A STUDY OF PUBLIC FUNDING AND ENROLLMENT IN INDIAN HIGHER EDUCATION

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Abstract

Public funding is crucial for the growth of higher education in the country. This paper aims to analyze the alignment of public funding with enrollment across different types of higher education institutions. This study is based on secondary data for the period 2009 to 2016 from sources such as UNDP, MHRD, AISHE, etc. Analysis of data indicates that public expenditure per student is the lowest on State higher education institutions. To reach its 2035 target of 50% GER, India needs to increase public expenditure on higher education, as well as provision for a higher proportion of public expenditure on State higher education institutions as a strategic initiative.

Keywords: Higher Education Institutions, Public Funding, Expenditure per student, Enrollment

Introduction

Indian Higher Education System is one of the largest higher education systems in the world. In 2019, 37.4 million students were enrolled for higher education in the country and the gross enrollment ratio was 26.3%. Higher education is defined as, "an education which is obtained after 12 years of schooling or equivalent and is of the duration of nine months (full time) or after completing 10 years of schooling and is of the duration of at least 3 years". In colonial India, higher education was accessible largely only to the elite few. In post-colonial India, efforts were made to increase the number of institutions of higher education and accessibility to those institutions. By 2001-02, GER was 8.1% which increased to 10% by the year 2004-05. 2005 onwards efforts were made to increase the number of HEIs with active participation of the private sector and increase GER. For the year 2019 the GER was 26.3%. The Ministry of Human Resource Development proposes to increase GER to 50% by the year 2035(National Education Policy 2019).

In India, Government funding has played a significant role in facilitating the spread of higher education. In 2007, the government has spent INR 500,889 million on higher education which was 1.09 % of GDP. In 2010, it was INR 977, 367 million (1.34 % of GDP) which rose to INR 2,295, 199 million (1.51 % of GDP) by 2016. Given India's demographic profile, it is very important that qualitative and quantitative improvements take place in Higher Education Institutes. While there appears to be a clear policy towards creating world class institutions, the structuring of HEI's India also warrants a redistribution of resources in innovative strategic ways to reach the GER target for 2035. (Refer Figure 1)

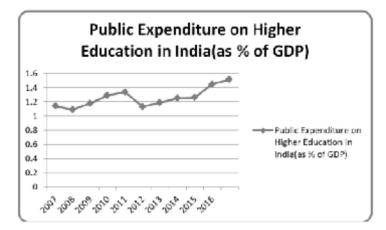


Figure 1: Public Expenditure on Higher Education in India (as % of GDP)

Source: Data from Government of India reports on Analysis of Budgeted Expenditure on Education for respective years

From 1985 to 1996, the educational expenditure of Government of India as a percentage of GDP remained almost stagnant at 3.4 per cent. In 1999, it rose to 4 per cent and reduced to 3.2 per cent in 2008. In 2012; it was 3.8% of GDP while in 2018; it was 4.6% of GDP. The levels of public expenditure on education as a proportion of GDP in some countries for the year 2012 are Norway (6.9%), United States (5.6%), Netherlands (6%), and India (3.8%) as mentioned below in **Table 1**. NITI Aayog report 2018 reiterates, "India currently spends less on education. The expenditure on education should at least 6% of GDP for quantitative and qualitative growth of education in the country."

	2008	2010	2012
Norway	6.4	6.9	6.9
Netherlands	5.5	6	6
United States	5.5	5.6	5.6
Canada	4.8	5.5	5.5
India	3.2	3.4	3.8

Table 1: Public Expenditure on Education as a percentage of GDP in some countries

Source: Data from UNDP: Human Development Report 2018

Literature Review

A systematic review of literature was conducted based on the largest relevant databases available, including SCOPUS, JSTOR and Google Scholar. There is a rich body of literature that has examined the role of funding on quality in higher education, funding being an external input, the role of internal factors to HEI's such as leadership, financial prudence, management of HEIs have been studied. Financial aid has significant direct impact on improving quality of education, management practice, efficiency and accountability of educational process in India (Colclough and De 2010). Mgaiwa (2018) has examined the source of funding for public university education in Tanzania from year

2011 to 2015 and their implications on quality of higher education in Tanzania. He concludes that lack of public funding negatively affects quality of higher education as well as research in Tanzania.

Nisar (2015) has studied the problem of performance based funding in higher education in terms of inherent complexity, affordability, and financial governance of higher education system. Hillman et. al. (2015) have evaluated the impact of performance funding on higher education. Miningou (2019) explains, "Good governance, political stability, and stronger national commitment to finance education play key role in improving efficiency of fund utilization in education". Masino et. al. (2016) emphasis the need to not only increase provision of resources to improve quality of education, but also on the need to optimize fund allocation through "management reforms, standards of practice enforcement and participatory management interventions". There is a need to review key policy strategies regarding funding of education system that can improve quality of service and employability of graduates.

Tilak (2018) states "higher education occupies a low priority in public expenditure. Its share has been around 1% of GDP in 2007". Due to low public funding in higher education in India, the expansion in number of institutions of higher education was made possible by private sector investment. Altbach (2012) argues that "Even if funds are provided, most of the higher educational institutes are not capable of managing them effectively". Therefore from the above discussion it emerges that it is not the paucity of public funding alone for higher education that is an impediment to the quantitative and qualitative growth of higher education. In addition to funding, qualitative improvement of higher education also depends on leadership prudence in the management of funds, foresight and design of management systems at HEI level as well as political foresight.

Research Methodology

Objectives of the Study

- To study public funding and enrollments in Universities & Higher Education-Centre, Universities & Higher Education-State and Technical Education in India.
- To analyze the alignment of public funding with enrollment in higher education.

Data Sources and Analytical tool used

This research is based on secondary data pertaining to higher education as mentioned in reports of bodies such as UNDP, MHRD, AISHE, etc. Public expenditure and enrollment in higher education for Centre, State and Technical Education for the period 2009 to 2016 has been analyzed. Technical education includes premier higher education institutions covering programs in engineering, technology, management, architecture, etc. (MHRD 2014). Average value of expenditure per student for the three segments- Centre, State, and Technical was calculated.

Analysis

In 2016-17, INR 2,295,199 million were spent on higher education by the Government of India which was 1.51% of GDP. Out of this, INR 653,222 million was spent in States which is 0.43% of GDP. INR 317,100 million was spent in Centre which is 0.21% of GDP and INR 1,324,876 million on technical education which is 0.87% of GDP. (Refer Figure 2)

Public Expenditure on Higher Education



Figure 2: Public Expenditure in Higher Education (in percentage)

Source: Data from Government of India reports on Analysis of Budgeted Expenditure on Education

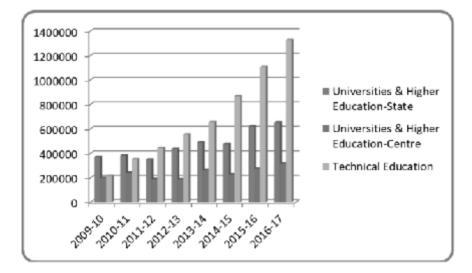


Figure 3: Public Expenditure in Higher Education (in million INR)

Source: Data from Government of India reports on Analysis of Budgeted Expenditure on Education from 2009-10 to 2016-17

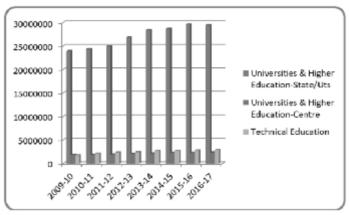


Figure 4: Enrollment in Higher Education (in numbers)

Source: Data from Government of India reports on All India Survey on Higher Education (AISHE) from 2009-10 to 2016-17

In terms of enrollments in higher education, 29.5 million students are enrolled in State higher education institutes while 2.34 million students are enrolled in Central higher education institutes. State higher education institutes have 13 times higher enrollments than Central higher education institutes. Enrollment in technical education is 2.9 million, which is one-tenth part of enrollment size at state level. (Refer Table 2)

Table 2: Average value of Public Expenditure per student in Higher Education

Sector	Universities & Higher	Universities & Higher	Technical
	Education-State	Education-Centre	Education
Average value of Public Expenditure per student (in INR)	17299.27	110835.3	262968.9

Source: Authors (calculated from different Government of India reports from 2009 to 2016)

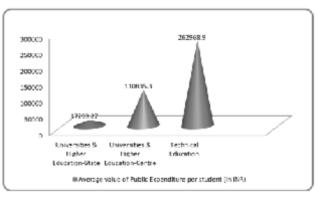


Figure 5: Average value of Public Expenditure per student in Higher Education

Source: Authors (calculated from different Government of India reports from 2009 to 2016) On calculating expenditure per-student in different types of higher education institutions, a dichotomous picture emerges. At the state level where 29.5 million students are enrolled, INR 17,299.27 is spent on one student. While in technical education, where 2.9 million students are enrolled, INR 262,968.9 is spent on one student. At the centre, INR 110,835.3 is spent on one student where 2.34 million students are enrolled. Therefore, there is an inverse relationship between enrollment size and expenditure per student by the government in State higher education institutes. (Refer Figure 5)

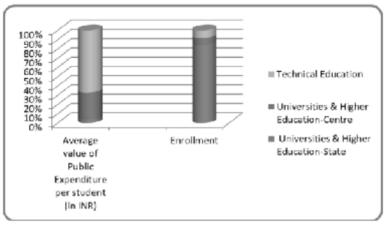


Figure 6: Public Expenditure per student as well as enrollment in Higher Education (in percentage)

Source: Authors

Findings

On state level where 85% of students are enrolled, just INR 17,299.27 is spent on one student. At the central level, INR 110,835.3 is spent on one student where 7% of students are enrolled. While in technical education, where 8% students are enrolled, INR 262,968.9 is spent on one student. There is an inverse relationship between enrollment size and expenditure per student by the government in State higher education institutes. State higher education institutes are deprived of sufficient finance. Thus, to capture a significant position in NIRF ranking remains a challenging task for State higher education institutes. Disproportionate funding with respect to total enrollments, low fee revenues and resource constraints in meeting NIRF quality norms impact the sector adversely making it difficult for them to improve quality significantly. An uneven playing field emerges for Indian Higher Education as major enrollments are in State higher education institutes but this sector is not recipient of fund from Government of India directly. As most State governments are short of funds, meeting the funding requirements for state higher education institutes remains a challenge.

Conclusion

Public expenditure per student is the lowest on State higher education institutions while they have the highest enrollment amongst all categories of higher education institutions. The paucity of funds translates into poor teacher-student ratio, insufficient educational infrastructure, lower NIRF ranking which further leads to lowered funding. Thus, here is a viscous circle of low funding, low quality, and lowered funding. Potential for increasing GER is highest in State higher education institutions. To reach its 2035 target of 50% GER, India needs to increase public expenditure on higher education, as

well as provisioning higher proportion of public expenditure on State higher education institutions as a strategic initiative. There is also a need to improvise governance of higher education institutions of India for optimum fund utilization.

Managerial Implications

To adequately develop a result oriented, contemporary higher education system that meets the aspirations of the youth and society the funding pattern needs a revamp. Though State higher education institutes are funded by State government, there has to be a serious reconsideration of leaving these higher education institutes to be funded only by State governments. There is a need to facilitate funding for state higher education institutes through budget provisioning for at least five years under an umbrella scheme to uplift the quality of state higher education institutes. A funding mechanism that develops a level playing field with faculty recruitment, infrastructure development and curriculum changes for State HEIs is required since a significant majority seeks education to move to a better life at these institutes. Having done that prudent mechanism for quality assurance, revenue generation and revenue management can be developed universally for State HEIs to make them competitive for the benefit of society.

References

- Ministry of Human Resource Development (2019). All India Survey on Higher Education Report 2018-19. Government of India.
- Ministry of Human Resource Development (2014). Indian Standard Classification of Education (InSCED). Government of India.
- Ministry of Human Resources and Development (2016). Educational Statistics At a Glance. Government of India.
- Ministry of Human Resource and Development(2019). National Education Policy 2019,. Government of India
- Government of India(2011). Analysis of Budgeted Expenditure on Education 2008-09 to 2010-11. Government of India.
- Government of India (2012). Analysis of Budgeted Expenditure on Education 2009-10 to 2011-12. Government of India.
- Government of India.(2013) Analysis of Budgeted Expenditure on Education 2010-11 to 2012-13. Government of India 2013.
- Government of India. (2014). Analysis of Budgeted Expenditure on Education 2011-12 to 2013-14. Government of India.
- Government of India. (2015)Analysis of Budgeted Expenditure on Education 2012-13 to 2014-15. Government of India.
- Government of India (2016). Analysis of Budgeted Expenditure on Education 2013-14 to 2015-16. Government of India.
- Government of India. (2017). Analysis of Budgeted Expenditure on Education 2014-15 to 2016-17. Government of India.

- The World Bank. (2019). Report on Government expenditure on education, total (% of GDP).
- UNDP: Human Development Report (2018). Retrieved from http://hdr.undp.org/en/content/expenditure-education-public-gdp as on August 5, 2019.
- NITI Aayog (2018). Strategy for New India @ 75. Government of India.
- Colclough, C., & De, A. (2010). The impact of aid on education policy in India. International Journal of Educational Development, 30(5), 497-507.
- Mgaiwa, S. J. (2018). The paradox of financing public higher education in Tanzania and the fate of quality education: The experience of selected universities. Sage Open, 8(2), 2158244018771729..
- Nisar, M. A. (2015). Higher education governance and performance based funding as an ecology of games. Higher Education, 69(2), 289-302.
- Hillman, N. W., Tandberg, D. A., & Fryar, A. H. (2015). Evaluating the impacts of "new" performance funding in higher education. Educational Evaluation and Policy Analysis, 37(4), 501-519.
- Miningou, E. W. (2019). Effectiveness of education aid revisited: Country-level inefficiencies matter. International Journal of Educational Development, 71, 102123.
- Masino, S.; Nino-Zarazua, M. What works to improve the quality of student learning in developing countries? International Journal of Educational Development, 48, 53-65, May 2016.
- Niño-Zarazúa, M. (2016). Aid, education policy, and development.
- Tilak, J. B. (2018). On Planning University Development: Shibboleths Versus Stylised Facts?. Social Change, 48(1), 131-152.
- Agarwal, P. (2006). Higher education in India: The need for change (No. 180). Working paper.
- Altbach, P.G.(2012). Half-Century of Indian Higher Education: Essays by Philip G. Altbach. Sage Publications, p. 587.
- Ministry of Human Resource Development (2011). India Survey on Higher Education Report 2010-11. Government of India.
- Ministry of Human Resource Development (2012). All India Survey on Higher Education Report 2011-12. Government of India.
- Ministry of Human Resource Development (2013). All India Survey on Higher Education Report 2012-13.Government of India.
- Ministry of Human Resource Development (2014). All India Survey on Higher Education Report 2013-14. Government of India.
- Ministry of Human Resource Development (2015). All India Survey on Higher Education Report 2014-15. Government of India.
- Ministry of Human Resource Development (2016). All India Survey on Higher Education Report 2015-16. Government of India.
- Ministry of Human Resource Development (2017). All India Survey on Higher Education Report

2016-17. Government of India.

• Ministry of Human Resource Development (2018). All India Survey on Higher Education Report 2017-18. Government of India.