friend Mr. Sajjad Hussain for providing me the computer related assistance even at odd times without raising eye brows or being browned off.

I am highly obliged to my younger brothers Mr. Nisar Hussain, Mr. Nudrat Hussain & Mr. Naveed Yahya Hussain who assisted me all the way in proof reading and typing this thesis and other co-related materials day in and day out.

Last but not the least, I do not find suitable words to console my wife, my loving son Hasium Abbas, my sweet daughter Maleeka Asad and other family members except to apologize being disturbed and often rebuked out of frustration due to over enthusiasm for completing the job at the earliest.

IQBAL HUSSAIN ASAD
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AACR</td>
<td>Anglo-American Cataloguing Rules</td>
</tr>
<tr>
<td>AIC</td>
<td>Agricultural Information Centre</td>
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<tr>
<td>ALA</td>
<td>American Library Association; Associate Of the Library Association; Australian Library Association</td>
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<tr>
<td>AMDISA</td>
<td>Association of Management Development Institutions in South Asia</td>
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<tr>
<td>APINESS</td>
<td>Asia Pacific Information Network for Social Sciences</td>
</tr>
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<td>ASLIB</td>
<td>Association of Information Management; Association of Special Libraries</td>
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<tr>
<td>AV</td>
<td>Audiovisual</td>
</tr>
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<td>BAIN</td>
<td>Bangladesh Agricultural Information Network</td>
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<td>BANBEIS</td>
<td>Bangladesh Bureau of Educational Information and Statistics</td>
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<td>BANSDOC</td>
<td>Bangladesh National Scientific and Technical Documentation Center</td>
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<td>BANSLINK</td>
<td>Bangladesh National Scientific and Library Information Network</td>
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<td>BARC</td>
<td>Bangladesh Agriculture Research Council</td>
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<td>BARD</td>
<td>Bangladesh Academy for Rural Development</td>
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<tr>
<td>BAYLID</td>
<td>Bangladesh Young Librarian Information Scientists and Documentalists</td>
</tr>
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<td>BBS</td>
<td>Bulletin Board System</td>
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<tr>
<td>BDSIC</td>
<td>Bangladesh Development Support Information and Communication</td>
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<td>BIDS</td>
<td>Bangladesh Institute of Development Studies</td>
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<tr>
<td>BIDS-LDC</td>
<td>Bangladesh Institute of Development Studies-Library and Documentation Center</td>
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<tr>
<td>BIRDEM</td>
<td>Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders</td>
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<tr>
<td>BL</td>
<td>British Library</td>
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<td>BLC</td>
<td>Bangladesh Library Council</td>
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<td>BLCMP</td>
<td>Birmingham Libraries Cooperating Database and Multidimensional Project</td>
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<td>BLDSC</td>
<td>British Library Document Supply Centre</td>
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<tr>
<td>BLIS</td>
<td>Bachelor’s Degree in Library and Information Science</td>
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<td>BLISS</td>
<td>British Library Document Supply Centre</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>BRAC</td>
<td>Bangladesh Rural Advancement Committee</td>
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<td>BTBB</td>
<td>Bangladesh Telephone and Telegraph Board</td>
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<td>CAS</td>
<td>Chemical Abstract Services; Current Altering Services</td>
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<td>CCF</td>
<td>Common Communication Format</td>
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<tr>
<td>CD</td>
<td>Compact Disc</td>
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<tr>
<td>CD-1</td>
<td>Compact Disc-Interactive</td>
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<td>CDCR</td>
<td>Centre for Documentation and Communication Research</td>
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<td>CDL</td>
<td>Community Development Library</td>
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<tr>
<td>CD-R</td>
<td>Compact Disc-Recordable</td>
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<tr>
<td>CD-ROM</td>
<td>Compact Disc-Read-Only Memory</td>
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<td>CDS</td>
<td>Computerized Documentation System</td>
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<tr>
<td>CIRDAP</td>
<td>Centre for Integrated Rural Development for Asia and the Pacific</td>
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<tr>
<td>CPU</td>
<td>Central Processing Unit</td>
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<td>CSCCD</td>
<td>Committee on Studies for Cooperation for Development in South Asia</td>
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<td>CURL</td>
<td>Consortium of University Research Libraries</td>
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<td>DAT</td>
<td>Digital Audio Tape</td>
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<td>DBA</td>
<td>Documentation, Library and Archives Department of UNESCO</td>
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<td>DBMS</td>
<td>Database Management System</td>
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<td>DEVINSA</td>
<td>Development Information Network for South Asia</td>
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<td>DOS</td>
<td>Disk Operating System</td>
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<tr>
<td>DRTC</td>
<td>Documentation Research and Training Centre</td>
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<td>EC</td>
<td>European Commission</td>
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<td>EPLA</td>
<td>East Pakistan Library Association</td>
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<td>EPO</td>
<td>European Patent Office</td>
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<td>ESA</td>
<td>European Space Agency</td>
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<td>FID</td>
<td>Federation of International Documentation</td>
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Gb  Gigabyte
GCI  Getty Conversation Institute
GDSS  Group Decision Support Systems
GUI  Graphical User Interface
GUIDE  Graphical User Interface Design and Evaluation
HDF  Human Development Foundation
HEC  Higher Education Commission
HELLIS  Health Literature Library and Information Services
HF  Human Factors
HTML  Hyper Text Mark-up Language
ICDDR,B  International Center for Diarrhoeal Disease Research Bangladesh
IBA  Institute of Business Administration
IDA  Integrated Digital Access
IDRC  International Development Research Centre
ILL  Interlibrary Loan/Lending
ILL  Inter-Library Loan
ILS  Integrated Library System
IM  Information Management
INASP  International Network for the Availability of Scientific Publications
INFLIBNET  Information and Library Network
INRD  Information Network on Rural Development
INSDOC  Indian National Scientific Documentation Centre
IR  Information and Retrieval
ISBN  International Standard Book Number
ISI  Institute for Scientific Information
ISIS  Integrated Set of Information System
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<td>ISO</td>
<td>International Standards Organization</td>
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<td>ISTIC</td>
<td>Institute of Scientific and Technical Information of China</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>ITDB</td>
<td>Industrial and Technical Data Bank</td>
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<td>JSC</td>
<td>Joint Steering Committee for Revision of AACR</td>
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<td>KB</td>
<td>Kilobyte</td>
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<td>KWAC</td>
<td>Keyword and Context</td>
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<td>KWIC</td>
<td>Keyword in Context</td>
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<td>KWOC</td>
<td>Keyword Out of Context</td>
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<td>LA</td>
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<td>LAB</td>
<td>Library Association of Bangladesh</td>
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<td>LABELNET</td>
<td>The Lahore Business and Economics Libraries Network</td>
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<td>LAMP</td>
<td>Library Automation and Management Program</td>
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<td>LAN</td>
<td>Local Area Network</td>
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<td>LIS</td>
<td>Library and Information Service</td>
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<td>Library and Information Science Abstracts</td>
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<td>MAN</td>
<td>Metropolitan Area Network</td>
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<td>MARC</td>
<td>Machine-Readable Cataloguing</td>
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<td>MHz</td>
<td>Mega Hertz</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>Master of Library Science</td>
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<td>MS-DOS</td>
<td>Microsoft Disc Operating System</td>
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<td>MWSS</td>
<td>Microsoft Windows Sound System</td>
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<td>NACSIS</td>
<td>National Centre for Science Information Systems</td>
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<td>NADLIN</td>
<td>National Agriculture Development Library and Network</td>
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<td>NAEM</td>
<td>National Academy for Education Management</td>
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<td>NAIS</td>
<td>National Agricultural Information System</td>
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<td>NALDOC</td>
<td>National Agricultural Library and Documentation Centre</td>
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<td>NASSDOC</td>
<td>National Social Science Documentation Centre</td>
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<td>NASTIP</td>
<td>National Science and Technology Information Policy</td>
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<td>NBS</td>
<td>National Bibliographic Service</td>
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<td>NCL</td>
<td>National Central Library</td>
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<td>NFP</td>
<td>National Focal Point</td>
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<td>NGO</td>
<td>Non-government organization</td>
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<td>NHLDC</td>
<td>National Health Library and Documentation Center</td>
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<td>NIDOC</td>
<td>National Information and Documentation Centre</td>
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<tr>
<td>NIEAR</td>
<td>National Institute of Educational Administration Extension and Research</td>
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<td>NIPORT</td>
<td>National Institute of Population Research and training</td>
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<tr>
<td>NLA</td>
<td>National Library of Australia</td>
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<td>NLDPC</td>
<td>Netherlands Library Development Project</td>
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<td>NLG</td>
<td>National Libraries Group</td>
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<td>NLLIST</td>
<td>National Lending Library for Science and Technology</td>
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<td>NTA</td>
<td>National Telecommunication Agency</td>
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<td>NTE</td>
<td>Networking Terminating Equipment</td>
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<td>OCLC</td>
<td>Ohio College Library Centre; Online Computer Library Centre</td>
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<td>OPACS</td>
<td>Online Public-Access Catalogues</td>
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<td>PAKLAG</td>
<td>Pakistan Library Automation Group</td>
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<td>PANASIA</td>
<td>Pan Asia Networking</td>
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<td>PANSDOC</td>
<td>Pakistan National Scientific and Technical Documentation centre</td>
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<td>PASTIC</td>
<td>Pakistan Scientific and Technical Information Centre</td>
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<td>Acronym</td>
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<tr>
<td>PBWG</td>
<td>Pakistan Bibliographical Working Group</td>
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<td>PCRWR</td>
<td>Pakistan Council of Research and Water Resources</td>
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<tr>
<td>PERI</td>
<td>Programme for Enhancement of Research Information</td>
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<td>PLA</td>
<td>Pakistan Library Association</td>
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<td>PNB</td>
<td>Pakistan National Bibliography</td>
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<td>PULSAA</td>
<td>The Punjab University Library Science Alumni Association</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<td>RAM</td>
<td>Random Access Memory</td>
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<tr>
<td>RAS</td>
<td>Russian Academy of Sciences</td>
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<td>RIRC</td>
<td>Rural Information Network</td>
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<td>RLG</td>
<td>Research Libraries Group</td>
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<td>RLIN</td>
<td>Research Library Network</td>
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<td>RLS</td>
<td>Regional Library System</td>
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<td>SDC</td>
<td>SAARC Documentation Centre</td>
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<tr>
<td>SDI</td>
<td>Selective Dissemination of Information</td>
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<td>SORD</td>
<td>Storage, Organization, Retrieval, Dissemination of Information</td>
</tr>
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<td>SSRC</td>
<td>Social Science Research Council</td>
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<tr>
<td>STIC</td>
<td>Science and Technological Information Centre</td>
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<td>TT</td>
<td>Teachers Training</td>
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<tr>
<td>TVE</td>
<td>Television Trust for Environment Network</td>
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<tr>
<td>UAI</td>
<td>Universal Availability of Information</td>
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<td>UAP</td>
<td>Universal Availability of Publications Programme</td>
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<td>UBC</td>
<td>Universal Bibliographical Control</td>
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<tr>
<td>UE</td>
<td>User Education</td>
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<td>UGC</td>
<td>University Grants Commission</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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INTRODUCTION

Libraries have ever been shouldering the upheavals of civilizations. These have been the main organs of preservation, exploitation and dissemination of recorded achievements of humanity throughout the ages. From the cave walls paintings, clay tablets, inscriptions, papyrus rolls, paper printing to the development of electronic databases, the main role of the libraries for the development of the human beings was and is the control of intellectual traffic mechanism. In early ages the pace of intellectual development was slow. With the invention of printing press technology, the recorded information has gone manifold which baffled the social and natural scientists to retrieve the pertinent piece of information within the optimum time.

Computer invention and its rapid use in various fields in human activities is witness to the fact that the computer is considered to be essential component for all round development. Computers continuance in almost all fields of human endeavor is due to its invincible qualities as like speed, unlimited capacity to store ocean of information on tiny storage devices, capability to perform without fatigue, radical power to sort, arrange, retrieve and disseminate information.

Thanks to the development of computer technology adopted by Libraries, now they are in a position to provide the latest information to researchers within shortest possible time span. Automation of Libraries started in USA in 1950s. Computers were used only for indexing purposes. MARC project was started in 1966 to automate Library of Congress catalogue. Nowadays computers have become almost essential component of Library operation even in developing countries. In India, Indian statistical institute first used computer in 1955 as far as Library automation is concerned, “Indian science abstracts were computerized in 1965. A union catalogue was prepared with help of computer in 1973”. Now the position is that major Libraries have been computerized and they have developed their network.

The library automation in Pakistan started in 1980s. Pioneer in the use of information technology in library in Pakistan was agriculture research council of Pakistan, Islamabad, which started developing library database in “INMAGIC software and also provided information through CD-Rom to its users”.

Later on Netherlands Library Development Project gave momentum to Library automation in Pakistan. Computers were donated to certain academic and public libraries which started computerization in software CDS/ISIS. For Human Resource development, training centers were established and a Library software LAMP, KOHA and LIMS were also developed. Now trend has been set to automate the Pakistani Libraries.

Bangladesh (East Pakistan) entered into computer world in 1964 with the installation of an IBM 1620 machine at the Atomic Energy Centre and IBM 101 statistical machine at the Institute of Statistical Research and Training (ISRT) at Dhaka.

International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) Documentation and Information Centre and Agriculture Information Centre (AIC) are the pioneers in creating bibliographic databases on specialized field using micro computers. Some other libraries and information centres working with computers and some related technologies are at the initial stage of 'automation process' and 'networking'. Till now, there is no single library in Bangladesh which is literally automated except ICDDR,B library and North South University library.

Not much information towards the state of art is available regarding automation of Libraries of Pakistan and Bangladesh. Present study has tried to explore the phenomenon to some extent.

The topic of my thesis is "Development of Libraries in Pakistan – Bangladesh: A Comparative Study". My thesis is based on historical research. The relevant material is obtained from books, periodicals, articles, reports, research papers, conference proceedings, personal interviews, survey results and websites, sorted according to chronology. The material was acquired from the Internet and needful downloaded from respective web sources. Information regarding thesis was also collected by paying personal visits to libraries in order to authenticate the recorded information.

I have divided the thesis into five chapters i.e. in first chapter I have discussed Development of Libraries: An Historical Perspective. In chapter two I have explained Socio-Economic factors and Development of Libraries. In third chapter, I have tried to explore the Development of Libraries in Pakistan. The fourth chapter deals with the
Development of Libraries in Bangladesh. Comparison between Development of Libraries in Pakistan – Bangladesh has been explained in fifth chapter. I have also used the American Psychological Association (APA) style – 6th Edition, throughout the thesis.

Hopefully I feel that this study will prove a stepping stage for further research in this respect.

IQBAL HUSSAIN ASAD
CHAPTER-1

DEVELOPMENT OF LIBRARIES:
AN HISTORICAL PERSPECTIVE

The first medium of communication which man used was a gesture and no vocal sound was attached to it. There were dozens of gestures in use, as ideas were conveyed i.e. arms, fingers, eyes and muscles, etc.

After the passage of several hundred years; man was able to represent his ideas in pictures. For example in Southern France, some pictures of animals are found which date back at least 10,000 to 15,000 years. Egyptians and Babylonians used the same type of pictographs and gradually developed those into true writing alphabet. Egyptians pictographs are known as “Hieroglyphic” this type of writing started round about 4000 years before Christ.

Ancient libraries are the product of civilization and a sort of preservation room for future records. Ancient libraries history shows that books and libraries always accompany some advances in culture (Akbar, 1968).

The human mind has an infinite capacity for invention and an insatiable desire for discovery and exploration. The human spirit is creative and cannot but write, paint, fashion and build. As the inheritors of several millennia of civilization, and more particularly of three or four centuries of very intense and rapid growth and expansion of knowledge, we today are confronted with an intricate and constantly developing network of knowledge, and live in a world where the discovery and application of new technology has become essential, not just to enable us to stand still for therein lies stagnation and economic disaster but to progress to even higher and better civilization along an exponential scientific technical industrial growth curve. Because of his ability to plan ahead, coupled with his real power to influence the course of events in the Universe, inventive man has learned to control his
environment and to harness natural resources for his own benefit, convenience and enjoyment (Kimber, 1968).

It is comparatively expensive to transport human beings but comparatively inexpensive to transport books and other library materials and to transmit data. The stage has been reached when the technology and perhaps also the economic incentive exist for a radical long-term appraisal of the nature of the library and information services that should be an integral part of a highly organized and scientifically and industrially advanced society. In computer-based library and information systems we have both the reason for making such an appraisal and the means for achieving the goals that may emerge from it.

Despite their key role in the processes of research and development, libraries, like any human activity, have been critically dependent on their appropriate technologies. While contributing materially, to the development of civilization, expressed in technological terms, for their ability to contribute to it. Libraries deal essentially in recorded knowledge, which, in our world is expressed in terms of alphabetic and numeric characters written on some suitable medium. “The technology pertinent to library function and development has therefore been that dealing with characters and their manipulation, their storage and transmission. In other words, alphabets and writing, ink, stone, clay, papyrus, vellum, paper, film, type and other storage media, printing, photography, postal, telephone and telex services, data-processing machinery, computers and data transmission” (Ravichandra, 1996).

All records created to preserve important information that could not be lost. The compilation of composed knowledge in some form of archive is a procedure as old as civilization. First written records were incised clay tablets, papyrus and parchment rolls. Large numbers of early “books” have been found in ancient ruins in Egypt and the Near East, many grouped in identifiable collections, obvious predecessors of today’s libraries. “The necessity for libraries can be gained from an examination of nature of these early collections i.e. Government Archives (Tax, property tax records, reports of military campaigns, history of rulers, religious, cultural records, business, and domestic information” (Seymour, 1979).
The Egyptians revered tradition. The educated Egyptian saw himself as a link in the maintenance of tradition through the ages, and hoped to continue this work in the afterlife. The written word made this possible. “Copy your father’s who were before you,” an Egyptian scribe urged his son. “Their words are made lasting in writing.” (The Instruction for Merikare, 1973-1980)

Assurbanipal’s library was a well-organized operation. It had its own factory for making tablets and its own kiln for baking them, to ensure high quality. These were inscribed carefully in a uniform script, with high standards of accuracy.

“Tablets were arranged in series, so that all material on the same subject should be gathered together. Mathematical, astrological, or magical collections included as many as a hundred tablets.” (Lerner, 1999)

**ANCIENT LIBRARIES**

On one of the wall of Temple Edfu in Egypt has preserved its catalogue into following headings:-

- Religion / mythology
- Astronomy hunting
- Astrology

Another evidence for the existence of a library is eight to nine hundred years before Christ. About 30,000 clay-based tablets discovered in ancient Mesopotamia date back well over 5000 years.

This library was ascribed to Ptolemy - The Soter, Greek literature was collected in it. Papyrus was the first writing materials used in Egypt & Greece.

In the library of Ptolemy - The Soter, there were collection of administrative records which consisted of religious and Government documents. In Egypt where writing was developed, government documents contained official records, correspondence and many other things. Egyptians were the first who produced a very extensive literature. Archaeologists have uncovered papyrus rolls from 1300-1200 B.C in the ancient, in two Egyptian cities i.e. Amarna and Thebes. The libraries in the cities of Egypt were called “papyrus libraries” and were located in temples which
contained lives of various Egyptian gods. The first papyrus book was found in Egypt which was tightly rolled, sealed in a pottery jar. These collections were records of royal families, travelers, stories, tales of wars and some magic books. In papyrus libraries, rolls were kept in jars made of clay / metal cylinders and some keywords which may be considered as titles were written on one side of the jar / cylinder. These jars / cylinders were kept in shelves (Akbar, 1968: 33-34).

A huge number of clay-based tablets were discovered in the palace of King Sennacherib, Assyrian ruler (704-681 B.C) at Nineveh, his capital city.

Ashurbanipal (626-668 B.C) was the first king who was well educated and able to read stone inscriptions. He devoted the major portion of his life, in the development of libraries. He was the first Monarch who provided separate staff for his library.

Initial collections probably have come forth from the Near East however the ancient Greek powered the concept through their higher involvement in literacy and intelligent life.

The first public library appeared by the 4th century BC, the personal library was more popular. Aristotle gathered a substantial private collection. Strabo reported “Aristotle was the first person to have assembled a set of books and to have educated the kings in Egypt the way to set up a library.” The truly amazing Alexandria public library, accessible to those with the appropriate scholarly and library skills, founded about 300 B.C (Krasner-Khait, 2001).

In Greece Plato and Aristotle were the two persons are credited for the development of libraries in the country. The efforts of Aristotle, in this connection are highly to be praised, as he left no stone unturned in the development of his library and in collecting a large number of valuable manuscripts. In the period of Alexander, who was Aristotle’s pupil, Greek culture occupied worldwide reputation. The period of Greek Roman history of libraries spreads over a time of about 600 years (Akbar, 1968: 35).

In Alexandria Library the books were in the form of rolls, so they could not be placed vertically. They were put horizontally in pigeon holes fixed in the walls. The
topic of the roll was written on a tag which was attached to the end of the every roll. Some of the books were arranged chronologically and some alphabetically.

Callimachus compiled the catalogue of library. He was the teacher of grammar and belongs to Cyrene city. The scholarly reputation of Callimachus rests upon his “Pinakes” which he produced about the middle of third century B.C. He recorded in his author catalogue the whole literature of that time. It was not only the catalogue but the bibliography of the books of the ancient world. The work reported to be prepared to have been contained on 120 rolls of Papyrus (Fazil, 1988).

The “Pinakes” as Callimachus’ catalogue was called an author list, arranged into major subjects or form groups, such as epic poetry, dramatic poetry, laws, philosophy, history and oratory. Addition to the bibliographical information concerning each work he added information regarding the author and summaries of the work themselves (Johnson, 1960).

The Museum of Alexandria was not only a center of scholarship; it served a political purpose as well. Alexandria was a Greek outpost in an ancient land whose royal cities and pyramids displayed the grandeur of its past. The museum helped to stamp Greek culture on Egyptian society. The library collected the classic books of Greek poetry, and its scholars edited and arranged them and made them available for copying by the public. Alexandrian writers produced original prose and verse, commentaries on earlier works, and a considerable scientific literature. This library used to have its books in many ways. It had enough funds with which to buy from the bookshops of Athens and Rhodes. “The ruler, Ptolemy III, ordered that all ships calling at the port be searched, and any books or manuscripts found aboard brought to the library. Their copies were made and given to the owners, while the originals were added to the library’s collections”. (Lerner, 1999: 20-21)

Alexandria deemed its place as the intellectual capital of the planet and gave a system for other libraries to use. “In the midst of the second century BC Rome likewise boasted loaded library assets. In the beginning some scattered private collections, holdings expanded through the spoils of war, Aristotle’s famed collection was among the bounty” (Krasner-Khait, 2001: 3).
The great Roman statesman Cicero maintained libraries at his palace on the Palatine Hill, and he made extensive use of them. He hired the Greek scholar Tyrannio to organize the library at his villa at Antium. “Since Tyrannio arranged my books,” Cicero wrote to his friend Atticus, “the house seems to have acquired a soul.” (Cicero, Ad Atticus 4.8.2)

Emperor Augustus completed Rome’s first library system throughout Rome and the entire Roman Empire, presumably to spread Roman culture and ideas. In time there were Roman public libraries in operation in Roman-run cities in Italy, Greece, Cyprus, Asia Minor, Africa, France and Spain.

“Caesar was assassinated before he could carry out his plans for establishing a public library in Rome” (Seymour, 1979: 4-5).

MIDDLE AGES

Middle Ages were the turning point for the development of libraries. Parchment codexes took the place of papyrus (Akbar, 1968: 36).

Roman libraries were not limited to the capital; they were found in provincial cities and resort towns across the empire. During Roman times the papyrus scroll remained the dominant medium for book publication. It would be several hundred years before it was replaced by the codex, the form of book we know today. It was actually the rise of the Christian church that started the evolution of the book as we know it today. Just as animal skins replaced plant fibers, so the sewing of folded sheets between covers replaced the pasting together of flat sheets into rolls. By the beginning of the 4th century, the codex might be encountered as frequently as the roll. Two centuries later it had displaced the roll almost completely. Libraries converted their collections from papyrus rolls to vellum codices (Lerner, 1999: 26-27).

Interest in libraries came easily in ancient Rome. Earlier cultures had recorded their history on clay tablets, papyrus rolls, and parchment books and a number of important collections of these had been assembled. The most notable was the library established after 305 B.C. by the Greeks in Alexandria, Egypt, where a copy of every known scroll was found. A close rival was the library at Pergamum, established a hundred years later (Seymour, 1979: 5).
Rome in time became a city of libraries, including works written in both Latin and Greek. Rome possessed merely three public libraries before Augustus's death.

A catalogue of Rome's buildings from about 350 A.D. listed 29 libraries within the city but in 376 A.D. the historian Ammianus Marcellinus mentioned, "The libraries are shutting down permanently, like tombs". Given that the Roman Empire fell, libraries turned out ruined to termination (Krasner-Khait, 2001: 4).

When Roman Empire fell, so did her libraries some of the classic Greek and Roman works fortunately were preserved in the great Byzantine library constructed in Constantinople, ultimately captured in the crusades (Seymour, 1979: 5).

After the fall of Rome, Byzantine culture took its position. Emperor Constantine at the academy of Byzantine, constructed a library, based on Christian's texts, which in later days was enlarged by his successors. This library was also burnt in to ashes by the Barbarians. During this period, one named Photius was hardly able to collect 280 works in 897-98 A.D. The reign of Frankish emperor is considered as one of the excellent periods. In this period Charlemagne was considered to be a good scholar who tried to import important works from Italy, Spain, Baghdad, and various other places.

Tartulian's library of that age can be pictured even today. After passing a century, a Zealous book collector, Jerome, copied those from papyrus on parchment, and obtained the help of two bishops of Caesar (Akbar, 1968: 36-37).

The Rule of St. Benedict made the reading of Christian literature a basic part of the monastic life. "Idleness is the enemy of the soul," declared the Rule. "Therefore, the brothers should have specified periods for manual labour as well as for prayerful reading." One of these reading periods was Sunday, when "all are to be engaged in reading except those who have been assigned various duties." As the Rule forbade private property of any sort, the brothers had to draw their books from a common store. The Rule's provisions for Lenten reading make this clear: "each one is to receive a book from the library, and is to read the whole of it straight through." (Rule of St. Benedict, 1981).
Foreign scholars were invited by King Charlemagne to bring the manuscripts from their native countries. In the statutes of the abbey, there passed a decree that librarian shall have the charge of all books and scribes.

Through the entire remaining eastern empire, monastic communities surfaced with compact and mostly theological-libraries. The capital city of Constantinople possessed three big libraries: the library for Royal family and civil services, the university library and theological collection (Krasner-Khait, 2001: 4).

The catalogue of a monastic library of the year 831 ends with these words “Here, then, are the treasures of the monastery, here are riches feeding the soul with the sweetness of heavenly life.” (Monastery of St. Riquier, n.d.)

NINTH TO TWELFTH CENTURY (A.D)

The post-Carolingian age ninth to twelfth centuries in history is very famous for scholarly activities. The expression was, “that a monastery, without a book chest is just like a castle without an armory” (Geoffrey of St. Barbe, 1717).

Monarchs, ecclesiastics, aristocrats, and scholars often owned small libraries. Books represented not only religion and scholarship but also wealth. Among the aristocracy, ownership of books, like possession of land, was a mark of wealth and social status. It had its practical side, too: law books and treatises on agriculture and military science covered topics of immediate interest to the nobility (Lerner, 1999: 34).

The Carolingian age produced two important monastic libraries, one at Weissenberg and the other at Lorch. Similarly Swabain abbey of St. Gall, which was a pro-to-type of German monastic culture, had a model school which graced so many distinguished scholars and writers such as Notker, Balbulus, Laboo and A. Grimald etc. Regarding A. Grimald who was a true lover of books and prepared a catalogue of books in the 9th century, which was present in that library for a very long time. In the library of Swabia there were over 400 volumes with Reginberg, as his librarian.

In Germany Reginberg was the top most leading personality of that period who prepared the catalogue of 500 titles (Akbar, 1968: 38).
LATE MIDDLE AGES

In the late middle ages, aristocratic mode of life was fully developed and knowledge of writing and reading began to spread rapidly.

In this period the middle classes began to rise and the desire for cultural activities were strengthened. Instead of old monastic orders new orders were brought in force and new directions to knowledge, through sermons and teaching were given several universities came into existence of which Bologna University was very famous being the house of legal studies. In Paris there was a university which was famous for scholastic theology (Hastings Rashdall, 1936).

The end of 14th century a number of good libraries were established for which some zealous and learned librarians were appointed. Similarly the activities of English minorities bare fruitful results. They possessed rich collection of books and manuscripts in London and Oxford. The Dominicans who were well known in the development of scholarly, instructions assembled their libraries on a practical point of view and give less attention to the external appearance of libraries (Hessel, 1950).

LIBRARIES IN ISLAMIC WORLD

Muslim libraries spread from Spain to India, across lands that had been parts of the Roman, Byzantine, and Persian empires. The Arabs held a great respect for the civilizations that they conquered, and found in the learning of the Greeks, the Persians, and the Jews a source of inspiration. Though the poet Al-Mutanabbi proclaimed that “the most honourable seat in this world is in the saddle of a horse,” he added that “the best companion will always be a book.” (Al Mutannabi, 1959).

One thing, which is quite clear, is that all these libraries were the copy of the Arab-Spanish libraries, which ranged from 8th to 12th century A.D. The western historians now admitted that in the development of libraries and improvement of knowledge, no nation can claim superiority over Muslims.

Muslims fostered and disseminated the knowledge and education with fullest measure of their attention. They established educational institutions from Indonesia to the North African and South Atlantic European seaboard. During the Abbasside and
Mediaeval eras it was not unusual for a mosque to have seminary within its premises. Every sizeable educational institution or seminary had a library of its own.

The Christian rulers were closely watching the activities of Abbasside rulers and were trying to come in close contact with Islamic world, for the promotion of the translation of Arabic literature (Akbar, 1968: 40).

The earliest Arab books were written on papyrus, parchment, or poplar bark; like those of their Christian neighbors, the sheets were gathered and bound into codices, rather than pasted together into rolls.

The manufacturing of paper was introduced by Tsi-lun in China in 105AD and later in 751 it was introduced into Samarkand by China, which it soon spread across the Islamic world. Many scholars had their own libraries, and the funds with which to maintain them. They collected rare and curious books in such fields as philosophy, logic, geometry, arithmetic, music, medicine, and astrology, and paid translators well for rendering sought-after works into Arabic. Though they were privately owned, many of these libraries were made available for the use of the learned community (Lerner, 1999: 58-59).

In 8th century A.D Harun-Rashid founded a library in Baghdad and received manuscripts of other valuable materials as a tribute from Byzantine dynasty and other places. These manuscripts were translated from Greek into Arabic. There were many libraries in Kufa, Basra, Baghdad, Halab and various other large cities under Muslim rule. Arab from the early Islamic period, up to the end of Middle Ages played a very important role for the development of libraries (Akbar, 1968: 40).

Two centuries after Muhammad, the caliph Harun-Rashid founded the Bayt al-Hakima (“house of wisdom”) in his capital city, Baghdad and al-Mamun developed it to great extent. Modeled after the Museum of Alexandria, it was a center of scholarly activity. Their books were translated from Greek, Syriac, and Persian, and new works were commissioned from Arab historians and scientists (Lerner, 1999: 58).

History tells us that after the fall of the two great Empires of Roman Byzantine and Sassanide Persian. It was not possible for the Christian world, to continue their traditions, customs and culture, due to their apparent incongruity. They were not force
to do so, but the characteristics of a reflective and traditional formation of Islamic Civilization, compelled them to inculcate the same upon their own civilization.

It was only the Arab civilization which presented at its formation almost all the element and characteristics, of what is called Medievalism. On account of the scholarly activities of Muslims in the development of knowledge and formation of a great Muslim Empire, the era ranging from 800 to 1200 A.D, was known as Golden Age.

Many Western Historians like Ribera, Ogla, Pinto, etc. have admitted that library of Alexandria was actually destroyed by the Christians themselves and charges that 2nd caliph of Islam “Umar” destroyed the great library of antiquity at Alexandria are absolutely fictitious and wrong. According to the sayings of the Holy Prophet of Islam, “Mohammad” (may the peace & blessing of God be upon him) who has instructed to his followers that the learning of knowledge is essential for every Muslim, may be man or woman and in one place he has instructed to go to China even, for obtaining knowledge. So, the blames on Muslims carry no weight as I have said before the civilizations of the above three nations were not removed by force which has also been admitted by Western Historians. In fact the Muslims came in close contact within these three nations and all the valuable books and manuscripts were gradually translated into Arabic and communicated to others.

These books were not confined to churches as done by Christians, separate buildings for the care and protection of the books were constructed on every large city. Highly qualified persons were employed to look after. History tells us that literary universities in 10th century A.D. were so common in Muslims that, apart from the ruling body, the nobles and others were also interested in collection of manuscripts and other valuable materials. The famous scholars often visited the market in search of manuscripts, etc.

In Harun-Rashid library there was no restriction on public, everyone who was interested to use the library was encouraged while the library of Louis was only meant for ruling bodies’ families and nobles and public was not allowed to enter this library.
In Baghdad, students and scholars were encouraged to take benefit from the library and full facilities were given to researchers. Financial aid was given to deserving students and interesting scholars.

In Cairo Alhakam laid the foundation of a university in which Physics, Mathematics, Medicine and other science subjects were taught. Now libraries connected to universities are only meant for faculty members and students and public is not allowed to use these libraries.

Dr. Ogla Pinto has confirmed that characteristics which Islamic libraries possessed were not found in Europe till the end of 15th century.

In the Islamic world there were three great libraries:

1. The largest library was at Baghdad which was later burnt by Halaku Khan

2. The second library in reign of Fatimide was in Cairo which contains rich collection of books on religion and science subject. In the period of Fatimide, Aziz Billah and Muhammad Bin Yousef were famous figures who took active part in book and paper trade. Fatimide period was from 970 to 996 A.D.

3. The third library was of Ommayyads in Spain, which existed till the end of civil war between the royal families of Ommayyads.

Another library highly praised by many writers, for its beauty and size was established by Abu-Nasar Sabur in 1025 A.D. There were over one lakh of books and manuscripts in this library. This library and 36 other beautiful libraries were plundered and burnt into ashes by the army of Mangol rulers. In other parts of Islamic world such as Cairo, Almoosul, Halb, Hurmoz, Ghaza, Isphahan, Nishapur, Ramna and Shiraz, etc. there were many splendid libraries.

Manager, servants, porters and calligraphers were managed for its maintenance. The students and scholars were freely allowed to use these libraries, read the books and take notes, even pencils and papers were also provided to the library users (Akbar, 1968: 47-52).

Many libraries did lend books, considering it a religious obligation to facilitate copying and study. The 13th century Spanish Arab historian Ibn Hayyan cited the
generosity of libraries to explain why he never bought books: “Whatever book I want to have I can get on loan from any library, while if I wanted to borrow money to buy these books I should find no one who would lend it to me” (Ibn Hayyan, n.d.).

Azadu-daullah says that there were 360 rooms in the library at Shiraz with galleries surrounded by gardens and parks having a fine staff for looking after the library. Books were properly catalogued and kept in shelves in systematic order, divided in various sections.

The library at Tripoli contained three million books and other graphic materials, as stated by a well known historian “Alfura’t”. In the library of Aziz Billah there were 20,000 books and manuscripts in general out of which 18,000 were on science. Due to rapid changes of governments and act of vandalism by conquerors and misuse of the collection, the life of those libraries was not so long. “Alfura’t” who died in 807A.D. has recorded that in Tripoli there were many splendid libraries, famous for their beauty and arrangement of books. Gradually with the fall of Muslim cities into other hands, due to the loss of political power, everything was left at the mercy of victorious Christians.

The life, property, language, literature and culture of Muslim nation brought at stable. The victorious Christians went against their terms of capitulation and tried to convert Muslims into Christians and burnt all the books and manuscripts which could be found in libraries, private houses, mosques and other places and this was done after the expiry of 8th year after capitulation. It is mention able that this was a period in which in the Christians were able to copy all the useful manuscripts, in Latin and Roman languages.

In comparison, Muslims occupied several parts, only copied those manuscripts in Arabic and then returned the original manuscripts to the owners.

At present there is no Muslim in Spain while in fact at the time of capitulation the entire population in Spain was Muslim, which were later converted by force.

After the death of Louis IX, his successor Charles V. included many valuable books to this library through purchases and translated many books in French (Akbar, 1968: 41-53).
During the reign of Charles V, Love of Luxurious books spread among the French nobility, in particular the members of Royal house embraced the habit (Hessel, 1950: 32).

History tells us “that the libraries of the newly founded universities – along with those of the manuscripts were the main centers for the study of books until the late middle ages; books were very expensive and beyond the means of all but few wealthy people.”

“The 13th, 14th & 15th centuries, however, saw the development of private collections. Philip the Good, Duke of Burgundy, Louis IX, Charles V, (who may be founder of Bibliothèque Nationale in Paris) were great collectors, as well as such princes of the church as Richard De Bury, Bishop of Durham (died 1345) who wrote a famous book in praise of books, Philobiblon (first printed in Cologne, 1473)” (Britannica, 1983).

The nobles as well as the members of the royal family took keen interest in the establishment of new libraries. At that time the library of Philips, was considered, one of the largest libraries. Prague, which was under the influence of Paris, held the leadership in the illumination of manuscripts in Central Europe. In Germany, a new literature was written for middle classes, due to which, she began to empress her influence upon the whole epoch. Richard De-Bury was the first man, who made it easier to establish book shops in the universities of Paris and place those books under the direct control of authorities (Akbar, 1968: 41).

RENAISSANCE

Actually the period of Renaissance started in Italy, An Italian Petrarch was a famous figure of this period and he is considered as the founder of, “Humanism”. Petrarch was the person who fixed his attention in classical antiquity and placed great value upon the beauty of manuscripts with the help of assistants, he tried to keep his library like a shrine. He was very fond of books and use to say that, “books delight us, speak to us, council us and are near to us, by a living action of relationship.” (Libri medullitus delectant, 1932-1941)
Petrarch was found, in his study room, head sunk upon an open codex at the time of his death. He created a new ideal for private libraries.

One of the greatest of fifteenth-century private libraries is described in “Pearl Kibre; The Library of Pico della Mirandola” (New York, 1936). The library of St. Mark at Venice had a very rich collection of manuscripts which later became the focus of Renaissance civilization (Hessel, 1950: 40-50).

“As Europe surfaced from the absolute depths of darkness into light of education, men and women started looking to the Greek and Roman artsy and literary classics for ideas. Several aristocrats of the time were committed to establishing their private libraries.”

Along with “the expansion of universities was the creation of university libraries, which in some instances were started on the basis of a personal contribution for example, Humphrey, Duke of Gloucester, generously donated his large collection to Oxford University during the early 1400s”. (Krasner-Khait, 2001:5-7)

Nicholas V was a tireless hunter of books and manuscripts, who devoted his major part of his life in searching and collecting Greek manuscripts. He translated with the help of his librarian named Tartolli the Greek literature into Latin and for this purpose he employed several copyists and scholars.

In 1452 A.D. Nicholas V, sent his agents to Scandinavia and various other countries for searching down the works of classical authors. Rome once again becomes the centre of scholarly and literary activities. Though he did not succeed in his mission due to his sudden death, even then he was able to collect nearly 400 Greek manuscripts.

In addition to this, Vatican was also trying to gain first class position in the libraries. In Italy actually she did succeed in gaining the first rank, so far the development of libraries in Italy is concerned.

A characteristic which differentiates Renaissance from the Middle Ages is the opening of public libraries.

In Nicholas V, library, patriotic and humanistic works stood side by side.
So far the system of shelving and classification of books are concerned, there is a slight difference between these two systems. But individual volumes in Renaissance’s libraries show a good deal of variation from medieval manuscripts.

Introduction of legal deposit system was one of the works of great importance of King Francis of France, which he proclaimed as a law in 1537-38.

**REFORMATION**

In history reformation period is known as the new age for the development of libraries. Many medieval libraries lost their existence in this period and collection of many countries was destroyed or carelessly disposed off like a papist literature. The revolutionary movement like peasant war of 1524-25 and other revolutionary movements brought a worst havoc upon Europe. The libraries in Oxford were completely emptied by order of King Edward VI. The furniture of libraries was auctioned, being found useless, if on one hand the reformation period is, a period, for the destruction of libraries, on the other hand, it has emphasized constructive influence also (Hessel, 1950: 40-51).

**17TH AND AFTER**

In France an important step was taken by the government for the transfer of the Royal Library to Paris. “This library was transferred under the supervision of Regault, a librarian who compiled the catalogue of this library in 1622” (John Evelyn, 1661).

In France only the ruling family took great interest in the development of libraries but in England, it was the whole nation represented by parliament. In the disturbed days of revolutionary movement, Sir Han Sloan, Dury and others tried to increase the collection of books and manuscripts to several hundred, thousands of volumes and later, George II donated the entire collection to this library. In the beginning of 17th century Italy tried to keep her position but could not continue her standard to the last. Marutori the librarian of Ambrosian was the famous librarian of this age. Megliabechi was a famous scholar enjoyed a good deal of reputation.
Gottington was another German who introduced a system of close organic connection between the arrangement of books on shelves and the catalogue. In 1699 legal deposit system was brought in force, in this century.

The period of 19th and after is great social upheaval, special for the development of libraries in western countries. In the middle of 19th century several public libraries were established in Germany and other European countries. In this period Sir Anthony Pannizzi of Italy, gained a universal fame in the organization of libraries. He was a politician and was further responsible for introducing libraries in new shape. Pannizzi was a good scholar and known as Anthony Napoleon of libraries.

Throughout the 1600 & 1700s libraries surged in popularity. In history these periods are called the Golden Age for libraries. As universities developed, country wide state-supported collections also started to appear and several of these reached up to the level of national libraries i.e. Bibliotheque National, The British Museum Library, Library of Congress, Lenin Library and other national collections. The British Museum “was founded in 1753 by the acceptance of the bequest of collections of Sir Hans Sloance, Physician to King Georg II and president of the Royal society” (Hessel, 1950, 72-128).

An Italian, Sir Anthony Pannizzi made the great reform in British Museum library, who was not only a good librarian but also a distinguished scholar and lover of books (Cobbett, 1833).

Antonio Panizzi was appointed Keeper of Printed Books in 1837, he insisted upon the rigorous enforcement of the mandatory deposit laws, which publishers had got into the habit of ignoring. He secured an appropriation of ten thousand pounds a year from Parliament for the purchase of books. And he improved both the physical facilities of the library and its staff, so that they might be adequate for the collection he meant to build: one that would not only possess “every book that was printed either by Englishmen or in English or relating to England,” (Miller, 1967) but would also own “the best library of each language outside the native country of that language.” (Eesdaile, 1975)
"In France, the national library in Paris recognized as Bibliotheque Nationale de France started in 1367 as the Royal Library of Charles V" (Krasner-Khait, 2001: 5).

In 1735 the Bibliotheque du Roi was permanently opened to the public, who were permitted to use the books twice a week. From its medieval beginnings, the Bibliotheque du Roi grew steadily through the purchase of eminent private collections and its own acquisition efforts. Missionaries and traders brought back books from the lands they visited. Duplicate books were exchanged with libraries in other countries; the King exchanged books with the emperor of China (Lerner, 1999: 76).

The National Library in Paris is a universally recognized “Great grand mother” of the type it was founded as the Royal Library in 1480 and has received deposit copies, with some interruption, since 1537. In 1795 it was declared the National Library of the country by the national convention (Library Information Science, 1976).

Italy featured numerous famous libraries including Laurentian Library in Florence, Vatican Library in Vatican City, Ambrosian Library in Milan and National Central Library in Florence, King Philip V founded the National Library of Spain, in 1711. Portugal’s National Library in Lisbon shown up in 1796.

The first, German Library in Berlin was established in 1661, then Leipzig library in 1912 and in Frankfurt library launched in 1946.

The Russian State Library in Moscow (formerly the Lenin State Library) was established in 1862 as a constituent of the Moscow Public Rumiantsev Museum.

The first USA Library in America started with a 400-books donated by John Harvard to a fresh university that inevitably privileged him by using his name.

The Library of Congress was established in 1800 by the special order of Congress for service of congressmen.

“The earliest collection of Library of Congress was doomed since the British burned it while in the war of 1812” (Krasner-Khait, 2001: 6-7).
Shortly after the destruction of the library, Jefferson donated his whole library to the Library of Congress. In 1898, Herbert Putnam was appointed the librarian of this library (Akbar, 1968: 53).

It was not until “waves of immigration as well as the philosophy of free of charge public education for children that public libraries apply in the U.S.A”. (Krasner-Khait, 2001: 7).

Librarians knew there was no need for the same book to be cataloged in detail by every library that owned it. After all, the basic bibliographical details of the ordinary printed book- author, title, imprint, physical aspects- did not vary from one copy to another, nor did its content. So the Library of Congress started selling copies of its printed catalog cards to other libraries. And, in turn, libraries contributed cataloging information for their books to a National Union Catalog maintained in Washington.

In recent years this cataloging information has been produced on magnetic tapes and optical discs to make interactive searching by computer possible.

The Dewey decimal classification, worked well in public and college library collections, was not detailed enough to reflect the contents of the Library of Congress. So the library devised its own classification, which has been adopted by large libraries across the United States and around the world.

Another area in which the Library of Congress has undertaken a leadership role on behalf of American Libraries is that of the conservation and preservation of library materials.

Librarians have microfilmed newspapers, laminated precious documents, and experimented with chemical technology for removing or neutralizing the destructive acids from pulp paper. The Library of Congress has been in the forefront of this work, conducting chemical research and using innovative computer techniques to preserve and distribute rare pictures and documents.

The Library of Congress is the American National Library, and is becoming one of the cornerstones of the evolving worldwide research library system (Lerner, 1999: 80-81).
In information technology the computer, which in general terms is a machine not just for performing mathematical computations but for manipulating characters and storing them, is an invention of direct relevance to libraries' prime concern—the acquisition, storage and exploitation of knowledge as recorded in documents of all kinds—in other words, character manipulation. We must expect, therefore, to see a very rapid growth in the use of computers in libraries and in the services provided by those libraries (Kimber, 1974: 8).

**LIBRARY AUTOMATION**

Library automation refers to use of computers in library work including services. Computers were engaged for working in library service in USA in 1950s in a very modest way. Computers entered and found some place in American Libraries in this decade. However, their use and application was very limited and restricted due to the high cost of hardware and non-availability of application software packages. In April 1960 the American Chemical Society published its “Chemical Titles” through computers. In this decade, one of the most significant developments in this direction was seen in MARC I (Sharma, n.d.).

**HISTORY & DEVELOPMENTS**

The most common house-keeping operations are acquisition control, cataloging and circulation control. In modern age “even the related topics such as information retrieval, semi-automatic, automatic indexing and networking of automated system are also treated as part of library automation. The computer has a major role in library automation, telecommunications and reprography technology.”

With the availability of general purpose computers for performing traditional library activities, library automation entered into second era in 1960s. Some of the developments during this period are as under:

- The MEDLARS project – A project to mechanize the handling of medical literature at the National Library of Medicine, USA.

- The pioneering work on serial control by the Southern Illinois University of California, San Diego.
- The development of a circulation system by the Southern Illinois University at Carbondale.

- Ontario New Universities Library project of the University of Toronto in 1963 (the project was aimed at producing computerized book catalogues for five new university libraries in Ontario).

- Initiation of project MARC by the Library of Congress to provide a format for cataloguing data that can be:
  
  i  Computer readable
  
  ii  Accepted as a national standard, and
  
  iii  Used on different computers (Ravichandra, 1996: 2)

Since the 1960’s libraries have used technology in general, and computers in particular, to automate a wide range of administrative, public, and technical services tasks. Computer applications in areas of library work acquisitions, circulation control, descriptive cataloging, catalog maintenance and production, reference service, and serials control (Saffady, 1989).

In the mid 1960s, two reports were published in USA on library automation. These reports had a great impact on further development of library automation. The first report entitled “Automation and the Library of Congress” was published in 1963 by King University. The other one was the report of a Planning Conference on Information Transfer Experiment.

The next era of library automation began in the late 1960s; to a great extent, it began with the success of the INTREX and the MARC projects. During this era, online, real time interactive computer systems were introduced in the library and information field. Most of the library automation projects of 1960s were batch processing systems (Ravichandra, 1996: 3).

In an automated library the essential functions are: Acquisitions, Serials Control, Cataloging, Circulation and the Public Access Catalog controlled by computer. Vannevar Bush imagined a computerized system that would save information. Librarians then settled beyond an idea or a vision for the utilization of
computers, because of the technology. They were capable of making wonderful breakthroughs in the application of computers for library systems.

The creation of CD-ROMs in late 80’s has modified the style of libraries working. CD-ROMs have become accessible filled with databases, software, and information which were earlier accessed through print. During the early 90’s the databases became readily available on CD-ROM. Libraries could then simply acquire information via a number of choices.

During the late 1990s University of Central England (UCE) library service worked hard to enhance the quality of its services with electronic delivery of information. The concept of digital library was to provide round the clock access to a wide range of information. The Library of Congress in the beginning of twenty first century to realize fully the potential of a digital library. The Internet has a virtual community where, with a PC and a modem, a person can connect anytime, anywhere, with another human being to share information, seek advice, buy or sell a product. The Library of Congress has enjoyed tremendous success in creating a national digital library program (NDLP). Library of Congress higher level of connecting to anyone in the world and provide such services to scholars in the Main Reading Room of the Library of Congress (Nawaz & Kamal, 2006).

The relationship between the library and the computer is a changing one. Computer science has been changing rapidly ever since. Half a century ago and now the library itself is beginning to be changed under the influence of the machine. In the twenty first century it is easy to strive for change simply for its own sake, just as it is even easier to strive for retaining the status quo. The growth of online techniques, are particularly suitable to some areas of library work and will make it realistic for libraries to expect to have online access to a large and powerful machine. We are now witnessing the gradual birth of widespread cooperation among libraries, founded upon the fact that modern techniques of electronic data storage, processing, and transmission make possible the speedy and accurate exchange of bibliographic data. New concepts of bibliographic control and library service are emerging as a direct result of computer applications to library work (Kimber, 1968: 1-4).
CHAPTER-2

SOCIO ECONOMIC FACTORS
AND DEVELOPMENT OF LIBRARIES

Being a social institution Library is expected to perform certain functions. It should be for: self-education; information about all local, national and international subjects; economic, political and social uplift; proper use of leisure time; development of culture; and preservation of literary heritage. The socio-economic factors for the development of libraries are:

- Political and social stability of the society.
- High standard of living.
- High rate of literacy.
- Local and national traditions.
- Encouragement from local, state and national governments.
- Influence of leading individuals.
- Well established book trade.
- Existence of large chunks of urban population.

As mentioned above it should be clear that social, political and economic conditions play an important role in the growth and development of libraries. The changes in the society will affect the role of librarian. The present day society is undergoing fast changes. These have made an impact on libraries and such as there are various implications for libraries.

For the development of libraries, it is essential that librarians should be able to understand and appreciate the changes in social, political, economic, technological and ethical environment. They should rather take advantage of the same. Above all they must respond to the changing situation (Kumar, 1987).
It is an accepted principle that a country, rich in information, is rich in socio-economic spheres. Information is emerging as a critical resource for user activities at all levels: Education, Research and Development. At present Information is advancing the frontiers of knowledge, pushing back the barriers of ignorance, creating competitiveness in business, industry and socio-economic development, improving the quality of day-to-day life etc.

Libraries have ever been shouldering the upheavals of civilizations. These have been the main elements of preservation, exploitation and dissemination of recorded achievements of humanity throughout the ages. From the cave walls paintings, clay tablets, inscriptions, papyrus rolls, paper printing to the development of electronic databases, the main role of the libraries for the welfare of the human beings was and is the control of intellectual traffic mechanism. In early ages the pace of intellectual development was slow. With the invention of printing press technology the recorded information became manifold which baffled the social and natural scientists to retrieve the pertinent piece of information within the optimum time.

Computer invention and its rapid use in various fields in human activities is witness to the fact that the computer is considered to be essential component for all round development. Computers continuance in almost all fields of human endeavor is due to its invincible qualities as like speed, unlimited capacity to store ocean of information on tiny storage devices, capability to perform without fatigue, radical power to sort, arrange, retrieve and disseminate information. Thanks to the development of computer technology adopted by Libraries, now they are in a position to provide the latest information to researchers within shortest possible time span.

It is true that information is playing a pivotal role in governing the human life in 21st century and making profound impact on society and economy. It is an outcome of various intellectual activities of human beings, generated through a number of communication channels or media. It is usually transmitted through informal and formal systems i.e. dialogues, lectures, symposiums, seminars, conferences, print, audio/visual, mass and electronic media.

Due to information flood, today we are living in an age of “information explosion” or “information boom”. Major factors leading to this phenomenon are
exceptional growth of literature, technological developments in printing technology, revolution in the field of information technology. The value of information is determined on the basis of providing information to the right user at the right time in the right form pertinently. Information is a valuable input to various types of groups such as academician, students, researchers, professionals, managers, decision makers, and planners, etc. It is an asset, but useless until it is put to use. Therefore, the value of information is determined on the basis of its utility. In an informed society, its importance is paramount. It is also a bedrock pillar of national development and that the availability of timely and accurate information will play a fundamental and dynamic role in the development of comprehensive policies and programs in any country.

**LIBRARY IS A SOCIAL ORGANIZATION**

Social systems are based on social organizations. Libraries and information resource centers are social organizations and such segment of society and social systems. Homogeneity of social process can be compact to the extent that all components are working well. In this age the latest information is becoming an important factor for the social economic, scientific and technological progress of every nation. No society may flourish at its own without trodding the footprints of its ancestors. We are bound to utilize the treasures of information hoarded by our predecessors in the shape of information resource centers, libraries which are tagged according to their functions, as academic, special, public and National Libraries etc.

Presently world is developing fastly and at the same time changes are taking place economically, politically, culturally on the basis of race class, and religion at global level. But majority of the population of world is suffering from diseases and facing hunger, war, and illiteracy. Man is struggling for peace and prosperity and for basic human rights. Information is not a new phenomenon. Man is social animal and distinguished from other creations by reason, knowledge, information and communication (Jamali, 1995).

Information is an important source of knowledge for the mankind from cradle to grave. It is an indispensable raw material for right decision making from personal
to governmental level. A knowledge-based society is more powerful and advanced than the others.

Information is weapon in the struggle for economic and social advantages. It is the basic ingredient of decision making. Business, science and technology, Government each is concerned with a world encompassing more and more interrelationship and the need in each case has therefore become ever greater to provide the decision maker with more information (Becker & Robert, 1963).

The information is an important factor in promotion of scientific knowledge and for socio economic progress of any nation. Human civilization could not be conceived without comprehending the role of information. Libraries are repositories of knowledge. Libraries are a rich source of knowledge and information for both scholar and layman alike. The existence of a nation as a civilized people depends on freedom of thought and free access to knowledge. If it had to be protected, as a nation must ensure that average citizen’s mind was not only free but was well informed (Samdhani, 1993).

The information has become the wide basis for the survival and progress of human civilization and society. This has been essential recognized in most countries and in those with large investments in research and development, information systems have been created to meet the special needs of scientists, engineers, administrators, doctors and those working in socio-economic fields.

The trend towards this progressive society being accelerated by the strategy of a sort of ‘information industry’ based on modern techniques which provide a means of challenging knowledge and speeding it more easily. As a result many countries has been examining the need for more systematic planning of their present information infra-structures and to utilize the information accumulated at the national level and to be able to participate in and benefit from existing and future world information systems in various fields of activity. So, in any country we should adopt the automation regarding library services (Jamali, 1995: 27).

“The culture of the world is contained in its libraries” (Houle, 1951). If that culture is to have it fullest significance for humanity, in guiding them to plan for
peace and prosperity of the future, libraries must be considered an integral part of community life and reshaped and set to function in a manner befitting the object. The tradition of an ancient culture and respect and love for knowledge, learning, books and reading is a primary advantage for the growth of libraries. But a paradoxical development of the library services is witnessed.

Nations with only short history of civilization and culture and artistic and literary heritage have established models of libraries service of their communities (Vishwanathan, 1978).

Automation is the most sophisticated electronic device invented by human being for processing enormous amount of raw data into meaningful and useful form of information with speed, accuracy and reliability. Library Automation means application of automatic and semi-automatic data processing machine “computers to perform traditional library house keeping activity such as acquisition, circulation, cataloguing, reference and serial control (Int. Lib. Rev., 1989).

**FAVORABLE/UNFAVORABLE SOCIAL FACTORS**

Dr. S. Ranganathan had stated that a “combination of impatience and inexperience is the greatest danger” in the organization and development of libraries. Before any programme to set up a library service in any locality is drawn up, it is very necessary to collect, through a survey of community, the data in respect of the social, economic, political and physical characteristics of the population. Without an adequate knowledge of the way of life of the people for whom it is intended, an appropriate type of library service is seldom useful.

In advanced countries, where stable and good government exists, reliable data about the community are normally, available in various state records and documents, like the census reports, economic enquiry reports, and linguistic surveys, geographic and educational surveys. In localities where previous data about the population is not available, it is fundamental that a community survey is instituted to ascertain the type of library service appropriate to the area.

In a civilized community, certain features exist which are favorable to the establishment of an effective library service. “The tradition of an ancient and revered
culture, which permeates the people’s lives, offers a sturdy trunk out of which the library may be grafted. Those countries in which learning and knowledge are respected and honored offer a fruitful-field. Other such features include the following:

- An awareness of local community needs and the desire to satisfy those needs.
- A conscious urge to learn and develop.
- The existence of various particular incentives to become educated, e.g., occupational, social, financial ambition.
- Homogeneity of language, race, religion.
- A sufficient degree and a steady annual increase of literacy.
- The existence of reasonably compact and stable communities, readily accessible to each other.
- A genuine interest in education and social welfare on the part of local and national authorities and officials,

Unfavorable features include the following:

- Poor communication.
- An extreme or unhealthy climate.
- Malnutrition arising from and cause (over-population, unhygienic occupations, etc)
- The absence of any significance, tradition or experience of group cooperation for common improvement.
- Any tradition which disapproves of the education of women.
- A poor economy.
- Apathy of the elite towards the education of the people.

In addition of these unfavorable factors, there may be a resistance to any attempt to bring education to underdeveloped groups in the community to retain or increase political, social, religious or financial dominance. Serious conflict between
competing religious, political, social or cultural organizations may also impede education. Perhaps, the greatest obstacle of all, however, would be a political situation in which a policy of discouraging of the enlightenment and self-development of the mass of the people is deliberately pursued. Special problems arise in those religions which do not govern themselves. And in which there exist suspicion and hostility towards those who govern (Houle, 1951: 113-114).

There are several institutions popularly used by the people for the religious or social purposes like the mosques, academic institutions, market places, missions, temples, rural centers, fairs and festivals, religious orders and societies, labour unions and associations, whose activities and cooperation could be enlisted for the successful organization of a public library service. Enough evidence is available that religious, philosophical, literary and artistic discourses were conducted in the premises of the religious places. The desire and devotion of the people to learning and literature was and is still unmistakable (Vishwanathan, 1978: 12).

The history of civilization tells us that the libraries have been an essential part of civilized society. These came into being to serve the needs of the society. These had a significant role in the preservation and advancement of culture; formal and self-education; and reading for leisure. In recent years Libraries have helped business men to improve their business; assisted the decision makers, the researchers, students and other members of society in achieving their goals.

Information has an important role in the advancement of knowledge (e.g., a researcher would need information to keep himself up to date and well informed in his field of specialization), decision making (e.g., a manager of business firm should have enough information to be able to take a right decision), planning (e.g., the planners of national or regional or local plans need information to be able to plan properly), avoidance of duplication of efforts and technology transfer. Research aims to provide solution to problems. No national development programme can succeed fully without proper information support. As a result, information is being increasingly regarded as a national source. In some developed countries it is considered as fundamental as energy as matter, which affect different aspects of human activities.
Traditional libraries confine themselves to books, manuscripts and periodical publications. But modern libraries acquire variety of items including books, periodical publications, microforms, slides, photo graphs, audio cassettes, video-cassettes, maps, models, gramophone records, tape records etc. The new material such as microforms, audio and video cassettes serve as an important force and every library must acquire these.

The best solution to overcome lack of resources is to set a national network of libraries. The network should consist of sub-systems including national, public, academic, special, government, and school libraries. National Central Library should be at apex. Small library authorities may be replace by large authorities. Resource sharing must be implemented seriously. Management of resources should be improved to achieve efficiency and effective-ness (Kumar, 1987: 3-9).

Since the beginnings, the library was considered as, “a nest in which to hatch scholars”. The sons of wealthy alone had access to the libraries; while those whose means did not permit them to purchase books were too often deprived of them. In the mid 19th century those who believed that education could save the world and that the library was handmaiden of universal education so urgently needed to make the world safe for democracy were in full cry. Library was considered the crowing glory of education. ‘How much more ignorance would thus be removed” thundered John B. Weight in his defense of the Public Library Act of 1851, how much vice reformed, how much slumbering talent awakened, how much awakened talent aided and made efficient, how much done to make many in a high degree intelligent, well informed, useful and respectable citizens, and to correct, improve and elevate and general character of the whole community…” Victor Hugo echoed, In Les Miserable, “Light, light in floods, no bat resists the dawn, illuminate the bottoms of society.” And the chief function of the library is to produce a general diffusion of knowledge to create enlightened citizenry. In sum, by the efforts of men of lead, learning and light, librarianship had turned the corner and begun to proselyte (Shera, 1972).
SOCIAL ROLE OF A LIBRARY

As we know library as a social institution. It is a product of society for its culture advancement. The traditional function of a culture is to enable a group to survive, and this principle implies the conversation of the past. Not only do the libraries conserve our culture, but as agencies of communication they pay an important role in its transmission. Its description as “Mind of Society”; the “House of Wisdom”; the “House of Learning”; the community’s intellectual in moulding the life of the community. To serve as a social agency, the libraries play an important role:

- To assemble, organize, preserve, socialize, and serve all expressed thought embodied as manuscripts, books, periodicals their constituent documents, however minute, and every other similar document produced as a means for communication.

- To help in the transmission of the knowledge of the earlier generations to the late ones.

- To help in the accumulation and the further building up’ of knowledge from generation to generation.

- To help in the contemporary development of knowledge without any wastage in the building of knowledge, by the unintended and purposeless repetition of effort and the consequent wastage in the research-potential of humanity

- To conserve the research time of humanity by the separation of literature-search from positive research (Ranganathan, 1961).

Secondly, library is an agency for perpetual self-education. Education does not end with one’s formal education, rather. Real education starts at the point where the formal education (imported through institutions ends. Education is a life-long process, from the cradle to graveyard, and library particularly the public library is the most appropriate agency to provide adequate facilities for self-education to one and all. In the process, library cultivates amongst people the virtues of self help, self-confidence, self-reliance and initiative.
The frenzy of enthusiasm for self-education for self-education represented a transition from the individual centered to the community-centered library, it enthuissased Alvin Johnson to describe the public library as a people University. The impelling need of self-education makes the library serve not merely the aristocracy of birth, rich or poor, powerful or meek, but each in the measure of his intelligence quotient and field of interest. In communities where there is no flow of appropriate reading material and no stimulus to write, literacy in itself may have little significance. Experience shows that in such areas individual that are taught to read and write frequently relapse into illiteracy, unless progress in literacy is accompanied by progress in other fields, particularly in the material of communication. Moreover, the wisdom and pertinent services of teachers must be supplemented when the students have their schools by liberal provision of means such as public libraries provide for the self-education of those whose ambitions and interests, having been stimulated, are active forces in the development of the individuals and of society (UNESCO, 1952).

The academic libraries do violence to the ideals which led to their development if they do not serve as wide public as the nature of their facilities permit. If facilities are lying idle in the form of books unused, records unheard or films unseen then there is a corresponding decrease in the value of the library to the community or individuals who pay for it, and no gain to those who do use the facilities. Since university library accepts the role of leadership in the community it should frame the policies and activities that could help the community in the elevation of its moral and intellectual attainments by the provision of partial or complete library privileges to.

- Students attending evening courses that are recognized by the university,
- Students following a bonafide programme of correspondence studies under the authority of the university, and
- Private study candidates who would be willing to pay a fee to guarantee good faith.
Further, the university library could make the provision of alumni privileges such as use of reading rooms, loan privileges through an “extension desk”, and access to general shelves. These privileges could be paid by the alumnus. The university library could also provide the same facilities to the public—possibly on a more restrictive basis such as a special reading room, guided reading programs for professionals—in cooperation with professional associations are provided. Specialized libraries could be set up for the camps, short courses and study groups, operated by university Extra-Moral Departments (Day, n.d.).

Thirdly, consistent to its dynamic role, the library plays an important role in strengthening democracy. Its important role in this respect lies in the creation of thinking people, cultivated men and women gifted with disciplined minds, high intellect and moral caliber, nurtured in the climate of freedom of thought and expression, and capable of holding opinions independently arrived at, to shoulder stupendous responsibilities. This remarkable function of training the mind and spirit of man enabling him to work for the social, cultural, moral and material advancement of society is the be all and end all of library academic pursuits. In fact, the library serves a society in flux poised between assimilation and utopia, torn as under by great social movements and tremendous political changes, and confused by a babble of conflicting traditions. Such a society needs, as never before effective access to the wisdom of past for its very survival and its provision is the library’s foremost duty. It enjoins upon the library to collect together all available record information—particularly in the form of reference books, and to socialize and serve freely all such information to each according to his needs at the moment. Other dynamic social functions of the library are:

- To increase the economic resources of humanity to the extent necessary to maintain the ever increasing population comfort and free from want of any kind.
- To help in the mutually understanding, mutually cooperating, and mutually tolerant peaceful co-existence of individuals, communities, and nations.
- To help in the elevating, self-dependent use the leisure with the aid of freely served books, pictures, sound records, and other similar materials.
• To help in increasing the opportunity for the spiritual awakening of one and all of the members of humanity (Ranganathan, 1961: 171-172).

The libraries provide material happiness, mental joy and spiritual delight. They contribute to the circulation of ideas the harnessing of leisure, the demands of democracy, the spread of literacy, and the success of commercial and industrial organization.

Fourthly, as a social agency, the encouragement of reading is the most important function and a continuing activity of the libraries. Stimulation of reading and guidance of the reader in choosing his/her document in the form of planned reading programs, books talks and books reviews, book lists, and specialized bibliographies, displays and exhibits, browsing areas, open access, and teaching and the use of specific library tools.

To encourage the use of library and to participate in the teaching and research programme as well as to become a nuclear of intellectual gravity for the community it serves; the library staff interprets the materials. It includes:

• Providing information pin-pointedly, exhaustively and expeditiously.
• Answering factual and complex reference questions by literature searching.
• Compiling bibliographies, and making annotations or abstracts or preparing indexes whenever necessary.
• Maintaining information and other files.
• Borrowing and lending materials on inter-library loan.

Finally the instructions should be given in the use of library by conducting formal classes, and by passing instructions to individual or groups in the use of library material. After achieving the social objectives as stated above the libraries have four responsibilities (Gates, 1968):

• To collect and organize pertinent information in what ever form required, on the basis if its utility in meeting the research, management, educational, informational, or other programme responsibilities;
To provide ready access to their materials and to assist users in locating required information;

- To disseminate pertinent information from their collections on a selective basis.

- To make their collections and services known to present and potential users.

Many of the basic functions performed by libraries today are education, research, information, civic responsibility, aesthetic appreciation and recreation. Since the library is intertwined in purpose and function with society’s needs, any piece or item of recorded material is a potential library acquisition function and no part of the social structure, regardless of the stage of its development is outside the scope of the library’s generic concern. McColvin has aptly remarked that “today we have reached the stage when we advocate universal library provision, not merely because the masses have the right to equality of opportunity in respect of access to knowledge, but also because we firmly believe that mankind will not be able to exercise wisely their rights and powers unless they do not intend enjoying such access to the mine of knowledge.”

Great libraries have rightly been hailed the roots and fruits of great civilizations. Libraries show light to enable people to become better citizens. Library thus effects society and is an acknowledged agency with which society must be concerned.

The history of the development of libraries reflects the social, cultural, economic and educational needs of the society. Libraries have responded to the needs of the society. Experience shows that many factors which affect the development of our societies also affect the development of libraries.

There are certain factors which are favourable to the development of libraries. Under these factors libraries have tended to prosper. These factors are listed below:

- Politically and socially mature societies which recognize the necessity of preserving, transmitting, and enlarging the body of knowledge.
• During the periods of relative peace and tranquility which afford time to plan and peruse cultural and intellectual activities.

• When individuals have time and the means to “Cultivate the finer arts and improve the common stock of knowledge”.

• In periods of intellectual creativity and scholarly activity, when large and varied collections of materials are required for study and research.

• When there is large societal emphasis on self-development and a well-informed citizenry.

• During revival of learning which centre around and depend upon accumulation of graphic materials and access to them.

• When institutional stability and security of tenure offer permanence and continuity.

• In areas with concentrated population and especially in an urban environment which can provide the leadership, the financial means to support libraries, and cultural and intellectual interest to simulate their use.

• When economic prosperity provides sizeable individual and corporate wealth and encourages philanthropic giving.

• In times when, in recent decades, economic growth national power and status are considered to be dependent upon the wide dissemination and use of information and knowledge which have utilitarian value.

In nutshell, social, political and economical factors play an important role in the development of libraries (Gates, 1968: 92-93).

The purpose and objective of setting up institutions like libraries has been the Storage, Organization, Retrieval and Dissemination of information.

Information is considered to be the most important and prominent heritage of the mankind. Hence, since the beginning of human life and civilization the mankind have been storing, retrieving and disseminating it. In ancient times information was stored in memory and assimilated after its dissemination through hearing.
The Universe of Knowledge was then very small and therefore it was possible to store it in memory. Human's brain is also a computer and it stores and assimilates information in an organized manner and also retrieves it when its dissemination is required. Gradually the Universe of Knowledge grew and the humans found it difficult to retain or store all information in memory. They therefore started recording it on various mediums. Then necessity for storing this recorded form of information was felt and manuscript library was result. There was no standard and defined pattern of organization of these manuscripts because their number was so less that it was not very difficult to retrieve a manuscript at the time of need.
CHAPTER-3

DEVELOPMENT OF LIBRARIES IN PAKISTAN

Information has turn out to be the most essential economic resource. Libraries deal with diverse needs of the individuals and also the particular requirements of various economic sectors. Apart from its function as a portal and an archive of information, library also acts as core of culture and heritage. Though the numerous programmes and solutions provided, library can certainly offer the social setting which permits for learning via human relationships and therefore opportunities to collect information through casual avenues. (PLA.1998)

LIBRARY DEVELOPMENT FROM 1947 TO UPDATE

The Post independence literary scene in Pakistan was not fascinating. Pakistan inherited a ruined economy and its impact was unavoidable on the library development in the country. The initially handicapped, Pakistan inherited 4 libraries of any significance. Three of them were located in Lahore, the city once called “The Cradle of Library movement” in India and where the first University Library School of the British Common Wealth of Nations was founded in 1915 by Asa Don Dickinson, who was a disciple of Melvil Dewey (1891 – 1931). Punjab University Library pioneered the teaching of Library Science by Starting a Certificate Course, a year earlier to the Library Association of the United Kingdom. Pakistan has made substantial progress in every walk of life during its 63 years of existence and the libraries are no exception to the rule.

Due to the heavy burden of refugee from India, it was not possible for the government of Pakistan, to provide full facilities for the improvement of the conditions of libraries until 1950. Library employees who were mainly Hindus left for India and those coming to Pakistan were not trained sufficiently to replace them. In fact that Pakistan was denying its rightful share of library resources build over the years during the British rule (Khurshid, 1977).
Need for proper Library Services in the country was intensely realized despite of tremendous problems and difficulties which were being faced by the newly born country in the early years of its independence. In the beginning libraries were a neglected institution due to other national priorities. Starting from 1956 a number of library development plans were made for the development and growth of libraries in the country, both by foreign as well as local experts, but none were implemented.

The Department of Archives and Libraries was subsequently bifurcated in order to create an independent Directorate of Libraries under the Federal Ministry of Education in 1973 (NLP, 2004).

DEPARTMENT OF LIBRARIES

The Department of Libraries is also responsible for the supervision and maintenance of the National Library of Pakistan and newly established Islamabad Public Library and Model Children Library, Islamabad. This Department looks after the professional issues, establishment of new libraries and the matters relating to information services in Pakistan.

Department of Libraries under the Ministry of Education opened 04 new small Public Libraries in different sectors of Islamabad during 2007-08. For this purpose Rs. 55.666 millions was provided to the Department of Libraries. The Government of Pakistan approved establishment of “National Human Resource Development Centre” in order to meet the continuing education needs of librarians.

FUNCTIONS

The main functions of the department of libraries are as under:

1. Formation of plans and polices for improvement of Libraries and Library services throughout the country.

2. Provision of information services to Ministries, Divisions, Departments, Federal Government Offices and residents of Islamabad by maintaining the Islamabad Public Library at Islamabad.

3. Provision of library services to the children of Islamabad through the Model Children Library at Islamabad.
4 Collection of statistical data on Libraries for research purpose.

5 Advisory services to other institutions in the planning and improvement of their libraries.

6 Management and operation of the National Library of Pakistan to meet the research, reference, information and reading requirements of the nation.

7 Collection and Preservation of National Literary Heritage procured under the Provision of Copyright Law and to provide access to these resources.


9 To compile and publish the Pakistan National Bibliography on annual basis.

10 Representations of Library Science on behalf of Government of Pakistan on international Library forums.

11 To facilitate the academic and cultural activities in the Federal Capital by extending the Auditorium facility for holding seminars, conferences, etc.

12 To arrange book exhibitions, conferences, workshops, etc for public awareness.

13 To organize courses and workshops for Human Resources Development in the field of Library Science.

**ORIGIN OF NATIONAL LIBRARY OF PAKISTAN**

The National Library was established in 1950 as a branch of Directorate of Archives and Libraries. In 1954, Liaquat Memorial Library was merged with the National Library and named as Liaquat National Library Karachi. A scheme for establishment of a National Library in real sense in Islamabad was originally approved by the ECNEC in 1963. The Liaquat National Library was renamed Liaquat Memorial Library in 1968. This Library continued to perform some of the functions of the national library until 1986, when it was transferred to Sindh Government under orders of the Federal Cabinet. "The actual construction of the National Library commenced in 1982. Most of the civil works were finished by June 1988 as scheduled and the library collections and staff were moved into the new building during the same year. The Prime Minister of Pakistan formally inaugurated the library on August
24, 1993 and its doors were opened to the users”. (Nazir, 2008:2)

The National Library of Pakistan works as apex resource centre of the nation. The Director General, Department of Libraries, under the Ministry of Education, is responsible for maintenance and administration of the library.

National Library of Pakistan, the most important organ of the Department of Libraries serves as the extreme resource centre of the nation. It acquires collections through legal deposits, purchases, donations, gifts and exchange. The library serves as national depository under the provisions of Copyright Ordinance 1962. It is compulsive for publisher to deliver the best copy of his publication to the National Library of Pakistan within thirty days of publication under the Copyright Ordinance 1962 and Copyright (Amendment) Act 1992. “Now Copyright Ordinance 1962 is predominant in the country, Chapter-X of this ordinance deals with depository provisions of all published literary heritage to the National Library of Pakistan”. (Nazir, 2008)

The objective of “depository collection” is to preserve all published material in the country just to make it available for the use of present and future generations. This is a Reference Library for research scholars and curious readers like all other National Libraries of the World and home landing facility is not extended. The National Library of Pakistan is providing all sorts of reference services to its cliental including e-reference service. The Library also provides CIP service to the publishers and online Catalogue Service to the local libraries through its Bibliographic Database. It is to serve as the fountain head of all Libraries developments in the country.

SERVICES

National library of Pakistan, at present is extending following services at national and international levels.

- Collection, technical processing and preservation of national published heritage.
- Development of comprehensive collection of reading materials in line with national requirements.
Compilation and publication of Pakistan National Bibliography (PNB).


Development of National Bibliography Database both in English and Urdu languages.

National Online Public Access Catalogue (NOPAC).

Internet surfing and research facility for readers and researchers.

Assistance in research activities.

Professional Advisory Service for Libraries and Institutions.

Document Delivery Service.

Reprographic Services.

International Cooperation in the field of Library Science.

Professional Training, Seminars and Workshops.

Book Exhibitions on important days of National life (NLP, 2004).

"The collection of National Library is about 210,000 volumes have been acquired through purchases, gifts, exchanges and legal deposits, the library is receiving 217 newspapers and 1300 periodicals under the depository provisions of copyright law. 580 hand-written manuscripts and over 10,000 rare books in Urdu, Arabic, and Persian have been acquired through the purchase of private collections belonging to famous literary figures and renowned national personalities" (Nazir, 2008:3).

(Nazir, 2008:3) re-iterated about "these valuable collections of 3000 Microfiche items containing reports of all India Censuses for 1911, 1921, 1931 and 1941 have been added to the collection. Number of bound volumes of newspapers and periodicals is about 45,000. National Library also serves as official depository of

The National library also acquired advanced hardware with equipment in 2007-8 and created a Digitization Section. The digitization of literary heritage is helping in preservation the reading materials and access to knowledge resources. This section has also started digitization of rare books.

National Library preserves Bibliography Database of more than 160,000 bibliographic records including 65,000 records in Urdu and oriental languages. Urdu is the national language of Pakistan. “This Library also maintains a database for leading national dailies named as “IDI Bhandar”. All the databases available through National Digital Library Programme of Higher Education Commission are also available at the National Library of Pakistan. All Electronic Databases of USA and UK are available through this programme. (Nazir, 2008:4)

National Library of Pakistan is administrated a development project titled “Up-gradation of Knowledge Resources of the Library” at the cost of Rs.39.97 million. “The Government of Pakistan has approved a new development project of community libraries under the title of Islamabad Public Reading Rooms. The Department of Libraries is also going to launch a mega project for establishment of Islamabad Public Library in line with the international best practices in near future”.

(Nazir, 2008:6)

Like, National and International Libraries, The Pakistan National Library also has affiliations, cooperation, and membership of local and foreign bodies/agencies/organizations. As reported by (Nazir, 2008). “The National Library is institutional member of IFLA, CDNL, CDNLAO and Union of Heads of National Libraries and Archives of ECO Countries. The Library is also participating in the activities of Pakistan Library Association (PLA), UNESCO and Economic cooperation Organization’s Cultural Institute. ISBN-Agency Pakistan is also part of National Library.” (Nazir, 2008:7)

Higher Education Commission of Pakistan has established National Digital Library, to have access to the library resources; it is free for University, Libraries,
Research Libraries and National Library of Pakistan. “The library also offers library services and provides access to McGraw Hill Collections of 45,000 online books in addition to 23,000 journals”. (Nazir, 2008:7)

The National Library of Pakistan has organized a section for conservation and preservation in 1994, where microfilming methods are applied for published heritage and “it is using Chemical Fumigation, Vacuums, Fumigation, Binding, Guarding, and Tissue Lamination. It has also started digitization of rare available books”. (Nazir, 2008:8)

Pakistan Bibliographical Working Group established in 1950 on the initiative of UNESCO and backed by Ministry of Education having headquarters at Karachi. Besides its other activities it proved instrumental in the formation of PLA. In sixty years of its existence it has made some contribution in bibliographical field by publishing bibliographies and directories. “Its most important activities are the compilation of Retrospective National Bibliography of Pakistan from August 1947 to 1961. The Group is also engaged in conducting classes and awarding Higher Certificate in Librarianship at undergraduate level. The annual volumes of National Bibliography (PNB) from 1962 to 2009 were also published and distributed among various libraries and organizations with in and outside the country. National Bibliography is considered to be the most important research tool for Social Scientists and Humanists. It is the National Index to measure the intellectual production of the country. The other publications of Pakistan National Library are the directories of libraries in Pakistan and directories of newspapers and periodicals” (Nazir, 2008).

The past 63 years of the Librarian- ship in Pakistan saw many ups and downs. The great Muslim Librarians of Sub-continent viz Khan Bahadur Assadullah Khan, Mohammad Shafi, Khawaja Noor Ellahi, Dr. Abdul Moid and others laid the foundation of librarianship in Islamic Republic of Pakistan. In early days of independence they created library consciousness amongst the people in general and government in particular. They formed Library Association, published different professional journals and established library schools. They organized various seminars and conferences, through which they succeeded to convince the government authorities to pay attention towards library development in Pakistan.
L.C. REPORT AND OTHER DEVELOPMENT PLANS

In 1955, the Government of Pakistan approached the Government of Australia to provide the services of a Library Consultant under the Colombo Plan. Mr. L. C. Key arrived in Pakistan in May 1955 for a twelve-month period to prepare a comprehensive plan for the development and reorganization of libraries and library services in the country. He prepared the report and the same was submitted in 1956, but it was not implemented for the reasons unknown to anyone (Key, 1992).

After the L.C Key report various plans and schemes were prepared which are as under:

1. Public Library Plot Project (P.L.A) 1960.
4. Development of Libraries and Manpower needs in Pakistan; SPIL's Memorandum to the Chairman, National Commission on Manpower and Education (SPIL) 1968.
5. SPIL’s Proposal for Execution of the planned projects under Library Services in Fourth Five Year Plan (1970-75), 1970.


15 Netherlands Library Development Project (N.L.D.P.).

16 All the P.L.A. Conference Resolutions / Recommendations.

All the above excellent efforts with a few exceptions met the same fate as that of Key’s Report. But we have to accept the fact that only the activities of N.L.D.P. became fruitful. The admirable activities of which are as under (NLDIP, 1995):

1 Establishment of Computer Centres in all the Provincial Capitals.

2 Continuing support to Computer Centres.

3 Development of Library Automation and Management Programmes.

4 Development of Current Contents Services (SERNET)

5 Local LAMP, CDS-ISIS and other technical training support for Pakistan Library Association.

In the field of Librarianship in Pakistan, the critics explain their views regarding the causes of non-implementation of the plans and schemes except NLDIP.

S.J. Haider, in his article ‘Library Planning in Third World: a case of Pakistan’ published in PLB Vol.XXVI, June 1995 has made analysis of most of the schemes and plans. He expressed “The foreign experts based their recommendations on the library situation of their own country and different plans were prepared single-handed and strict text book approach was adopted in formulation of indigenous plans” (Haider, 1995).
As well as M. Adil Usmani also discussed the causes of non-implementation of the plans and schemes so far prepared and submitted to the Government despite their short-comings are neither un-realistic nor over-ambitious, but the real problem is the bureaucratic attitude of government officers in Pakistan. They are neither library oriented nor Library minded (PLB, 1995).

Due to the low salary and status of Librarians in Pakistan, small portion of society was zealous to join this profession. Library is a growing organism and Librarianship is an expanding multidimensional profession. Librarianship connects people and ideas. Library organizations connect library profession and professionals.

**DETAILS OF DIFFERENT LIBRARIES**

There are many libraries established after the existence of Pakistan like University of Sindh, Peshawar and Karachi in 1947, 1950, 1952. The collection of Dr. Muhammad Hussain Library, University of Karachi is 316,000 volumes, 6,150 Micro Films, 270 Periodicals, 4000 Research Reports, 18,000 Volumes and Seminar Libraries and 20,000 Documents and Reports, The biggest library in Pakistan is Bait-ul-Hekmah, Hamdard University of Karachi. Its collection is more than 500,000 books.

The Ewing Memorial Library Formen Christian College has collection of 100,000 books, HEC Online Journals and 30 Theses. In this library automation was started in 2005. In Private Sector Lahore University of Management Sciences has a very big library. Its collection is 200,000 books, 35,000 Online Journals, 1,000 Thesis and 5,000 Reports. The automation of this library started in 1986. Another big library is Central Library, Islamia University of Bahawalpur. Its collection is 224,350 books, Online HEC Journals, 5,000 Thesis. It is a Digital Library. The automation of this library started in 1992. One more library having large collection is Library Information Centre and CIIT, Lahore. The collection is 16,000 books, 32,000 Online Journals, 2,200 Thesis and 782 Reports. The National Library of Engineering Sciences, Lahore is also a big library; its collection is more than 100,000 books, 22,000 Journals, 3,500 Thesis and 100 Reports. Its automation started in 1995.
The Punjab University main Library has gone online using a multi-lingual software system. Presently, Punjab university library has 462,000 Books and 25,000 Manuscripts etc. The library material is now easily available on the Internet. The Union Catalogue System has been designed for the library using Visual Basic, ASP and SQ servers. A bar code system is also introduced for issuance of books. Punjab University Library has a collection of 4,62,000 books available online, out of which more than fifty thousand books are from the 17th and 18th centuries.

The Library services are as under:

- Online Public Access Catalogue (OPAC)
- IT based services like Automated Circulation
- CD ROM Databases, Online Journals Databases
- Current Awareness Services (CAS)
- Selective Dissemination of Information (SDI)

The Punjab University Library shifted to Quaid-e-Azam Campus in 1988. Its main objective is to meet the challenges of modern research technique in the 21st century. The facility of Internet started on 16th December 1999, along with Internet Lab in January, 2000. In library the work of automation was started on Oct, 2000. The processing of almost all English material has been completed. Recently Punjab University Library has started data entry of serial publications that will give access to its volume and issue level. Moreover library has started a database of its newspaper index a monthly publication of newspaper articles being published in various local and foreign newspapers. Formally the index was only available in printed format. The database software used both for books and Serials is WIN/ISIS. Software is searchable under a number of categories like author, title, subject, heading, publishers, classification, etc. The Punjab University Library Lab is the biggest lab in Pakistan (PU, 2006).

PLA in its issue for the year 2008, narrated as, “The collection of books of Government College University is more than 270,740 including precious personal collections. The library acquires exchanges 284 National and Internationals journals.
A total number of 17 newspapers are also subscribed. The library has 700 CD-ROM. Microfilm reader is also available in the postgraduate library. The unique electronic security system has also been introduced to detect un-issued library material” (PLA Punjab, 2008).

Recently, Government College University contracted with World Organization Development Library Network and have access to 1500 Libraries with 75,00,000 Books of 22 different countries. According to Abdul Wahid Chief Librarian GCU, the bibliographic details of 1500 Libraries of 22 countries including India, America, Sri Lanka, U.A.E, and Oman is also available on this Developing Library Network (Jang, 2010).

The university libraries in Pakistan are better placed in respect of resources available, organization and services. In the early years of independence little attention was given to higher education because of some other national priorities. It was after the report of the Commission on National Education in 1960 that needs for a fresh outlooks with regard to education in general and higher education in particular was recognized (Education Ministry, 1961). The real growth in the field of higher education took place during the 1970s when twelve universities were established. The enrollment jumped from 22,777 in 1975 to 49,098 in 1981 (Kidwai, 1984). This expansion has affected the quality of education. Besides other factors this unplanned and unsystematic expansion has affected the university library services. By the late 1970's there was crisis as termed by Feather and Smith (Feather & Smith, n.d.). There existed a climate of stagnation and decline in university librarianship. In the closing years of 1970's and early 1980's some positive move was made by University Grant Commission but it did not help very much in this regard. In fact university library provision is not enough to meet the modest needs of our present-day researchers not to speak of prospective users of information.

The condition of college libraries with few exceptions is not satisfactory. School library development in Pakistan is in its initial stage in fact school libraries development has had not attracted the attention of educational authorities. Due to this reason its development has been for the most part sporadic and spotty. Presently, the
government of Pakistan also allocated development funds to the tune of Rs.250 millions for establishment and improvement of school libraries in Punjab province.

Special Libraries in Pakistan are mostly attached to government departments and institutions or to universities and colleges, while smaller number has been setup in recent years by industries and firms. The main focus of these libraries is round the large cities and metropolitan areas. The collection of the books of such libraries is not large. Books and periodicals form still the largest part of their holdings. The non print and audio-visuals aids are non-existent. As regard services, these libraries have not succeeded in freeing themselves of the traditional approach which lay emphasis on the collection, organization and use of material rather than on the collection, analysis and evaluation of data. The services like indexing and abstracting, SDI, translation, literature searching, and editorial assistance are totally absent. In rare cases bibliographies are prepared on request.

Recently libraries have started the application of computer library programs. The Netherlands Library Development Project (NLDP) in Pakistan, started in 1991 has made efforts in this regard in the form of providing training facilities to the selected library schools and libraries with the help of Pakistan Library Association.

Apart from these, majority libraries occupy temporary buildings. Their holdings are mostly fiction and out-of-date. A major portion of the collection is in English language. Very few are properly staffed. In majority of libraries one seldom finds qualified librarian on the staff. In the absence of proper staffing the existing resources are in adequately organized and housed. Their services are limited. The main source of finance is the regular grant from annual budget of the municipality and subscription charged from the public (Haider, 1997).

A six years national plan of educational development of Pakistan, which was drawn in 1951 called for 524 public libraries by 1954-58. Unfortunately, due to some unavoidable circumstance this plan was kept in abeyance and no action has been taken. Pakistan has many public libraries but without any public library system. Mostly subscription libraries are under the charge of the municipal and social bodies. Enactment of a legislation providing legal bases for the public libraries in the country is still awaited, despite repeated calls to this effect, by librarians on the eve of their
Seminars, Conferences and Symposiums. The Punjab Public Library which is the largest library in Asia now has 327,500 books. Apart from this there were many public libraries at Peshawar, Sukker and Frare Hall Karachi.

In Dayal Singh Public library in Lahore its collection of books is 1, 46, 000 and 10,000 periodicals. Libraries at the University of Sindh, Peshawar and Karachi were founded in 1947, 1950 and 1952 respectively. In addition to these, there are many other libraries established after the existence of Pakistan. These are the library of the Constituent Assembly of Pakistan, the Central Secretariat Library, the Library of the Central State University of Bahawalpur, the state Bank of Pakistan Library and library of the Pakistan Association for the Advancement of Science etc (Akbar, 1968).

The Public Libraries are effective education and cultural agencies. They provide means of education, information, enjoyment and positive use of leisure. They can be utilized for promoting literary and good citizenship. The use of Libraries and the opportunities they provide are corner stones in national development. In the golden days of Islam our ancestors who were the torch bearers of civilization, established Libraries throughout the length and breadth of the Muslim countries. Now we have few renowned Libraries, which are far behind the development of International Organizations. No doubt we have some good Libraries in Punjab, like the Central library at Bahawalpur, the Quaid-e-Azam Library Lahore, the Liaquat Municipal Public Library at Rawalpindi, the Jinnah Library, Gujranwala and the Model Town Library, Lahore. Presently there is also the collection of 40,000 books in Model Town Library and this library is using LIMS Software. A collection of 1, 16, 000 books exists in Quaid-e-Azam Library and the Municipal Library at Rawalpindi contains more than 45,000 books.

In a developing country like Pakistan we need more and better public libraries which may provide opportunity and encouragement for children, young people, men and women to educate themselves continuously. Keeping in view the ideological character of our state, one of the important objectives of a public Library should be the promotion of Pakistani culture and Islamic way of life. It is, therefore, necessary that we examine the present state of our Public Libraries, their standards, relationship
and effectiveness, and consider what measures are required to promote the library services.

The Public Library services in Pakistan are confined to a few big cities at present. The Public Libraries in Karachi, Lahore, Rawalpindi, Peshawar and Quetta need further improvement and modernization. The central library Bahawalpur well maintained but lacks adequate qualified staff. It is also true of the Dayal Singh Trust Library. There is a dire need for several advance courses in Library management and administration, staff education and training for better Public Library service and automation system.

The Librarians require continuous education and more courses should be planned by organizing workshops, conferences, forums, library tours and lectures/discussions on new developments. Technology is rapidly changing librarianship. The important functions of providing reference services and information services are not being fulfilled by the existing Libraries. Pakistani Libraries are not serving as cultural centers except in a few cases. The worst features are not inadequacy of financial support, building or equipment but poor organization and administration. In most of the Pakistani Libraries the book stock are in physically poor condition and need renewal. Knowledge does not keep fresh and update. The books should be regularly weeded out. Sufficient care is not taken to keep the collection of books in good condition. Books are not arranged properly. The old Library buildings have not been properly designed. Sufficient care is not paid to the maintenance of buildings and furniture. The atmosphere in the Libraries is not attractive and the people are not encouraged to draw and read books from the stock. To all these problems the Library staff lacks enthusiasm. Sufficient control is not maintained on borrowers. Books are not returned on time. In most of the Libraries there is no body to assist readers or researchers, no bibliographies, no reproduction facilities. In the absence of security and discipline there are severe losses due to negligence and carelessness. All these difficulties must be removed with a great deal of effort, proper planning, cooperation and coordination. A publicity programme in TV channels and press is needed to draw the attention of the people to the proper use and effectiveness of the Public Libraries. The Library staff must be properly trained. The status of a librarian needs respect and
recognition. This profession must be made attractive and honoured by devising a proper career structure (Inamul Haq, 1999).

The total numbers of libraries at the national level are as under

- 05 Library Associations/Foundation
- 400 Public Libraries
- 500 Special Libraries
- 132 University Libraries
- 1200 College Libraries
- 7000 School Libraries
- 5000 Ecclesiastical Libraries
- 10 New Libraries are being established

In Pakistan University and Special Libraries made rapid progress during the last few years. "The most of the libraries were automated and they succeeded in getting state of the art Hardware and Software. Modern library security systems were also installed in some universities and special libraries. National Library of Pakistan also acquired 3M books security system which is under implementation at present. Govt. of Pakistan also allocated development funds to the tune of Rs. 250 millions for establishment and improvement of school libraries in Punjab province. An additional block (Building) was also constructed with the famous Quaid-e-Azam Public Library, Lahore. New library buildings were completed in University of Engineering, Taxila, International Islamic University, Islamabad, COMSATS University Islamabad and Bahria University, Islamabad. Information Literacy, automation, and digitization remain the key topics for library seminars, conferences, workshops and discussions among the library professionals. Book trade also flourished a last financial year as Government allocated substantial amount of funds to the libraries for the purchase of books and other reading materials" (Nazir, 2008: 1-7).
LIBRARY ASSOCIATIONS ROLE IN LIBRARY DEVELOPMENT

For the uplift of any profession joint efforts particularly in the shape of associations become the main force behind it. Libraries being conscious of this philosophy tried to revive the defunct Punjab Library Association in June 1948 in Lahore named it All Pakistan Library Associations, but its scope was localized and it ceased functioning as a national body. Later a number of library associations, regional as well as special were formed.

Pakistan Library Association was formed in Karachi in 1957, named Pakistan Library Association. It contributed significantly towards the cause of libraries and librarians. It also managed to create a better image of librarians in the society. Its activities were patronized by no less than a person like the President of Pakistan who inaugurated its very first conference in Karachi in 1958. On this occasion the President said something regarding this profession and stressed the need to improve Library Service. Wide publicity was given through Newspapers, to this conference an, in this way Library Association was introduced in the Country. PLA on its part tried to involve many dignitaries like Ministers, Governors, Secretaries and other Government Officials in its conferences, seminars and group discussions in order to draw their attention towards the deplorable condition of libraries in the country.

PLA prepared plans of library development, held seminars, conferences, library weeks, sent delegates to various international conferences and arranged internal programmes for working librarians with Library Association, U.K. and American Library Association. It also made provision for librarians’ education and training role in publishing, though not very significant, has made some mark in the shape of journal, newsletter and conference proceedings.

When Karachi became the capital of Pakistan, it was felt necessary to establish as many libraries, as possible. It was also felt essential to provide trained personnel for these libraries. Karachi Library Association (KLA) was formed in 1949. KLA School of Librarianship’s role in making provision for library science education hardly can be ignored. It produced a team of qualified librarians. Some of its trained
students were offered high positions and made great contribution in the field of library and information science. It was 1952 when Karachi Library Association was, in a position to start a certificate course in library science.

Punjab Library Association is one of the oldest regional library associations of the country. Besides its useful activities it is known for its certificate course in librarianship which also served as a cradle for younger generation of librarians. They received their library science education and training in its school. It organized a number of library seminars, conferences and also served as a host to Pakistan Library Association Conferences held in Lahore.

When the capital shifted from Karachi to Islamabad a number of libraries and librarians were also moved to that city. They formed their own association and named it as Federal Library Association. A certificate was also introduced which provided an opportunity to new participants in the profession to get library science education.

In 1959 the school and college librarians of Sindh formed a group named Sindh council of school and college librarians in Karachi. The membership is predominantly composed of college librarians. It has been very active especially in getting the scale of pay and status of college librarians equal to teaching faculty and placing their names in the seniority list for further promotion.

Pakistan Bibliographical Working Group was formed in 1950 on the initiative of UNESCO and backed by Ministry of Education. The headquarters were at Karachi. Besides its other activities it proved instrumental in the bibliographical field by publishing bibliographies and directories. One of its most important activities is the compilation of Retrospective National Bibliography of Pakistan from August 1947 to December 1961. The Group is also engaged in conducting classes and awarding Higher Certificate in Librarianship at undergraduate level.

The formation of Alumni Association by the old students of departments of library and information science of Karachi and Punjab Universities had injected new blood in the body of librarians. Karachi University Library Science Alumni Association (KULSAA) and Punjab University Library Science Alumni Association (PULSAA), the younger generation of librarians, participated in library activities by
bringing out library journals, newsletters and helped their seniors in the profession. 
KULSAA did a pioneering job of issuing a quarterly journal Pakistan Library Review and a Newsletter (PLB, 1997).

The importance of library associations for monitoring library developments, particularly in countries where library advisory councils do not exist at the government level, cannot be over-emphasized, but observation shows that the existing library association in Pakistan have failed to shoulder leadership responsibilities because of their weak organizational structure, poor membership and lack of financial resources. Over a dozen local, regional, provincial and national library associations exist at present in Pakistan. All these associations, no doubt have had contributed to the growth and improvement of library profession, but their contributions seem to result from random programmes rather than systematic planning. Their activities are focused on current problems rather than on established objectives and long range goals (Haider, 1997: 23).

Society for the Promotion and Improvement of Libraries (SPIL) was formed in Karachi in 1960 under the dynamic patronage of Hakim Mohammad Said. Society for the Promotion and Improvement of Libraries from its very inception has focused its intention on helping to improve library service in Pakistan. It made great contribution in molding public opinion in favor of library development and making it a movement. In order to popularize the cause of librarianship, it held a number of national and international seminars and conferences. Its participants included eminent scholars, distinguished citizens, famous journalists, well-known social workers, industrialists, business magnets, Ministers, Governors, Governments Officials and other public figures. A number of plans and schemes were also prepared by the society and submitted to the government for implementations which unfortunately met the same fate as those sponsored by the government itself. The main field of its activities was public libraries. It contributed significantly in developing school libraries by conducting library workshops for school teachers and librarians. A handbook for school libraries was prepared and published.

Library Promotion Bureau was established in 1965 in Karachi with the aim of producing Library Literature in Pakistan. Since its inception it has to some extent met
the reading material needs of Librarians, Library Science Teachers and Students. Special emphasis has been laid on indigenous literature and in Urdu language. Bureau has a number of publications to its credit including directories, bibliographies and other books which no other publisher could undertake to publish because of limited market for them. With the growth of Libraries and Library Schools in Pakistan the Bureau is planning to launch publishing programme on the pattern of other Library publishers of the world.

No country can depend upon foreign material for a long period, may it be in any shape. The indigenous Literature in Library Science needed by students, teachers and students was not available in Pakistan. The only book Punjab Library Primer by ASA Done Dickenson was inherited from pre-partitioned days. The first Library Journal on Pakistani soil, Modern Librarian was published from Lahore since 1930 and closed down before Independence. The Modern Library was revived in December 1949 as Modern Librarian-New Series but closed down for ever with its issues of July, 1950. After eight years Pakistan Library Review, a quarterly journal sponsored by KULSAA published in March 1950. With several gaps, it ceased publication in December 1962. Pakistan Library Association started publishing PLA Journal in July 1960. During eight years, i.e. up to October 1968, it could publish only two volumes. It was revived in August 1987 and is being published regularly since then.

A library journal entitled Pakistan Library Bulletin is being published by the Bureau uninterruptedly since 1966, in mimeo form and since 1968 in printed form. Its Silver Jubilee Number was published in December 1995. It has made the greatest contribution towards production of library literature in Pakistan in the shape of scholarly articles as well as thematic and thought-provoking editorials which, spread over forty two years now. It has helped to create a team of young writers.

Since inception of Pakistan, Librarians, Library Associations and Government played an important role in the Development of Libraries. In different times Library Associations and Institutions have been publishing, newsletters and journals. For example PLA Newsletter, KULSAA Newsletter, Library Gazette by Sindh Council of School and College Librarians, Dr. Mahmud Hussain Library news bulletin, Allama Iqbal Open University’s Library information and Documentation Service and a
number of others. This shows a desire on the part of Librarians to portray their professional activities and to convey the message of librarianship to their fellow workers as well as its library clientele.

Other than Library journals professional writings have appeared in monograph forms too, although quality as well as quantity has not been on the desired level. There is great need of monographic publications especially in Urdu and other local languages. These may be either translations of required books or original writings. This has been a weak aspect of profession and librarians have lacked behind in this field. Much needs to be done in this direction (PLB, 1997: vi-viii).

**LIBRARY EDUCATION DEVELOPMENT**

In Library Education, Pakistan has made significant progress. Pakistan can rightfully take pride of having the distinction that the first regular training program of the Librarianship outside the United States was introduced at the University of the Punjab, Lahore; that is the heart of the present day Pakistan in the year 1915 (Banal & Tikku, 1988).

Librarians were conscious of the need of professional education and training. The Library staff must be highly motivated and efficient. Sufficient attention has not been paid to the education for librarianship in Pakistan. The traditional librarians must learn the active use of sophisticated technology with on-line computers. Library science and profession demand the highest quality of education standard for its personnel. Opportunities should be provided to librarians to advance their qualifications and status. In service training both for the professional and non-professional staff is necessary.

In addition, attention shall be paid to Libraries Administration, Information Science, and Media Studies with an international viewpoint. We need courses on design and use of bibliographies. In Pakistan libraries and information schools are 63 years old and their curriculum is out of date. We must restructure our Library and Information Science Curricula; undertake comparative Library research, Visit Libraries abroad and now about developments in International Organization. The Library Science Departments at Pakistani Universities must be revitalized for more
practical training. Some Librarians must be subject specialist, possessing a vast store of knowledge. The profession of Librarianship should not be undervalued. Greater job satisfaction will lead to improve standards of service. Pakistani top class Librarians should not be obliged to seek better job opportunities in other countries. However, it must be understood that Librarianship is not a paying profession. A great satisfaction for the Librarian lies in his contact with books and readers. He must love the books in the Libraries and the Library work and the contact with scholars. The development of new services and infusion of new ideas and new approaches to the service are needed. The Librarians must be made to feel that an opportunity of unselfish interest and service of the country lies before them. The experienced Library staff must be able to speak with authority on books and other materials (Inamul Haq, 1999: 6-7).

On the initiative of the librarians that Universities of Pakistan started courses in Library and Information Science, the first postgraduate diploma was started at Karachi University in 1956 and master degree in 1962 Sindh, Karachi, Peshawar, Baluchistan and Punjab offer M.Phil program also.

The University of Karachi offers a Doctoral Program since 1967. In 63 years 8 Universities have established, Departments of Library and Information Science, which are awarding Bachelor, Master and M.Phil degrees and thus meeting the need of qualified persons in the country. Two of those Universities that are universities of the Karachi and Punjab are awarding PhD degree also. The program of Library education through correspondence leading to Bachelor's Degree in Library and Information Science (BLIS) and Master of Library and Information science is also offered by the Allama Iqbal Open University, Islamabad. Besides, several Library Associations and Departments of Libraries, Government of Pakistan, offered courses of short duration. Library Science courses have also been included in Intermediate and B.A classes as optional Subject (Haider, 1997: 23).

The shortage of competent teachers with practical experience of Library work is the most serious problem in the library schools in public and private sector Universities of the Pakistan. Moreover, the number of teachers with knowledge and competency in information technology is very low. The dearth of professional literature, well suited to local needs, is another problem (Fosket, 1987).
In Pakistan, at present there are 10 Library schools in Public and Private Sector Universities offering postgraduate and PhD degrees in Library Information Science and 04 certificate-awarding schools for preparing paraprofessional library staff in the country. Actually there are a number of foreign qualified Librarians and teachers holding Master and PhD degrees but unfortunately Libraries and the Departments of Library and Information Science of Pakistani Universities are deprived of their services because majority of them are working either abroad or as teachers of Library Science in various Universities. In higher academics institutions in Pakistan, the selection of teachers made purely on merit basis. In fact the highly qualified and capable persons complete with each other and only those are selected who fulfill the required recruitment conditions and rules. Therefore, one should not deny the fact that at present the teachers of the Library Science at University level are of high selected breed.

Dr. Mumtaz. A. Anwar conducted a survey for his unpublished article entitled, ‘Professional Development of Library Science Teachers in Pakistan’. He describes in the result of a survey that there is an urgent need for introduction of present and in-service training programs for the faculty members of Library and Information Science for their professional and academic improvement (Anwar, n.d.).

LIBRARY DEVELOPMENT AND EDUCATION POLICIES

Present is the age of knowledge, scientific development and that of technological advancement. Collection of knowledge is not a day’s activity of human being. It started from the day the human being came into senses and gained the power of mental retention. Human being cannot do more beyond his capacity. To enhance the power of retention he stored the knowledge in the forms of books and for the retention of books and ultimately knowledge, he established the libraries. Today we are living in the form of nation states or countries. Every country has its own libraries with the books printed in that country and knowledge developed in the other countries of the world. Development of libraries education and flourishing of democracy go side by side.

“The quality of education and standard of research depends on the basic support of a well recognized library system at all levels from primary schools to
universities, side by side with academic institutions which provide education throughout life without any reservation, is the public library. They create a well informed citizenry, worthy of serving. Their proper role in the democratic society of modern days, their importance is unimaginable” (PLB, 1984).

Pakistan is far behind as for the matter of library development and development of library system is concerned. Our libraries are deficit of the following:-

1. There is inadequate collection of material.
2. Processing of technical is too slow and is out-dated.
3. Inadequate availability of trained man power both in quality and quantity.
4. There is an acute shortage of funds.
5. Planning regarding development is disintegrated.
6. Society and government both shows less attention in the development of libraries.

A library developed on sound footing can provide facility for storage and preservation of materials; it provides good quality bibliographic reach to the resources of knowledge. The libraries stimulate, promote and co-ordinate education and research, through communication, between sources of knowledge, library staff and the participating members. For this purpose there is dire need of funds.

As Pakistan is a developing nation. We fix our goals of development for five years called as “Five Year Plan”. Mr. L.C Key, Deputy Librarian of the national of Australia prepared a plan for development of libraries in Pakistan under the technical assistance of programme of Colombo Plan, which was not published. Therefore, it did not assist in provision of Library Services.

Mr. David G. Donovan, a foreign expert was invited to provide a plan for the establishment of library services in 1974. He submitted his report after the announcement of Education Policy 1972-80. Therefore, this struggle failed to facilitate development of Libraries Network.
In 1959 commission on National Education recommended to the local bodies to establish libraries under Union Councils and Town Committees. Small Public Libraries were established with the provision of reading rooms (National Education Report, 1961).

**National Education policy of 1970**

This policy consists of the following recommendations.

1. Libraries with sufficient reading material are necessary in Primary and Secondary Schools.

2. Libraries will be opened in and outside the educational institutions.

3. Local bodies should establish libraries from their own resources for the benefit of their areas (Education Policy, 1970).

**Education Policy of 1972-80**

As compared to the announced polices, this policy was important for the Libraries and Librarians’ point of view. In the history of Librarianship this was the first time that the importance of libraries has been recognized at the Government level. The policy has two important announcements which are related to establishment of libraries in the country and other cadres and salary scales of libraries.

Education policy of 1972-80 has following recommendations:

1. Establishment of Public Library System comprising 50 thousand People Oriented libraries in all villages and city wards of the country.

2. Establishment of respectable cadres and salary scales of librarians similar to teachers / lecturers both in educational institutions and public libraries (Sabzwari, 1972).

The announcement of establishment of public libraries in the country was very fascinating and of immense value. But this plan could not be implemented (Sabzwari, 1972: iii-viii).
Education Policy of 1979

Education policy 1979 was announced on 14th February 1979. The policy included the following recommendations regarding the establishment and development of libraries in the country:

1. 5000 Mosque Schools will be established in the country. 20 textbooks and a Quran-e-Majid will be provided to these institutions.

2. 5000 Mohala Schools will be established in the country and books will be provided to these Schools through UNESCO, UNICEF and UNDP.

3. Special attention will be given on women education and the books will be provided to their institutions.

4. 10,000 Adult Literacy Centres will be benefitting from the educational programme of Open University through Radio and TV.

5. Textbooks of Tafseer, Fiqh and Hadith will be provided to Deni Madaris.

6. More generous provision will be made available for Libraries of Colleges and Universities.

7. More facilities will be provided to the libraries of technical and professional colleges.

8. 100 Book Banks will be opened in the country (Education Policy, 1978).

1992-2002

This policy is the outcome of extensive consultations with eminent educationists, scholars, administrators and members of the educational committees of the National Assembly and the Senate. The policy comprises of three parts with twenty six chapters. The first part of the policy identifies the weakness of the present system. The second part of the policy emphasizes on the implementation of the process as an integral part of the policy. For the first time a system was suggested for feed backs between Federal and Provincial Agencies. Whereas in the third part of this policy the issues of funding of educational development were addressed, this also provided 10 years action plan. Almost all the educational policies have commitment
for development of libraries and have reserved huge amounts for the purpose. The Education Policy of 1992-2002 confirms “more library grants shall be provided for books and journals” (Education Policy, 1992).

**National Education Policy 2009**

Regarding development of Libraries the National Education Policy 2009, states as:-

“That there should be, increase in the use of libraries and, improvement in the quality of library services, on line libraries services, better professional service structure for librarians, declaration of librarians in educational institutions as library lecturers, advance education for library professionals.” (Education Policy, 1992:47).

The allocations of funds and establishment of Libraries is the need of the day and this cannot be done without legislation and enactment of law. The Great Britain and America promulgated the first public Library Services Act on 30th July, 1850 and Library Services Act (LSA) in 1956 and again in 1964 respectively (PLB, 1994).

The frequent use of SMS, Internet and non-existence of proper facilities has caused a reduced in the use of libraries and decline in reading habits.

For provision of information in Education, Research and Training well equipped libraries should be established at provincial headquarters. There should be Documentation center to cater and preserve national records and facilitate research. Material collected through research should be available under one roof for Educationists and Researchers (PLA, 1998: Preliminary).

The Pakistan Research Repository is another project of HEC that endorses the presence of research of other countries coming to Pakistan. “The aim of this program is to keep a digital archive of the intellectual outcome of Pakistani institutions, to supply a single-entry access point to examine this research, and to deliver this knowledge as broadly as possible. The archive, made the full text of over 1800 Ph.D. Theses accessible in high-quality scanned format, while a total of 200 have already been digitized, uploaded into repository and made available through Web. An additional 350 PhD theses are in the progression of digitization, and the HEC has
released an organized procedure for the assortment and the digitization of the outstanding Theses.

The repository estimated to hold approximately 3,200 PhD. theses by the end of 2008.” (PRR, n.d.).

Libraries play an important role in an information society. Present situation of both the Public and Private libraries in Pakistan is very poor. A lot of the national guidelines usually do not offer the establishment of efficient libraries. Although Library development system is proposed in some policies however no attempt to execute these at the government level is made as yet. In Pakistan, community is experiencing serious and swift changes caused by the progression of the information superhighway. These alterations are apparent in different spheres of Pakistani community. The reliance on computers; economic globalization; and the framework of government policy by multinational companies are only a handful of factors on the changing horizon. The development in information and transmission technologies has built a platform for the free flow of information, thoughts and knowledge throughout the world.

Libraries are the reflection of social society and their main objective is to save it. Information services provided by the libraries play a role in the strong process of the comprehensive information community. They allow intellectual liberty by giving access to knowledge, concepts and deeds of creativity in almost every channel and irrespective of boundaries. They assist to shield democratic principles and worldwide right of public equally. Their purpose has always been to answer to the specific queries and requirements of people. Libraries are important for a well-informed citizenship and obvious governance, and also for the take-up of e-government. The International Federation of Library Associations and Institutions (IFLA) have likewise highlighted the effective part of libraries in information society. Information Communication Technology and Broad Band have great attraction for educational institutions and public libraries. It creates a global instant relation connection (Mahmood & Shafique, 2007).

According to S. J. Haider (Haider, 2002) and K. Mahmood (Mahmood, 2005) the education has lowest priority in Pakistan. The government spending is poor as far
as the matters of human development and care are concerned. The budget provided to the educational institutions is too poor as compared to their actual requirements. However, the status of university libraries is better than that of college and school libraries. The financial constraint and political will are hindrances in establishment and development of libraries. Library automation and networking is need of the day and libraries without it will prove totally failure.

An evaluation of E-government Approach and 5-Year Plan, IT Policy and Education in Pakistan: A white paper on education plan (Pakistan Ministry of Information Technology. Electronic Government Directorate) emphasizes those libraries really are a neglecting link in government plans and methods in Pakistan. The sole exception is the development of the National Digital Library. A few policies and legal documents offer the development of libraries but no steps in any way have been taken. For instance, the Local Government Ordinance, 2001 presents that “a concerned local government may set up and manage such libraries, reading rooms and circulation libraries as may be required for the effective use of the public.” National Education Policy (1998-2010) offers the establishment of “multimedia libraries and information learning resource facilities at grass root levels, i.e. Union Council that will motivate and entice the youths and adults to self-learning and other alike optimistic actions.” The policy also stimulates the application of the newest Information Technology, Computers, Internet, Databases, etc. in libraries. Education for All: Platform for doing things to Meet Basic Learning Needs, adhered by the Pakistan Government, suggests that “In joint ventures with school and community workers, libraries ought to end up being a vital link in supplying educational means for all learners-pre-school through adulthood & Mdash; in school and non-school settings. There is certainly therefore a necessity to acknowledge libraries as crucial information resources.” According to education sector reforms the Federal Ministry of Education has scheduled to set up 500 Tehsil/District Teacher Resource Centers (TRCs) in every province that will incorporate public libraries (IT Ministry, 2005).

The development of Internet Labs in certain public libraries of big cities provided great results (Mahmood, 2006). This exercise can be repeated in small libraries. Public and School Libraries can much better work as Multipurpose
Community Telecenters (MCTs) for the progress of rural and lacking areas (Mahmood, 2005) but this potential part of libraries is also overlooked by the government of Pakistan. Conversely, Librarians particularly in public and school libraries seem to be lacking in ideas and performance. Finance is among one of the restrictions, nevertheless there is also the shape of local government itself and the position of public and school libraries inside this. There is a serious demand for efficient and effective endeavours from both policy makers and librarians to stuff this hole for the beneficial engagement of civil society and much better consumption of prospects present in the information society.

Pakistan exhibits an array of inequalities contributing to its socioeconomic issues. Poverty, Unemployment, Illiteracy, Regional Inequality, Inflation, etc. are the troubles that influence badly the major progress and growth of library and information facilities in Pakistan. The library services retain the educational, social and cultural progress of all citizens. Libraries should therefore be incorporated into the information society system for improvement.

AUTOMATION OF LIBRARIES IN PAKISTAN

In Pakistan, the computer is gaining popularity in the field of library. The information services due to computer efficiency, performance and ability have to handle large volumes of documents. The computer has proved its success in the fields of library Acquisition, Cataloguing, Classification, Circulation, Serials control, and Information Storage and Retrieval process. Many new services like SDI and Current Contents service have been initiated with the help of the computers. Library automation has become a burning issue, with pros and cons, among librarians throughout the world. One cannot mention present library literature or any conference without a reference to library automation.

In Pakistan, Library Automation was introduced in the 1980s and a number of libraries were computerized during or after 1987.

“The library literature in Pakistan does not provide much information about the current status of library automation in the country, although a few articles have been published. In this regard, Dr. Mumtaz Ali Anwar, Dr. Sajjad-ur-Rehman and Dr.
Abdus Sattar have presented an introduction and basic guidelines for librarians wishing to automate their libraries, with special reference to Pakistan." (Mehmood, 1998:9) Automation is to make researchers productive, and disseminate information for the development of Union Catalogues. In 1991, a few libraries had computers and there was no national format for automation. More important there was no integrated library automation software in the market. Mostly libraries were developing small applications in DBASE and FoxPro in isolation. No library automation training was being imparted in the country. Due to lack of funds and support from the Government, the library community including the Pakistan Library Association was dormant and very little professional activity was taking place in the country. This was pitiful state of affairs at a time when other countries were investing in Information Highways and the Internet.

There are also many problems faced by Pakistani libraries in automating their procedures. It indicates computer illiteracy, improper planning, unavailability of library software, retrospective conversion, lack of standardization and quality control, bureaucratic set-up and lack of expertise, technical know-how and the vendor support for library hardware and software. No consultancy firms about library automation or library systems analysis and design exist. Training focused on library automation is scarce and uncoordinated. Most of the trainees exposed to the training are not given chance to apply the knowledge acquired. If a library is lucky enough to get automated despite the above problems, non-availability of vendor support for the specialized library software and hardware becomes the major hindrance for further development (Riaz, 1993).

Anwar, M.A. says, there is lack of co-ordination among the planners and decision makers regarding national information provision in Pakistan. This is due to the absence of national policy on library and information services. “Pakistan spends to less budgetary amounts on Research and Development almost 0.2% of GNP; foreign information resources and services are expensive; it is impossible for individual libraries to be set up; there should be coordination among libraries and information centers; a National Center for Software Development and Training should be created; and appropriate manpower should be developed for library automation.” (PLA, 1992).
A badly-managed library cannot be improved with the help of computer, a computer can only retrieve information about documents, but does not provide access to those documents; library automation is not an objective in itself; merely buying a computer does not mean library automation; provision of the right hardware is only one of the many requisites for an automation project; system development is too costly to be affordable for our libraries; and training of personnel and retrospective conversion are important facets of library automation.

The survey conducted by Maqsood Ahmad for computerized library services in Federal Area [Islamabad/ Rawalpindi] mentions that most of the libraries have IBM-compatible personal computers, and are concentrating on cataloguing and acquisitions. Only 39% of the institutions have staff trained in library automation. It was also noticed that female’s librarians are taking keen interest in automation of their libraries but the problem is the access to computer by library staff and proper training (Ahmed, 1993).

University libraries of Pakistan appear to be lack of initiative and failure to realize the importance of information by the top management of the university; lack of proper finances: lack of trained manpower: and lack of information sensitivity.

The survey conducted by Mr. Muhammad Ramzan, 2002, Ramzan, 2002, showed the importance of positive relationship between librarians’ information technology attitudes and levels of information technology utilization.

"During the survey, Muhammad Ramzan revealed that 23% of the respondents did not have any computers at their workplace, 44% did not have email facility, and 47% did not have Internet Access, while 30% of the respondents did not have any library software. This reflects rather discouraging picture with regard to the availability and usage of even the most common information technology tools. The position with relatively more sophisticated information technology applications was even more discouraging, as 68% of the respondents did not have a network server, 81% did not have CD-Writers, 88% did not have Barcode Readers, and 75% had no Online or Web, application. Seventy-four percent did not have Microfilm Readers, 72% did not have Fax, and 37% were without a Photocopying facility.
The Heads of libraries showed positive attitude towards information technology. The findings with regard to overall positive attitude were further supported by the fact that librarians showed a low level of agreement with negative statements.

The factor analysis indicated that information technology expenditure, information technology training, information technology service level and resource utilization, information technology for survival of Libraries, fear of information technology specialist (separate from librarianship), and information technology rules and regulations are the key determinants of librarians, attitude. These factors need to be considered to make the librarians’ attitude positive towards the application of information technology in libraries of Pakistan.” (Ramzan, 2002).

PRESENT STATUS IN PAKISTAN

Information management in Pakistan society presents a gloomy picture. The supply of information by libraries and research centers, even those attached with universities other higher academic and research oriented institutions, is not reasonable. The fact is obvious that they possess inadequate resources in traditional as well as modern techniques.

The automated library services of PASTIC, which commenced in the late 80’s, have helped enabled to develop the in-house specialized software which is used to maintain two larges database i.e. (1) Listing of all reports and files accessible by PINSTECH and (2) Incorporation of the table of contents of these reports accessible to PINSTECH separately. It also provides customized services based on user-submitted profile of references. The PINSTECH library also provided information services to universities and other research agencies. A survey on the use of technology in university libraries of Pakistan highlights the amount of material available on the current situation for the use of technology in libraries of Pakistan. A few articles have been focusing of the application of technology in libraries. The available sources show that the majority of libraries in Pakistan are not using information technology to support their activities. Even though some libraries in the special, academic and public sectors are successfully using information technology to support their professional and public service activities, of these, NARC (National Agricultural
Research Centre), Lahore Staff College and Quid-e-Azam Library, Shirkat Gah Document Centre, SMEDA, University of Central Punjab, Lahore, are prominent for their use of automated system. There is shortage of literature on university libraries in Pakistan particularly for the use of information technology. The available sources describe the problems facing the libraries for the use of information technology and discuss theoretical aspects for the application of automated systems in libraries. These also identify the increasing need for the use of information technology in libraries of Pakistan. A survey by Hafiz Muhammad Khalid shows that majority of university libraries of Pakistan use manual systems for their housekeeping activities. It also shows the use of mixed systems (manual and automated) and fully automated systems by a small number of libraries. The survey also shows that most of the libraries use majority of access point for their cataloguing services. The proportion of the use of automated systems either alone or in combination with manual systems (mixed systems) is small but significant. The libraries also provide bibliographic searching facilities through supplying Bibliographies, Catalogue of other Libraries, Union Catalogues and Periodical Indexes and Abstracts. The majority of university libraries provide these facilities through printed medium. CD-ROM and On-line Media are rarely used for these services. The survey shows less use of automated systems for value-added services but there is considerable use of mixed systems for these services. This shows the increasing trend for the application of technology of library services. It also indicates that the application of technology can be maximized through combined efforts of the profession and the government agencies (Khalid, 1998).

There is a lot of debate over the use of the information technology. No doubt the use of computers has brought great revolution in all fields of human life. Although it started very late in Pakistan yet since 1996 information technology is flourishing in the country. Information technology has assumed importance in the global economic scenario. Pakistan Government has accorded priority to Information Technification Division of Ministry of Science and Technology has developed “Information Technology Policy and Action Plan”. They explained salient features of the policy in their brochure of 18th August 2000. They have described following areas of concentration and development.
• Human Resources:
• Software Industry:
• Infrastructure:
• Hardware Industry:
• Internet growth and Free Access:
• Incentives to develop and promote information technology industry:
• Promotion and Awareness:
• Information Technology Usage:
• Legislation:
• Regulations.

The Information Technology Policy and Action Plan is very attractive and charming for country’’s future development. If it is executed as planned and implemented as designed Pakistan will definitely achieve desired goals. Genius and intelligent planners intend to develop information technology trained personnel in haste. They are right to some extent but for long term planning and sustained fruitful results. They should also pay due attention on academic institutions. School is the base of education. Our schools are in miserable state. For future consistent and ever growing development Pakistan Government should introduce use of Computers and information technology awareness right from school level. At national level there are about:

- Primary Schools 158,689
- Middle Schools 41,456
- High Schools 24,822
In Pakistan, if government makes a crash program and start computer training at least from Middle School level we can get computer-familiarized youth in bulk. They can contribute a lot at college, university and public institutions. Similarly there are:

- Higher Secondary Schools/Inter Colleges: 3,399
- Colleges: 1,275
- Public Universities: 73
- Private Universities: 59
- Total universities in public and private sectors: 73 + 59 = 132

In Pakistan, at colleges and universities students should be provided education and training in information technology. If a five-year plan is chalked out for computer use, information technology training and awareness right from school level to university thousands of trained youth will be available to meet the challenges of country’s development. Planners would draw attention towards the miserable condition of libraries at school, college and university level. Our education experts do not consider any role of library in education and research. At school libraries are almost non-existent. At college these are just heap of old and out-dated books and journals. At universities also situation is not very satisfactory. Libraries in advanced countries are regarded hearts of the institutions. They regularly pump fresh and current literature to students and faculty members. It is established fact that high class and quality research cannot be done without well-equipped libraries. It is dangerous trend that researches in our country are done on table without visiting libraries. Now a day some intellectuals think that they can do research with the help of Internet without going to libraries. It is a fake idea. Although one can get lot of information on Internet, yet there are still certain limitations due to which libraries cannot be ignored. Every individual cannot purchase computer. If libraries are equipped with computers students and faculty members can create wonders. In USA 58 percent people have Internet access. In Pakistan only 0.80 percent of population has access to the Internet.
in their homes”. Keeping this situation in view information technology planners should pay due attention to introduce use of computers and information technology awareness right from schools to university level. They should make centers for computer learning and information technology training. By ignoring libraries we cannot achieve our desired goals of high and quality research.

In February 2002, University Grants Commission’s Karachi office organized a meeting to revise Library and Information Science curriculum at B.A. and M.A. level. Chairpersons of LIS departments of University of Pakistan and some prominent librarians participated in the meeting. The Committee evaluated courses taught at B.A. and M.A. level. They proposed certain innovation. The Curriculum Committee proposed certain additions and changes in the course. The most striking addition was the introduction of automation, computerization and information technology. At B.A. level besides other papers, “Computer in Libraries” was suggested as 5th part of the course. Similarly at M.A. in part 1 teaching of information technology, Computer components, Hardware, Software, Information Storage, Retrieval and Dissemination, online searching, Telecommunication etc. was emphasized. At M.A. Final also advanced courses were proposed to familiarize students with the latest and more advanced concepts of information technology, management of information, communication technology, etc. in specialized course Management of Information Systems (MIS) is also introduced. It will provide clear understanding of management techniques, decision making, automation, system design, implementation maintenance, etc. It is a healthy sign that UGC has persuaded LIS departments in the country to renovate their curriculum and provide latest teaching facilities to students to manage and organize libraries to meet the challenges of the time. It is hoped that now librarians will be fully aware of the latest information technologies and will serve administrators, planners, readers, researchers, etc. in their pursuits of advancement and development. It is sure to meet a bright future if Ministry of Science and Technology and Universities continued and maintained the pace of development and growth on modern scientific scenario (Sabzwari, 2002).

The revolution of information technology is just taking off the ground and its effects on the existing structure of library profession will take some time to be fully
realized and recognized, partly because of the economic limitations. There is a great need to accelerate the pace of adoption of information technology if we are to flock with the developed world. The library profession is entering a new era with the introduction of information technology.

Therefore, it is high time to think how we can cope with this emerging challenge keeping in view our limitations. The main obstacles to the adoption of information technology in the libraries include misconceptions regarding information technology, fear of unemployment, and hesitation to accept new technology on the part of library professionals. On the other hand, the library schools which are prime importance as educational and training institutions for the future library professionals are not well prepared for the demands of tomorrow’s information-sensitive society. The scarcity of resources and lack of appropriate policy regarding information technology adoption have made the problem more critical. Although, a few efforts have been made but still there is need for acceleration. Some efforts have been made to improve the situation. For example, in 1997, a Technical Committee has been constituted to revise and update the curricula for library schools. In order to provide on-line retrieval services, LABELNET and SIRNET have been developed. The NLDP (National Library Development Project) has financed and executed various programs for the development of library profession including development of two packages, named LAMP and SERNET, (based on CDS/ISIS) for fast library operations: automation of the parliamentary libraries: establishment of computer centers; and provision of training and supply of equipment to the libraries and library schools. In 1991-92, some functional strategies regarding impact of information technology were recommended by the study Group on Information Communications of the Prime Minister’s Secretariat. Some individual efforts have also been made by certain organizations such as NARC, PINSTEC, and NADLIN. However, a broad-based national policy on information technology is crucial to develop the library profession to face the challenge of tomorrow’s cybernetic society. Such policy should compass the information-requirement assessment, equipment and human resource development, information technology transfer and adoption process (Ilyas, 1997). The libraries are attached to government departments, institutions, universities and colleges, while a far smaller number have been set up in recent years by industries and
firms. The main concentration of these libraries is around the large cities and
metropolitan areas. The collection of books of such libraries is not large. Books and
periodicals form still the largest segment of their holding. The non-print and audio-
visual materials are almost non-existent. In respect of services too these libraries have
not succeeded in freeing themselves of the traditional approach, which lay emphasis
of the collection, organization and use of material rather than of the collection,
analysis and evaluation of data. The most popular service provided is the list of
current acquisitions. In rare cases bibliographies are prepared on request. The services
like indexing and abstracting, SDI, translation literature searching, and editorial
assistance are totally absent, even in theory and concept. The concept of computer
oriented information service is gradually developing. This is true both on the part of
users as well as information suppliers. A few libraries, recently, have started
experiment for the application of computer to library programmes. In fact, the know-
how about the use of computers for library programmes yet to be developed. The
Netherlands Library Development Project Pakistan, started in 1991, has made serious
effort in this regard in the form of training facilities both in Netherlands and at home,
by establishing computer providing training centers in provincial metropolis in
collaboration with the Pakistan Library Association and through presenting
microcomputers to selected schools and libraries. Pakistan Scientific and
Technological Information Center (PASTIC) was to act as a first organization for
coordination of libraries in the areas of science and technology, had not been
somewhat instrumental in providing the necessary leadership as far as introduction of
information technology was concerned. The Center itself works along traditional
lines. The importance of Library Associations for monitoring library developments,
particularly in countries where Library Advisory Councils do not exist at the
government level, cannot be over-emphasized. But observation shows that the
existing Library Associations in most of the countries of Third World have failed to
shoulder leadership responsibilities because of their weak organizational structure,
poor membership and lack of financial resources. This is also true in case of Pakistan.
Over a dozen local, regional, provincial and national library associations exist at
present in the country. All these associations, no doubt have had contributed to the
growth and improvement of library profession, but their contributions seem to result
from random programmes rather than systematic planning. Their activities are focused on current problems rather than established objectives and long range goals. The shortage of competent teachers with practical experience of library work is perhaps the most serious problem in this sector. Moreover, the number of teachers with knowledge and competency in information technology is very low. The lack of professional literature, well suited to local needs, is another problem. This section would remain incomplete without mentioning the contributions of some foreign entities to library development of this country. The Asia Foundation had been in the forefront of furnishing books to all types of libraries in general, and academic libraries in particular. Likewise, British Council assisted the universities and colleges as well as several research organizations through providing donations of books and by paying subscriptions to professional journals. Both the Asia Foundation and British Council provided services of library experts and helped in training of Pakistani Librarians abroad. The contribution of United Nations and its agencies particularly, UNESCO, has been significant. The USIS and U.S. Education Foundation have also been active in this regard. Present advancement in computer technology and a significant decrease in unit costs have given decision makers increased opportunities in every walk of life to use PCs. Today, a large number of business, administrative and research establishments are benefiting from computers. Mainframe, Mini-computers and Microprocessors and all available in Pakistan, AST, IBM, DEL, Compaq, Bull, NCR, ICL, Sun, Unisys are among the major multi-platform computer companies having dealers in the country. Access of E-mail, Satellite Transmission, Teleconferencing and Cable Television is fairly common-place. In recent years networks (LAN) are operating in most of the offices. The Paknet, run by the Pakistan Telecommunication Corporation, is a public data network in operation in the country since 1991 for Wide Area Network (WAN) for at least 300 users. By making use of this facility a large number of private sector organizations have set up Wide-Area Network of their own. Some notable organizations that have their WAN include the Pakistan International Airlines, the Associated Press of Pakistan, multinationals like IBM, ICI and financial institutions like Citibank, American Express and Bank of America. They lease lines from the Pakistan Telecommunication Corporation within Pakistan, and some of them have overseas lines as well. But all these networks are proprietary in nature. A few
academic and research organizations have adopted new technologies and options in networking. There are, at the moment, four institutions that have dial-up link with UUNET in the USA. The HEJ Research Institute of Chemistry the first to establish this link, followed by the FAST (Foundation for the Advancement of Science and Technology), Institute of Computer Science, Lahore, and the Higher Education Commission, Islamabad.

This debate would not be complete without mention of Internet, recently being adopted by several organizations, particularly in private sector corporations, located in metropolitan cities. Internet offers a multitude of useful applications, such as E-mail, retrieval of infinite amount of information on any possible area of interest. Internet is a very powerful tool for both individual and businesses. One can communicate with anyone anywhere in the world who had access to Internet (Haider, 1997).

LIBRARY SOFTWARE

Hardware without software is useless. The selection of software should precede hardware. When we talk about library software, it means the software needed for library housekeeping routines and information retrieval services. Many of library packages have been developed and run successfully in advanced countries and there are many directories and other tools available that help librarians to select suitable software for their libraries. The situation in Pakistan is at developmental stage and a few attempts have been made. There are some obstacles for progressive situation. We are a developing nation with small monetary resources. Our libraries cannot afford the cost of automation as a whole. With low percentage literacy, there is a lack of research institutions. Because of our poor educational system, students and teachers do not consider the library usage. Librarians are not trained for library automation. Library schools in our country do not prepare their students for this challenge. Some have included the subject of library automation in their syllabi but there is no facility for practicals. Because of computer illiteracy, librarians are unable to automate their libraries. People do not appreciate the requisites of library automation like system analysis, consultancy, staff training and equipment maintenance. Libraries that have been automated have worked individually without benefiting others’ experiences. Because of computer illiteracy, librarians hesitate to automate their libraries and, if
they have to do so, they cannot play an active role in the automation process. Another problem is the growing trend of software piracy in the country. No software developed abroad is suitable for our libraries. As standard library software is non-existent in Pakistan, library co-operation, which is one of the remarkable achievements of automation, is becoming extinct with the passage of time. Pakistani libraries mostly use microcomputers. So, it will be useful to introduce briefly some database management systems for microcomputers being used in the country.

Mehmood, 1998, states that the library software is used for all library operations routines and information storage and retrieval services. The library software used in Pakistani libraries in two categories: foreign and locally developed.

FOREIGN LIBRARY SOFTWARE

Dbase & FoxPro

In Pakistan some libraries have developed their library databases using dBase and FoxPro. They do not have variable length fields and repeatable fields, which are necessary for any bibliographic database. Therefore, they are not suitable for library usage. DBase provides an opportunity for relational databases. The dBase can be run on local area network. The dBase is a standard database management system and is not meant especially for libraries. For developing purposes and an application understanding and training is necessary for both library software’s.

INMAGIC: DB/Text works

INMAGIC is used in Lahore University of Management Sciences (LUMS), NWFP Agricultural University Peshawar, Shirkat Gah Documentation Centre Lahore & Karachi and some other agricultural libraries in the Pakistan. The software was originally developed for mini computers in 1980. Since 1983 it has been available for use with IBM PC and compatible machines. The package is powerful, flexible and easy to use. Data are stored in variable length fields and each field may be repeated, which fulfills requirements for multiple authors, subjects, etc. in a bibliographic database. Its manual is written, contains many examples and is well indexed. Online tutorial is available. Fields, records and databases sizes in INMAGIC are unlimited. This software is very suitable for Pakistani libraries but it is expensive. It is good for
bibliographic data handling, but is not suitable for others managerial routines of a library.

**CDS/ISIS**

CDS/ISIS was developed by UNESCO and is being distributed free of charge. More than 6,000 libraries are licensed users worldwide. It is a non-numeric database specially designed for bibliographic records, and is multilingual. It provides variable length fields, repeatable fields. It has powerful indexing and searching techniques. Advanced programming can be done in the PASCAL. Its latest version 3.07 was released in December 1993. Use of CDS/ISIS software was introduced in the libraries in Lahore by LABELNET project. This project was jointly sponsored by International Development Research Centre (IDRC), Canada and Lahore University of Management Sciences (LUMS) and it aimed at the resource sharing in the libraries in business and economics sector in Lahore. Using CDS/ISIS two databases were maintained. SENET was the database designed for Union List of Serials. The database contained 605 records. The second database, UNIC, was developed for union catalogue. Until 1990 this database had 1,800 records. CDS/ISIS (Computerized Documentation System / Integrated Set of Information Systems) is popular in Pakistani libraries. There are a number of libraries that are working on CDS/ISIS in Pakistan. It is available in many languages e.g. English, French and Spanish languages databases, Arabic and Latten versions are also available. Unlimited number of databases can be designed in CDS/ISIS. Attractive titles can also be created. Its indexing method is very powerful. It maintains an indexed – terms dictionary arranged alphabetically. One can choose the key words from the dictionary; combine them with different operations and then search. Since version 3.0, CDS/ISIS has been providing full LAN (Local Area Network) support, i.e. simultaneous access to a given database by two or more users for both searching and data entry. Its operations are easy because it is menu driven package. All the menus and work sheets are designed in various languages. New menus and worksheets can be framed and modified as required. Its retrieval language is very powerful.
SCI-MATE

Sci-Mate package, developed by the Institution of Scientific Information, Philadelphia, is used in the WAPDA House Library at Lahore. It is designed specifically for menu-driven searching of a wide variety of online databases and for the management of textual information.

Locally Developed Library Software

Some attempts have been made to develop library software’s in Pakistan which are as under.

KITABDAR

Iqbal Academy Library has developed the first True Multilingual Library Database 19 years ago. It successfully automated its library in 1989 with its DOS based True Multilingual Library Software (Kitabdar) the first of its kind in Pakistan. The Software remained the only true Multilingual Library package for 15 years. To keep pace with the advancement in the field of computer science, the Academy undertook the project of updating its library Software with a complete revamp; giving it a Windows environment, new structure, enhanced features and extended search facilities. The New SW is named Kitabdar for Windows. It is an extremely sophisticated project of extraordinary technological depth and breadth. It not only has the promise of providing in-depth research assistance/ Library services to the scholars the world over but also offers certain features that outshine all the existing Software Packages in the field.

Windows version of KITABDAR provides both the professional librarian and the general users with the first true multilingual database library management software to effectively automate the large research/reference libraries and personal collections alike. Kitabdar is now available for Windows XP.

Salient Feature

- Specially designed for research / reference oriented technical and academic libraries. Based on Unicode, therefore supports English, Arabic, Urdu and all other Pakistani Languages written in Arabic script as well as any other
language like Hindi, Gurmukhi, Bengali or Chinese.

- Archives, automates and retrieves data for books, journals and newspapers. Automates all the standard library procedures and functions e.g. Acquisition, Accessioning, Cataloging, Classification, Catalog and Printing, Circulation, reminders, new arrivals, periodic bulletins, searching, bibliography, etc.
- Holding information is organized into 28 items competently selected by experienced librarians.
- User-friendly and intuitive Graphical User Interface (GUI) minimizes training time even for those with no previous experience of computer operations. This means maximum productivity in a very short time with no additional staff.
- Very fast and flexible search, over the subject and content, in a large variety of ways.
- Menu and message language selectable between Urdu and English extendible to any language.
- USMARC compatibility that facilitates Copy Cataloguing Electronic Data Transfer between cooperating libraries. Union Catalogue Additional usage possible as a general information management system for research and record keeping.
- The already easy-to-use interface made simpler through the use of instantaneous help and status line information.
- Works on all PCs with a minimum of Pentium II (266 MHz) or equivalent processor running Windows 2000 or Windows XP. Fully supports LAN functionality for all operations.
- All prices include software, documentation and free training with 3-months warranty against bugs in the software. Mixing of texts of any language.
- Multilingual
- Based on Unicode, supports all languages within a phrase.
- Bilingual User-interface: Menu and message language selectable between Urdu and English extendible to any language on demand.
- Electronic data transfer between cooperating libraries through US MARC compatibility.
- Fully integrated functions.
- Hardware requirement: Pentium II (350 MHz) or higher with CD drive.
- Operating System: Windows XP.

**LAMP**

The library automation and management programme has been developed by Netherlands Library Development Project Pakistan (NLDP-P) with the collaboration of Pakistan Library Association (PLA). It is a totally integrated Library Package which includes Acquisition, Fund Accounting, Cataloguing, Circulation and Management Reports. LAMP is based on CDS/ISIS version 3.07. CDS/ISIS is available free of cost from Pakistan Scientific and Technological Information Centre (PASTIC) in Islamabad. The application LAMP can be obtained from PLA for Rs. 15,000 per copy. The Urdu and English versions are sold separately. The Netherlands Library Development Project (NLDP) was initiated as the Netherlands Scientific Literature Project (SLP) in 1975 by the Government of Netherlands. This project focused specifically on collection building of scientific libraries. The project was limited to Book Aid, and covered in principle institutions showing interest in receiving books. After an evaluation by SOCRATES in 1988 the SLP was restructured and the number of beneficiaries was limited to six universities, and the scope was widened to include some staff training and the purchase of equipment and library furniture. In June 1991, the country desk approved the phase II of the project. The project’s name was changed from SLP to the Netherlands Library Development Project (NLDP). The most important development in 1993 was the extension of the project from May 1994 till August 1995. At the time of NLDP started operation the automation condition of Pakistani libraries was pitiful. There was no national format for library automation. There was no integrated library software available in the market. Libraries were not able to get costly foreign library software packages. In
these circumstances, the Netherlands Library Development Project took the initiative to develop library software which can fulfill the needs of Pakistani libraries.

With the consultation of senior library professionals, integrated library software, Library Automation and Management Program (LAMP) was developed. A team of two computer programmers and a number of professional librarians were involved in its development. Advanced programming in PASCAL language was incorporated in six databases created in CDS/ISIS. It is a completely menu-driven, user friendly package.

LAMP can handle all library operations of any Public, Academic or Special library in Pakistan. The module for acquisition of monographs includes budget control, ordering routines and payment records. Bibliographic information can be entered in the cataloging module, which can print catalog cards, bibliographies and shelf lists and search for any information through various keys. The circulation module can maintain borrowers’ records and issue, return, renew, and reserve books. It calculates fines for overdue books and also prints overdue notices. SDI service can also be provided to the users having specific interests. The serials module can handle the acquisition and cataloging of serials and holding lists of serials can also be printed. Subject, author, and publisher authorities can be maintained in LAMP (Farrukh Khan & Ur-Rehman, 1995).

The LAMP is being used in more than fifty libraries. Some of them are using it on a local area network (LAN) very successfully. Its Urdu version has also been developed.

Library Management System (LMS)

It is library software developed by the Tower Technologies local software developers. It is windows based, user friendly, easy to use by the librarian as well the users of the databases. It is module based software providing space for different module according to different processes and operations being performed for library management and databases development, etc. It can be used in small and big libraries / information centers according to their needs and demands. Searching module is helpful for identification of reading material from in house database and through internet as well as it is mostly used for acquisition process. Cataloguing module helps
in classifying and technical processing of the documents. Circulation module is used to develop a database for public services and users profiles. There is also provision for serial control. Utilities of the software provide facility for spine label printing, barcodes, overdue reservation letters. Through the software, the status of the document can also be traced very well which is very much important towards utilization of research material in specific projects. Primarily it is being used by the Govt. College University Library, Punjab College of Business Administration (University of Central Punjab).

Selection of library automation software has been very difficult, has become more complicated and controversial issue in the present librarianship scenario in Pakistan. Fresh library graduates as well as senior professionals working in the established institutions are struggling hard for a bearable compromise between quality and cost. The available options for library management software in Pakistan are as under:

- Off-the-Shelf Software
- Open Source Software
- In House Software Development.

Off-the-Shelf Software is a good choice in ideal condition because these are developed by highly qualified Library and I.T. Professionals. Unfortunately in Pakistan where education is a last concern of authorities, how can library spend a huge amount on buying this software and so much so it will have to pay handsome money for support every year. Some of the Pakistani Libraries have experimented In House Software Development specially Punjab University Library, Quaid-e-Azam Library, Iqbal Academy are running successfully and fulfilling their requirements. But most of these software’s are tailor made and suitable for the institution they are made for. These institutions offer free excess to their software to other libraries. In this situation open source software is the only hope for most of the librarians. This software is available online and free of cost ‘Koha’ is the example of this kind of software. One only needs practice on it. Some library professionals in Pakistan have worked on this software and made it suitable for Pakistani environment where
literature is available in multiple languages. Even then more concentration is needed to customize Open Source Software in Pakistan. More and more library professionals should think about it as this option can provide us with an affordable solution of automating most of the Pakistani libraries (PLA, 2008).

In Pakistan now most of the libraries are generally using VIRTUA ILS, Horizon, Koha and LIMS integrated library systems. However most of the school, college and public libraries have not yet started automation process and majority of libraries are using in house developed library software (Nazir, 2008: 1).

**PakLAG Koha**

Koha is open source library automation software and PakLAG Koha is its customized version built to run on Internet to manage automation requirements of medium to large libraries. It has multilingual support integrated in it. In the start of 2007, around 140 Libraries throughout the world were utilizing Koha.

PakLAG Koha fully meets the functional requirements of a library automation system. It is fully compatible with the Pakistani Libraries because of the MARC based library system integrated in it.

The GUI (Graphical User Interface) of PakLAG Koha is very easy and friendly having great flexibility. The inclusion of Urdu, Sindhi and Pashto on screen keyboards and the special feature of export to Urdu MARC has made it possible for PakLAG Koha to stand out uniquely among other library automation solutions.

**Main Features**

Koha is a comprehensive system that will intelligently run your library - large or small, real or virtual.

- A full featured modern Integrated Library System (ILS).
- Award winning and open source no license fee, ever.
- Linux, UNIX, Windows and MacOS platform.
- Web Based.
- Full integrate it into website
- Copy cataloguing and z39.50.
- MARC21 and UNIMARC for professional cataloguers.
- Tailored catalogue module for special libraries.
- Use as a document manager or digital library.
- Manage online and off line resources with the same tool.
- RSS feed of new acquisitions.
- E-mail and/or txt patron's over dues and other notices.
- Print your own barcodes.
- Serials management module.
- Full Catalogue, Circulation and Acquisitions system for library stock management.
- Web based OPAC system (allows the public to search the catalogue in the library and at home).
- Simple, clear search interface for all users.
- Simple and comprehensive acquisition options.
- Koha is multi-tasking and enables updates of circulation, cataloguing and issues to occur simultaneously.

Library Information and Management System (LIMS)

Library Information and Management System (LIMS) is excellent tool used for automation of libraries and is fully tested and analyzed by library professionals. Not only it is free of cost, but the group of library professionals is also providing its services to train the staff by different means, which include support through Instant messaging, emailing, over the phone or may be a visit to the library. LIMS is popular not only in Pakistan; it is also being used in Middle East. Over all more than 50 libraries of almost every type are utilizing LIMS at the moment.
In Pakistan, some of the esteemed educational institutes are using LIMS and a team of developers provide training and other troubleshooting support locally in Islamabad, Punjab and NWFP.

The online version of LIMS; Web OPAC, is developed to run over Internet and it has been tested and will be distributed among the users of LIMS at no extra cost.

NETWORKING

Information networking is important for national development, but there is no formal culture of resource sharing in Pakistani libraries and information centers. Most of institutions operate in isolation, and most government reports and studies are not accessible even to government institutions and departments. Under these conditions it is very difficult to develop an information network. There is a need to convince the policy makers to develop databases of related literature. The best way would be to computerize the most important libraries.

At present, due to the shortage of funds, the majority of Pakistani libraries are not in a position to purchase even essential periodicals from their own budgets. The number of periodicals and their costs increase every year. Hence there is a great need to share resources. For this purpose a Serial Network (SERNET) project has been proposed by the NLDP. A SERNET database has been developed containing information on the contents of 1500 periodical titles. Institution in the Federal and four Provincial Headquarters have been included in the network, and the database has been distributed to fifty libraries on floppy disc.

A CD-ROM version will also be developed and distributed. When a National Union Catalogue of books and serials is functioning, Interlibrary Loan will be easy. For this purpose, an Inter-library Document Delivery System has been suggested by the NLDP. Through this system books and articles will be available for researchers throughout the country. To make the system successful, the e-mail facilities at PLA branch offices will be used. Full text CD-ROM databases are also recommended to provide document delivery services.
LABELNET: Networking Project

The Lahore Business and Economics Libraries Network (LABELNET) is a pilot network of libraries documentation centers in Lahore (Pakistan) which is aimed at facilitating resource sharing among the libraries in the areas of business and public administration and other related fields. It is expected to improve access to information produced from and about Pakistan through computerized databases.

The project is jointly sponsored by the International Development Research Centre (IDRC) and the Lahore University of Management Sciences (LUMS).

The objective of establishing this automated network to develop computer literacy among the participating librarians and to introduce the concepts of database and information processing .The project is also expected to provide a model of sectoral resource sharing which might encourage the establishment of similar networks in other areas and in turn a national network of libraries and information centers.

The idea of sharing library resources through mutual cooperation emerged from the LUMS library in its attempts of satisfying the information needs of its users. The LUMS Library was rich in current information, but it could not adequately collect retrospective information about Pakistan’s business and economy .The old government documents, research reports and periodical back-files were no more available for acquisition. This material was available only in the libraries of some old institutions. It was making this information available to its users through personal contacts with the local librarians. It was realized that effective utilization of these resources required a formal agreement of library cooperation.

They developed the understanding that they can enhance their resources through mutual resource sharing without involving excessive expenditures.

The proper bibliographic control of available information is a pre-requisite of resource sharing, the group decided to take up the task of making a union list of serial holdings through cooperative effort. A list of subject headings was prepared and a data collection worksheet was designed. These were distributed among group librarians with the request to forward these to focal person after filling them out. The
LUMS assumed the responsibility to compile a computerized list. Unfortunately, this could not be achieved, as the librarians were not able to supply the information due to different reasons they stated.

All aspirations of cooperation are difficult to materialize without adequate financial support. The main objective of the LABELNET project was to establish a network of libraries specializing in the areas of public management and economics in Lahore region. The ultimate purpose of the development of bibliographic databases is to increase the availability of a wide range of materials through a system of Interlibrary Loan. This should also serve as a model information-sharing network for other libraries/information centers.

Specific objectives were as under:

(a) To create a computerized Union List of Serials held by participating libraries;

(b) To create databases of government documents, research reports and monographs;

(c) To develop and implement an interlibrary loan system among participating libraries;

(d) To prepare an index of Pakistani periodicals subscribed by member libraries;

(e) To input relevant bibliographic records to DEVINSA through the Pakistan Institute of Development Economics; and,

(f) To provide information services to researchers, planners, business community and other users of the participant libraries as well as the public at large.

The software called Micro-CDS/ISIS was selected to develop the project databases. A licensed copy of the programme has been obtained form UNESCO. Data were collected and processed by the special staff hired for the project.

LABELNET operates through its two databases, SENET and UNIC. SENET was the database designed for Union List of Serials.
(1). SENET contains 605 records. New records would be added for new titles. The language of the database is English. Each record comprises of the title of the serial, changed title, location, origin of serial, publisher, frequency, starting date, ISSN, language, subject references, and notes and holding information of different libraries. Subject headings used by Ulrich’s Periodical Directory have been used as a means of vocabulary control for subject analysis.

(2). The UNIC database has been designed to contain bibliographic entries of materials relevant to the project scope. A quarterly union catalog of these materials is produced from this database.

UNIC contains 1,800 records and about 40 records are added or modified every day. The language of the database is English. A typical UNIC record contains the following fields: call number, location, reporting station, reporting station record number, accession number, document level, document type, language, author, corporate author, title, translated title, author-parent work, corporate-parent work, title-parent work, title of serial, vol./issue number, place/publisher, year of publication, collection, edition, ISBN/ISSN, conference, notes, series, geographical area, sectoral code, descriptors, documentalist and input date.

Databases and lists produced by the automated system of the project will facilitate bibliographic access to the available material. But, physical access to documents would require a formal interlibrary loan system. At present no formalized interlibrary loan network exists in Pakistan. Frequently, such ideas of resource sharing are put forward from different quarters which have never been put to practice.

An Interlibrary Loan Code, based on the model code prepared by the American Library Association, is planned to be drafted. Subsequently, necessary support documents, e.g., Interlibrary Loan policies, forms, delivery schedules, and responsibilities of borrowing and lending libraries will be prepared. These codes and procedures would be revised and refined in group meetings. Contractual documents would be developed to formalize the Interlibrary Loan network (Riaz, 1990).
The National Documentation Center, Library and Information Network (NADLIN)

It was established in 1987, as an attached department of the Council for Water Resources and Environment with the financial aid of United States Agency for Internationals Development (USAID) to collect, organized and disseminate information or Research and Development (R & D) activities in the field of Water Resources and other related area. NADLIN is in the process of establishing a computerized database on water resources and environment.

NADLIN provides a monthly list of fresh arrivals list of bimonthly periodicals, content services; semi annual abstracts services on water resources, retrospective and selective bibliographies on related topics. It also provides photocopies of reading materials to research workers on demand and computerized database on water resources and environment.

The Development Information Network in South Asia (DEVINSA) this network was set up by the Committee on Studies for Cooperation in Development in South Asia (CSCD), Colombo, with the financial and technical assistance of the International Development Research Center of Canada for developing network in South Asian Countries i.e. Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka.

The network controls published and unpublished materials of the member countries as well as provides documentation and bibliographical services from its database suggestions.

The network, WIDENET, will cover the governmental and non-governmental organizations working in the field of women and development. The proposed services include a new Accessions list, Current Awareness Service (CAS), Document Delivery, Selective Dissemination of Information (SDI), and Reference Service. An Environment Information Network will organize the information resources of institutions working on the environment. A bibliographic database of materials on the environment will be set up.
The Karachi is the hub of the banking sector in Pakistan, a network to be known as BANKNET has been proposed for Karachi. Organizations involved in education will be also be networked through an education information network. The Higher Education Commission has shown interest in developing such a network. About more than 250 organizations are involved in the science and technology field in Pakistan. For information dissemination among these institutions a Science and Technology Information Network has been proposed by the NLD.P. The Chairman of the Science Foundation showed keen interest in this proposal. A Forestry Information Network has been developed for institution involved in forestry. As a first step, the library of Pakistan Forest Institute at Peshawar has been computerized and a database of about 25,000 books and 28,000 journal articles has been developed for distribution to other forestry libraries. Health service institution will be networked through HEALTH NET. The National Institute of Health, Islamabad has agreed to become the focal point for this network.

Another renowned institution of Pakistan, the COMSTECH, has networked the journal holdings of forty five major libraries spread across its fifteen member states and made available list of twenty eight thousand research journals online. Now this institution has started its Inter-library Network service to enhance the utility of its free literature search service in view of limited access of the Scientists and Researchers of the OIC Region to scientific research articles. Therefore in 2001 COMSTECH established an in-house facility to initiate the massive task of collecting the list of journal holdings from the member libraries and compile it in a format compatible with an online database to be made available on COMSTECH Website. At present journal holdings of forty five libraries from fifteen member states are listed with COMSTECH. These member states are Bangladesh, Indonesia, Iran, Jordan, Malaysia, Morocco, Nigeria, Pakistan, Qatar, Saudi Arabia, Senegal, Syria and Turkey. New libraries from OIC member states can also participate in this programme and welcome to send list of their journal holdings to enable COMSTECH to integrate it in its online database. The main objective of COMSTECH Inter-Library Resource Network Service is to make the scientific journal holdings of major OIC libraries accessible to the scientific community of the OIC region. This network service is not only addressing the needs of the OIC-Wide community of scholars, researchers and
students by letting them share each others national resources, but also proving helpful to avoid duplication of the same publication already available in one of the member libraries (COMSTEC, 2008).

**CD-ROM TECHNOLOGY**

The advent of CD-ROM technology has suddenly changed the whole spectrum of information dissemination in developing countries. It provides an excellent opportunity to access large databases of information at low cost. It also provides an excellent opportunity for less developed countries to overcome traditional problems associated with online searching. The CD-ROM technology may prove to be an important factor in removing the imbalance between information-rich and information poor countries.

Results of the Cornell University study on agricultural information dissemination showed that optical disk technology provided potential for a breakthrough in the transmission of scientific and technical information to developing countries. Metcalfe's study indicated that users in developing countries were excited to have literally at their finger tips access to information on a scale, speed and convenience previously only dreamt of the IDRC evaluation project for CD-ROM in Africa. South East Asia and Caribbean also indicated that comprehensive documentation on installation and allow most users in developing countries to be self sufficient in the use of CD-ROM system. Moreover, this technology would fit easily into the existing infrastructures of less developed countries.

It has been noted that maximum benefit from CD-ROM databases could only be made if it was supported by a strong document delivery service. Access to primary document remains one of the main obstacles in the flow of scientific and technical information in the developing countries. If the users are aware of the existence of documents they need for their research and development activities, they would feel frustrated if they are unable to have access to them. The users would lose interest in bibliographic services if document delivery service is not available. It is meaningless to provide citations to documents if these are not or cannot be made available. Samaha also listed problems in procuring documents from national and international agencies. The factors mentioned were poor collections of foreign documents in local,


lack of union list of journals, lack of libraries inter lending agreements, restrictions on foreign exchange, increasing cost of photocopying, delays in surface mail delivery, high airmail costs of documents and non availability of photo-reproduction facilities at the source, etc.

One of the primary concerns of optical disk users is the proliferation of search software. CD-ROM user has to learn a wide variety of retrieval software to effectively search the desired information. Efforts are being made to develop a common command language for information retrieval to be used as a standard. These software packages initially a “gateway” programme, would promote the use of optical disc as the users will not have to learn difficult retrieval software programmes.

Fortunately, the three largest agricultural databases world-wide, i.e. AGRICOLA CAB Abstracts and AGRIS are available from M/s Silver Platter which is one of the pioneers among the CD-ROM producers. Its retrieval software called SPIRS (Silver Platter Information Retrieval System), contains sophisticated and powerful searching capabilities it is very user-friendly and can be used with minimal training. Silver Platter has established its leading role in the CD-ROM industry and its software has become an accepted standard.

The remarkable success and popularity of CD-ROM database have inspired MART-USAID authorities to include CD-ROM component in their Mart Libraries Strengthening Project. Under this project, a decentralized CD-ROM network of 17 selected agricultural libraries will be established. The focal point, the National Agricultural Research Centre will develop a comprehensive collection of Agricultural Database on CD-ROM. These databases will include AGRICOLA, CAB Abstracts, AGIRS, Biological Abstracts. Food Sciences & Technology Abstracts, Pest Bank, McGraw-Hill Science & Technology set, ERIC, LISA, GIAR and Extension Reference Library of USDA. The nodal points will get the most frequently used databases or a database in their field of specialization.

The PARC is also acting as test and evaluation site for a number of CD-ROM prototype databases like CGIAR full text and Extension Reference Library. Both the databases have full text and contain combination of text, numeric data, tables and illustrations as well as sound.
It is hoped that successful introduction of CD-ROM technology would help bridge information gap between Pakistan and developed countries. Similarly, availability of a variety of CD-ROM database will play a decisive role in supporting agricultural research in the country (Majid & Zuberi, 1990).

ELECTRONIC DOCUMENT DELIVERY IN PAKISTAN

There is an information explosion in the world. The diversity of information formats from microforms to optical discs, CD-ROMS and advent of Internet Resources have more complicated the process of intellectual traffic control. This situation has compelled the Information Resource Centers to manage the information availability through electronic assess to its patrons. This has resulted in electronic document delivery systems. Its operation for Interlibrary Loans Resource Sharing and purchase through a commercial vendor is common in developed countries but the state of the art is very limited in Pakistan. Some special research and academic libraries are paving the way in this respect.

The Ariel software developed by Research Libraries Group (RLG) of USA is a small software package, which can turn your PC, printer and scanner into a state-of-the-art document transmission station on the Internet.

The other commonly used method of Electronic Document Delivery among the libraries is the Fax. Although it is still a good option for libraries without Internet access, yet it is not very popular for international document delivery. This is mainly due to the high cost of Fax as well as the fact that some documents may not transmit properly via Fax. Photographs, detailed charts, maps, graphs, small print and similar documents were not received clearly if sent by Fax. But Ariel can scan and forward all such documents without loss of clarity.

The commercial document providers are now taking another step forward regarding online/electronic transfer of documents by making their full-text document databases accessible through World-Wide Web. Whereas, any user with Internet connectivity, can directly access and download the required documents instantaneously. This has even eliminated the use of a special software or wait for two days. A good example is the newly launched ProQuest-Direct of UMI. In the library
field too Electronics Librarians or Virtual Libraries are emerging very fast. These virtual libraries have huge collections of electronics books and journals, which can be searched through Web and full-text documents, can be consulted and/or downloaded (if so permitted).

Although slowly, Internet use, is gaining momentum in Pakistani Libraries. In the area of Electronic Libraries seems a little farther, the Ariel Document Delivery System can work as a good option for Library Resource Sharing. By purchasing this small and easy to use software, and a scanner attached to the computer, any library with Internet connection, can send or receive any document from any other Ariel workstation within Pakistan or anywhere else in the world. Keeping in view, the budget limitations and the general scarcity of information resources in Pakistani libraries, this technology can not only facilitate nation-wide sharing of resources as well as shared collection development among libraries but also help us benefit from the rich resources available in libraries around the world (Jaswal, 2000).

**TRAINING**

Training in itself is the basic ingredient of capacity building. Training in a specific field enables a person to perform his role according to service expectations. Since the information management and retrieval is service oriented, it becomes imperative for the person inducted to this profession that he/she should have got the necessary training required for discharging his/her duties well. As far as training required meeting the information technology challenges in library and information management in Pakistan is concerned, some efforts have been made to equip the professionals with software/hardware know-how required by them.

As a good educational programme has a strong curriculum as the basis of all activities. The component of information was first included in library curriculum in Pakistan in the 1970s. In April 1995, a curriculum revision meeting in LIS Programmes was held at the Higher Education Commission, Islamabad. The curriculum merges Diploma and Masters Programmes into a two year LIS Master Program.
New curriculum contains, for the first time, contemporary information technology components in different courses.

- Fundamentals of computerised information storage, retrieval and dissemination.
- Introduction to computer hardware and software.
- CD-ROM (Technology and data bases).
- Networking.
- Electronic mail.
- Use of microcomputers in libraries.
- Database design and maintenance.
- Automated serials management.

It is something recommendable that HEC has been successful in making Library Information Science department to reassess their curriculum and to provide modern facilities to the users of libraries. Now we are hopeful that no libraries will have update technologies and will provide their users full support to get latest information regarding their respective fields.

In the 1980, it was felt for the first time at government level to train the library professionals with modern techniques of information services. In 1987, A.C. Fosket, an expert of repute requests my Pakistani government to prepare a report. He give many suggestions on of the recommendations was to develop an information center for training. NADLIN was the first to introduce the series of automation courses in 1988, in different cities of Pakistan.

Library professionals in Pakistan can not ignore the role of the Netherlands Library Development Project (NLD) in promoting and developing information technology in the country. One of the major areas of activities of this five years project was arranging courses and seminars to introduce modern technology in libraries. With a pool of computers and other hardware facilities, NLD established five computers training centers in Federal and Provincial Capitals of Pakistan.
The main objectives of the center’s planning and future development would be as under:

- To provide formal training to librarians in Library automation
- To provide a facility for practice and work to Centre’s registered members
- To provide consultancy and guidance in library automation.
- To serve as an intellectual resource base and a center of excellence for research on library automation, library soft wares, and their customization for Pakistani libraries.

The work done by NLDP for the promotion and development of information technology in Pakistan is highly appreciable. Different courses and seminars were arranged by NLDP for the training of library professionals in connection with modern technology.

The NLDP arranged foreign training for library professionals from Pakistan. They were trained to use the new library technology. NLDP also sent Pakistani professionals to the Netherland to get the first-hand knowledge of library automation.

More over the NLDP sponsored a number of workshops, seminars and conferences. Training courses on library automation were organized the big cities of Pakistan.

The PLA Computer Training Centre, Lahore offers formal education and training in library computerization for librarians. It started functioning on 2nd November, 1992, being funded by the Netherlands Library Development Projects-Pakistan.

The establishment of this training centre was an attempt to bridge the gap created by the local library programs by not offering formal instruction and training about modern technologies in the libraries. In Pakistan, library automation has been slow due to deficiency of expertise. Few Librarians have been able to develop know-how through self-education. The foundation of PLA Computer Training Centre was indeed a positive step forward in library and information science training in the
Punjab Province. It was start of a new era of developments in the filed of librarianship in Pakistan (Riaz, 1993).

In first three years the center produced a reasonable number of librarians trained in different aspects of library automation. Up to 1995, there were 70 to 80 libraries only in Lahore which has been automated, or were planning to use information technology. This number by now has increased to 150. The period comprising over decade of the immediate past training of Information Technology shows that library professionals know the importance of the use of modern technology and ready to meet this challenge of the time. Their efforts though not satisfactory are appreciable. With the advent of the 21st century, training of Librarians in Information technology has become more significant as the future society will be totally technology based. No nation will be able to prosper without reasonable knowledge of information technology.
CHAPTER-4

DEVELOPMENT OF LIBRARIES IN BANGLADESH

Libraries are essential cultural establishments. Certainly no community is regarded as whole without having a library. The propagation of democracy, the expansion of knowledge, the recognition of exploration pursuits and immediate boost in the creation of documented information, has resulted in the development of libraries and also the progression of their services. “The discussion of strategies is one of the most substantial feats in the social development of the mankind. Library is one of numerous methods of human interaction and a vital center for distributing information” (Johnson, 1973).

Bangladesh came into being as an independent sovereign state in 1971. Prior to the mid-19 century, almost all libraries in Bangladesh had been privately operated and accessible to selected communities (Mannan & Begum, 2002).

The attempts of the librarians along with other involved individuals have significantly altered this unimportant purpose and have made up the library an extensive and essential service establishment. “After twelve months the addition of the public library act in the united kingdom, the very first non-government library of Bangladesh was founded at Jessore in 1851” (Alam, 1991).

Afterwards, 3 additional non-government public Libraries-Woodburn Public Library at Bogra, Barishal Public Library at Barisal, and Rangpur Public Library at Rangpur had been founded in 1854 (Khan, 1984).

During 1851-1955, a large number of different types of libraries were established in the country; however, the whole picture of library and information systems in Bangladesh is not encouraging. The very first government public library was founded in Dhaka in 1955 and accessible to everyone in 1958 (Foote, 1995).
GENESIS OF LIBRARY DEVELOPMENT

Libraries play an important role in development of any country. Pakistan came into being in 1947 when the sub-continent was divided into two independent countries. Unfortunately, all the old and well established educational institutions, research organizations, museums etc were located in those parts of the sub-continent which are now in India. Not only this, Pakistan was also deprived of her due share of books from the libraries of the Government of undivided India. Since birth of Pakistan libraries were neglected and never been considered a matter of national importance. Every Government gives importance to education and to provide educational facilities to far off small villages. The policy makers seem to be of little concern and are unaware of the importance of libraries. In 1949, the Government of Pakistan has established joint directorate of archives and libraries. This was the first step towards the promotion and development of libraries in the country. In 1955, the ministry of education, Government of Pakistan, at the suggestion of UNESCO, borrowed the services of a foreign expert Mr. L. C. Key, deputy librarian of the National Library of Australia, under the technical assistance program of Colombo Plan. Mr. Key prepared a comprehensive report entitled “Report & Proposals on the Establishment and Improvement of Libraries in Pakistan”. Unfortunately report was not published and remained unimplemented (Key, 1992).

In 1959, commission on National Education recommended that local bodies should maintain from their own funds an active library and reading room for the benefit of the public (National Education Commission Pakistan, 1961).

In the same period, the Government has also issued a directive for the provision of libraries through basic democracies. Under the program of basic democracies Union Council and Town Committees had established small public libraries and reading rooms in their offices.

During the 1950s and 1960s the former East Pakistan was fortunate to have a handful of dedicated librarians who kept vigilance on library development and were successful in drawing the attention of the provincial and the central Government of Pakistan to the needs for library services.
The two personalities Mr. Ahmed Hossain and late Mr. M. S. Khan who emerged as pioneers of library development belong to East Pakistan. Their efforts were mainly concentrated on the development of academic and public library system.

**ORIGIN OF NATIONAL LIBRARY OF BANGLADESH**

The library situation changed after Bangladesh was separated from the territory of Pakistan. Several institutions have been upgraded and new institutions have been established to fill the gaps created due to the political and geographical change of the country. These developments have been made during the initial two planning periods of the development schemes. The national libraries of Bangladesh i.e. NLB (National Library of Bangladesh), NSL (National Science Library), NALDC (National Agriculture Library and Documentation Center), NHLDC (National Health Library and Documentation Center) came on the scene during those periods.

The UNESCO Conference on the “Development of National Libraries in the Asian and Pacific Countries” held in Manila in 1964 adopted a resolution for establishing a national library in each country. In pursuance of this resolution, the government of Pakistan decided to setup the National Library of Pakistan in Islamabad with two subsidiaries under the designation of central libraries for two main cities of the country, Dhaka, the capital of the then East Pakistan, and Karachi, the one time federal capital of Pakistan. Their main function was to acquire native publications under the coverage of Copyright Ordinance, 1962. The central library in Dhaka (not the East Pakistan Central Public Library) came into being in 1968, and started collecting local publications under section “Delivery of Books and Newspapers” of the aforesaid Ordinance. In fact, a book delivery cell, started in a rented building, after the emergence of Bangladesh, that book delivery cell was turned into the national Library of Bangladesh.

Under the rule of Pakistan the National Library of Pakistan was established in Karachi and a book deposit branch known as Central Library was setup in 1967 at Dhaka to collect regional new publications under the copyright law of Pakistan so, “after the independence that Central Library branch was turned into National Library of Bangladesh. The National Library of Bangladesh is playing the role of a depository of national produced publications.” (Ahmad, 1985) The National Library started its
functioning in 1972 and was declared as the National Library of Bangladesh vides the
gazette notification no. LB/IL-13/75/355 dated 19th August, 1975. The library
remained in that rented house until the construction of the building of the library was

The National Library of Bangladesh from the day of inception is an important
national institution working under the Directorate of Archives and Libraries. The
users of National Library are of multidiscipline with wide vision consisting of
researchers, professionals, administrators, policy makers, general readers etc.

The collection of Bangladesh National Library covers all major disciplines of
human knowledge including Arts, Archaeology, HRD, Literature, Cultural Heritage,
History, Science and Technology, Engineering, Medical Science, Economics,
Agriculture, Library and Information Management, Gender Studies, Development
Administration, Environment, etc. Preservation is scientific in manners. “The most of
publications in the Bangladesh National library possesses huge collection of foreign
representational publications on Asian countries and specially related to South Asian
studies. The library enriches its collection through acquiring publication under copy
right act, purchases, institutional/ personal donations etc.” (Latif-ur-Rehman, 2008:1-
2)

COLLECTIONS

The NLB consists of unique and rare collection of books; manuscripts and
special materials like maps of various period and place which have given especially
from other libraries of the country or donated by Bangladesh secretariat library.
(Latif-ur-Rehman, 2008: 3).

National archives and national library has a treasure of several thousands of
old books, magazines, newspapers, journals. All kinds of printed materials and
publications form home and abroad relating to the history, culture and administration
of Bangladesh, which are important for research and studies on any aspect of
Bangladesh.
Special collection trusted to the NLB is as under:-

1. First Dr. M. Shaidullah-Personal Collection
2. Khan Bahadur Nawab Ali Chowdhury collection
3. Bangladesh Secretariat collection
4. Actors Md. Goam Mastafa-Personal collection etc.
5. Mymensingh Fundamental Education Academy’s collection and other’s national personalities.


SERVICES

National library of Bangladesh, at present is providing following services at national and international level.

- Collection, technical processing and preservation of national published heritage. Development of comprehensive collection of reading materials and provides microfilm reading services on some selected subjects and areas are given to the concerned research scholars in line with national requirements.

- Compilation and publication of Bangladesh National Bibliography (BNB), abstract and indexes to the Newspaper articles, directories of publishers, etc.


- Standard rates of conversion and discount for purchase of reading materials in Libraries and Institutions in Bangladesh.

- Internet browsing and research facility for readers and researchers.

- Assistance in research activities.

- Professional Advisory Service for Libraries and Institutions.

- To provide guidelines to the government/professional associations in making library Act.
• Document Delivery Service.
• International Cooperation in the filed of Library Science.
• Professional Training, Seminars and Workshops.
• Book Exhibitions on important National days.

“Bangladesh National Library has membership of IFLA, CDNLO ISBN agency, and cooperation with national and international other professional bodies-

Bangladesh National Library has a good number of audiovisual service components for its user’s community. NLB has its own customized software and service” (Latif-ur-Rehman, 2008: 3).

The Bangladesh National Library has no branch in the country. Its users are about 7000. All information needing persons coming to the Bangladesh National Library have the free access to its collection but are advised to take membership.

**FUTURE PLANS**

Future plans of Bangladesh National Library are as under:-

• To finalize the National Library Act.
• To enhance the users facilities including digital information service, computerized library management, e-mail browsing, etc.
• To start Online Public Access Catalogue (OPAC).
• To arrange for the publication of Annual Report of National Library.
• To enforce the Legal Deposit Regulations of Copyright Law.
• To implement the recommendation as regards NLB made by the National Commission for Culture in 1989 (National Archives & National Library Bangladesh via Internet).

Presently in Bangladesh there are following libraries at the national level:-

• special field’s national libraries,
• 700 special libraries,
• 68 public libraries,
• 150 community libraries,
• 1260 College libraries and
• 75 University (21 public, 54 private) libraries (Latif-ur-Rehman, 2008: 4).

With the increase in educational institutions the government is trying to open as many new libraries as possible.

PRESERVATION ACTIVITIES

Preservation activities of National Library of Bangladesh are in traditional mode. They have not taken any measure for the “Digital preservation” of the collection. “National Library of Bangladesh has reprography, photography and microphotography service unites for the users.” (Latif-Ur-Rehman, 2008: 4-5)

COPYRIGHT & LIBRARY ACT

The National Library Act has been executed and it is hoped that it will be approved very soon by the government is in way to be approved by the government. “The legal deposit act of Bangladesh incorporated in country’s copy right law. Since 2005 NLB was declared the single depository and repository institution of the country for the first time. The major change in the Copy Right laws held in 2005. Computer software was included in the copyright law” (Latif-ur-Rehman, 2008: 5).

STATUS OF LIBRARY DEVELOPMENT ACTIVITIES

Although libraries of many types have been established in the Bangladesh yet the whole scenario is not encouraging. In Bangladesh, there is not a single library in primary schools. Some private secondary schools have libraries but they are completely unorganized. The books of these libraries are kept under lock and key, without any supervision of a librarian or a teacher.

“There is no national body for providing training programmes for the school and college librarians of Bangladesh. National Academy for Education Management (NAEM) has been providing continuing education programmes for college and madrasah librarians of the country” (National Academy for Education via Internet).
Many different training programs have been arranged for college librarians. For example in 1998 and 2002 Bangladesh Bureau of Educational Information and Statistics (BANBEIS, 2003) and the Library Association of Bangladesh (LAB) arranged two training programme which were funded by the UNESCO.

Some non-government organizations (NGOs) have also started taking interest in providing training programmes for school librarian. “Human Development Foundation (HDF), Bangladesh has been arranging training programmes on librarianship under “Rural School Library Enrichment Programme (RSLEP)” for non-government school teachers in rural areas since 1986. At a time, HDF selects 50 to 60 non-government schools from different rural areas and one teacher is invited from each school for training programmes. HDF has provided different reading materials to rural schools in Bangladesh” (HDF, 2004). Another NGO, PRAKRITAJAN has also shown some interest in this respect by starting “Training of Secondary School Teachers under Volunteers for Bangladesh and PRAKRITAJAN School Assistance Programme and selecting 23 schools from rural areas to provide reading materials for them” (Prakritajan, 2004).

The Ministry of education provides books to some schools in rural areas. Asia Foundation and Islamic Foundation donate books and other reading materials to some educational institutes every year. “Community Development Library (CDL) has established 26 Rural Information Resource Centres (RIRCs) in different rural areas of Bangladesh for creating reading habits among rural people. Children and school students are especially encouraged to use these resources centres” (Munshi.n.d).

These resource centres which are organised for the uplift of libraries in remote areas are provided with every possible facility. “They have library facilities and can organise seminars, workshops, study circles, meetings, discussion and video shows to enrich people’s knowledge on development issues. RIRCs maintain news clipping service and network with local NGOs and people in the community. Each center has an advisory committee comprised of representatives from NGOs and public bodies, as well as teachers, librarians, journalists, local Govt. officials and cultural activists. The committee identifies the resource materials, policy matters, priorities, potential topics and organizations with which they would like to link” (CDL, 2004).
The government of Bangladesh had not shown any interest in establishing and developing school and college libraries. Library Association of Bangladesh (LAB) had taken few initiatives and arranged seminars/conferences for library movement and development of library education and librarianship. Reports of Commissions on education have also emphasized on the Establishment of libraries in schools and colleges.

So it is clear from the above mentioned facts that very poor conditions prevail in Bangladesh as far as the libraries of schools and colleges are concerned. No special programs have been developed for the uplift of libraries. A few efforts have been made by some NGOs which provide funds, reading materials, arrange training programmes. These measures are not sufficient for the overall development of libraries.

The main objective of the education is to make the children responsible citizens of the country. For this purpose enhancement of knowledge is needed which cannot be done without realizing the importance of library. So it is concluded that for better citizens well equipped libraries are a must.

PROBLEMS

Library problems of school and college libraries in Bangladesh are as under:

- Lack of national commission for school and college library development in Bangladesh.
- Lack of proper initiatives for the establishment of libraries by the government.
- Lack of leadership in library and information profession.
- Lack of funds for purchasing books and other reading resources for school and college libraries in Bangladesh.
- Lack of a national level organization to advice government on library and information affairs.
- There is no proper National Commission for the development of libraries.
- The government has shown no initiative to set up new libraries.
There is no proper leadership in library profession.

There is lack of funds for the purchase of books and reading material for libraries.

There is no proper service structure for librarians.

These and many other problems have made it difficult for the libraries to prosper in Bangladesh.

SUGGESTIONS

"National Commission for School and college Library Development in Bangladesh should be established immediately. The commission will advise government on the development of library and information affairs and work for the providing benefits and facilities of the library professionals.

The national development of Bangladesh can not be thought of without the development of libraries and information policy at the national level. The government should give more attention for library development as recommended by the National Education Commission Report 2003 by M. Maniruzzaman Miah.

Every government and non-government primary, secondary school and college must have a library and every library must have a professional librarian.

The government should allocate funds in the annual budget for the development of school and college libraries in Bangladesh.

The government of Bangladesh should promote the development of a library-based education in the country. Also should promote the organization and development of village, school and college libraries in Bangladesh.

A national training institute for library and information science should be established for providing training programmes of professional librarians on the use and application of modern information technology (IT).
• Leading libraries, library associations and educational institutions should organize seminars, conferences, meetings and lecture series and other programmes in different times to create reading habits among students, teachers and general people of the country.

• The Government of Bangladesh should approach UNESCO, World Bank and IFLA for a special project for school and college library development.” (Munshi, 2002)

LIBRARY EDUCATION IN THE DEVELOPMENT OF LIBRARIES

Bangladesh has gotten a sluggish expansion of library education, which began prior to independence. The country has 58 years of history in library education. “After First World War there was a gradual development of libraries in west. The library schools in western countries designed their curriculum and a fresh variety of innovative, optimistic, and service driven librarians was produced, but these developments had no impact on Bangladesh (than part of India) while the region was in fact under British colonial control” (Hossain, 1985).

The beginning of twentieth century is usually known as the “dark age” for education of librarianship in Bangladesh. “There have been libraries but without the strategies and techniques of librarianship for organized services by expertly competent manpower” (Ahmad, 1981).

The need for library science education was very soon realized strongly. But no serious efforts were made until 1952. Library education has been around for six decades in Bangladesh. Divisions, institutions and professors have the crucial duty, to instruct and retain with the transforming environment and tendencies within the discipline. The coaching divisions focus on high and ensure that their graduate students are paid well in any kind of library. The obligation of coaching departments is to enhance the image and upgrade the curricula including lessons on technology in libraries. There must be high requirements for entry, efficiency, and the most up-to-date technology and products should be accessible to the students.
History of library education is as under:-

Library education in the country was introduced in 1952. In the beginning, three month certificate course in Librarianship was instituted at Dhaka University by late M. Fazle Elahi, the librarians of the University. The programme was discontinued after only one session. However in 1953, higher training facilities were made available under the technical assistance programme of the Colombo plan. Two practicing librarians were trained in this programme. In 1954, two more librarians were given the opportunity to receive training in the U.S.A. and U.K (Mannan, 1990).

“Three month certificate” course in library science was started in Dhaka University in 1955-56. Consequently an undergraduate course in Librarianship was started by the East Pakistan Library Association now Library Association of Bangladesh in October 1958 which was attended by working librarians of Dhaka and elsewhere (Mannan, S.M, 1990: 116-11)

A great breakthrough in the field of library education occurred when the Postgraduate diploma course in Library Science was introduced on a trial basis by Dhaka University from the session 1959-60. A one year Master degree course in Library Science was introduced from the session 1962-63 (Mannan, S.M, 1990: 117).

The landmark year in regard to library education in Bangladesh was 1964-65 when the Department of Library Science was instituted under the Faculty of Arts at Dhaka University. In the session 1975-76 the one year M.A. course was converted to 2 years M.A. course. M.Phil and Ph.D course was introduced by Dhaka University in 1976 and 1979 respectively. Dhaka University renamed the Department of Library Science as Department of Library and Information Science with the opening of Honors in 1987-88. And thereby it suspended the diploma course. The University offered the Association to start the post graduate course and thus the Association started the post graduate diploma course from academic session 1989-90. Rajshahi University started a one year post-graduate diploma course in Library and Information Science in 1991 and the University added a three year B.S.S. Honors course in 1993 and Master degree course in 1997 (Mannan & Begum 2002: 239).
To keep pace with time the department of Library and Information Science, Dhaka University again changes it’s named as Information Science and Library Management from the session 2001-2002.

Different courses and programs were introduced to give library education. “The National University introduced a two-year MA course in library and information science in 2003-04. From 2006-07, the university is offering a four-year BA (honours) course in the same subject. The Lalmatia Girls’ College has taken the opportunity to start both the MA and BA (honours) courses under the National University. The University of Dhaka started a two-year MA (evening) course in 2004-05” (University of Dhaka, 2005).

“From 2006-07, the University of Dhaka started semester system for BA (honours) course. The University of Rajshahi introduced M.Phil and PhD courses for library science graduates from 2006-07. In July 2007, the University of Rajshahi re-named the department of Library and Information Science “Information Science and Library Management.” (Rahman, Khatun & Mezbah-ul-Islam, 2008: 6).

The library education was started in Bangladesh before her independence. Bangladesh has an education system of study and teaching from certificate level to PhD in Library Information Science. Two universities offer B.A. (Honours) and M.A. in Library Information Science and twelve institutes offer diploma courses.

At present private sector is also actively participating in this effort of giving library education. “Some private universities are also offering diploma and certificate course in Library Information Science. About five hundred Library Information Science professionals are being produced from these educational institutions every year. But this number is not sufficient to meet the information requirements of one hundred and forty million people of Bangladesh. Not only that, the quality of Library Information Science professionals is not up to the mark but also there is a need to work hard for the overall development from education system to professional development” (Islam & Chowdhury, 2006).

Some other appreciable efforts made by private universities are as under: “In 2005 Darul Ihsan University (DIU) started a PGD course in library and information
science, and in 2007, a two-year MA course. Royal University of Dhaka (RUD) introduced an MSc in library management and information science in 2005. International Islamic University of Chittagong (IIUC) launched a PGD in library and information science in 2007. In this decade, six more institutions have been established and received affiliation from LAB to start the certificate course. Four more colleges have begun to offer library and information science as an optional subject for their BA (pass) students under the National University.” (Rahman, Khatun & Mezbah-ul-Islam, 2008:7)

Although these efforts are not sufficient for a country having such a large population yet the ground had been prepared for more universities to come forward to work for the education of librarianship. “There are only 6 (both public & private) out of 75 universities (UGC, 2008) and 16 (both public & private) out of 1,581 degree colleges (BANBEIS via Internet) providing library science education. Among them, only 2 public universities deal with undergraduate to PhD level, 2 private universities teach Master's level, 1 private university offer the certification level, and one has a post-graduate diploma program. Out of 9 colleges, only Lalmatia Girls' College has undergraduate and postgraduate courses under National University. More courses are required. There should be more institutions offering BA (hons) and MA programs in library science field. UGC should design strategies to open “Department of Information Science and Library Management” in public universities like Khulna University, Chittagong University, Jahangir Nagar University, and Shahjalal University of Science and Technology.” (Rahman, Khatun & Mezbah-ul-Islam, 2008:14)

The struggle made by these institutions has borne and a fruit and many professionals have been prepared to take up their responsibility in different schools and colleges. “About 120 Master degree holder, 350 Diploma holder and 100 Para professionals are coming out to join the team of librarians. At present Masters degree, is offered by three universities and Ph.D from one university respectively, Graduate from 15 colleges and Diploma from 12 institutes in addition to para professional certificate course. Courses of studies are incorporated topics on library automation, resource sharing, and information technology at different levels. A good number of
institutes related to HRD, education, research and library services organize in-service, refreshment training course for the library professionals.” (Latif-ur-Rehman, 2008: 5).

**TRAINING IN LIBRARY & INFORMATION SCIENCE EDUCATION**

There exists a deficiency of skilled development coaching in Bangladesh. There are several librarians who had received no training besides conventional one.

Ongoing training for teachers ought to be an important part of all library establishments. This assists the faculty to master instructing methods with the newest electronic resources instead of depending on their outdated hand-written notes, to instruct courses in the rapidly changing discipline of library science.

In an effort to aid exercising librarians and information experts and keep educators mindful of concerns and trends used, there must be a good number of training seminars and short classes. Institutions and skilled associations must take liability to coach their future generation regarding present trends in library development, analysis, composing, and publishing (Rahman, Khatun & Mezbah-ul-Islam, 2008).

There is lack of training courses even in big universities of Bangladesh. They do not offer advance courses to librarians to enable them to update their skill to meet new challenges of time. “In Bangladesh, both Dhaka and Rajshahi University do not offer continuing education for their previous graduates or the professionals. In the recent past, the department of Library Information Science of Dhaka University organized a one-day international seminar on “Library Automation” held on 30 June 1998. Since then the department has not taken any initiative to organize seminar at national and international level.”(Chowdhury, 2006: 361)

The training opportunity for the Library Information Science students and professionals in Bangladesh are unsatisfactory. At present, both the universities are not offering any training programme. The Dept. of Library Information Science, university of Dhaka organized some training programme on CDS/ISIS, but due to lack of infrastructural facilities and initiative from the faculty members, the programme did not continue.
Some other universities of Bangladesh, which are offering training programme are not doing it on elaborate scale. Only short and confined programs are offered. “There are some leading libraries in Bangladesh which offer training programme for the Library Information Science professionals, most of them are confined on CDS/ISIS training. International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B) Library, Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) Library, Community Development Library (CDL) and Independent University, Bangladesh (IUB) library offer training course on CDS/ISIS subject to availability of the participants. Two libraries in Dhaka, name ICDDR,B & IUB also offer library attachment training, but the participation of the course is not satisfactory due to high course fee. Another private university, North South University started certificate course on “Online and Digital Librarianship” in 2004. Some other libraries also organize training programme, but the total effort is far below than the requirement” (Islam & Chowdhury, 2006: 358-363).

STATUS OF LIBRARY & INFORMATION SCIENCE JOURNALS

Analysis and publication are a fundamental element of education. Publication of well written articles and guides helps the students to acquire more information and to appreciate and regard their educators. The competent graduates do top quality research, publication and coaching.

The Department of Library and Information Science of the University of Dhaka published “Bangladesh Journal of Library and Information Science” for the first time Vol. 1, No.1, in December 1998 to highlight articles of one day international seminar on library automation. “Unfortunately, the journal has not been published after this issue. The East Pakistan Library Association that was named as Library Association of Bangladesh (LAB) published journal ‘The Eastern Librarian’ in 1961 and the publication of the journal is not continued. The last issue of this publication was a combined volume 20-22, published in the spring of 1998”. (Sharma, 1999)

The LAB is planning to publish the journal and it is expected that the journals will get success and will be published continuously.
PROBLEMS IN LIBRARY & INFORMATION SCIENCE EDUCATION

The major problems in the Library Information Science education in Bangladesh are as under:

- Lack of infrastructural facilities.
- Inadequacy of reading materials.
- Inadequate full time faculty member/teacher.
- Insufficient attention to research and its facility.
- Lack of faculty members obtained PhD.
- Lack of attractive job facilities and social status for the library professional.
- Big gap between the Academician and the professionals.
- Lack of career development facilities.
- Absence of national policies.

The Library Information Science departments of two public universities are trying to maintain the quality of Library Information Science education in Bangladesh. All the Library Information Science institutes of Bangladesh are not quality conscious. It is noteworthy that there is no organization on the national level responsible for review, approval and accreditation of any programme including Library Information Science education in Bangladesh. The University Grants Commission (UGC) of Bangladesh just serve an advisory role.

In order to remove the above problems the following recommendations are as under:

- The Infrastructural facilities in all Library Information Science educational institutions in Bangladesh should be provided by the Government.
- Adequate reading materials from textbooks to foreign journals both Bengali and English in print and digital format should be available in all the institutes.
- There must have full time qualified faculty members at the Library Information Science institutes.
- The essential research facilities especially in the Library Information Science department of two public universities should be increased and there should have monthly research allowance for the faculty members so that they can accelerate their research work without facing any financial crisis.

- It is a fact that the quality of degree from the first world countries is very high and they are providing quality education indeed. If more faculty members involved in Library Information Science education in Bangladesh would get the facility to acquire their PhD degree from those developed countries, the Library Information Science educators in Bangladesh get very much benefit from them (faculty member).

- International collaboration like exchange of faculty members and students should be ensured both in Dhaka and Rajshahi University.

- The Government of Bangladesh and the concerned authority should be more sincere to establish the dignity and social status of Library Information Science professionals by formulating appropriate and equal policy to the other professionals.

- There should have the arrangement of seminar, symposia and conferences very frequently for greater cooperation among the professionals and the academicians. It will also enable the Library Information Science professionals to enrich their professional skills and knowledge and would be capable of maintaining a global view and an appreciation of the importance of the field internationally.

- The opportunity of Library Information Science education in university level (both public and private) should be expanded to produce more qualified Library Information Science professionals.

  Nowadays it is common to continue education with lifelong learning. Changes and developments come very sharply to Library Information Science. So all the universities and institutions should offer regular and diverse continued education programmes in order to refresh and update the knowledge of past graduates, professionals and teachers (Islam & Chowdhury, 2006: 358-363).
ROLE OF LIBRARY ASSOCIATIONS IN THE DEVELOPMENT OF LIBRARIES

Library associations have played an important role in growth and development of profession. They bring together librarians providing them an opportunity for intercommunication of ideas through conferences, congresses and workshops and its publications and served as a platform for general discussion of problems related to library activities.

In 1947 about two third province of Bengal became the Eastern part of Pakistan due to the partition of the Indian subcontinent into India and Pakistan. Bangladesh then called East Bengal later East Pakistan received no share of books from important libraries of Bengal as the division of the provincial assets. Library facilities became deplorable and inadequate having very few trained librarians libraries started to be ill managed with untrained staff (Ahmad, 1987).

For development of any profession in any country an active association is important. Therefore the idea of establishment of Pakistan Library Association was generated in the mind of the handful professional in 1954. Pakistan Library Association (PLA) came into being in July 1956 (Ahmad, 1987: 2).

Bangladesh emerged as an independent country in 1971. Till today though the overall library situation is not so satisfactory still there is vast scope to develop. In Bangladesh at present there are two registered professional associations. Which are:

- Library Association of Bangladesh-LAB, which is affiliated with International Federation of Library Association and Institutions (IFLA) and Commonwealth Library Association (COMLA)
- Bangladesh Young Librarian Information Scientists and Documentation lists (BAYLID)

There is only one professional foundation in the name of late M. Siddique Khan Foundation Late khan the pioneer of Library education and profession in Bangladesh received Independence Award in 2004 (Latif-ur-Rehman, 2008: 4).
The library association of Bangladesh (former East Pakistan Library Association) established in 1956, due to some great efforts of the dynamic librarians in the time. Library Association of Bangladesh (LAB) is a professional national body for promoting library related activities.

The first conference of the library association of Bangladesh (LAB) was held jointly with the third annual conference of Pakistan library association in between 24 and 28 December 1960 at Dhaka. The most important achievement of this conference was that the East Pakistan librarians were able to convince the West Pakistani Librarians to shift head quarter of the Pakistan Library Association (PLA) in Dhaka. In conference, it was decided that the PLA headquarter would rotate between Karachi, Dhaka and Lahore (Ahmad, 1987: 4).

East Pakistan was the host to the fifth annual conference of the Pakistan Library Association for the second time in 1963 when the second conference of the Library Association of Bangladesh (former East Pakistan Library Association) was also held. Since the PLA head quarter was in Dhaka at that time, there was great enthusiasm and encouragement among the East Pakistan Librarians (Sadiq, 1964).

After the emergence of Bangladesh, Library Association of Bangladesh (LAB) has organized different types of seminars, training, and rally and so on with the objective of fostering the professional development. The association started publishing its official journal the Eastern Librarians in 1966 (Ahmad, 1987: 1-6).

Library Association of Bangladesh opens the door for those who are interested to get a degree regarding library and information science. Thus it makes para-professional in the field of library and information science. In addition to the certificate and diploma programmes, the Lab has been conducting special courses for the army personnel and for the librarians of the educational institutions. All educational programmes are being conducted at the Library Training Institute established by LAB with the help and recognition of the Government of the People’s Republic of Bangladesh.

From 1958 to 2002 LAB has conducted 70 certificate courses (including Rajshahi, Khulna and Chittagong division LAB) 4472 participants have successfully
completed these certificate course. From 1989-90 to 1999-2000 LAB has conducted 11 Post-graduate diploma courses. 1029 participants have successfully completed these courses (Nafizzaman via Internet).

AUTOMATION OF LIBRARIES IN BANGLADESH

During the last 46 years, the computer and telecommunication technologies began to build up an information society, which has crossed the geographical limitations and has provided facilities to access into global information systems. “As a result, nature of modern librarianship has changed considerably with the advent of new technologies in the age of information explosion, libraries and information resource centres have become multimedia centres due to adoption of new technological devices and changing nature of their information storage retrieval and services. Automation has been making tremendous impact on different sectors of the libraries and information centers. (Munshi, 1998: 2)

In view of complex and multi-faced user requirements, this results numerous specialization and flow of non-stop information. But there are problems of decreasing comprehensive acquisition of documents for libraries, growing demands of information, increasing numbers of users, etc. “Automation has been playing an important role in improving the capabilities of libraries/information centers towards attaining satisfaction of their users.” (Munshi, 1998)

Even though computer systems have been introduced since 1964 to government departments and the private sectors, libraries have only begun to use computers by the beginning of the 1980s.

Bangladesh (East Pakistan) entered into computer world in 1964 with the installation of an IBM 1620 machine at the Atomic Energy Centre and IBM 101 statistical machine at the Institute of Statistical Research and Training (ISRT) at Dhaka (Ahmed, 1998).

From 1964-65 only very insignificant development was made in the use of computer in libraries, but there has been considerable progress since 1996. The International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) Documentation and Information Centre and Agriculture Information Centre (AIC) are
the pioneers in creating bibliographic databases on specialized field using micro computers (Khan, 1989).

Some other libraries of information centers working with computers and some related technologies are at the initial stage of ‘automation process’ and ‘networking. The Digital library initiatives have been taken in the Bangladesh by the different institutions which are basically Non Government i.e., North South University ICDDR B. A consortium on digital library has also been formed under the control of University Grants Commission with some major library and research institutions in Dhaka. NLB is planning of digitization but it has not yet undertaken any digitization programme.

In Bangladesh basic library network exist only in Line libraries. Telecommunication facilitates i.e. dial up, broadband VSAT are not only major problem for library network in as a whole.

It is noted that about 55 special libraries of the Bangladesh are in the process of creating databases by using personal computers. Most of libraries use computer devices. Those libraries have installed micro computers mainly for creation and maintenance of bibliographic databases and some word processing activities. Few libraries have CD-Rom facilities but no initiative has been taken to produce any indigenous information product on CDs. Some libraries have online connection and are providing external resource sharing facilities to a limited scale. Only few specialized libraries have started networking and resource sharing or use telecommunication systems for inter-site data transfer (Aslam, 1998).

There is no formal study on how many libraries have bought computers for initiation of automation. Approximately 82 (24 public & private university, 2 national, 1 public and 55 special) libraries and information centres (science and technology, agriculture, health, covering research, departmental, ministries, missions, etc.) use computers in their operations and most of these are concentrated in Dhaka, the capital of Bangladesh.

The libraries use various types of electronic equipment and communication technologies to ensure the smoothness of library activities. Libraries use information
communication technologies in activities such as data processing, communication, cataloguing, bibliography, serials control, circulation and creation of an in-house database. There is not a single library in Bangladesh that is fully automated; most of the private universities libraries provide computerized service to users while most of the public university libraries are not yet able to do so. For creating and maintaining a database the libraries in Bangladesh use different types of software. Some of the libraries use locally developed software, i.e. NSU Library Management Software (locally developed), LIBRARIUM (locally developed) and BUET LIB (locally developed), but most use CDS/ISIS software.

The Dhaka University Library has installed the library software package Graphical Library Automation System (GLAS) equipped with a network server and a number of PCs distributed in a local area network (LAN) within the different sections of library and other university buildings. Most libraries in Bangladesh, however, use computers as stand-alone devices whose applications are confined to bibliographic database maintenance and word processing (Alam, 1996).

The changing attitudes of information users in getting specific information, a number of libraries and information centers of the Bangladesh have recently taken steps to establish a proper system for providing desired information to their users.

Bangladesh is one of the few countries in the world which began to adopt information technologies in 1964 but today computerization of libraries in Bangladesh is still infancy. A number of problems contribute to the low level of computerization in the libraries in Bangladesh. Information specialist, who had automation related experience identified the problems. Which are as under?

- Computer Illiteracy.
- Improper Training.
- Unavailability of Library Software’s.
- Retrospective Conversion.
- Lack of Expertise and Technical Know-How.
- Non Availability of Vendor support for Library Hardware and Software.
- Shortage of System Analyst.
- Lack of Programmers Efforts.
- Lack of Long Term Planning.
- Lack of Shared Initiatives.
- No Consultancy firms about library automation/library systems analysis.
- Lack of Financial Resources.
- Lack of Standardization and quality control.
- Lack of ICT Resources.
- Lack of Infrastructure.
- Bureaucratic setup.
- Psychological factors.
- Lack of information sensitivity.
- Lack of Networks.
- Software Piracy.
- Software problems (problems in their selection, evaluation, cost effectiveness, operating systems, training facilities).

In Bangladesh Information Communication Technology Introduced at primary, secondary and post secondary levels is very limited, with only a limited number of urban schools and colleges having Information Communication Technology facilities available for education. “Initiatives for increasing penetration are generally held back by a paucity of funds, as are many initiatives for creating information networks in educational information/information centers. For example, the Bangladesh National Scientific and Library Information Network (BANSLINK) are not working due to shortage of funds.”

There is an ever growing demand for computer education with regard to library automation but institutes offering this sort of education are very few. In service training is given but only to a small portion of workers. Lack of software companies
in Bangladesh is responsible for this problem. It may result in immigration of information technology specialist and students as well.

There is a need for tremendous growth in private Information Communication Technology training institutions in Bangladesh. It would be better for Bangladesh if these institutions could fulfill the demand for Information Communication Technology training, but instead they are concentrating their efforts on software developments. Graduates from these professional institutions prefer to go abroad for jobs.

At present there is general lack of coordination among the National Library of Bangladesh, National Health Library and the National Libraries of science and agriculture from others. Lack of coordination among the libraries in the sharing is seen in the lack of standardization and harmony of systems and their development, the duplication and wastage of resources (Ahmad, 1985: 36-50).

There are only two cases of library coordination in Bangladesh. The National Health Library has taken up for central acquisition of current journals for itself as well as for the medical college libraries from a common fund in foreign exchange for this purpose since 1988.

Another evidence of cooperation is setting up the National Health Library in the capacity of national focal point of the health literature, library and information service network system. The aim of which is to make better use of available sources at the national, regional and international levels sponsored by WHO since 1980. Particularly library in the network are the ones in the health sciences and related field throughout the Bangladesh (Medical Librarianship International Congress, 1985).

No nation can make any progress without the use of information. Message sending and Information is "older than civilization." It makes the change and improvement in society easy and increases the growth of economy. It also helps in social mobility. "The growth of society is now affected by "information explosion" with larger quantities of information being published and causing problems of storage and dissemination. At the same time, the number of information user has grown dramatically because of growing literacy and individual's realization that 'information
is power. The Libraries are responsible to meet information needs of users. As no library can be self sufficient with its resources, so it is all most difficult to fulfil the users demand relating to their information needs. Networking and resource sharing among the libraries can play an important role to meet the user's information demand in this age of information explosion. Networking and resource sharing in the library field is aimed at extending the information resources and services to a wider category of users without proportionate increase in expenditure.” (Manaan. S.M.n.d.)

The Libraries of the Bangladesh are not properly organised and suffer from different problems, such as, shortage of funds, inadequate information resources, lack of proper system for information dissemination, “lack of trained staff, modern technological facilities and lack of willingness of the authorities. In such circumstances it is impossible for any single social science library in Bangladesh to meet the information needs of its users. To overcome these problems and to promote the research and development activities in the field, establishment of social science library network for resource sharing is a must. The main cause of this networking is to share library resources effectively irrespective of geographical barriers. The resources can include information, equipment, facilities, function, services, trained personnel, time and money.” (Manaan. S.M.n.d)

Library professionals of the Bangladesh have now started to realize that networking and resource sharing is one of the most effective systems of solving the problem of providing information in time to users. But many of them are undecided about what models they should adopt? Because they lack in experience, technological facilities, necessary financial allocations, etc.

In Bangladesh, the realization for the need of library and information network has caused the department to start and share this type of education. “There exists an informal kind of cooperation and resource sharing programmes among a few libraries in the field nationally and in internally based on off-line information service. These are namely a) Development Information Network in South Asia (DEVINSAs), (b) National Information Correspondents Network in Social Science (c) Information Network on Rural Development (INRD), (D) Bangladesh Development Support Information and Communication Network (BDSIC).” (Manaan. S.M.n.d)
The new technologies, Computers, CD-ROMs, Internet and E-mail in Bangladesh have vast contributions in the field of communication and information exchange. The status of automation in social libraries is not satisfactory.

A few libraries are using computer mainly for word processing and partially for information storage and retrieval. Only few libraries have CD-ROMs, E-mail facilities and are connected up to this time in the Internet in Bangladesh. Most of the libraries are using micro CDS/ISIS software. “For national, regional, and international networking and resource sharing, the availability of tools like directories, bibliographies, union catalogues, indexes and abstracts, databases etc. is most essential. But no authentic information in this regard in the field of social science is available in the Bangladesh. However, it is observed that a few social science libraries have compiled or is in the process of compiling some essential tools required for networking and resource sharing.” (Manaan. S.M. 1998 n.d)

In the modern world, information is an essential input to any R&D (Research and Development) activity. This availability of scientific and technical information may result in the followings

(a) “Improved capability of a country to take advantage of existing knowledge and 'know-how' achieved elsewhere.

(b) Rationalization and systematization of research and development efforts in the light of knowledge already available.

(c) Wider knowledge base for the solution of problems.

(d) New alternatives and approaches to the solution of technical problems, and options for minimizing future ones.

(e) Improved effectiveness and efficiency of technical activities in the production and service sectors.

(f) Above all, better decision - making in all sectors and at all levels of responsibility.”

(Social Science Research Council, 1991:342)
The following universities and organizations of Bangladesh are busy in carrying out research:

- University of Dhaka;
- University of Chittagong;
- Rajshahi University (RU);
- Bangladesh Agricultural University (BAU), Mymensingh;
- Bangladesh Academy for Rural Development (BARD), Comilla;
- Centre on integrated Rural Development for Asia and the Pacific (CIRDAP), Dhaka
- Rural Development Training Institute (RDTI), Sylhet;
- National Institute of Local Government (NILG), Dhaka;
- Social Science Research Council (SSRC), Dhaka;
- Bangladesh Agricultural Research Council (BARC), Dhaka;
- Bangladesh Public Administration Training Centre (BPATC), Savar, Dhaka;

Almost all of the above organizations/universities and Institutes have functional libraries. But the picture in most of these libraries is not encouraging. “There is a paucity of personnel in libraries which in turn affects the quality and quantity of services offered. In fact, research in Bangladesh has not been accompanied by the setting up of a national information infrastructure and related services.” (Manaan. S.M, 1994 n.d)

In Bangladesh this calls for employment of more documentalists, librarians and information specialists capable of evaluating information and producing appropriate Research & Development information packages.

The national information policy for development in Bangladesh (either for social science, science and technology or rural development) remains far less well defined. However, efforts have been made to develop/define sectoral policy for development information. “Bangladesh National Scientific and Technical
Documentation Centre (BANSDOC) based in Dhaka has submitted a set of guidelines on national information policy for Science and Technology (S&T)” (Ahmed, 1988). The recommendations are awaiting follow-up action at the Science and Technology Ministry. However, BANSDOC already houses the National Science Library (NSL) at its premises.

Agricultural Information Centre (AIC) of Bangladesh Agricultural Research Council (BARC) prepared a planning paper for a National Agricultural Information System (NAIS) in 1988. The proposal has been accepted by the Governing Council of BARC (BARC, 1989).

Bangladesh has already established a National Health Library and Documentation Centre (NHLDC). “Attempts are being made to develop such national library/documentation centre in other sectors like industries, environment and forestry.” (Thakur, 1992) Similarly, keeping in view of changing scenarios of development strategies time has come to re-organize information systems and services with the help of modern techniques.

The actual library development in Bangladesh commenced in the midst of eighteenth century and the encouragement being furnished by the west. Developing a library network and expansion of library services to individuals have been for long and yet an existing problem in the state. But because insufficient proper intending by the Government and the involved respective authorities; the library and information system of the whole nation is utterly moribund. At present Bangladesh has different type of libraries i.e. Public, National, Academic and Special are as under:

- 11 University institutes libraries.
- 74 Universities Libraries (including private universities).
- 3 National Libraries and Documentation centers.
- 44 Professional and Technical college libraries.
- 664 Special libraries (including health, agriculture, science and technology, research institutes in various fields, ministers, departmental, missions in Bangladesh and foreign etc).
- 1031 college libraries (including Non-Government College libraries).

However the truth is that apart from university and a few research organization libraries, many of these libraries appear in paper only. Conversely, the following groups of people need information and literature assistance:

- Researchers and Scientists
- Students, fellow and teachers
- Rural literature people
- Business and trade people
- Policy-makers, planners and decision makers (Khan, n.d.).

NETWORKING AND RESOURCE SHARING ACTIVITIES IN BANGLADESH

The concept of spreading information networking and resource sharing is a unique trend in the country. It is often observed that the method looks like its grounded more on a theoretical base than on the practical factors. Also, it is observed that the idea has not been formalized by any authorized support. Consequently, the Bangladesh has not yet been able to put into practice this idea completely. However, a few attempts and initiatives have been taken by distinct organizations in a variety of sectors to kick-off co-operation in the field. A few of the attempts taken are given below:

- "An informal inter-library loan system was operational in the country even before 1971.
  The former National Agricultural Library and Documentation Center (NALDOC) of BARC
- Attempted to establish its network 'BAIN' but this could not be materialized. In 1976 icddr'b and NHLDC signed an agreement to facilitate library cooperation
through an inter-library loan system. Subsequently, BIDS (1977), BIRDEM (1978), USAID, Dhaka (1992), Aga Khan Community Health Program, Dhaka (1992) and BRAC (1995) have joined this program. nhlde, icddr’b, and BIDS has been successfully operating a cooperative program for avoiding duplication in journal subscriptions. The Agricultural Information Center (AIC) has initiated a library network for agricultural institutions (NAIS). Of the 36 agricultural organizations and institutions, 11 have been participating in this program. The Social Science Research Council (SSRC) has organized a Social Science Information Network in Bangladesh. 43 organizations and institutions involved in social science research have been brought under this network. The network has been functioning as the national focal point for APINESS. Cirdap has taken steps to develop a regional network on rural development known as Information Network on Rural Development (INRD) and an information network on women known as Women Information Network (WIN). BARD, Comilla has developed a network of rural development institutions in Bangladesh termed the Bangladesh Development Support Information and Communication (BDSIC) Network. The National Institute of Population Research and Training (niport) has established an information network in the field of Health, Family planning, MCH and population studies.

Dhaka University Library attempted to develop an information network of university libraries by preparing a union catalogue of the holdings of university libraries. But unfortunately the project did not materialize.” (Mannan, 2009)

- **BANSDOC did things on the way to formulation of a National Science and Technology Information Policy (NASTIP).** The policy is expecting government approval. Under the policy, a four-tier science and information technology networking system has been recommended.

- **BANSDOC also is now been employing a venture Automation and Networking of Science and Technology Libraries in Bangladesh in three stages.** The network has been referred to as Bangladesh National Scientific and Library Information Network (BAN SLINK).
Regarding Network Training of Bangladesh was awarded a project funded by Pan Asia Networking (PANASIA). The approach was initially concentrated on a village network that had been established by The Learn Foundation. The Foundation’s network, connected to the Shahjalal University, was comprised of 10 schools situated in the rural area around Syllhet, some 200 miles northeast of Dhaka.

Initiatives taken by Private sectors, there are a large number of private sectors computer and Information Communication Technology training institutes in Bangladesh. These institutes provide training in basic and advanced computing skills. Alumni seek employment in the industry at home or move abroad to enter the global Information Communication Technology market. Market demand for trained personnel is great but the ability of governmental institutions to meet it lags behind. The amount of allocated public funds available does not match the actual costs of training.
CHAPTER-5

COMPARATIVE STUDY OF
PAKISTAN-BANGLADESH LIBRARIES

In modern age knowledge became the source of economic development. Expansion and development of libraries is directly linked with National Developments. It has an emerging role in supporting the entire spectrum of nation in lifelong procedure of gaining new knowledge and skills. Libraries are a source to reach to the required knowledge, and their major function is of gateway and repository of knowledge and information, library performs as center of culture and heritage.

The role of libraries in imparting the knowledge is very great. "The education in Pakistan and Bangladesh needs a new orientation and direction for quantitative expansion and qualitative improvement to meet the challenges of the 21st Century. This depends on the support of organized libraries at all levels from primary schools to universities. Side by side with academic libraries the establishment of an integrated network of public libraries in the Pakistan and Bangladesh is essential to create well informed citizens worthy of serving society decently. The present governments wish to create a literate society and to provide sustained motivation for neo-literates to continue their education. Thus due importance be given to the provision and progressive improvement of library facilities and services in order to contribute effectively to national development." (PLA, 1998)

No one can deny the significant place; libraries have in building the societies. "Libraries are important social institutions. No community is considered complete without a library. The spread of democracy, the extension of education, the intensification of research activities and rapid increase in the production of recorded knowledge, have led to the expansion of libraries and development of their services. The communication of ideas is one of the most significant achievements in the cultural development of the human race. The Library one of many means of human
communication and is an important centre for disseminating knowledge.” (Johnson, 1973)

Considering the fact that information is power, one can see the importance of library information science professionals who provide facilitated access to information. The techniques of storing, organizing, retrieving and accessing information keep on changing and providing both new opportunities and challenges to the library information science professionals. There are lots of opportunities for library and information professionals provided they keep themselves abreast with the emerging trends. Griffiths says that new information professionals should: “guide in the face of an uncertain future; collaborate; prioritize and maintain agility and flexibility in the face of changing goals; empower; and understand the core capabilities of one’s organization, workgroup and colleagues.” (Griffiths, n.d.)

Bates also listed skills an MLS degree holder should possess. Her list includes basic librarian skills; proficiency in the traditional online services; internet skills; selection and use of information resources; value added services; teaching skills; working in teams; marketing library services; entrepreneurship; leadership skills; change management; and innovation.” (Bates, n.d.)

Role of Libraries in industrial and agricultural development of any country cannot be ignored. Pakistan which came into being in 1947 when the sub continent was divided into two independent countries, unfortunately all the old and well established educational institutions, research organizations, museums, etc. were located in those parts of the sub continent which are now in India. Not only this, but Pakistan also could not get its due share of books from the libraries of the Government of united India.

GENESIS OF LIBRARY DEVELOPMENT

Since inception of Pakistan, the libraries were neglected and never been considered a matter of national importance. Every Government gives importance to education and to provide educational facilities to far off small villages.

The troika of every country i.e., Bureaucrats, Politicians and the Ministry recognize the importance of well informed and well educated citizens who can play
their due role of check and balance in the day to day affairs and provide them guidance for, prosperous and developed nation. Public Libraries are maintained to organize and provide satisfactory services, this will refine the thinking of the people and they will not remain just tools in the hands of a few self interested group of rulers.

The planners and policy makers of both countries, Pakistan and Bangladesh, seem little concerned and are unaware of the potentialities of libraries even in this 21st century, it is said to be the age of explosive knowledge in which libraries are playing a key role in helping the planners and policy makers.

After Independence the literary scene in Pakistan was not admiring. Pakistan inherited stagnant economy and its impact was unavoidable on the library development in the country. Library education in Pakistan has made a significant progress. The first regular training programme of the Librarianship outside the United States was introduced at the Punjab University, Lahore; that is the heart of the present day Pakistan in the year 1915.

Proper Library Services in the country were intensely realized, despite of many problems and difficulties which were being faced by the newly born country in the early years of its independence. Libraries became less supported institutions due to other national priorities. From 1956 a number of library development plans were made, by foreign and local experts, but none were implemented.

Directorate of Archives and Libraries was established under the Federal Government in 1949, soon after the independence for proper planning and growth of Libraries in the country and preservation of records. The Department of Archives and Libraries was subsequently bifurcated in order to create an independent Directorate of Libraries under the Federal Ministry of Education in 1973. (NLP, 2004)

The Department of Libraries is responsible for the supervision and maintenance of the National Library of Pakistan. This Department deals with the matters relating to Librarians, Librarianship, task of research, planning, establishment and improvement of libraries & library services in Pakistan.

The Government of Pakistan setup the National Library of Pakistan in Islamabad with two subsidiaries under the designation of central libraries for two
main cities of the country, Dhaka, the capital of the then East Pakistan, and Karachi, the one time federal capital of Pakistan. Their main function was to achieve native publications under the coverage of Copyright Ordinance, 1962. The central library in Dhaka (not the East Pakistan Central Public Library) came into being in 1968, and started collecting local publications under section “Delivery of Books and Newspapers” of the aforesaid Ordinance. In fact, a book delivery cell, started in a rented building, after the emergence of Bangladesh, that book delivery cell was turned into the national Library of Bangladesh. The present Bangladesh territory (East-Bengal) became East Pakistan as part of Pakistan in 1947. The Bangladesh emerged as an independent sovereign state in 1971.

Under the rule of Pakistan the National Library of Pakistan was established in Karachi and a book deposit branch known as Central Library was setup in 1967 at Dhaka to collect regional new publications under the copyright law of Pakistan so, after the independence that Central Library branch was turned into National Library of Bangladesh. The National Library of Bangladesh is playing the role of a depository of national produced publications. The Library started its functioning in 1972 and was declared as the National Library of Bangladesh vide the gazette notification No. LB/IL-13/75/355 dated 19th August, 1975. The library remained in that rented house until the construction of the building of the library was completed in 1984. (Ahmed, 1985)

“The National Library of Bangladesh from its inception is one of the two important national institutions under the Directorate of Archives and Libraries. The Directorate at the outset was under the Ministry of Education and at present is functioning under the Ministry of Cultural Affairs. The users of National Library Bangladesh are of multidiscipline i.e. researchers, professionals, administrators, policy makers, general readers etc.” (Latif-ur-Rehman, 2008)

LIBRARY EDUCATION DEVELOPMENT

The Library Education in Pakistan has made significant progress. Punjab University library, Lahore pioneered the teaching of library science by starting a first regular Certificate Course in the year 1915. (Bansal & Tikku, 1988)
Librarians were conscious of the need of professional education and training. The Library staff must be highly motivated and efficient. Sufficient attention has not been paid to the education for librarianship in Pakistan. The traditional librarians must learn the active use of sophisticated technology with on-line computers. Library science and profession demands the highest quality of education for its personnel. Opportunities should be provided to librarians to advance their qualifications and status. In-service training for the professional and non-professional staff is necessary.

A lot of attention shall be paid to Libraries Administration, Information Science, and Media Studies with an international viewpoint. We need courses to design and use of bibliographies. Libraries and information schools in Pakistan are 63 years old and their curriculum needs a change. We must restructure our Library and Information Science Curricula undertake comparative Library research, Visit Libraries abroad and now about developments in International Organization. The Library Science Departments in Pakistani Universities may be revitalized for more practical training. Some Librarians be made subject specialist, possessing a vast store of knowledge. The profession of Librarianship should not be undervalued. Greater job satisfaction will lead to improve standards of service. Pakistani top class Librarians should not be obliged to seek better job opportunities in other countries. However, it must be understood that Librarianship is not a paying profession. A great satisfaction for the Librarian lies in contacts with books and readers. He loves the books in the Libraries and the Library work and the contact with scholars. The development of new services and infusion of new ideas and new approaches to the service are needed. The Librarians must be made to feel that an opportunity of unselfish interest and service of the country lies before them. The experienced Library staff must be able to speak with authority on books and other materials. (Inam ul Haq, 1999)

On the initiative of the librarians the Universities of Pakistan started courses in Library and Information Science, the first postgraduate diploma was started at Karachi University in 1956 and master degree in 1962 Sindh, Karachi, Peshawar, Baluchistan and Punjab offer M.Phil program also.

The University of Karachi offers a Doctoral Program since 1967. In 63 years 8 Universities have established, Departments of Library and Information Science,
which are awarding Bachelor, Master and M.Phil degrees and thus meeting the need of qualified persons in the country. Two of those Universities that are universities of the Karachi and Punjab are awarding PhD degree also. The program of Library education through correspondence leading to Bachelor’s Degree in Library and Information Science (BLIS) and Master of Library and Information science is also offered by the Allama Iqbal Open University, Islamabad. Besides, several Library Associations and Departments of Libraries, Government of Pakistan, offered courses of short duration. Library Science courses have also been included in Intermediate and B.A classes as optional Subject. (Haider, 1997)

The scarcity of competent teachers with practical experience of Library work is the most serious problem in the Departments of Library Information Science in public and private sector Universities. Moreover, the number of teachers with knowledge and competency in information technology is very low. The dearth of professional literature, well suited to local needs, is another problem. (Fosket, 1987)

There are ten Departments of Library and Information Science in Public and Private Sector Universities, offering postgraduate and PhD degrees in Library Information Science and four certificate-awarding schools for preparing paraprofessional library staff in the country. Actually there are a number of foreign qualified Librarians and teachers holding Master and PhD degrees, unfortunately Libraries and the Departments of Library and Information Science of Pakistani Universities are deprived of their services because majority of them are working either abroad or as teachers of Library Science in various Universities. In higher academic institutions in Pakistan, the selection of teachers made purely on merit basis. In fact the highly qualified and capable persons compete with each other and only those are selected who fulfill the required recruitment conditions and rules. Therefore, one should not deny the fact that at present the teachers of the Library Science at University level are of high selected breed.

Dr. Mumtaz. A. Anwar also conducted a survey for his unpublished article entitled, ‘Professional Development of Library Science Teachers in Pakistan’. He describes in the result of the survey that there is an urgent need for introduction of
present and in-service training programs for the faculty members of Library and Information Science for their professional and academic improvement. (Mumtaz, n.d.)

As compared to the library movement in Bangladesh which was “started in the mid-19th century with the establishment of four public libraries in the district towns of Jessore, Bogra, Barishal and Rangpur.” (LAB, 1992)

Now a large number of libraries have been opened in Bangladesh and a satisfactory number of library information schools have also been established throughout the country.

In comparison to West Pakistan, the library and information science education in Bangladesh was started in 1952 when its London-trained Librarian, Mr. M. Fazle Elahi, introduced a 3-month training course for the library staff at the Dhaka University Library. The course was discontinued after only one session. Between 1955 and 1959, four 3-month subject-wise training courses were conducted with the help of Fulbright scholars under the supervision of Mr. M. S. Khan, Librarian Dhaka University Library. These courses drew the attention of a satisfactory number of library staff and persons interested in librarianship. There was no training facility apart from this course available in Bangladesh until October 1958, when the newly formed East Pakistan Library Association (EPLA –1956), now the Library Association of Bangladesh (LAB), started a regular 6-month Certificate Course in librarianship. It was the precursor of regular library education at undergraduate level in Bangladesh. (Ahmed, 1993)

In 1959, of a one-year Postgraduate Diploma Course in Library Science at the University of Dhaka under the direction and guidance of its UK trained librarian, Mr. M. S. Khan. This course was introduced at Master’s level in 1962, M. Phil in 1976 and Ph.D. Degree in 1979. The available training programmes for school librarianship at the National Institute of Educational Administration Extension and Research (NIEAR), Dhaka, now National Academy for Education Management (NAEM), began in 1963 and four Teachers Training (TT) colleges started work from 1975. The Bangladesh Library Council (BLC) organized a 6-month certificate course in 1972. (Ahmad, 1987)
Today progress of a nation depends upon the libraries directly. Modern and organized system of libraries in the country is necessary and pre-requisite for promoting education and literacy in the country. Libraries are considered heart of any research and educational institutions. Since 1972-2009, almost all national educational policies of both countries emphasized the need of establishing libraries; acquiring good collections and provision of standardize library services. Only by implementing these policies, the state of education and research can improve.

For the prosperity of Pakistan-Bangladesh, both Governments should have a sound library based education and research system. The role of librarians in facilitating research can never be neglected. The money spent on purchase of books for libraries and their modernization indicate the best interest of Government on the development of country.

LIBRARY ASSOCIATIONS’ PRESENT SCENARIO

The development of profession depends upon the professional association and it works as a potential force for the upraising of profession. Libraries indicate conscious of this philosophy tried to revive the defunct Punjab Library Association in June 1948 in Lahore named it All Pakistan Library Associations, but its scope was localized and it ceased functioning as a national body. Later a number of library associations, regional as well as special came into existence.

In 1957, Pakistan Library Association was formed in Karachi, and named Pakistan Library Association. It contributed significantly towards the cause of libraries and librarians. It also managed to create a better image of librarians in the society.

There are over a dozen local, regional, provincial and national library associations working in Pakistan and have contributed to the growth of librarianship, their contributions is random and not a systematic efforts. Their activities focused on current problems rather than short-term and long-term established objectives and goals. Amongst the associations having some kind of impact on the country’s library scene, mention may be made of the Pakistan Library Association (PLA), the Pakistan Bibliographical Working Group (PBWG) etc. Some new but active e-groups, such as,
the Pakistan Library Automation Group (PakLAG), Librarian Welfare and LIBCOOB may be mentioned in this context. (Mahmood, Hameed & Haider, n.d.)

At present, in Pakistan there are more than “73 public and 59 private universities/degree awarding institutions offering education in all kinds of disciplines with attached centralized or decentralized library systems.” (Pakistan – HEC).

As far as the professional associations are concerned, in Bangladesh “there are two registered professional Associations. These are:

i) Library Association of Bangladesh-LAB

ii) Bangladesh Young Librarian Information Scientists and Documentation lists.” (BAYLID)

These associations have contributed for the growth of librarianship. “There is also one professional foundation in the name of late M. Siddique Khan Foundation. Late Khan the pioneer of Library education and profession in Bangladesh received Independence Award in 2004.” (Latif-ur-Rehman, 2008)

Bangladesh National Scientific and Technical Documentation Centre (BANSDOC), is a big organization in Information Technology. This organization prepared a draft of National Science and Technology Information Policy (NASTIP), with the help of Library Association of Bangladesh (LAB). It is also its responsibility to co ordinate and channelizes national information resource. Some active network organizations, libraries and information centres have also offering library facilities and information services in the Bangladesh at national level. These include the following:

- Bangladesh Bureau of Educational Information and Statistics (BANBEIS) Library
- Bangladesh Central Public Library
- Bangladesh Institute of Development Studies (BIDS) Library and Documentation Centre
- Centre for Integrated Rural Development for Asia and the Pacific (CIRDAP)
- International Centre for Diarrhoea Disease Research, Bangladesh (ICDDR.B)
• Dissemination and Information Services Centre
• National Archives of Bangladesh
• National Health Library and Documentation Centre (NHLDC)
• National Library of Bangladesh

Considering the dearth of material and limited access to research and learning resources in the country, a few of the above libraries and information centres have been allowing the outside users to access their collections and different types of services.

In contrast there are 75 university libraries (31 public and 54 private) in Bangladesh. (Bangladesh - UGC, 2008).

The libraries of both countries are the primary source for consumer of graduates of LIS graduates along with public and special libraries but no latest directory is available to give proper job placing to LIS professionals.

These two associations and one professional foundation in the name of late M. Siddique Khan Foundation have contributed for the growth of librarianship.

The Library Association of Bangladesh (LAB) was founded in 1956 in Dhaka as described earlier. Its mission is “to provide leadership for the development, promotion, and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all.”

BALID was founded as "Bangladesh Young Librarians, Information Scientists and Documentalists (BAYLID) on January 23, 1986 by Bangladeshi young library professionals who wished to establish an association to develop the libraries along with professionals. Its objectives are:

• Develop the services of Library, Information and Documentation centers for all the citizen of the country.
• Develop the professional status of Librarians, Information Scientists and documentalists.
• Promote the professionals proficiency.
• Welfare and professional interest of the members.
• Co-operate with various libraries, information and documentation centres.
• Co-operation with other relevant local, regional and international organizations.
• Participate in socio-economic activities and help to other same groups.

With the inception of Pakistan and Bangladesh renowned librarians, library associations and the governments of both countries played an important role in the development of libraries. Library associations of both the countries have organized different types of seminars, conferences and trainings with objectives as:

• Promotion of library services to the people.
• Provision and promotion of facilities for training of librarianship and research in library science.
• Co-operation with libraries within the country and outside the countries.

The library associations, mentioned above also made provision for librarians' education and training role in publishing, though not very significant, have made some mark in the shape of journal, newsletter and conference proceedings. The library and information professional development is not encouraging and this field do not get adequate facilities for their professional development even they do not get the social and professional status, so most of the time they are not able to project them as an efficient professional. As the PLA and LAB do not get the proper facilities to expand their activities the professionals are deprived of the enjoying the extensive facilities to develop their skills. PLA and LAB can play an important role in developing the professions, due to lack of proper efforts, facilities, skilled management and adequate Government aids, the performance of PLA and LAB is not admiring.

The overall library scenario is not encouraging in both countries. There is no organized public library system due to absence of public library legislation. Academic libraries especially college libraries are also in bad condition. Only university libraries are in comparatively better position regarding collection or professional staff.
The Libraries in Pakistan-Bangladesh “need to resolve deficiencies in order to anticipate; identify and meet current information needs, but this is not going to be easy. The present generation of Information Managers has specialized responsibility in this regard. They need to take leadership and change their thinking to establish a new focus on creating and using intellectual assets. There is a need for change to improve library services in both countries. External changes in the environment or having an effect the proliferation of electronic publishing, automation and the internet has had a profound influence on libraries and their work environment. Likewise, the political climate and the demographic changes are effecting libraries, adversely, essentially, everything in and around libraries are changing, from collections, services, technology, access policies and so on. The challenges for Pakistani-Bangladeshi librarians are to capitalize upon these opportunities to create positive changes in the profession. The libraries may be authorized are to generate their own capital, for financing their needs.”

**AUTOMATION IN LIBRARIES**

Library automation means the use of computer. Information & Communication Technology s shows a radical change in libraries from collection management to delivery of service towards library users and public at large.

Automation is the “elimination of all manual labour through the use of automatic controls that ensure accuracy and quality. Each library, i.e. Public, Academic and Special has its own specific user type and specific fields of interest. There is a strong relation between libraries and technology, invention of printing, emergence of computer, and consortia of digital information provider.” (Vyas, 1997)

Developed nations “started library automation in the late 1960s and the developing world like Pakistan and Bangladesh started library automation in late 1980s. Most of the developing countries of the world got their independence from their rulers. Many developing countries in Africa, South Asia and even some part of Europe were colonies of Great British Empire. Use of computer in the libraries modernized the environment of developing countries libraries and also impacted their services.”
As stated by Roberts (Roberts, 2008) "the dawn of the age of automation and computer based retrieval was in the 1960s, with a gradual development of information retrieval theory and experiments." A report for IFLA shows that the concept of computer in library relate to 1964 when IBM introduced the 360 series, the first "family" of computers to be released and the robust machine that propelled computing out of the universities and into the mainstream" (Mccallum, 2003). In the UK, Universities like Cambridge and Oxford, with its international education and research have a very high and demanding library service user group. The Library Information Science professionals and schools adopted computer technology for facilitation of their user and to make their services viable, effective and fast. "In 1982 libraries formed a Consortium of University Research Libraries (CURL), to share computerized cataloguing/bibliographic information within UK. Birmingham Libraries Cooperation Mechanization Project (BLCMP) is an example of this group work initiative" (Plaister, 1975).

Library automation started in India during 1980s. “The first players in this special libraries adapted automation in the first fray and university libraries joined the fray in 1990s, after the University Grants Commission established Information and Library Network (INFLIBNET) as the national agency for coordinating the library automation activities of Universities”. (Suku & Pillai, 2005)

British Empire had their education system for colonies developed by Lord Thomas Babington Macaulay. Pakistan also inherited the same system at the time of independence from British Empire in 1947. According to an article by M.N. Munshi, “Bangladesh entered into the computer world in 1964 with the installation of an IBM 1620. Till now, there is not a single library or information centre in Bangladesh which is literally automated except ICDDR, B Library and North South University Library machine" (Munshi, 2003).

In 1950, Mr. L. C. Key developed a plan to establish Liaquat memorial Library at Karachi, alongside, a plan was also chalked out to develop libraries in the country, consequent upon this Pakistan Library Association (PLA) came into existence in 1957. (Mushahid Hussain, 1994)
Three major library automation projects were launched in Pakistan under the auspice of “NLDP (Netherland Library Development Project), Asia Foundation and USAID collaboration with PASTIC (Pakistan Scientific and Technological Information Centre) and UNESCO CDS/ISIS. All efforts ended with the drying up of foreign funding.” (Pakistan, 2008)

There are 132 Universities out of which 73 are working in Public Sector and 59 in Private sector in Pakistan. These are mainly financed by the Government of Pakistan. (PLA, n.d.).

There are four basic reasons for library automation “(1) The flood of information; (2) Services to readers; (3) Efficiency and accuracy (4) Resource sharing”. Provision of technology, software and internet in Pakistan was a giant leap to be taken by library professionals, who are supposed to be the custodian of libraries, archives centres and information handlers. Out of the three major library automation projects that were launched in Pakistan from time to time only NLDP was successful till early 1990’s. Use of internet in the libraries especially higher education libraries was not common till late 1990s. (Mahmood, K. 1999)

A remarkable advancement took place “when a lot of libraries adopted free library software LIMS (MS-Access based library package). LIMS was offered freely by the PAKLAG to LIS community in Pakistan. According to one survey conducted in Lahore (a major city of Pakistan), 31 types of library software were being used by the 84 automated libraries of Lahore, Out of 84 libraries 28 are using free package LIMS, 18 are using UNESCO free package Win ISIS and 9 are using NLDP project product LAMP.” (Shafique & Mahmood, 2007)

The PAKLAG introduced a customized KOHA (an international open source standardized library management solution) on service and support price base. It is cost effective system, fully adaptable with the developing economies, it also has compatibility to international standardized requirements for all types of libraries in Pakistan. PAKLAG-KOHA is MARC21, Z3950 gateway, complex language capability (UNICODE based), SRU/SRW boosted library management system.
Use of computer began in Pakistan in late 1960's by scientific organization. Whereas a number of libraries were computerized during or after 1987.

Library automation in Pakistan started almost in the same era as in other developing world. The pace of development remained less significant. One of the major hurdles was less collaborative efforts which could possibly be due to electoral process and politics of late election of professional association (PLA). It remained unable to accept and deal with professional career structure, professional education, professional trainings, emerging technologies and libraries infrastructure etc. Use of computer in University libraries of Pakistan started in 1980s.

Automation is an accepted source for fast and efficient library operations. Pakistani and Bangladeshi libraries have to employ computerized techniques of information management to keep up with developments and to utilize tremendous sources of bibliographic data available as a by-product of machine readable cataloguing. Since in-house development of library computer programmes has almost ceased as an option, success of automation programme mainly depends on the proper evaluation and right selection of the software package to be used for computerization of various library operations in any library.

Sources of information are available to identify library related programmes including directories of software packages and bibliographies of relevant articles. The general sources of information, library science journals also provide valuable information on library application packages. A review of information sources is a good start in the selection process of a suitable software package. Careful evaluation of the selected systems is extremely important to reach an appropriate decision.

Problems for automation of libraries are as under:

- Computer illiteracy.
- Improper training.
- Unavailability of library software.
- Retrospective conversion.
- Lack of expertise and Technical know-how.
- Non availability of vendor support for library Hardware and Software.
- Shortage of system analysts.
- Lacking of programmers efforts.
- No consultancy firms about library automation/library system analysis.
- Lack of financial resources.
- Lack of standardization and quality control, Bureaucratic setup.
- Lack of information sensitivity.
- Software piracy.
- Problems in the software selection, evaluation, cost effectiveness, operating systems and training facilities.

In Pakistan-Bangladesh there is no national format for automation in the libraries. It discourages the use of libraries. The major problems regarding automation in public and private sectors of both countries are: lack of working environment, less financial resources, irresponsible library staff and level of expectation from their departments is low. Training opportunities, especially in public sector, such as changed management, are less and the low incentives also affect their workings. There is no service structure in public sector, library information staff retire in the same cadre/scale even after their whole service until and unless they change the department.

- There are three basic elements for automation.
- Right hardware.
- System development.
- Training of personnel.

Retrospective conversion is important element for library automation. The nations setting aside the information technology cannot advance. New technological developments in the form of computers, telecommunications, electronics, reprography and micrographs adopted in libraries enhance the use of library. Incorporation of
new techniques are, suitable and useful for improving and making library services effective to the user community. Big industrial organizations are using the computer network using communication satellite for resource sharing purposes, which enables participating library to obtain not only bibliographic details from other library’s collection and also makes it possible to obtain full list in the form of indexes, abstracts, of the required articles and even facsimile copies of the required page of the document by using computer terminal attached to the system. (Misra & Phadke, 1995)

It is a fact that the coming century is totally dependent on information. The libraries have to play an important role in functioning as information servers. To play this role more effectively and efficiently in order to meet challenges of the 21st century, modern information technologies must be introduced in their services without any delay. Individual efforts should be replaced into integrated, collective national effort. Otherwise uniformity in the use of application of software, networking systems, bibliographic descriptions, etc. will become impossible. It will open the opportunities of national development.

NETWORKING AND RESOURCE SHARING

ACTIVITIES IN LIBRARIES

The resource sharing is not properly done in the libraries of Pakistan and Bangladesh. In Pakistan, the libraries are working on the basis of “self-sufficiency”. It is worth noticing that two libraries located at the same city are spending substantial amounts of their budget on “same journals, same books, whereas they can easily share their resources with each other. Therefore, there is a need to motivate librarians and information professionals for resource sharing and networking of libraries to ensure optimum utilization of available financial, physical and manpower resources.” (Tanvir, 2005)

In Pakistan, the conditions of governance and that of bureaucracy are a bit too grave. So libraries working in various management systems find it difficult to operate in cooperative systems due to the clash of systems. The willingness and commitment, to cooperate with other institutions in library collection development, management, cataloging and in the delivery of services is the foremost thing in creating any
resource-sharing project. Formal marketing efforts can create awareness about the virtues of resource sharing at the management level.

Librarians shared resources for many decades through both formal and informal agreements. Even in Pakistan, the librarians have their own limited informal network to borrow books from each other’s libraries through personal links. In this respect the concept of resource-sharing is not missing among libraries in Pakistan. There exist norms of conduct among librarians of Pakistan, to informally borrow and lend materials to each other in case of urgent needs, which is keeping the resource sharing tradition alive though at a limited level. So, creating awareness among librarians for realization of need for resource sharing is an effort to realize the importance of resource utilization. Library network requires policy support from their institutions in order to operate freely in a interconnected environment. (Jaswal Bushra, 2005).

Libraries in Pakistan “mostly have to computerize their catalogues to provide online access to the users. For resource sharing and networking some new concepts emerged during the past few years. The professionals have the potential to evolve a mechanism for resource sharing and networking for the common good of all the people in this country who have a passion for knowledge.” (Tanvir, 2005)

Exploration of new ways of resource sharing can help overcome the financial constraints faced by most of our libraries and information centers. In modern age of Information Technology “new concepts and ideas open new vistas of knowledge to our scientists, researchers, policy makers, planners, faculty members and students. The ongoing process of digitization of libraries would ultimately reduce dependence on libraries in the form of physical presence during particular timings or working hours and the users will be able to search and visit the library with the help of log-in and password at a nominal cost.” (Tanvir, 2005).

Resource sharing has always been there in Pakistan, but in a limited and informal way. The efforts of resource sharing have been done and in this context the initiatives by some organizations are as under:
LABELNET: Networking Project

The Lahore Business and Economic Libraries Network, LABELNET established in January 1990, is the first and only example of a formal library resource-sharing network. (Riaz Bushra, 1990)

The Lahore Business and Economics Libraries Network (LABELNET) is a pilot network of libraries documentation centers in Lahore (Pakistan) which is aimed at facilitating resource sharing among the libraries in the areas of business and public administration and other related fields. It is expected to improve access to information produced from and about Pakistan through computerized databases.

The project is jointly sponsored by the International Development Research Centre (IDRC) and the Lahore University of Management Sciences (LUMS).

The objective of establishing this automated network to develop computer literacy among the participating librarians and to introduce the concepts of database and information processing. The project is also expected to provide a model of sectoral resource sharing which might encourage the establishment of similar networks in other areas and in turn it will develop a national network of libraries and information centers.

The idea of sharing library resources through cooperation emerged from the LUMS library in its attempts of satisfying the information needs of its users.

In actual the main objective of the LABELNET project was to establish a network of libraries specializing in the areas of public management and economics in Lahore region. The ultimate purpose of the development of bibliographic databases is to increase the availability of a wide range of materials through a system of Interlibrary Loan. (Riaz Bushra, 1990)

The National Documentation Center, Library and Information Network (NADLIN)

The National Documentation Center, Library and Information Network-NADLIN are a project of Pakistan Council of Research and Water Resources (PCRWR), Ministry of Science & Technology, Pakistan.
It was established in 1987, as an attached department of the Council for Water Resources and Environment with the financial aid of United States Agency for Internationals Development (USAID) to collect, organized and disseminate information or Research and Development (R & D) activities in the field of Water Resources and other related area. NADLIN is in the process of establishing a computerized database on water resources and environment.

NADLIN provides a monthly list of fresh arrivals list of bimonthly periodicals, content services; semi annual abstracts services on water resources, retrospective and selective bibliographies on related topics. It also provides photocopies of reading materials to research workers on demand and computerized database on water resources and environment.

The Development Information Network in South Asia (DEVINSA) this network was set up by the Committee on Studies for Cooperation in Development in South Asia (CSCD), Colombo, with the financial and technical assistance of the International Development Research Center of Canada for developing network in South Asian Countries i.e. Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka.

The network controls published and unpublished materials of the member countries as well as provides documentation and bibliographical services from its data base suggestions.

The network, WIDENET, will cover the governmental and non-governmental organizations working in the field of women and development. The proposed services include a new Accessions list, Current Awareness Service (CAS), Document Delivery, Selective Dissemination of Information (SDI), and Reference Service. An Environment Information Network will organize the information resources of institutions working on the environment. A bibliographic database of materials on the environment will be set up.

The Karachi is the hub of the banking sector in Pakistan, a network known as BANKNET has been developed in Karachi. Organizations involved in education will also be networked through an education information network. The Higher Education
Commission has shown interest in developing such a network. About more than 250 organizations are involved in the science and technology field in Pakistan. For information dissemination among these institutions a Science and Technology Information Network has been proposed by the NLDP. The Chairman of the Science Foundation showed keen interest in this proposal. A Forestry Information Network has been developed for institute involved in forestry.

Health service institution will be networked through HEALTH NET. The National Institute of Health, Islamabad has agreed to become the focal point for this network.

Another renowned institution of Pakistan, the COMSTECH, has networked the journal holdings of forty five major libraries spread across its fifteen member states and made available list of twenty eight thousand research journals online. Now this institution has started its Inter-library Network service to enhance the utility of its free literature search service in view of limited access of the Scientists and Researchers of the OIC Region to scientific research articles.

The main objective of COMSTECH Inter-Library Resource Network Service is to make the scientific journal holdings of major OIC libraries accessible to the scientific community of the OIC region. This network service is not only addressing the needs of the OIC-Wide community of scholars, researchers and students by letting them share each others national resources, but also proving helpful to avoid duplication of the same publication already available in one of the member libraries. (COMSTECH, 2008).

In Pakistan, “PARC since its inception in 1978 has followed a sustained policy of sharing of information, ideas, technologies and a strong program in human resource development to meet the current and future needs of the country in agricultural research sector.”(Tanvir, 2005)

The government of Pakistan started PSDP (Public Sector Development Programme) to uplift some major libraries to bring them to national level. “However, there is a long way to go in this area to provide a variety of services to the respective users. PARC established an independent Scientific Information set-up at NARC right
with the establishment of this Centre of excellence in 1984, as one of its vital components along with basic and applied research infrastructure and research programmes. The Directorate of Scientific Information started use of computers in location, collection, processing, package making and dissemination of agricultural research information in the beginning of 1980s. The Documentation Centre established at PARC in 1973 was declared National Liaison Office for AGRIS Database of FAO in 1976, and it was the first centre which dispatched the computerized research information to FAO from the South Asia region. (Tanvir, 2005)

"The Directorate of Scientific Information has also established online searching of international research journals facility on a network of 15 computers which will be opened for the scientists, researchers and university students from 11th April 2005, on the eve of inauguration of the national workshop on resource sharing and networking of documentation centres. This is the most modern facility established in collaboration with Higher Education Commission to provide online access to the scientists and researchers. Thousands of full text and... research journals can be accessed through this facility. PARC information professionals and scientists have developed NINE databases which are available on website. It is engaged in 2-way sharing of research information with 154 countries of the world through various databases available on Internet and CDs." (Tanvir, 2005)

The time of traditional library resource sharing networks is now over. Now in the current age surrounded by the new developments of information technology; the Internet, e-mail, high-speed data networks, web catalogs, Blogs and digital libraries thriving even in Pakistan, when I look back on LABELNET and DIEVINSA, it seems to me like a big white elephant. And I painfully recall how much hard work it involved to obtain a copy of a 10-page document from another library for a user. It was harder if the request was urgent or the holding library was in another city or in another country. The technological developments within the past two decades have revolutionized the libraries’ abilities to provide bibliographic access. Even if these developments did not arise to serve the needs of resource sharing they have
significantly increased the possibilities for resource sharing and changed the shape of resource sharing activities, introducing new challenges for the librarians.

The fact that more and more information is now available in the digital form, which is accessible online in extensive amount, easily retrievable through powerful online search engines and shared with users located over long distances through high speed networks in virtually real time has introduced new forms of resource sharing among the libraries. Information produced or acquired in the digital format by one institution, in an electronically connected environment, can be easily shared with other institutions. This fact has created a fear for economic survival among the publishers and producers of digital resources. So, the digital information resources are not only very expensive but the publishers impose a number of restrictions on “sharing” of their information. In certain cases the libraries only buy access to the resources but not the ownership. This has given way to special form of Library Consortia where libraries get together to negotiate better terms from the publishers at a lower (shared) cost to each sharing institution. The recent initiative of Higher Education Commission (HEC) in Pakistan is the example of a collective purchase of subscription license of scientific journal resources with access rights for the academic and research institutions all over the country. The Higher Education Commission has secured inclusion in the Programme for Enhancement of Research Information (PERI) of the International Network for the Availability of Scientific Publications (INASP). This programme aims to support capacity building in the research sector in developing and transitional countries by strengthening the production, access and dissemination of information and knowledge. (Jaswal Bushra, 2005)

The idea of information networking and resource sharing is a fresh trend in the Bangladesh. This has been noted that the approach is based on theoretical rather than practical grounds. A few attempts and campaigns have been steered by distinct organizations in numerous sectors to trigger co-operation in the field. A few of the efforts made are provided below:

- “An informal inter-library loan system was operational in the country even before 1971.
• The former National Agricultural Library and Documentation Center (NALDOC) of BARC

• Attempted to establish its network ‘BAIN’ but this could not be materialized.

• In 1976 icddr’b and NHLDC signed an agreement to facilitate library cooperation through an inter-library loan system. Subsequently, BIDS (1977), BIRDEM (1978), USAID, Dhaka (1992), Aga Khan Community Health Program, Dhaka (1992) and BRAC (1995) have joined this program.

• nhlde, icddr’b, and BIDS has been successfully operating a cooperative program for avoiding duplication in journal subscriptions.

• The Agricultural Information Center (AIC) has initiated a library network for agricultural institutions (NAIS). Of the 36 agricultural organizations and institutions, 11 have been participating in this program.

• The Social Science Research Council (SSRC) has organized a Social Science Information Network in Bangladesh. 43 organizations and institutions involved in social science research have been brought under this network. The network has been functioning as the national focal point for APINESS.

• Cirdap has taken steps to develop a regional network on rural development known as Information Network on Rural Development (INRD) and an information network on women known as Women Information Network (WIN).

• BARD, Comilla has developed a network of rural development institutions in Bangladesh termed the Bangladesh Development Support Information and Communication (BDSIC) Network.

• The National Institute of Population Research and Training (niport) has established an information network in the field of Health, Family planning, MCH and population studies.

• Dhaka University Library attempted to develop an information network of university libraries by preparing a union catalogue of the holdings of
university libraries. But unfortunately the project did not materialize.”
(Mannan, S.M., 2009)

National Scientific and Technical Documentation Centre (BANSDOC) established in 1962. Govt. of Bangladesh announced the National Science and Technology policy in 1986. BANSDOC with Library Association of Bangladesh (LAB) prepared a draft of National Science and Technology Information Policy (NASTIP). BANSDOC has the responsibility to co-ordinate and channelize national information resource. BANSDOC worked well on the way to formulation of a National Science and Technology Information Policy (NASTIP). Under the policy, a four-tier science and technology information networking system has been recommended.

Actually BANSDOC is mandated to serve the scientific community, entrepreneurs, planners and administrators of the country with the latest information and information materials from all over the country and the world as well.

As per National Policy on Science and Technology the following are the main objectives of the centre: Collection, processing and storage of information and data on scientific research and experimental development in all branches of science and technology; Dissemination of such information to researchers irrespective of their affiliations whether they are engaged in research and academic institutions, planning organizations, policy making bodies and in the public and private industries sector; Assistance to researchers to make contact with researchers in other countries working in the same field of interest.

BANSDOC has co-operative programme with many national, regional and international information/ documentation center. Some important ones are:

1. Indian National Scientific Documentation Centre (INSDOC)
2. Pakistan Scientific and Technical Information Centre (PASTIC);
3. British Library Document Supply Centre (BLDSC);
4. National Library of Australia (NLA);
5. Institute of Scientific and Technical Information of China (ISTIC);
6. National Centre for Science Information Systems (NACSIS), Japan;
7. Russian Academy of Sciences (RAS);
8. SAARC Documentation Centre (SDC), New Delhi, India;
9. Federation of International Documentation (FID), The Netherlands;
10. European Patent Office (EPO), The Netherlands;
11. European Commission (EC), Belgium;
12. UNESCO, France.
13. Science and Technological Information Centre (STIC), Taipei, Taiwan.

BANSDOC is the Bangladesh National Focal Point (NFP) of SAARC Documentation Centre and co-ordinates the activities of the SDC calendar. BANSDOC has been nominated NFP of the Industrial and Technical Data Bank (ITDB) of D-8 Nations. BANSDOC implemented a GOB project entitled “Automation and Networking of Science and Technology Library in Bangladesh” and a network known as BANSLINK has emanated which has become internationally known. The network is going to be expanded and enriched by adding 47 more Library Information Centres of the country under a second phase of GOB project (1999-2004). The attempt is to pool the information resources on the net to ensure maximum utilization of the limited resources.

BANSDOC at the same time is now been employing a project Automation and Networking of Science and Technology Libraries in Bangladesh in three stages. The network has been titled as Bangladesh National Scientific and Library Information Network (BANSLINK). There are a number of libraries in the Bangladesh have been offering library facilities at the National level which are as under:

- As the national focal point NHLDC is participating with the health network organized by WHO-SEARO.
- The BIDS Library and Documentation Center was the national focal point for devinsa network organized by CSCD through the Marga Institute in Sri Lanka (The project period was over in 1995) BIDS-LDC has also been maintaining a Development Science Correspondents Network.
The Institute of Business Administration (IBA) Library, Dhaka University, has been selected as the national focal point for the Association of Management Development Institutions in South Asia Library Network for Resource Sharing (AMDISA Library Network).

The Community Development Library (CDL), a non-governmental organization working in the field of development information located in Dhaka has been selected for the network called South-South Exchange and TVE. (BANSDOC, 1996).

Network Training of Bangladesh was awarded a project funded by Pan Asia Networking (PANASIA). The approach was initially concentrated on a village network that had been established by The Learn Foundation. The Foundation’s network, connected to the Shahjalal University, was comprised of 10 schools situated in the rural area around Syllhet, some 200 miles northeast of Dhaka.

There are a large number of private sectors computer and Information Communication Technology training institutes in Bangladesh. These institutes provide training in basic and advanced computing skills. Alumni seek employment in the industry at home or move abroad to enter the global Information Communication Technology market. Market demand for trained personnel is great but the ability of governmental institutions to meet it far behind. The amount of allocated public funds available does not match the actual costs of training.

**LIBRARY DEVELOPMENT TRAINING PROGRAMMES**

For capacity building, training is a continuous process. Training in a specific field enables a worker to perform his role according to service expectations. The information management and retrieval is service oriented, it becomes imperative for the worker inducted into the profession to have proper training required for discharging duties well. Training is required to meet the challenges of the use of IT in library and information management in Pakistan. Certain efforts have been made to equip the professionals with software/hardware knowledge.

A significant educational programme has a strong curriculum as the basis of academic/research activities. The component of information was included in library
curriculum in Pakistan in the 1970s. In April 1995, a curriculum revision meeting of LIS Programmes was held in office of Higher Education Commission, Islamabad. The curriculum for Diploma and Masters Programmes was merged into a two year LIS Master Program.

Revised curriculum contained, contemporary information technology components as integral part of M.LIS programme consisting of:-

- Fundamentals of computerized information storage, retrieval and dissemination.
- Introduction to computer hardware and software.
- CD-ROM (Technology and data bases).
- Networking.
- Electronic mail.
- Use of microcomputers in libraries.
- Database design and maintenance.
- Automated serials management.

The HEC is persuading LIS departments in the country to revise their curriculum and provide latest teaching facilities to the students to manage and organize libraries to meet the challenges of the day. It is hoped that now librarians will be fully equipped to use the latest information technologies and serve administrators, planners, readers, researchers, etc. in their pursuits of advancement and development of knowledge.

In case, the Ministry of Science and Technology continues maintaining the pace of development and growth in the university libraries, it will improve the scenario.

Importance of training in modern techniques of information handling was realized first of all at the government level in the 1980s. In 1987, the government invited A.C. Fosket, a foreign expert, to prepare a feasibility study for establishing a postgraduate training program in information studies. In his recommendations, he
suggested to establish a training center for information technology handlers. Practical training of librarians started by NADLIN (National Agriculture Development Library and Information Network) in the form of series regarding automation courses in 1988 in various cities of Pakistan. Library professionals in Pakistan always highlighted the role of the Netherlands Library Development Project (NLDP) in promoting and developing information technology in the country. One of the major areas of activities of five years project was arranging courses and seminars to introduce modern technology in libraries. With a pool of computers and other hardware facilities, NLDP established five computers training centers in Islamabad, Lahore Karachi, Peshawar and Quetta.

The main objectives of the centres planning and future development would be as under:

- To provide formal training to librarians in Library automation.
- To provide a facility for practice and work to Centre’s registered members
- To provide consultancy and guidance in library automation.
- To serve as an intellectual resource base and a center of excellence for research on library automation, library soft wares, and their customization for Pakistani libraries.

The first training centre “started functioning in November 1992 at Lahore. Each centre was equipped with eleven IBM-compatible 386 personal computers, four dot matrix printers, an overhead projector and a crystal display unit. By the end of 1995, more than 600 professionals were trained at these centres. The courses provided include: Fundamentals of Computers; Disk Operating Systems (DOS); Word-processing, using MS -WORD and Word Perfect; Spreadsheet Management, using Lotus 123 and Quarto Pro; Database Management, using dBase and FoxPro; and Library Automation, using CD/ISIS and the Library Automation and Management Program (LAMP). After the establishment of centres, the NLDP continued its financial support.”(Riaz Bushra, 1993)
The PLA Computer Training Centre, Lahore offers formal education and training in library computerization for librarians. It started functioning on 2nd November, 1992, being funded by the Netherlands Library Development Projects-Pakistan.

The establishment of this training centre was an attempt to bridge the gap created by the local library programs by not offering formal instruction and training on the use of information technologies in the libraries. In Pakistan, library automation has been slow due to deficiency of expertise. Few Librarians have been able to develop know-how either through training abroad or by working with foreign consultants. Self-education is another method used by some. The foundation of PLA Computer Training Centre was indeed a positive step forward in library and information science training in the Punjab Province. It was start of a new era of developments in the filed of librarianship in Pakistan. (Riaz Bushra, 1993)

In first three years the center produced a reasonable number of librarians trained in different aspects of library automation. Up to 1995, there were 70 to 80 libraries only in Lahore which has been automated, or were planning to use information technology. This number by now has increased to 150. The period comprising over decade of the immediate past training of Information Technology shows that Pakistani Librarians are aware of its importance in libraries and are to some extent making they ready to cope with challenges of the time. The efforts are appreciable. The role of Foreign Agencies in this respect is also appreciable. With the advent of the 21st century, training of Librarians in Information technology has become more significant as the future society is entirely technology based and without reasonable resources of Information, no nation can become prosperous.

In contrast to Pakistan, there is no national organization for providing training programmes for librarians of Bangladesh. National Academy for Education Management (NAEM) has been providing continuing education and training programmes for college and madrasah (religious education) librarians of the country (2-4 weeks). Bangladesh Bureau of Educational Information and Statistics (BANBEIS) and the Library Association of Bangladesh (LAB) have arranged two training programmes for college librarians in 1998 and 2002 respectively. The
UNESCO funded these two training programmes. The Bangladesh Central Public Library has been organizing 1-month training programmes on “Library Operation and Management” for the public library staff twice or thrice in a year. The Ministry of Cultural Affairs funds the training programme. Department of Information Science & Library Management arranges a one month training programme on “Library Database Management System and Programming Languages” for the M.A. Final Year examinees every year. Moreover, Bangladesh National Scientific and Technical Documentation Centre (BANSDOC), DISC of ICDDR,B and CIRDAP arrange regular library based computer training programmes for both students and the library professionals. Besides these, a number of private university libraries provide training programmes in different times on library-based software and their application.

Non-government organizations (NGOs) provide training programmes for school librarian in Bangladesh. Human Development Foundation (HDF) Bangladesh has been arranging training programmes on librarianship under “Rural School Library Enrichment Programme (RSLEP)” for non-government school teachers in rural areas since 1986. (HDF, 2004)

In one instance, “HDF selects 50 to 60 non-government schools from different rural areas and one teacher from each school for training programmes. The project period for each school is five years and after every three months each school must report about the progress of their activities. Within the project period, RSLEP contributes about 700 to 800 recreational books for each school to establish a library. So far, HDF has provided training programmes and contributed different reading materials to about 300 rural schools in Bangladesh.”(Munshi, n.d. 2002:2)

Library education and training in Bangladesh has the following objectives: (Ahmed, 1993).

1. To impart principles and theories of library and information science;
2. To transmit knowledge that is expected subsequently to be useful in the lives of the recipients of such knowledge; and
3. To produce the required and necessary manpower to handle the many aspects of library and information science and services.
To make the library education and training programmes for library and information professionals in Bangladesh these two factors should be considered:

(i) the needs of society;

(ii) The focus on more progressive curricula of developed countries.

For better organization and management of libraries in Pakistan and Bangladesh, it is strongly felt that the librarians and information professionals must be equipped with strong professional skills in performing modern technological activities. In spite of all these efforts at education and training of library professionals in IT, there is a general feeling of dissatisfaction with the human resources situation. The present technology based profession demands new skills, methods and new approaches for information. The mental aptitude and thinking have to be transformed to cope up with the challenges with technology, environment and users. It is mandatory to each library and information science professional, from top to bottom to understand the use and benefits of modern information technology and to provide better library and information services. The role of the library is, thus, changing. So the library and information science schools in Pakistan and Bangladesh need to modify their curricula to prepare their students, making them capable of handling many aspects of modern technology and library and information science and services. (Munshi, n.d.)

While analyzing the history of library education, with a broad spectrum of the challenges; it is evidently clear that library education is a booming and progressive field which has not yet been given extra care. An ample library science education system with plenty of training facilities is a requirement of a society on the whole and librarians as a special case.

The present situation is not hopeless, though essential features of library service has not been matured in terms of number of libraries, skilled staff, systematic operation, up to date technology, usefulness of the system, etc. This field is now appealing people from diverse social backgrounds with noble academic qualifications. In near future, young professionals will be able to manage the complete library system of both countries in an advance and better way.
CHAPTER-6

CONCLUSION AND SUGGESTIONS

Libraries are to serve the mankind. The libraries have been there since ancient times. However, the ancient libraries were engaged in housing and preserving recorded information with a very restricted use. Since the emergence of modern librarianship in last quarter of the 19th century, the importance of library users had been realized. Contemporary literature suggests that library professionals have to look at their library collection and services from actual and potential users’ perspective to meet the library needs, it is an important subject to survive as a social institution in the digital world. Fast development of information and communication technology (ICT) has created new challenges and opportunities for libraries and librarians. Library services to users have changed the management of libraries and the roles of librarians have been multiplied. The present millennium produced new opportunities to exploit an ever growing array of information and communication technology in the provision of library services.

Libraries are store houses of knowledge and information with the advancement in educational technology changes are taking place in Library functions. There had always been forces of change related to information. These changes had affected the way we acquire, organize, seek, and provide information. One should not forget that we are living in an information explosion age. And the most noticeable impact of this has been in the areas of information technology. By utilizing the new technologies the libraries have increased their abilities with regard to organization of information work. Improved communication links made possible distant access, facsimile transmission, local area network, and teleconferencing. CD-ROM technology provided massive storage possibilities. Inter-active video-systems and networks have become common place in the work environment of libraries. Along with these developments a marked change in the information seeking behavior of the users has also been observed. Today for instance, reading is not confined to just reading activity, for reading is only of many different media available. Instead of aiming a comprehensive collection there is an emerging trend towards building up
excess-driven collection with demand priorities. The traditional approach organization and retrieved of information is being substituted by latest innovation. This is manifested by the fact that cataloguing is moving away from the librarian's professional job duties. Data base search service made possible, which has earlier impossible in provision of reference service. More importantly, because of budgetary constraints the libraries are increasingly held accountable for the value of their services. In great majority of cases, as a matter of fact, the libraries of Pakistan and Bangladesh are either no more funded or only to a minimum level.

But unfortunately, the libraries in Pakistan and Bangladesh did not react sharply to above the changes. Only special libraries of Pakistan and Bangladesh had opted in favor of new technologies for some selected operations either for the sake of fashion or under some pressure. But, truly speaking, very little success was achieved towards this end. Even it backfired at some places. Of the major impediments in this regard mention in particular may be made of absence of complete human resources. This could be said not only for libraries but library schools too. Both failed to identify basic competencies required for working in libraries in information age. The attendance at some course of short duration was considered enough for working librarians. The Pakistani and Bangladeshi library schools for a long time confined themselves to inclusion of one or two information science courses in order justify themselves to be renamed as Library and Information Science Department. The teaching of such courses is handicapped for want of competent teacher and equipments etc.

Computer is an economic means to man kind which receives information, process it according to some instructions and derive necessary results. Computer Services are useful for libraries in almost all the operations of library. Today's world of information explosion demands an efficient system of information packaging and retrieval. There should be a free flow of information within a time limit. The fast growth of subjects with complex interdisciplinary character and increasing demands for specific information has made a compulsion for technological application to storage, processing and dissemination of information. To hand the ever growing,
infinite, multidimensional information, computer has become the basic necessity of library world.

A computer has its own advantages and libraries of today will have to take its help. At the same time it will have to be remembered always that computer is a machine and as such a tool, to help the librarians to serve the users more efficiently and effectively. It is therefore useful only when remains a servant and does not become our master.

Information is an important for progress in Pakistan & Bangladesh. This will be an important link for progress. It is felt that science and technology information services, particularly those in developing countries do not reach and are not geared to serve the needs of economically and socially less developed sections of the community who constitute more than 75% of the population. The national development should really mean the overall improvement at the quality of life of the entire society and not of particular segment. In most of the third world countries, there has been in recent years, a realization of this fact, and there has been a corresponding reorientation of the national development programmers. Suitable plans, which focus attention on this large segment of society, have been drawn up.

If information services are intended to support national development as an alliance for progress they should be designed to serve the rural community to improve its productive capacity and its overall quality of life, which would mean progress. The extension services presently used for transfer of information, particularly for the agriculture, small industry and health sectors are functioning independently of each other as well as for the national information system. As a result, there is on the one hand duplication of effort, and on the other hand inadequate and inefficient use of available resources. In many of the third world countries adequate resources have not been developed for such services, perhaps because it was not always perceived that the financial benefits alone would widely cover the small additional investment needed.

The libraries must improve the quality and efficiency of their services to achieve bargaining power for more resources. Even small improvements can go a long way in convincing the managements of the parent organization, of the need for
more investment in training and new equipment. The infrastructure in the form of better communication network, facilities for data base development, easier access to hard ware and software etc, is now slowly being built in Bangladesh. The recent liberalization of Pakistan and Bangladesh’s investment and economic policies will no doubt provide a further impetus for private sector investment in information technology and its application. This mean that libraries of Pakistan and Bangladesh should gave the highest priority to improve their services and ensure easier and wider access to documents and information for their users.

The new information and communication technology will be helpful for speedy and quick dissemination and retrieval of information to the users. The new technology has high potential to grow. The governments of Pakistan- Bangladesh are taking it seriously and in their recent year plan period the proposal for modernization and networking all institutional/universities libraries have been accepted. The recommendations for new policy for information technology application have been accepted and likely to be implemented in coming years.

Advances in information technology are bringing progressive change in modern society all over the world. Newly emerging society is known as information intensive society, among the characteristics features of this society, that the members have developed a confidence of self-reliance in solving their problems by using pertinent information. They believe that relevant technology like “Software Technology” would pay an important role in getting access to pertinent information. A large segment is Society in Pakistan and Bangladesh too has begun to feel the impact of software technology in different ways. Information technology has been able to abridge time and space dimensions for proper management of information.

Information society is passing through many challenges due to lack of information professionals skills, information management skills and up to date subject knowledge. Making available proper information infrastructure, information techniques and proper information policies will make information society of 21st century a ground success. We must carry out the suggested strategies in order to go for the information society of tomorrow.
Automation of library concept and availability of information technology is real boom to librarianship development. User’s expectations have been increased due to technological developments a good sign. Information technology should be used as a means but not as end in itself. It should be taken as a time bound plan, if it is done, Pakistan and Bangladesh will have perhaps a new image of the 21st century.

In Pakistan and Bangladesh, mostly microcomputers are being used for automation processes. Such software packages are suitable which may be used on microcomputers. Despite the availability of some software, there are certain problems towards their, selection, evaluation, and cost effectiveness, operating system, training facility etc. since there is a shortage of systems analysts and programmers efforts should be made to cope with the situation. In Pakistan-Bangladesh there are many problems in automation like computer illiteracy, improper planning, unavailability of library software, retrospective conversion, lack of expertise, technical know-how and the vendor support for library hardware and software. No consultancy firms about library automation or library systems analysts and design exist. Training focused on library automation in scarce and uncoordinated. Most of the trainees exposed to the training are not given chance to apply the knowledge acquired. If a library is lucky enough to get automated despite the above problems, non-availability of vendor support for the specialized library software and hardware becomes the major hindrance for further development.

Library automation is in its infancy in Pakistan. No serious effects have been made in the field of library software in a proper manner. Keeping the automation period in view, very few persons have been trained in this field of automation. It is the duty of professional associations and library schools to solve the problems of library software in the country. The PLA computer centers must play an important role in selecting and developing library software suitable for local institutions. A national center for library software development should be established. Library software should be developed to deal with material in local languages such as Urdu, Punjabi, Pushto, Sindhi, Baluchi. Standards for library cooperation, interlibrary loan, electronic mail should be fixed and software is designed for this purpose. Programs should be
developed to exchange data among databases of different formals and incompatible environments.

The foundation of PLA computer training center was indeed a positive step forwards development in the library and information science education in the Punjab, Pakistan. In first three years the center produced a reasonable number of librarians trained in different aspects of library automation. Up to 1995, there were 70 to 80 libraries only in Lahore, which have been automated or were planning to use new information technology. This number by now has increased to 150. The period comprising over decade of the immediate past training of information technology shows that Pakistani librarians are aware of its importance in libraries and are to some extent making them ready to cope with challenges of the time. The efforts are, if not satisfactory, appreciable. The role of foreign agencies in this respect is also appreciable. With the advent of 21st century, training of librarians’ information technology has become of more significance, as the future society will be entirely technology based and without reasonable resources of information no nation will prosper.

As the question of implementation of the revised curriculum is concerned it has been noticed that, with minor modification, some schools has implemented it and the others are in the process. One thing, which should be considered as more important, is the obstacle in implementing the revised syllabi in our library schools. Lack of financial resources is still a problem. Curriculum revision will only be fruitful when all requisites are fulfilled. Information technology is the need of the time and for the prosperity of the nation, the Pakistan Government, professional associations and donor agencies can play a part in building the necessary infrastructure. Information technology has a bright future in Pakistani libraries. To cater to the needs of librarians, pertaining to IT, Pakistani library schools must face this challenge as IT education is mainly based on practical work that requires a large amount of money, economically challenged library schools in Pakistan experience great difficulty in implementing IT education. The only satisfactory aspect of IT education is the revision of curriculum that has recently been done in the country.
The networking activities started with limited number of participating institution, in each case. However, the decision makers seem to have a mistaken idea of the benefits that would be forthcoming. They expect books, journals, patents, standards etc to travel like electronic waves solving all their woes concerning information. While networking has caught on like wide fire at the conceptual level, the libraries are found to fumble, when it comes to act. Automation of all kinds of libraries is increasingly becoming popular in Bangladesh with the financial and technical support of state/central government, BANSDOC, ICDDR, B, AIC, NHLDC, BASLIBNET, and UGC. It not only facilitates computerizing the house keeping operations of a library, but also serves as a primary requisite for information retrieval (IR) and Library networks. Government of Bangladesh has taken some measures to (i) establish software technology parks (ii) exempt tax on profits from software exports (iii) exempt a fixed percentage faced by Bangladeshi libraries and (i) inadequate funds (ii) lack of excise duty on hardware and software imports etc. But the major problems in automation of libraries are (i) inadequate funds (ii) lack of expertise in automation of libraries, and (iii) retrospective database creation. However, school of library and information science, professional associations, LAB, BALID, ICDDR, B, AIC, BANSDOC, UGC and BASLIBNET provide short-term refresher courses, workshops and training programmers to update the knowledge and skills for the professionals working in the libraries. Considering all these points, library professionals may choose the appropriate course of action in consultation with these national bodies for a well-planned implantation of library automation programs.

LAN is a basic technical necessity of information activities. The flexibility, resource sharing & expendability features in Bangladesh and Pakistan make LAN very demanding for information services. Information centers can use LAN for data entry and work processing.

In libraries, the house-keeping activities like cataloguing, circulation, acquisition, periodicals controls, MIS, SDI, CAS, financial control, test-mailing etc. can be possible through LAN.

Following are the major problems of libraries development in both countries:

1. There is no national commission for library development in both countries.
2. Lack of proper initiatives, efforts and plans to establish new and maintained libraries by the governments at national level.

3. Lack of appropriate leadership in library and information profession of both countries. Absence of a national level steering body to advise the Governments on library and information affairs.

4. Lack of funds for purchasing books and other reading resources for libraries is the common problem of both countries. Sometimes the parent organization allocates limited funds after fulfilling all other needs of the organization.

5. Service conditions of librarians are not still well defined which causes demoralization in profession. Low professional status, poor working conditions and insufficient infrastructural facilities make the librarians depressed. The role of library association is very poor towards the development of libraries and the promotion of staff service structure is not pertinent. The whole efforts of the Office bearers of library associations consist upon to achieve their goals, welfare and their projection.

Libraries represent cultural developments and play an important role in society. Great cultures have great libraries. In fact, great nations achieve their standing in part due to their libraries because information resources are at the root of the effective research, teachings and learning. Librarians are through out to be the scholars of their age they are the most capable and intelligent people. If we look at the history of the Muslim’s glorious period, we know that the most knowledgeable persons were appointed as librarians. It is unfortunate that now librarians are overlooked. Librarianship is a vulnerable profession. The education and research policies at national level cannot succeed as long as libraries are not developed according to the current global trends, and this is not possible if librarians are not given their due status.

In both countries there is no proper salary structure for school and college librarians at the national level. It varies from one institution to another and even within the government departments. Each department has its own isolated services and pay structure for librarians. To motivate the professionals and made them job
satisfied, a proper uniform service structure for academic library professionals should be introduced through the Governments.

**SUGGESTIONS**

During the course of my research process and interaction with the stakeholders of the study, I have come to the point to put forward certain recommendations.

- The national development of a country like Pakistan-Bangladesh cannot be thought of without the development of libraries and information system at the national level. The governments should give more attention for library development. The governments should promote the development of a library-based education in their countries.

- A national training institute for library and information science should be established for providing training programmes of professional librarians on the use and application of modern information technology (IT).

- In both countries, Professional staff should be trained up, improve their ideas and knowledge about ICT.

- Social dignity of the library professionals should be established. Proper infrastructural facilities should be provided for the better information services of the whole community.

- The governments of Pakistan-Bangladesh should allocate sufficient funds to support the purchasing and maintenance of computer systems by libraries. Tax and VAT on computer systems and computer accessories should be withdrawn initially for 5 years if the countries want to encourage greater automation of processes in the next century.

- Any computerization projects of the libraries in Pakistan-Bangladesh should be a joint exercise between the libraries and the computer centres of the respective universities. This is necessary owning to the cost involved and the readily available expertise at the centers.
Library and information science schools of both countries should develop special training programmes for library staff on the use of computers in libraries and organise special advanced training courses for professional librarians on the use of computers in libraries.

Librarians should convince administrators at the higher level, in the importance of the use of computers, to develop a level of awareness at the administrators' level sufficient to encourage them to use the computer in libraries and to convince officials that automation will improve the effectiveness of information services and access to information which they need for decision making.

Computerised systems are dynamic rather than static. So it is important in planning for computerization, that hardware and software be selected which is sufficiently flexible to meet both the present and future needs.

Libraries with the help of software development firms should try to develop software packages for the use of computers in Pakistani-Bangladeshi libraries in general and to make the best use of the available ready-made software for libraries, provided they are capable of solving the local needs. They should also develop a standardized thesaurus in Urdu, Bengali language for the use of computer system employed in the libraries of Pakistan - Bangladesh.

Libraries should also develop a centralized database to include all documents and sources of information available in the both countries in order to support scientific re-search and studies, and to provide decision-makers easy access to needed information. Such a database is needed to be linked with other international networks.

The library associations, leading libraries and library educational institutions of Pakistan and Bangladesh should organize meetings, seminars and workshops in different times, to create awareness among librarians, students and general people of both countries, about the potential advantage of automation and thus encourage more libraries to automate their processes.

- Governments should contribute formal national groups for developing policies, plans, standards and new technology.
- Governments should constitute task forces to look into the poor situation of information services to pace with 21st century, strategic and tactical planning should be made to maximize the use of new technology in libraries.

- Governments should established national centers for software development; national professional bodies should draw up a time table for professional training and arrange surveys for information needs assessments.

- Governments should arrange training for master trainer abroad in latest technology for libraries.

- There should be mechanism to automate all libraries of the countries and managements of un-automated libraries should arrange tours of automated libraries for the state of the art-training.

- Sufficient recurring grants should be allocated for automation of libraries, to arrange seminars and conferences on automation of libraries.

- All library school facilities should be provided with updated information for further diffusion to their students.

- Curriculum of library schools should be updated including compulsory internship, visiting experts for teaching information technology should be invited.

- UNESCO should be approached to arrange special courses on information technology for the library professionals.

- Databases should be developed through automated library networks, efforts should be made to maximize the subscription of hard and on-line journals.

- The libraries should organize for user's education the computer assisted programmes.

- Librarians should develop good working relationship with other organs of its parent organization for the development of library automation.

- There should be an opportunity for the professional librarians to share, generate and get published new knowledge in library automation.
• It is recommended that Governments of Pakistan-Bangladesh should direct to their departments collaborate officially with all stakeholders, including (Ministry of Education, Librarians, PLA, LAB, LIS schools, Volunteers) on a single platform to discuss all prevailing and future issues about libraries, its services and library automation.

• Governments should support professional associations, LIS schools and volunteers to collaborate for in-service trainings, and other of technological experiences.

• PLA, LAB, and LIS schools of both countries should play an important role of awareness creation regarding technical issues of automation, i.e. complex language issue, local language issues, and retrospective data conversion. They should also discourage the widespread concept of individual efforts, solo flight or reinventing the wheel every time. Professionalism should be realized through awareness campaign to be more adaptive, proactive and futuristic in their approach.

• Lack of research, other practical issues of technology and emerging trends should be addressed through the research by LIS schools as well as by regular publication of PLA, LAB, SIGs, and LIS academia research publications.

• Well-trained and skilled personnel are essential ingredients for implementing ICT in libraries. Steps should be taken to develop properly trained and competent people for this purpose.

• Libraries need funds to initiate the implementation of ICT. The both governments can play important role by allotting sufficient funds for purchasing and maintaining ICT in libraries.

• The government’s administrative complexity should be reduced to help create awareness of the importance of ICT in libraries.

• The governments of Pakistan- Bangladesh should make library and information services a part of national development initiatives, efforts, and plans.
- Libraries need a suitable location with sufficient space for collections and services. To this end, governments must create an information infrastructure for the countries.

- Libraries need strong support from their parent organizations and the governments. This can be achieved only if there is such awareness regarding ICT. Pakistan Library Association (PLA) and the existing library information schools in Pakistan, The Library Association of Bangladesh (LAB), The Department of Information Science & Library Management, University of Dhaka, The Department of Library & Information Science, University of Rajshahi, and any other professional organization should also organize seminars, workshops, etc., to create awareness among library authorities about the advantages of ICT.

- Networking is one of the most effective ways of serving users' needs comprehensively. Networked access to databases would help get newly-published information to library users.

- Professional organizations such as Pakistan Library Association (PLA), the Library Association of Bangladesh (LAB) and library administrators should organize short-term training programmes for library professionals in computer applications in library and information services, online information retrieval, data processing, electronic publishing, and also software such as Microsoft Office, CDS/ISIS, etc.

- The role of library associations gains importance. They have to work hard the structural, functional uplift of the libraries. They have also concentrate on the professional and otherwise needs and requirements of librarians. They have to exert pressure on the decision makers to provide a service structure to the librarians and take care of their areas of service provision. Moreover, a promotional timescale base framework should be implemented.

- A long-term plan is an essential component of the long-term implementation of ICT in libraries of the both countries.
- A comprehensive collection development policy for e-resources should be maintained by the libraries in the study, in order to follow a set of standard practices for acquisition and management of electronic information resources. There should be specific budget for new resources and the renewal of existing resources.

For further development and improvement of library related programme the first thing is strong control and personal direction. The Public Library services are financed directly by the public; therefore, public Library should provide free access to works of knowledge, information and imagination. Care should be taken to provide good reading material as well as guidance to the readers. The development of taste and special interests are gradual processes. The provision of latest books and periodicals should be ensured. Libraries should not be starved because of lack of funds. The money spent on books for increasing knowledge is a national investment.

The existing public Library services in both countries need improvement. To realize their full potential the public libraries must be made attractive and stimulating, full of interesting things to look at and think sympathetically to the needs of the people who may use them. There are considerable Library deficiencies throughout the both countries. Library development plans based on agreed standard of provision an assessment of national needs must be prepared. After a survey of library needs, there must be judicious allocation of financial resources that are available. Library designs and buildings must be related to the services publicized through a well planned continuous public relations programme.

It must be realized that the success or otherwise of a Library depends on the quality and expertise of its staff. The best stocked library cannot give a comprehensive service to its users if it does not at the same time possess a keen, efficient and trained library service depends on a Librarian's skill in selecting material and in organizing the library resources. The Library staff should be motivated and dedicated in the Libraries.
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Cobbett’s words are worth quoting at some length (March 1 – April 1, 1833): “Let those who lounged in it, and made it a place of amusement, contribute to its support. Why should tradesmen and farmers be called upon to pay for the support of a place which was intended only for the amusement of the curious and the rich, and not for the benefit or the instruction of the poor? If the aristocracy wanted the Museum as a lounging place, let them pay for it.”


The International Library review. (1989), 20, 1, 76.


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