CHAPTER-II HIGHER EDUCATION AND UNIVERSITY LIBRARIES

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2.1 Introduction

Ancient records of the Indian tradition testify to the search of the Rishis and sages for higher knowledge and their discoveries have been continuously transmitted to posterity and kept alive through its long history, marked by periods of expansion, specialization, and renewal. This theme of higher knowledge informs and inspires even the latest developments in the Indian educational system and plays a significant role.

Pursuit of integral knowledge and liberation, which has been a constant endeavor of Indian culture, is also the central objective of education. Education is perceived as a bridge between the past, present, and the future and as a means by which the best of the heritage is transmitted to the new generations for its further progression.

Higher Education as defined by the Webster's dictionary as the “Education beyond the secondary level of education provided by the college or university.”

2.2 Objectives

The objective in higher education is not only to promote equality and social justice, but also to provide the right kind of work ethos, professional expertise and leadership in all walks of life.

“The task of university education is to provide to the society with leaders at various walk of life: thinkers, scientist, specialists who, by virtue of their merit, competence and motivation, will be the torchbearers of the national march towards national development.” Further higher education has, “facilitated the ability of the country to deal internationally on various fronts... academic, economic, social and political.
India, has, therefore developed a higher education system capable of sustaining many areas of activity\textsuperscript{3}.

University Education Commission of Free India (1948-49) under the Chairmanship of Dr. S. Radhakrishnan Reported tasks of higher education as, Dissemination of learning incessant search for new knowledge, unceasing effort to plumb the meaning of life, provision for professional education to satisfy the occupational needs of our society are the vital task of higher education\textsuperscript{4}.

Jawaharlal Nehru rightly said "A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search for truth. It stands for the onward march of the human race toward higher objectives. Universities are places of ideals and idealism. If the universities discharge their duties adequately, then, it is well with the nation and the people"\textsuperscript{5}.

In the fifty odd years since India achieved independence, its higher education system has undergone a remarkable transition from an elite system, having deep colonial roots, to an enlighten system striving to meet the aspirations of a vibrant democracy\textsuperscript{6}.

2.3 Growth of Higher Education in India

Higher education system in India is only 145 years old, when the first three universities were set up in 1857 under the British Rule. The period 1857 to 1947 was the period of slow development of higher education in India. When India became independent, it had only 18 universities and 500 colleges located in different parts of the country but in the post-independence period, higher education have expanded fast.
Growth in Higher Education in India

<table>
<thead>
<tr>
<th>Institutions</th>
<th>1950-51</th>
<th>1990-91</th>
<th>1996-97</th>
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<tr>
<td>Teachers ('000)</td>
<td>24.0</td>
<td>272.7</td>
<td>321</td>
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Source: UGC Annual Report 1996-97

The number of university level institutions has gone up from 18 in 1947 to 252 at the beginning of the third millennium. Number of colleges has increased from 591 to over 10,000 and students from 0.2 million to 7 million.

The steady growth of higher education in India is the result of the nation's policy to promote education amongst the masses and also due to National Policy of Education visualizing education to be a process of empowerment through knowledge, skills and values, an instrument of social change. Therefore, universities are expected not only to generate and transfer knowledge but also to provide extension services to transfer the benefits of knowledge they generate and preserve and also be directly involved in the transformation of society and its economic development through partnership activities like university-industry linkage. To accomplish these aspirations needs, each institution of higher learning has to define, in more micro and definite terms, its goals clearly and plan for their achievement.

2.4 Investment in Higher Education

Higher education in India is in deep financial strain, with escalating costs and increasing needs, on the one hand, and shrinking budgetary resources, on the other. Now they have to raise their own resources by raising the fee levels, private donations...
and by generating revenues through consultancy and other activities. The State’s intention to develop higher education is reflected in the five-year plans and the public outlays made. The total outlays on higher education, both in net terms and as a proportion of the GNP has risen from Rs.140 crores in first plan to Rs.15,160 crores in eighth plan.

2.5 Quality in Higher Education

Higher education system must care and be cautious with the advent of information and communication technology, exponential growth of knowledge, and growing needs of student’s population for their future growth. For the purpose higher education system should imbibe, the quality of education is of utmost importance. Efforts should be directed towards maintenance higher standards of education in the universities and no compromise of any type should be acceptable: further it should help for a very well trained manpower which would contribute meaningfully to the development of Indian economy and society. Quality in education sharpens the intellect and provides the knowledge based for intelligent efforts.

Quality tools and techniques can be made use to build quality higher education, ‘Implementation of TQM in higher education requires deep commitment, full involvement of people, top management support, fair reward and recognition polices and training of concerned people in the concept, tools and techniques of TQM’. Today, higher education becoming an international service, there is a growing concern the world over about quality, standards and recognition. Consequent of this trend TQM in higher education emerging as a universal compulsion in the education
Further the International Network Quality Agencies for Higher Education (INQAAHE) can enhance their quality of education and status through constructive interactions, evolving accords and facilitating their role in mutual recognition of the constitutions of higher learning throughout the world.

The University Grants Commission [UGC] was set up in 1956, for coordination and maintenance of the standards of teaching, examination and research in universities to improve quality and to introduce innovations.

The major initiatives taken by the UGC in improving the quality and standards of higher education are:

- Improvements in the quality and standards of teaching and research through programmes for setting up Centres of Advanced Study and Research;
- Periodic review and renewal of curricular content of courses in various disciplines;
- Establishment of common facilities for research, networking of resources for information and documentation;
- Induction of electronic media in higher education;
- Provision of scholarships and fellowships to students; and
- Quality improvement through infrastructure development like laboratories, libraries, classrooms and hostels.

UGC established National Accreditation and Assessment Council (NAAC) as an autonomous council to carry out periodical assessment of universities and colleges in the country.
2.6 Centres of Excellence in Higher Education

Centres of excellence in different subject specialties have been established under the scheme of Centres of Advanced Studies (CAS), Department of Special Assistance (DSA) and Inter-University Research centres at internationally comparable standards. The objectives of these centres are to provide quality input in higher education and in research.

2.7 New Challenges

The university has a crucial role to play in promoting social change. It must make an impact on the community, if it is to retain its legitimacy and gain public support. Frontiers of knowledge are bound to expand unimaginably, and new researches will oblige humanities, sciences, technologies, and fine arts to arrive at new equations and new combinations. The world is entering into an Information Age and developments in communication, information and technology will open up new and cost-effective approaches for providing the reach of higher education to the youth as well as to those who need continuing education for meeting the demands of explosion of information, fast-changing nature of occupations, and lifelong education.

An uncertain future demands a forward looking policy frame, ability to create a dynamic system of higher education with adequate infrastructure facilities and determined leadership with vision and will to stand up to any challenges from any of quarters. In the changing socio-economic context completion and selection for the best (in quality) has become the order of the day. Therefore D. Swaminadhan rightly said that, ‘universities should undertake intensive introspection and reorient
themselves to respond adequately to the emerging challenges of the changed economic scenario in the country\(^\text{17}\).

Growth of information technology on the one hand and the developments in teaching, learning and research on the other, all concerned with higher education today are attempting to grasp how information technology could help in modernizing teaching, research and learning, as without the timely assimilation of the advance of technology in the filed of higher education we could be left far behind in the development race\(^\text{18}\). The strength of this technological explosion has to be harnessed and used properly in order to reap its maximum benefits. The ‘mantra for higher education must be accessibility, and relevance supported by quality assurance\(^\text{19}\). Hence, the universities of tomorrow will have to identify more and more with the national interest, without underplaying their academic leadership role.

\subsection*{2.8 UNIVERSITY LIBRARY}

\subsubsection*{2.8.1 Introduction}

Universities are the seat of higher learning, Truscot says, ‘a university is a corporation or society, which devotes itself to search after knowledge for the sake of its intrinsic value\(^\text{20}\). ALA Glossary of Library and Information Science defines the university library very clearly as a ‘library, or system of libraries, established, supported and administered by a university to meet the information needs of its students and faculty and support its instructional, research, and service programmes\(^\text{21}\).

The university library is core in meeting the academic and research needs of the user community. The scientific research needs a library as well as its laboratories, while for
humanistic research; the library is both library and laboratory. Dr. S. Radhakrishnan rightly said the role of university library as, "the library is the heart of all the university’s work; directly so as regards its research work and indirectly as regards its educational work. Scientific research needs a library as well as its laboratories, while for humanistic research, the library is both library and laboratory as one."

The functional role of the university library should not be operated as a more storehouse of books attached to a teaching room, but as dynamic instruments of education. The University libraries play a pivotal role next only to the instructional staff in its importance for high quality instruction and research activities.

India has a large educational system comprising of universities and centers of higher learning and excellence to serve the educational needs of its academic population. That's how university libraries in India are closely connected with the development of higher education. The libraries attached to them serve as dynamic centers of information rescues in pursuit of aims and objectives of the institution for which they become an integral part. The university libraries are the nerve centers of the higher education and learning. They place a central role of critical importance in teaching, research, and extension activities of the universities, by designing and developing their collections and service. Late Dr. Shankar Dayal Saharma, Ex-President of India has rightly stated that, ‘a library is more important than a university because a library can function with a university whereas a university cannot do without a library.'

The library is the life-blood of an academic institution by performing its function like acquisition, organization, preservation, and dissemination of knowledge. To achieve the academic pursuits of the university, the librarian must build a well-knit team of
honest, dedicated and professionally competent professional staff and must have a sound knowledge of human engineering. This demands the Librarian to have an adequate knowledge of modern management tools and techniques for optimizing the library service to the academicians at the lowest cost and with reasonable effort.

2.8.2 Role of University Library in Changing World

The challenges before University libraries and information centres will emerge from the expected change in the very nature of future libraries. Emergence of Computer and Communication Technology has revolutionized the whole scenario of university libraries. The world is moving towards the concept of global village and as such Indian university libraries cannot afford to act in isolation but rather in the networked environment utilizing the latest information technology in their routine activities and services.

Qualitative academic pursuits of teaching, research and intellectual excellence is only possible in an university by having a library well managed by latest management techniques as a central organ to serve the whole user community of the institution. The University Libraries have a very significant role to play in teaching and learning processes. The teacher and the taught both need the library to retrieve information for interactive learning and acquiring skills for advancement of their carriers and lives. The importance of libraries in university education system in the change scenario has been emphasized time and again by several commissions and committees constituted by the Central Government. Setting up of UGC in 1956 was the turning point and landmarks in the development the university libraries in India.
The present prospective, erstwhile university library system needs drastic changes to meet the challenges of modern times with the help of gadgets of information technology. With the advancement of Science and Technology, the country is experiencing the tremendous growth of information resulting in information explosion, it is putting a tremendous pressure on University Library and Librarians to keep pace with the changing time by knowledge acquisition and catering to the increasing number of users through traditional media. Increasing cost of books and Journals coupled with multiplicity of subjects in recent years has made it imperative for educational administrators to review the existing libraries to meet the aforesaid challenges and provide quality based services. Therefore, Navaneeth Rao committee recommends that 'optimum utilization of the library books and journals be made by adopting modern technologies such as use of the computers to enable each department to be within the reach of the latest information available'.

In view of the changing scenario, the University Libraries are expected to do the following:

- Ascertain the pertinent requirement of the library and its user community.
- Be service oriented rather than collection oriented;
- Resource sharing and networking of libraries,
- Preservation for posterity and provide access as an integral part of library service;
- Marketing of Library and information;
- Regular training and development to the library professionals to cope with the new changing environ; and
New Management techniques need to be adopted for dealing with the objectives of the University

The Library professionals need to adopt newer technologies available, to organize, retrieve and manipulate information. Consequently the university library is undergoing a transformation and they are in need of library staff that can adopt and handle the latest technologies and manage for the benefit of the users. Hence the Library Staff should undergo in service training in automation, networking before venturing to adopt IT. They should be trained in:

- Integrated Relational database Management Systems;
- Automating Technical Processing and Circulation;
- Acquaintance and knowledge of E-Journals;
- Email, Computer Network, Computer systems-peripherals and networking components;
- User Profiles, CAS and SDI; and
- Internet Information resources skills.

The library professionals should be in a position to disseminate digital information rather than the custodians of information. They must be capable to train in IT than a passive learner. Further, they should not restrict their service to their single library but they must exploit the contents of world resources in caring their customers by cent percept commitment to quality work culture.
2.8.3 Mysore University, Mysore

The University of Mysore\textsuperscript{26} became the first University outside the domain of the English administration in India, the sixth University in India as a whole, and the first ever University in Karnataka. It is a state University of the affiliating type, and turned autonomous on March 3, 1956, when it got recognition from the University Grants Commission. The University of Mysore is among the foremost institutions of its kind, and is an enduring symbol in the sphere of higher education in India. It was founded by the then Maharaja of Mysore, His Highness Sri Krishnaraja Wodeyar IV and his Dewan, the renowned engineer-statesman Sir M.Visveswaraya, on July 27, 1916. The Maharaja of Mysore became its first chancellor. The University came into existence on the basis of a report on educational progress in the United States and Australia, submitted by Messrs Thomas Denham and C.R.Reddy.

The main campus of the University, created in 1960, lies in a picturesque area of 739 acres at the western end of the Kukkarahalli Lake. The University headquarters, the Crawford Hall, is located right across the lake on the eastern end. The campus was aptly named Manasagangotri by the poet-laureate, Kuvempu. In due course, two satellite campuses were set up in response to the demands of postgraduate education from semi-urban/rural areas: Sir M.Visveswaraya Postgraduate Centre at Tubinakere in Mandya, and the Mysore University Postgraduate Centre at Hemagangotri in Hassan.

University Library

The Mysore University Library is one of the largest University libraries in the country. It has a glorious record of 84 years of service with a resource collection of 8 lakh
volumes in its system today. It was originally established in the Jubilee Building with a core collection of 2,311 gift books in 1918, then moved to Maharaja's College campus and finally to its functional building in the Manasagangotri campus in 1965. The first UGC Chairman C D Deshmukh laid the foundation stone of this functional building in 1960 and was inaugurated by Dr. S. Radhakrishnan in 1965.

A professionally functional library building lay amidst natural setting, the library has a plinth area of about one-lakh square feet. Huge stack-cum-reading halls of reference and periodicals divisions running half a fur long are a delight. The eye-catching panels of mural works of art, Progress of Civilization and Peace for Mankind, of the well-known muralist Dr. K.K. Hebbar adorn the walls in the active stack area and entrance hall.

The well-furnished and well-illuminated interior has a very serene and pleasant atmosphere, and encourages reference and reading for academic and research endeavors.

The library's function mainly consists of the acquisition section responsible for collection development, technical processing takes care of classification and cataloguing; the maintenance section covers active and controlled stacks including public catalogue; the circulation section deals with lending and return of books, attends to membership facilities extended to retired faculty, writers, scholars and registered graduates and also takes care of the text book loan scheme.

The Library collection comprises of general and specific reference works, annual reports, theses and dissertations, reports of various committees and commissions, rare
and archival materials of historical importance connected with the history of the Princely State of Mysore and its royalty; Archeological Survey of India reports, Epigraphia- Indica, Ephigraphia-Carnatica, South Indian Inscriptions, Indian Forest Records, Mysore Administrative Reports, Proceedings of the Mysore Representative Assembly.

The periodicals division presently subscribes to about 430 Indian periodicals, 15 foreign journals of general interest and COPSAT services. The periodical section houses more than one lakh bound back-volumes arranged according to the Dewey Decimal Classification scheme. The total number of journal titles in the collection since the inception of the library in 1918 is about 2400. The Mysore Gazette volumes are available right from 1885 to present. For the benefit of SC, ST and economically weaker sections of student community, the library has maintained a special scheme of lending 5 text books to each of the students for a period of one academic year. Language, literature and subject books in Kannada are maintained here since 1965. It has a collection of 65,000 volumes segregated in four categories-reference works, textbooks and subject books, epics and Puranas and back-volumes of journals in Kannada. A dictionary catalogue assists in reference and retrieval.

Library Automation

The library has a collection of 28 CD-ROM databases in various disciplines. Internet Centre owes its existence to the vision of the present Vice Chancellor Prof. S.N. Hegde by getting the finance from the UGC, which has 22 nodes on a 128 kbps having leased line from Software Technology Park of India. The Second phase to provide OFC connectivity to all the postgraduate departments of the Manasagangotri campus
is now under way. Students, research scholars and faculty are extensively using this facility for 15 hours a day and plans are afoot to extend the timings to 24 hours a day.

The automation of various library operations and services is being done with the financial assistance of the INFLIBNET Centre, Ahmedabad, sponsored by the UGC. The bibliographic data conversion of books and dissertations is now in progress and Online Public Access Catalogue (OPAC) will be in operation shortly.

2.8.4 Karnatak University, Dharwad

In 1949 the Karnatak University was founded and the magnificent building was built in 1958. Due to the fervent efforts of Dr D.C. Pavate, Ex-Vice Chancellor of Karnatak University, most of the departments were established. The weather is so pleasant that it is called “Chota Mahabaleshwar”. There is a Historical Research Institution consisting of old writing on papyrus leaves, engraved copper sheets and also a very good collection of old coins and idols have enriched the treasure of this institution. There are 44 departments including Chemistry, Physics, Library and Information Science, Sociology, Commerce, Music, Education Yoga, Criminology, Women studies, Management Course, Gandhian Studies etc.

University Library

The authorities of the university visualize that the 'library is the heart of the university', took immediate steps for starting the university library. "The university library came into being in 1950, with 10,000 books and back volumes of periodicals costing 1 lakh were purchased and housed together with 2,514 books which were
gifted by the Chief of Mudol and placed in Govt. Training College. During 1959 the library was shifted to main education building and further it shifted its new building in August 1981.

Thereon, the library gradually emerged a learning resource center to the user community with a carpet area of 41,500 sq feet amidst the sprawling surroundings. It consists of entrance hall, browsing area; reading cum-stock room accommodating 200 to 250 readers and is fully equipped with suitable furniture's and fittings.

The Library with its huge collection of 3.8 lakhs books and back volumes of periodicals has been organized in different units viz., Acquisition, Technical, Periodical, Circulation, Binding, Reprographic and Computer sections. It has a special section called U.N. Depository Centre established in 1967 by UNO considering this university as 12th wing among the different universities of India and has more than 21,000 UNO publications.

Its collection also comprises of rare books, govt. publications, films, audio-video cassettes, films, microfilms and micro cards, thesis, dissertations and textbooks for SC/ST and BT students. The library provides documentation services to the users on demand, publishes latest additions, COPSAT service and photocopying. The library has supporting libraries in the campus as well as outside the campus i.e. Gandhi Bhavan Library.

**Library Automation**

The library is providing E-mail and Internet services to its users since 1997. The library has created databases of books, theses and reports in machine-readable form
acting as OPAC to the users using CDS/ISIS software. The Library Advisory Board and Library Automation Project (LAP) Committee are closely involved in installing the campus networking through Fiber Distributed Dissemination Interface (FDDI) network. The library remains successful in establishing Campus LAN to all most all the departments, administrative block and examination building by laying 2.5 k.m. of Optical Fiber Cable with an Internet connectivity through leased line to access the library OPAC and Internet around the clock.

2.8.5 Bangalore University, Bangalore

Bangalore University\(^{29}\) was brought into being by an act of the then Government of Mysore in the year 1965, located in the sprawling campus with 48 departments in the field of Science, Arts, Commerce, Management, Communication, Education and Engineering.

University Library

Bangalore University Library was established in the year 1966 with a mission to identify, select and procure the relevant text books, journals, monographs and other documents to the courses offered by the University and to organize the materials for easy access, reference and reading by faculty, students and research scholars of the university. The University library both at Jnana Bharathi Campus and at the Central College Campus (City Campus) cater to the information needs of the students, staff and research scholars very effectively and the texts are available very soon the request is made by students and staff.

\(^{29}\)
The library procures on an average of 4000 volumes a year average number of books received as gift is 500 and its total collection as on January 2000 is 2,85,000 and subscribes 251 journals per year. On an average 1,235 students, 314 teachers, 800 research scholars, 40 M.Phil. students and 786 university staff members are using the library facilities. Similarly 500 books are issued every day, 900 books consulted per day, 700 visitors visit the library and about 500 to 1000 Photostat copies are provided each day. The university library is well equipped with experienced staff and with good number of equipment. The university with the financial assistance of the University Grants Commission installed Library Automation and net working system and the work in this direction is in progress to provide access to all the P.G. Departments in the University.

Library Automation
The Library has been developed on modern lines with latest computer and communication technology providing Internet and E-mail facility through SIRNET and NICNET to faculty members and Research Scholars. The library has initiated computerization of its activities aims to provide on line public access catalogue service, easy access to the library holdings, better and comprehensive access to information by providing remote access in a net worked environment.

At present, the library subscribes to inside information on CD-ROM discs, CAPS (Contents Abstracts Photocopies Service) and COPSAT (Contents of Periodicals Science and Technology). The services rendered by the University Library are borrowing of books, Inter-library loan, Reference service, Browsing and Reading facility, Xerox service, Internet access and E-mail service.
2.8.6 Gulbarga University, Gulbarga

Gulbarga University\textsuperscript{30} has emerged as a sound knowledge base Centre of Scientific Excellence catering to the educational and research information needs of academic and scientific community of rural and backward region of Hyderabad-Karnataka. A P.G. Centre of Karnataka University, Dharwad was established during 1970 at Gulbarga and this P.G. Centre was elevated to the status of independent University in 1980 located on a sprawling campus of 860 acres with excellent sylvan surroundings.

Gulbarga University has emerged as a young growing university par excellence in teaching, learning and research activities with 34 Departments and four P.G. centers at Bidar, Raichur, Bellary and Sandur. The University has been viewed by the community here as the harbinger of positive social change in view of the tangible improvements it has brought about in the field of intellectual awareness, aptitude for learning and pursuit of scientific knowledge.

The University enrolls about 3500 students every year for various post graduate, M.Phil. and Ph.D. programmes in various disciplines. There are about 200 faculty members and 700 technical and non-technical supporting staff. There are 165 colleges affiliated to this University, which enroll approximately 45000 students every year in various graduate/diploma courses in arts, fine Arts, music, social sciences, science & technology, commerce, education and law. The university offers various courses in different faculties of which science faculties has 16 departments, in Arts faculties there are 6 departments are working, in faculty of social sciences there are 7 departments are
working in faculty of commerce there are two departments viz. commerce and management. Besides this there is Education faculty and physical education.

**University Library**

University Library, heart of University has been developed on modern lines as one of the most prominent Knowledge Learning Resource Centre on Campus, ideally situated and easily accessible by all the Departments in one umbrella with a total carpet area of 54,000 Sft. A well-planned and dynamic Library building housed with print and digital collection provides the best possible satisfactory services to the clientele.

The Library is logically divided into seven Units i.e. Acquisition, Periodicals, Technical, Maintenance, Circulation, UCAIR (University Computer Aided Information Retrieval) center and SC/ST Book Bank for carrying out the activities of Library effectively and efficiently. These units are strongly supported by Establishment Section and Photocopier Service. This Library is one of the prominent universities identified by the UGC for establishing National Network, the INFLIBNET, programme in the year 1993-94.

University Library has been ideally situated on the campus, easily accessible to all the departments with a total collection of 2,00,000 volumes, subscribing 400 current periodicals and sixteen CD-ROM databases accessible on multi user CDNET Tower with 14 drives.

The Information Services offered by the university are reference service, referral service, User education, bibliographic service, technical writing skill service,
Document Delivery Service, OPAC Services, Reprography Service, SC/ST Book Bank, CD-ROM services, Internet and E-mail facility to the user community.

Library Automation

The university library has created three in-house databases on GULCAT, GULSER and GULDAT have been created for books, serials/journals and theses/dissertation respectively by using CDS/ISIS library software. It is an active member of DELNET and INFLIBNET and the online databases available on the network is being accessed to meet the academic and research information needs of users.

The Library subscribes to 16 National/ International CD-ROM databases in science and social sciences and a great boon to the academic and research community in meeting the research information endeavor by just push of a button. A full fledge INFLIBNET building has been established to provide CD-ROM based research information and Internet facility and so also Multimedia facilities, Learning Resources Lab, instructional Material Development Centre, LAN, etc., are being established. The Internet facility is extended under LAN environment with multi-user computer systems for accessing research information.

2.8.7 Mangalore University, Mangalore

Mangalore university campus called Mangal Gangotri to correspond with the name of parent university campus Manasagangotri suggested by the great poet in Kannada, Padma Vibhushana Dr.K.V.Puttappa is situated to the south-east of the city of Mangalore at a distance of roughly 20 kms established in 1980. The campus spread over a large area of about 300 acres, is on a high elevation overlooking the Arabian
Sea on one side and the Western Ghats on the other. Mangalore University comprises of 19 postgraduate departments on its campus, 51 colleges of arts, science and commerce, 4 colleges of education, 3 law colleges, 4 colleges of hotel management and one institute of German language. In all 74 colleges are affiliated to the university and further it plans to set up and develop 'Botanical Garden' in an area of about 44 acres.

University Library

The University Library plays a central role in the university's teaching, learning and research programmes through a blend of information technology and professional expertise to meet the nascent information needs of the users. The total library building is about 3250 sq. mts. accommodating 400 readers at a time, with excellent lighting and ventilation facilities and the library is kept open for 12 hours a day. The units are Circulation, Text-book-cum-reading, reference, newspapers, periodicals, Kannada books and establishment and reprographic unit.

The total collection of the library is 1,37,645 and library subscribes to 385 scientific journals and on an average 380 users refers the library. The information services extended are: current awareness service, documentation service, referral service, bibliographic, lending of books, inter library loan, press clippings, readers guidance and alert service for training and study abroad.

Library Automation

The university library automated the library activities and services using dedicated library software – LIBSYS, under LAN environment and also established a leased line
at speed of 64 kbps. The library also subscribes various CD-ROM databases and provides Internet and E-mail facilities, CD-ROM search services, photocopy, audio-visual facilities, micrographic and COPSAT services to the users.

2.8.8 Kuvempu University, Shimoga

Kuvempu University came into existence on 29.6.1987 incorporating the P.G Centre of Mysore University established at B.R Project in Shimoga district. One-man commission report of T.R Jayaraman led to the formation of Sayadri University, later named after Kuvempu. The university was given territorial jurisdiction over the area comprising the revenue districts of Shimoga, Chitradurga and Chickmagalur.

University Library

The university library is as old as the establishment of the B.R. Project and established at erstwhile post-graduate center was shifted to the Academic Block on Jnanasahyadri campus in 1988. The existing library building has two floors; ground floor space of 127 sq ft. with a seating capacity of 35 readers, first floor of 127 sq. ft. and one more hall is extended to library to house reference and text books with a seating capacity of 30 readers. A functionally planned building is under completion stage consisting of 1,10,254 sq. ft.

The collection of library runs to 56,000 books and 230 current journals with a total strength of five library professionals. The major objective the library is to provide the best possible information services to the faculty, research scholars and postgraduate students in the university. It strives hard to build its image by collecting, organizing,
maintaining and dissemination the various information sources to the user community. The collection of the library is classified according to DDC and CCC.

The service offered by the library includes reference service, inter-library loan, current awareness service, addition of books and reprographic services. The library also provides up-to-date information about the latest additions and contents of the learned periodicals to the faculty. The library is equipped with professional staffs that are always available at reference desk to attend the query. The annual addition of books to the library runs to 1339 and number of documents consulted in the library is around 400. The library has strong infrastructure facilities for the user community and it is open for 12 hours a day extending information services to the user community at large. The library publications include: Directory of professionals of Kuvempu and affiliated colleges, Latest additions of books and catalogue of serials.

2.8.9 University of Agricultural Sciences, Bangalore

University of Agricultural Sciences, Bangalore, established in 1964, had the operational jurisdiction of the entire State of Karnataka bifurcated into two Agricultural Universities viz., University of Agricultural Sciences, Bangalore and University of Agricultural Sciences, Dharwad in 1986.

The UAS, Bangalore\textsuperscript{33} has a territorial jurisdiction over 15 southern districts of Karnataka comprising of nearly 50 per cent of the total area of the State engaged in teaching, research and extension educational programme. The research infrastructure at UAS, Bangalore consists of 23 research stations spread over fifteen districts coming under the jurisdiction of UAS, Bangalore. There are six Regional Research Stations,
one each at Bangalore, Mandya, Navile, Mudigere, Tiptur and Brahmavar representing Central dry zone, Eastern dry zone, Southern dry zone, Southern transitional zone and Hill zone.

University Library

The University Library came into existence during the year 1966-67 with a initial collection of 26,000 volumes of books and bound periodicals and it has more than 1,62,831 volumes and housed in its functional new building at GKVK in the year 1976.

The Library is kept open for 12 hours on working days and for limited hours on Saturday and Sundays for Students and staff of the University. The Library follows Dewey Decimal Classification scheme and Classified Catalogue Code. The collection of the University Library is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Books</td>
<td>1,33,486</td>
</tr>
<tr>
<td>2. Thesis / Dissertations</td>
<td>5,414</td>
</tr>
<tr>
<td>3. Reports</td>
<td>13,382</td>
</tr>
<tr>
<td>4. Pamphlets</td>
<td>10,236</td>
</tr>
<tr>
<td>5. Maps</td>
<td>78</td>
</tr>
<tr>
<td>6. Microfilms</td>
<td>68</td>
</tr>
<tr>
<td>7. Microfiche</td>
<td>167</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,62,831</strong></td>
</tr>
</tbody>
</table>

Current Periodicals

(i) By subscription 518
(ii) By exchange 143

In addition to borrowing, the Library provides services like Reprographic Service, overnight Issue, Inter-Library Loan, Reservation of circulated books. The Library subscribes two CDROM Data bases viz. i.e., AGRIS and CABCD.
2.8.10 University of Agricultural Sciences, Dharwad

The University of Agricultural Sciences, Dharwad was established on October 1, 1986. The objectives of the University as defined in the Act are as follows.

- Making provision for imparting education in different branches of study, particularly agriculture, horticulture, veterinary and animal sciences, forestry, fisheries, agricultural engineering, home economics and other allied sciences.

- The advancement of learning and research, particularly in agriculture and other allied sciences.

- Undertaking the extension of such sciences to the rural people of the State.

- Such other purposes as the State Government may specify, by notification in the official Gazette.

The University has 8 teaching campuses, 32 Research Stations, 5 Extension Education Units, 5 Krishi Vigyan Kendras and 3 National Agricultural Extension Programmes. The University has its jurisdiction over 12 districts namely Bagalkot, Belgaum, Bellary, Bidar, Bijapur, Dharwad, Gadag, Gulbarga, Haveri, Koppal, Raichur and Uttar Kannada in northern Karnataka. The University caters to the needs of the farming community spread over 56 per cent of the geographical area and 64 per cent of the total cultivated area of the State. Six out of 10 agro-climatic zones of Karnataka fall in this area. Greater diversity exists in soil types, climate, topography cropping and farming situations. The jurisdiction includes dry farming to heavy rainfall and irrigated area. Important crops of the region include sorghum, cotton, rice, pulses,
chilli, sugarcane, groundnut, sunflower, wheat, safflower etc. The region is also known for many horticultural crops. The growth and development of this University has been possible due to the foresight and dedication of the Vice-chancellors and their contribution during their tenure. The University has eight colleges spread over six teaching campuses.

University Library

The university library has a flexible, dynamic building located in the heart of the campus surrounded by lush green. In addition, all the research stations are having library facilities. Of these, 15 stations have been identified for strengthening under National Agriculture Research Project (NARP). The library is kept open from 8 am to 9.30 pm to meet the diversified information needs of 800 users. The total collection of the books in the library is 78,000, theses and dissertation – 6650 and subscribed 234 national and international journals. The annual addition of books in 2000 was 330 and 350 in 2001. Average number of readers visiting the library daily is about 250 and documents consulted are 1060.

The library offers services like circulation service, reference service, referral service, CAS, bibliographic, photocopier and inter-library loan services. Digital library services are made available over the Local Area Network in the main campus, UAS, Dharwad.
2.8.11 Indian Institute of Science, Bangalore

The Indian Institute of Science (IISc) was started in 1909 through the pioneering vision of J.N. Tata. Jamsetji Nusserwanji Tata (1839-1904) was conceived that the future progress of the country depended crucially on research in Science and Engineering and envisaged this Institute to conduct original investigations in all branches of learning. Since then, it has grown into a premier institution of research and advanced instruction, with more than 2000 active researchers working in almost all frontier areas of science and technology. IISc is an institute of higher learning and is constantly in pursuit of excellence. It is one of the oldest and finest centres of its kind in India, and has a very high international standing in the academic world as well.

The Institute currently has more than forty academic departments, pursuing research in different areas of science and engineering. The departments belong to one of the two faculties of the Institute, viz., the Faculty of Science and the Faculty of Engineering. Faculty of Science awards PhD degrees through the Regular Research and Integrated PhD programme. On the other hand, Faculty of Engineering awards ME, MTech and M Des degrees in addition to PhD and M Sc (Engg).

The research activities of the departments in IISc fall under six major divisions. They are:

- Division of Biological Sciences,
- Division of Chemical Sciences,
- Division of Electrical Sciences,
- Division of Mechanical Sciences,
• Division of Physical & Mathematical Sciences and
• Division of Information Sciences.

Library

J.R.D. TATA Memorial Library, popularly known as the Indian Institute of Science Library, is one of the best Science and Technology libraries in India. Started in 1911, as one of the first three departments in the Institute, it has become a precious national resource center in the field of Science and Technology. The library spends over six crores of rupees annually towards the journal subscription which is unparalleled in this part of the globe. Library is one of the key component of the newly created division viz., “Information Science and Services Division” in the Institute. The total area of the library is 50,000 square feet and has ground floor first floor with 3 tiers. Computational facilities are provided to the staff and students of the Institute by the Supercomputer Education and Research Centre which runs round-the-clock i.e. seven days a week and 365 days a year, helping the researchers to break many barriers in computational science and engineering.

The Library provides services viz. reference, referral service, current awareness service, Inter library loan, Book bank scheme, Xeroxing, Document delivery service, Interaction service, Bar coded library cards, Telnet access, Web access and Union Catalogue of Books and Journals.

Library Automation

The library activities and services are automated using LIBSYS software as a solution for developing integrated information system for carrying out the activities and
services effectively. The Library maintains network accessible databases such as Online Catalogue, i.e. books holdings available in the main library over 1,28,000 records searchable by author, title and subject of the book, periodicals holdings, library user database etc. Library Online Catalogue, Periodical holdings Weekly list of additions are accessible on the web as well.

2.8.12 Indian Institute of Management, Bangalore

The Indian Institute of Management (IIMB)36 established in the year 1973 and runs various Programs like PGP, PGSM, FPM, EEP & Others and publish Management Review & Gleanings.

Library

The IIMB library is housed in a building of 55000 sq.ft of carpet area spread over four floors and serves to the users round the clock except on three National Holidays. It has a comprehensive collection of literature predominantly related to Management and its allied subjects to meet the present and future information needs of its users.

IIMB encourages the use of its library for professional purposes and individuals and organizations can use the library regularly as either on a Deposit or Non Deposit basis on payment. The library brings out several publications for reference purpose. Some of the major services rendered by the library are Reference, Reprographic, Database search Services, Inter Library Loan, Resource Sharing, Audio-Visual, Industrial Information, Press Clippings, Articles Supply on request, Documentation Services like CAS, SDI, Indexing, Bibliographic and such other services. The Library has a Reserved Reading Room with the facility of a core collection of books, Magazines and
Newspapers etc. An Industrial Information Centre has been set up with information on about 2200 leading Indian companies. The library also gives intensive training to Graduate, Diploma and Vocational Apprentices on a regular basis.

The library has a total collection of about 1.66 lakhs of documents consisting of books, back volumes, Government publications, technical reports, conference proceedings, microfilms, microfiche, CD-ROM Databases, maps etc. The library subscribes 1120 periodicals, 150 Newsletters, 2200 annual reports from public and private organizations and maintains around 250 press clipping files on management and related subjects.

Library Automation

The library activities and services are computerized using “LIBSYS” integrated software with a CD-Workstation facility. Around 1.45 lakhs of documents are available on the institutes Local Area Network. It holds the Union Catalogue of Journals of Major libraries in Bangalore The computing resources at IIMB include world class servers and workstations, a state-of-the-art campus network with a 2Mbps & 64Kbs speed dedicated Internet connections operating 24 hours a day and throughout the year.

2.9 Conclusion

The role of academic libraries in the electronic era has seen tremendous developments especially: electronic development and article delivery, electronic journals, publication on demand, link to networked resources and training and awareness development. The major questions rise regarding the academic library’s role in learning and teaching
processes. The academic libraries therefore need to explore service developments in the 21st century to support a series of new scenarios viz., publication and scholarly communication media; intensive digital resources; heterogeneous student population; continuing high demand from students and ever reducing resources, staff leading to enormous pressures and severe challenge to management of the university\textsuperscript{37}.
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