6.1 Introduction:

In the era of information explosion, it is important that libraries have to develop a network or link among themselves to other networks using the networking technologies to be able to meet the users' needs in very cost-effective ways. The network environment offers very effective and useful opportunities to member libraries like online access and dissemination is possible without physical visiting to the library, many users can access a single source of information at a time. The information divide can only be bridged by pulling all the resources in one nutshell. (Manhas 2010).

Networking and resource sharing are one of the thrust areas in library and information, for long time, Dr. S. R. Ranganathan has emphasized much on this concept regarding library co-operation in his book ‘Five Laws of Library Science’. Indeed all five laws warrant the practice of networking and resource sharing for better and effective library operations and services. Network of college libraries under the umbrella of universities have been widely discussed, many projects have been initiated and undertaken at global level. In India particularly, UGC and other educational bodies recommendations also emphasized the necessity of networking of college libraries. The role of university library in clustering, resource sharing among the colleges and information access by avoiding the duplication of efforts and resources is immense. The INFLIBNET and NAAC are also emphasizing university and college libraries network and ensuring the role of university library in promoting the information environment of affiliated institutions.

Application of new information technology has brought dramatic changes in the library and information field. With technological advancement, libraries and information centers around the world have computerized their library routines, developed databases for shared use on computer networks. Besides, improving services and operations for improved performance, libraries have also been able to evolve effective computer networks with an
aim to optimize utilization of resources and facilities. The library and information networks have potential to improve library services in several ways. It brings down the cost of information products and services in the network environment. It enables libraries to offer need-based services to the end users eliminating the limitation of size, distance and language barriers among them. Due to library networks, the emphasis has moved from physical entities to the resources sharable entities through the networks. The network accessible resources include databases of libraries journal articles, electronic text, images, video and audio files, scientific and technical data etc.

There has been a voluminous growth of published documents in the recent past due to both print and digital. As a result no library is in a position to procure process or store all documents that its users demand. According to Kent (1978) "It is difficult to anyone single library to acquire even one percent of the total document published in the world". Due to one or more of the following reasons:

1. Knowledge explosion
2. Literature (both print and digital) explosion
3. Explosion of users
4. Augmentation of specializations
5. Declining funds
6. Declining cost per publication
7. Varying need of information
8. Limitations of libraries in making the environment conducive for ICT

All the above referred factors have compelled the libraries to go for consortium or sharing approach which is the sole theme of the present research work.

6.2 Background of Resource Sharing and Networking:

In libraries and information centers the resource sharing concept was used since very long and the activity initiated with “Inter Library Loan (ILL)”. Initially the efforts for resource sharing were good but they were concentrated more at local level only and the tool used was “Union Catalogue” and only books or library material was considered. This was the limitation in the process. However the concept of resource sharing was initiated and also worked well at local level. Later different activities related to resource sharing were
carried out in the area of libraries like “Library Cooperation”, “Resource Sharing” etc and the resources of the libraries considered for the sharing purpose. Due to applications of ICT in libraries, resource sharing turned in to “Library Networks”. The computers were used for developing databases and the communication technology used for connecting the libraries located at distances and sharing of information, faster than before. The library networks were very popular and UGC, NISSAT took a lead in developing different library networks of cities in different parts of the countries. The effort was so fruitful that the flow of information was enhanced and sharing concept was entered in the profession. Thus ICT played a pivotal role in the development of RS globally. Currently the internet and web technology added more benefits to resource sharing and new concept developed is consortium. Different organizations share the access to the e-resources by establishing consortium and developing economic knowledge base in the limited funds.

It is now a challenge to access the information published in the world due to information explosion, hence resource sharing was initiated in libraries and developed library networks, found essential and suitable for the sharing purpose. Using the technology effectively, computer networks are developed to access remote information and databases faster than any other facilities. In the information overload, it is not possible to hold all the collection at a single place and hence to meet the needs of users, resource sharing through networks is essential. The main purpose of computer networks is sharing resources, sharing meaningful information and data among each other. The development of network needs sufficient and advanced hardware, software, netware and skillful manpower for developing and functioning effective networks.

6.3 Resource Sharing:

The real essence of resource sharing is formation of library networks. Through library networking, users can scan and monitor the information they require, not available in a particular library but other library holds that particular information, without loss of time and at a minimum cost. Resource sharing networks offer:

- Document delivery and interlibrary loan services
- Shared cataloguing
- Cooperative collection development
• Coordinated acquisition
• Reference and referral assistance
• Consultation and staff training
• Email, facsimile service, bulletin boards etc.

Access through any network in the globe can be obtained virtually through internet which is widely used international network. Automated libraries can also help sharing of information through CD-ROM networking. With the increasing trend in electronic publications particularly on CD-ROMs and networks, automated libraries are going to be converted into electronic libraries. The introduction of multi-user and multi task CD-ROM systems has made more economic for most of the organizations, especially where the same data or database are required for several users.

The term resource sharing has been used in the library profession since 1960. It is method of co-operation and co-ordination among participating libraries. Need of resource sharing was realized by libraries a long back. Besides entering into inter-library loan practice, libraries also thought seriously of resource sharing in many other areas, such as co-operative acquisition, co-operative cataloguing, co-operative classification, etc. Inter-library loan has been practiced as one of the most popular resource sharing activity amongst libraries. Inter-library loan in a traditional library is severely affected by barriers of information communication, such as apathy of the lending library, distance, language, time etc. A computerized inter-library loan system overcomes these limitations. For resource sharing, the participating libraries need to come together and co-operate in two broad areas: (a) Developing the collection on shared basis and (b) Developing services for exploiting such collection (Dhawan, 1999).

Libraries exist for users any change in their demands and requirements need libraries to adapt. Users are now more demanding, expecting from libraries and have to show their accountability they have to satisfy the users in the best possible way. Customized services are the talk of the time. Staff has to be more interactive with the users knowing about their area of interest and their requirements to serve them in the best possible way. Sharing of resources may solve the problem by acquiring all the documents that they require in corporation. They would share the documents thus overcoming the problem of increased prices and space for storing them. Libraries by sharing would have access to the
large number of documents and satisfying the increasing demands for documents. Sharing would also allow libraries to use documents in different formats.

6.4 Library Networking:

The term networks generally reflect to computer networks which allow different configured computers to communicate among them and share resources and information available with them. UNISIST – II (UNESCO 1979) defines information networks as “A set of inter-related information systems associated with communication facilities, which are cooperating through more or less formal agreements in order to implement information handling and to offer better services to the users”. A computer network or data network is a telecommunications network that allows computers to exchange data. In computer networks, networked computing devices pass data to each other along data connections. The connections (network links) between nodes are established using either cable media or wireless media. The best-known computer network is the internet (Wikipedia). The National Commissions on Libraries and Information Centers in its National Programme Document (1975) defined a network as “Two or more libraries engaged in a common pattern of information exchange, through communications for some functional purpose”. (Sahoo, 2004).

6.5 Objectives of Library Networks:

Potdar and Joshi (1997) had discussed the main aim and objectives of library networks, which are as follows:

1. Improving resources utilization and service through automation at various levels.
2. Facilitating access to composite databases.
3. Implementation of inter library loans, document delivery services etc.
4. To aid swap of spare publications.
5. Facilitating central catalogue search
6. Harping on ICT in every aspect of library functioning.
7. Forming benchmarks and sharing of best practices at every level.
6.6 Need of Library Networks:
From the above discussions it is conducted that there is a need of resource sharing among
group of libraries to develop economic ventures even in narrow discipline. Among the
various reasons information explosion, is the main cause and it continuous increase, made
it is possible for every library to procure each and every document in the library. The
other prime factor is of the library budget which never increased proportionately and it is
difficult for libraries to purchase required documents and rising cost of documents never
matches with funds. The value to education and research is increasing and the growth in
institution demand for more facilities. The users expectations for libraries are increasing
due to advent of ICT usage. To meet the needs of users under such conditions libraries
have to face the different challenges. The need of resource share is felt enormously due to
these reasons. The advanced programs are being under taken continuously to match the
situation. The ICT applications fulfilled the desire of resource sharing by networking
libraries and exchanging information. The library networked developed to get the benefits
like:
- Access to centralized databases at economical cost
- Collectively acquiring information resources
- Qualitative need based core collection development useful to the users
- Consortium benefits like specialized database collection
- Increased resource sharing efforts
- Develop different projects like IR
- Providing better and enhanced library services to users for group of library’s
collection.
- Developing economical aspects while subscribing to resources and hardware.

6.7 Development of Library Network:
In 1960s Centre for Resource Libraries was built in Chicago. This center co-operate
among 162 institutions to acquire, store and preserve information. The cost of library
materials increases but library budgets remains as it is. As a result, in 1974 the Columbia,
Harvard and Yale research libraries and other libraries in New York established the
Research Libraries Group (RLG). This was born out of the belief that no library can be
self sufficient to satisfy the information needs of all its patrons materially and service-
Resource sharing and library networks have grown mostly during the last thirty years in different geographical environment in order to cater to the specific needs of the users. United States and in other countries library networks are also growing and have emerged several models that provided specific services. The essential functions included were promotion of resource sharing, creation of resource sharing tools like union catalogues, rationalization of acquisition and maintenance of international standards for creation of records uniformly etc. Libraries have to be joining different networks depending upon the need and select a model, which conforms to its requirements. (Kaul, 1999)

In the developed countries resource-sharing and networking was started long back. For instance the growth of networks in the United States traced from the mid of 1960. USA is the birthplace of library networking and by now libraries in each state are networked to local, regional and national network. It is important to note that the United States Department of Education has been advocating a vigorous policy of promoting library networking. It offers networking grants, supports inter-library loan projects, automation and retro conversion projects, resource sharing schemes, etc. besides providing regular federal grants annually to the public and academic libraries.

Dickson and Holley (2010), examines the use of the major social networking tools in academic libraries in the USA. Social networking can be an effective method of student outreach in academic libraries if libraries take care to respect student privacy and to provide equal coverage for all subject areas. The author provides a snapshot on the use of social networking in academic libraries through a review of the available literature and an examination of the libraries' presence on the most popular social networking sites. It also provides help for academic libraries wishing to implement social networking.

Resource sharing worked very well in United Kingdom also. The best example is Birmingham Library Co-operative Maintenance Project (BLCMP) in Birmingham, has 13 million bibliographic records of books, serials, music etc. in its database and its catalogues get a hit rate of above 90% with more than 60 libraries comprising public libraries, college libraries, university libraries, national and special libraries. BLCMP has introduced EDI clearing house service in about 25 libraries. Networking of libraries is one of the most important issues in library and information community. The convergence of
computing and communications technology helps in developing resource sharing activities and manages use of information in different ways.

In Australia the resource sharing tools have grown from catalogue cards to national databases with the contributions of many old and large libraries. In Australian Bibliographical Network, the national and central bibliographic databases are maintained and co-ordinate and maintained by a national agency. Roxanne Missingham, (2007) describes the developments in Australian libraries and in particular the national interlibrary loan and document delivery systems, the outcomes of the Local Inter-lending and Document Delivery Administration Systems (LIDAS) projects. Australian libraries have highly cooperative approach to resource sharing for many years. Inter library loan has become increasingly automated since the introduction of the online union catalogue in 1981 and the national inter-lending system in 1989. In 2004 interoperability was introduced, with developments in directories completing the national connected system. Rapid and easy access to interlibrary lending has increased significantly through automation of local and national systems. While the overall number of loans and copies has not increased the speed of delivery and efficiency of ILL has increased significantly.

By understanding the environment that led to a coordinated approach to automation by libraries in a variety of sectors, and evaluating the outcomes of the technological developments.

Library co-operative programmes in Japan also initiated but not at high scale. The academic libraries of Japanese have made great efforts in co-operative programmes producing some fruitful results in library cooperation. Among national university libraries for instance a “Lending and Borrowing Agreement” was made in 1989 (Oshiro 2000).

Resource Sharing networks in the developing countries face problems of financial resources. In developed countries there is no such problem. In developed countries, government is taking active interest in promoting cooperative networks. However, in developing countries, Government is not showing much interest. In India, there is a problem of financial resources. However, there is no dearth of skilled human resources to manage such networks.
6.8 Development of Library Networks in India:

Library networking as a mean of resource sharing has its beginning in late 1970’s and developed during 1980’s. It is no wonder that libraries in all the countries of the world have adopted networking (Sivaraj, Esmail and Kanakaraj, 2007). Due to factors which are responsible for the development of library and information networks in India. The report of the working planning commission on modernization of library services and informatics for the seventh five year plan, 1985-1990 emphasized on resource sharing and networking of libraries. The National Policy on library and information systems submitted a document (1986) which was accepted by the ministry of HRD, Government of India. The report on national policy on university libraries is also prepared by the Association of Indian Universities (1987). The UGC report on information systems for science and technology under the Department of Science and Industrial Research (DSIR) Government of India has been vigorously promoting an integrated approach to library automation and networking. This move indicated the developments of library networks in India.

6.9 Library Associations and Networks:

The library associations and national organizations are working for the development of library profession in national and international level. The efforts of NISSAT and UGC are remarkable in achieving resource sharing with developing library networks at different levels e.g. local, national and international etc.

6.9.1 Library Networks in India: brief overviewed:

It is observed that the development of library networks in India took place massively during 1991 to 1995 due to efforts of NISSAT, UGC, DST, Library associations and different organizations. In the following table the development of network is in chronological manner and also discussed their role in the following paragraphs.
### Table 6.1: Library Networks in India.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Abbreviation of Library Networks</th>
<th>Full Title of Library Networks</th>
<th>Place Located</th>
<th>Establishment Year</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>INFLIBNET</td>
<td>Information and Library Network</td>
<td>Ahmadabad</td>
<td>1991</td>
<td><a href="http://www.inflibnet.ac.in">http://www.inflibnet.ac.in</a></td>
</tr>
<tr>
<td>3</td>
<td>PUNENET</td>
<td>Pune Library Network</td>
<td>Pune</td>
<td>1992</td>
<td><a href="http://punenet.ernet.in">http://punenet.ernet.in</a></td>
</tr>
<tr>
<td>5</td>
<td>MALIBNET</td>
<td>Madras Library Network</td>
<td>Madras</td>
<td>1993</td>
<td><a href="http://www.malibnetonline.com">www.malibnetonline.com</a></td>
</tr>
<tr>
<td>7</td>
<td>MYLBNET</td>
<td>Mysore Library Network</td>
<td>Mysore</td>
<td>1995</td>
<td><a href="http://mylibnet.org">http://mylibnet.org</a></td>
</tr>
<tr>
<td>8</td>
<td>BALNET</td>
<td>Bangalore University Academic Library Network</td>
<td>Bangalore</td>
<td>1995</td>
<td><a href="http://www.bangaloreuniversity.ac.in">www.bangaloreuniversity.ac.in</a></td>
</tr>
<tr>
<td>9</td>
<td>DELNET</td>
<td>Developing Library Network</td>
<td>New Delhi</td>
<td>1998-99</td>
<td><a href="http://delnet.nic.in">http://delnet.nic.in</a></td>
</tr>
<tr>
<td>10</td>
<td>MANLIBNET</td>
<td>Management Library Network</td>
<td>New Delhi</td>
<td>2000</td>
<td><a href="http://manlibnet.in">http://manlibnet.in</a></td>
</tr>
<tr>
<td>11</td>
<td>NODLIBNET</td>
<td>National Open and Distance Learner’s Library and Information Network</td>
<td>New Delhi</td>
<td>2007</td>
<td><a href="http://nodlibnet.blogspot.com">http://nodlibnet.blogspot.com</a></td>
</tr>
<tr>
<td>12</td>
<td>INDOLIBNET</td>
<td>Indore Library Network</td>
<td>Indore</td>
<td></td>
<td><a href="http://indolibnet.blogspot.com">http://indolibnet.blogspot.com</a></td>
</tr>
</tbody>
</table>
Apart from this different organization like DESIDOC, DRTC, ILA, MALA, NASDOC, NCSI, NICAIR, NISARRI, SLIS also made efforts to developed resource sharing activity in the country.

1. Bombay Science Librarian’s Association (BOSLA):

It is a professional association of library and information professionals and working since 1970’s. It is one of the oldest library associations in Mumbai. Academic libraries, college libraries, corporate and special libraries are the members of BOSLA. It has provided a platform to its members for professional development through organizing conference, workshops, seminars and training programmes.

The initiative was then taken by the librarians of Bhabha Atomic Research Centre (BARC), Department of Chemical Technology, Bombay University (UDCT), and Indian Institute of Technology (IIT), Bombay and Tata Institute of Fundamental Research (TIFR). They started meeting frequently to discuss and explore the possibilities of developing closer ties than routine inter-library loan. As a result of these efforts, the Mumbai Science Librarian’s Association (BOSLA) was formed in October 1975. The objectives of the BOSLA were to improve the services of the Mumbai science libraries, to cooperate actively so as to benefit mutually by the resources available to the libraries, to strengthen the financial resources of the science libraries in Mumbai, to raise the professional standard of library staff in the Mumbai science libraries, to improve the status and service conditions of the library staff in Mumbai, to maintain liaison between the professionals and the government.

1.1. Bombay Library Network (BONET):

BONET was established in 6 November 1992. It was setup at the National Centre for Software Technology (NCST), Mumbai. The Network is sponsored by NISSAT. The main objective is to build a low cost of library information system which can possibly be used by members or participants of Bombay Library Network (earlier it was BOSLA).

BONET provided significantly benefits from the experience gained, and facilities created, by the Education and Research Networking (ERNET) project of the Department of Electronics, Govt. of India, assisted by the United Nations Development Programme (UNDP). BONET is aimed at promoting cooperation between libraries in Mumbai. It has focused on inter-library and resource sharing activities rather than on computerizing
individual libraries. BONET offers training related to library computerization and networking and speed up computerization of Mumbai libraries. BONET provided access to its centralized catalogues and E-mail facilities to BONET members. The access to library related services outside Mumbai in India and Abroad established because of ERNET. Organized training for staffs of participating libraries, online cataloguing, inter library loan facility, information retrieval services, online document delivery and many more services are offered by BONET.

2. Information and Library Network (INFLIBNET):

INFLIBNET center is an autonomous Inter-University Centre (IUC) of University Grants Commission, Government of India. It involved in creating infrastructure for sharing of library and information resources and services among academic and research institutions and it involves modernizing university libraries in India and connecting them to information centers in the country through a nation-wide high speed data network using the state-of-art technologies for the optimum utilization of information. INFLIBNET works collaboratively with Indian university libraries to shape the future of the academic libraries in the evolving information environment. It is national programme initiated by the UGC in 1991 with its Head Quarters at Gandhinagar, Ahmadabad. Initially started as a project under the IUCAA and became an independent Inter-University Centre in 1996. INFLIBNET is set out to be a major player in promoting scholarly communication among academicians and researchers in India.

INFLIBNET works towards modernization of libraries and information centers for transfer and access of information, supporting scholarships and learning and academic pursuits through a national network of libraries in around 264 universities, colleges and R&D institutions across the country.

INFLIBNET in India is the core autonomous body under University Grants Commission (UGC) for facilitation of library networks. The UGC INFONET is an excellent resource sharing program of INFLIBNET.

3. Pune Library Network (PUNENET):

PUNENET - Pune Libraries Networking is a joint programme of the University of Pune, National Chemical Laboratory (NCL) and Centre for Development of Advanced Computing (C-DAC) funded by National Information System for Science and
Technology (NISSAT), Department of Scientific and Industrial Research (DSIR), Government of India. It is hosted in the Bioinformatics Centre in University of Pune. It had maintained a centralized databases of information resources available in the member libraries of PUNENET. Other libraries also had access to database using link http://punenet.ernet.in or at http://202.41.70.50/index.html.

The main objectives behind establishing PUNENET was to interconnect all the libraries in Pune city through computer networking to increase the cooperation amongst the participating libraries and coordinate the activities to serve the user community efficiently and provide various information services to all the users by using various information sources and also provide active information exchange to users to keep themselves up-to-date in their information needs. 30 libraries and 15 library professionals were involved in PUNENET. They access Pune library network through modem. Users access data and use e-mail and internet facilities. Union catalogue is available for all users. Users can access publishers and book seller’s databases, NICNET databases MEDLINE, US patent database, available on internet, Patent information, and Union catalogues of books available in British Libraries in India. The network was based on star topology the data was collected by the central team of PUNENET from all libraries and uploaded other the central server. The member libraries have access to it. Unfortunately this network could not survive.

4. Calcutta Library Network (CALIBNET):

CALIBNET is a Government of India project and has been launched by the National Information Systems for Science and Technology (NISSAT), Department of Scientific and Industrial Research (DSIR) and managed by the CALIBNET Society established under the West Bengal Government’s Societies Registration Act 1961.

Main aim of CALIBNET is to provide the individual libraries and their reading members with cost-effective solutions to their information needs. The objective is building access to library and information resources available in the eastern region. It implements a series of databases, bibliographic, factual and intellectual assets of West Bengal. Members and users of CALIBNET have facilities to access Indian library and network resources, worldwide library catalogues, and data of national libraries of the World, electronic reference tools, newspapers and journals and provide information services. It
supports users for information services, services for library automation, manpower
development opportunities and IT applications etc.

5. Madras Library Network (MALIBNET):

The need for interconnecting libraries and information centers in Madras was visualized in 1991. MALIBNET is a registered society of Tamil Nadu Government (Reg. No. 45/1993). It was founded in 1993. Initially six major academic institutions were directly linked to the MALIBNET host system. Two important databases have been created utilizing the resources available in Madras libraries. Nearly 83 libraries are contributing actively to MALIBNET and 37 major Education / Research institutions have joined as members of MALIBNET. Directory Database of Current Serials in Madras covering 30 libraries and contents database covering articles published in 300 journals available in Madras libraries are information products brought out by MALIBNET. Both these databases are continuously updated and also expanded regularly. They are available for online- access to any user photocopies of articles from member libraries can be supplied within two days.

The main aim and objectives behind establishing network is to undertake scientific research in the field of library and documentation evolves a network of libraries and information centers in India. Establish appropriate links to national and international libraries and networks and facilitate resource sharing and information dissemination through networks. Membership of MALIBNET is open to universities, colleges, R&D institutions, industries and individuals.

6. Ahmadabad Library Network (ADINET):

ADINET is a network of libraries and information centers in Gujarat which was established in 1994. It was established by National Information System for Science and Technology (NISSAT), Department of Science and Industrial Research, Government of India, New Delhi. The main aim of ADINET is to join libraries for resource sharing. The objective is to co-ordinate with other regional and national networks, to integrate the economic, scientific and technical information system into an effective network, to provide library consultancy services, to develop databases of AV materials and institutions and to help library and information users.
The different publications like ADINET Newsletter (Quarterly), Directory of Institutions, Colleges, Universities in Ahmadabad and Gandhinagar in Gujarat, Union list of 5540 Current Journals, Current Contents for Library and Information Science (CUCOLIS), Book of papers of seminars held each year, course materials of workshops and training programs are being brought out as intellectual output.

Similarly services provided through ADINET is maintaining a database of over 5500 current periodicals which received by over 140 libraries in Ahmadabad. Document delivery and inter-library loan, library staff development programme, digitization work, organized seminars on current trends in libraries to make aware of current developments in library professionals.

All institutions, corporate houses, booksellers, libraries and information centers, individual library professionals and students are member of ADINET and taking benefit of library network based activities. ADINET is functional library network in the area of Gujarat state.

7. Mysore Library Network (MYLIBNET):

Mysore city is unique compared to any other metropolitan city due to the richness in information resources. It is also unique in a way where one can find information on many areas like food science, sericulture, speech and hearing, pharmacy, dentistry, polymer, medicine, archeology, anthropology, Indian languages and engineering at one place. Considering this uniqueness, the Mysore Library Network (MYLIBNET) was established at Mysore in the year 1995 and the Central Food Technological Research Institute (CFTRI) Mysore, being an active member of Mysore City Library Consortium (MCLC) and hosting this network in its premises. The Mysore Library Network was setup under the financial assistance from NISSAT. CFTRI is one of the premier sectoral centers of NISSAT in the area of food science and technology. With this added advantage, MYLIBNET is working closely with MCLC to promote information services in Mysore city.

There are 16 institutional members. The holding list of Mysore city libraries has been computerized and software has been developed to enable users to access the catalogue and information on-line. MYLIBNET provides e-mail facilities to its members.
MYLIBNET is also having the same objectives like other library networks in India. One of the main objectives of this network is to prepare a union catalogue of periodicals subscribed by the member libraries. Accordingly most of the library networks have been compiling the catalogue either in hard copy or in electronic form. Due to advancement in information technology, catalogue is now made available on the internet. MYLIBNET has also compiled this catalogue in the year 1996 in the machine-readable form and developed a software package for searching this catalogue either by institution name, journal title or by keywords. This software was released to its members in July 1996. MYLIBNET is organizing various programmes regularly for the benefit of library and information science professionals. Some of them are workshops.

8. Bangalore University Academic Library Network (BALNET):

Bangalore Academic Library Network (BALNET) is sponsored by JRD Tata Memorial Library, Bangalore. It was established in 1995. More than 100 Libraries are become members of this network. Bangalore University has a central library at a sprawling campus called Jnana Bharati and a Branch library in the heart of the city at the Central College campus. All the affiliated colleges have independent libraries. Libraries in this area been have already computerized and also have created bibliographical databases of their collections. BALNET developed a resource sharing model benefited to all participating libraries and avail inter-library loan and document delivery services. In the proposed model, the online union catalogue is prepared for students and faculty at the BU and any member colleges can search for required monographs, serials, conference proceedings, articles etc.

9. Developing Library Network (DELNET):

DELNET is the first operational library network in India. It was started as a project of the India International Centre in January 1988 and registered as a society in 1992. DELNET was supported by National Information System for Science and Technology (NISSAT), Department of Scientific and Industrial Research, Govt. of India. It was registered as a society in June 1992 under the Societies Registration Act of 1860 and is currently being promoted by the National Informatics Centre (NIC), Planning Commission, Govt. of India and India International Centre, New Delhi.
DELNET has been established with the prime objective of promoting resource sharing among the libraries of Delhi through the development of a network with aims to collect, store, and disseminate information besides offering computerized services to users, to coordinate efforts for suitable collection development and also to reduce unnecessary duplication wherever possible. Initially it was Delhi Library Networks but later it becomes Developing Library Networks.

DELNET has emerged as the first major operational library network in South Asia. It has more than 970 libraries as its members and includes 163 libraries in Delhi, 812 libraries outside Delhi in 30 States and Union Territories and 14 in overseas countries. DELNET maintains a Union catalogue of books and more than twenty other databases including National Bibliographic Database. DELNET offers access to more than fifty five lakh bibliographic records of books, journals, articles, CD’s through online. The databases are growing in size every day. DELNET extensively provide inter library loan and document delivery services to its member libraries. The books can be select on ILL as well as the full text of the journal articles can be arranged through DELNET. This is also most functional library network.

10. Management Library Network (MANLIBNET):

Management Libraries Network (MANLIBNET) was established for sharing of resources and information among the management libraries by fostering a spirit of cooperation and weaving these together in a networking arrangement. The primary objective of MANLIBNET is to provide a common forum to the professionals and to develop understanding and co-operation particularly among management and business libraries and the librarians. MANLIBNET promotes outstanding library practices. On professional platforms MANLIBNET tries to put in contact with current and future leaders in the library profession.

MANLIBNET was established in year 1998 at the first convention held in Ahmadabad which was jointly organized by the IIM, Ahmadabad and Ahmadabad Management Association. This was followed by a series of conventions and seminars at various places including the IMT (Ghaziabad), IIM (Lucknow), IIM (Kozhikode), XLRI (Jamshedpur), NIFM (Faridabad), Nirma University (Ahmadabad), ICSSR (Mumbai and Delhi), KIIT University (Bhubaneswar), SSIM (Secundrabad), IIHMR (Jaipur) and University of Delhi South Campus.
11. National Open and Distance Learner’s Library and Information Network (NODLIBNET):

NODLIBNET is a national network of distance learning for sharing collections, e-resources and providing services on a common platform. Currently access to the network resources is open to IGNOU student and academic community and soon be extended to state open universities and distance education institutes attached to conventional universities. Its mandated is to offer 24x7 online accesses to electronic resources anywhere anytime to authorize members of the NODLIBNET network.

NODLIBNET is a platform for libraries and information centers for Open and Distance learning system of the country and provide information resources and digitized content to its stakeholders from anywhere at any time using advanced technologies to enhance the quality of education at par with the conventional education system. The main aim is to create an integrated e-platform for scattered e-resources i.e. access to e-books/journals and digitized contents of library resources unique and relevant to target beneficiaries. This network and consortium involves all the participating institutions of the ODL State Open Universities (SOUs), Distance Education Institutes (DEIs) of conventional universities, National Institute of Open Schooling (NIOS), and IGNOU.

The inter-working of relevant accessible content from other national library network and consortia is planned to be forged to economize the efforts. The activities and services shall be on suitable architecture, technology based options, and type of infrastructure available at DLIs (Distance Learners Institutions) with a suitable model.

12. Indore Library Network (INDOLIBNET):

Indore Library Network has been designed for link and networks all the libraries available in the Indore city. The main objectives of Indore library network is resource sharing, developing forums for interaction among information professionals and helping those seeking solutions to common problems. To supports the library operation and forming Indore Library Consortia.

Increase in number of educational institutes there is a need felt to have a resource sharing between academic institutes. The idea for Indore Library & Information Network (INDOLIBNET) came up for the Indore city to utilize the resources in a better way and generate new services and professional forums for interaction among information
professionals and users. INDOLIBNET promoted better understanding among participating institutions and libraries for optimum utilization of the existing national information resources, systems and services and support exchange of information among institutions and prepare a common platform for the available information resources for better and effective usage. Network organized seminars and group discussions among professionals to offer services using IT and consortia.

**Summary:**

It is observed that the city library networks were established in different states of India due to efforts of NISSAT and UGC (DSIR/DST). The period 1991-1995 was the glorious period in which maximum networks have been established for achieving resources sharing among city libraries. The plan was to coordinate all the city network and established a national grid of information and provide services to users. But in mean time few networks like PUNENET stopped functioning and the scope restricted to city level only. After 1995 only countable networks like MANLIBNET (2000) established for management libraries. But no more progress visualized later. No doubt INFLIBNET is doing best at its level but some supporting city networks need to be developed to enhance the national activities. In the era of ICT it is now possible to develop advanced library networks easily then before. Due to ICT storing and transferring information is fast as compared to previous days in which any databases were established.

**6.10 Role of NISSAT in Resource Sharing:**

The efforts of National Information System for Science and Technology (NISSAT -1977) in this direction was appreciated as they have established national / regional information centers for specific subjects nearly at 12 places in India to strengthen the subject collection an provide information services based on charging.

NISSAT has established following national centers in India.
### Table 6.2: Information and Research Centers developed by NISSAT

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Acronym</th>
<th>Concerned Institution</th>
<th>Subject Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NICLAI</td>
<td>Central Leather Research Institute, Chennai</td>
<td>Leather Technology</td>
</tr>
<tr>
<td>2</td>
<td>NICFOS</td>
<td>National Information Centre for Food Science and Technology (NICFOS) Mysore</td>
<td>Food Technology</td>
</tr>
<tr>
<td>3</td>
<td>NICMAP</td>
<td>Central Manufacturing Technology Institute, Bangalore</td>
<td>Manufacturing Technology</td>
</tr>
<tr>
<td>4</td>
<td>NICDAP</td>
<td>Central Drugs Research Institute, Lucknow</td>
<td>Drugs and Pharmaceutical</td>
</tr>
<tr>
<td>5</td>
<td>NICTAS</td>
<td>Ahmedabad Textile Industry's Research Association, Ahmedabad</td>
<td>Textiles and Allied Subjects</td>
</tr>
<tr>
<td>6</td>
<td>NICHEM</td>
<td>National Chemical Laboratory (NCL), Pune</td>
<td>Chemicals &amp; Allied industries</td>
</tr>
<tr>
<td>7</td>
<td>NICAC</td>
<td>Central Glass and Ceramic Research Institute, Calcutta</td>
<td>Advanced Ceramics</td>
</tr>
<tr>
<td>8</td>
<td>NCB</td>
<td>National Center on Bibliometrics (NCB)</td>
<td>Bibliometrics</td>
</tr>
<tr>
<td>9</td>
<td>NICRYS</td>
<td>National Information Center for Crystallography, Madras</td>
<td>Crystallography</td>
</tr>
<tr>
<td>10</td>
<td>NICDROM</td>
<td>National Information Center on CD-ROM (NICDROM) at National Aeronautic Laboratory (NAL), Bangalore,</td>
<td>CD-ROM (Compact Disk)</td>
</tr>
<tr>
<td>11</td>
<td>NICMAR</td>
<td>National Information Center for Material and Research, Pune</td>
<td>Materials Science</td>
</tr>
<tr>
<td>12</td>
<td>NICRYS</td>
<td>National Information Center for Crystallography, Chennai</td>
<td>Materials Science</td>
</tr>
</tbody>
</table>
Table 6.3: NISSAT Access Centres to International Database Services

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Concerned Institutions</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Aerospace Laboratory</td>
<td>Bangalore</td>
</tr>
<tr>
<td>2</td>
<td>Indian Association for Cultivation of Science</td>
<td>Kolkata</td>
</tr>
<tr>
<td>3</td>
<td>Central Leather Research Institute</td>
<td>Chennai</td>
</tr>
<tr>
<td>4</td>
<td>NISCAIR</td>
<td>New Delhi</td>
</tr>
<tr>
<td>5</td>
<td>National Chemical Laboratory</td>
<td>Pune</td>
</tr>
<tr>
<td>6</td>
<td>Ahmedabad Textile Industry’s Research Association</td>
<td>Ahmadabad</td>
</tr>
<tr>
<td>7</td>
<td>Victoria Jubilee Technical Institute</td>
<td>Mumbai</td>
</tr>
<tr>
<td>8</td>
<td>Centre for Cellular and Molecular Biology</td>
<td>Hyderabad</td>
</tr>
<tr>
<td>9</td>
<td>Kerala State Industrial Development Corporation</td>
<td>Thiruvananthapuram</td>
</tr>
</tbody>
</table>

The activities of NISSAT were very essential and also assisted very well but the project of NISSAT developed by DST stopped since 2005.

Similar efforts have been made by DESIDOC, DRTC, NASSDOC, INSDOC now NISCAIR, SALIS and SATKAL.

Table 6.4: Library Association in India.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Abbreviation of Library Networks</th>
<th>Full Title of Library Networks</th>
<th>Place Located</th>
<th>Establishment Year</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ILA</td>
<td>Indian Library Association</td>
<td>New Delhi</td>
<td>1933</td>
<td><a href="http://www">http://www</a> ila india.net</td>
</tr>
<tr>
<td>3</td>
<td>DLA</td>
<td>Delhi Library Association</td>
<td>Delhi</td>
<td>1939</td>
<td><a href="http://www.dla">http://www.dla</a> india.org</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Description</td>
<td>City</td>
<td>Year</td>
<td>Website</td>
</tr>
<tr>
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<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>4</td>
<td>IASLIC</td>
<td>Indian Association of Special Libraries and Information Centers</td>
<td>Kolkata</td>
<td>1955</td>
<td><a href="http://www.iaslic1955.org.in">http://www.iaslic1955.org.in</a></td>
</tr>
<tr>
<td>5</td>
<td>DESIDOC</td>
<td>Defense Scientific Information and Documentation Centre</td>
<td>New Delhi</td>
<td>1958</td>
<td><a href="http://drdo.gov.in/drdo">http://drdo.gov.in/drdo</a></td>
</tr>
<tr>
<td>7</td>
<td>DRTC</td>
<td>Documentation Research and Training Centre</td>
<td>Bangalore</td>
<td>1962</td>
<td><a href="http://drtc.isi.bang.ac.in/DRTC/">http://drtc.isi.bang.ac.in/DRTC/</a></td>
</tr>
<tr>
<td>8</td>
<td>NASSDOC</td>
<td>National Social Science Documentation Center</td>
<td>New Delhi</td>
<td>1969</td>
<td><a href="http://www.icssr.org">http://www.icssr.org</a></td>
</tr>
<tr>
<td>9</td>
<td>NCSI</td>
<td>National Center for Science Information</td>
<td>Bangalore</td>
<td>1983</td>
<td><a href="http://ncsinet.org/ncsi">http://ncsinet.org/ncsi</a></td>
</tr>
<tr>
<td>10</td>
<td>NISCAIR</td>
<td>SAARC Documentation Centre</td>
<td>New Delhi</td>
<td>2002</td>
<td><a href="http://www.sdc.gov.in">http://www.sdc.gov.in</a></td>
</tr>
<tr>
<td>11</td>
<td>SALIS</td>
<td>Society for Advancement of Library and Information Science</td>
<td>Chennai</td>
<td>2002</td>
<td><a href="http://autolib-india.net/salis/salis-about.asp">http://autolib-india.net/salis/salis-about.asp</a></td>
</tr>
<tr>
<td>12</td>
<td>SATKAL</td>
<td>Satinder Kaur Ramdev Memorial Trust for Advancement of Leadership</td>
<td>Chandigarh</td>
<td>2000</td>
<td><a href="http://www.satkal.org/SATKAL-INDEX/">http://www.satkal.org/SATKAL-INDEX/</a></td>
</tr>
</tbody>
</table>
These organizations made efforts towards resource sharing by developing information centers at their institutional level and made efforts towards sharing resources. Viz.

- DESIDOC - for DRDO Laboratories
- NISCAIR (INSDOC) - for CSIR Laboratories
- NASSDOC - for Social Science Academics
- DRTC - for Library and Information Science
- SALIS - for Library and Information Science
- SATKAL - for Library Professionals

In recent period IIM, IISC, IISER made efforts in coordinating resource sharing activities at their institutional digital libraries by establishing or joining consortium ventures.

6.11 Role of Indian Library Associations in India:

Apart from library networks few library associations in India also made efforts and shared the resource sharing task by acting as information providers from their centers. Library associations in India also supported to resource sharing by developing are windows services to users. They provide the services to users. The library associations Delhi library associations, IASLIC, ILA, KLA, MALA, SIS, IATLIS and national library of India made maximum efforts towards resource sharing.

Thus the progress of resource sharing initiated in Indian scenario and now currently in the ICT era. It is observed that new methods of resource sharing have been introduced by means of consortia practices. The efforts of CSIR, UGC, IIM, IIT, ISIISER, Astronomy, Astrophysics, ICMR, ICAR etc also developed consortia for achieving economy in subscribing to e-resources further development of institutional repository at different educational and academic level developed resource sharing activities by compiling full text literature published by them.

6.12 International Association and Networks:

Library association working at international level has made maximum efforts to achieve resource sharing. International library association listed in Table 6.5 are prominent in providing user services based on sharing resources from local and international libraries.
### Table 6.5: International Library Associations and Networks

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Abbreviation of Library Networks</th>
<th>Full Title of Library Associations</th>
<th>Place Located</th>
<th>Establishment Year</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ALA</td>
<td>American Library Association</td>
<td>United States</td>
<td>1876</td>
<td><a href="http://www.ala.org/">http://www.ala.org/</a></td>
</tr>
<tr>
<td>2</td>
<td>SLA</td>
<td>Special Library Association</td>
<td>United States</td>
<td>1909</td>
<td><a href="http://www.sla.org">http://www.sla.org</a></td>
</tr>
<tr>
<td>3</td>
<td>ALISE</td>
<td>Association for Library and Information Science Education</td>
<td>Chicago</td>
<td>1915</td>
<td><a href="http://www.alise.org/">www.alise.org/</a></td>
</tr>
<tr>
<td>4</td>
<td>ASLIB</td>
<td>Association for Information Management</td>
<td>United Kingdom</td>
<td>1924</td>
<td><a href="http://www.aslib.co.uk">www.aslib.co.uk</a></td>
</tr>
<tr>
<td>5</td>
<td>IFLA</td>
<td>International Federation of Library Associations and Institutions</td>
<td>Scotland</td>
<td>1927</td>
<td><a href="http://www.ifla.org">www.ifla.org</a></td>
</tr>
<tr>
<td>6</td>
<td>ASIST</td>
<td>American Society for Information Science Technology</td>
<td>USA</td>
<td>1937</td>
<td><a href="https://www.asis.org/">https://www.asis.org/</a></td>
</tr>
<tr>
<td>7</td>
<td>ALIA</td>
<td>Australian Library and Information Association</td>
<td>Australia</td>
<td>1937</td>
<td><a href="http://www.alia.org.au">www.alia.org.au</a></td>
</tr>
<tr>
<td>8</td>
<td>SCURL</td>
<td>Scottish Confederation of University and Research Libraries</td>
<td>Scotland</td>
<td>1950</td>
<td><a href="http://www.scurl.ac.uk">www.scurl.ac.uk</a></td>
</tr>
<tr>
<td>9</td>
<td>SCONUL</td>
<td>Society of College, National and University Libraries</td>
<td>UK</td>
<td>1950</td>
<td><a href="http://www.sconul.ac.uk">www.sconul.ac.uk</a></td>
</tr>
<tr>
<td>10</td>
<td>IATUL</td>
<td>International Association of Technological University</td>
<td>Germany</td>
<td>1955</td>
<td><a href="http://www.iatul.org">www.iatul.org</a></td>
</tr>
<tr>
<td>No.</td>
<td>Libraries</td>
<td>Europe</td>
<td>1967</td>
<td><a href="http://www.oclc.org">www.oclc.org</a></td>
<td></td>
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<td>--------------</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>OCLC Online Computer Library Center</td>
<td>Europe</td>
<td>1967</td>
<td><a href="http://www.oclc.org">www.oclc.org</a></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>ALPSP Association of Learned and Professional Society Publishers</td>
<td>UK</td>
<td>1972</td>
<td><a href="http://www.alpsp.org">www.alpsp.org</a></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>CNI Coalition for Networked Information</td>
<td>Washington</td>
<td>1990</td>
<td><a href="http://www.cni.org">www.cni.org</a></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>JISC Joint Information Systems Committee</td>
<td>United Kingdom</td>
<td>1993</td>
<td><a href="http://www.jisc.ac.uk">www.jisc.ac.uk</a></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>ILIAC International Library Information and Analytical Center</td>
<td>Washington</td>
<td>1997</td>
<td><a href="http://www.iliac.org">www.iliac.org</a></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>CILIP Chartered Institute of Library and Information Professionals</td>
<td>UK</td>
<td>2002</td>
<td><a href="http://www.cilip.org.uk/Pages/default.aspx">http://www.cilip.org.uk/Pages/default.aspx</a></td>
<td></td>
</tr>
</tbody>
</table>

The brief activity of each association is narrated below:

1. **American Library Association (ALA):**

   The American Library Association (ALA) is a non-profit organization in United States in 1876 and promotes libraries and library education internationally. It is the oldest and largest library association in the world with more than 62,000 members. The main purpose of the association is "to promote library service and librarianship." Members may also join any of seventeen round tables that are grouped around more specific interests and issues than the broader set of ALA divisions.
2. Special Library Association (SLA):

Special Libraries Association (SLA) is an international professional association for library and information professionals working in business, government, law, finance, non-profit and academic organizations and institutions. SLA was established in 1909 in the United States. It is now an international organization with over 9,000 members in over 75 countries.

While special libraries include law libraries, news libraries, corporate libraries, museum libraries, medical libraries, and transportation libraries many information professionals today do not actually work in a library setting. They actively apply their specialized skills to support the information needs of their organizations. Members of SLA typically possess a master's degree in library or information science. Given the rapid adoption of information technologies for selecting, analyzing, managing, storing, delivering information and knowledge the average SLA member might be performing a range of services and employing a diverse mix of skills related to but not exclusive of library science. Association activities include conferences, professional education, networking and advocacy.

3. Association for Library and Information Science Education (ALISE):

Association for Library and Information Science Education (ALISE) was founded as the Association of American Library Schools. The original association grew out of a series of informal meetings of library school faculty at American Library Association (ALA) conferences which was known as the Round Table of Library School Instructors. The Round Table voted in 1915 to form a permanent organization and to be identified as the Association of American Library Schools. The association has provided a forum for library educators to share ideas, to discuss issues and to seek solutions to common problems. In 1983 the association changed its name to its present form to reflect more accurately the mission, goals, and membership of the association.

4. Association for Information Management (ASLIB):

ASLIB serve information professionals and librarians across all sectors. ASLIB supports members to enhance their own performance through the provision of comprehensive resources, specialist training, communities of practice, advice and international networking. ASLIB has a key focus on presenting essential reading and services for busy
information professionals, translating research and policy for application. ASLIB provides expertise in information governance, management and the development of procedures and skills to steer organizations successfully in these areas.

5. International Federation of Library Associations and Institutions (IFLA):

The International Federation of Library Associations and Institutions (IFLA) is a leading international association of library organizations. It is a global voice of the library and information profession, and its annual conference provides a venue for librarians to learn from one another. The IFLA forum promotes international cooperation, research and development in all fields related to library activities. A very important and close partner of the IFLA is UNESCO. Several of the manifestos prepared by committees of the IFLA and have been recognized as UNESCO manifestos. IFLA is part of the International Committee of the Blue Shield (ICBS), which works to protect the world's cultural heritage threatened by wars and natural disaster. IFLA was founded in Edinburgh, Scotland, in 1927. IFLA has now grown to over 1,600 members in approximately 150 countries. It is headquartered in the Koninklijke Bibliotheek, the national library of the Netherlands, in The Hague. The objectives of IFLA are to represent librarianship in matters of international interest, to promote the continuing education of library personnel, to develop, maintain and promote guidelines for library services. IFLA Journal, Annual Report, IFLA Publication Series, IFLA Professional Reports are the publications of IFLA.

6. American Society for Information Science Technology (ASIST):

The American Society for Information Science and Technology (ASIST) is a non-profit membership organization for information professionals. Established in 1937 as American Documentation Institute, the organization sponsors an annual conference as well as several serial publications, including the Journal of the American Society for Information Science and Technology (JASIST) and the Society Bulletin. The Society has special-interest groups or SIGs which provides administration for geographically defined chapters connects job seekers with potential employers and provides organizational support for continuing education programs for information professionals.

7. Australian Library and Information Association (ALIA):

The Australian Library and Information Association (ALIA) is the peak professional organization for the Australian library and information services sector. Established in
1937 as the Australian Institute of Librarians, the association assumed the title of the Library Association of Australia in 1949 and in 1989 adopted the new name of the Australian Library and Information Association in recognition of the broadening scope of the profession. The association is governed by a constitution and is guided by a vision, mission, objects and values.

8. Scottish Confederation of University and Research Libraries (SCURL): 

Scottish Confederation of University and Research Libraries (SCURL) collaborate on behalf of Scottish Higher Education and Research Libraries achieving best value for the investment on content for the benefit of our users. Collections sharing, electronic content licensing, electronic content loading/presentation, storage facilities and training are the main functions of SCURL. With this collaborative professional development opportunities for our colleagues, collection management policies for Scottish academic and research libraries, disaster and business recovery community of practice, Library Services Platform Task Force investigating potential for one LMS for SCURL members, Scottish Metadata Platform Group, Open Access Working Group and Scottish Higher Education Digital Library are few important functions of SCURL.


SCONUL (Society of College, National and University Libraries) is the membership organization for all academic and national libraries in the UK and Ireland. SCONUL was established in 1950 as the Standing Conference of National and University Libraries. In 1994 when British polytechnics became universities it merged with COPOL, the Council of Polytechnic Librarians, and in 2001 it extended its membership to libraries of colleges of higher education and changed to its current name. The current membership of SCURL comprises the Scottish University and HEI libraries, the two major public reference libraries in Glasgow and Edinburgh, the National Library of Scotland, National Museums Scotland, and the Open University. SCONUL’s activities include advocacy for the higher education library community, training and sharing best practice, making arrangements for reciprocal access to libraries, and the collection of statistics. The Society of College, National and University Libraries (SCONUL) represents all university libraries in the UK and Ireland, irrespective of mission group as well as national libraries and many of the UK’s colleges of higher education.
SCONUL promotes awareness of the role of academic libraries in supporting research excellence and student achievement and employability and represents their views, interests to government, regulators and other stakeholders. It helps academic libraries collaborate to deliver services efficiently, including through shared services, to share knowledge and best practice.

10. International Association of Technological University Libraries (IATUL):

The International Association of Technological University Libraries (IATUL) was established in Düsseldorf, Germany in May 1955, as an international forum for the exchange of ideas relevant to librarianship in technological universities throughout the world. IATUL is a voluntary international non-governmental organization of a group of libraries, represented by their library directors or senior managers, who have responsibility for information services and resources management. The expanded name of IATUL was changed to the International Association of Scientific and Technological University Libraries in 2009 General Assembly to reflect the broader range of institutions which now make up the membership of the association. IATUL is an excellent example of the development of an effective informal international network between libraries of similar type, with a common high level of professional expertise and offering a similar range of services to their users. The main objective of IATUL is to provide a forum where library directors and senior managers can meet to exchange views on matters of current significance and to provide an opportunity for them to develop a collaborative approach to solving problems.

11. Online Computer Library Center (OCLC):

Online Computer Library Center, Inc. (OCLC) is a nonprofit membership computer library service and research organization dedicated to the public purposes of furthering access to the world’s information and reducing information costs. Established in 1967 as the Ohio College Library Center, OCLC and its member libraries cooperatively produce and maintain WorldCat, the largest Online Public Access Catalog (OPAC) in the world. OCLC provides bibliographic, abstract and full-text information to anyone.

OCLC database contains records in Machine Readable Cataloging (MARC) format contributed by library catalogers worldwide who use OCLC as a cataloging tool. These MARC format records are then downloaded into the libraries local catalog systems. This
allows libraries to find and download records for materials to add to their local catalog without the lengthy process of cataloging each individually.


The Association of Learned and Professional Society Publishers (ALPSP) is an international trade association of non-profit publishers created in 1972 with 24 society members. It is the largest association of scholarly and professional publishers in the world and claiming "more than 360 members in 36 countries". This association was granted in 2004 the International Information Industry Award. The association has committees on copyright, marketing, professional education and training and electronic developments. Recent work has included policies and practice in online publishing. The main aim of this association is to serve, represent and strengthen the community of scholarly publishers and those who work with them. ALPSP provides information, education, representation, cooperative initiatives and guidelines for good practice. ALPSP always conducts different activities like training, seminars, webinars etc.

13. National Forum on Information Literacy (NFIL):

The National Forum on Information Literacy (NFIL) was created in 1989 as a response to the recommendations of the American Library Association’s Presidential Committee on Information Literacy. These education library and business leaders stated that no other change in American society has offered greater challenges than the emergence of the information age. The mission of the National Forum on Information Literacy is to mainstream information literacy philosophy and practices throughout every sector of American society. Information is expanding at an unprecedented rate and enormously rapid strides are being made in the information and communication technology universe for storing, organizing and accessing the ever-growing tidal wave of information. The combined effect of these factors is an increasingly fragmented information base a large component of which is available only to people with money and/or acceptable institutional affiliations. In the recent past the outcome of these challenges has been characterized as the “digital divide”.


The Coalition for Networked Information (CNI) is an organization whose mission is to promote networked information technology as a way to further the advancement of
intellectual collaboration and productivity. The Coalition for Networked Information (CNI) is a joint initiative of the Association of Research Libraries (ARL) and EDUCAUSE. It was established in 1990 CNI works on a broad array of issues related to the development and use of digital information in the research and education communities. CNI fosters connections and collaboration between library and information technology communities, representing the interests of a wide range of member organizations from higher education, publishing, networking and telecommunications, information technology, government agencies, foundations, museums, libraries and library organizations. Paul Evan Peters was the founding Executive Director.

15. Joint Information Systems Committee (JISC):

JISC (formerly the Joint Information Systems Committee) is a United Kingdom non-departmental public body whose role is to support post-16 and higher education and research, by providing leadership in the use of ICT in learning, teaching, research and administration.

JISC was established on 1st April 1993 under the terms of letters of guidance from the Secretaries of State to the newly-established Higher Education Funding Councils for England, Scotland and Wales, inviting them to establish a Joint Committee to deal with networking and specialist information services. JISC was to provide national vision and leadership for the benefit of the entire higher education sector. The organization inherited the functions of the Information Systems Committee (ISC) and the computer board which had served universities. JISC supports the development of innovative uses of ICT helping the education and research communities to exploit the full potential of information technologies.

16. Council on Library and Information Resources (CLIR):

The Council on Library and Information Resources (CLIR) was created in 1997 through the merger of the Council on Library Resources and the Commission on preservation and access. To understand CLIR, one must first look at its two parent organizations. The Council on Library and Information Resources is an independent, nonprofit organization that forges strategies to enhance research, teaching and learning environments in collaboration with libraries, cultural institutions and communities of higher learning. CLIR aspires to transform the information landscape to support the advancement of
knowledge. CLIR promotes collaborative solutions that transcend disciplinary, institutional, professional and geographic boundaries in support of the public good.

17. International Library Information and Analytical Center (ILIAC):

International Library Information and Analytical Center (ILIAC) is a non-profit US-based corporation of international status set up to contribute to the development of educational, scientific, cultural and business cooperation between Russia, CIS, USA and other countries. ILIAC is an information gateway to Russia and the CIS countries for the American public primarily in library and information field but also in wider areas of culture science and education.

ILIAC is an associative member of the International Federation of Library Associations and Institutions a member of the International Association of Users and Developers of Electronic Libraries and New Information Technologies (ELNIT) a co organizer of major international conferences “CRIMEA” and “LIBCOM” in library-information sphere.

Its mission is to ensure efficient and multidimensional international cooperation in library and information field, to contribute to the development of science-tech, cultural and educational links between Russia, CIS, USA and other countries. Organization of international professional research, study and training programs on current problems of library information and publishing business, web technologies, legal and other aspects of the information society development serving as a multi-purpose clearing house and gateway to library and information resources of Russia.

18. Chartered Institute of Library and Information Professionals (CILIP):

The Chartered Institute of Library and Information Professionals (CILIP) is the leading professional body for librarians, information specialists and knowledge managers in the United Kingdom. CILIP’s vision is a fair and economically prosperous society underpinned by literacy, access to information and the transfer of knowledge. CILIP has approximately 15,000 members (May, 2012). It is established in 2002 by the merger of the library association.

6.13 Library Consortia - Trends in Resource Sharing:

In the era of information explosion and ICT development of digital libraries, research and development activities all over the world are now trying to satisfy the information need of
users by developing consortium. According to users demands of information libraries need to share their resources with each other. Resource sharing is based on networking of resources and sharing them. Use of internet is essential part of resource sharing.

Library consortia are a new trend for sharing resources among the participant’s libraries. Library consortium development is based on library type academic, special, public etc. A consortium is an agreement, a common platform, aiming to reduce costs per unit through or group of libraries formatting consortia. A consortium is an association of two or more individuals, companies, organizations or governments with the objective of participating in a common activity or pooling their resources for archiving common goal. Consortium is a Latin word, meaning partnership, association or society and derives from consors partner itself from con-together and sors ‘fate’, meaning owner of means or comrade.

According to Wikipedia, the free encyclopedia, A library consortium is a group of libraries that partner to coordinate activities, share resources, and combine expertise. The international coalition of library consortia is an informal discussion group of such consortia. Library consortia concepts came first time from academic libraries for the sharing printed and e-resources materials. Recently academic libraries are having consortia to provide common access to electrical resources across the internet and they are forming these consortia on a statewide basis library. This task is very difficult for single library however by forming a consortium among libraries. It becomes possible to purchase in stabilized and reasonable prices.

A library consortia can be at local, state, national and inter-institutional levels for making the resources and services available both within the premises of members and outside for the benefit of members. There are a number of basic issues that consortia members should be aware of like number of participants in the consortium, security methods, pricing formula, and negotiation for consortia which may differ according to the setup. Successful consortia exist to expand further the mission of member- institutions by strengthening them.

6.13.1 Types of Consortia:

A wide variety of consortia exists presently all over the world ranging from very simple to very complex organizations. The different patterns that are found in the nature of the consortia are narrated in Figure 6.1
Figure 6.1 Types of Consortium

**OPEN CONSORTIUM**
Generally homogeneous in nature and require sharing of the resources in specific subject area
Ex. INDEST consortium of MHRD

**CLOSED CONSORTIUM**
Formed by coalition, affiliation and collaboration among exclusive member libraries
Ex. CSIR, DAE

**CENTRALLY FUNDED**
A parent body has the financial responsibility
Ex. UGC-INFONET

**SHARED BUDGET**
Management of funds are handled individually by the member libraries
Ex. FORSA

**PUBLISHERS’ INITIATIVE**
Certain publishers are also encouraging consortium formation by giving high discount to the member libraries
Ex. Emeralds’ publishing group, Elsevier’s science Direct

**NATIONAL CONSORTIUM**
It includes member libraries from one country
Ex. INFLIBNET

**INTERNATIONAL CONSORTIUM**
This is a model perceived at international level
Ex. OhioLink, VIVA, SUNY connect, in USA, CONCERT in Taiwan.
Table 6.6 Library Consortia

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Consortium</th>
<th>Name of Organization</th>
<th>Place and Area</th>
<th>Year of Establishment</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICMR</td>
<td>Indian Council of Medical Research</td>
<td>New Delhi Medical</td>
<td>1911</td>
<td><a href="http://icmr.nic.in/icmrnews/e">http://icmr.nic.in/icmrnews/e</a> Consortia.htm</td>
</tr>
<tr>
<td>2</td>
<td>CSIR</td>
<td>Council of Scientific and Industrial Research</td>
<td>New Delhi S&amp;T</td>
<td>1942</td>
<td><a href="http://www.csir.res.in/">www.csir.res.in/</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Astrophysics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Consortia</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7</td>
<td>HELINET</td>
<td>Health Sciences Library &amp; Information Network</td>
<td>Karnataka Medical</td>
<td>1994</td>
<td><a href="http://www.rguhs.ac.in/hn/newhell.html">http://www.rguhs.ac.in/hn/newhell.html</a></td>
</tr>
<tr>
<td>8</td>
<td>INDEST-AICTE</td>
<td>Indian National Digital Library in Engineering Sciences and Technology</td>
<td>New Delhi Engineering</td>
<td>2003</td>
<td><a href="http://paniiit.iitd.ac.in/dest/">http://paniiit.iitd.ac.in/dest/</a></td>
</tr>
</tbody>
</table>
1. Indian Council of Medical Research (ICMR):

The council has under taken many new initiatives like subscribing to JCC@ICMR and full text electronic databases i.e. ProQuest. To keep pace with the rapidly changing information technology scenario, the council entered into the e-journal arena through developing an e-journal consortium. In phase–I of this activity, the ICMR has identified five core bio-medical journals and subscribed for e-version in consortia mode to all ICMR institutes. These include Lancet, Science, BMJ, NEJM and Nature. E-journal consortium is beneficial for cross sharing of information among the ICMR Institutes. ICMR library has taken a major project of a compilation of the union catalogue of journals available in ICMR Libraries in the year 2001. This union catalogue of journals in ICMR libraries would help serve scientists working in ICMR for quickly accessing information on all the journals subscribed by the ICMR.

2. Council of Scientific and Industrial Research (CSIR):

CSIR is established in 1942, is an autonomous body under the provision of the registration of societies ACT XXI of 1860. CSIR is India's largest Research and Development (R&D) organization. CSIR is mainly funded by the Ministry of Science and Technology. The Research and Development activities of CSIR includes various fields such as aerospace engineering, structural engineering, ocean sciences, life science, metallurgy, chemicals, mining, food, petroleum, leather and environment.


The Forum for Resource Sharing in Astronomy & Astrophysics (FORSA) came into existence in the year 1982 for sharing the resources available in astronomy libraries in the country. In 2004 this group has extended its membership to Physics and Mathematics libraries in the country who have common interests to carry forward the aim of FORSA and its activities. Currently FORSA has twelve members and it works towards the goals and services which the founder members have started.
4. UGC-DAE Consortium for Scientific Research (UGC-DAE):

UGC-DAE was created in the year 1990 with the broad objective of developing competence and promoting research in front line areas of science and technology in Indian universities by providing institutional framework for optimum utilization of major research facilities established by the department of Atomic Energy such as Dhruv Reactor of Mumbai, VECC at Kolkata and Synchrotron Radiation Sources at Indore. The facilities of IUC can be availed by scientists from any university. UGC-DAE consortium for Scientific Research located in Indore, India has three centres Mumbai (Maharashtra), Kolkata (West Bengal), Kalpakkam (Tamilnadu). It was formerly known as Inter University Consortium for DAE facilities.

5. Indian Institute of Management (IIM) Library Consortia:

IIM library consortia is a digital library network system based on internet technology to provided the IIM community (faculty, students and staff) an online web enabled access to the information resources available in all the IIMs without any barriers of time and distance. It will be a simple, efficient and cost effective system. The basic operating principle of this system is decentralized acquisition, decentralized processing and centralized utilization. IIM/INDEST consortia have the distinction of representation of almost all major publishers in the field of Management such as Elsevier, Kluwer, John Wiley, Blackwell, Taylor & Francis, and MCB University Press (Emerald Full-Text Intelligent Library). Also world renowned aggregators such as EBSCO and PROQUEST and a number of corporate information content providers/vendors participate in the consortium. The end result has been highly praiseworthy, that over 1050 E-journals directly are sourced from various publishers and over 10000 aggregated full-text E-Journals. IIMs are able to get online access across all the campuses by paying a nominal additional amount.

6. Indian Space Research Organization (ISRO):

Indian Space programme started for promoting space activities in the country and concentrated on achieving self reliance and developing capability to build and launch communication satellites for television broadcast, telecommunications and meteorological applications remote sensing satellites for management of natural resources.
The objective of ISRO is to develop space technology and its application to various national tasks. Accordingly Indian Space Research Organisation (ISRO) has successfully operationalised two major satellite systems namely Indian National Satellites (INSAT) for communication services and Indian Remote Sensing (IRS) satellites for management of natural resources also Polar Satellite Launch Vehicle (PSLV) for launching IRS type of satellites and Geostationary Satellite Launch Vehicle (GSLV) for launching INSAT type of satellites.

7. Health Sciences Library & Information Network (HELINET):

It is hosted by Rajiv Gandhi University of Health Science, Bangalore. It is the first medical consortia launched in the country. The main objective of network the libraries affiliated to the university to promote resource sharing especially with reference to international medical journal and databases. HETNET is the first resource sharing network and e-journal consortium in the medical education sector. The main goal of HELINET is to deliver information to user’s desktop with round-the-clock access.


The Ministry of Human Resource Development (MHRD) has set-up the Indian National Digital Library in Engineering Sciences and Technology (INDEST) consortium on the recommendation made by the expert group appointed by the ministry under the chairmanship of Prof. N. Balakrishnan. The Ministry provides funds required for subscription to electronic resources for institutions including IISc, IITs, NITs, IIMs and a few other centrally-funded Government institutions through the consortium headquarters set-up at the IIT Delhi. Besides, Government of Government-aided engineering colleges and technical departments in universities have joined the consortium with financial support from the AICTE. Moreover the INDEST-AICTE consortium as an open-ended proposition, welcomes other institutions to join it on their own for sharing benefits it offers in terms of highly discounted rates of subscription and better terms of agreement with the publishers. All electronic resources being subscribed are available from the publisher’s website. The consortium has an active mailing list and a website hosted at the IIT Delhi.
9. INFONET Digital Library Consortium (UGC-INFONET):

The UGC-INFONET Digital Library Consortium was formally launched in December 2003 after providing the internet connectivity to the universities under the UGC-INFONET programme. The consortium proved to be a recipe to university libraries which have been discontinuing subscription of scholarly journals because of ‘Serials Crisis’. The term ‘Serials Crisis’ refers to exponential and continuing increase in subscription cost of scholarly journals. The crisis is a result of rise in cost of journals much faster than the rate of inflation, increase in number of journals and the paucity of funds available to the libraries.

The consortium provides current as well as archival access to more than 7000+ core and peer-reviewed journals and 10 bibliographic databases from 26 publishers and aggregators in different disciplines. In the first phase that began in 2004 access to e-resources was provided to 50 universities who had internet connectivity under the UGC-INFONET connectivity programme of the UGC. In the second phase, 50 more universities were added to the programme in the year 2005. So far 160 Universities out of 181 that come under the purview of UGC have been provided differential access to subscribed e-resources. These e-resources covers almost all subject disciplines including arts, humanities, social sciences, physical sciences, chemical sciences, life sciences, computer sciences, mathematics and statistics etc. The programme is wholly funded by the UGC and executed by the INFLIBNET (Information and Library Network) Centre, Ahmadabad.

10. Industrial Credit and Investment Corporation of India (ICICI) Knowledge Park:

ICICI Knowledge Park is the joint venture of the government of Andhra Pradesh. Industrial Credit and Investment Corporation of India (ICICI), Hyderabad aimed at offering state of art infrastructure and facilitating collaborative research and knowledge share in the area of biotechnology, bulk drugs, pharmaceuticals, information technology (hardware), agro industries and new materials. The new ICICI Knowledge Park in Hyderabad offers world-class infrastructure and also support facilities for business driven research in India, a country that offers an inexpensive source of knowledge workers the Industrial Credit and Investment Corporation of India claims. The park also seeks to build
a knowledge network to facilitate collaborative research and knowledge sharing with world-renowned academic and research organizations in the country.

Library consortia are providing physical and electronic document delivery of materials and integrating the collection development process. Consortia are tools which aids in exploiting the features of the e-resources as well as in effecting savings.

**Summary:**

The world has been witnessing a knowledge and information explosion during the past decades. Information technology is evolving at a rapid pace worldwide to cater to the need for providing information in any form at anywhere. Access to information holds the key to development. While there is a deluge of information on one hand, the cost of collecting, processing, storing and disseminating information has been spiraling up on the other hand. Because of this resource sharing and co-operative functioning through networking have become inescapable for libraries and information centers worldwide.

They are trying to form a larger community in an effort to take the ever increasing demands for better services. This was resulted in discernible change in the information scenario. Library and information activities have entered in new era. Today information and communication technology (ICT) has made resource sharing a reality. In fact networking of libraries is a crucial factor in today’s ICT era. It has extended the mutual co-operation, fast retrieval of information and efficient service among the libraries. Resource sharing and networking is a great boon in which needs to be implemented progressively and professionally. This initiative generated optimum satisfaction among users and also save considerable national resources.

It is noticed that after networking of libraries and internet facilitates made it now possible to develop consortium. But consortia are limited at higher level or institute or organizational level. But an effort to network local group of libraries is need of present time. An effort towards this direction is required and researcher tried to cover in the present study.
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