Improving Quality and Excellence in Higher Education: Evaluation of Recent Developments in India

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Abstract

Education particularly higher education is the most crucial sector for leveraging the growth and development of the nation in social, economic, cultural, political and scientific aspects. It is the basis of all national endeavours and development plans. Education provides strength and resilience to the people to respond to changing and often adverse situations. Education has the potential of transferring human beings into human resources. And thus potential development of human resource is the foremost function of education. Quality and excellence is of great significance both to the provider of higher education and education receiver in the process of building solid foundation of higher education and building capacities and capabilities of receivers, thus bridging the gap between underdeveloped and developed nation, rich and poor societies, less knowledgeable and erudite sections of population. Education has the ability to induce change leading to progress of society. Education has indeed become a subject of public policy and a sine qua non for the survival of society. In the realm of present day globalised world higher education is required to uphold creativity, talent, adaptability and quality. In order to fully utilize the fruits of higher education endeavours, the fundamental concern is to make sure that its quality and excellence are ensured, sustained and upgraded at all levels and appropriate policy measures are adopted to match our higher education system to international levels. The first section of the paper addresses the status of higher education in India. The second section focuses on the challenges faced by higher education institutions. The third section deals with the foremost policy initiatives by the government in the higher education sector. In the fourth section an attempt has been made to delineate imperative measures needed to foster quality and excellence in higher education. The paper strongly supports that the need of the present era is inclusive and qualitative expansion of higher education to uphold the cause for wide-ranging and all round development of the nation.

Introduction

"Education is the true alchemy that can bring India its next golden age. Our motto is unambiguous: All for knowledge, and knowledge for all."

The President of India - Shri Pranab Mukherjee

Education particularly higher education is the most crucial sector for leveraging the growth and development of the nation in social, economic, cultural, political and scientific aspects. Education enables people to cause and contribute to social change and societal development thereby ushering change in orderly manner. Education is the mainstay of all national endeavours and development plans.

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Education provides strength and resilience to the people to respond to changing and often adverse situations. In order to promote economic and industrial development in a country, the essential requirement is the capacity to develop skilled manpower of high-quality and in adequate number. Thus higher education is a catalyst which has the potential of transforming human beings into 'human resources'. The basic objective of higher education is to increase the intellectual powers of the human mind and add real value to human resources. The characteristic expansion of human resource to produce intellectuals, scientists, administrators and leaders who shape the future of our society is the main function of higher education.

Quality and excellence are buzzwords in the realm of today's globalised world. Improvement in quality and excellence in higher education is of profound value for the progress of the nation to make its niche felt in the world's arena. Quality and excellence is of great significance both to the provider of higher education and education receiver in the process of building solid foundation of higher education and building capacities and capabilities of receivers, thus bridging the gap between underdeveloped and developed nations, rich and poor societies, less knowledgeable and erudite sections of population. Higher education has the ability to induce change leading to progress of society in social, economic, cultural, spiritual dimensions. Establishing leadership in the world is possible only when we have a developed system of higher education in which efficiency and effectiveness remains the sole decisive factor to evaluate performance. Education has indeed become a subject of public policy and a sine qua non for the survival of society. From cultural and aesthetic aspect education enables the natural, harmonious and progressive development of man's innate powers. It is the expansion of all those capacities in the individual which would enable him to manage his environment and fulfill his wants. It is important to both human beings and the wider society for preparation of an educated workforce and citizenry, economic growth and mobility, transmission and creation of culture and values and social welfare at large. Higher education is a path to social and economic mobility. To be more specific education is an attempt to develop man. Education endows a man with knowledge to act rationally.

In the realm of present day globalised world higher education is required to uphold creativity, talent, adaptability and quality. In order to fully utilize the fruits of higher education endeavours, the fundamental concern is to make sure that its quality and excellence are ensured, sustained and upgraded at all levels and appropriate policy measures are adopted to match our higher education system to international standards. Major concern today is over the quality of education in our higher educational intuitions, relevance of current practices worldwide, need for reforms and steps to foster quality and excellence in higher education. It is therefore, highly desirable that educationists, academicians, researchers, bureaucrats and politicians sit together, discuss the present issues on education and mull over ingenious solutions of provide quality education to our copious human gentry. We need to think how we can have best universities, colleges, renowned scholars, innovative practices, passionate teachers and gifted students so that we can form best human capital to shape the future of our society.

Status of higher education in India

Indian higher education system is one of the largest in the world. There were only 20 universities and 500 colleges with 0.1 million students at the time India attained independence. But according to the latest data there are 611 universities and university level institutions and 31,324 colleges as on August 2011. Table 1 shows the category of institutions of higher education and their number in India.

Table 1: Category of institutions of higher education and their number in India

S. No	Type of institution	Number
1	Central Universities	43
2	State Universities	289
3	State Private Universities	94
4	Deemed to be Universities	129
5	Institutes of National Importance	50
6	Institutions established under State Legislature Acts	5
7	**Total**	**611**
8	**Total Colleges**	**31,324**
9	**Grand Total**	**31,935**

Source: XIIth Five Year Plan (2012-2017): "Inclusive and Qualitative Expansion of Higher Education", University Grants Commission.

Enrolment: Another parameter of the size of the Indian higher education system is reflected in the current enrolment of students in the institutions of higher learning. During the academic year 2010-11, there were 169.75 lakhs (provisional) students enrolled in various courses at all levels in universities/colleges and other institutions of higher education as compared to 156.35 lakhs in the previous year, registering an increase of 8.6 per cent. A diagrammatic representation of the trend in enrolment in absolute terms from the year 2000-01 to 2010-11 is given in Fig.1.

Fig 1: All India Growth of Student Enrolment: 2000-01 to 2010-11
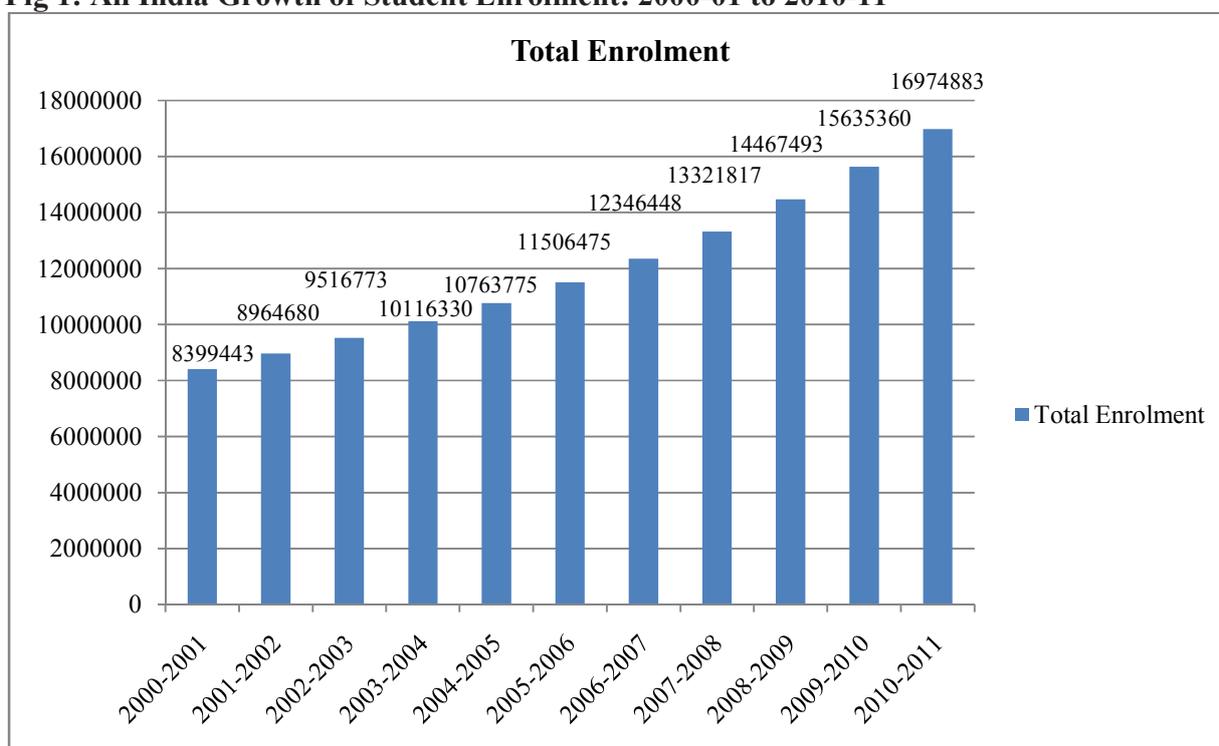
Source: Annual Report (2011-12): "Department of school education and literacy and department of higher education", Ministry of Human Resource and Development, Government of India.

GER in Higher Education: Even though there is a significant growth in student enrolment in higher education system, especially in the last two decades, the GER in higher education in India is still about half the world's average. GER (24%) and about two thirds that of the developing countries (18%) and much lower than that of developed nations (58%) (12th Five Year Plan, 2012-2017).

Public expenditure on higher education as a percentage of GDP: While India's public expenditure on higher education as a percentage of GDP is 0.60% is quite low when comparable to other countries. The comparison between public expenditures in different countries is given in Fig 2 (UNESCO, 2009).

Fig 2: Public expenditure on higher education as a percentage of GDP (2010-11)
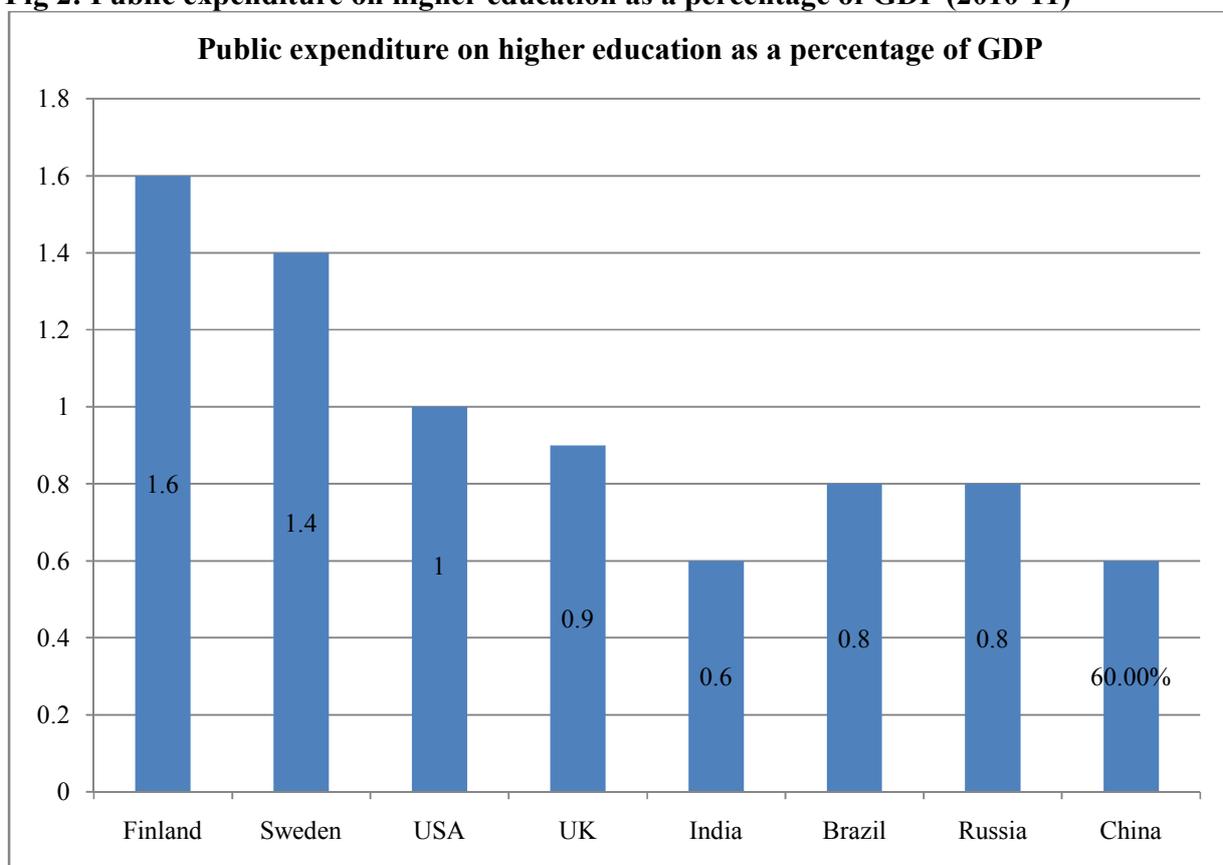
Note: figures in parentheses indicate percentages

Share of spending on higher education: State governments have historically been a larger source of public funding for higher education, vis-à-vis the central government. However, the balance has been shifting towards the central government in recent years. Fig 3 shows the share of spending on higher education by central and state governments. While Fig 4 and Fig 5 illustrates the share of spending by central government on higher education and the share of spending by state governments on higher education respectively in different sectors of education such as general, technical, agriculture, medical etc.

Fig 3:Share of spending on higher education (2010-11)

Share of spending on higher education

33 Central Government
67 State Government
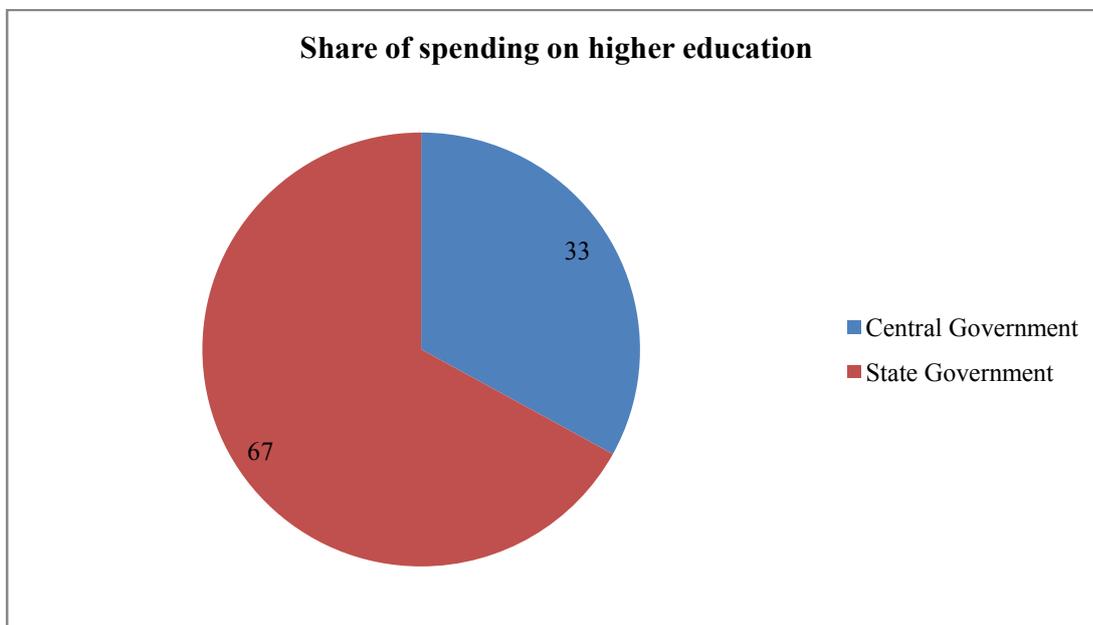
Note: figures in parentheses indicate percentages

Fig 4: Share of spending of central government on higher education (2010-11)

Share of spending of central government on higher education

38 General Higher Education
28 Technical Higher Education
17 Agriculture
17 Medical
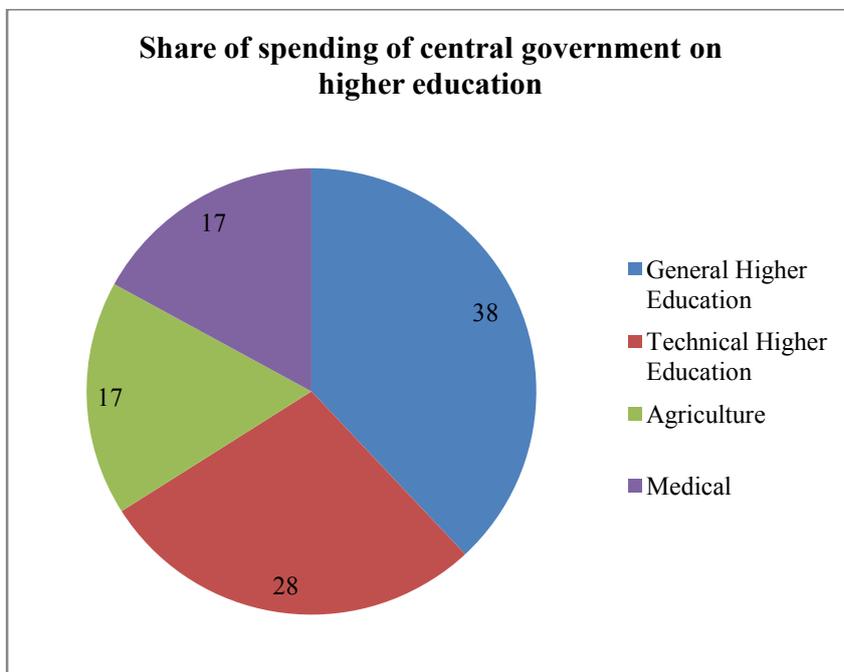
Note: figures in parentheses indicate percentages

Fig 5: Share of spending of state governments on higher education (2010-11)
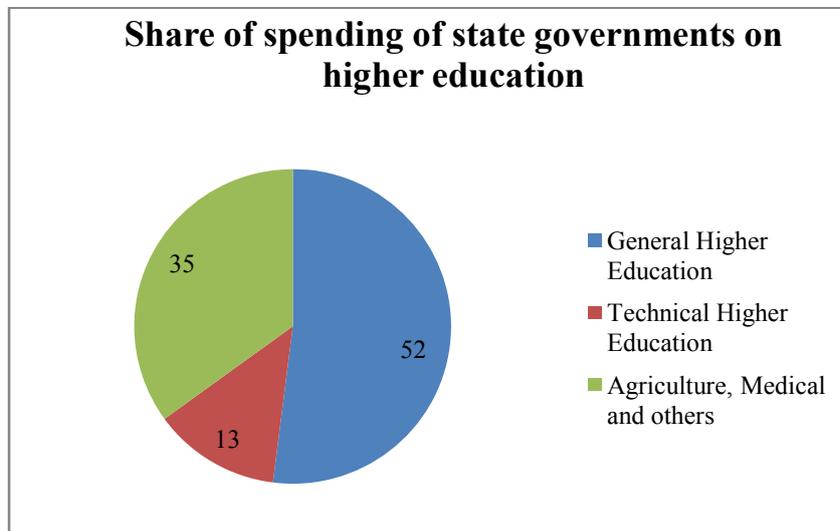
Note: figures in parentheses indicate percentages

Overall National Research & Development Expenditure: Every country as part of its development efforts spends significant part on research activities. Fig 6 shows the contribution to research and development expenditure by Higher Education. The research and development expenditure spent on higher education in India is amongst the lowest vis-à-vis its global peers. A recent research at higher education institutes accounted for a mere 4% of the total national R&D expenditure (Agarwal, 2009).

Fig 6: National R&D expenditure spent by Higher Education Institutions (2010-11)
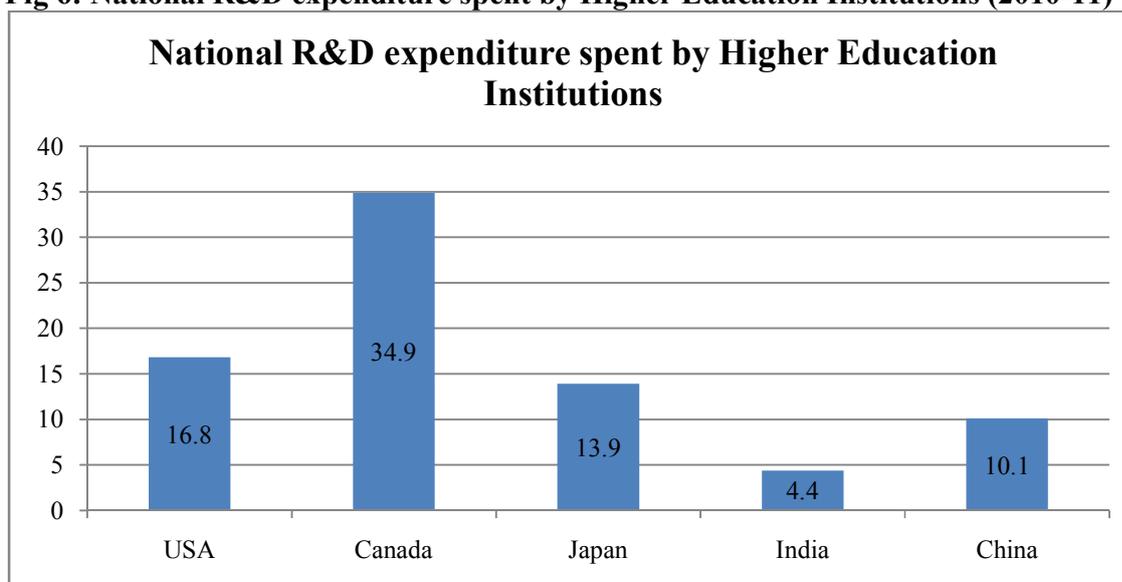
Note: figures in parentheses indicate percentages

Challenges faced by Higher Education

The higher education system of India had passed from various complicated situations in the post independence period of our country. But still the Indian educations system has not progressed well though several improvements have been made in the Indian education system from various perspectives. The authorities involved in the management of higher education system in India like UGC, AICTE, BCI, QCI and DEC are constantly making serious efforts to improve the quality education in India and also to match Indian education standards with the international norms. Despite these forgoing efforts higher education sector is confronted with following challenges:

1. **Low accessibility and high cost:** Higher education is costly to taxpayers and individuals. A college education may be a path to social and economic mobility, but college can also represent a barrier to mobility for those who are unable to gain entrance to the elite institutions that are closely tied to social class. Thus access to the higher education system is currently restricted to a small portion of the society. Another reason being lack of awareness among the lesser educated segment of population or its high cost. Due to this reason people end up taking the traditional and lesser fee courses even if they opt for higher education.

2. **Fewer scholarship schemes:** India does not have robust scholarship and student loan schemes which can make higher education accessible at a more aligned tuition fee structure. Scholarships schemes provided by the government cover a very insignificant portion of the total student population. Government earmarked an expenditure of 450 million on scholarships in higher education with an objective of covering just 2% of the student population in colleges and universities. While the government scholarship reaches a very small proportion of the students, Universities themselves do not have any scholarship scheme. Almost 56% universities have schemes which cater to less than 10% of the students while 23% do not have any university level scholarship schemes for students.

3. **Case for student loan scheme**: Though student loans have gained in popularity as a form of financing higher education, the proportion of students availing them continues to remain low. While approximately 60% students in the US took an education loan in 2010-11, in India, the figure was less than 10%. Despite recent growth, student loans availed by graduates in India are quite low. According to a recent market study, 81% of the students showed interest in availing education loans but identified key concerns such as: higher interest rate, cumbersome procedures and documentations, high administrative cost, absence of special provision for weaker sections of the society

4. **Lower gross enrollment rate:** GER in India increased from 5% in 1980 to 16% in 2011 while in the same period China's GER increased from 1% to 23% India's GER grew at a CAGR of 3.4% as compared to China's CAGR of 12.8%.

5. **Rural-urban divide:** The Indian higher education system suffers from a large rural-urban divide in terms of access, gender inequity, and large differences in GERs among various communities.

6. **Little job guarantee:** Most of the higher education courses are not job oriented particularly in humanities and social sciences stream. Not more than 10% of the students are able to fetch jobs. The Chairman of the National Assessment and Accreditation Council (NAAC) executive committee said that 'barely 10% of the 30 lakh students who graduate every year are employable' while only 15% graduates are suitable for back-end jobs in office (Singh, 2012). Universities need to adopt an innovative approach to raise the employability levels of

traditional arts, science, and commerce degree holders. There should be engagement or inter-linkages of higher education with the government and private intuitions**.** Job market should be enlarged to encompass the social sciences and traditional languages.

7. **The Changing and uncertain job market for Ph.D.'s:** The job market for new Ph.D.'s appears less secure today than it was 20 or 30 years ago. One measure of this is the occurrence of vacancies in postdoctoral positions appears to be lengthening. Percentages of Ph.D.'s who have obtained jobs by the time they have completed their doctoral studies are declining in both developed and developing countries. The rise in "postdocs" reflects a dramatic change in prospects about how scientists are prepared and response to a weaker job market. A placement survey of Ph.D.'s suggested that about half would find jobs outside academe. Also a national study in the year 1995 concluded, "Ph.D.'s are increasingly finding employment outside universities and more and more are in types of positions that they had not expected to occupy." A 1997 National Science Foundation survey found a relatively high level of dissatisfaction among science and engineering researchers and reported they would be "not at all likely" to choose the same field of study again. Given these uncertainties, perhaps the best that can be done is to strengthen the Ph.D. job market especially to meet replacement and growth needs. Large numbers of faculty and other doctorate-holders in the workforce will retire in the next decade and need to be replaced. (Zusman, 2005)

8. **Shortage of quality faculty:** Quality of higher education in India is impacted by shortage of value faculty. There is acute shortage of faculty in central universities (40%) and state universities (35%) as per working group on higher education for 12th five year plan report, September 2011. Large vacant faculty positions and poorly qualified adhoc faculty dilute the quality of teaching done at higher education institutes. The shortage of faculty is also giving faculty lesser time to focus on research.

9. **Lack of infrastructure:** Higher education institutions face an acute problem in terms lack of academic and physical infrastructure. There are 153 universities and 9,875 colleges with infrastructure deficiencies recognised by the UGC in the year 2011. The academic infrastructure in colleges across the country when compared with that of premier institutes and the AICTE norms highlights their poor status.

10. **Little Global recognition:** Despite having one of the largest higher education system in the world few Indian institutions have earned global distinction. Indian Institute of Science and IIT Kharagpur ranked in the 303-401 range. IIT Bombay and Delhi ranked 36th and 42nd respectively. Indian School of Business, ranked 15th and is the only Indian management institute to appear in the list (University Grants Commission, 2008).

11. **Talent Drain:** In pursuit of better quality education, an increasing number of Indian students are studying abroad. The value of imports (Indian students overseas) is extremely high at 0.46% of GDP which comprises of around 80% of the public spending on higher education in the year 2010-11. The figure is also comparable to the total spent on higher education which is 1% of the GDP in India. (FICCI – EY Report, 2009)

12. **Divide between teaching and research:** The separation between teaching and research which started in British India now became a permanent feature of the academic landscape of India. Except few top ranked universities and other institutions of higher education, research figure very low among the teaching fraternity. Despite having large human resource the quality of research done by Indian does not outline in the world arena.

13. **Differences that exist between the State universities and Central universities:** The Central universities in India comparative to State universities are financially better endowed,

take lead in research and development activities and enjoying better governance. But the State universities vastly outnumber their Central counterparts, issues of poor governance and narrow outlook that arises out of provinciality remains key issues for the university sector in India.

14. **The issue of Autonomy of Universities:** The system has been exclusively under the government control since its inception in British India. The situation got more complex after independence as state governments' agenda relating to university operations often differed to that of the central government thus contributing to the conflicting tensions that persists within the sector. The governance of State universities is carried out through a separation of duties between state and central government. University Grants Commission (UGC) is a central body responsible for grants-in-aid from public funds to Central and State universities.

15. **Financial challenges facing academia:** India's per capita income in 2011-12 stood at US$ 1,527 compared to Britain's US$ 38,600 and USA's US$ 49,800. It is not feasible for India to make massive state investments in research and development that produced research led universities in the west such as MIT, University of California, Berkeley in the US or University of Cambridge in Britain, whose intellectual properties-a consequence of such investments-attracted industry to their doorsteps **(**Bansal, 2012).

16. **Lack of ICT awareness:** Lack of ICT understanding in higher education institutions and low technology and people readiness is another major concern accompanied by poor quality of digital content, especially in regional languages.

17. **Poor quality of research:** India has a low base of researchers and the academic sector contributes less than a seventh of the total number of researchers. India has approximately 130,000 researchers, a tenth of the number of researchers in the United States of America and a seventh of the number of researchers in China. When viewed in comparison to the population of the country, India just has about 100 researchers per million people. This is 2% of the number of researchers per million people that most developed countries have. In terms of research papers, India lags behind in terms of both number and quality. On an overall basis, India's rank was 13th in the world in terms of the number of research papers published. The number of times a research paper is cited is indicative of its quality. India's research papers were cited at an average of 3.2 times, indicating poor quality. India's rank was 119th out of 149 countries in terms of number of citations. (University Grants Commission, 2009). Another disadvantage is a more commercialized and politicized research system.

18. **NAAC accreditation:** 62% of universities and 90% of colleges in India were average or below average in 2010-11. NAAC will be launching its revised manual and methodology for assessment and accreditation starting from April 2012. The present system is in vogue since 2007, will be replaced by a system that makes space for new dimensions and trends in the changing higher education system (NAAC News, 2012).

Higher education therefore has posed to be a formidable challenge which is currently going under a profound crisis of quality, low accessibility, higher cost, lack of qualified and inadequate faculty and poor quality of research etc. The crisis confronting the system of higher education has further invigorated in terms of over-production of "educated" persons, increasing educated unemployment, weakening of student motivation, increasing unrest and indiscipline on the campuses, deterioration of standards and frequent collapse of administration. Given the costs and value of higher education it should come as no surprise that, as state budgets have become tighter and student fees have risen, therefore policy makers and legislators should sought to

ensure attention to state priorities and regulate academic matters in pursuit of better and high quality education.

Foremost policy initiatives by the government in the higher education sector

In order to equip the higher education system to the changing conditions in the job market, society and world at large there is a need to increase its access and improve quality to make it more relevant. The government of India through its regulatory institutions continues to discover suitable policy measures in the form of reforms to upgrade the higher education system. Some of the academic reform measures taken by government in the pursuit to improve the higher education system in India are enumerated below:

1. **Introduction of Semester system:** Most institutions of higher education in Western Europe and North America follow a semester based system. In India, too, several professional and technical institutions have adopted semester system. It has enlarged curricular space and encouraged and supported accelerating learning opportunities for all concerned. Further, it has the provided to accommodate diverse choices that dynamic and motivated students may like to have.
2. **Choice-Based Credit System:** Choice-based credit system was adopted due to its various unique features such as enhanced learning opportunities, ability to match students' scholastic needs and aspirations, inter-institution transferability of students following the completion of a semester, part-completion of an academic programme in the institution of enrolment and part-completion in a specialised and recognised institution, improvement in educational quality and excellence, flexibility for working students to complete the programme over an extended period of time, standardisation and comparability of educational programmes across the country, etc. (Eleventh Plan Period for Universities and Colleges, 2007-12, p.76).
3. **Curriculum Development with Inter-disciplinary approach:** A hallmark of vibrant educational institutions and disciplines is their curricular content which evolves continuously as a measure to foster quality. Curricular revision is an on-going academic activity involving all the faculty members. Not only does it endows academic programmes with quality but also adds to their contemporariness and relevance. All curricular updates are reviewed and endorsed by departmental, schools or committee and other university and college authorities. Adoption of interdisciplinary approach in developing curricula is another landmark in curriculum development.
4. **Competitive Admissions procedure:** Admissions ought to have objective based and transparent procedures. As a part of academic reforms, on the whole the universities and institutions of higher education in the country have paid very serious attention to the procedures for merit based admission to their certificate, diploma, undergraduate, post-graduate, M.Phil. and Ph.D. programmes.
5. **Continuous Internal Evaluation and End-of-Semester Evaluation:** Internal assessment is done by the concerned faculty member, Department, School or the Centre with the aim to assess values, skills and knowledge grasped by students. While End-of-Semester Evaluation is carried out at the end of each semester, and will aim to assess skills and knowledge acquired by students through class room, laboratory work, field work and workshop practice. The evaluation can be in form of written examination, laboratory work and workshop assignment. Evaluation process can be verified and transparent.

6. **Open and Distance Learning:** Distance education system is emerging as an important means to cater to the increasing demand for higher education. Open and Distance Learning has contributed significantly in development of education structure of India. It provides avenues to those students who are not able to leave their jobs or are not able to attend regular classes due to some reasons. Our distance education system consists of one National Open University namely, Indira Gandhi National Open University (IGNOU) and 14 State Open Universities. In addition, many Central/State Universities also offer courses through distance mode.

The other important policy initiatives in higher education include programmes for general development of universities and colleges; special grants for the construction of hostels for women; scholarships to students, innovations in teaching-learning methods, rewards to meritorious teachers and researchers, scheme to provide interest subsidy on educational loans for professional courses, interventions to attract and retain talent in the teaching profession in the higher and technical education. Emphasis has been laid on expansion with equity, use of ICT in education, promotion of research and quality education. The urgent need is to keep up the momentum of higher education through upscaling these reforms.

Steps needed to foster quality and excellence in higher education

Meticulousness in efforts is needed to improve the quality in higher education in India and also to match Indian education standards with the international norms. Aim of strengthen India's higher education system should be to drive the country into becoming a knowledge superpower. The following measures should be adopted to augment and improve quality and excellence in higher education:

1. **Adoption of faculty development measures:** Efforts should be made to attract and retain talented young persons. Faculty being the single most critical factor responsible for the overall quality and excellence in higher education, it is a matter of grave concern that a large number of faculty positions remain perennially vacant due to either non availability of suitably qualified persons or due to procedural restrictions and fund constraints in State universities or colleges. In order to ensure that expansion drive in higher education is sustained, initiatives shall be taken to attract and retain the best talents as faculty resources by creating conducive working ambience and by making teaching and research as a lucrative career destination through continuous central assistance.

2. **Better pay and service conditions for teachers:** To attract the talented persons to the teaching profession and to retain them is the issue which needs to be addressed directly.. Attracting talent to teaching and research professions and retaining it required reasonable salaries and proper service conditions. The government recognised the distinctiveness of the teachers category and developed a separate category of pay, designated as "Academic Pay Grade". As at present, the 'pay package' and other service conditions of teachers in universities and colleges are comparable and competitive. Apparently, they also have adequate promotional avenues. This should strengthen the process of attracting talent to the academic profession and of retaining the talent in the profession.

3. **Addressing the issue of faculty shortage and quality:** It has been established that state institutions and central institutions suffer from 40% and 35% shortage of faculty respectively

(Report of Working Group on Higher Education for 12th five year plan, September 2011), which is one of the most important factors impacting the quality of teaching. Some of the vital measures to solve this issue are given as under:

   i. To fill the vacant posts, grants from the government should be linked to vacancy position in institutions. UGC schemes should also be made norm based in order to incentivize institutions to engage qualified faculty.

   ii. New scheme of teaching assistantship should be adopted. Joint appointments should be engaged for teacher's i.e. researchers can be engaged as faculty.

   iii. Faculty shortage can be addressed by provision of visiting professors from other educational institutions and universities.

   iv. Operation faculty recharge scheme should be adopted by all universities and National Mission on teachers should be started to enlarge the fraternity of teaching.

   v. Promotions of teachers to be linked with performance -Performance Based indicators should be established to ensure quality. Compulsory training and orientation should also be made for teachers.

   vi. Measures should be taken to enhance the prestige value of teaching profession. (Report of the Working Group on Higher Education for XII Five Year Plan, 2011)

4. **Quality improvement:** Wide-ranging frameworks for quality assurance are essential to address the quality deficit in the higher educational institutions. A comprehensive reform agenda has to be unremittingly adopted in the in order to bring our higher education institutions at par with world quality institutions. The key strategies are:

   i. Mandatory accreditation as quality assurance frameworks system for all higher education institutions should be adopted which should be globally valid.

   ii. Facilitation as a key measure should be endorsed rather than regulation.

   iii. New institutions should be established keeping in view quality of Global institutions.

   iv. Horizontal and vertical mobility of students should be expedited.

   v. Universities should be perceived as centers' for innovation and research.

   vi. Internationalization of higher education should be proposed by permitting Foreign Educational Institutions in India and enhancing collaborations.

   vii. Grants to higher education institutions should be linked with accreditation grades. (Report of the Working Group on Higher Education for XII Five Year Plan, 2011)

5. **Need for a New Higher Education Management System:** The new higher education management system has to be a debureaucratised modern system of governance integrating e-administration, e-education, e-resources, e-planning, e-society and the e-world leading to good governance of higher education as a transparent, time and money efficient, productivity-oriented system. Such a system should be taken up for implementation in the higher education institutions. This will provide a smooth flow of information between the "university administration" and the "students, staff and public". In addition, the new management system would encompass e-education portal with e-resource backbone through the National Knowledge Network (NKN) as an end to end solution for the higher education delivery and management system (XIIth Five-Year Plan, 2012-17, p. 97).

6. **Call for Good Governance in Higher Education:** Higher education sector is lagging behind in automation and use of ICT in governance though many other sectors like railways, revenue, power, etc., have implemented e-governance successively. Policy measures are needed to target automation of administration and e-governance in the UGC and all the Universities/Colleges. In order to efficiently meet the ongoing and emerging challenges in

higher education sector, good governance would call for appropriate skills and competencies on the part of all tiers of educational administrators to handle the modalities of good governance. In an era of collaborative education, globalization and competition, higher educational institutions will have to be managed more professionally. (XIIth Five-Year Plan, 2012-17, p. 96).

7. **Strengthening the E-Initiatives and Expanding E-Resource Availability:** Easy and trouble-free access to internet and to E-resources is the way forward to enhance the quality of teaching along with learning process. The scheme of e-connectivity should be extended to all the state and centrally funded institutions. The concept of consortium subscription E-resources funded by the UGC needs to be extended to all the state universities as well as the centrally-funded institutions. The key to high quality teaching and research essentially depends on the access to latest information which should be available to a teacher. Since the private sector universities and colleges are increasingly getting established, all the E-resource facilities may also have to be extended to them to enhance overall quality education to students (12 Five-Year Plan, 2012-17, p. 95).

8. **Innovative use of Information and Communication Technology:** ICT can perform various roles in higher education. Efforts should be made to improve ICT infrastructure in Higher Education Institutions through PPP models and incentivise the adoption of ICT in pedagogy. Mechanisms should be developed for advancement and free distribution of high quality content across languages. Improvement in connectivity across Higher Education Institutions should be made through application of information technology and creating a national repository of digital content. Usage of ICT can help improve India's higher education system in three ways:

   i. **Improved Quality:** With the use of information and technology the quality of teaching improves by usage of supplementary teaching aids, better and more efficient processes and management systems and access to up-to-date content. It increases the knowledge sharing among course creators and scientists. It leads to the creation of comprehensive centralised digital repositories for reference material.

   ii. **Better Access:** Use of information and technology increases flexibility, providing anytime anywhere access to students. It reduces the capacity constraints making large enrolments possible in courses run by reputed institutes. Cost of education becomes Cheaper by increasing accessibility. Technology can be leveraged to provide access to courses in new and emerging fields to greater number of students.

   iii. **Greater Equity**: Use of information and technology facilitates increased access to students from various socio-economic groups, leading to greater inclusion. By way of communication technology Good quality institutions are not restricted to a few pockets but are made accessible to students located all over the country. Furthermore Content from all over the world can be made available to students with access to internet.

9. **Private Sector Participation**: For promoting private sector participation in higher education, newer models based on quality shall be explored, supported and incentivized by well-defined policies, norms, and monitoring mechanisms. The initiative would also include maximizing the potential of Public Private Partnership (PPP) in higher education not only for setting up new universities and colleges but also for creating and sharing quality infrastructure and physical facilities in the existing colleges and universities.

10. **Regulatory Framework:** Need is to create a single autonomous agency for regulating higher education and abridge the regulatory framework. Efforts are also required to reduce entry

barriers for reputed players, by smoothening entry of high-quality foreign universities and private universities through the PPP model. Furthermore need of the hour is to improve transparency in the system.

Conclusion

The system of higher education should be upgraded in such a manner that the students opting for higher education in the future should have an excellent teaching and learning experience, informed by up-to-date research and facilitated by a high-quality learning environment, with state-of-the-art learning resources such as libraries, laboratories and e-learning facilities. Higher education institutions should put in place systems to capture feedback from students, and use this feedback to inform institutional and programme management, as well as national policy. Further a national student survey system should be put in place and the results published. Every higher education institution should put in place a comprehensive anonymous student feedback system, coupled with structures to ensure that action is taken promptly in response to student concerns. Every student should learn in an environment that is informed by research, scholarship and up-to-date practice and knowledge. The roles of teaching and research should be afforded parity of esteem. This should be reflected in resource allocation, in promotion criteria, and in the metrics used to assess performance at individual, institution and system level. In the coming decades, the delivery of higher education in India must be characterised by flexibility and innovation. A national framework for the recognition of prior learning must be developed and recognised by all higher education institutions. If these measures are adopted we are sure to receive in outcome a qualitative education system with excellence its motto. Thus we conclude with the words of father of our nation, Mahatma Gandhi, "In order to build 'the India of our dreams,' we need to improve the quality of education in the country."

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