

Higher Education in India: Issues related to Access, Equity, Efficiency, Quality and Internationalization

Kishore M. Joshi¹ & Kinjal V. Ahir²

Maharaja Krishnakumarsinhji Bhavnagar University & Sardar Patel University

Abstract

The Indian higher education system is the largest in the world in terms of the number of institutions and the second largest in enrolments. Access to higher education in India has grown tremendously in context of the number of institutions and enrolments. However, the Gross Enrolment Ratio (GER) is still much lower. Higher education in India faces six types of challenges related to equity each associated with gender, caste, interstate, religion, spatial, and income. In terms of efficiency while rates of returns were higher for higher education levels as compared to the lower levels of education in India, however, the problem of appropriate employment amongst higher education graduates still persists. Despite consistent efforts in enhancing the quality of higher education in India, effective measures are required to make it internationally competitive. Indian higher education will have to address equity, quality and efficiency issues in a pragmatic manner through effective policy framework to become globally competitive and relevant to the labour market demand.

Keywords

Higher education, India, access, equity, efficiency, quality, internationalization.

Περίληψη

Το ινδικό σύστημα ανώτατης εκπαίδευσης είναι το μεγαλύτερο στον κόσμο με βάση τον αριθμό των ιδρυμάτων και το δεύτερο μεγαλύτερο με βάση τον πληθυσμό του. Η πρόσβαση στην ανώτατη εκπαίδευση της Ινδίας έχει δυναμικά αναπτυχθεί τόσο σε επίπεδο ιδρυμάτων όσο και φοιτητικού πληθυσμού. Παρόλα αυτά ο συνολικός αριθμός εγγραφών παραμένει μικρός. Η ανώτατη εκπαίδευση στην Ινδία αντιμετωπίζει

¹ Professor of Economics of Education, Department of Economics, Bhavnagar, Gujarat, India
kmjoshi1972@gmail.com

² Associate Professor, Post-Graduate Department of Economics, Vallabh Vidyanagar, Gujarat, India
kinjalahir@gmail.com

έξι προκλήσεις σχετικές με την ισότητα και αναφέρονται στο φύλο, στην κάστα, στην περιφέρεια, στη θρησκεία, στην τοπικότητα και στο εισόδημα. Με όρους αποτελεσματικότητας αν και τα ποσοστά αποφοίτησης είναι υψηλότερα για την ανώτατη εκπαίδευση σε σύγκριση με τα άλλα επίπεδα εκπαίδευσης, παρόλα αυτά παραμένει το πρόβλημα της σύνδεσης με την εργασία των αποφοίτων. Παρά τις προσπάθειες για την εμφάνιση της ποιότητας της ανώτατη εκπαίδευσης στην Ινδία, αποτελεσματικά μέτρα απαιτούνται για να καταστεί αυτή διεθνώς ανταγωνιστική. Η ινδική ανώτατη εκπαίδευση θα πρέπει να αντιμετωπίσει με ρεαλιστικότητα τα ζητήματα της ισότητας, της ποιότητας και της αποτελεσματικότητας μέσω ενός αποτελεσματικού πλαισίου πολιτικής για να γίνει ανταγωνιστική σε παγκόσμιο επίπεδο και να ανταποκρίνεται στη ζήτηση της αγοράς εργασίας.

Λέξεις-κλειδιά

Ανώτατη Εκπαίδευση, Ινδία, πρόσβαση, ισότητα, αποτελεσματικότητα, ποιότητα, διεθνοποίηση.

INTRODUCTION

The human capital has a very crucial role to play in the current era of the knowledge economy. A nation with abundant human capital is expected to grow at a higher rate. Consequently, both the quantity and the quality of the population of a particular nation are vital for a sustainable economic growth. The annual percentage growth rate of GDP for India in 2017 was 6.6 (World Bank, 2018), but it has been forecasted that the average real GDP growth rate would be around 5 % for the period from 2016 to 2050 (PwC, 2017). According to PwC (2017), India would surpass the U.S. to become the second biggest economy of the world next to China by 2050. The share of India as a share of world GDP in PPP terms has been projected at around 15 % by 2050 with 44,128 projected GDP at PPPs in constant 2016 \$ billions (PwC, 2017).

Demographically, India is the second most populous country in the world next to China. In 2017, the population of India was about 1.34 billion, out of which more than 66 % belonged to the age-group 15-64 and the age dependency ratio was 51 % (World Bank, 2018). The median age of the population in India was 27.9 years (CIA, 2018). While the large economies of the world have already started ageing, India is a comparatively younger nation for a longer time to come. The current age composition holds promises of a sustained growth-induced future for at least another fifty years. The current age structure consists of the population belonging to the age-group 0-14 years as 27.34 %, 15-24 years as 17.9 %, 25-54 years as 41.08 % and 55-64 as 7.45 % (CIA, 2018).

While a country may have a demographic advantage in the form of a huge population base, the demographic dividend and the returns to the economy may grow manifold if the quality of human capital is productive and efficient. The quality of the human capital largely depends on the level of health and education of the population. Education, rather knowledge production and dissemination, largely happen in higher

education institutions. India has one of the largest higher education systems in the world in terms of the number of institutions and enrolments. Consequently, the higher education system in India is voluminous and complex. But the higher education in India faces enormous challenges in terms of access, equity, efficiency, quality and attracting international faculties and students (Joshi and Ahir, 2013, 2014). The present paper makes an attempt to discuss these issues and the associated intricacies.

ACCESS TO HIGHER EDUCATION IN INDIA

Access to higher education in India is assessed with regard to the number of institutions, the absolute number of enrolments, Gross Enrolment Ratio (GER) and briefly, the number of teaching staff along with the pupil-teacher ratio. Accordingly, the section of access to higher education in India is further divided into four subsections.

a) Number of higher education institutions in India

Three types of institutions exist in India, including universities³, colleges⁴ and stand-alone institutions⁵. According to the University Grants Commission (UGC, 2012), in 1950-51, the number of universities was 30 and colleges were 695. By September 2017, the number of universities increased to 903 and the number of colleges to 39,050, besides 10,011 stand-alone institutions (MHRD, 2018a). There are different types of universities in higher education in India^{6,7}.

³ Under the UGC Act 1956, 'University' means a university established or incorporated by or under a Central Act, a Provincial Act, or a State Act, and includes any such institution as may, in consultation with the University concerned be recognized by the Commission in accordance with the regulation made in this behalf under the Act. A University shall exercise the right of conferring or granting degree. For further details refer to MHRD, 2018a, Annexure 2, p A-4. http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE2017-18.pdf

⁴ Colleges are institutions which can run degree programs but are not empowered to provide degree on their own and necessarily have to be attached to a University / university level institution for the purpose of awarding degree. For further details refer to MHRD, 2018a, Annexure 2, p A-5.

⁵ Stand-alone institutions are outside the purview of university and college. These institutions generally run Diploma / PG Diploma Level Programs for which they require recognition from one or the other Statutory Bodies (including Indian Institutes of Management - IIMs, Chartered Accountancy, Company Secretary, polytechnics, etc.)

⁶ *Central University* is established or incorporated by a Central Act. The universities established under this Act receive funding from the Central Government.

State University is established or incorporated by a Provincial Act or by a State Act. The state public universities under this Act receive funding from State/Provincial government.

Open University imparts education exclusively through distance education in any branch or branches of knowledge

Of the various types of universities, State Public Universities consisted of the maximum number of universities (351), followed by State Private Universities (262) in 2017-18. 633 universities under states' purview (State Public Universities – 351, State Private Universities - 262, State Open Universities – 14, Institutions under State Legislature Act – 5, State Private Open University – 1) collectively accounted for 70 % of the total universities. Out of the total 903 universities, 343 universities are privately managed (about 38 %).

Table 1: Types of Universities in higher education in India in 2017-18

Type of Universities	Number
Central Universities	45
Central Open Universities	1
Institutions of National Importance	101
State Public Universities	351
Institutions Under State Legislature Act	5
State Open Universities	14
State Private Universities	262
State Private Open Universities	1
Deemed Universities - Government	33
Deemed Universities - Government Aided	10
Deemed Universities - Private	80

Source: MHRD, 2018a

Private university is established through a State / Central Act by a sponsoring body viz. a Society registered under the Societies Registration Act 1860, or any other corresponding law for the time being in force in a State or a Public Trust or a Company registered under Section 25 of the Companies Act, 1956.

Deemed university is an institution Deemed to be University and refers to a high-performing institute, which has been so declared by Central Government under Section 3 of the UGC Act, 1956.

For further information related to the definitions and types of universities refer to MHRD, 2018a, Annexure, p A-2. http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE2017-18.pdf. Also refer Joshi & Ahir, 2015.

⁷ An Institution of National Importance is defined as an institution 'which serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state' (Manuel, 2015) such as Indian Institutes of Technology, Indian Institutes of Information Technology, National Institutes of Technology and Indian Institutes of Science Education and Research.

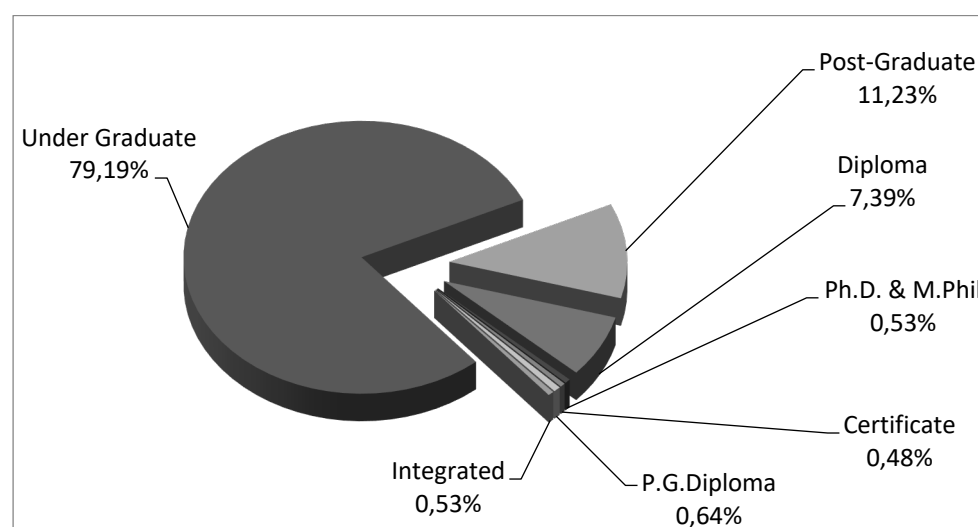
Further, as against this, the number of private colleges is 78 % of the total colleges with 64.7 % private unaided colleges⁸ and 13.3 % private aided⁹ colleges. In addition, 75.5 % of the total stand-alone institutions are private, with about 66 % being private unaided and 9.43 % private aided.

b) Absolute number of enrolments in higher education in India

Private unaided colleges enrolled only 46.7 % of the college going students, even though the number of private unaided colleges was the highest amongst colleges, (64.7 %). In contrast, the government colleges (22 % of the total colleges) enrolled 32.7 % of the total college going students and private aided colleges (13.4 % of the total colleges) enrolled 20.6 % of the total college going students. Unlike in western countries, the enrolment in each college is largely less (Dharaskar, 2014). About 65.2 % of colleges enrolled less than 500 students (out of which 18.5 % colleges enrolled even lesser than 100 students) (MHRD, 2018a).

In 1950-51, the total students' enrolment was about 0.40 million that increased in 2017-18 up to 36.6 million (UGC, 2012; MHRD, 2018a).

Figure 1: Level wise enrolment percentage in 2017-18 in higher education in India

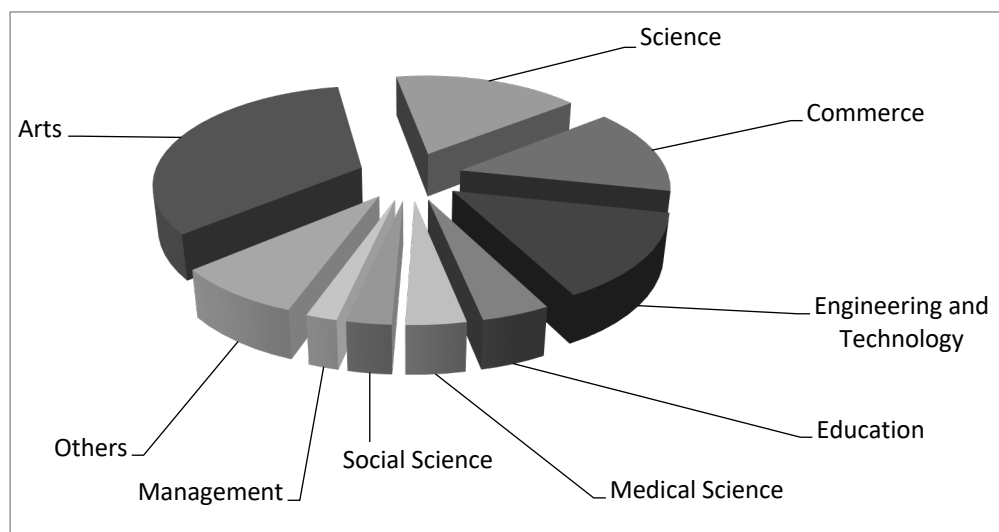


⁸ Private un-aided institutions are managed by an individual, trust, society or other private organization that may or may not receive onetime ad-hoc grant from Government for any specific purpose and does not receive a regular maintenance grants. For further details refer to MHRD, 2018a, Annexure 2, p A-9

⁹ Private aided institutions are managed by an individual, trust, society or other private organization that receive a regular maintenance grants from the government or local body. Private aided institutions receive one type ad-hoc grant and regular maintenance grant. For further details refer to MHRD, 2018a, Annexure 2, p A-9.

In 2017-18, about 79 % students were enrolled at the undergraduate level (baccalaureate level) and an additional 11.23 % student, at the post-graduate level, together summing up to more than 90 % of the total students pursuing higher education. 7.4 % of students were enrolled at the diploma level, pursued after higher secondary schooling (10+2) or after graduation and having a duration of 1/2/3 years. Research oriented courses Ph.D. and M. Phil. were pursued by a meager 0.53 % of students (MHRD, 2018a).

Figure 2: Program wise enrolment at undergraduate level in 2017-18



Source: MHRD, 2018a

In 2007, out of the total enrolments in higher education institutions, about 40 % pursued Arts, 16.1 % pursued Sciences, 13.3 % pursued Commerce, and 11.1 % pursued Engineering and Technology (MHRD, 2011). As compared to 2007 in 2017, out of the undergraduate level students that enrolled about 79 % students of the total students in higher education, 33.42 % students pursued Arts, 17.06 % students pursued Science, about 14 % pursued Commerce, about 14 % pursued Engineering and Technology, 4.4 % pursued education, 3.87% pursued medical science stream, 2.89 % pursued social sciences and about 2 % pursued management stream. On the other hand, at the post-graduate level, the maximum number of students pursued social sciences followed by management. However, maximum numbers of students opting for Ph.D. after their post-graduation were those belonging to Agriculture and Allied courses (about 21 %).

Similarly, in Engineering and Technology about 20.07 % and in sciences 6.9 % of the students opted for the Ph.D. course after pursuing Master's course.

Not only the colleges were able to enroll a lesser number of students, but they were also restrictive regarding the courses and the disciplines offered by them. About 34 % of the colleges offered only a single program. Out of them, 83 % were under private management and of them; about 55 % offered only a Bachelor of Education program. Such a trend was observed in the education discipline due to the ever-increasing number of educational institutions. Accordingly, the demand for teachers was high, thereby increasing the prospects for job opportunities.

c) Gross Enrolment Ratio for higher education in India

Although the absolute number of enrolments in higher education institutes in India at 36.6 million is huge and praiseworthy, however, a lot more effort needs to be put to assure an increase in access to higher education as measured by the Gross Enrolment Ratio (GER). GER for higher education is defined as the number of students enrolled in higher education irrespective of their age group, as a percentage of the total number of the population belonging to the relevant age cohort (in India, 18-23 years). GER for higher education in India was 8.1% in 2001-02, 13.1 % in 2007-08 and 25.8 % in 2017-18. If India is to gain from the demographic dividend, a larger number of students will have to pursue quality higher education. Such a huge percentage of the population out of the purview of higher education is not only a loss but also a danger to the socio-economic future of the country.

d) Number of teaching staff and pupil-teacher ratio

In 1950-51, the teaching staff in universities and colleges was 23,549 that increased to about 1.28 million in 2017-18 (UGC, 2012; MHRD, 2018a). Accordingly, the pupil-teacher ratio exclusively for universities (and constituent units) in 2017 was 20, whereas the pupil-teacher ratio for universities and colleges combined was 30 (MHRD, 2018a).

EQUITY ISSUES IN HIGHER EDUCATION IN INDIA

Amidst a lot of diversity, higher education in India is posed with a challenge of five different dimensions of inequity associated with gender, caste, spatial, religion, and

financial status. Accordingly, the section regarding equity in higher education in India is divided into five sub-sections.

a) Gender Inequity in higher education in India

Efforts to reduce gender disparity in enrolments in higher education have manifested in various forms like subsidized fees, exclusive girls' hostels, and higher education institutes among others. 15 universities and 11.04 % of colleges are exclusively devoted for women (MHRD, 2018a). While the GER for males was 15.2 and for females it was 10.7 in 2006-07, the gap between the GER for male and female further reduced in 2017 with GER for males being 26.3 and that for females at 25.4. However, a more important tool to measure gender-based inequality is the Gender Parity Index (GPI). GPI is derived by dividing GER of females with the GER of males at a particular level of education. Hence, GPI of 1 indicates persistent equality between male and female enrolment, in terms of pursuing higher education. If GPI is observed to be lesser than one then it indicates inequity between males and females in favor of males. In India, GPI at higher education level in 2017-18 was 0.97 a rise from 0.7 in 2006-07.

b) Ethnic inequity in higher education in India

The ethnic disparity persists in India since pre-independence era. Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs) – the socially and educationally backward classes have remained impoverished despite policy efforts to improve the opportunities of access to higher education for them. SCs and STs have been so identified under the Article 341 and 342 of the Constitution respectively. Historically people belonging to the SC category are those who had been discriminated along the caste grounds, were largely associated with performing the most menial tasks, and were also treated as untouchables until it was regarded as derogatory and unconstitutional in independent India. As against this, people belonging to ST category are the indigenous people largely isolated from the mainstream population as they reside in remote forest areas. The most prominent affirmative action to overcome ethnic disparity has been reservation or quota in admission whereby 7.5 % of the total seats are reserved for students belonging to ST category and 15 % for students belonging to SC category (Joshi, 2012; Joshi and Ahir, 2016). Such positive discrimination was done with an objective to enhance enrolment in higher education thereby uplifting their

socio-economic status through increased access. The policy of reservation was further supported by hostel facilities, additional educational enhancement coaching facilities, scholarships, and fellowships, among others. As a result, the GER in 2006-07 for SC was 11% and that for ST was 9.5% that further increased in 2017-18 with GER for SC at 21.8% and ST at 15.9%. Therefore, the affirmative action resulted in positive outcome favoring the enhanced enrolment for ST and SC population, but it could not keep pace with the growth of the overall enrolment that observed a rise in GER from 13.1% in 2006-07 to 25.4% in 2017 (MHRD, 2011; MHRD, 2018a). Besides this, the GER for SC females (21.4%) and ST females (14.9%) were lower than their male counterparts respectively (22.2% & 17%). Also, the GPI for all categories combined was 0.97, GPI for SC was 0.96 and for ST it was 0.87.

c) Spatial inequity in higher education in India (rural-urban and interstate disparity)

In the context of the rural-urban disparity, about 40 % of the total universities, 60.48 % of the total colleges, and 55.9 % of the total stand-alone institutions are located in the rural areas (MHRD, 2018a). However, they are largely established on the peripheries of the urban areas, categorized as established in rural areas in order to access cheaply available resources in rural areas. All of these peripheral institutions largely cater to the urban population by providing access to transportation facilities for students from urban areas. Accordingly, the rural-urban disparity in terms of enrolment as measured by GER was 13.9 % and 32.5 % in rural and urban area respectively in 2009-10 (MHRD, 2013). Spatial discrimination reveals itself in another form in a federal country like India, the inter-state disparity. India has 29 States and 7 Union Territories. All of the states vary in terms of socio-economic, geographical, political, and educational aspects. There is a wide disparity in the number of colleges per lakh¹⁰ population (18-23 years) across the states of India. There are states like Bihar and Delhi which has less than 9 colleges, whereas states like Karnataka and Telangana have more than 50 colleges per lakh population (18-23 years). The states like Tamil Nadu, Karnataka, Maharashtra, Andhra Pradesh, and Uttar Pradesh had the maximum number of hostels for boys and girls, while states like Tripura, Sikkim, Mizoram, Nagaland, and Meghalaya had lesser number of hostels. Even in terms of enrolment, inter-state disparity was noticeable. The

¹⁰ 1 lakh is equal to 0.1 million.

states like Bihar (13), Nagaland (17.8), Jharkhand (18) Assam (18.2) and Chhattisgarh (18.4) and West Bengal (18.7) had low GERs, states like Chandigarh (56.4), Tamil Nadu (48.6), Delhi (46.3), Uttarakhand (36.3), Himachal-Pradesh (37.9) and Kerala (36.2) registered a high rate of GER in 2017. In terms of the number of out turn / pass outs¹¹ at various levels of higher education, states with high out turns included Uttar Pradesh, Tamil Nadu, Maharashtra, Rajasthan, and Karnataka, whereas most of the North-eastern states of India like Arunachal Pradesh, Nagaland, Mizoram, and Sikkim had lesser number of students out turn within the higher education at all levels (MHRD, 2018a).

d) Inequity in higher education in India with regard to religious diversity

India is constitutionally a secular country with enormous religious diversity. According to the Census of India 2011, the population of India comprises Hindus (79.8 %), Muslim (14.23 %), Christian (2.3 %), Sikh (1.72 %), Buddhist (0.7 %), Jain (0.37) and other religion or population with religion not stated (0.9 %) (COI, 2011). However, not all religions have similar enrolment levels in higher education. According to MHRD (2013) the GER for Hindu (20), Muslim (11.3), Christian (31.3), Sikh (23.1), Jain (54.6), Buddhism (17.9) and Zoroastrian (63.6) were distinctively varied. While various government initiatives to motivate the minority - Muslims to pursue higher education are in place, their GER continues to remain low.

e) Inequity in higher education in India with regard to financial diversity

In terms of financial disparity, higher graduation rates were observed for people belonging to higher quintiles of income as compared to their counterparts in lower quintiles both in the rural and urban area. Of the five-quintile classes on the basis of Usual Monthly Per-capita Consumer Expenditure (UMPCE)¹², with the rising quintile the number of students completing graduation show a rise in the rural and urban areas (quintile one depicts the population with the lowest levels of UMPCE and quintile 5 depicts the population with the highest levels of UMPCE). In the rural areas, the

¹¹ Out turn means the number of final year students of a particular program, who have successfully completed the program, i.e. the number of students who have passed the final year examination of the program. (MHRD, 2018a, Annexure, p A-11).

¹² For further information regarding the definition of each quintile of UMPCE, refer to MOSPI (2016), pp 12, statement 2.1.

graduation completion grew from quintile one (1.6)¹³, to two (2.3), three (3.4), four (4.8) up to quintile five (9.3). Similarly, in the urban area too, the graduation completion level grew from quintile one (4.2), to two (6.5), three (11.8), four (19.2) up to quintile five (37.8) (MOSPI, 2016). It clearly depicts that the population with higher levels of expenditure had a greater likelihood of completing their graduation than their counterparts from lower levels of expenditure. People belonging to the lower quintile were likely to remain out of the purview of higher education irrespective of whether they belonged to non-vulnerable religious groups, castes, states or location (Agrawal, 2011).

In nutshell, people belonging ST, SC, OBC (in that order); rural population, females; population belonging to backward states like the North-eastern states of Bihar and West Bengal; poor people and Muslims were the most vulnerable in terms of access to higher education in India as measured by enrolment (Khan and Sabharwal, 2012; MOSPI, 2016). The population facing multiple backwardnesses were worst off, like the ST female or Muslim female belonging to a poor household in a rural area (Joshi and Ahir, 2016a).

EFFICIENCY ASPECTS OF HIGHER EDUCATION IN INDIA

The efficiency of the higher education system in India can be known from the employment data and rates of returns. According to the Ministry of Labour and Employment Report (2016), the unemployed persons having graduate level qualification were 10 % and those having post-graduate level education were 9.8 %. Amongst the reasons for unemployment, the prominent reason mentioned was ‘non-availability of job matching with education / skill / experience followed by ‘non-availability of adequate remuneration’ (MLE, 2016). Besides, numerous reports in the print and electronic media cite the un-employability of graduates, particularly engineers and management graduates. The reasons cited include, lack of faculty, mismatch between knowledge and skills being imparted and industry requirements, violation of statutory norms, excessive supply of seats, lack of participation in summer internship, lack of hands-on experience, lack of practical approach beyond theory, discipline and

¹³ The numbers in the parentheses represent the percentage distribution of literates (for all ages) by completed level of education for each quintile class of UMPCE. Ex. In rural areas in quintile 1 out of the total literates (for all ages) 1.6 % had completed graduation and above.

attitude issues, lack of general aptitude and IQ, inadequate infrastructure and lack of soft skills (Anand, 2017; Pratap, 2017; Roshan, nd; Sharma, 2016, Laha, 2016).

However, the private rates of return on higher education have been observed to be higher than the other levels of education (Agrawal, 2011; Mendriatta and Gupt, 2013; Singhari and Madheswaran, 2016; Rani 2014).

In spite of having acquired higher education degrees, it is difficult to seek appropriate employment due to the mismatch with the demand of labour market. Thus, while it is difficult to become employed having accumulated a higher education degree, but once a person is in the job the rates of return on higher education suggests that a person shall be rewarded for pursuing higher education more than those who would not have pursued higher education.

QUALITY CONCERNS FOR HIGHER EDUCATION IN INDIA

One of the major challenges associated with an increase in access to higher education in India is the one associated with quality. Within the country, the attempts to assess the quality of higher education institutions include the processes of accreditation and ranking of various institutions. However, higher education institutions of India at the international level have failed to mark a noticeable presence in any of the internationally reputed university rankings. The research output is also a crucial factor to adjudge the quality of higher education system. Hence, a discussion of the performance of higher education institutions in accreditation and national as well as international ranking is followed by the research output of the higher education institutions in India.

The accreditation process is a vital part of the higher education quality enhancement initiative by the government. UGC made it mandatory for all higher education institutions in India to undergo accreditation¹⁴, and in case of failing, provisions have been made for severe punishments like, not releasing the financial assistance for the non-accredited government funded institutions and in case of privately funded institutions, their recognition notification could be repealed. The responsibility of accreditation of general education rests with the National Assessment and Accreditation Council (NAAC) whereas that for technical education lies with the National Board of

¹⁴ University Grants Commission (Mandatory Assessment and Accreditation of Higher Educational Institutions), Regulations, 2012.

Accreditation (NBA). While NAAC undertakes institutional accreditation, NBA undertakes program and institution accreditation for institutions offering technical education like engineering, technology, management, pharmacy, architecture, etc. In addition, the criteria, weightage and the processes that are evolved for accreditation differ between the two. Yet, both are based on the philosophy of self-evaluation, and accountability of the institutions volunteering¹⁵ for assessment and accreditation by recognizing their own strengths, weaknesses, opportunities, and challenges to further enhance their quality. The accredited institution has to opt for three cycles of accreditation after each accreditation. The cycle period for each cycle is five years. Since its inception in September 1994, the NAAC accreditation process has undergone various improvisations in terms of criteria, weightages, grading method and process. As per the latest amendment introduced in July 2017, NAAC identified seven levels of accreditation ranging from A++ to C grade and D grade shows that the institution was 'not accredited'. Assessment is done on the basis of seven criteria¹⁶, further divided into 34 key indicators¹⁷ with different weightages (Joshi and Ahir, 2015). Moreover, the weightages for each criterion are different for universities, autonomous colleges, and affiliated colleges. A total of 11964 institutions (540 universities and 11424 colleges) had been accredited till March 2018. In 2017-18 alone a total of 7772 institutions were accredited (320 universities and 7452 colleges). Out of 320 universities, 201 universities secured grade A (63 %), 116 - grade B (36 %) and 3 - grade C (1 %). In contrast, out of 7452 colleges, 1621 colleges secured grade A (22 %), 5037 - grade B (68 %) and 794 - grade C (11 %)(NAAC, 2018a). Hence, universities scored more 'A' grades as compared to colleges that secured more 'B' grades.

While NBA was established in 1994 by All India Council of Technical Education (AICTE), it was accorded an autonomous status in January 2010 and was later accorded a permanent signatory status of Washington Accord in June 2014. NBA provides for Tier I (Washington Accord) accredited programs and Tier II accredited programs. There were 670 programs with a valid Tier 1 accreditation. NBA accreditation is 'outcome-

¹⁵ While it is mandatory by 'Mandatory Assessment and Accreditation of Higher Educational Institutions Regulations, 2012 many higher education institutions have not considered it to be obligatory to get accredited.

¹⁶ Seven criteria include: curricular aspects; teaching-learning and evaluation; research, innovations and extension; infrastructure and learning resources; student support and progression; governance, leadership and management; and institutional values and best practices.

¹⁷ For further details regarding key indicators and their weightages for universities, autonomous colleges and affiliated colleges refer to <http://naac.gov.in/docs/Annexure.pdf>.

based' whereby accreditation is awarded on the basis of achievement of predefined outcome associated with the vision, mission and objectives of the institution assessed. The vision, mission, and objectives may vary amongst institutions assessed, but the standardized process assures that the outcome in the form of expected knowledge and skills acquired by a graduate on successful completion of the program is in accordance with the vision, mission and objectives set by the institute.

Besides assessment and accreditation, attempts to enhance quality are augmented through various schemes for universities, colleges, and teachers by UGC. Universities, colleges, and teachers apply for such schemes and, benefit by the funding and status associated with such schemes like Special Assistance Program, Centre for Advanced Studies, and Universities and Colleges with Potential for Excellence. 'Institution of Eminence' is yet another scheme announced by MHRD with an objective "*to enable higher education institutions in India to emerge as world class Teaching and Research institutions*". Under this scheme, 10 government¹⁸ and 10 private institutes have been declared as Institutions of Eminence and would be provided a total grant of INR 10,000 million and certain other incentives. New regulatory structures for such institutions have been proposed and accordingly expected outcomes are prescribed. Once an institution is granted the status of Institution of Eminence, they would be able to leverage greater financial, administrative, regulatory, and academic autonomy (UGC, 2017a and 2017b). However, it is difficult to identify eligible institutes given the current performance of the higher education institutions in national and international ranking and the regulatory framework in which they operate (Joshi, Ahir and Desai, 2018). Till date, 6 higher education institutions have been granted the status of 'Institutions of Eminence'. The quality enhancing options also include attempts associated with the teaching fraternity. Faculties apply and compete for major and minor research grants from UGC. Besides the annual appraisal, faculty recruitments are based on 'Academic Performance Index (API)' score that has weightage for teaching, research, training taken and provided, consultancies undertaken, and extension activities¹⁹, among others.

¹⁸ Central Universities, Government owned and controlled Deemed to be Universities, Institutions of National Importance, Government owned standalone Institutions working under individual MoAs, such as Indian Institutes of Management and State Universities set up under a law made by Legislative Assembly of a State

¹⁹ Extension activities involve activities developing sensitivities towards community issues, gender disparities, social inequity etc. and inculcating values and commitment towards the social issues and contexts. It emphasizes community services undertaken by educational institutions as a part of their 'Institutional Social Responsibility'

Moreover, the highest apex body associated with higher education institutions in India, Ministry of Human Resource Development, felt the need to rank the institutions and hence consecutively started ranking higher education institutes in India. The first National Institutional Ranking Framework (NIRF) based India rankings were released in April 2016. Discipline-wise rankings for 2018 are also available for disciplines like Engineering, Management, Pharmacy, Architecture, Law, and Medical (NIRF, 2018). The rankings are based on five parameters with similar weightages but different sub-parameters²⁰.

In the context of international rankings, the performance of India is worrisome. Most of the higher education institutes in India again failed to secure any rank in the most recently announced top 100 higher education institutes of any of the three most prominent international rankings, namely Times Higher Education (THE) World University Rankings 2018, QS World University Rankings 2019, and Academic Ranking of World Universities (ARWU) 2018. The Indian higher education institute that appears first in the above mentioned lists is Indian Institute of Science (IISc) in THE rankings in the rank range 251-300 and the rank range 401-500 in the ARWU ranking. Besides this, Indian Institute of Technology Bombay (IITB) ranked 162 in QS ranking. Also, among the top 500 ranks, only one institute ranked in the range of 251-300 (IISc) and one in 351-400 (IITB) in THE, 9 in QS ranking²¹ and one in ARWU (THE, 2018; QS, 2018; ARWU, 2018). A comparison of top ranking universities in the world with their Indian counterpart highlights various reasons for poor performance of Indian institutions like lesser number of students' enrolment, lesser number of faculties, proportion of foreign faculties and students as a percentage of the total faculties and students and lesser number of programs offered, among others (Joshi & Ahir, 2017).

Scimago Journal and Country Rank (SJR, 2018) ranked 239 countries on various parameters related to the research output like documents, citable documents, citations, self-citations, citations per document and H-index. Over a period of 1996-2017, India ranked 9th in terms of the number of documents produced, citable documents and 14th in terms of citations. However, in terms of citations per document the rank of India was 184th and that in the case of H-index was 21 during the same period (SJR, 2018).

²⁰ For further details regarding key parameters, sub-parameters and their weightages refer to <https://www.nirfindia.org/Documents>

²¹ To know the ranks and the institution names of those Indian institutes that rank in top 500 in QS ranking refer to <https://www.topuniversities.com/university-rankings/world-university-rankings/2019>.

However, institutes like Indian Institute of Management Calcutta (IIMC) is accorded the globally renowned 'Triple Crown Accreditation' in management education by EFMD Quality Improvement System (EQUIS), Belgium, Association of MBAs (AMBA), London and AACSB. IIM, Ahmedabad and IIM, Bangalore are successfully accredited with EQUIS accreditation (<http://www.efmd.org/accreditation-main/equis/accredited-schools>, <http://bestbizschools.aacsb.edu/search-by-location>, <http://www.ambaguide.com/find-an-accredited-programme/schools/asia/?page=1&pp=10>). Besides this, selected higher education institutions have also carved a niche for themselves like the Jadavpur University, Vellore Institute of Technology, various IITs, IIMs, All India Institute of Medical Sciences, Manipal Academy of higher education, and Birla Institute of Technology and Science, Pilani among others. In the recent past, numerous government schemes and provisions have been introduced for funding, to motivate higher education institutions to pursue good quality research and enhance quality.

INTERNATIONALIZATION OF HIGHER EDUCATION IN INDIA

In 2006-07, 14,654 foreign students were enrolled in Indian higher education institutions. Out of them, 62 % pursued graduation and 27 % post-graduation. M.Phil. and Ph.D. attracted meager 3.8 % students (MHRD, 2011). In contrast, 0.176 million Indian students went abroad to pursue higher education in 2006-07 (MHRD, 2011).

In 2017-18, 46,144 foreign students from 166 countries enrolled in higher education institutes in India (0.13% of the total enrolment). Most of the students came from neighboring countries like Nepal (25 %), Afghanistan (9.5 %), Bhutan (4.3 %), Bangladesh (3.4 %) and Sri-Lanka (2.7 %), together accounting for about 45 % of the total foreign students. Amongst other top 10 countries that sent students to India include Sudan (4.8 %), Nigeria (4 %), Iran (3.4 %), Yemen (3.2 %) and U.S. (3.1 %). Collectively the aforementioned top 10 countries sent 63.4 % of the total foreign students in India (MHRD, 2018a).

About 77.4 % of the foreign students pursued under-graduate courses, maximum students pursued B.Tech., B.B.A., and B.A. Out of the total students enrolled in higher education in India, about 3.3 % of students pursued Ph.D.

Maximum foreign students' enrolments to pursue Ph.D. were from Ethiopia (213), Yemen (202) and Islamic Republic of Iran (180). Within India, maximum foreign

students were attracted in the state of Uttar Pradesh (412) and the states with cosmopolitan hubs like Karnataka (168), Delhi (142), Maharashtra (140) and Punjab (134) (MHRD, 2018a).

In contrast, according to the Ministry of External Affairs (MEA, 2017; 2018) 553,440 Indian students went abroad to pursue higher education up to August 2017 and 586,183 Indian students up to December 2017. Indian students opted for as many as 86 different countries. US, and Canada accounted for 55 % of Indian students studying abroad. Further US, Canada, and Australia attracted as many as 2/3rd of the students pursuing higher education from India.

Invitations to foreign students and faculties have been facilitated for those institutions that have been declared as Institutions of Eminence.

CONCLUSION

The Indian higher education system is the largest in the world in terms of the number of institutions and the second largest in enrolments. About 36.6 million students are currently enrolled in higher education institutions, but the Gross Enrolment Ratio (GER) is still very low at 25.8%. There are 903 universities and 39050 colleges in India, and this mammoth network of higher education institutions includes a large private sector that has emerged and experienced very rapid growth during the last two decades. Despite this growth, Indian higher education is facing several challenges with regard to equity, efficiency, and quality. Multi diversity in the social, economic and cultural patterns as they have evolved historically erect tough challenges of equity. Quality and commitment for quality on the part of institutions will determine the future prospects of Indian higher education's status in the global competition. Owing to the economic growth and favourable demographic conditions, the rates of return to higher education have been encouraging. The efficiency of higher education is also reflecting obscure accomplishments due to the high rate of unemployment among the highly educated, which can be attributed to the policy failure to imbibe appropriate skills and knowledge. Unfortunately, the Indian higher education is still not inclusive, globally competitive, and innovative.

Indian higher education will have to address equity, quality and efficiency issues in a pragmatic manner through effective policy framework to become globally competitive and relevant to the demand of the labour market.

REFERENCES

- Agrawal, T. (2011). *Returns to Education in India: Some Recent Evidence*. (WP-2011-017). Indira Gandhi Institute of Development Research, Mumbai. September. Retrieved as on 24.6.12 from <http://www.igidr.ac.in/pdf/publication/WP-2011-017.pdf>
- Anand, A. (2017). Out of 8 lakh graduate engineers, 60 percent remain jobless in India. *India Today*, March 20, New Delhi. Retrieved as on 25.8.18 from <https://www.indiatoday.in/education-today/news/story/60-of-engineering-graduates-unemployed-966582-2017-03-20>
- ARWU (2018). *Academic Ranking of World Universities 2018*. Shanghai Ranking Consultancy. Author. Retrieved as on 30.8.18 from <http://www.shanghairanking.com/ARWU2018.html>
- CIA (2018). *The World Fact book: India*. Central Intelligence Agency. Author. Retrieved as on 8.9.18 from <https://www.cia.gov/library/publications/the-world-factbook/geos/in.html>
- COI (2011). *Religion Census 2011*. Census Survey of India. Census Organization of India. Author. Retrieved as on 23.8.18 from <https://www.census2011.co.in/religion.php>
- Dharaskar, R. (2014). *113 Difficulties in Developing World Class Universities*. Shroff Distributors and Publishers Private Limited. ISBN 9789351104704.
- Joshi, K.M. (2012). Higher Education and Social Equity in India: Access, Participation and Affirmative Status amongst Disadvantaged Groups, *International Review of comparative Sociology*, 3(2). pp 149-165.
- Joshi, K.M. & Ahir K.V. (2013). Indian Higher Education: Some Reflections. *Intellectual Economics*, 7(1): 42-53.
- Joshi, K.M. & Ahir. K.V. (2014). Higher Education in India: Reflections on Changing Landscapes, in K.M. Joshi, and S. Paivandi (eds.), *Higher Education Across Nations*, New Delhi: B.R. Publishing Corporation. pp. 412- 456.

- Joshi, K.M. & Ahir K.V. (2015). The State of Higher Education Governance in India: A Perspective, in K.M. Joshi, and S. Paivandi (eds), *Global Higher Education: Issues in Governance*,. New Delhi: B.R. Publishing Corporation. pp. 262-314
- Joshi, K.M. & Ahir, K.V. (2016a). Equity in Indian Higher Education: Issues and Challenges in Access and Participation. In Saeed Paivandi & K.M.Joshi (eds) *Equity in Higher Education: A Global Perspective*, Studera Press, New Delhi. ISBN 978-93-85883-06-4. pp 55-82.
- Joshi, K.M., & Ahir, K.V. (2016b). "Higher Education Growth in India: Is Growth Appreciable and Comparable?" *Higher Education Forum*, 13: 57-74.
- Joshi, K.M. & Ahir, K.V. (2017). Quality Assurance in Indian Higher Education: An Unfinished Agenda. In Stamelos Georgios, K.M.Joshi & Saeed Paivandi (eds) *Quality Assurance in Higher Education: A Global Perspective*. Studera Press, New Delhi. ISBN 978-93-85883-27-9. Pp 127-144.
- Joshi, K.M., Ahir, K.V. & Desai, B.S. (2018). The Awaited Rise of the Sleeping Elephant: Trajectories of Creating World-Class Universities in India. In Marcelo Rabossi, K.M.Joshi & Saeed Paivandi (eds) *In Pursuit of World Class Universities: A Global Experience*, Studera Press, New Delhi. ISBN 978-93-85883-64-4. pp 59-90.
- Khan, K. & Sabharwal, N. S. (2012). *Access and Equity in Higher Education: Aspects of Gender, Caste, Ethnicity, Religion, Occupation and Economic Groups in Rural and Urban Areas during Pre and Post Reforms Periods*. Indian Institute of Dalit Studies, Working Paper Series, Volume VI, Number 4, New Delhi.
- Laha, R. (2016). Over 80% of engineers in India still unemployable: Survey. *Hindustan Times*, January, 25. Retrieved as on 25.8.18 from <https://www.hindustantimes.com/education/over-80-of-engineers-in-india-still-unemployable-survey/story-VHSmdFhsKLBwaKDbagUwEK.html>
- Manuel, T. (2015). So who decides what an institution of National Importance is? The Wire. 22 July 2015. Retrieved as on 24.10.18 from <https://thewire.in/education/demystifying-higher-education-in-india-second-of-a-series>
- MEA (2017). *Lok Sabha Unstarred Question No. 337 Indian Students Studying Abroad*. Ministry of External Affairs, Government of India, New Delhi. Author. Retrieved as on 4.9.2018 from <http://164.100.47.190/loksabhaquestions/annex/12/AS337.pdf>

- MEA (2018). *Lok Sabha Unstarred Question No. 2755 Indian Students Abroad*. Ministry of External Affairs, Government of India, New Delhi. Author. Retrieved as on 4.9.2018 from <https://www.mea.gov.in/lok-sabha.htm?dtl/29313/QUESTION+NO2755+INDIAN+STUDENTS+ABROAD>
- Mendiratta, P. & Yamini Gupt (2013). Private returns to education in India by gender and location: A Pseudo-Panel Approach. *Arthaniti*, 12(1-2)/2013/48. Retrieved as on 25.8.18 from <http://www.econcaluniv.ac.in/arthanitiweb/book/2013/PM.pdf>
- MHRD (2011). *Statistics of Higher and Technical Education 2007-08*. Bureau of Planning, Monitoring and Statistics, Ministry of Human Resource Development, New Delhi. Author.
- MHRD (2013). *Rashtriya Uchchatar Shiksha Abhiyaan*, National Higher Education Mission. Ministry of Human Resource Development in association with Tata Institute of Social Sciences. September. Author.
- MHRD (2018a). *All India Survey on Higher Education 2017-18*. Department of Higher Education, Ministry of Human Resource Development, Government of India, New Delhi. Author. Retrieved as on 24.9.18 from http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics-new/AISHE2017-18.pdf
- MHRD (2018b). *Government declares 6 educational 'Institutions of Eminence'*. Press Information Bureau, Ministry of Human Resource Development, Government of India, New Delhi. Author. Retrieved as on 5.8.18 from http://mhrd.gov.in/sites/upload_files/mhrd/files/IOE_PR.pdf
- MLE (2016). *Report on Fifth Annual Employment and Unemployment Survey 2015-16*. Labour Bureau, Ministry of Labour and Employment, Government of India, Chandigarh. Volume 1, September. Author.
- MOSPI (2016). *Education in India: NSS 71st round (January – June 2014)*. Report Number 575(71/25.2/1) National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, New Delhi. March. Author.
- NAAC (2018a). *Statistics*. National Assessment and Accreditation Council, Bangalore. Author. Retrieved as on 30.8.18 from <http://naac.gov.in/menu/graphs>
- NIRF (2018). *India Rankings 2018*. National Institutional Ranking Framework, Ministry of Human Resource Development, Government of India, New Delhi. Author.

- Pratap, R. (2017). Worthless degrees and jobless graduates. Business Line, *The Hindu*, April 24. Retrieved as on 25.8.18 from <https://www.thehindubusinessline.com/news/education/worthless-degrees-and-jobless-graduates/article9660619.ece>
- PwC (2017). *The long view: How will the global economic order change by 2050?* PricewaterhouseCoopers, London. February. Author. Retrieved as on 8.9.18 from <https://www.pwc.com/gx/en/world-2050/assets/pwc-the-world-in-2050-full-report-feb-2017.pdf>
- QS (2018). *QS World University Rankings 2019*. Quacquarelli Symonds Top Universities. Author. Retrieved as on 30.8.18 from <https://www.topuniversities.com/university-rankings/world-university-rankings/2019>
- Rani, G. (2014). Disparities in earnings and education in India. *Cogent Economics and Finance*. ISSN: 2332-2039, pp. 1- 18.
- Roshan, R. (nd). Six reasons for the unemployment of Engineers in India. *Stumagz*. Retrieved as on 25.8.18 from <https://www.stumagz.com/six-reasons-for-the-unemployment-of-engineers-in-india/>
- Sharma, K. (2016). 9 in 10 MBA graduates, engineers in India unemployable: FICCI report. *DNA*, November 15. Retrieved as on 25.8.18 from <https://www.dnaindia.com/academy/report-9-in-10-mbas-engineers-unemployable-2273475>
- Singhari, S. & Madheswaran, S. (2016). *The changing Rates of Return to Education in India: Evidence from NSS data*. Working paper 358, The Institute for Social and Economic Change, Bangalore. ISBN 978-81-7791-214-2. Retrieved as on 25.8.18 from <http://www.isec.ac.in/WP%20358%20-%20Smritirekha%20Singhari%20and%20S%20Madheswaran%20-%20Final.pdf>
- SJR (2018). *Scimago Journal and Country Rank*. Scimago Lab. Retrieved as on 30.8.18 from <https://www.scimagojr.com/countryrank.php?order=h&ord=desc>
- THE (2018). *World University Rankings 2018*. Times Higher Education World University Rankings. Author. Retrieved as on 30.8.18 from https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking#!/page/0/length/25/locations/IN/sort_by/rank/s_ort_order/asc/cols/stats
- UGC (2012). *Higher education in India at a glance*. University Grants Commission, New Delhi. February. Author.

UGC (2017a). *UGC (Institutions of Eminence Deemed to be Universities), Regulation 2017*. University Grants Commission, New Delhi. Author.

UGC (2017b). *UGC (Declaration of Government Educational Institutions as Institutions of Eminence) Guidelines, 2017*. University Grants Commission, New Delhi. Author.

World Bank (2018). *Data: India*. The World Bank Group. Author. Retrieved as on 8.9.18 from <https://data.worldbank.org/country/india>.