

HIGHER EDUCATION AND ACADEMIC LIBRARIES IN INDIA: A RAPIDLY CHANGING SCENARIO

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Abstract: *The development of higher education in India has evolved rapidly with globalisation. Innovations in research, development and competition in the global context have influenced growth and development in all areas, including education. ICT has become its facilitator for transforming the education sector. Today it is not just learning but quality learning experiences with innovations that are much sought after for developing educational institutions. Libraries and information centres (LICs) play a vital role in the development of Universities, Colleges and other higher educational institutions. Library networks and consortia play a critical role in reducing the financial crisis of libraries and information centres. The pride of libraries lie in service extended to knowledge seekers. LICs, therefore, are major academic entities in the architecture of an institution of learning. This paper examines the changing role and responsibilities of academic libraries in the overall developing country of ours.*

Index Terms - Consortia, Higher Education, ICT, Libraries, MHRD, UGC

I. INTRODUCTION

Education has a significant place in human society. The beauty of education is that it grows fast with the dynamics of teaching and learning. Today it is more of participative learning. Learners learn best when they become part of the teaching-learning programme. Learning progresses with higher education (HE) both in knowledge expanse and in qualification of the individual. Innovative strategies are added to creative activities. The 21st century has witnessed many innovative learning strategies such as machine learning, social-emotional learning, shadow education, virtual learning, deep learning, lifelong learning (LLL) etc. The fast pace of change in the world is due to factors such as the quality of education in general and the speed of learning in particular. What is required is life-guiding education also.

HE has played an important role in developed countries. Modernisation and improvement in the HE have brought the quality above the line in the HE sector. The government has been encouraging the education institutions to become excellent educational hubs by providing grants for eligible HE institutions. In India, there are 903 Universities, 39,050 Colleges, and 10,011 standalone institutions (AISHE Report 2017-18). Information Communication Technology (ICT) enabled education, and electronic resources are the main reasons for the transformation of the education system in India. University Grants Commission (UGC) furnishes the grants and lays down the guidelines to follow. NAAC has been assessing and accrediting HE institutions. Recently, the Ministry of Human Resource Development (MHRD) launched the National Institutional Ranking Framework (NIRF), to rank the higher educational institutions. The All India Survey on Higher Education (AISHE) is another initiative of MHRD, and it collects various data of the HE institutions and helps in the planning of the educational segment. These initiatives assist the institutions to improve the quality and develop the strategies to compete with other institutions. Along with the transformation of the HE sector, the libraries that are the heart of the institutions are modernising and digitalising the resources and the services.

With globalisation, Indian HE development has been changing rapidly. Reforms in the Universities and Colleges have enhanced the status of the HE in India. The impact of ICT, globalisation and universalisation have contributed to the advancement in education.

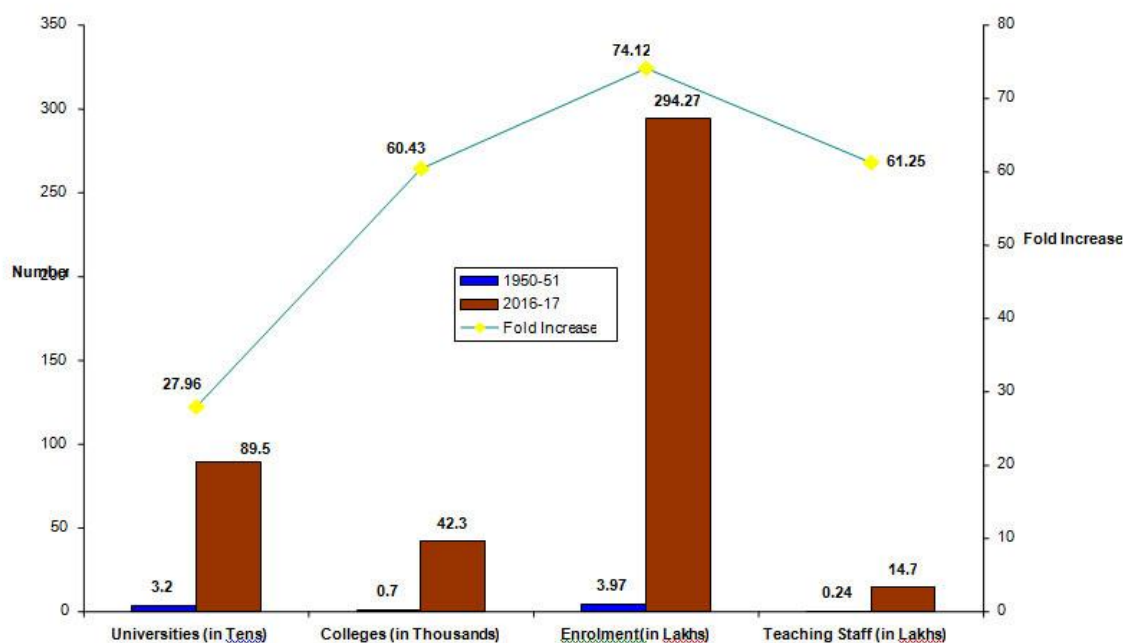
The main objective of this paper is to find out the status, trends and the recent developments and transformations of the HE in India, with the contribution of academic libraries. The library and information centres are also playing a crucial role in the development of Universities, Colleges and other HE institutions. Since independence, the advancement in the HE sphere has changed drastically, and it will contribute to the development of society and the country. ICT has played a vital role in the day today's life and culture. ICT evokes a paradigm shift in the HE system in India. The paper uses secondary data for information collected from various periodicals and web sources.

II. HIGHER EDUCATION IN INDIA

HE is one of the most critical sectors in the development of any country. India's HE system is the third largest in the world, next to the United States and China (Wikipedia). The Indian HE system produces and supplies skilled, enriched and able human resources to the world. By 2030, India will be amongst the youngest nations in the world. With nearly 140 million people in the College-going age group, one in every four graduates in the world will be a product of the Indian HE system.

After the independence of India, reforms in the HE sector and the field of research have made a big difference in the modern education system. After the innovations in science and technology, competition has enhanced in the world. Adaptation of the ICT in the HE sector has changed the scenario in the country. The growth of HE is rapidly in progress. Innovations in research & development and competition in the global context have influenced the development in all the fields, including education. Reforms, innovations and changes have become the need of the hour to the knowledge world, and they create new products and services in all the areas. The impact of ICT and e-literacy has filled the urban and rural gap has made a considerable impact. The student enrolment ratio has also increased steadily. The following figure shows the growth and enrolment of students in the HE field.

Fig 1: Growth of Higher Education in India 1950-51 to 2016-17



Source: UGC website

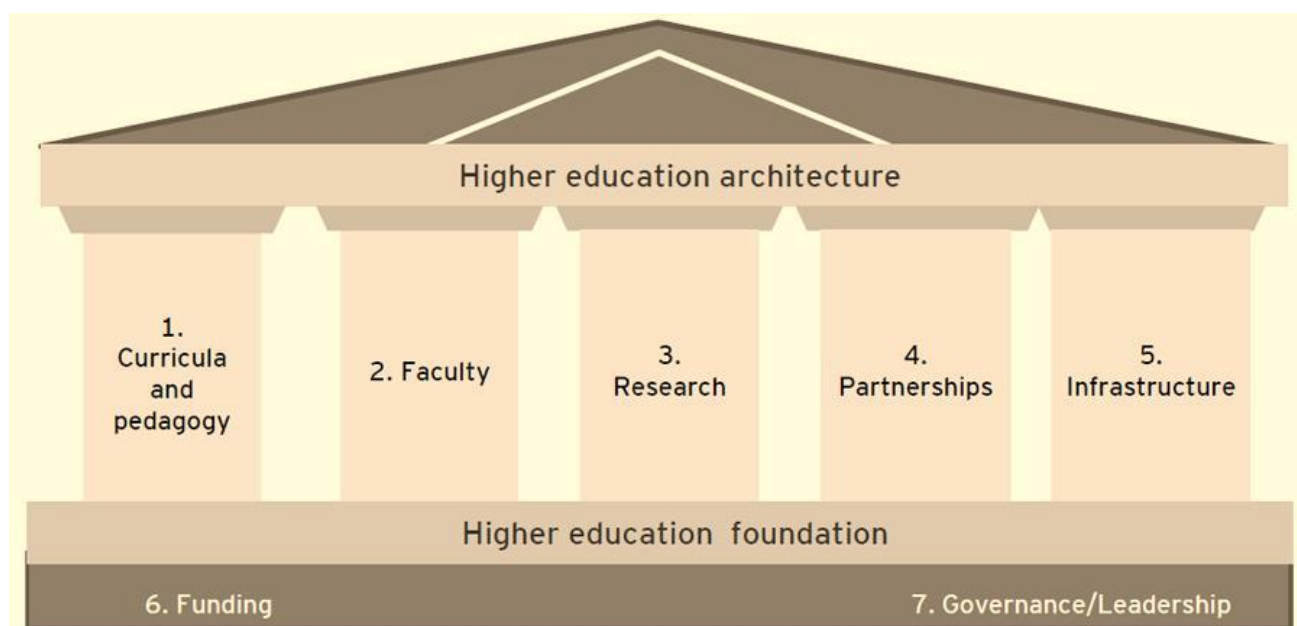
The National Knowledge Commission (NKC) has been formed to transform India into a Knowledge Society. The Commission has focussed on access to knowledge, knowledge concepts, creations, applications and services. In the regard, Sam Pitroda, Chairman of NKC, has recommended the development of libraries and information centres. It also emphasised on Library and Information Science (LIS) education, training, research activities and staffing, including job descriptions, designations, qualifications, pay scale, career advancement and service conditions (NKC, 2009).

III. STATUS AND VISION

Over the last two decades, India has remarkably transformed its HE landscape. It has created widespread access to low-cost, high-quality University education for students of all levels. With the well-planned expansion and a student-centric learning-driven model of education, India has not only bettered its enrolment numbers but has dramatically enhanced its learning outcomes.

A differentiated three-tiered University system – where each tier has a distinct strategic objective – has enabled Universities to build on their strengths and cater across different categories of educational needs. The HE architecture is robust as it appears (see figure 2). Further, with the effective use of technology, India has been able to resolve the longstanding tension between excellence and equity.

Fig 2: Structure of Higher Education



Source: <https://www.ey.com>

India has also undertaken large-scale reforms to better the faculty-student ratios by making teaching an attractive career path, expanding capacity for doctoral students at Universities and research centres, and by delinking educational qualifications from teaching eligibility. India is on the track of attaining a higher status in the global HE scenario through its features and achievements (see Box 1).

Box 1: Highlights of India's education sector

India is the single largest provider of global talent, with one in four graduates in the world being a product of the Indian system

India is among the top 5 countries globally in cited research output, its research capabilities boosted by annual R&D spend amounting to over US\$140 billion

India is in the fourth cycle of its research excellence framework, with at least a 100 of Indian universities competing with the global best

23 Indian Universities are among the global top 200, going from none two decades ago.

In the last 20 years alone, 6 Indian intellectuals have been awarded the Nobel Prize across categories

India is a regional hub for higher education, attracting global learners from all over the world

The country has augmented its GER to 50% while also reducing disparity in GER across states to 5 percentage points

The Indian higher education system is needs blind, with all eligible students receiving financial aid. Two-thirds of all government spending towards higher education is spent on individuals, including faculty and students

India's massive open online courses, started by several elite research Universities, collectively enrol 60% of the world's entire student population

Indian higher education institutions are governed by the highest standards of ethics and accountability, with every single one of them being peer-reviewed and accredited.

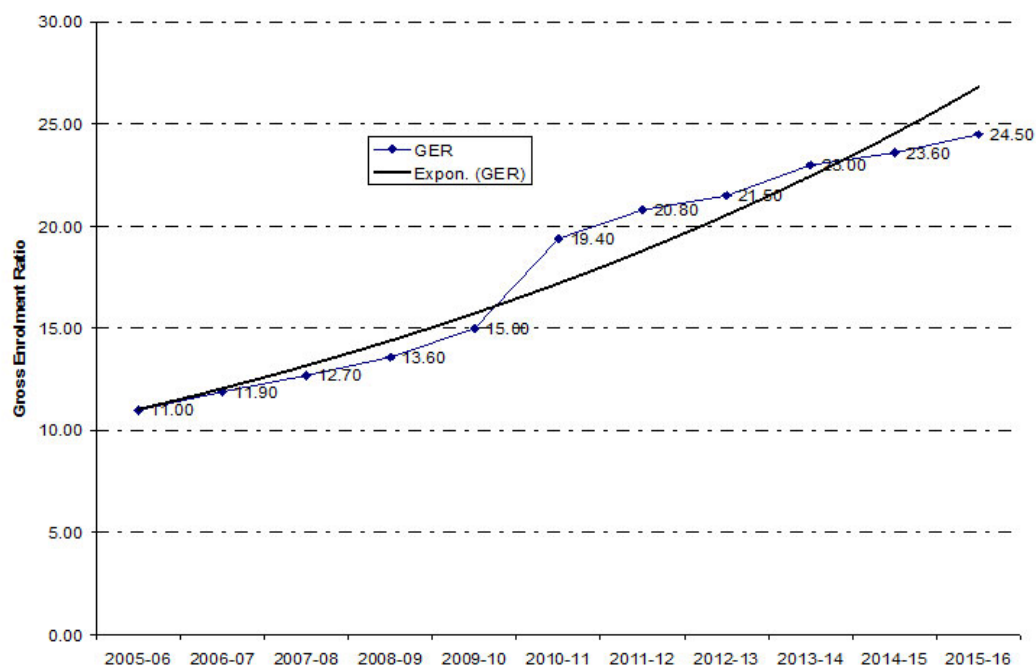
The path of HE has no doubt strewn with challenges, but the vision is bright and bold. In recent years, India has undertaken massive structural and systemic changes that have started to yield encouraging results. The country has been touted to have the best-in-class post-secondary education system at present. Some of the significant factors that have contributed to this growth and can help envision the 2030 dream includes:

- Expansion of a differentiated University system with a three-tiered formalized structure
- Transition to a learner-centred paradigm of education
- Intensive use of technology
- Reforms in governance
- By 2030, India will have the largest population in the world, in the HE age bracket. Increasing urbanisation and income levels will drive demand for HE.
- India's economy is expected to grow at a fast pace; rapid industrialization would require a gross incremental workforce of 250 million by 2030; India could potentially emerge as a global supplier of skilled human resources.
- India has the opportunity to become a prominent R&D destination.
- Given the expected socio-economic scenario in 2030, India would need a robust HE system that can deliver on multiple imperatives.
- A differentiated system of institutions with differing objectives and focus areas would be critical for achieving the proposed goals.

IV. PROMOTION OF HIGHER EDUCATION

Over the years, the promotion and progress of HE have played an essential role in building the Knowledge Society. Advancement of quality and excellence in the HE in India has become the need of the hour. To compete with the global institutions, the standards of the HE have to be improved. Global standards must be observed in this sector. The government has been providing scholarships for the students and fellowships to the researchers of the economically and socially backward of the society for their upliftment. The UGC has been providing grants to major and minor research projects for the teaching fraternity of the HE institutions. The UGC also gives travel grants to the University and College teachers to promote higher learning and career advancements. Even some non-governmental organisations offer such incentives for R&D. As a result, the Gross Enrolment Ratio (GER) has been increasing year by year, and the government has been supporting the institutions, financially and otherwise. The following figure shows the GER of the country during 2005-06 to 2015-16.

Fig 3: GRE in India: Trends



Source: UGC website

V. ROLE OF THE MINISTRY OF HUMAN RESOURCE AND DEVELOPMENT (MHRD)

The MHRD has been charged with the overall care of the education system in India. It has been operating the primary, secondary and HE sector. Through Sarva Shiksha Abhiyan in the primary level, Madhyamika Shiksha Abhiyan in the secondary education level and RUSA in the HE sector, it provides financial and other assistance to the HE sector.

MHRD also provides the scholarships, fellowships and other financial support to the students in the various stages of their academic career. MHRD has established a few statutory bodies to enhance the quality in the HE sector. The UGC has specialised in financial support and building the rules and regulations in the HE field. National Assessment and Accreditation Council (NAAC) in assessment and accreditation, National Institutional Ranking Framework (NIRF) for rankings and All India Survey on Higher Education (AISHE) for collecting and disseminating the data to check the status of the HE sector through the survey of the HE institutions in India.

VI. ROLE OF THE UNIVERSITY GRANTS COMMISSION (UGC)

The UGC is a statutory body, established as per the UGC Act, 1956, under MHRD. It plays a significant role in the HE sector in India. Its main objectives are coordination, determination and maintenance of University and College education. The UGC distributes the grants to the eligible HE institutions for their overall development.

The UGC oversees Open and Distance Learning (ODL) throughout the country. The ODL includes:

- Correspondence Course Institutes (CCIs)
- Indira Gandhi National Open University (IGNOU)
- State Open Universities (SOUs)

The UGC observes and coordinates the State and Central governments to maintain the standards and quality in the HE sector. Based on the NAAC grade, the UGC provides financial support to the eligible institutions. The UGC has given equal importance to libraries in the HE sector. The UGC encourages resource sharing and establishes many national information networks and consortiums to promote the library and information centres in HE. The library consortiums have most benefitted in the Universities.

The UGC established NAAC to assess and accredit the HE institutions in India. To maintain the standards, NAAC accreditation and re-accreditation process assists the HE institutions to improve the quality of education. The UGC made accreditation mandated to the Universities and Colleges in 2013. As of 31 March 2017, 503 Universities and 10392 Colleges has been accredited by NAAC (NAAC annual Report 2016-17).

VII. RECENT TRENDS IN HIGHER EDUCATION

ICT has been adopted quickly in the HE sector. Traditional methods are making way for the digital technology* all over the world. In the day-to-day life, electronic gadgets and electronic administration, play an essential role and have changed the mind-sets of the new generations, not only in the education sector but also in commerce, economy and administration.

Digital libraries are quite new – about 20 years of age. At the same time, they have been growing at a fast pace. Digital libraries have the following characteristics – they store, preserve, distribute and protect contents in different formats and, at the same time, they allow interaction between the user and the contents (materials); they are always present, both geographically and over time. They can make works internationally known, enhancing referencing and citations; they can make public the products of the educational process and let them be used as inputs for further learning. Digital libraries are suitable tools to manage courseware and additional reference items used in class. A significant advantage of digitalisation of libraries is Cross-institution cooperation – digital libraries, in general, are connected to the Internet, this allows that contents to be used from different cooperating institutions, as long as the LOs are described (metadata) and managed suitably. An example of the importance of cooperation is MERLOT – Multimedia Educational Resource for Learning and Online Teaching, an organisation whose mission, as stated on the website, is to serve as a leading edge, user-centred, searchable collection of peer-reviewed, HE, online learning materials created by registered members, and a set of faculty development support services (Pavani, 2007).

Electronic technology has had a rapid influence. Library and information centres are also not far behind to adopt automated technology. Books, journals, periodicals and other printed materials have been replaced by electronic resources and digitalised services such as ‘Ask A librarian services’, online, chat reference, video conferencing, digital robots, and collaborative digital reference etc. (Roopa & Krishnamurthy, n. d.).

HE has been developed and modernised. ICT has become its facilitator to transform the education sector. Indian Universities are attracting foreign collaborators and signing Memoranda of Understanding (MoU) with international institutions. There are 45,424 students enrolled in the HE institutions from 165 different countries (AISHE 2015-16 Report). The enrolment of women students has been increasing every year in the HE. As per the AISHE report of 2015-16, out of 34.6 million, 16 million girls’ students are enrolled in the HE sector.

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* A digital library, digital repository, or digital collection, is an online database of digital objects that can include text, still images, audio, video, or other digital media formats. Objects can consist of digitized content like print or photographs, as well as initially produced digital content like word processor files or social media posts. In addition to storing content, digital libraries provide means for organising, searching, and retrieving the content contained in the collections.

VIII. HIGHER EDUCATIONAL INSTITUTIONS SURVEY AND RANKINGS

The MHRD introduced the annual web-based All India Survey on Higher Education (AISHE) in 2010-11. It collects data from the Universities and Colleges from all over the country in various parameters. This will help in making policy decisions and research for the development of the HE sector. AISHE gives a clear picture and conditions of the HE in India.

NIRF was accepted and launched by MHRD in 2015. Every year the MHRD conducts the survey of the HE institutions in various disciplines. The NIRF system has been focusing on the overall quality achievements and services of the institutions. It will help create healthy competitions among the institutions to maintain the quality and development in their institutions to get better rankings in the country. AISHE and NIRF have given importance in the parameters to the library and the information centres, mainly in the collection development.

IX. LIBRARIES AND HIGHER EDUCATION

The library is a medium for the current exchange of ideas, not just for finished collected wisdom to be set down imperishably for posterity. It is a way of talking to one another - necessary talking, but tentative talking nonetheless. Eventually, when the excitement is mostly gone and the subject all wrapped up, then, for the most part, it will appear in books that are treatises.

The library is a service institution. Library services are one of the most widely used and accepted in the modern world. The academic community, particularly in a University, utilises library services for research and teaching purposes. The library supports academic work. Therefore, the library is rightly regarded as the heart of an academic institution. Thus, we can say the concept of a library is an institution where a reader can consult and acquire desired information under a single roof. Therefore, the Universities are places, which are wholly responsible for the HE and knowledge for the development of a human personality and development of nations. A University caters to the needs of higher learning and research.

The role of the library can be defined within the framework of the University's mission and a library development programme can be undertaken accordingly. In the words of Dr S. R. Ranganathan, "Libraries are not mere storehouses; they are rich springs from which knowledge flows out to irrigate the field of education and culture."

The fundamental role of the University library is educational. It should not be operated as a mere storehouse of books attached to a reading room but as a powerful instrument of education. It is emphasised in different reports brought out by various library and educational commissions in India and abroad. A University library is established to aid in the successful accomplishment of the objectives such as teaching, research, publication programmes, etc. In the modern education system, the University library has important responsibilities, and it must be a transformative one (Arjun et al., 2010).

X. TRANSFORMATION OF LIBRARIES AND INFORMATION CENTRES

The library and information centres have been transformed after the development of science and technology. Digital and electronic resources have been adopted responsively. Academic libraries are supporting teaching, research and other academic programmes positively and proactively. The UGC, NAAC, NIRF and other organisations have given importance to the libraries. In Universities and Colleges, libraries are playing a significant role in the HE process and development. Libraries are getting equal emphasis with other parameters in the institutions to maintain and achieve quality in the education. Various committees and commissions uphold the vital status of the libraries and information centres. Swift advancement in information communication technology, research and development (R&D) has changed the scenario (needs and responsibilities) of the libraries in the world and also in India.

Library consortiums and resource sharing networks have been a crucial component in the field of library and information centres. Allen Kent (1979) elaborated the concepts of resource sharing as "Resource sharing in libraries is defined as a mode of operation whereby functions are shared in common by several libraries in its most positive effects. Resource sharing entails reciprocity, employing partnership in which each member has something useful to contribute to others and in which every member is willing and able to make available when needed. The term resource is used to designate any or all of the materials, functions, services and the expertise of the professional and non-professional staff. Resource implies a thing, a person or an action to which one turns for aid and help in time of need". Library consortia are more authoritative to share and exchange their resources through online databases. Most of the higher educational institutions are facing financial difficulties. To overcome this problem, the library consortiums help to access information resources through the consortia. In India, MHRD and UGC have taken initiatives in this regard and have established many consortia to share information resources.

Information Library Network (INFLIBNET), an autonomous inter-university centre of the UGC was established in the year 1991. It has overhauled the HE libraries and connected them for maximum use of information. INFLIBNET has connected HE institutions, libraries and information centres for promoting research and developments in India. INFLIBNET has established many new initiatives like Online Union catalogue-IndCat, Shodhganga- the full-text theses digital repository, Shodhgangotri digital repository of research synopsis, e-PG Pathshala, e-Shodh Sindhu consortia, N-LIST, UGC INFONET, Vidwan database, and SOUL 2.0. Besides these, INDEST, UGC-INFONET, NISCAIR and other library networks and consortia are playing a significant role in India to share information resources.

However, the Indian HE system is facing many problems, which are largely attributable either to inadequate state funding or to the insufficient consolidation of nation intention (Abrol, 2010). Recent trends have shown that the Indian education system has been changing in terms of both quality and quantity. Students and research scholars come from different countries of the world. Eminent scientist Dr K. Kasturirangan, former chief of ISRO, headed the committee of the New

Education Policy (2017). The New Education Policy will be more modern, innovation and research oriented. Hi-tech is being adapted quickly, and cognitive content has been changing simultaneously. Pedagogy and mind-sets have been changing the contemporary education system. Library and information centres have changed their views and technology has been adopted responsively. Due to the impact of technology, libraries are more focused on electronic resources and consortiums to save time, space and the financial crunch. Library users can be proactive now than ever before.

XI. CHALLENGES AND RECOMMENDATIONS

HE in India today is in a transformative stage, both in structure and content. The conventional concept of education in general and HE, in particular, is changing – albeit slowly – mainly due to globalisation and the advancement of new technologies in information and communication. Financial/commercial viability and social mobility in and through HE have improved. Perhaps this is only a glittering scene. On the one side of the ocean (of knowledge), we have those who possess and profess the virtues of HE. On the other hand, there is a large section of the population that either has no access to the HE or has found fewer returns from investing/innovating in the field of the HE.

For India, which spends on an average about 4.2 per cent GDP on education, estimating the returns to investment in education is useful for making comparisons with other forms of investment too. There is an urgent need to improve knowledge – quantitatively and qualitatively – in India. The current discussion on the possible constraints has focused primarily on the issue of resources in and through libraries and information centres. The country has not managed its resources for education efficiently nor handled globalisation effectively (Hans, 2009).

For a vast populated and socially diverse emerging country like India, HE becomes all the important to supplant physical capital with social capital to achieve faster economic growth along with social cohesion, cultural ‘development’ and ethical uprightness in all fields. While there is a growing demand for access to HE, the challenges in providing quality HE are by no means small – lack of wherewithal being primary. While size seems to be the focus by planners and entrepreneurs in the field, quality has suffered due to massification, commodification, and poor demonstration. Failed strategies and low incentives continue to bane serious students, researchers and teachers. Even some educational philosophers and philanthropists do not ‘walk the talk’. There is a mismatch between knowledge, skills, enterprise and equity, both ex-ante and ex-post. How then can India – the ancient seat of learning – claim to be the knowledge powerhouse today?

Our view is that libraries, and therefore librarians, should be treated as integral and active parts of the educational process and the latter be involved in course planning and development. The role identified for libraries in traditional HE has not been transferred to the thinking about the external mode of study. The problems of providing any library service to foreign students in a country as vast and sparsely peopled as India – with more international students to be enrolled in the coming years – are enormous. Improvements in the development of the three ‘master’ skills of creativity, critical thinking and influence are essential for developing the next generation of researchers (Hans, 2015).

To extend services and opportunities equivalent to those available on campus may be impossible, but a great effort should be made. Otherwise, it may be impossible to match the educational experiences of external and internal students, in which case, the equivalence of their qualifications is in serious question (Hans, 2013).

This is the Age of empowerment. Empowerment of individuals and communities means increased control over life and coping skills. With and through ICT, people's empowerment is quick and far-reaching. With ICT, people gain new abilities and ways to participate and express themselves in a networked society. However, there is a need for such a mechanism to explode the myth that digital empowerment is urban-centric (Hans, 2018).

XII. CONCLUSION

The HE system in India is still lagging compared to the standards of the world's top institutions, and none of the Indian Universities is in the top of 100 Universities in the World rankings. Indian HE has to become more competitive in the international markets and attract international students and research scholars. Reforms in the HE sector have made a difference in the modern education system. Liberalisation and privatisation of education have changed difference in the pace, pattern and performance of HE in this era. Private and industry participation has made a difference in the HE sector. UGC, NAAC, AICTE and other legal bodies have done a marvellous job to improve the quality in the HE system in India. The HE institutions are producing skilled and able human resources and with fruitful research activities in various fields. Healthy competition among the HE institutions promotes quality and efficiency in the research fields. The Knowledge Society has developed all parts of the world, and it helps in the development of India too.

ICT enabled education and women empowerment has to develop in the country. Advanced research helps in this regard, and the statutory bodies have to review the cognitive content and pedagogy of the HE to promote the quality and progress in the education system of the country. The advancement of creative teaching and learning process will happen only when more and more reference resources have been used instead of textbooks and guidebooks. A Progressive curriculum also plays an important role in increasing the quality of education.

Libraries and information centres have to attract users to knowledge centres. This will help create new ideologies and theories in the education sector. Hence, the available technologies and resources have to be used effectively. The library networks and consortiums are playing a very important role in reducing the financial crunch of library and information centres.

For any library to succeed in implementing knowledge management will require strong leadership and vision from the top administration, which can influence the organisation's knowledge sharing efforts positively. As libraries enter the knowledge age of the next century, we should not take a back seat in the development of knowledge management. Instead, armed with our professional knowledge and experiences, we should be in the driver's seat. The library is like 'history on the move' – archives in the name of preservation have a pivotal role to play. When knowledge sources needed to be increased and diversified, speed of access has to be geared up. Accessibility, availability, interaction, customisation and reuse are strong reasons to use digital libraries for HE even when there are challenges in the academic libraries, particularly in a digital and networked environment. Secondly, respect for intellectual property rights must be ensured. This is the right time to make the best of Digital India as well as Demographic Dividend, two of the on-going trends in the country. Then 'Make in India' becomes meaningful and profitable. A higher level of educational attainment leads to a skilled, productive and efficient workforce that ensures the standard quality of goods and services.

Education in general and the HE, in particular, are essential to increase the productivity of human capital. Education is regarded as the basis for the foundation for employability. Education implies not only gaining knowledge but also transforming that knowledge into an application through vocational training and skill development. Education enhances people's capacity to work and their opportunities to work, promoting innovation. It ensures work satisfaction and increases productivity. All these will help remove socio-economic obstacles (Shetty and Hans, 2016).

To achieve the envisioned state in 2030, transformational and innovative interventions would be required across all levers of the HE system in India. Academic libraries must play their challenging role very well – managing resources for education in education.

REFERENCES

- Abrol, D. (2010). Governance of Indian higher education: an alternate proposal. *Social scientist*, 38(9/12), 143-177.
- Arjun; K. D.; Jyoti A.; Majumder & Bose, S. (2010). Role of library in higher education in India. *International journal of librarianship and administration*, 1(1), 1-12.
- Bansal, J. & Kumar, D. (2018). ICT enabled higher education: an overview. *Asian journal of research in business economics and management*, 8(3), 45-51.
- Bhunia, A. (2018). Empowerment of women through education: a comparative study of India and West Bengal, *Asian journal of social sciences and humanities*, 8(2), 82-92.
- Chinara, M. & Rout, H. S. (2017). Changing trends in financing of higher education: a critical review. *Manthan: Journal of commerce and management*, 3(2), 27-60.
- Deshmukh, S. R. (2017). Higher education for knowledge building society. *South Asian academic research journals*, 7 (7), 4-8.
- Gill, A. K. R. (2016). Emerging issues and challenges in higher education. *Zenith international journal of multidisciplinary research*, 6(11), 1-8.
- Hans, V. B. (2009). Managing resources for education and human development: experiences from India. *Proceedings of international conference on business management university of Sri Jayewardenepura, Nugegoda, Sri Lanka*. Retrieved from <http://journals.sjp.ac.lk/index.php/icbm/article/view/858/OmVol6>, 2009.
- Hans, V. B. (2013). Higher education in India – assailing challenges; assuring quality. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2306842
- Hans, V. B. (2015). Creativity and innovation in research and scope for multidisciplinary research. *International journal of educational research and information science*, 2(3): 54-60.
- Hans, V. B. (2018). Digital empowerment and inclusive growth. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3139344
- Jha, U. C. (2017). International practices in assessment, accreditation and quality standards in higher education. *International journal of social science, engineering and technology*, 4(1), 31-39.
- Jonaki, B. & Prasenjit, P. (2016). Higher education in India: recent issues and trends. *Research Journal of educational sciences*, 4(1), 10-16.
- Jonki, B. & Prasenjit, P. (2016). Higher education in India: recent issues and trends. *Research Journal of educational sciences*, 4 (10), 10-16.
- Kaleem, S. & Akhtar, S. M. J. (2017). Higher education in India: an overview. *The geographer*, 64(2), 17-29.
- Kalyan, P. P. (2016). Challenges, issues and opportunities of higher education in India. *International journal of advanced research in management and social sciences*, 5(11), 43-51.
- Kent, A. (1978). Library resource sharing networks: how to make choice. *Library acquisitions: practice and theory*, 2(2), 69-76.
- Kent, A., & Galvin, T. (1979). The structure and governance of library networks. New York: Marcel Dekker.
- Pavani, A. M. B. (2007). The role of digital libraries in higher education. International conference on engineering education – ICEE 2007. Coimbra, Portugal September 3 – 7, 2007.
- Pavithra, R. H. (2016). An importance of higher education-an Indian perspective. *International journal of physical and social sciences*, 6 (1), 145-155.
- Rajeshwari, K. & Akilandeshwari, K. (2016). Commercialised higher education in India. *International journal of research in social sciences*, 6(4), 10-16.
- Rani, P. G. (2017). Education loans and financing higher education in India: trends, driving forces and distortions. *IASSI quarterly: contributions to Indian social science*, 36(2&3), 152-173.
- Roopa, E. & Krishnamurthy, M. (n.d.). Perspective of digital library services: a review, *International journal of next generation library and technologies*, 1(1), 1-19.

- Sekar, K., Kasirao, V. & Loganathan, G. (2018). Developing electronic libraries in the professional colleges. *Medico-legal update*, 18(1), 456-459.
- Shetty, S. S. (2016). Enhancing the role of education for 'Make in India': A makeover. In Kayarkatte, N., Ashalatha, H. Rashmi, and B. Ravisha (Eds.). *Exploring innovative management practices to achieve 'Make in India' - A spark to bring change in Indian economy* (pp. 19-24), Mangaluru: MSNM Besant Institute of PG Studies
- Tomar, C. S. (2017). Higher education, its aims and quality concerns. *International journal of engineering and management research*, 7(2), 619-627.
- University Grants Commission. (2018, July 20). Retrieved from UGC: <https://www.ugc.ac.in/>
- Wikipedia (2019, May 19). Higher education in India. Retrieved from https://en.wikipedia.org/wiki/Higher_education_in_India
- <http://naac.gov.in/docs/Annual%20Reports/Annual%20Report%202016-17.pdf>
- https://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE2017-18.pdf
- http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/ESG2016_0.pdf
- <https://www.ey.com/in/en/industries/india-sectors/education/ey-higher-education-in-india-vision-2030>

