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Globalization and Indian Higher Education - Structure, Statistics: Issues and Challenges

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Abstract:
The present global higher educational milieu is typified by its preoccupation with rankings. The inter-connectedness that has resulted from globalization has facilitated methodization of higher education systems the world over. The coming together of countless institutions on a unified platform necessitates the logic of benchmarking. The Indian higher education system is a formidable presence, at least with respect to the numeric strength of comprising institutions, as well as the mass of populace that it covers. This is all the more reason why shortfalls in the higher education system—which have come to be something of a platitude—are so disappointing. The Indian Government has recently made rousing proclamations to make good this deficit and recast the country as "knowledge economy", purportedly by making higher education a top national agenda item and creating world-class universities. While this concern is welcome, there lies a significant distance between the value of comparative information and projects to launch world class universities that policy makers have not heeded. The systemic challenges that afflict the Indian higher education system are tied to its long colonial history as well as its present developing country status. The paper collates research on global rankings; reasons that explain India's effective non-appearance in global rankings of higher education institutions; and critique of the Indian Government's world-class universities project.
Key words: Higher Education, Excellence, Research, Academic development, Policies and challenges.

Introduction

In the present global educational milieu, the notions of "knowledge economy" and world-class university are concurrent (Altbach, 2004; Salmi, 2008, as cited in Ramaprasad, 2011, p. 45). This derives from the enhanced significance that tertiary education assumes in a knowledge economy: tertiary education comes to be the lifeblood of "human capital base", which is made up of skilled workforce and innovative knowledge (Cookson, 2007; Yusuf & Nabeshima, 2007 as cited Salmi, n.d.). Thus, it is important to ascertain that higher education institutions are continually pushing the frontiers of knowledge and innovation. The notion of world-class university is intertwined with global rankings of academic institutions (Altbach, 2004; Altbach, 2011; Kaba, 2012; Salmi, 2011; Salmi, nod. Salami & Saroyan, 2007). Altbach (2004) notes that the dictionary definition of world

class refers to "ranking among the foremost in the world; of an international standard of excellence" (p. 22). It would also appear that both concepts heaved into sight as a consequence of globalization and the resultant internationalization of higher education (Altbach, 2012; Huang, 2012). The appliance of the English language as the lingua franca of higher education after the Second World War outside of the communist bloc and the United Nations' championship of global higher education as an item of high priority were instrumental in systematization of higher education the world over (Guruz, 2008; Altbach, 2008). The convergence of higher education institutions on a global platform led to the need to methodize diverse systems so as to place them within the purview of agencies such as the UNESCO.

Global rankings: "The Blind Men and the Elephant":

There is much debate on the variety of ways in which global rankings can be grouped as well as the relative significance of these groupings. In the interest of navigating the study within a wieldy compass, the authors limit the discussion to academic rankings with the main purpose of producing university league tables. The era of global rankings is said to have begun in 2003 with the publication of Shanghai Jiao Tong University ranking called the "Academic Ranking of World Universities" (ARWU). The remarkable preponderance of American and British universities was met with amazement all over the world. The Time Higher Education Supplement World University Ranking (in cooperation with Quacquarelli Symonds, and later with Thomson Reuters) the next year was, in a way, Europe's answer to ARWU (Rauhvargers, 2011, p. 19). The phenomenal stir generated by the two has resulted in mushrooming of numerous global rankings (Salmi & Saroyan, 2007, p. 79 as cited in Kaba, 2012, p. 2).

Rankings are also the object of much debate and controversy. Possibly the most widely held criticism is the one about furthering of elitism in higher education and symbolic efforts to attain selectiveness. Krishnan (2005) maintains that preoccupation with rankings and governmental programs to formally launch world class universities in India, just as much as in China, Korea and Taiwan are the results of three driving factors—in this order: "pride, prestige, and spin offs to the wider economy" (p. 1682). As a point of fact, rankings cover no more than three to five per cent of the world's universities. Moreover, the "elitist approach" applied in the methodologies of the global league tables implies that as many as 16,000—at the very least—do not qualify to be considered for the competition (Rauhvargers, 2011, p. 13). It has been posited that the iconic popularity of rankings emanates from their symbolic significance with respect to economic and political factors and not from educational relevance: "[they] encourage prestige wars" and "appear to have many of the characteristics of an academic fad . . . lead[s] too little substantive improvement" (Birnbaum, 2012, pp. 7 – 9).

The Indian higher education system and the curious case of the Indian Institute of Technology:

"Some pinnacles of excellence in a sea of mediocrity"

The National Knowledge Commission (NKC) lamented that "the Shanghai University ranking of 500 world class

universities featured only 3 Indian universities" (Report to the Nation, n.d., p. 188). To fully grasp the Commission's disappointment, it is important to situate the issue in the larger context of Indian Government's Proclamations to remodel the country as "knowledge economy". The Planning Commission, in the Eleventh Five Year Plan (2007-12) broadcast its intent to attract global talent through public-private partnershipxiv. At the core of this is the mandate by the Ministry of Human Resource and Development (MHRD) to set up of fourteen "innovation universities aiming at world class standards." The "innovation universities" are to be developed as "Global Centers of Innovation" in identified cities. These Centers are to be, for all intents and purposes, India's education hubs wherein higher education and other bodies will, purportedly contribute to the cause of inter-disciplinary education, entrepreneurship and, research and development in a concerted fashion.

The Ministry of Human Resource Development's plan of "world class universities" has been the object of research more than a few times (Altbach, 2009; Altbach, 2011; Altbach, 2012; Altbach & Jayaram, 2008; Gupta, 2010; Gupta & Gupta, 2012; Krishnan, 2005; Powar (n.d.); Ramaprasad, 2011). It has been reported that the framework of the proposal is formulated in a slapdash manner, and has been put together by piecing together fragments from the administrative schemas of prestigious Indian institutions like Indian Institution of Technology (IIT) and the Indian Institute of Management (IIM) (Kasturi, 2008). While the shortfalls in the proposal per se are important, it appears that they present as the proverbial "tip of the iceberg". Sensu lato, the most important consideration in the discussion is that the template of world class universities cannot be configured without a supporting higher education ecosystem (Salmi, 2011, p. 6). Further, an integrated and planned tertiary education system that responds to nation building capabilities and is subject to reforms is more useful than a few stand-alone world class universities (Salmi, n.d.).

This explains the criticism of the Ministry of Human Resource and Development's pronouncements about world class universities which rest on the tenor that the Indian Government is disinclined to identify and grapple with core challenge in the higher education system and resorts to tokenism (Krishnan, 2005, p. 1681). Ramaprasad's (2011, pp. 45-54) study qualifies Krishnan's argument; the former expresses the ontological problem inherent in the plan by positing that India needs an improved university system, and not just a few universities to the standard of world class. More to the point, the author contends that for the country to drive knowledge economy forward in the face of global competition, elements of this system must be woven into the fabric of the higher education system. The author illustrates the point by the citing the case of the American higher education system, which is remarkable not only because it features the largest number of world class universities, but also because it comprises of a "richly connected network of institutions" which is made up of research universities just as much as associate degree granting community colleges (p. 46). In the same vein,

Krishnan (2005) points out that America's out of the ordinary dominance in global rankings occasions at the systemic level and differentiation plays an important role therein.

While the Central Government makes frequent references to the American model of world class universities, the higher education system in India stands at the other end of the spectrum. Altbach & Jayaram (2008) have criticized the National Knowledge Commission's recommendation to launch world class universities on the grounds that it is, in actual fact, a heedless proclamation to invest money and resources into a "fundamentally broken university system" (p. 246). The higher education system in India is beset with fundament problems of very high corruptibility, bureaucracy and absence of culture of academic meritocracy and research. The consideration that the Commission's recommendations are wholly neglectful of these challenges implies that indiscriminate investment and purported replication of the American model of world class universities will not amount to much (Vaidhyasubramaniam, 2012).

A number of researchers (Altbach, 2009; Altbach, 2011; Krishnan, 2005; Salmi, n.d.; Sanghi, 2010) have drawn on the case of the IITs as inimitable model of world class universities while still being nested in the Indian higher education system. Altbach (2009) and Altbach (2011) have noted that none of the Indian universities can be considered world class. The author is dismissive of Indian Institute of Technology (IIT), Indian Institute of Management (IIM) and few other institutions that have featured in the global rankingsxxiv on the grounds that they are very highly specialized institutions catering to a very select group of students. The author goes even further to hypothesize that the IITs cannot be considered universities but rather "small, high-quality technology Vidya Rajiv Yeravdekar and Gauri Tiwari / Procedia - Social and Behavioral Sciences 157 (2014) 63 – 83 67 institutions" (Altbach, 2009, p. 21). It is also maintained that while the IITs' research output is impressive, it is limited by the very mission and make-up of the institutions (Indiresan, 2007, as cited in Altbach, 2009). This emerges as a wider trend: the Indian Government has invariably sidestepped universities in order to invest in research and training and opted for specialized institutions instead such as the IITs, IIMs and All India Institute of Medical Sciences (Altbach & Jayaram, 2008 as cited in Altbach, 2012, p. 246).

The vast majority of specialized technology oriented institutions such as the IITs and Indian Institute of Science (IISc) focus on technology and engineering, to the exclusion of every things else (Krishnan, 20005). The fact that they are divorced from social and behavioural sciences and humanities raises the question about the usefulness of their research output to the developing world environment of the country. The problem is compounded, Gupta & Gupta (2012) argue, by setting down the centrally funded technical institutions, such as the IITs, IISc and IIMs into a separate sector. Krishnan (2005) takes the discussion forward to postulate that such de-coupling of technology-engineering with social sciences is not unique to India, rather it is characteristic of developing economies, and it is doubtful if truly world class universities can be generated in the face

of this deficit. It is relatable that global rankings are often criticized for sidestepping humanities and social sciences (Rauhvargers, 2011). Possibly, this is tied to the case that the vast majority of research publications and citations in high impact factor journals comes about in STEM disciplines (Altbach, 2011, p. 3). This opens up the discussion about the significance of research in social sciences in developing economies and the concern that global rankings are unmindful of this important aspect.

It is important to situate India's research output in the global context. It has been widely held that trans-Atlantic dominance in research accounts primarily for its corresponding preponderance in global rankings (Altbach, 2004; Altbach, 2011; Altbach, 2012; Altbach & Balan, 2007; Kaba, 2012; Krishnan, 2005; Ramaprasad, 2011; Rauhvargers, 2011; Salmi, n.d.; Salmi & Saroyan, 2007).xxxi It is also important to note that the Anglo-American dominance in research is fast yielding to the greater presence of developing economies, particularly the BRICK nations (Adams, Pendlebury & Stembridge, 2013). In a comparative discussion of research output of the BRICK nations, the authors describe India as a "sleeping giant", referring, perhaps to India's sluggish upward movement in comparison to the exceptional upsurge in China. It would not be amiss to liken this to China's corresponding escalation in global rankings.

Several studies have noted that the limited research that does take place in Indian universities is sub-par and not 68 Vidya Rajiv Yeravdekar and Gauri Tiwari / Procedia - Social and Behavioral Sciences 157 (2014) 63 – 83 internationally competitive. Additionally, the research output is by no means distributed evenly; rather it comes from a very small cadre of institutions: as much as 80 per cent of the publications come from only 10 per cent of universities (Vaidyasubramaniam, n.d., n.p.). Moreover, it does not help that there is no arrangement in place to rank academic institutions in the country. The concept of rankings of higher education institutions in India is limited to the so-called "B Schools", which refer to institutions that grant management and business degrees. Furthermore, these rankings have poorly spelled out methodologies. On a more hopeful note, the National Assessment and Accreditation Council (NAAC), an autonomous agency entrusted with assessing and evaluating higher education institutions in the country, has constituted a committee to work out a framework to develop its own grading scales similar to models like ARWU (Gupta, 2010, p. 838).

It emerges that higher education systems that are differentiated and oriented to research are characterized by several other attributes. One of the top factors that distinguishes a research university from one that limits itself to teaching is that the former has access to public funding that is "consistent and long term" (Altbach, 2004, p. 22). Disappointingly, investment in research is demonstrably insufficient in India. Dukkipati (2010) points out the paradox in Indian economy wherein economic growth has been led by "knowledge based industries" in the face of meager research investment, both in absolute and relative terms. In India only 4 per

cent of research expenditure is made through universities. In the United States the corresponding figure is 17 percent and in Germany it is 23 percent . . . China's investment in research manpower, estimated at 708 researchers per 1 million people, is six times that of India's Altbach (2009) concurs and points out that while as many as 150 universities in China benefit from research funding, the University Grants Commission (UGC), on behalf of the Indian Government, sponsors only 20 institutions (p. 17). Similarly, Gupta & Gupta (2012) note that the Government expenditure on research and development in science and technology as percentage of GDP was 0.8% during 2005-06 in India. By way of comparison, the corresponding figure for Israel was 5%, Sweden (4%), Japan (3%), US (2.77) and China (1.5%).

Numerous research undertakings have delved into reasons that account for the failure of research in the Indian higher education system. It emerges that the country's colonial history is at the core of the discussion on research (Agarwal, 2009; Altbach, 2009; Altbach, 2012; Altbach & Umakoshi, 2004; Nguyen, 2010; Powar, 2012). Agarwal (2009) upholds Altbach & Umakoshi (2004) in attributing the "centre–periphery relationship" of the system—which puts one in the mind of dependency theory of international relations—to the long colonial history with Britain. This is as true of India as it is of other colonized countries in Asia. Altbach & Selvaratnam (1989) use the phrase 'twisted root' to refer to the common origin of contemporary higher education systems in Asia . . . [they are a] replication of non-Asian models that were either imposed by the colonial powers or adopted voluntarily by the non-colonized state like Thailand (Nguyen, 2010, p. 26). It is held that research was an area of neglect as it did not relate to the British colonial interests in India (Altbach, 2009, p. 14). The higher education system post-Independence continued to grow in the absence of differentiation: "academe has grown without planning in response to massification and the need for new kinds of institutions to serve an expanding economy. There is no formal division of responsibility for access or research (Jayaram, 2004)" (p. 16). The problem is only compounded by the case that the scant research that is internationally competitive takes place in institutions that cannot be described as universities, properly speaking (Gupta & Gupta, 2012). Since the present model is derived from the pre-independence era, it is hardly a surprise that research is limited to "a few research organizations in specialized fields . . . in some scientific disciplines" (Altbach, 2009, p. 15). The case of research bodies being divorced from mainstream teaching institutions implies that the research that is accomplished does not tot up towards strengthening India's case for global rankings. Additionally, it has been hypothesized that research and teaching benefit from being in the same institution (Altbach, 2009). It would stand Indian higher education institutions in good stead to form collaborative networks with research oriented institutions in the country; and there are quite a few of them are internationally competitive, such as the Tata Institute of Fundamental Research (TIFR).

Much like any other higher education system, the state of research in the

Indian higher education system is nested within the general academic culture, and the former betokens the latter: "Excellence in research underpins the Vidya Rajiv Yeravdekar and Gauri Tiwari / Procedia - Social and Behavioral Sciences 157 (2014) idea of world class universities. If research is the central element, other aspects of a university are required to make outstanding research possible" (Altbach, 2004, p. 22). This is all by way of saying that high quality research is an indicator of other attributes such as quality of faculty and overall education, and supporting infrastructure. For one, universities that consistently feature in the list of global rankings record relatively high graduate enrolment (Salmi, n.d., p. 6). The concern that undergraduate enrolment accounts for the bulk of enrolment in India is a key factor in the consideration regarding the deficit in research (Altbach, 2009; Sanghi, 2010).

Among the numerous factors that contribute to a system's research prowess, faculty compensation features prominently. Internationally competitive research universities require adequately paid professoriate since this group of academics is part of global labour market. An international survey revealed that China and India were at the bottom of a group of 15 countries in academic salaries (Rumbley et al., 2008 as cited in Altbach, 2009). Neelakantan (2007) and Bradshaw (2007) have demonstrated that the growing disparity in the salaries of academe and industry in India is responsible for the shortage of internationally competitive faculty members at premier institutions such as the IITs and the IIM's (Gupta & Gupta (2012), citing a Ministry of Human Resource Development report estimates this figure to be in the range of nearly one-third of faculty positions for aforementioned premier institutions as well as central universities. Upholding the argument, Altbach & Jayaram (2008, as cited in Altbach, 2012) have concluded that while world class universities require an internationally competitive salary structure that rewards productivity, the Indian faculty members are "rewarded for longevity rather than productivity, and for conformity rather than innovation" (p. 247).

The edifying case of China:

The Indian Government makes frequent comparative references to China. Indeed, the lessons from China are particularly instructive for Indian policy makers. China, along with South East Asian countries—particularly, Hong- Kong and Singapore—has proved that it is possible to move away from the periphery and close to the centre. China's drive to have its higher education institutions counted amongst the top ranking institutions has been studied more than a few times (Altbach, 2009; Mohrman, 2003, as cited in Salmi, n.d.; Pella Jr. & Wang, 2013; Wilhelm, 2013). While there is consensus that China has succeeded in catapulting ahead of the periphery, there is also some concern whether it is more about appearances than substance. The drift of accusations leveled against the Chinese drive seems not to be fundamentally different from the Indian initiative, and centers on the criticism about resorting to palliative rather than curative measures. The fact that rankings judge output exclusively, to the exclusion of processes (Krishnan, 2005, p. 1682) makes it easier for an institution to achieve world class status by engaging in formulaic and calculated efforts—most often by increasing research

publications. Indeed, the thrust of these countries is boosting research productivity through increasing publications, hiring of "research-active international staff" (Altbach, 2011, p. 3) and collaborating with Anglo-American universities. It has been put forward that Chinese universities, guided by imitation rather than creativity, deploy less than admirable means to achieve global rankings. The most successful manoeuvre, it appears, is increasing the number of research publication in high impact international journals, without an underlying accent on original knowledge creation (Mohrman, 2003, as Vidya Rajiv Yeravdekar and Gauri Tiwari / Procedia - Social and Behavioral Sciences 157 (2014) 63 – 83 73 cited in Salmi, n.d.; Pella Jr. & Wang, 2013; Wilhelm, 2013). Furthermore, the Chinese policy of favoring research staff with foreign degrees over those with domestic degrees has created divisive and unproductive Relationship between the two groups (Pella Jr. & Wang, 2013).

At the crossroads of policy reforms:

The MHRD's aspirations to create world class universities in "a society of scarcity" and the tripartite challenge of "access, equity and quality" While the idea of benchmarking against world class universities serves the Indian higher education system importantly as a point of reference, the question whether the captivation with and investment in building world class universities is well-considered warrants research concern. The question of attainability of financing is paramount, more so for a developing country like India (Altbach, 2004; Altbach & Jayaram, 2008; Krishnan, 2005; Ramaprasad, 2011; Salmi, n.d.; Vaidhyasubramaniam, 2012).

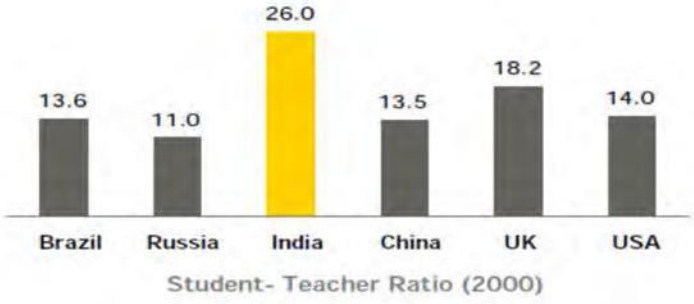
As things stand at present, the notion of world-class university is equated with Research University, and excludes institutions that offer undergraduate education (Salami). While research has its place, a higher education system must address national and regional realities; it must, first and foremost, address the immediate socioeconomic needs (Altbach, 2011, p. 23). The challenges that beset the Indian higher education system are of a fundamentally systemic nature. The sheer mass of the populacelxvii that the higher education system in India serves, combined with the country's emerging presence in global economy, present a very forceful case for thrusting the whole higher education sector as a top agenda item in national policy making.

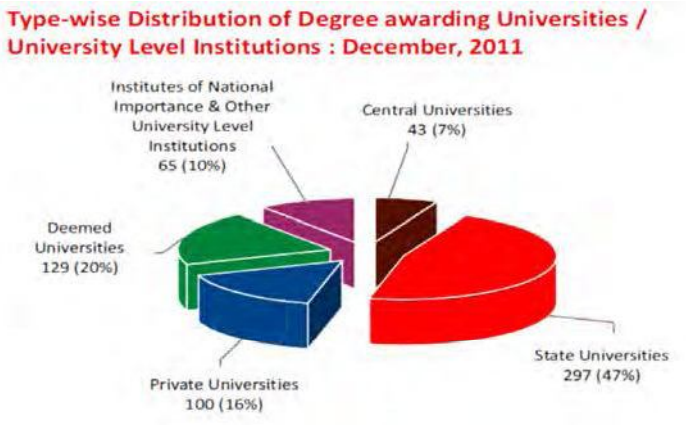
Of all the challenges, the one about access looms the largest. Simply put, it refers to the large mass of higher education demographic that goes without accessing higher education: an enrolment figure of 13 million puts India at the third place in global higher education enrolment; however this number denotes only 10% of the higher education demographic in the country (Altbach, 2009). The emerging prominence of distance education and massive open online courses (MOOCs) presents as viable solution and must be considered as area of further research interest for Indian policy makers.

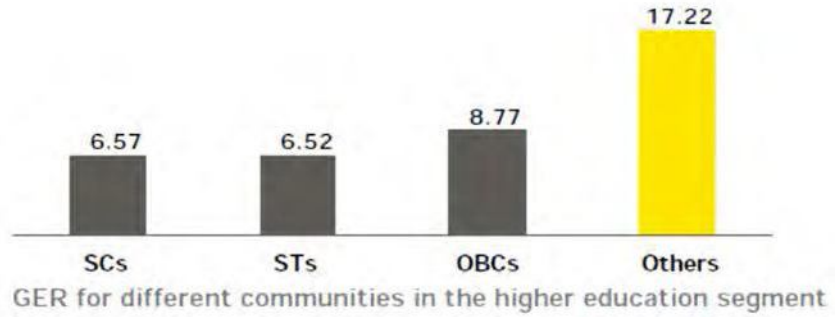
Conclusion:

Global rankings are an inevitable aspect of higher education: "basification", internationalization and ommoditization of higher education have necessitated the logic of benchmarking institutions. That being said, it is important to understand their limitations and misemployment. The concern about India's poor

representation in global rankings leads to a useful discussion. Several peripheral countries have succeeded in vaulting over the divide. Alongside the question of prospects is another point at issue: the relevance of global rankings to developing economies. It is unlikely that the Indian Government can muster the astronomical amounts of money that world class universities call for. Further, the question how well a country like India will be served by diverting scarce resources to building internationally – competitive research intensive universities is also worth considering. In face of the aforementioned challenges and scarcity of resources, the MHRD's project of world Class University comes across as one that is out-of-concurrence with the higher education system as well as the society at large. It emerges that there are more constructive and purposeful ways to apply public funding than to make exorbitant investments to get a few universities to feature in the global rankings. As is often the case with Government of India initiatives, rhetoric and symbolic efforts surpass earnestness of purpose and pragmatism. Funding Acknowledgement: This research received no grant from any funding agency in the public, commercial or not-for-profit sectors.







GER for different communities in the higher education segment

Source: UGC Higher Education in India 2008; 11th Five Year Plan Volume II * 2004-05

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