

## LIBRARY CONSORTIA: A BOOST UP FOR RESOURCE SHARING



**Babita Jaiswal**

Assistant Professor , Dept of Library and Information Science  
University of Lucknow ,Lucknow .

### Co-Author Details :

**Noushia Parveen**

Junior Research Fellow , Dept of Library and Information Science , University of Lucknow , Lucknow.



### ABSTRACT:

Due to increase in the cost of resources and lack of the sufficient finance of the academic, the phenomenal growth of information and the need for its organization, access and delivery have necessitated the growth of library consortia. Library consortia are the emerging concept in library cooperation field and emphasis on sharing of resources among participant libraries. Present paper describes a brief account of the concept of library consortia and discusses its feature, advantages and limitations.

### KEYWORDS

*Library Consortia, Resources Sharing, Library Cooperation.*

### INTRODUCTION :

Information is considered as a vital resource for communication or dissemination of knowledge of one individual to another from the very early stage of human civilization. It is the basis of education and is an essential ingredient for new ideas. For effective use of information, it is necessary that it should be shared. The tremendous information revolution and proliferation have brought about drastic changes to the function and services in all type of libraries in India during last two decades.

Many libraries in India, till today are not in a position to afford, to procure all documents and subscribe to core journals in major disciplines or CD ROM databases. Recent developments in library funding and the growth in importance of electronic materials have led to a change in thinking about libraries cooperation and the growth of a formal cooperative body. Co-operation can take place either at local, national or international level. The study of Nagarjuna (2005) explained that cooperation for information; resource sharing is a well beaten track for information professionals though sometimes it has been referred to a library networking or library resource sharing.

Resource sharing in libraries is not a new concept. It has long been used to improve access and service through borrowing and lending from other libraries. Cooperation and sharing have been transformed by information technology and the move from print to digital environment. Primary purpose of establishing a Library Consortium is to share physical resources including books and periodicals, among members. However increasing number of publishers is using the internet as a global way to offer their publications to the international community of scientist. Many Library Consortia were created as part of larger academic cooperative groups, where the universities included libraries in a larger agreement between two or more institutions. Other Library Consortia require that the parent institution, not the library, be the official member, with all activity and governance generally delegated to the library.

### Concepts of Consortia

The concept of consortium perhaps originated or evolved from the concept of cooperation, coordination and collaboration. Consortium is originated from Latin word "Conсор" where con indicates the meaning of together and "sor" describes meaning of partnership, association or society. The published literature indicates that the concept is not new and it refers to co-operation, co-ordination and collaboration between libraries for the purpose of sharing information. A consortium could be described as a group of organizations who come together to fulfill a combined objective that usefully requires co-operation and the sharing of resources and need to have a clear mutual goal in order to ensure their success. Library Consortia development processes were examined from an ecological approach, combining historical perspective, dynamic developmental approach, and social structure, stressing the issues of permeable boundaries in Library Consortia and the manifestation of inter-organization relationships. Shachaf (2003) worked on that Library Consortia, a new kind of library cooperation, were created as a spontaneous reaction to the journals crisis and the new e-Environment. A Library Consortium formation can be local, regional, state, national and inter institutional level. Library Consortia development processes were examined from an ecological approach, combining historical perspective, dynamic developmental approach and social structure, stressing the issues of permeable boundaries in Library Consortia and the manifestation of inter-organization relationships.

## Definitions of Library Consortia

According to Merriam Webster Dictionary, “Consortium is an agreement, combination or group as of companies, formed to undertake an enterprise beyond the resources of any one member”.

Cambridge online dictionary, defined “Consortium is an organization of several business or banks, joining as a group for a shared purpose”.

Aldrich, Bolton and Sasaki (1998) assessed the meaning that “Consortia usually involve horizontal collaboration among direct competitors”.

## Why is Library Consortia

Ramireddy (2011) Library Consortium is a group of two or more libraries that have agreed to cooperate with each other in order to fulfill certain similar needs, usually resource sharing. Traditionally, library cooperation meant sharing collections in some way, but it could also include sharing of services, or of processes such as joint cataloging of materials, or of staff and user training.

•**Information explosion:** The explosion of information in multidimensional form and voluminous development has urged the libraries to adopt new philosophies and technologies for collection development and reduce costs of information. Today society is suffering from information explosion, where it has become difficult to understand what is right or wrong. Information is exploiting in many forms and it is impossible to acquire all the form for any individual library. In that case it has become essential to acquire resources through Library Consortia.

•**Diversity of user needs:** Requirement of user is ever growing and varies from user to user. Users have different nature and taste. They need a wide spectrum of information due to information explosion, presence of multi-discipline, specialization of subjects etc. It is difficult to acquire all the martial required by user so as to fulfill their individual requirement No library can meet their demands with their own resources. Library can share the resources via Consortia for its fulfillment.

•**Professionalization of library services:** Role of library professionals has been changed from mere conservator to facilitator of knowledge. Major functions of a librarian are to identify, select, procure, organize, preserve and disseminate information. Rapid changes have taken place in all the areas. It has posed great challenge for librarians to remain at the frontline of the profession.

•**Financial crunch:** Today most of the libraries are faced with economic problems and suffering from financial crises, especially in developing countries to collect all the new generated information and to satisfy the high degree of aspiration for knowledge of the users. It has to acquire all the resources in limited funds. Library Consortia can solve this problem up to the limit. Cooperative efforts usually an economic motivation and that incentive continue today.

•**Rapid technological developments:** Rapid technological development has resulted in a constant pressure for new hardware, software and education trading of library staff which requires a cooperative venture. The rapid progress of information technology through research and development activities all over the world, now tries to satisfy the information need of human being in diverse manner.

•**Impossibility of self-sufficiency:** Information demand of the user to a greater extent is beyond the control of the capacity of librarians, much of the exercise rests on the input resources and it becomes impossible to be self sufficient by the library.

### Features of Library Consortia

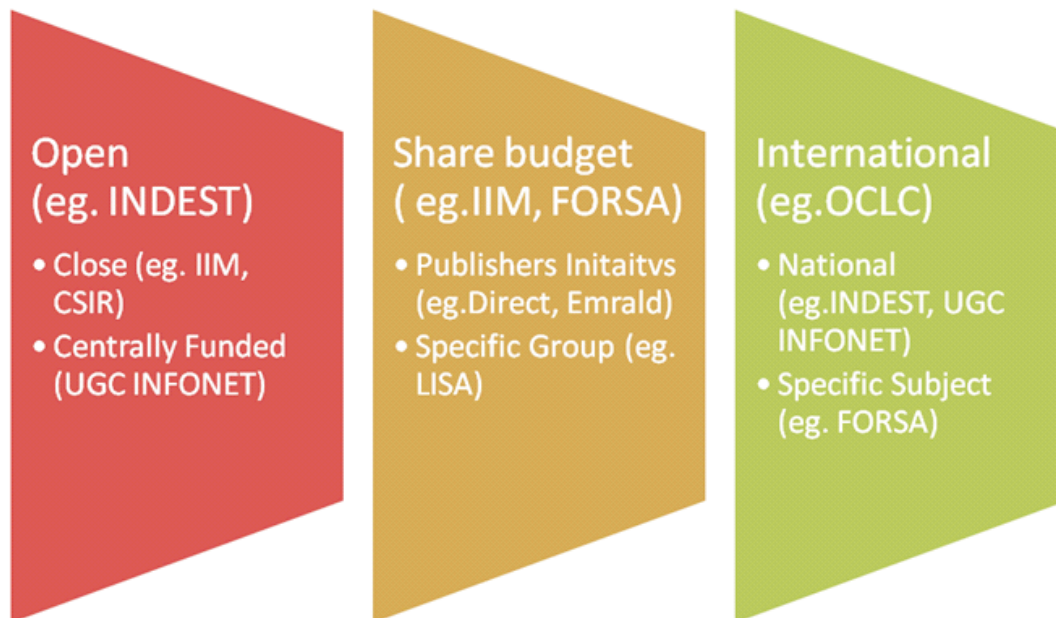
- Round the clock availability: Library Consortia provides round the clock availability of information and resources to the users.
- E-Publishing: Library Consortia promotes E-Publishing of information variously.
- Direct purchase from publisher: Library Consortia assists in direct purchasing from publisher. It is the cooperative task to reduce the cost of purchase. As a result end users can take benefits of more resources than would be available through one library.
- Staff development: It is helpful in developing efficiency of staff and results in staff development.
- Easy interaction: Library Consortia provides easy interaction with quality of service.
- Research and development activities: Library Consortia supports research and development activities and proves very helpful in growth of research related activities.
- Language barrier: Information is publishing in various formats and languages regardless of place, race, nation etc. Library Consortia make it possible, sharing of information and resource in different formats or languages etc. In this way it avoids barrier of language.
- Sharing of resources: Sharing is an important task for using resources at different formats for different purposes. Library Consortia promotes sharing of resources which make it easy to handle information in different platform.
- Different subscription level: It provides different subscription level of different publishers and reciprocal borrowing.
- Collection development policy: Library Consortia assists in building collection of document at national and international level and in planning of a policy for development of collection for a library/institution/organization etc.

### Functions of Library Consortia

- Nodal Agency: To act as a nodal agency for increasing the cooperation amongst the participating institutions.
- Coordination: To coordinate all activities concerned with subscription of E-Resources on behalf of consortium and to stimulate for further co-operation between libraries and information centers.
- Set up work groups: To set up work groups on different subjects and organize their meetings with an aim to improve the functioning of consortium as well as identify new resources and evaluate the existing resources.
- Maintenance: To maintain a web site for the consortium for the benefit of its members and to encourage sharing of resources in an online mode.
- Review the progress: To review the progress of consortium at various stages and also review progress on other related issues like discontinuation of print or E-Journals etc.
- Propagation: To propagate the Consortium with other institutions and enroll new members into the consortium.
- Agreement: To make a concrete agreement needed to be established for the participating libraries in consortia to achieve a common target.
- Smooth administration: To establish a rational fort and to run for the smooth administration of Library Consortium.
- Joint venture: To look after that all the participating libraries under Library Consortia must work jointly just like a joint venture in business sector to make it a total success.

- Access to electronic resources: To provide access to electronic resources and integrating them into library programs.

### Consortia Models



#### • Open Consortia

This type of consortia is open ended and member libraries have the freedom to join or leave from consortium at any time. In this case publishers define a minimum number of libraries for the consortium to take off, at a specific rate per product. INDEST consortium, run by ministry of human resources department government, of India is an example of this type of consortia.

#### • Closed Group Consortia

This type of consortia formed by the same type of member and has a common need to cross the resources in specific area. Here the formation and operation of the consortia guidelines and its administration are fairly easy and simple. CSIR, DAE, IIM are examples of this type of consortia.

#### • Centrally Funded Model

This type of Consortium depends on the central funding agency and parent body shoulders the financial responsibility of running the consortia. INDEST, UGC INFONET, CSIR, ICMR, MCIT are examples of this model.

#### • Share Budget Model

This type of consortia comes out with the appropriate sharing of funds with of participation member. The management of fund is individually handled with MoU. IIM and FORSA are examples of this

model.

#### • Publishers Initiatives

Publisher offered a deep discount consortium price to participating libraries on national level. SCIENCE DIRECT, EMERALD are examples of this type of model.

#### • Specific Group Consortia

These types of consortia deal with specific group. LISA plus consortia of university library is example of this type of model.

#### • Subject based Consortia

These types of Consortia deal with specific subject. FORSA, UGC, DAE are examples of this type of mode.

#### • Regional Consortia

These types of Consortia covers specific region. Chandigarh Library Consortia is example of such type of Consortium.

#### • E-Journal Consortia

INDEST, IIM Consortia, ICAR Consortia are examples of E-JOURNAL Consortia.

#### • National Consortia

This model of consortia covers national level licensing of product like INDEST, UGC INFONET and is called national level consortium.

#### • International Consortia

In this consortium libraries belonging to different countries participate. This may be formed either by the individual libraries such as OCLC or by bringing different national consortia under one umbrella.

### INDIAN PROMINENT LIBRARY CONSORTIA

Ambuja (2003) explained that all the educational institutions in India are functioning under various educational and research & development systems like All India Council of Technical Education (AICTE), University Grant Commission (UGC) Indian Council of Agriculture Research(ICAR) OR Indian Council of Medical Research and Council of Scientific and Industrial Research (CSIR), these have library systems to support education, learning research and meet information need of their academic and research community. These are the hub for the information storage and dissemination. The conceptual development of Library Consortia in India goes before three decades. Libraries formed consortia for the



primary purpose of sharing printed materials, now these are forming consortia to provide common access to electronic resources across the internet and forming them on a national or regional basis. Diana and Carlos (1972) discussed that while considerable savings are possible using Consortium for delivery of scholarly periodical articles but saving from joint collection development may not be very significant sharing resources and expertise is seen by consortia as one of the best ways to cope with rising costs and shrinking budgets.

### UGC Infonet Digital Library Consortium

UGC Infonet Digital Library Consortium is the largest academic library Consortium in India. This Consortium was launched on sixth December 2003 which was inaugurated by Dr.A.P.J.Abdul Kalam, former President of India on 28th December 2003. Access to various E-Journals has started from January 1, 2004. The UGC, INFLIBNET and ERNET came together to meet the challenge that may face the education community with respect to real time information. UGC Infonet Digital Library Consortium is a national initiative for providing access to scholarly electronic resources including full text and bibliographic databases in all subject disciplines to academic community in India. The aim of this consortium is to provide the scholarly literature to the entire community through single point administration and subscription. To access these resources the user does not require any login ID and Password because access is made available through internet protocol (IP), Address of institution. IP addresses should be authenticated by the ERNET.

Sohail and Ahmad (2011) The consortium provides current as well as archival access to more than 5000 core and peer reviewed journals and ten bibliographic databases from various publishers and aggregators in different disciplines. The member institutes are provided differential access to these resources based on their needs and activity profile as per the recommendations of the national steering committee the program has been implemented in a phased manner. In the first phases that began in 2004 access to e-resources was provided to 50 universities who had internet connectivity under the UGC-Infonet connectivity program of the UGC. In second phases 50 more universities were added to the program in the year 2005. So far there are 201 member comprising 158 universities, 38 associate members and 4 inter university centers (IUCs) and other institutions that come under the purview of UGC. These E-Resources covers almost all subjects' disciplines including Arts, Humanities, Social Science, Physical Science, Chemical Science, Life Science, Mathematics and Statistics.

### Consortium for E-Resources in Agriculture (CeRA)

Oral communication has been an integral part of people to people interactions in all ancient civilizations. The process of communications has expanded over the years to cover print and other modes like computer and associated gadgets with the advancement of Science and Technology. India is predominantly an agrarian country and the growth of agriculture is reflected in the good yields of different crops that depend on various factors-natural and man made. Agriculture research, the backbone of agriculture growth in the country, demands timely dissemination of knowledge being generated and updated across the globe from time to time. With the advent of internet facilities and advancement of web technology, almost all reputed international journals are available on line and can easily be accessed by researchers over the network.

The establishment of CeRA under NAIP is a part of the ongoing activities of the Unit of Simulation and Informatics(USI) set up in November 2003 by merging the Unit of Applications System Simulation(UASS), the Bioinformatics Centre and Internet Facilities.

The IARI central library, which house the CeRA office, is the focal point of institute. Over the years, the library has expanded to meet the ever growing needs of the scientific and student community of the institute and of the country as a whole. It has assumed the de facto status of National Agriculture Library of India, and is regarded as one of the 10 best agro-biological libraries of the world. CeRA is consortium of E-Journals being subscribed by NAIP, ICAR and is providing access to 124 libraries of Agriculture (NARS) for h years 2008-10(3years).

### **Council of Scientific and Industrial Research (CSIR) Consortium**

One of the worth mentioning initiative is the Council of Scientific and Industrial Research (CSIR) Consortium. It has 40 laboratories across the country. The major objective of the CSIR Consortium is to strengthen CSIR library resources by pooling, sharing and providing electronic access to scholars and scientists of CSIR laboratories and to promote the culture of electronic access. The NISCAIR (National Institute for Science Communication and Information Resources), which was formed by merging INSDOC and NISCOM, was identified as the coordinator of the CSIR Consortium and a monitoring/steering committee was constituted with NISCAIR as the focal point .Further NISCAIR set up a Task force team comprising of some nodal officers from some of the major laboratories.

### **IIM Consortium**

The Indian Institute of Management (IIM) consortium was formed in the year 2000. The objective of the consortium was to ensure among the IIMs optimum utilization and enhancement of the resources and to minimize the expenditure by to the commonly subscribed databases and journals. The idea was to approach publishers of CD-ROM Databases to begin with, as consortia, for better pricing and services. Eventually, other digital databases and journals also to be covered by the program. In the case of journals, all the six IIMs put together subscribes to over 2550 scholarly titles of which around 1200 are duplications (overlapping titles).

### **Forum for Resource Sharing in Astronomy and Astrophysics (FORSA) Consortium**

Perhaps FORSA may be the first consortium formed in Indian context. It was launched in 1981. The mission of the forum was to compile union catalogues of scientific serials, annuals and other irregular publications, reference tools, recent researches in astronomy, books on order and theses holdings, holdings of duplicate issues and facilities available in each library. All the member libraries of FORSA, have been fully computerized with all modern Information Technology infrastructures and are capable of coping up with ever changing technological developments. At present, [FORSA has the following eleven members under its umbrella covering institutes from different government departments, DST, UGC, DAE etc.:

1. Aryabhatta Research Institute for Observational Sciences, Nainital.
2. Bose Institute, Kolkata.
3. Harish Chandra Research Institute, Allahabad.
4. Indian Institute of Astrophysics, Bangalore.
5. Inter University Centre for Astronomy and Astrophysics, Pune.
6. National Centre for Radio Astrophysics (TIFR), Pune.
7. Centre for Advanced Studies in Astronomy, Osmania University, Hyderabad.



8. Physical Research Laboratory, Ahmadabad.
9. Raman Research Institute, Bangalore.
10. Saha Institute of Nuclear Physics, Kolkata.
11. Tata Institute of Fundamental Research, Mumbai.

FORSA is an open model consortium wherein most of the institutions associated are different government organizations and university departments. FORSA consortium has gone into formation of two consortia; Indian Astrophysics consortium with KLUWER publishers for cross e-access to Astronomy journals and FORSA Nature Online Consortium where Nature journal is accessed electronically through the consortium deal by the FORSA member libraries.

### MCIT Library Consortium

The Ministry of Communications and Information Technology (MCIT) Library Consortium was recently set up for resource sharing among the libraries under the Ministry, which comprises of three departments, Department of Information Technology (DIT), Department of Telecommunications (DOT) and Department of Post (DOP). MCIT Libraries Consortium has the following areas in its purview. All the three Departments, Autonomous Bodies and PSU (s) has number of publications like Annual Reports, Standards, Patents and many important government publications. A digital library of all such collections will be put on the consortium web site for general purpose in public domain wherever possible and for internal use of MCIT officials.

### J-Gate Custom Content for Consortia (JCCC)

It is a customized solution for accessing and sharing journal literature subscribed by all the IITs, IISc and IIMs, individually and collectively through INDEST consortium. Joining this community of resource sharing Consortium are 17 National Institutes of Technology to whom the benefits of JCCC@INDEST is extended as secondary members. JCCC@INDEST is a common gateway to access 4,500+ e-Journals from 1,028 publishers, subscribed by IITs, IISc. IIMs. The journals of following INDEST consortium registered publishers are included in JCCC@INDEST.

- ACM Digital Libraries.
- American Society of Civil Engineers (ASCE).
- American Society of Mechanical Engineers (ASME).
- IEL Online.
- Nature.
- Science Direct (Elsevier).
- Springer-Link.

All electronic resources being subscribed are available directly from the publishers Website. Local hosting of resources has not been considered at this stage.

### Health Science Library and Information Network (HELNET) Consortium

The state of Karnataka promoted Rajiv Gandhi University of Health Science (RGUHS) in 1994 to focus better planned development of health science education. It is the first medical Library Consortium

in the country lunched in 2003. HELNET has made it possible for each institute to access and share the contents in more than 600 journals from leading publishers at about one third of price of their print subscription HELNET is operated by Rajiv Gandhi University of Health Science Karnataka. The consortium was started with a vision to improve the quality of education and research in the health science colleges/institutes in karnatkaa state through enhanced access to high quality medical information.

### DAE Consortium

The Department of Atomic Energy (DAE) consortium was established in 2001 and fulfils the information requirement of institutions including BARC and TIFR. It is provided the funds by the Department of Atomic Energy (DAE) Government of India.

### INDEST-AICTE Consortium

The INDEST consortium was set up in December 2003 with financial support from the Ministry of Human Resources Development Government of India, on the recommendation of an expert appointed by the ministry under chairmanship of prof.N Balakrishnan. The ministry provides funds required for providing access to electronic resources to 47 institutions including IISc, IITs, NITs IIMs and a few other centrally funded government institutions through the consortium headquarters set up at IIT Delhi. Besides it, 60 governments or government aided engineering colleges and technical departments in universities have joined the consortium with financial support from the AICTE. The Consortium as recently been renamed as INDEST-AICTE consortium. More ever the INDEST-AICTE consortium as open ended prepositions 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 publisher. All electronic resources being subscribed are available from the publisher's website. The INDEST-AICTE consortium is a fully functional consortium since 2003..

### National Knowledge Resource Consortium (NKRC)

The National Knowledge Resource Consortium (NKRC) established in the year 2009. It is a network of libraries and information centers of CSIR and DST institutes, carrying out R&D work in the areas of Engineering, Biologics, Chemical, Physics, Environmental and Information Science. It is one type of close group consortia; this kind of consortia emerges either by affiliation and collaboration among them. NISCAIR, the nodal agency implemented an agency for the process of providing access to globally available electronic journals to the entire Science and Technology staff of CSIR.

### DelCON (DBT Electronic Library Consortium)

Parmar.et al (2014) it is an Electronic Journal consortium which is operational since January 2009. The Biotechnology Industry Research Assistance council (BIRAC) New Delhi is a part of DelCON.

### DRDO E-Journal Consortium (DESIDOC)

Defense Research and Development Organization (DRDO), Ministry of Defense, Government of India, is the largest government funded research and development organization in India. It provides information through E-Consortia to it 50 plus laboratory and 7000 plus users on science and technology.

### ADVANTAGES

- Increase the access base: Library Consortia with the dawn of internet era, are compelled to provide relevant information essential to its end user within a short span of time either from its in house holdings or from resources available in other libraries.
- Rational utilization of funds: Consortia identify priority for funding within libraries and to be proactive in influencing national agendas/ priority for funding for research support.
- Gateway of information: Library Consortium functions as a central gateway for users, to access locate transform and utilize information resources in a variety of printed and electronic formats via applications, databases etc.
- Ensure continues subscription: Consortia based subscription to electronic resources provides access to wider number of electronic resources continues and at substantially lower cost.
- Qualitative and Quantitative resources: It provides the community with physical and virtual access to the shared resources having qualitative and quantitative value of all libraries.
- Enhancing the visibility image of the library: It publicizes and disseminate information about libraries and its activities as widely as possible in appropriate context.
- Improve existing library services: Consortia promotes improvement in existing library services which helps in boosting professional image
- Harness developments: A consortium proves to be very effective in harness development in IT, facilitating building digital libraries.
- Access to wider number of e-resources : It cope up with the newly generated knowledge published in different forms, such as printed and non printed documents, electronic media on various disciplines, multi disciplinary and new generated subject area.
- Optimum utilization of funds: Through Library consortia, member intuitions can subscribe electronic resources at highly discounted rates of subscription.

### LIMITATIONS

- Special skills in handling e-resources: Library Consortia required special skills in handling E-Resources.
- High initial investment: It required high initial investment in licenses and Information Communication Technologies.
- Rights direct access: The problem of access rights, direct access from publishers and through nodal agency by mounting the database on them.
- Information technology: It suffers from limitation of information technology.
- Unreliable telecommunication link: Library Consortia consists of unreliable telecommunication link which creates hurdles in communication among member institutions.
- Insufficient bandwidths: Sometimes Library Consortia consists insufficient bandwidths which require necessity of Internet access ID.
- Back Up of databases: The problem of back up of databases after discontinuation from the Library Consortium.
- Problems of e-journals: The users are not accepting E-Journals as with print journals .They even now feel difficult to download, acquire and access it.
- Insufficient service: A Library Consortium deals with shortcomings in respect of insufficient mutual information service provided to user.
- Lack of coordination: Library Consortia are lacking for co-ordination of present activities and preparation of new ones. Integration already acquired information sources and their interconnection

with book catalogues, collective catalogue etc.

- Long term perspective: Library Consortium require long term perspective from state assistance in concerned field.
- Excessive contribution fee: Library Consortia suffers from it as sometimes organizing body may charge excessive contribution fee which is quite high and dependent on their will.
- Bureaucracy: Since there is no completion, so bureaucracy may arise in a Library Consortium.

## CONCLUSION

Thus we can say that, Library Consortia is described as a group of organizations whose purpose is to collectively facilitate and support the work of a service program in ways that add material and human resources beyond those available to each organization/individual. The aim should be to deliver more than the sum of the individual parts. A consortium approach is the ideal solution in a situation of scarcity of funds but it is not without its challenges. The concept is considered to be a metamorphosis brought by the fast changing information environment for supporting better library services through joint actions.

## REFERENCES

1. Aldrich, Howard E., Ted Baker, Michele, Kremen. Bolton, and Sasaki., Toshihiro, (1998). Relational Contracting in U.S. and Japanese R&D Consortia: Technological, Organizational and National Influences. IEEE Transactions on Engineering Management.
2. Allen, B. M. & Hirshon, A. (1998). Hanging Together to Avoid Hanging Separately: Opportunities for Academic Libraries and Consortia. *Information Technology and Libraries*, 17(1), 36-44. Retrieved on July 5, 2012 from <http://www.editlib.org/p/86492/>
3. Ambuja, R. (2003) Planning a Consortia among the campus libraries of university of Madras first international convention on mapping technology on libraries and people, INFLIBNET, Ahmadabad
4. Anderson, Terry and Elloumi, Fathi. (2005). Theory and practice of online learning. [cde.athabasca.ca/online\\_book/pdf/TPOL\\_book.pdf](http://cde.athabasca.ca/online_book/pdf/TPOL_book.pdf).
5. Arora, J., & Agarwal, P. (2003). INDEST Consortium: consortia based subscription to electronic resource for technical education system in India. Edited by S.M. Sagar et al. (eds.). In proceeding of CALIBER 2003 Ahmadabad. (p.271-72). Retrieved from <http://www.iitg.ernet.in/tamal/inweb.pdf>
6. Arora, Jagdish and Tivedi, Kruti (2010) INDEST-AICTE Consortium. present service and future Endeavour's. *DESIDOC Journal of library and information technology*. 30(2)79-91.
7. Awal, Abdul. K.M. (2005). Bangladesh University Grants Commission and Library in Higher Education Plan. University Grants Commission of Bangladesh UGC.
8. Bajpai, R.P., Mal, Bidyut K., & Bajpai, G. (2011). Use of e-resources through Consortia: a Boon to Users of Indian University Libraries. Retrieved from [crl.du.ac.in/ical09/papers/indexfiles/ical-85\\_83\\_195\\_2\\_RV.pdf](http://crl.du.ac.in/ical09/papers/indexfiles/ical-85_83_195_2_RV.pdf)
9. Bansode, S. Y. (2007). Library Consortia in India: Issues and Prospects. *Trends in Information Management*, 3(2), 138-152. Retrieved from <http://www.jourlib.org/paper/2317815#.VTQOrSGqqkp>
10. Biswas, B.C., & Dasgupta, S.K. (2003). Opportunities for libraries in managing and resources sharing through consortia: a new challenge for Indian libraries. In 1st International Convention on mapping technology on libraries and people. Ahmadabad: INFLIBNET.
11. Bostick, S. L. (2001). Academic Library Consortia in the United States: an Introduction. *LIBER QUARTERLY*, 11(1), 6-13. Retrieved from <http://liber.library.uu.nl/index.php/lq/article/view/URN%3ANBN%3ANL%3AUI%3A10-1-113240>

- 12.cera.iari.res.in/
- 13.CSIR e-Journals Consortium [www.ampri.res.in/eng/index.php/.../library/csir-e-journal-consortium](http://www.ampri.res.in/eng/index.php/.../library/csir-e-journal-consortium)
- 14.Daina, Delanoy and Caudra, Carlos.(1972). A Directory of Academic Library Consortia. System Development Corporation, Colorado Ave., Santa Monica, California.
- 15.dictionary.cambridge.org/dictionary/british/consortium.
- 16.forsa.ncsi.iisc.ernet.in/pipermail/lis-forum/2003-September/000286.html.
- 17.Galileo - University System of Georgia [www.galileo.usg.edu](http://www.galileo.usg.edu).
- 18.Hirshon, A. (1999). Libraries, consortia, and change management. *The Journal of academic librarianship*,25(2), 124-126
- 19.Lal, Jawahar. (2012). Conceptual framework of resource sharing and library consortia formation: an introduction. In proceeding of National Seminar on Ranganathans vision on future libraries (NSRV-2012). Lucknow. (pp. 173-181).
- 20.LOUIS: The Louisiana Library Network - WordPress <https://sites01.lsu.edu/wp/Louis>.
- 21.Nagarjuna, G. (2005).Information and Knowledge Management Using GNOWSYS. In proceedings of the Nnational Conference on Recent Advances in Information Technology.
- 22.Reddy, R. P., & Keshalu, P. (2011, August). Developing e-journals consortium in India: a new approach for digital network resource sharing. In proceeding of UGC National Seminar on Management of digital/e-resources. Hyderabad. (pp. 106-126).
- 23.Shachaf, P. (2003). Nationwide consortia life cycle. *LIBRI: International Journal of Libraries and Information Services*, 53(2), 94-102. Retrieved from <http://eprints.rclis.org/12415/1/NationwideLibraryConsortiaLifeCycle.pdf>
- 24.Sohail, Md., & Ahmad Imran, Md. (2011). Use of E-Resources and UGC-Infonet Consortium by the Teachers and Research Scholars in Aligarh Muslim University. *Library Philosophy and Practice (e-journal)*. Retrieved from <http://digitalcommons.unl.edu/libphilprac/509/>
- 25.UGC-Infonet Digital Library Consortium - INFLIBNET Centre [www.inflibnet.ac.in/econ](http://www.inflibnet.ac.in/econ)
- 26.[www.lights.ca/hytelnet/uk1/uk132.html](http://www.lights.ca/hytelnet/uk1/uk132.html).
- 27.[www.merriam-webster.com/dictionary/consortium](http://www.merriam-webster.com/dictionary/consortium).