International Conference on Digital Libraries

LIBRARY NETWORKING IN SOUTH ASIA
THE ISSUES

Dr. H. K. Kaul
Director, DELNET
hkkaul@delnet.ren.nic.in
Networked Digital Libraries : A Vision

• Access any document
  – In any Language
  – In any format
  – Anywhere in the world
  – Any time as required
  – At a very low cost
Networked Digital Resources: A Vision

- Linked to any institution in the world.
- Offer digital documents globally.
Changing Publishing Methods

• From Print to the Digital

• Publishing on the INTERNET
Growing Dimensions

• From tangible to intangible media
  
  – sources of information and representations of knowledge on the INTERNET.
Growing Dimensions (contd.)

- From Books and Journals to services and databases
  - The knowledge packages are published and distributed on the INTERNET.
Growing Dimensions (contd.)

- From buying to leasing
  - access to knowledge packages is controlled on the INTERNET
Growing Dimensions (contd.)

- From ascertaining to using
  - New purposes for the catalog. To help others to use knowledge packages on the INTERNET.
Library Networks in South Asia

- National Overview
<table>
<thead>
<tr>
<th>Type of Libraries</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Libraries</td>
<td>22</td>
</tr>
<tr>
<td>University Institute Libraries</td>
<td>11</td>
</tr>
<tr>
<td>College Libraries</td>
<td>1,075</td>
</tr>
<tr>
<td>National Libraries</td>
<td>2</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>68</td>
</tr>
<tr>
<td>Government Libraries</td>
<td>500</td>
</tr>
<tr>
<td>Private Libraries</td>
<td>500</td>
</tr>
<tr>
<td>Special Libraries</td>
<td>665</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,843</strong></td>
</tr>
</tbody>
</table>
1. Library cooperation is still informal

2. Institutions like the National Health Library and Documentation Centre, and Bangladesh Institute of Development Studies that have developed proper arrangements for inter-library loan.

3. Resource sharing among libraries in Science and Technology is carried. Bangladesh National Scientific and Technical Documentation Centre is working on the project.
Bhutan

Public and Institutional Libraries 7

Maldives

1. National Library 1
2. Religious Library 1
3. Government Libraries 10
4. Institutional Libraries 10

22

The networking of libraries is being considered by the Ministry for Communication, Science and Technology.
Nepal

1. Academic Libraries

(a) University Libraries 5
(b) Campus Libraries 80
(c) Affiliated Campus Libraries 145
(d) Higher Secondary School Libraries 400
(e) Secondary School Libraries 100

2. Institutional Libraries 7

3. Public Libraries 900

1,637
Nepal (contd.)

- Efforts for networking of libraries are on.

- The establishment of Scientific and Technological Information Network (STIN) by the Royal Nepal Academy of Science and Technology (RONAST) has not progressed.

- Tribhuwan University Library has been initiating resource sharing activities.
Pakistan

More than 3,000 libraries exist in Pakistan but the breakup is available for the following libraries only:

<table>
<thead>
<tr>
<th>Type of Library</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Libraries</td>
<td>2</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>223</td>
</tr>
<tr>
<td>Special Libraries</td>
<td>421</td>
</tr>
<tr>
<td>Institutional Libraries</td>
<td></td>
</tr>
<tr>
<td>University Libraries</td>
<td>147</td>
</tr>
<tr>
<td>College Libraries</td>
<td>927</td>
</tr>
<tr>
<td>School Libraries</td>
<td>123</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,843</strong></td>
</tr>
</tbody>
</table>
1. The networking of libraries is considered necessary. A multi-type library network at city or national level not started.

2. A number of organisations such as Pakistan Institute of Development Economics, National University of Science and Technology and Lahore University of Management Sciences (LUMS) have well-organised and computerised libraries.

3. Online access to Internet resources is growing.

4. In the past the use of SERNET (Serial Network), DEVINSA, H.E.J. Science and Technology Information Network, Lahore Business and Economic Libraries Network (LABELNET) and National Documentation Centre Library Information Network (NADLIN) was being used.
<table>
<thead>
<tr>
<th>Rank</th>
<th>Type of Library</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Library</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Public Libraries</td>
<td>580</td>
</tr>
<tr>
<td>3</td>
<td>Piri Vena Libraries</td>
<td>363</td>
</tr>
<tr>
<td>4</td>
<td>Technical Institute Libraries</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>College Libraries</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>Special Libraries</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>Government Libraries</td>
<td>30</td>
</tr>
<tr>
<td>8</td>
<td>University or Higher Education Libraries</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>Institutional Libraries</td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>School Libraries</td>
<td>66</td>
</tr>
</tbody>
</table>

Total Libraries: 1,185
There is no library network but the following institutions offer access to information

- SLISTINET (Sri Lanka Scientific and Technical Information Networks)
- HELLIS
- AGRINET
- TECHINET
- TRADENET SL
- ENLINET
- National Information in Education
- NATNET LANKA
### India

1. **Academic Libraries**
   
   (a) Universities 223  
   (b) Deemed to be Universities 37  
   (c) Open Universities 7  
   (d) Colleges 8,000

2. **Public Libraries** 54,845

3. **Science and Technology Libraries** 1,200

4. **Social Sciences Libraries** 450

5. **Government Departments** 800

6. **Humanities Libraries** 500

7. **National Libraries** 7

8. **Industrial Libraries** 5,000

8. **School Libraries** 10,000

---

81,069
India (contd.)

Network Initiatives

- INFLIBNET
- DELNET
- CALIBNET
- MALIBNET
- BONET
- MYLIBNET
- PUNENET
- ADINET
## 1. India (DELNET)

<table>
<thead>
<tr>
<th>State</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andaman and Nicobar Islands</td>
<td>1</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>68</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>1</td>
</tr>
<tr>
<td>Assam</td>
<td>4</td>
</tr>
<tr>
<td>Bihar</td>
<td>4</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>5</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>6</td>
</tr>
<tr>
<td>Delhi</td>
<td>141</td>
</tr>
<tr>
<td>Goa</td>
<td>6</td>
</tr>
<tr>
<td>Gujarat</td>
<td>17</td>
</tr>
<tr>
<td>Haryana</td>
<td>20</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>5</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>5</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>7</td>
</tr>
<tr>
<td>Karnataka</td>
<td>63</td>
</tr>
<tr>
<td>Kerala</td>
<td>25</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>29</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>66</td>
</tr>
<tr>
<td>Manipur</td>
<td>1</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>1</td>
</tr>
<tr>
<td>Orissa</td>
<td>17</td>
</tr>
<tr>
<td>Pondicherry</td>
<td>6</td>
</tr>
<tr>
<td>Punjab</td>
<td>18</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>19</td>
</tr>
<tr>
<td>Sikkim</td>
<td>2</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>101</td>
</tr>
<tr>
<td>Tripura</td>
<td>1</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>42</td>
</tr>
<tr>
<td>Uttaranchal</td>
<td>10</td>
</tr>
<tr>
<td>West Bengal</td>
<td>28</td>
</tr>
</tbody>
</table>

**Total** 719
2. Other SAARC Countries

Nepal 1
Sri Lanka 3
Total 4

3. Outside SAARC

Oman 2
Philippines 1
United Arab Emirates 1
United States 2
Total 6

Grand Total 729
<table>
<thead>
<tr>
<th>Subject</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>100</td>
</tr>
<tr>
<td>Science and Technology</td>
<td>519</td>
</tr>
<tr>
<td>Social Science</td>
<td>89</td>
</tr>
<tr>
<td>Humanities</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>729</strong></td>
</tr>
</tbody>
</table>
Types of Libraries

Academic
- Universities 33
- Colleges/Institutes/Deptt./Centres 552 585
Research/Special 86
Public Libraries 5
Government Libraries 26
Libraries of Diplomatic Missions/UN Agencies 8
Miscellaneous including Trusts 19

Total 729
Growth of DELNET Membership

- 0 members in 1991-1992
- 26 members in 1992-1993
- 30 members in 1993-1994
- 43 members in 1994-1995
- 57 members in 1995-1996
- 69 members in 1996-1997
- 76 members in 1997-1998
- 106 members in 1998-1999
- 153 members in 1999-2000
- 233 members in 2000-2001
- 393 members in 2001-2002
- 565 members in 2002-2003
- 729 members in 2003-2004
DELNET (http://delnet.nic.in)

- Union Catalogue of Books 28,55,821
- Union Catalogue of Books(MARC) 44,132
- Union Catalogue of Periodicals 19,289
- Union List of Periodicals 21,402
- Article Database 5,69,583
- CD-ROM 2,106
- Union List of Video Recordings 3,667
- Union List of Sound Recordings 748
- Indian Specialists Database 2,000
- Union Catalogue of Hindi Books 3,000
- DEVINSA Database 20,000
- Union List of Theses and Dissertations 41,420
- Union List of Serial : Management Libraries 800
Links to National and International Databases

- GISTNIC Databases
- MEDLARS and other Databases of NLM
- US Patents: Full Text
- Library of Congress Catalogues
- Books New Arrivals from the INTERNET
- Books Reviews
- Current Contents of selected Journals
Software Developed

- **DELPUS**

  Developed on Visual Basic and MS-Access

- **Special Features (DELPLUS)**
  - For all kinds of libraries
  - Free upgradation
  - Follows internationally recommended standards and formats such as US-MARC, MARC 21, AACR-II
  - Best for smaller libraries
DELNET (Contd.)

- DELPLUS (Contd.)

This Software is easy to work with and comprises the following modules:

- Acquisition
- Cataloguing
- Circulation
- OPAC
- Administration
- Export/Import
- Authority Control
- Article Indexing
- Report Generation
DELNET (Contd.)

Software Developed (Contd.)

• DELMARC

• Developed on Visual Basic and SQL Server

Special Features

• For all kinds of libraries including public libraries, academic libraries and special libraries
• Multi user facility
• Free upgradation
• Follows internationally recommended standards and formats such as US-MARC, MARC 21
• Available at a very low cost
Software Developed (Contd.)

• **DELDOS**
  
  • Efficiency of OPAC module  
  • No wastage of disc space  
  • Fast retrieval of multilingual records  
  • Duplicate checks and validation checks in various modules  
  • Full security  
  • Facility for defining the tags /indexes/global data  
  • Protected with password control  
  • More features such as copy option, delete in range, undelete in range/single/all, etc  
  • Permanent deletion and updation of disk space  
  • Automatic backup facility
DELNET (Contd.)

Services

• Online access through Internet and Local Dial Up
• ILL Online
• INTERNET and E-mail
• Retro-conversion
• Training Programmes, Workshops, Seminars and Lectures
I.T. Networks

- NICNET
  
  Established by National Informatics Centre, Planning Commission, Govt. of India in 1987. It provides following services:
  
  - Videoconferencing Facility
  - Interactive Access
  - INTERNET Access
  - Remote Database Access
  - Electronic Mail Facility
  - Electronic Data Interchange (EDI)
  - File Transfer Facility
  - Software Design and Development
  - Geographical Information System
  - Computer Aided Design
  - Bibliographic Informatics (MEDLARS, Patent Information)
  - Training
ERNET (Education and Research Networks) was established in 1986 and offers a nationwide network for the academic and research community.

**Services:**

- E-mail
- USENET News
- File Transfer, Remote Login
- Database Access
- USIS (User Services Information Services)
INTERNET Service Provider (ISP)

- Software Technology Parks of India (www.stpi.ernet.in)
- Software Technology Park, Bangalore (www.stpb.soft.net)
- Videsh Sanchar Nigam Limited (VSNL) (www.vsnl.net.in)
- Mahanagar Telephone Nigam Limited (MTNL) (www.mtnl.net.in)
- NIC (www.nic.in)
- ERNET India (www.doe.ernet.in)
- Bharati BT Internet Limited (www.mantraonline.com)
- Satyam Infoway Limited (www.satyamonline.com)
- Network of the World (NOW) (www.now-india.com)
- Tatanova (www.tatanova.com)
Major Issues in Networking

- High Bandwidth Connectivity
- Training
- Software
- Retro-conversion
- Document Delivery
- Multi-type Library Networks
- International and National Databases
- Union Catalogues
- National Bibliographic Databases
Major Issues in Networking (contd.)

- Use of International Standards
  - MARC 21
  - AACR II
  - LCSH
  - DDC

- Preservation of Digital Documents

- Authority Databases

- Rationalisation of Resources
Major Issues in Networking (contd.)

- Books in Print Databases
- Centralised Classification and Cataloguing
- Support for Resource Sharing
- Resource Sharing Technology
- Language Barriers
- Copyright Regulations
Library Management/Networking Software

- Support Various Character Sets - Non Roman Alphabets
- Library Management
- Flexible for Local Variations
- Export/Import Facility
- Format Compatibility
- Web Access
THANK YOU