REPORT
OF THE
JGU TASK FORCE
ON
EDUCATION QUALITY
UPGRADATION AND INCLUSION
PROGRAMME (EQUIP)

SUBMITTED TO
THE SECRETARY
DEPARTMENT OF HIGHER EDUCATION
MINISTRY OF HUMAN RESOURCE DEVELOPMENT
GOVERNMENT OF INDIA

APRIL 2019
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EXECUTIVE SUMMARY

In response to the five-year (2019-2024) action plan 'Education Quality Upgradation and Inclusion Programme' (EQUIP) of the Ministry of Human Resource Development (MHRD), Government of India (GoI), O.P. Jindal Global University (JGU) constituted an internal task force to discuss and deliberate on the key issues that form the mandate of EQUIP, and its constituent expert groups. This report presents the outcomes of the deliberations of the task force. The report addresses each of the 10 themes introduced under EQUIP and elaborates on existing challenges, proposed reforms, challenges of implementation, and potential outcomes. Key policy recommendations are proposed for each of the themes accounting for the nature of past progress, recently introduced government policies, and cross-cutting characteristics of the Indian higher education system at the national and state levels.

The 10 themes addressed in this report correspond to those under EQUIP namely:

1. Strategies for expanding access
2. Towards global best teaching/learning process
3. Promoting excellence
4. Governance reforms
5. Assessment, accreditation and ranking systems
6. Promotion of research and innovation
7. Employability and entrepreneurship
8. Using technology for better reach
9. Internationalisation
10. Financing higher education

Brief summaries of existing challenges and policy recommendations under each theme are given below.

1. **Strategies for expanding access**

   In 2017-18, Gross Enrolment Ratio (GER) in higher education in India was 25.8. This implies that for every 100 persons belonging to the age group of 18-23, only approximately 26 persons are actually enrolled in higher education. A key challenge is the low GER of the SC and ST category population. In 2017-18, SC GER was 21.8 and ST GER was only 15.9, significantly lower than the overall GER in higher education in India. GER for female SC and female ST categories were 21.4 and 14.9 respectively. The role of demand and supply side factors needs to be considered in influencing GER under various categories. Regional imbalances in GER are a feature across Indian states and union territories (UTs). Some of the under-performing UTs have GER levels as low as 5.2 (Daman and Diu), disproportionately affecting the national GER.

   The role of Demand and Supply factors in influencing GER under various categories needs to be considered.
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Regional imbalances in GER are a feature across Indian states and union territories (UTs). Some of the under-performing UTs have GER levels as low as 5.2 (Daman and Diu), disproportionately affecting the national GER.

The role of demand and supply factors in influencing GER under various categories needs to be considered.

![Figure 1: GER in India (2010-2018) (Source AISHE)](image)

A useful example of impressive improvement in Higher Education GER is China. The country's national GER rose from 28.04 in 2012 to 51.01 in 2017 – an increase of approximately 82% over a 5-year period. Barring South Africa, India’s GER is one of the lowest in the BRICS region, and its rate of growth has remained sluggish in the last five years.

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<td>52</td>
</tr>
<tr>
<td>GER female</td>
<td>25.4</td>
<td>51</td>
</tr>
<tr>
<td>GER SC</td>
<td>21.8</td>
<td>44</td>
</tr>
<tr>
<td>GER SC female</td>
<td>21.4</td>
<td>43</td>
</tr>
<tr>
<td>GER ST</td>
<td>15.9</td>
<td>48</td>
</tr>
<tr>
<td>GER ST female</td>
<td>14.9</td>
<td>45</td>
</tr>
</tbody>
</table>

![Figure 2: Recommended GER targets for 2029 under EQUIP](image)

Reform strategies proposed to improve access and GER levels include:

- Increasing the enrolment capacity of the existing higher educational institutions (HEIs);
- Creation of new HEIs in the Educationally Backward Districts (EBDs) through government and philanthropic initiatives;
- Educational development of the tribal communities;
- Educational development of the north eastern states;
- Focus on the union territories; and,
- Ushering private initiatives, particularly, in the high and the moderately well performing states.
2. Towards global best teaching/learning process

The task force proposes that in order to introduce and sustain reforms, structural challenges that relate to historical contexts need to be addressed first. The policy recommendations under this theme include:

- Curriculum revision;
- Professional development of faculty;
- Faculty recruitment;
- Tenure track of faculty;
- Assessment and exam reforms;
- Mentoring of neighboring institutions;
- A more integrated approach to teaching and research; and,
- Institution of end-semester teaching-learning feedback survey.

3. Promoting excellence

Global rankings have now become an effective way of quantitatively evaluating and promoting excellence amongst HEIs across the world. Among multiple ranking platforms, QS and Times Higher Education (THE) have established themselves as frontrunners. Therefore, to evaluate where India stands on the global front today, the task force analysed India's standing in the THE and QS World Rankings to understand pathways to promoting excellence in the Indian higher education system.

THE Parameters

![Diagram showing the parameters for THE rankings]

Figure 3: Parameters for THE rankings
The identified challenges to improved performance of Indian HEIs in global rankings are:

- International outlook (primarily international students and faculty);
- Global reputation among academics;
- Domestic reputation among employers;
- Research productivity; and,
- Faculty – Student ratio.

Indian HEIs have underperformed under the parameters of reputation (being of the highest weightage), and internationalisation (being the weakest performing indicator) and hence, these require greatest attention and development. Internationalisation has a strong influence on reputation. Based on this, the following policy recommendations are proposed:

a) Increasing international students
   Key strategies include:
   - International collaborations through country focus.
   - Centralized scholarship funding.

b) Increasing research output
   Key strategies include:
   - Assign a greater percentage of GDP on research.
   - Promote more private funding and encourage academia – industry collaboration for research.
• Develop online interface to connect researchers and funding entities.
• Align our research tracking practices with SCOPUS.
• Support for research in non-STEM universities.

c) Increasing international faculty
   Key strategies include:
   • Reduce the work visa transactions.
   • More funds for public universities.

d) Increasing faculty-student ratio
   Key strategies include:
   • Peg faculty incentives and perks to government employee Levels.
   • Invest in more infrastructure in public universities.

e) Reputation
   Parameters under NIRF are not aligned with reputation parameters in global rankings and, therefore, the NIRF does not contribute to Indian universities in global rankings. If the GoI aspires for HEIs to be globally ranked, we must scrap the NIRF and follow QS rankings.

f) Out of nearly 1000 universities in India, at least 5% (50 institutions - 25 Public and 25 Private universities) should be recognized under the Institution of Eminence framework. As there are no financial implications relating to the conferment of IoE status on the private universities, there is no rationale for maintaining 1:1 parity between public and private universities. The Government can recognize more private institutions under the IOE framework.

4. Governance reforms
   The key sub-themes identified by the task force relate to
   • Internal governance in HEIs;
   • Affiliation reforms;
   • Examination of processes for selection of institutional heads and key personnel;
   • Leadership training; and,
   • Grievance redressal systems.
   Important recommendations include:
   • Debureaucratisation of internal governance processes and mechanisms, and decentralisation within HEIs;
   • Greater investment in training non-academic staff, through state-level and regional-level trainers and online training modules on Swayam platform;
   • Upholding greater standards in filling of statutory positions in HEIs;
   • Implementation of more robust grievance redressal mechanisms within all HEIs;
   • Greater attention to gender parity and promoting women in leadership roles within HEIs;
   • Increased synergy and collaboration between HEIs at the national and state levels; and,
   • Institution of a singular regulatory body for all disciplines at the national level.

5. Assessment, accreditation and ranking systems
   Two key areas of concern in the existing system have been identified by the task force under this head. These are: outreach of accreditation and quality of HEIs.

As per the 2017 AISHE Report, only around 14% of India’s HEIs stand accredited as on date.
Lack of Accreditation

Figure 5: Percentage of accredited and unaccredited HEIs in India (2017-18)

Inferences of quality drawn from accreditation figures are as follows:

![Graph showing percentage of accredited and unaccredited HEIs in India](image)

<table>
<thead>
<tr>
<th>HEI</th>
<th>Accredited</th>
<th>Total</th>
<th>Accreditation %</th>
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</thead>
<tbody>
<tr>
<td>Universities</td>
<td>315</td>
<td>903</td>
<td>34.8837</td>
</tr>
<tr>
<td>Colleges</td>
<td>5309</td>
<td>39050</td>
<td>13.5954</td>
</tr>
<tr>
<td>Total</td>
<td>5624</td>
<td>39953</td>
<td>14.0765</td>
</tr>
</tbody>
</table>

![Graph showing percentage of accredited universities by grade awarded](image)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total HEIs</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A++</td>
<td>7</td>
<td>2.22%</td>
</tr>
<tr>
<td>A+</td>
<td>17</td>
<td>5.40%</td>
</tr>
<tr>
<td>A</td>
<td>166</td>
<td>52.70%</td>
</tr>
<tr>
<td>B++</td>
<td>22</td>
<td>6.98%</td>
</tr>
<tr>
<td>B+</td>
<td>16</td>
<td>5.08%</td>
</tr>
<tr>
<td>B</td>
<td>78</td>
<td>24.76%</td>
</tr>
<tr>
<td>C</td>
<td>9</td>
<td>2.86%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>315</td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing percentage of accredited colleges by grade awarded](image)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Total HEIs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A++</td>
<td>11</td>
<td>0.21%</td>
</tr>
<tr>
<td>A+</td>
<td>100</td>
<td>1.88%</td>
</tr>
<tr>
<td>A</td>
<td>1262</td>
<td>23.77%</td>
</tr>
<tr>
<td>B++</td>
<td>430</td>
<td>8.10%</td>
</tr>
<tr>
<td>B+</td>
<td>581</td>
<td>10.94%</td>
</tr>
<tr>
<td>B</td>
<td>2532</td>
<td>47.69%</td>
</tr>
<tr>
<td>C</td>
<td>393</td>
<td>7.40%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>5309</td>
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</tbody>
</table>
Two major concerns were identified by the task force relating to the National Assessment and Accreditation Council (NAAC). These are: need for increasing the percentage of HEIs accredited, and improving the quality of HEIs through increase in the accreditation scores and grades.

Key policy recommendations for improving assessment, accreditation and ranking systems are:

a) Address the low outreach that may exist due to the non-conformance to the quality standards set by NAAC;
   • Institutions should undergo a pre-accreditation check when founded on controls applicable to an infant institution.
   • Introduce a mentoring system for unaccredited and low grade HEIs.

b) Re-evaluate/ reduce the fees charged during accreditation;

c) Improve the accreditation volume which may currently be hindered by the bandwidth constraint faced by NAAC due to rising demand in NAAC accreditation by HEIs;

d) Mandatory accreditation for all HEIs

e) Address the low participation in national ranking for public funded universities; and,

f) State Governments must amend their respective legislations regarding their State public and private universities. Legislative amendments are required in the Advocates Act, Council of Architecture Act and other legislations governing professional councils in order to give effect to the letter and spirit of UGC Graded Autonomy Regulations.

6. Promotion of research and innovation

The task force recommends that a more integrated approach to teaching and research needs to be adopted across HEIs in India. Since implementation of such an approach will be highly challenging within existing systems and structures, the focus must be on institutionalising an integrated teaching and research model in all new institutions. In the long run, these institutions can then serve as peer-mentors for overhauling the “two-boxed” system of teaching and research.

Additional recommendations include:
• Develop a more integrated approach to teaching and learning;
• Develop a more interdisciplinary approach to curriculum and pedagogy;
• Develop a three-fold system of self-assessment, student-assessment and peer-assessment of teaching and learning;
• The affiliated college system should be granted more autonomy to reform their own curriculum and administrative processes;
• Faculty recruitment and promotion processes must be enhanced and strengthened to match global standards;
• More robust assessments of research quality that are benchmarked against standard and globally-adopted criteria; and,
• International advisory capacities for assessment and commercialisation of research.

7. Employability and entrepreneurship

The task force has proposed the following areas for policy focus:

a) Provide toolkits to create micro incubation centres: The intended outcome is increased number of successful startup ventures and the promotion of a startup culture across the country.
b) Adopt student entrepreneurship-friendly university policies: The intended outcome is to effectively promote a startup culture within HEIs that encourage and incentivise students to engage in innovation and entrepreneurship at an early stage.

c) Focus on skills demanded by the global economy: The intended outcome is an increased number of people with competency in skills demanded by the global economy on an ongoing basis.

d) Establish a more responsive, adaptive approach to skill development: The intended outcome is an increased number of people with competency in skills demanded by the global economy at all times.

8. Using technology for better reach

The task force has proposed the following areas for policy focus:

a) Improve learner experience on SWAYAM platform: The intended outcome is increased number of students enrolled in online courses and increased GER over time.

b) Invest in high-quality online course creators: The intended outcome is increased number of students enrolled in online courses and increased GER over time.

c) Promote digital-learning software tools in classrooms: The intended outcome is improved student learning outcomes and higher quality education at universities.

9. Internationalisation

The task force identifies 20 distinct qualities that mark exemplary global universities around the world. These seek to frame the current challenges and possible future pathways for improving measures of internationalisation in India.

The vision of international higher education in India so far has been driven by a perception of the country as a “sending region”, that is, a country from where students go out into various parts of the world seeking study abroad opportunities. Hence, policy making has also been geared towards this, focusing on ensuring that Indian students are protected from dubious institutions and fraudulent practices. This has left behind a legacy of viewing international partnerships with inherent suspicion and skepticism. While the 'Study in India' campaign is a step in the desired direction, there is much to be done to fulfil its potential and thoughtful action is needed at various levels.

Two key policy recommendations are offered:

a) Increasing the enrolment of international students:
   - Measures by the GoI towards LOWERING entry barriers, and ease visa and foreign residents’ registration processes. The process at Foreigners Regional Registration Offices should be streamlined and simplified.
   - The MHRD must sign MoUs with their counterparts in other countries to do away with the mandatory requirement of degree attestation by the Department of Higher Education for the degrees issued by the HEIs.
   - Engagement with philanthropists, alumni and Indian diaspora communities by universities and the government to secure financial aid for international students to study in India.
   - Stepping up publicity effort of the very idea of 'Study in India' by branding the quality educational and unique cultural experience that can be gained at affordable cost.

b) Promoting Academic Collaborations:
   - Complete autonomy to institutions to enter into and implement international academic collaborations in accordance with their needs and strengths.
• Indian universities to proactively seek out and collaborate with overseas institutions with a genuinely global outlook, not exclusively focused on rankings and western institutions.
• While implementing academic collaborations, special attention be paid to major funding schemes such as New Colombo Plan (facilitating short term mobility of Australian students to India), Erasmus+ (enabling funded mobility of teaching and non-teaching staff to and from Europe) and Fulbright (support for short-term teaching and research stints).
• Streamline procedures for the visit of international scholars to India. Issue expeditious conference visa for academics.

The report also highlights some considerations for foreign university campuses in India and offshore campuses of Indian universities.

10. **Financing higher education**

Under this theme, the report highlights 14 major challenges currently faced in the Indian higher education system:

1. Low budgetary allocation as percentage of national GDP.
2. Disparities in state government expenditure on higher education.
3. Philanthropic initiatives limited to a few premier institutions.
4. Challenge of tapping private resources for government aided institutions.
5. Fee regulation leading to stifling of autonomy of public and private institutions that are capable of generating resources by offering reputed and competitive courses.
6. Commercially motivated private institutions providing poor quality higher education.
7. Lack of financial autonomy for premier universities in the country.
8. Low penetration of student loans.
9. Cost of education, high fees and repayment burden for students and families.
11. Limited CSR funds in higher education.
12. Inability of companies to find appropriate projects to invest in which align with their goals and vision.
13. Under-utilisation of cess funds already collected.

The key strategies proposed for policy reform are:

- Increase in budgetary allocation.
- Increase in the funding of state institutions.
- Encouraging private philanthropy, alumni donations and foreign flow of donations/grants and researchers.
- Greater private sector participation for quality education.
- Providing financial autonomy and encouraging financial accountability.
- Contextualising student loan mechanisms.
- Channelising CSR funds.
- Exploring regulated-market solutions.
- Reworking the tax structure for higher education.
- Higher Education Council should be established on the lines of GST Council for better coordination of matters relating to higher education.

A comprehensive discussion of the current state under each theme, policy recommendations, challenges for implementation and foreseen outcomes is placed in the following sections.
1. In 2017-18, Gross Enrolment Ratio (GER) in Higher Education (HE) in India was 25.8%. At the same time, there is a low GER in the SC and ST category. In 2017-18, SC GER was 21.8% and ST GER was only 15.9%, significantly lesser than the overall GER in HE (25.8%) in India. The GER for Female SC and Female ST is 21.4% and 14.9% respectively.

Graph 1

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Graph 2
2. According to the AISHE report 2017-18, 5% students belong to Muslim Minority and 2.2% are from other minority communities.

3. Demand Side Factors: Perceived high opportunity cost of pursuing higher education, poor prospects of employability, alienation of the curriculum vis-à-vis the knowledge requirements of the youth in the available job opportunities, not ready/qualified for pursuing higher education because of school drop-out, disillusionment with the formal schooling system and poor performance at the level of school. For marginalized sections, these factors are aggravated and result in systematic inaccessibility to higher education.

4. Supply side factors: Lack of availability of higher education institutions in the nearby locality, especially in regions inhabited by marginalized population, difficult geographic terrain, limited seats, non-availability of experts, teachers, non-teaching staff, lack of adequate infrastructure like laboratory, classrooms and hostel facilities, rising fees especially in the private higher education.

5. There are regional imbalances in GER across states and union territories (UTs) in India. Some of the poorer performing states (GER less than the national average) are- Bihar (13), Nagaland (17.8), Jharkhand (18), Assam (18.2), Chhattisgarh (18.4), West Bengal (18.7), Gujarat (20.1), Madhya Pradesh (21.2), Tripura (21.2), Rajasthan (21.7), Odisha (22), Mizoram (22.9) and Meghalaya (24.7).

6. Some under-performing UTs have GER levels as low as 5.2 (Daman and Diu). Barring Delhi, Chandigarh and Puducherry, all other UTs like Andaman and Nicobar Islands (21.8), Dadra and Nagar Haveli (9.1), Daman and Diu (5.2) and Lakshadweep (7.6) have low GER. These abysmally low numbers pull the national GER down.

7. China has shown tremendous improvement in its GER in HE from 28.04 in 2012 to 51.01 in 2017. Other BRICS countries' GER in HE in 2016 was -Brazil (50.49), Russia (81.82), South Africa (20.48). Barring South Africa, India’s GER is one of the lowest in the BRICS region. Also, the GER growth rate in India has remained sluggish in the last 5 years.

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<tr>
<th>S. No.</th>
<th>Category</th>
<th>Current</th>
<th>Target by 2029</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Lagged Behind States and UTs</td>
<td>GER of 17 states and UTs lagging behind the national average of 25.8</td>
<td>• Doubling the GER of the states and UTs lagging behind the national average which include Daman and Diu, Lakshadweep, Dadra and Nagar Haveli, Bihar, Nagaland, Jharkhand, Assam, Chhattisgarh, West Bengal, Gujarat, Madhya Pradesh, Tripura, Rajasthan, Andaman and Nicobar Islands, Odisha, Mizoram, Meghalaya</td>
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<tr>
<td></td>
<td></td>
<td>GER between 0-25.8</td>
<td>• Concerted efforts on Bihar and a few Union Territories where the GER needs to be increased by 3 to 5 times to improve the national average.</td>
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<tr>
<td></td>
<td></td>
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<td>• Targeted average GER for these states should be at least 42</td>
</tr>
<tr>
<td>8.</td>
<td>Moderately Well Performing</td>
<td>GER between 25.8-30</td>
<td>• States and UTs like UP, J&amp;K, Karnataka, Goa, Haryana, Arunachal Pradesh</td>
</tr>
<tr>
<td></td>
<td>States and UTs</td>
<td></td>
<td>Targeted average GER of 52-62</td>
</tr>
<tr>
<td>9.</td>
<td>High Performing States</td>
<td>GER between 30-57</td>
<td>• States and UTs like Punjab, Andhra Pradesh, Telangana, Maharashtra, Manipur, Kerala, Uttarakhand, Puducherry, Sikkim, Himachal Pradesh, Delhi, Chandigarh, Tamil Nadu to drive the rise of GER in India to reach the national target.</td>
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<td></td>
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<td>• Targeted Average GER of 62-72</td>
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<tr>
<td>10.</td>
<td>District-wise disparities within</td>
<td>District-wise disparities within states, even among the well-performing states</td>
<td>• Concerted efforts to be put in EBDs (as per the new definition proposed in this document).</td>
</tr>
</tbody>
</table>
Strategies for Change and Recommendation

A. INCREASING THE ENROLMENT CAPACITY OF THE EXISTING HEIs
1. Upgradation of well-performing autonomous institutions and colleges into universities (NAAC data). Increasing the enrolment of such institutions by creating capacity through infrastructural development under RUSA, HEFA and other sources. Under HEFA, an institution’s capacity to pay back loan should not be determined by its existing capacity but by its prospective capacity.
2. Conversion of poor performing state colleges and higher education institutions into Vocational cum Professional Training Institutions, in accordance to the skill requirement of the local economy. To include the enrolment of the vocational cum professional training institutions into the calculation of GER.
3. Creating Cluster Universities - where two or more colleges in a vicinity, are administratively combined together to become a degree granting university. Increase in the enrolment in cluster universities through infrastructural development. The combined financial and administrative capacity of the institutions will be high.
4. Revamp Distance Learning Programmes in India- Reputed institutions such as IITs, IIMs, JNU, HCU and other premier institutions in India including the private institutions, to design and offer full-fledged degree programmes via the distance learning mode. Boost the enrolment in the distance learning programmes and include such enrolment in the calculation of GER.

B. CREATION OF NEW HEIs IN EBDs: GOVERNMENT AND PHILANTHROPIC INITIATIVES
1. District-wise analyses of higher education in India on the parameters of access (availability of higher education institutions, GER), equity (GER of SC/ST/OBC/Women) and quality (NAAC score, NIRF score, primary data).
2. India’s current GER in HE is 25.8. One needs to identify all the districts which have GER values less than the national average of 25.8 and declare them as EBDs. These districts can be further divided into four categories – Category A (GER: 0-6.5), Category B (GER: 6.5-13), Category C (GER: 13-19.5), Category D (GER: 19.5-25.8).
3. On the basis of the above analyses, redefine and update the EBDs. Accordingly, design and prioritise educational reforms, district-wise. New HEIs must be established in EBDs in a targeted manner. This may include comprehensive universities, vocational institutions and professional institutions.
4. Establishment of HEIs in EBDs is also expected to address the equity aspect as well. Due to systematic inequality in socio-economic development, marginalised population like SC, ST and other minorities are more likely to inhabit the EBDs. Thereby, the new HEIs in EBDs should be made affordable. Government funded HEIs need to be opened in the EBDs. Philanthropy in higher education should be promoted in the EBDs.
5. Scaling up of current schemes and scholarships for the SC, vulnerable, and marginalized sections.

C. EDUCATIONAL DEVELOPMENT OF THE TRIBAL COMMUNITIES
6. Hand-holding efforts, facilitating transitioning from school to higher education with interventions at possible school drop-out points. This could be augmented by the development of facilitating centres in the school or in the community for senior secondary tribal students, to ensure that they eventually pass the school board exams and/or become eligible for higher education. Eklavya Model Residential Schools may take a lead in establishing such platforms to facilitate transitioning to higher education.
7. Increase the number of Eklavya model residential schools in the tribal regions of the country including states like Jharkhand, Odisha, Chhattisgarh and Rajasthan.
8. Making concerted efforts to increase the GER in minorities, especially, minority women in ST category. This can be done by providing financial aid and scholarship to minority women in ST and other marginalised sections.
9. Tribal Women in Higher Education- Special scholarships may be created for tribal women in senior secondary school and in higher education.

10. Increasing the allocation of funds on the existing scholarships meant for ST students. The current National Fellowship and Scholarship schemes could be made available to a larger ST population.

11. Providing earning opportunities to SC/ST/OBC students such as involvement in administrative assistance, library, staff, teaching assistants, amongst others, while they are still studying. This would help address the issue of student drop out due to economic reasons.

D. EDUCATIONAL DEVELOPMENT OF THE NORTH EASTERN STATES

12. Concerted efforts to create new HEIs and increasing the enrolment of existing HEIs in the north eastern states of India.

13. We could leverage the geographical advantage of these states and attract more students by setting the institutions in the scenic locales of these states.

E. FOCUS ON THE UNION TERRITORIES

14. Concerted efforts to create new HEIs and increasing the enrolment of existing HEIs in the union territories like Andaman and Nicobar Islands, Lakshadweep, Daman and Diu.

F. USHERING PRIVATE INITIATIVES PARTICULARLY IN HIGH AND MODERATELY WELL PERFORMING STATES

15. The scholarships should also allow students to pursue studies in private institutions. This will give an opportunity to students to study in an institution of their own choice and will encourage more students to enrol in HE.

16. Fiscal sops and tax incentives should be given to private players to set up more institutions in the EBDs.

17. Increase the low GER in Gujarat and West Bengal. Is regional mobility happening in these states? Are students moving out of these states after schooling due to weak linkages between education and economy in these states? AISHE can provide an analysis of inter-state migration within India, based on secondary data from NSSO and by collecting primary data at the household level.

18. Better linkage between and education and employment needs to be generated. Economically advanced states (in terms of state per capita income) like Haryana and Karnataka are only few points above the national average, whereas, rich state like Gujarat has GER below the national average. This implies a number of students in these states are opting for employment than education after their schooling.

19. To promote these linkages, entrepreneurial, and vocational courses, incubation centres, skill development courses need to be introduced and expanded. Technical and professional training institutions should be set up to impart skill-based training.
Higher Education Institutions (HEIs) are “sites” of knowledge production. HEIs help create “situational awareness”—the sense of modernity/”being in a globalizing world”—among students. HEIs impart highest human values, e.g. mutual respect, tolerance to criticism, appreciation of diversity and differentiation, accountability, and fairness. HEIs help create “situational awareness”—the sense of modernity/”being in a globalizing world”—among students. HEIs impart skills relevant for social production in the “political economy”. HEIs maximize the use of technology mindful of the role of technology in achieving human excellence.

**II. TOWARDS GLOBAL BEST TEACHING/LEARNING PROCESS**

*Where are we right now?*

Many scholars of Indian higher education, such as Rizvi (2011) and Jayaram (2007) have analysed the structural problems of Indian higher education and its colonial beginning in the mid-19th century, with a strong emphasis on disciplinary learning, examinations and “two-boxed” system of teaching and research. To promote excellence in teaching and learning and research in the Indian Higher education sector, the National Knowledge Commission had recommended a series of initiatives for expansion, excellence, and greater access in Higher Education covering regulation, accreditation, governance, curriculum, research, faculty development, financing, asset management, affirmative actions.

*What needs to be changed?*

There has been no clear road-map or strategy on how to implement past policy recommendations. Hence, we propose that in order to reform the higher education sector, first, the structural problems rooted in the historical context needs to be addressed. One should be mindful of certain key perspectives that account for any reform measure in HEIs

- Higher Education Institutions (HEIs) are “sites” of knowledge production.
- HEIs are also sites of “identity formation” of individuals—HEIs shape their worldview.
- HEIs impart highest human values, e.g. mutual respect, tolerance to criticism, appreciation of diversity and differentiation, accountability, and fairness.
- HEIs help create “situational awareness”—the sense of modernity/”being in a globalizing world”—among students.
- HEIs impart skills relevant for social production in the “political economy”.
- HEIs maximize the use of technology mindful of the role of technology in achieving human excellence.

**Strategies for Change and Recommendation**

*a. Curriculum Revision*

1. Creation of Curriculum Development Council (CDC) in departments/colleges (statutorily required as Academic Council (AC)). Discipline-wise subcommittees (maximum diversity in composition) of the CDC to report to the CDC. CDC’s work to be subject to the apex regulatory body.
2. Monitoring the process and assessing the impact.
3. Curriculum ought to remain socially relevant. Its relevance will lead to the holistic development of individuals and society.

*b. Professional Development of Faculty*

1. Carried out through FDPs/MDPs organized at the institutional level. Most of the FDPs come as single-packet formula. They fail to understand the faculty-specific needs or potential. The capacity-building systems are coordinated by the University Grants Commission and the MHRD which do not operate under a uniform vision or strategic plan as against customizing programmes mindful of the faculty-specific needs.
2. A vision document on faculty attributes that reflect the “key perspectives”. Establishment
of a National Higher Education Academy (NHEA) to hold capacity-building programmes for directors and faculty members of Human Resource Development Centres (HRDCs) or teachers' training institutes in the university aiming at a further percolation of such training to HEIs.

3. Potential to disseminate high values of excellence among teachers through the three tier structure: the NHEA, the HRDCs, and the faculty which is in addition to many schemes of MHRD like Pandit Madan Mohan Malaviya National Mission on Teachers and Training (PMMMNMTT) that focuses on the overall professional development of teachers.

c. **Faculty Recruitment**

1. Faculty recruitment is presently done through NET, PSCs, and by the faculty search/recruitment committees. NET tests the subject matter in a shallow manner. It has no means for assessing the constitutive potential of individuals.

2. We recommend that faculty recruitment to HEIs be made through UPSC (which assesses the candidates not only in terms of competency but also in terms of their personality and potential). The Indian Education Service (IEdS) may be strictly separated from other services and candidates must undergo a one-year training at the proposed NHEA.


d. **Tenure Track of Faculty**

1. Tenure tracks in India are mostly probationary periods lasting 6 months to one year. During this time, there is negligible assessment of performance since eligibility criteria for the shift from tenure track to tenure are not properly defined or loosely defined.

2. We recommend tenure tracks to include a training phase. If the IEdS model is implemented, after the first phase of training (one year or six months) at NHEA, the candidates can be put in tenure tracks before the actual tenure (entry level Assistant Professor) starts.


4. Training culture—more receptivity to feedback and striving for improvement and excellence.

e. **Assessment and Exam Reforms**

1. Formative assessments are largely performance based and tailored to suit larger groups, often leaving no means for assessing individual specialities. E.g. class participation is “in class” performance only—office hours, email exchanges, post-class conversations are outside the scope of participation.

2. Formative assessments should be broader in scope. Assessment as a process should be for the teachers an understanding of students in a holistic manner—a balance sheet of their strength and weaknesses. The takeaway for the student should not be the score but inputs on overcoming their weaknesses.

3. Institutionalizing a robust assessment culture. Setting processes that will encompass the broader scope of formative assessments. However, awareness can be spread through policy papers.

4. An excellent and healthy feedback system for students about their studies that will help them in their professional and social self-becoming. Teacher to student feedback will be more of a confidence-building process for the student.
5. Institution of teaching-learning feedback from students to ascertain faculty performance at the end of each semester will further improve the quality of teaching and learning. This will also enable prompt corrective action by HEIs.

g. **Mentoring of Neighbouring Institutions**

1. IIMs & IITs have a system of mentoring young and neighbouring institutions, which can be replicated.

2. Either under the NHEA or otherwise, the Institutions of Eminence can create a framework of mentoring on areas like planning, systems, administration, and outreach.
III. PROMOTING EXCELLENCE

Where are we right now?

Global rankings have now become an effective way of quantitatively evaluating and promoting excellence amongst HEIs across the world. Among multiple ranking platforms, QS and THE have established themselves as frontrunners. Therefore, to evaluate where India stands on the global front today, we have analyzed our standing in the THE and QS World Rankings to understand our pathway to promoting greater levels of excellence in our higher education system.

1.1 QS Ranking Review

In 2019, while only 24 Indian universities have appeared in QS World rankings, all 24 are in the top 1000, with only three in the top 200 – IIT Bombay, IISc Bangalore, IIT Delhi. With the aspiration of the present administration to have at least 20 universities in top 200, we performed a critical evaluation of the QS rankings, where Indian universities have already made to the top 200. On the individual parameters it was observed that two universities were in top 200 for academic reputation, four for employer reputation, eight for citations per faculty, and none for international students, international faculty, and faculty student ratio. Furthermore, of these top 24 Universities, 15 did not hold a rank in Academic Reputation, Employer Reputation, International Faculty and International Student, 7 did not hold a rank in Faculty Student Ratio and 10 did not hold a rank in citations per faculty.

1.2 THE Ranking Review

49 Indian universities have appeared in THE World rankings, with 33 in top 1000, and none in top 200. A review of the Indian Universities in THE top 1000 showed that highest normalized scores of the individual parameters were observed for industry income (98.2) and citations (86.5). The highest normalized score achieved in the remaining parameters was at best, mediocre - research (51.4) teaching (56.7), and international outlook (46.8).

What needs to be changed?

Based on the above analysis, we believe that following are the key problem areas—

- International outlook (primarily international students and faculty)
- Global reputation among academics
- Domestic reputation among employers
Additionally, the other areas which also pose concerns and will need to be addressed are:

- Research productivity.
- Faculty - Student Ratio.

Given that the parameters are similar across THE\(^4\) and QS\(^5\), we should be able to improve our standing on both ranking platforms if we address these issues. Additionally, given the nature of these parameters, working on them will allow us to achieve high level of excellence in education in comparison to other countries.

**Reputation** (being of the highest weightage), and **Internationalisation** (being the weakest performing indicator) should be our major areas of development. We believe that internationalization has a strong influence on reputation.

**Strategies for Change and Recommendations**

Given the key areas of development identified and the ranking parameters, we would like to propose the following changes:

### 1.3 Increasing International Students

#### 1.3.1 Recommendation #1 – International collaborations through country focus

Apart from trying to build an international student base from across the world, we should have a more focused approach towards attracting students from specific developing nations. Given that we received maximum foreign students from these countries, we should consider them for building international collaborations – Nepal, Afghanistan, Sudan, Bhutan, Nigeria\(^6\). China’s focused approach towards Africa has seen a 26-fold increase in international students from Africa in China – from less than 2000 in 2003 to approximately 60,000 in 2016.

- As a part of this approach, we recommend setting up forums with selected countries, think tanks. Example China formed the China Africa think tank forum in 2011, and the Forum on China-Africa Cooperation (FOCAC).
- Invitation to attend exchange programmes, scholarships, training programmes for government officials should be a part of this effort.\(^7\)
- Develop an inter-governmental collaboration with other countries in South Asia and Africa, especially Nepal, Bangladesh, Bhutan and Nigeria from where we receive a large number of international students.
- The agenda of this collaboration would be to work on development projects, with a side effect being increase in international students in India. This has been observed to be successful in the past. The Belt and Road Initiative has enabled China to strengthen their relations with 65 countries. 317,2000 of the 489,000 international students in China are from a number of countries in this belt.\(^8\)
- Taiwan's Southbound policy has strengthened its positioning in South east Asia, and India. 50,000 of their international students come from this Southbound countries, which represent a 10,000 student increase from within this region in the last one year.\(^9\)
• Lastly, there should be a greater initiative to reduce racism and xenophobia, to create a safer environment for international students

1.3.2 Recommendation #2 - Centralised scholarship funding

We recommend the establishment of a central scholarship council to attract international students. China has set up a Chinese Scholarship which provides equivalent $300 million of scholarships each year for international students from developing nations60 to study in China. From 8500 scholarships in 2006, it has increased to 58,600 scholarships in 2017.61 Today China is among the top countries for international students.

1.4 Increasing Research Output

1.4.1 Recommendation #1 – Assign a greater percentage of GDP on research

Currently India spends 0.7% of their GDP on research62 as compared to 2.1% by China. In absolute terms, India spends 66.5 billion USD(PPP) while China spends 451.9 billion USD(PPP). Therefore, we propose a minimum 2% of GDP on research63. Also, it is important to invest in more application oriented R&D which aims at problems specific to our economy.

1.4.2 Recommendation #2 – Promote more private funding and encourage academia-industry collaboration for research

In the list of top 2500 global R&D spenders, India has 26 companies, compared to 301 Chinese companies. In fact, India has no presence in the top 10 R&D sectors, while China which has a presence in all of them.64 Therefore, we need to incentivize organizations to invest more in tying up with universities to invest in domestic research. In parallel, we should add higher score to universities' accreditation where institutes for research have been setup and are actively churning out publications.

Further, it has been observed that in 2018, INR 1717 crores of CSR assigned by companies have been left unspent.65 We may consider suitable amendments in the CSR law to reprioritize and dedicate a certain component of CSR, especially unused CSR towards higher education and research, in addition to the present trend of CSR investment in primary and secondary education. This could take the form of an amendment to Schedule VII of the Companies Act, 2013, specifically bringing in higher education funding within the meaning of CSR, or contributions towards a centralized scholarship fund.

1.4.3 Recommendation #3 – Develop an online interface to connect researchers and funding entities

Organizations capable of funding are often not aware of ongoing research in universities which may be of interest and utility to them. Therefore, we propose setting up a centralized online platform to connect universities and researchers with potential funding entities and firms. We could model this on other existing platforms such as experiment.com and consano.org.

1.4.4 Recommendation #4 – Align our research tracking practices with SCOPUS

Given that SCOPUS is now the only platform to capture research scores for global rankings, we would need to motivate more research output in SCOPUS indexed journals. Therefore, we propose having a centralized reward policy for public universities, which provides a monetary incentive for publishing in a SCOPUS indexed journal, over and above the standard reward parameters such as citations, H-index. We also recommend working backward with Indian publishing houses to align themselves to SCOPUS parameter to enable Indian journals to get captured on the platform, so that more of our
research gets captured on SCOPUS and thus increase our research scores.

1.4.5 **Recommendation #5 – Support for research in non-STEM universities**

For subject matter rankings, the research output is normalized for individual disciplines. However, in university rankings, where all institutes are on the same level field, non-STEM universities do not produce as much research output as their STEM counterparts. Data from QS shows that Medicine, Biology and Computer Science have most publications, whereas Social sciences have the least.

To exacerbate this scenario in India, the investment in social sciences research is already lower compared to other fields. In the period 2006-2010, the grant amount allotted to ICSSR was approximately 2.3% of the CSIR grants assignment, and approximately 11% of the ICMR grants assignment. The funds assigned to social sciences for research in 2009-2010 were less than 12% of the total UGC budget assigned to research. Further review of the grant budget shows that over the last two decades share of ICSSR budget, which was allotted to run its institutes, went up from 73% to 81%, and the budget actually allotted to fund research and fellowships went down from 13% to 8%.

Thus we propose a greater budget assignment for social sciences, especially funding for non-STEM universities.

1.5 **Increasing International Faculty**

1.5.1 **Recommendation #1 – Reduce the work visa transactions**

To attract more international faculty for teaching and research it would help to reduce the transactions and restrictions for getting a work visa. This would be particularly useful for hiring low cost junior associates and research fellows from outside India, which will help us attain a better ratio.

1.5.2 **Recommendation #2 – More funds for public universities**

In both QS and THE rankings, the university which has fared best is Amrita University, which is a private university. It is clear that public universities need greater funding to give an impetus to their scores on the parameters related to international faculty. Therefore, we propose assignment of greater budgets to public universities in the top 1000 ranks in particular to enable them to hire more international staff.
1.6 Increasing Faculty-Student Ratio

1.6.1 Recommendation #1 – Peg faculty incentives to government employee levels

Top technology institutions such as the IITs face high level of vacancies for faculty. As on November 2018, IIT Bombay faces approximately 38.66% vacancies, while IIT Delhi faces 33.11%, IIT Guwahati faces 26.5%, IIT Kharagpur faces 42.42%, IIT Roorkee faces 41.88%. Given the type of opportunities and pay scales provided by the technology industry, especially the IT industry, we are possibly losing potential faculty to the lucrative industry jobs. Therefore, we propose that salaries and incentives be pegged to the same as government employees.

1.6.2 Recommendation #2 – Invest in more infrastructure in public universities

Central universities continue to face a shortage in faculty. Elite universities had 1277 vacancies in 2015 at the position of professors (53% of positions sanctioned), 2173 vacancies at the associate professor level (46% of the positions sanctioned) and 2478 vacancies at the assistant professor level (26% of the positions sanctioned). One of the reasons identified is lack of adequate infrastructure in terms of office space and laboratories. We, therefore, propose investing in infrastructure to meet the faculty requirements which will not just help achieve the desired quality of education, but also boost the rankings.

1.7 Reputation

We believe that all of the above points will have a direct or indirect bearing on the reputation of Indian universities. Increased research productivity, international faculty and students and better salaries and infrastructure will boost how international academics and the industry view Indian universities. However, we would like to make an additional recommendation specific to NIRF to further boost the rankings of Indian universities.

1.7.1 Align the national ranking to include parameters considered in global rankings

Currently, NIRF does not account for some important parameters considered for ranking universities in global platforms such as QS and THE. The following parameters are missing:

- Institutional income (THE).
- Proportion of international staff (THE, QS).
- International collaboration (THE).
- Global academic reputation (THE, QS).

We also recommend doing away with NIRF in its entirety and instead follow QS ranking system.

Challenges and Outcomes

Rankings are a significant motivational tool to improve our higher education eco-space. But it is important to have a long sighted vision, so that we take action which is less palliative and more curative.

However, while we aspire to improve our presence in global rankings, we face more pressing needs of a developing nation including ensuring education for all, improving GER, filling faculty vacancies, ensuring employment of graduates. Therefore, to work
out balance between the domestic demands of our system, and our global aspirations, we propose that we prioritize the funding to top 50 Indian universities in the current QS and THE ranking, which have easy potential to make the top 200 cut. We can then focus on other potential budding universities based on more transparent criteria to give them the impetus needed to boost their rankings.

We should also encourage more private universities which have the financial capability and a proven track record to break into the top 200 by reducing levels of regulation for private universities. In taking these steps, we will be able to have 20 of our universities make way into the global 200, and also achieve higher levels of excellence in our higher education system.

Out of nearly 1000 universities in India, at least 5% (50 institutions - 25 Public and 25 Private universities) should be recognized under the Institution of Eminence framework. As there are no financial implications relating to the conferment of IoE status on the private universities, there is no rationale for maintaining 1:1 parity between public and private universities.
IV. GOVERNANCE REFORMS

Where are we right now?

While there have been a few islands of excellence, the current higher education system in India faces a number of challenges. These include, among others, over-centralisation, identification and appointment of competent persons as Vice Chancellors, lack of a responsive grievance redressal machinery. The current state of diversity in the faculty, and in particular, in the leadership positions in HEIs point out the need for reform.

Strategies for Change and Recommendations

a. Internal governance in University:

I. Enterprise Resource Planning (ERP) implementation and de-bureaucratizing processes.

- Computerisation and digitisation of all academic and non-academic processes, starting from the admissions, examinations, teaching and learning, library, time table etc. by way of ERP, must be implemented in all HEIs for better transparency, efficiency and optimum utilisation of resources.

- Benefits of ERP implementation: A common data source would replace many discrete back-end systems thereby cutting down the time taken and bureaucratic delays within a system. Controlled access to students, parents, vendors, employees and regulatory bodies and various other stake holders would lead to a transparent and more secure, tamper-free operation.

- In the long run, implementation of ERP would lead to a stable and transparent system that would make the HEIs agile, responsive and world class. Implementation of ERP when supported by a suitable hardware, would lead to a nearly flat organization cutting down many levels of decision making.

- There is no ‘one size fits all’ approach with regard to governance structures. Each institution has to devise its own structure while delineating the roles and responsibilities of staff at various levels. At the apex level, there should be governance structures dealing with academics, research, student welfare/initiatives, international collaborations etc. (for instance, Deans assisted by Vice/Associate/Assistant Deans).

II. Training the non-academic staff.

- Comprehensive and periodic staff development programmes must be conducted for non-teaching staff on academic leadership, conflict resolution, excellence, new technological tools etc. There should be at least one short term (1 – 5 days) programme once in a year and one long term (2 weeks to one month) once in every five years.

- Top Institutions in the country should mentor second rung or all the smaller Institutions. There should be a framework, which requires all public as well as private HEIs which have a high NAAC score (at least 3.25 and above) to train and guide the management, faculty and non-teaching staff in other universities. This process must be institutionalised.

- State-level and Regional-level trainers should be created to reduce the time and cost of training.
• Online training modules on Swayam platform can be created for augmenting the skills of non-teaching staff.

III. Decentralization at the department/school level.
• Admissions, scholarships, hiring and certain other tasks can be decentralized at the Department/School level for streamlining educational administration and for swifter decision-making. They must be given sufficient administrative and financial powers to discharge their mandate effectively.

IV. Institution’s academic bodies – minimum qualifications.
• It is very important to codify the qualifications of members of the highest academic bodies. They must be distinguished persons. Statutes of Central, State Public and Private and Deemed Universities be amended to ensure that the above-mentioned minimum qualifications are rooted in a legislation and are followed.

b. Affiliation reforms – autonomy for the best performing colleges.
• Best performing colleges must be identified on a regular basis and they must be conferred with autonomy (NAAC score of A and above as against the current practice of A+ and A++ for affiliated colleges).

c. Process for selection of VCs/Deans/Registrars/FOs
The current eligibility norms ought to be reviewed and made more stringent to ensure that only meritorious candidates and outstanding individuals having the right mix of academic, research and administrative experience should be appointed to the position of Vice Chancellor/Dean/Registrar.
• With regard to finance officers, domain knowledge and competence must be ensured before they are appointed.
• Currently, the process for selection of Vice Chancellor is flawed with allegations of arbitrariness, corruption, political interference etc. It is very important to select outstanding men/women for this leadership position without any political considerations or extraneous considerations. The current flaws must be removed.
• The VCs/Deans/Registrars/FOs should have sufficiently long tenure (minimum 5 years of more) to implement their agenda.
• A data base of eligible candidates can be prepared and maintained through a rigorous process of careful selection.

d. Leadership training – handbooks on processes for all
• MHRD/UGC ought to compile best practices across the country and have manuals prepared for different levels of leadership and on different aspects (infrastructure, academics, research, teaching-learning, examination, exchange programmes, mentorship).
• UGC/MHRD may identify University leaders in different aspects (solar energy, waste management, cleanliness, quality assurance, IT etc.) on a regional basis which can, in turn, impart training to other institutions.
e. **Grievance redressal systems**

- All grievances can be categorized under the following heads:
  - Genuine grievances.
  - Partly genuine.
  - Not justified from a feasibility angle.
- All genuine grievances must be redressed in a swift manner. Helplines can be instituted to enable students to reach out to the administration.
- Grievance redressal mechanism should be computerized which should monitor the time taken to resolve the grievance and take corrective actions.
- Many universities have grievance redressal system only on paper. In the absence of a credible mechanism, there are protests across campuses over food quality issues, discriminatory rules against female students etc.
- The ombudsmen and the Grievance Redressal Committee system must be made to work at the ground level. There should be a decentralized grievance redressal system covering aspects like admissions and scholarships, food, examinations, academic matters and other matters.
- A responsibility matrix must be evolved by each institution and it should be circulated amongst students telling them the first port of call, higher authority for escalation and specifying the timelines for resolution of grievances. After resolution of a grievance, a sign off should be taken from the student concerned about satisfactory resolution. These matters should be reviewed on a periodic basis by VC or Registrar.
- Open houses should be held with students at least twice in a semester by the Vice Chancellor.
- The grievance redressal system must also cover gender discrimination and other forms of discrimination, ragging etc.
- Grievances must be addressed in a timely manner to prevent suicides, physical harm, violence and mental health issues.
- The grievances of vulnerable sections like women, SC, ST, OBC, minorities, persons with disabilities, LGBTQI need to be fast tracked.

f. **Miscellaneous**

- Appoint women in leadership positions in HEIs. There is a need to mainstream this issue in a conscious manner. Diversity of all HEIs need to be promoted in the interests of fairness, justice and to promote liberalism.
- Autonomy to fix fee and hire faculty members.
- Promote inter-state collaborations between HEIs.
- Curriculum reforms focussing more on industry expectations.
- Benchmarking all policies and procedures in higher education with best universities in the world.
- Only one apex body should be there at the national level to regulate all kinds of HEIs instead of multiple statutory and regulatory authorities for different disciplines.
V. ASSESSMENT, ACCREDITATION AND RANKING SYSTEMS

Where are we right now?

Outreach of Accreditation

As per the AISHE Report 2017-18, India has 39,953 HEIs (excluding standalone institutions), of which only 5624 have a valid accreditation. Therefore, only around 14% of the HEIs stand accredited as on date. Even if we were to consider HEIs whose accreditation may have recently expired, there is a concern in terms of insufficient number of accredited HEIs in our system.

Lack of Accreditation

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<th>HEI</th>
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<th>Total</th>
<th>Accreditation %</th>
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<tr>
<td>Colleges</td>
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<tr>
<td>Total</td>
<td>5624</td>
<td>39953</td>
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Quality of HEIs

Among the 14% HEIs that are accredited as of November 2018, the following inferences can be drawn based on their accreditation grades.

- Of the colleges which hold a valid accreditation at this point in time, approximately 74% have less than an A grade
Of the universities which hold a valid accreditation at this point in time, approximately 40% have less than an A grade.

As opposed to rankings where universities are placed in relation to each other in terms of their performance, the NAAC is an objective rating based on a number of parameters and it is entirely possible for a large number of HEIs to be of high quality.

**What needs to be changed?**

Therefore, two major concerns relating to NAAC arise which provide us the following opportunities of development

- Increase the percentage of HEIs accredited
- Improve the quality of HEIs through increase in the accreditation scores and grades

The given concerns could be attributed to the following systemic flaws

- Failure of quality within the system (Universities and Colleges).
- Financial restrictions in participation in the accreditation system.
- Bandwidth constraints for NAAC.
- Lack of incentives and negative consequences for HEIs not accredited.

**Strategies for Change and Recommendations**

Based on the areas of development identified and their potential causes, we recommend that we phase out the changes to first achieve a larger magnitude of accreditation among the Indian HEIs, and then focus on ensuring homogeneity and higher standards in the quality achieved across the institutions via accreditation.

**Recommendation #1** - To address the low outreach that may exist due to the non-conformance to the quality standards set by NAAC, we suggest the following
Conduct a pre-accreditation check for new universities and colleges

India has seen a 70% boom in the Indian HEI space within the last 17 years. With a Gross Enrollment Ratio of 25.8%, we need to question the rise of HEIs, especially when eventually the accreditation percentages are so low which is a reflection of the fact that even with increase in institutions, we are not reaching out to students sufficiently. Additionally, low accreditation is a reflection of low quality to the existing students. Therefore, we need to re-evaluate pumping up the system with more institutions at the cost of quality.

Thus, we recommend that institutions should undergo a pre-accreditation check when founded on controls applicable to an infant institution. Also, based on applicable controls, a pre-defined score should be defined as a minimum target for the entity to be conferred as a College/ University by the UGC.

Positive benefits of this step have been observed previously in Latin American countries, where a process for institutional accreditation for approval of new universities limited the increase in numbers and resulted in improvement in the homogeneity of quality. Argentina saw 23 new (private) universities in first part of 1990s. However, from 1995 onwards, only nine received approval. Similarly in Chile initially 43 (private) universities were created. However after the creation of the Higher Education Council, only five new universities were formed between 1990-2000. In spite of raising entry barriers to the creation of new HEIs, as of 2018, the GER in Argentina and Chile are 99.49% and 91.47% respectively as opposed to 70.53% and 60.99% in 2009.

Introduce a mentoring system in place for unaccredited and low grade HEIs

Currently we have approximately 86% of HEIs which do not have valid accreditation (no accreditation/ expired accreditation). Therefore, we recommend that there be a system in place wherein HEIs which are unable to get accredited for two times in a row independently, are mentored by accredited HEIs.

Among the universities, for every two unaccredited universities there is one accredited university, therefore a 1:2 mapping can be performed for mentoring. This can be added as a key parameter of the mentoring institute to maintain their accreditation status.
Among the colleges, for every six unaccredited colleges there is one accredited college. However, a mentoring mapping becomes challenging here because of the 1:6 ratio. Thus for colleges, the responsibility can be assigned to either the parent university to which they are affiliated, or a cluster format could be used to have group mentoring done by peer colleges.

The mentoring system should be established in two phases

- **Phase 1** – We focus on mentoring to ensure unaccredited HEIs achieve accreditation
- **Phase 2** – We use a waterfall mechanism to have Institutions with A grade mentor the lower grade institutions to ensure an overall improvement in the higher education ecosystem

**Recommendation #2 - To improve the accreditation volume which may currently be hindered by the financial constraints of HEIs, we recommend the following:**

Based on the NAAC University manual, HEIs need to pay a fees of INR 25,000 for IIQA plus an additional amount of 1.25 lacs – 7.5 lacs depending on certain applicable parameters. With 60% of our HEIs being rural, and GER being as low as approximately 25%, some HEIs may need some financial aid to apply for accreditation. We recommend the financial fees to be identified based on a combination of multiple parameters including the operating expenses of the entity.

**Recommendation #3 – To improve the accreditation volume which may currently be hindered by the bandwidth constraint faced by NAAC due to rising demand in NAAC accreditation by HEIs we recommend the following**

Use a Third Party Audit system to allow increase in pace of completing accreditation and scale up quicker. We could reference the US Accreditation system wherein US Department of Education (USDE) and Council for Higher Education (CHEA) accredit agencies which can further perform the actual assessments on their behalf. The controls and frameworks continue to be defined by MHRD, and the sole ownership and leadership will lie within MHRD, while the implementation can be handed over to external parties. However, it is important that the payment of third parties is done by the GOI, and not the HEI. This way we can ensure that the HEI will not have choice of third parties, and, therefore, refrain from a possible conflict of interest.

**Recommendation #4 – Mandatory accreditation for HEIs which are being mentored**

HEIs which fail to get accredited even after going through the mentoring program recommended ought to be penalized. Therefore, after 2 attempts independently and not getting accredited, the HEI should undergo mentoring and reapply. Failing to get accredited even after this should result in a penalty which could possibly be as stringent as termination of the status of the Institute as a University/College.

**Recommendation #5 – To address the low participation in National Ranking for public funded universities, we recommend the following:**

While accreditation results in identifying the quality bracket of an HEI, however does not allow for a relative comparison. Therefore, we recommend maintaining the existing National Institutional Ranking Framework in place to allow for the same. However, the core idea of NIRF was to help Indian HEIs into the top 200 universities in the world. Having said that, the framework currently faces the key issue of not being in sync with the global rankings. Important parameters around Internationalization, global reputation, institutional income are covered across THE and QS Rankings, and not in NIRF. Thus, we propose that NIRF be revised to be
more in sync with THE/QS parameters. Specific additional parameters to be included –

- Institutional income (THE)
- Proportion of international staff (THE, QS)
- International collaboration (THE)
- Global academic reputation (THE, QS)

**Recommendation # 6**

In the case of Central Universities and Deemed universities, the UGC Graded Autonomy Regulations framework works fine but for State Public and State Private Universities, which are governed by State legislations, no tangible benefits are visible. A lot more needs to be done before the object and purpose of the Regulations can become truly meaningful. In fact, these UGC Regulations require the active support of all State governments and other regulatory agencies. State Governments must amend their respective legislations regarding their State public and private universities. Legislative amendments are required in the Advocates Act, Council of Architecture Act and other legislations governing professional councils in order to give effect to the letter and spirit of UGC Graded Autonomy Regulations.

**Challenges and Outcomes**

We foresee the following challenges which we may face in implementation of the recommendations made –

- Increasing barriers to entry, mandatory accreditation and strong penalization for an un accredited HEI may reduce the proliferation of HEIs which lower the overall quality of the higher education landscape. However, it will conflict with the need to increase the outreach of higher education. At a time where the GER is merely at 25% (approximately), we may not be able to afford strict entry barriers for HEIs
- Using third party intervention for assessments will increase the need for finances
- Mentoring program will increase an administrative overhead costs for high grade HEIs especially without the appropriate incentives.

In achieving the implementation recommended, we hope to see a more robust higher education ecosystem in India with a wide outreach as well as a more homogenous quality system.

- We will be able to increase the accreditation volumes, not just by increase in the number of HEIs which get accredited, but by eliminating consistently low performing institutions.
- A third party system will not just expedite the accreditation process, but it will also allow scope of digitization to a point where we use more data driven approaches to improve our strategy for the higher education space.
- A mentoring scheme will not just allow for increase in accreditation but also create a more collaborative environment for Indian academia.
Where are we right now?

As already noted in Chapter 2, the Indian higher education right now suffers from a “two-boxed” system, which developed historically because of the colonial legacy. Research activities are conducted in separate research institutes, while universities are mostly burdened with massive teaching and administrative work. Hence, there is little knowledge circulation. Often, curriculum taught in classrooms offer dated-knowledge to students on a particular discipline or topic. This has created massive problems of employability of graduates—referred to as the “degree-disease” by scholars of higher education. As a result, graduates with job specific degrees miss the necessary content knowledge and skills they require to do particular jobs. Hence, it is important to institutionalize a more integrated approach for teaching and research within HEIs. It is important to make research and innovation the core of the university’s work. Through teaching, the research-based knowledge is to be disseminated to students to train them for problem-solving and innovative thinking in the workplace.

Strategies for Change and Recommendations

1. A more integrated approach to teaching and research needs to be taken
   • It is understandable that within the current system, it is not possible to create such a system so that the focus should be on creating all new institutions with a more integrated teaching and research model.
   • These institutions in the long run may serve as a peer-mentor for overhauling the “two-boxed” system.
   • Provide professional training to researchers to integrate research into teaching.
   • Inform curriculum and pedagogy in classroom through research.
   • Involve students in faculty research for experiential learning of research methodologies and insights into real-life challenges and problems.

2. In order to develop a more integrated approach to teaching and learning, develop interdisciplinary approach to curriculum and pedagogy.
   • Develop a system of problem/research enquiry-based learning through interdisciplinary approach to curriculum and pedagogy.
   • Develop a system of incentives for faculty to develop courses connected to their research enquiry and integrate it into teaching and learning in classroom.


4. The affiliated college system should be granted more autonomy to reform their own curriculum and administrative processes.
   • Mentor role should be assigned to affiliating universities and faculty to help undergraduate colleges to work towards curricular reform which must be aligned with the contemporary needs of the society and economy.

5. Faculty recruitment and promotion process.
• We must develop a more transparent faculty recruitment process through public advertisement of positions and remunerations.

• Bring faculty remuneration and perks at par with global standards as has been done in China and other parts of East Asia.

• Quality of research publication needs to be assessed based on reputation of publisher, SCOPUS index and impact factor of journal.

6. International advisors for assessment and commercialisation of research

• Include international scholars in university/college/national level advisory committee who will assess research output and quality of teaching and learning in Indian HEIs, as is being done in China.

• The Protection and Utilization of Public Funded Intellectual Property Bill 2008 is yet to be passed in spite of being pending before parliament for nearly 10 years. It is based on the highly impactful Baye-Dole Act of the United States that promises ownership of inventions and resulting IP to the inventor and the host university resulting from R&D funded by public money. If the Indian version of the Baye Dough legislation comes through, it could perhaps provide considerable impetus to technology-based institutions (including at the very least- 16 IITs, 23 IIITs, more than 30 central universities that have STEM subjects and several state and private universities) and further incentivise engineering and STEM universities to build world class research facilities.
VII. EMPLOYABILITY AND ENTREPRENEURSHIP

Where are we right now?

The Fourth Industrial Revolution is currently transforming the world of work in India and globally. With technology advancing faster than people can adapt, the skills required to do most of the jobs are evolving quickly—a significant challenge ahead for higher education in India. Entrepreneurial skill development is a key to addressing this challenge. We know entrepreneurs create jobs, but a focus on entrepreneurial skill development in higher education can strengthen the employability and competitiveness of the future workforce. It is clear that the future economy will create new jobs and roles never previously imagined. Business will require not only hard skills but also the soft skills associated with entrepreneurship: innovation, self-reliance, comfort with risk, communication and problem-solving.

Strategies for Change, Recommendations and Outcomes

Provide toolkits to create micro incubation centres

- Move beyond funding for large technology business incubators. Provide toolkits for institutions to create smaller micro incubators at institutions across the country and even across various disciplines as pilot initiatives.
- Provide a mechanism for micro incubators to self-report success in two ways: 1) number of startups created 2) survival rate of startups.
- Provide funding to those who demonstrate measurable success.
- Explore creating micro incubators in specialized fields of research.

Intended Outcome: Increased number of successful startup ventures and the promotion of a startup culture across the country.

Adopt student entrepreneurship-friendly university policies

- Ensure university policies do not prohibit student entrepreneurship (i.e.: prohibiting commerce between students).
- Build in flexibility in academic policies for students to pause studies to pursue entrepreneurial ventures.

Intended Outcome: Increased number of successful startup ventures and the promotion of a startup culture across the country.

Focus on skills demanded by the global economy

- Explore public-private partnership arrangements with international skill development providers.
- Harness new data sets on global skill demands like the Coursera skill graph and Global Skills Index.

Intended Outcome: Increased number of people with competency in skills demanded by the global economy on an ongoing basis.
Establish a more responsive, adaptive approach to skill development

- Skill development approach should acknowledge the disruptive nature of skill demands from industry in a fourth industrial revolution.
- Analysis of new data sets on skill demands like the Coursera skill graph and Global Skills Index on an ongoing, real-time basis.

**Intended Outcome:** Increased number of people with competency in skills demanded by the global economy at all times.
VIII. USING TECHNOLOGY FOR BETTER REACH

Where are we right now?

Over the next five years, a new generation of students will enter higher education with increased digital exposure and literacy. Meanwhile, changes in the economy and workforce are pushing education to adapt more quickly to prepare students for the future of work. Online education holds the promise to serve more students in new and different ways to prepare them better for the future. But for higher education to realize the potential of online education, universities cannot simply replicate classroom learning and place it on an online platform. Online education requires a new strategy and a new approach. Universities ought to experiment, learn from global best practices and invest in technology.

Strategies for Change, Recommendations and Outcomes

Improve learner experience on SWAYAM platform

• Ensure strong quality assurance of all courses on the platform that includes learning design, accessibility and technical standards.
• Develop a data-driven content strategy to ensure course offerings meet learner demands.
• Harness best practices from leading MOOC platforms (ie: Coursera, FutureLearn, edX, Udacity)

Intended Outcome: Increased number of students enrolled in online courses and an increased GER over time.

Invest in high-quality online course creators

• Invest resources in successful online course creators measured by number of course enrolments and engagement metrics on SWAYAM and other MOOC platforms.
• Work with course creators to expand individual courses into online programs and degrees on SWAYAM.
• Provide incentives to successful online course creators on competing platforms to join SWAYAM.

Intended Outcome: Increased number of students enrolled in online courses and increased GER over time.

Promote digital-learning software tools in classrooms

• Encourage the use of high quality, open-source software in the new Operation Digital Board (ODB) initiative.
• Experiment with the latest trends in “learning engineering” - the practice of applying findings from learning science to classroom design.
• Explore using the open-source license version of Carnegie Mellon University's pioneering adaptive-learning project, the Open Learning Initiative and its learning analytics platform LearnSphere.

Intended Outcome: Improved student learning outcomes and higher quality education at HEIs.
IX. INTERNATIONALISATION

Where are we right now?

For universities around the world, 'internationalisation' has evolved from being seen as an occasional and aspirational pursuit to becoming a core pillar of institutional building. Internationalisation, not only means having partnerships with institutions based overseas, although that is a common modality through which it is practiced, but also includes-

- adding value to the teaching and learning experience,
- enhancing the diversity of any campus, offering global curriculum across all disciplines,
- attracting international students and staff and
- investing in intercultural understanding for the future.

Qualities of exemplary global universities

All universities which internationalise successfully possess many of the following characteristics:

- A well-conceived international strategy over a 3 to 5-year horizon.
- A balanced emphasis on student mobility, international student recruitment and joint teaching and research initiatives.
- Targeted strategy distinguishing between different regions of the world.
- Strong commitment of university leadership and higher management to internationalisation including the willingness to allocate time and resources.
- Interest and buy-in among faculty members and heads of schools, departments and faculties.
- Adequate administrative bandwidth for implementation of international strategy and joint initiatives.
- Institutional capacity to host visiting researchers, professors and students.
- Tailored approach to various disciplines and needs of different degree levels rather than a one-size-fits-all approach.
- Respect to the principles of diversity, non-discrimination and inclusion in institution-wide policies and practices.
- Encouragement to learning and research in foreign languages.
- Selective but fully-operationalised policies with attention to breadth and depth of implementation.
- Deliberate attention to the needs of home students who do not/cannot afford to study abroad through global and comparative curriculum, teaching by international visiting scholars, opportunities to work on transnational research projects and meaningful interaction with international students.
- A highly conducive policy environment at the national level, including financial support for joint initiatives, dedicated state and private agencies to promote all universities in the country on an equal footing and minimal oversight.
- An alignment with the overarching country strategy and integration of national objectives.
- Partnering with complementary domestic institutions to enable a more holistic and varied offering to overseas partners.
• Awareness of strengths and attractive elements of local context and incorporating these in the outreach and marketing plan.
• Official presence in key target regions/countries.
• Dynamic online publicity strategy.
• Dedicated and consistent efforts to nurturing alumni relations.
• Periodic review of strategy and operating procedures to incorporate structural changes.

**Status of Internationalisation in Indian Universities**

As of 2017-18, foreign students constitute a mere 0.1% of the gross enrolment in HE in India, of which the highest share is being held by Nepal (24.9% of all foreign students). Thus the vision of international higher education in India so far has been driven by a perception of the country as a “sending region”, that is, a country from where students go out into various parts of the world seeking study abroad opportunities. Naturally, policy-making has also been geared to this restrictive notion, focusing on ensuring that Indian students are protected from dubious institutions and fraudulent practices. This has left behind a legacy of viewing international partnerships with inherent suspicion and skepticism.

While the ‘Study in India’ campaign is a step in the desired direction, there is much to be done to fulfil its potential, and thoughtful action is needed at various levels, as addressed below.

**Strategies for Change and Recommendations**

**Increasing enrolment of international students to 10% of the gross enrolment through policy interventions**

**A. Creating the right environment**

• Many institutions in India are still not at the adequate levels of preparedness to meet the demands of international students. A student who is not familiar with the cultural setting, and lacks the requisite experience of getting things done in an unfamiliar cultural and organisational milieu, must rely on a team of individuals within the university to navigate the system for them.

• This team can be drawn from a mix of qualified staff who are culturally-sensitive and refined communicators as well as students who are friendly and know their way about campus. This team should also be seen as just the initial step; down the line, campus-wise sensitisation and training on pastoral care of international students will be called for. Similarly, for international students to have the positive impact discussed above on the classroom experience and campus life, institutions must proactively facilitate their interaction and integration with local students.
• Institutions should also bear in mind that students who find options in India attractive may hail predominantly from regions that face adverse exchange rates, affordability issues and political and economic insecurity. Sustained efforts would have to be made to tap philanthropists and other potential sources outside the higher education space that might be interested to contribute to this cause.

• The Government sponsorship and support to HEIs for their outreach efforts through participation in education fairs, conferences etc. There is a need for a comprehensive online and offline strategy to present unique capabilities of India HEIs to attract foreign students.

B. Changes in Perception
The most crucial factor on which the success of 'Study in India' depends upon is the perception of India as a viable and attractive destination. It is worthwhile recalling that a young student does not base their decision to study abroad on the degree they are going to earn alone. It, therefore, becomes the responsibility of the host culture and institution to make the student feel welcome, and ensure they have a well-rounded experience. The Government of India will have to do much better to package the overall experience in a way and through the multimedia formats that are accessible and relatable to the prospective international student.

C. Issuance of Visa and Foreign National Registration
The next set of policy reform should be based on a study of the emerging difficulties with accessing higher education in traditionally more popular markets and an attempt made to do away with these challenges in the Indian case. An example of such a measure could be making student visa application processes more straight-forward, predictable and streamlined across all regions. As things stand, a Chinese national applying for a short-term study visa in Beijing can expect rather different wait times and outcomes that a Chinese national applying under the same category in Shanghai.

The process at Foreigners Regional Registration Offices should be streamlined and simplified. The MHRD must sign MoUs with their counterparts in other countries to do away with the mandatory requirement of degree attestation by the Department of Higher Education for the degrees issued by the HEIs.

Streamline procedures for the visit of international scholars to India. Issue of expeditious conference visa for academics.

D. Cultural Immersion and Social Inclusion of International Students
News of simmering resentment against “aliens”, sometimes inspiring xenophobic attacks and hate-crimes is lately coming out of various pockets around the world. Some Indian cities and towns too have witnessed racially motivated incidents of aggression and assault. Student satisfaction is a key determinant of future flows of international students and this will be adversely affected if the causal factors behind such incidents are not addressed. To achieve this, on the one hand, international students must be educated about certain attitudes and mores that they should understand in context and work with. On the other hand, as many avenues as possible should be made available to them to mingle with local communities outside campus, which may include volunteering and contributing to social causes.

Top 3 Recommendations:
1. Measures by government to lower entry barriers and ease visa and foreign residents' registration processes.
2. Engagement with philanthropists, alumni and Indian diaspora communities by universities and the government to secure financial aid for international students to study in India.

3. Stepping up publicity effort of the very idea of “Study in India” by branding the quality educational and unique cultural experience that can be gained at affordable cost.

Promoting Academic Collaborations

Student, faculty and staff empowerment should be at the heart of academic collaborations set up by universities. In addition, such collaborations have great potential in encouraging a thriving research environment as well as having an impact on the wider community through continuing and executive education, skill development and service learning.

If Indian institutions aim to achieve research excellence, internationalisation is a promising avenue towards the achievement of this aim, by enabling:

1. Exchange of ideas, data and research facilities
2. Access to international funding programmes where requirement of Indian/foreign partner is stipulated
3. Dissemination of research outcomes to a wider audience

Top 3 recommendations:

- Complete autonomy to high performing institutions to enter into and implement international academic collaborations in accordance with their needs and strengths.
- Incentives for Indian universities to proactively seek out and collaborate with overseas institutions with a genuinely global outlook.
- While implementing academic collaborations, special attention needs to be paid to major funding schemes such as New Colombo Plan (facilitating short term mobility of Australian students to India) Erasmus + (enabling funded mobility of teaching and non-teaching staff to and from Europe) and Fulbright (support for short-term teaching and research activities).

Some considerations for foreign university campuses in India and offshore campuses of Indian universities

- Regulatory restrictions do not allow foreign universities to set up campuses in India.
- When students choose to pursue education abroad, they are not interested in the university alone but in the life-experience of living in a different country and experiencing different ways of life.
- Various institutions have established their presence the form of centres in Delhi and Mumbai – they may be encouraged to do so in other parts of the country. These centres attract academics and students who would otherwise not consider coming to India and serve as avenue for intellectual engagement with local and national institutions.

Top 3 recommendations

- Changes in the regulatory regime to allow limited foreign universities to set up campuses in India, subject to minimum standards.
- Such campuses must mandatorily enrol a minimum number of students from specified vulnerable and marginalised groups.
- Further, foreign faculty recruitment in such universities must be capped.
X. FINANCING HIGHER EDUCATION

Where are we right now?

1. **Low budgetary allocation:** In 2017-18, Government spent only 2.7% of India’s GDP on the entire education sector, of which higher education funding is close to 1.15% of the GDP. In 1964, the Kothari Commission had recommended an allocation of 6% of the GDP on education.

2. The annual expenditure of top universities in Asia shows how much India needs to scale up the financing of its top universities. While Tsinghua University spent almost US$3.57 billion in 2015-16, the figure was close to US$2.45 billion for Peking University. In the case of the Indian Institute of Science (IISc) in Bangalore, the amount is around **US$0.42 billion**, while the corresponding figure for the Indian Institute of Technology Bombay (IIT Bombay) is **US$0.35 billion**.²⁸

3. The IoE programme will provide in total only US$1.44 billion dollars (10000 crore INR), which is still a miniscule amount.

4. **Disparities in state government expenditure** in higher education. While the rich states spend more on higher education than the poor states, it is also observed that education spending is driven by political priorities of the governments.

5. **Philanthropic initiatives limited** to a few premier institutions. Foreign philanthropy includes donations to alma maters by NRIs and donations by international agencies. Free inflow of foreign philanthropy is hampered by government regulations. Indigenous philanthropy is, mostly, directed to research and professional institutions only.

6. **Tapping private resources is difficult** for government-aided institutions. The University Grants Commission’s (UGC’s) practice of deducting any philanthropic contributions from a university’s grant-in-aid discourages institutions from generating their own resources.

7. **Fee regulation** stifles the autonomy of public and private institutions that are capable of generating resources by offering reputed and competitive courses.

8. At the same time, **commercially motivated private institutions** providing poor quality higher education, is an issue. The commercial imperatives of the private institutions contradict with the objective of quality in higher education.

9. **Lack of financial autonomy** of the premier universities in India. Both public and private universities in India face considerable bureaucratic challenges in receiving funds from abroad, private bodies and individuals.

10. **Low penetration of the student loan:** Student loan market in India is still evolving. According to an estimate, only 10% of the total students enrolled in higher education have taken student loan in 2012.

11. High tuition fees, particularly for professional degrees, act as barriers for pursuing higher education. This is exacerbated with the repayment burden associated with student loans. The 64th National Sample Survey (2007–08) highlights that 21% of respondents had cited financial constraints as reason for not pursuing education beyond the secondary school level (NSSO 2010).²⁹

12. Currently, by providing interest subsidies, the government is partly reducing the repayment burden of economically weaker students. However, there is, still, a huge threat of loan default.
In the absence of collateral or any security, banks are disincentivized from advancing student loans.

13. **Limited CSR funds in higher education:** Of the total CSR funds flowing into education, majority is spent on school infrastructure and facilities. The share of HE remains relatively low in attracting funds from the CSR pool.

14. A major reason for non-utilization of the CSR funds is inability of companies to find **appropriate projects** to invest in, which align with their goals and vision.

15. **Underutilisation of Cess** funds already collected.

16. Need to channelize funds to the **HEFA** model.

**Strategies for Change and Recommendations**

**A. Increase in budgetary allocation**

1. There is a dire need to increase the budgetary allocation to education in general, and HE in particular. The share of government expenditure should be raised to 6 % of GDP with at least 1/3rd of it being spent on HE.

2. Increase in the share of state governments in the central government expenditure.

**B. Increase in the funding of state institutions**

1. It is imperative to increase the share of central budgetary funds allocated to states. A major chunk of government funds in HE are allocated to Central Universities and Institutions of National Importance. It is important to make the share of State Institutions to Central Institutions close to the ratio of 70: 30, at least in the underperforming states and union territories.

2. The categories under which RUSA funds are claimed should be diversified and emphasis should be on hiring of faculty, procurement of academic resources like books and journals (journal subscription), faculty research grants, student scholarships, amongst others.

3. Setting up private partnerships in collaboration with regional and local industry. To safeguard the interest of private investors and encourage them to invest and bear substantial risk, the government should extend a minimum guarantee on investment in lieu of the risk that the private investors take. A step like this would help provide a conducive environment for investment and make investors secure about their investment. This will go a long way in boosting investors' confidence and encourage them to channel more and more investment in state higher education, thus strengthening public-private partnership.

4. Regional philanthropists and corporate houses should be encouraged to invest in the existing higher education institutions, for example, by setting up centres of excellence in universities.

**C. Encouraging private philanthropy, alumni donations and foreign flow of donations/grants and researchers**

1. A culture of giving back to alma mater needs to be instituted and encouraged resulting in stronger alumni networks.

2. Alumni donation fund needs to be created and funds from it need to be channeled for improving ecosystem of the university.

3. Students who get well placed abroad should be encouraged to donate in both monetary and non-monetary terms (mentoring, facilitating placements of juniors,
creating strong networks). These donations should be tax exempted for all HEIs.

4. Students with income in the highest tax bracket should be encouraged to make at least one-time monetary donation to their alma mater.

5. Implement Narayana Murthy Committee’s recommendation on providing free land for 999 years for setting up educational institutions, 300% deduction in taxable income to companies for contributions towards boosting higher education and 10-year multiple entry visas for foreign research scholars. It also recommended a ₹1,000 crore scholarship fund (with tax exemption for corporate sector contributions) to promote greater accessibility of higher education to the underprivileged.

6. A liberalised FCRA regime for the HEIs to enable them to receive foreign grants/donations for research, teaching and institution building activities.

**D. Private sector participation for quality education**

1. Universities and other HEIs should make concerted efforts to attract private funds through forming collaborations with the industry by setting up of incubation centres, skill development centres and research labs, amongst others.

2. Industry and corporates can provide funds to universities to set-up special centres to promote research and development as part of their vision and mission.

3. Investor summits and PPP conclaves are effective ways to attract investors and introduce them to the government’s vision for private initiative in the higher education sector of the state. A 2-3-day summit can bring together state authorities, private companies and educational institutions to design a rigorous public-private partnership foundation with the aim to achieve their educational targets.

4. Popularising the concept of donation based crowdfunding and developing a digital platform for connecting infrastructural needs and research projects with the prospective funders. The portal will allow the corporates and private investors to invest in the project of their domain.

5. Encouraging households and corporate donations and sponsorship of education of students from underprivileged sections as it is tax exempted under section 80G

**E. Providing financial autonomy and encouraging financial accountability**

1. Allowing high performing institutions to determine their fee structure and giving them the autonomy to charge high fee from students subject to cross subsidization of some equity concerned initiatives.

2. Allowing universities to commercialise their patents and IPRs and retaining their ownership by appropriate legislation.

3. With enhanced financial autonomy, premier institutions and universities should also focus on bringing in more funds from consultancies, foreign collaborations and partnering with industry.

4. Mandating all HEIs including the private institutions to come out with comprehensive annual financial report of the institution and publish it on the web for public accountability.

**F. Contextualising student loan**

1. The Credit Guarantee Fund for Educational Loans (CGFEL) assists the banks at the time of any default of the student loans. Instead of banks paying the insurance premium, it should be made mandatory for every private academic institution to
annually contribute towards the credit risk guarantee fund, as is prevalent in China.

2. The debt aversion barriers that exist especially among the marginalized population should be acknowledged and addressed to ensure a better distribution of student loans.

3. Variant of income contingent loans where the students pay back only when their income is more than a certain threshold can be explored, in the context of professional courses.

4. Preferred rates of interest for student loans for marginalized sections.

G. **Channelising CSR funds**

1. Attracting CSR funds in higher education by giving tax exemption on investment in HE. At the moment 100 percent tax exemption under 80G is only allowed on donations in universities/institutions of national eminence as approved by the authorities. However, other ‘non’ eminent institutions remain bereft of such donations.

2. Higher education, especially in lagged behind states and UTs, should be given a status of a ‘priority sector’ and philanthropic donations to higher education should be made completely tax exempted.

3. Implementation of strategies by the central and the state governments to attract CSR funds through developing projects, collaborations and linkages. The distribution of CSR investment is skewed in favour of certain states like Maharashtra, Rajasthan, Karnataka and Gujarat. It is important to re-distribute the funds and bring them in the lagged behind states such as the north eastern states and union territories.

H. **Exploring regulated-market solutions**

1. Diversifying the sources of funds and developing new market instruments like development bonds, social impact bonds, education bonds, amongst others, is the need of the hour. However, these instruments should be regulated and facilitated by the government.

2. During summer and winter vacations, universities can lease out unutilized and extra spaces in the university campus area and use the rent earned on it for improving the educational and infrastructural service.

3. HEIs can outsource the ancillary educational services like canteen, stationery, IT to private players through competitive and transparent bidding processes.

I. **Reworking the tax structure for HE**

1. The 18% GST tax on educational services should be reduced to less than 5 %.

2. Removing GST on foreign grants that universities receive for research and other purposes. GST of 18% should be completely removed as it puts additional burden on universities and students.

3. Higher Education Council should be established on the lines of GST Council for better coordination of matters relating to higher education.

4. The Higher Education Cess collected so far should be immediately utilized with a tight deadline of end of the current fiscal year.

5. The government needs to create a favorable tax structure that would invite corporate participation in the form of private investment. The private investments in HE especially in EBDs should be made completely tax exempted.
ENd Notes

1. GER in HE is defined as the number of students enrolled in higher education, regardless of age, expressed as a percentage of the population of the age group which officially corresponds to the given level of education. In India, the population in the age group of 18-23, is considered to be the concerned cohort that could be enrolled in HE.


14. https://books.google.co.in/books?id=Z_VoDwAAQBAJandpg=PT314andlpg=PT314anddq=26+19+pharma+automobiles+softwareandsource=blandots=PH4m7qM1sVandsig=ACU3U3Pbi54Z9b_dMecLtjiH-5AEQrdwandler=enevsa=Xandved=2ahUKEwi137X2rsPhAhWpL6YKHdqhBFoQ6AEwAHoECAgQAQ#v=onepageandq=26%2019%20pharma%20automobiles%20softwareandf=false


16. https://assets.publishing.service.gov.uk/media/57a08abeb65274a3fe0000754/60911-MappingReport_social_science.pdf

17. https://thewire.in/education/understanding-faculty-shortages-at-indias-universities

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16. https://assets.publishing.service.gov.uk/media/57a08abee5274a31e0000754/60911-MappingReport_social_science.pdf

17. https://thewire.in/education/understanding-faculty-shortages-at-indias-universities

18. https://thewire.in/education/understanding-faculty-shortages-at-indias-universities


29. https://www.epw.in/journal/2017/51/special-articles/analysis-educational-loans.html?0=ip_login_no_cache%3Dff940b1effec55dea2a3941eac27d08c
About O.P. Jindal Global University

O.P. Jindal Global University (JGU) is a non-profit global university established by the Government of Haryana and recognised by the University Grants Commission (UGC). JGU was established as a philanthropic initiative of its Founding Chancellor, Mr. Naveen Jindal in memory of his father, Mr. O.P. Jindal. JGU is one of the few universities in Asia that maintains a 1:10 faculty-student ratio and appoints faculty members from India and different parts of the world with outstanding academic qualifications and experience. JGU is a research intensive university, which is deeply committed to its core institutional values of interdisciplinary and innovative pedagogy; pluralism and rigorous scholarship; and globalism and international engagement.

JGU has established eight schools: Jindal Global Law School (JGLS); Jindal Global Business School (JGBS); Jindal School of International Affairs (JSIA); Jindal School of Government and Public Policy (JSGP); Jindal School of Liberal Arts & Humanities (JSLH); Jindal School of Journalism & Communication (JSJC); Jindal School of Art & Architecture (JSAA) and Jindal School of Banking & Finance (JSBF). JGU has been granted with "Autonomy" by the University Grants Commission and the Ministry of Human Resource Development, Government of India, for receiving the "A" Grade from the National Assessment and Accreditation Council (NAAC). This makes JGU the only private university in the state of Haryana and one of the only two private universities in India to be given the status of autonomy.

In 2018, JGU broke into the QS Asia University Rankings 2019. JGU is the youngest Indian university to break into this prestigious international ranking. Having been ranked among the top 450 universities in Asia, the ranking places JGU in the top 3% of over 13,000 universities in Asia. JGU was also ranked as the youngest Indian University in the QS BRICS University Rankings 2019 across five major countries that comprise the BRICS group (Brazil, Russia, India, China and South Africa) and places JGU among the top 3% of 9,000 universities. In 2018, JGU was awarded the second rank in Swachh Campus Ranking 2018 of all higher education institutions in India.

About International Institute for Higher Education Research & Capacity Building (IIHEd)

International Institute for Higher Education Research & Capacity Building (IIHEd) is an independent research institute within JGU that is focused on pursuing research and capacity building initiatives on different aspects of higher education in India and beyond. The vision of IIHEd is to contribute towards institution building for nation building. IIHEd conducts research, and offers advice on all aspects of higher education with a strong focus on curriculum development; pedagogical innovations; faculty engagement; faculty recruitment, retention and development; research and knowledge creation systems; promotion of scholarship and building research capacities; developing international collaborations; benchmarking and assessments of institutions; and for providing institutional support on law, policy and regulations relating to higher education. The five pillars on which IIHEd rests its objectives are: Research, Training, Policy Advisory, Outreach and Consultancy. In its pursuit of achieving and promoting academic and research excellence in higher education, IIHEd has organized more than eighty events including lectures, seminars, roundtable conferences and symposiums. The motivated faculty of IIHEd have number of academic publications to their credit which include six major IIHEd books/reports. IIHEd aims to contribute effectively to the discourse on higher education policy and its various manifestations by working as a policy institute and think tank and engaging in the research on the trends and issues in the higher education landscape in India and the world.
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