Revisiting Educational Development in Himachal Pradesh

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Abstract

Himachal Pradesh has witnessed tremendous progress in the educational development in a relatively short span of time. The State has achieved nearly 100 per cent universal elementary education and has one of the lowest dropout rates at the national level. The challenge at present is lower levels of participation at the higher education level, which could mainly be attributed to lesser number of institutions available. The impressive results in educational participation and access are mainly attributed to its efficiently run and managed government schooling system. However, the success of government schools seems to be losing its sheen as private schooling revolution is taking over the State-run schools rapidly. The share of government school participation has decreased sizeably over the decade, whereas the share of private school participation has increased. This is a serious concern and the government schooling system needs to be made more accountable and all stakeholders including teachers, administrators, policymakers, community and parents need to take active responsibilities.

INTRODUCTION

Educational development encompasses universalisation of access to education and equity in quality of education across different levels, sections of society and regions in a country. Though India has made considerable progress in the area of educational development since Independence, it still needs to traverse a long path to achieve the set targets and bridge

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the large disparities that exist across regions, caste and gender groups; reduction in these disparities is one of the biggest challenges before us. This is discernible from the output indicators of educational participation, wastage and poor leaning levels amongst students.

Himachal Pradesh, a mountainous State of the Indian Republic, has come a long way in the field of education post Independence and ranks today amongst the most advanced in terms of educational development in the country.

Educational expansion in the State

Faith-based schools have been a characteristic feature of the educational set-up in Himachal Pradesh. Post Independence, the development problems in the State were largely akin to those in the other States, but the problems were accentuated due to its mountainous terrain with extreme climatic conditions. These factors further added to the State's backwardness and posed as a major challenge to the overall pace of development in the State. Strong political will and administrative intervention combined with societal support enabled the State to make impressive progress in the overall educational development. Therefore, these developmental efforts had multiple contributors, as Dreze and Sen (2009) in their essay on 'Putting Growth and Its Place' pointed out that Himachal Pradesh began this journey much later than Kerala and Tamil Nadu, but is catching up very quickly. This is especially visible in the parameters relating to elementary education — Himachal Pradesh at the time of Independence had dismal literacy levels, at par with those in Bihar and Uttar Pradesh, but it soon caught up with the high-performer Kerala in a span of few decades. This 'schooling revolution' according to them was based almost entirely on a policy of universal provision of government schools, although it must be noted that there has been a steady rise in private schooling during the last decade. A rise in enrolment and literacy does not alone signify educational development, therefore, it is germane to analyse the current situation. This paper tries to revisit the educational development scenario in Himachal Pradesh and identify some of the main challenges that the State is facing in relation to post-elementary education scenario given the fact that the State has almost achieved universal participation at the elementary level.

Rising Literacy Levels

Literacy is an important indicator to measure the socio-economic development of a region. The concept of literacy varies from country to country but at the bare minimum, it refers to the minimum levels of literacy skills. The Indian census document defines literacy as competence 'to read and write with an understanding in any language'. As a consequence, the umbrella category of the literate

population contains a whole range of people from those who can barely read and write to the highly educated.

At the time of Independence, Himachal Pradesh was considered to be one of the most underdeveloped areas of the country, both socially and economically (Dreze and Sen 2009). The literacy rate during the time of independence was about 8 per cent, which was below the national average of 18.33 per cent. However, over the years, the State has shown tremendous progress and is at present recognised as one of the most literate States with a literacy rate of 82.80 per cent. It also ranks second in the country in terms of literacy rates after Kerala, amongst the bigger States (2011, Census). A large part of this success can be attributed to the efforts of both the Central and State governments. The rapid expansion in educational facilities, free education in schools and emergence of middle class section of the society following rapid growth in service sector are the major factors responsible for this speedy rise in literacy rates (Bhardwaj, 1999).

District-wise Analysis

Table 1 shows the literacy rates at the district level, according to the 2011 Census. Hamirpur district had the highest proportion of literates with a literacy rate of 88.15 per cent, as compared to 63.77 per cent in 1981. This is closely followed by Una and Kangra with literacy rates of 86.53 per cent and 85.67 per cent, respectively, in 2011, as against 59.75 per cent and 59.20 per cent, respectively, in 1981. Shimla with literacy rate of 83.64 per cent in 2011 came next followed by Bilaspur, Solan and Mandi having literacy rates of 84.59 per cent, 83.68 per cent and 81.53 per cent, respectively, in 2011, as compared to 53.80 per cent, 49.39 per cent and 49.00 per cent, respectively, in 1981. Comparatively higher levels of urbanisation and economic development along with a high number of educational institutions could be the reason for high literacy levels in these districts.

The districts of Lahaul and Spiti, Kullu and Sirmaur had literacy rates of 76.81 per cent, 79.40 per cent and 78.80 per cent, respectively, in 2011, and 41.05 per cent, 36.57 per cent and 38.59 per cent, respectively, in 1981. These districts are predominantly rural and backward in character with poor infrastructure and accessibility, which could be the contributing factors to low levels of literacy. The least literate district in 2011 was Chamba with literacy rate of 72.17 per cent, however it has shown remarkable improvement from a literacy rate of 32.15 per cent in 1981.

Looking at gender-wise literacy rates for 2011, it is apparent that males have 90 per cent literacy level which is considerably higher than the literacy level amongst females at 76 per cent. A time-series analysis of the gender-gaps shows a declining trend from about 23 point difference

to 18 point difference which further narrowed to 14 percentage points difference in 1991, 2001 and 2011, respectively. The district-level differentials also show a lower female literacy trend as compared to males across all the districts. The gap between the male and female literacy levels is higher in the backward districts of Chamba, Lahaul and Spiti, Kinnaur and Kullu indicating that access to education and its outcomes in the form of literacy is a bigger challenge for females in rural and rugged topographies.

It can be argued that Himachal Pradesh, with the exception of Chamba, and Lahaul and Spiti, has done considerably well in terms of improving its literacy rates. All the districts have shown improvement over the earlier decades. Good government policies and promotion of education at the village-level coupled with construction of primary schools even in the remote corners of the State has contributed to improvement in literacy rates. This underlines the progressive dimension of governance in Himachal Pradesh.

Table 1
Literacy Rates in Himachal Pradesh

Districts	Total	Male	Female
Himachal Pradesh	**82.80**	**89.53**	**75.93**
Chamba	72.17	82.59	61.67
Kangra	85.67	91.49	80.02
Lahaul and Spiti	76.81	85.69	66.84
Kullu	79.40	87.39	70.91
Mandi	81.53	89.56	73.66
Hamirpur	88.15	94.36	82.62
Una	86.53	91.89	81.11
Bilaspur	84.59	91.16	77.97
Solan	83.68	89.56	76.97
Sirmaur	78.80	85.61	71.36
Shimla	83.64	89.59	77.13
Kinnaur	80.00	87.27	70.96

Source: Census of India, 2011.

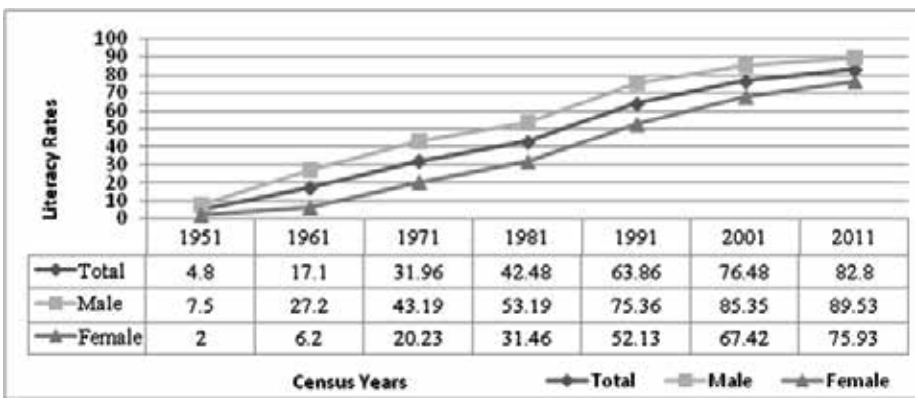
Growth in Literacy

Despite having a rugged terrain with inaccessible tribal pockets, Himachal Pradesh has taken a big leap in the development process. In the post Independence era, Himachal Pradesh has performed better on the literacy front than most other States in the country. An examination of the literacy rates given in Figure 1 reveals that the State showed a threefold growth in literacy during the period 1951 to 1961, from 7.98 per cent to 21.30 per cent. The 1971 Census showed a 10 per cent increase to 31.96 per cent and the trend continued—in 1981, it rose to 42.48 per cent. The period 1981–91 was an inflection point with literacy rate showing a marked improvement in 1991 at 63.86 per cent. It was during this period that various centrally sponsored policies and schemes, such as the National Programme for Non-Formal Education (1980), National Education Policy (1986), Operation Blackboard (1987–88), the campaign on Universal Primary Education, etc., were introduced. These governmental interventions resulted in a higher growth rate in literacy levels. In the 1990s, the growth rate tapered and this can be partly attributed to the base effect.

Between 1981 and 1991, Himachal Pradesh registered an average growth rate of 21.38 per cent. Lahaul and Spiti which was one of the least literate districts in 1981 with a literacy rate of 31.35 per cent, registered the highest decadal growth rate at 25.47 per cent in 1981–91. In comparison, the growth rates in the districts with higher literacy rates *viz.* Mandi, Bilaspur, Solan and Hamirpur stood at 22.62 per cent, 22.48 per cent, 22.23 per cent and 22.18 per cent respectively.

Accessibility and Availability of Educational Institutions

At the time of Independence, the limited reach of our educational system was



	1951	1961	1971	1981	1991	2001	2011
Total	4.8	17.1	31.96	42.48	63.86	76.48	82.8
Male	7.5	27.2	43.19	53.19	75.36	85.35	89.53
Female	2	6.2	20.23	31.46	52.13	67.42	75.93

Figure 1. Growth of Literacy in Himachal Pradesh

Source: Census of India.

its major weakness and this could be attributed to the lack of support and thrust by the colonial government. In 2002, the 86th Constitutional amendment was passed by the Indian Parliament that added Article 21A to the Constitution making education a fundamental right. Article 21A makes it mandatory for the State to provide free and compulsory education to all children from the age of six to 14 years. The Right of Children to Free and Compulsory Education Act, 2009 was enacted by the Parliament to give effect to the Constitutional amendment and the Act came into force on 1 April 2010.

Universal elementary education is a pre-condition towards universal secondary education. Though the past six decades since Independence have witnessed an unprecedented expansion of education, yet the fulfillment of this constitutional commitment has remained elusive. Therefore, availability and accessibility of educational institutions play a key role in attaining the national goal of achieving education for all. The Constitutional commitment lies at the root of conception of major government initiatives, such as Right to Education, Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), etc.

By 'availability', we mean the physical existence of educational institutions according to the needs of the people, which is determined by the numerical strength of the student population in specific age-groups (Raza, Ahmad and Nuna, 1978). The availability of these institutions proportionate to the requirements of the population is the foremost necessary condition for educational progress. The spatial pattern of distribution and the growth in the number of these institutes also have a significant role in the overall educational development of any region.

Accessibility to educational institutions is likewise an important criterion in considering their efficiency and availability to the population intended to be served by them. The attribute of accessibility flows directly from the decision to locate an institution according to the residential location of the population to be served. The decision to receive formal education, which is imparted in schools and colleges on a collective basis, implies daily movement of student population between the centers of residence and the institution. As such the movement may be unimportant in the urban areas where alternative modes of transport are available and schools are located within the settlement. However, the location of schools in the rural areas has a crucial bearing on their usability by the population intended to be served. There is an outer limit beyond which it is not physically feasible for the children of different age groups to travel (Raza, Ahmad and Nuna, 1978). Location of schools hence, in itself is a function of a number of factors. Here, topography,

age of students, size and density of population, size of area, distance and socio-political factors may be viewed as important factors influencing singularly or in association with each other upon provision and location of school infrastructure (Sinha, 1988).

Availability, as defined earlier, denotes the physical space for educational facilities in relation to its requirement. In this study, spatial distribution of total number of institutes is used as a proxy for availability and is calculated using the size of the student population in a particular age-group and the number of educational institutes available to them. This aspect is important in view of high spatial variations in the density of population. Though the role of accessibility (distance and location) in availing the educational facilities cannot be minimised, the level of the actual requirements cannot be ignored either. It is often noted that while in one locality, a primary school is available for 50 children, at another it is expected to serve more than 200 children (Sinha, 1988). Such anomalies are quite common and it may, therefore, be stated that the availability of educational institutions commensurate to the needs of the population is a necessary condition for educational development, as availability reflects the reach of the education system to the population in general.

In a predominantly mountainous State like Himachal Pradesh with low population densities, accessibility to educational institutes assumes critical importance as distance and location of the schools to a large extent determine student participation, especially at the post-elementary level which further impacts higher education. Therefore, without the basic existence of these educational institutes, distance and location may be irrelevant and vice versa. In fact, both availability and accessibility are interlinked and together create conditions favourable for the spread of schooling facilities. Henceforth, we will examine the subject of availability followed by accessibility in this section of the study.

Though availability is an important aspect, but the mere existence of institutes may not alone serve the purpose, as location of the institute has a more significant role to play. This is because there are tracts particularly in mountainous and forest areas wherein physical access constitutes the crucial constraining factor in availing these facilities. It may, however, be noted that the areas with difficult terrain often have low population with a relatively smaller number of children per school.

Availability becomes central and crucial in areas having high population densities. Location of institutions facilities in such cases determined essentially by population size, distance occupying a less important position in decision-making. Considering the mountainous physiography and extreme climatic conditions of Himachal Pradesh, the

meaning of accessibility is bound to acquire a more important significance, as average distance in the plains and hills has varying connotations. The availability and accessibility of the facility of educational institutes may be analysed with the help of the following approach:

1. Temporal Distribution of Educational Institutions
2. Growth of Educational Institutions
3. Spatial Distribution of Educational Institutions
4. Institution–Population Ratio

Temporal Distribution of Educational Institutions

A comparison of the period 2015–16 figures of the number of educational institutions in the State, with the figures in the preceding four decades, shows a healthy upward trend in the availability of educational institutions. Table 2 shows that the State had a total of 3,768 primary schools in 1970, which tripled to 10,499 by 2000 and in 2012, Himachal Pradesh had around 10,739 primary schools managed by the government. In 1970, there were 742 upper primary schools as compared to a total of 1,709 upper primary schools in 2000 and in 2012, the State had a total of 2,317 upper primary schools.

In case of secondary schools, there were a total of 435 schools in 1970, which rose to 977 in 2000, and in 2015 the State had 2,191 secondary schools. The senior secondary school system was introduced in 1978 and prior to it, there used to be the intermediate level. Therefore, there were only three senior secondary schools in 1980, which increased to 536 in 2000, and in 2012 the State had 1,262 senior secondary schools, which rose to 2,487 schools in 2015–16.

Analysing the trend for distribution of schools over time, one can observe that the total number of schools at various levels of education have increased although the rate of change differs between different educational levels. It is understandable that it may not be possible to provide the same number of schools at each level but the gap in availability between these various levels of schooling needs to be narrowed in order to boost continuity in education.

The number of government-run colleges providing general education has increased from 15 in 1970–71 to 37 in 2000–01 which further doubled by 2015–16 to 87 colleges. It must be noted that the rise in the number of private colleges has been even higher in the last few decades with 67 colleges under private management for the same period.

Availability of higher and technical institutions in a State like Himachal Pradesh today has assumed greater significance than before, as the Gross Enrolment Ratio (GER) at senior secondary level has risen manifold. This expansion indicates that the increase in the number of

Table 2
Number of Educational Institutions in Himachal Pradesh

Year	Primary/ Junior Basic	Middle/ Senior Basic	Higher/Higher Secondary	Colleges of General Education
1970–71	3,768	742	435	15
1980–81	6,093	1,032	585	25
1990–91	7,548	995	1,010	25
2000–01	10,499	1,709	1,513	37
2005–06	10,613	2,112	1,654	47
2013–14	10,650	2,321	2,191	67 + (66)*
2015–16	10,710	2,130	2,487	87 + (67)*

**Private colleges*
Source: Statistical Abstract of Himachal Pradesh.

educational institutes at tertiary level is a consequence of the demand push emanating from higher enrolment at the preceding educational levels. Though tremendous efforts have been made over the years, availability is still low in relation to the demand. These were 15 government colleges, in 1970–71, which increased to 37 in 2000–01, and subsequently doubled (67) in number by 2013–14. There has also been a huge rise in the number of private institutions.

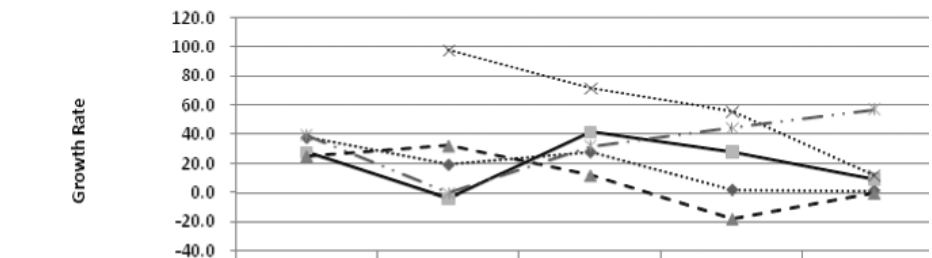
Looking at the availability of medical and technical institutes in the State, it shows meagre progress and most of the institutions are run by the government. As Table 3 shows, in 2008–09, Himachal Pradesh had two (2) medical colleges, three (3) engineering colleges, seven (7) polytechnics and 50 industrial training institutes—all of them were run by the State government. Although there has been mushrooming of small technical institutes which offer diploma and certificate courses, their exact number not known as they do not offer recognised courses, hence is not registered with the government.

Due to vigorous efforts of the State government to set up and facilitate setting up of technical and medical institutions, their numbers have gone up phenomenally since 2000. For example, there was just one engineering college in 1992, which has increased during 2015–16 to four government engineering colleges and 14 private engineering colleges. Similarly, the number of polytechnics has increased from four to 15 during 1992 to 2016. The increase in number of medical colleges has been insignificant—there has been an addition of only two

Table 3
Number of Technical and Medical Institutions in Himachal Pradesh

Years	Engineering Colleges	Polytechnics	Industrial Training Institutes	Medical Colleges
1992–93	1	4	32	1
1997–98	1	6	34	1
2000–01	1	7	44	2
2002–03	2	7	44	2
2004–05	2	7	50	2
2005–06	2	7	50	2
2006–07	3	7	50	2
2008–09	3	7	50	2
2012–13	2+17*	10+18*	93+129*	3
2015–16	4+14*	15+18*	110+136*	3

**Represents the number of private colleges*
Source: *Himachal Pradesh Government Website for Technical Education, Statistical Abstract of Himachal Pradesh.*



	1970-80	1980-90	1990-2000	2000-07	2007-12
Primary Schools	38.2	19.3	28.1	1.7	1.2
Middle Schools	28.1	-3.7	41.8	28.3	9.7
Secondary Schools	25.3	32.3	12.0	-17.6	0.1
Senior Sec. School		98.0	72.0	55.9	11.8
Colleges	40.0	0.0	32.4	44.8	57.4

Figure 2. Growth of Educational Institutions in Himachal Pradesh (1970–2012)
Source: *Annual Report, Directorate of Education Himachal Pradesh, 2013.*

medical colleges in the last 20 years, from one in 1992 to three in 2015. This unfortunately underscores the lack of medical institutions in the State. Though there has been a mushroom growth in the number of private technical institutes, no such phenomenon is noticed in respect of medical institutes and this could be attributed to the norms being more stringent for setting up medical institutes.

Growth in Educational Institutions

Figure 2 shows the growth in the number of institutions in absolute terms. In this section, we attempt to explain the decadal percentile increase or decrease between 1970 and 2012 in availability of schools at different levels of education in the State. Efforts were made post-Independence and thereafter, at the beginning of the creation of the State to meet the demand for education and this led to a rapid growth in setting up of educational institutions, which gradually tapered off as supply increased in different localities, as is evident from the data explained below.

Primary Schools: The growth in the number of primary schools declined during 1970–80 (38.16 per cent) and during 1980–90 (19.28 per cent). Between 1990 and 2000, there was a 10 per cent increase to 28.11 per cent which can be attributed to a boom in the private institutions and government programmes, such as District Primary Education Programme, etc.; between 2000–07, the growth reduced to only 1.71 per cent which further declined to 1.2 per cent between 2007–12. This could be due to the fact that most of the villages had already been covered with primary schools in the earlier intervals.

Upper Primary Schools: At the upper primary school level, the growth rates show a varying trend. Between 1970 and 1980, there was a strong growth in the number of upper primary schools at 28.10 per cent which turned into a negative growth at -3.72 per cent in the subsequent period, i.e., between 1980 and 1990. This may be due to the diversification of the government's efforts in introducing the senior secondary school level during this period. In the decade 1990–2000, the trajectory changed to register a robust growth of 41.78 per cent. The growth rates were lower but still impressive between 2000 and 2007 at 28.76 per cent. The growth further declined to 9.7 per cent during the period 2007–12, this again could be attributed to increase and coverage of schools at the upper primary level.

Secondary Schools: The number of secondary schools in the decade 1970–80 showed a growth rate of 25.26 per cent, which further increased to 32.33 per cent during1980–90. In the subsequent decade, i.e., 1990–2000, the growth rate declined but was still impressive at 11.98 per cent. A higher decline and a negative growth rate was observed for the period 2000–07 at -17.57 per cent, which

could be the result of the merging of the schools at this level with their respective higher and upgradation of the lower level schools. However, a marginal increase of 0.1 per cent in the following period 2007–2012 was witnessed for schools at this level.

Senior Secondary Schools: The secondary school system in its current form of 10+2 was only introduced in the late 1970s, therefore the growth rates have been calculated from 1980–90, when the growth rate was at 98 per cent. Such a high growth is mainly because this level was commenced during this period. Though there has been a considerable growth over the years, a declining trend is observed from 72.01 per cent in 1990–2000 to 55.92 per cent in 2000–07, which further reduced to a growth rate of 11.8 per cent during 2007–12.

Colleges: The number of colleges has grown almost five fold in the period 1970–2012. During 1970–80, a vigorous growth of 40 per cent was registered followed by a period of no growth between 1980 and 1990. Though the phase post-1990 has shown an increase in the growth of number of colleges as the base educated population has grown tremendously, resulting in a demand for this level. The growth rate during the period 1990–2000 was 32.43 per cent which further increased to 44.78 per cent in the period 2000–07. The five-year period between 2007 and 2012 further saw the highest growth at 57.4 per cent. These growth percentages do not take into consideration the private institutions that came up during this period. Though the periodic growth figures are impressive, but there still seems to be paucity of good institutions especially at this level. The growth rates of privately managed institutions have not been calculated due to paucity in availability of data.

Spatial Distribution of Educational Institutions

To examine the access to educational facilities, the spatial distribution of educational institutions was analysed in relation to the total population and area of the districts. Table 4 shows that Himachal Pradesh has better access to educational institutions when compared with the national average. Within the State, the districts with low and sparse population like Lahaul and Spiti, Kinnaur and Chamba represented better levels of access to schools along with the district of Shimla which has a higher proportion of schools. The average population served by each school is also below the State average with one school available for a population of 304 persons in Shimla. All the remaining districts represented a higher number of population for every school, with the districts of Una (551) and Kangra (480) representing the lowest levels of access.

Kullu represented low levels of access for higher educational institutions with one institution available for 48,608 persons and Hamirpur represented the highest

level of access to higher educational institutions with one institution available for 15,665 persons.

Examining the area served by the available educational institutions, it is evident in Table 4 that the mountainous districts of Lahaul and Spiti, Kinnaur and Chamba that have sparse population represented a larger area covered by each institution as compared to the other districts that relatively represent better levels of access in terms of the area served by each school.

The spatial distribution of schools to determine the level of access to educational institutions represents that availability of schools is relatively high in most of the districts but there is a dearth of higher educational institutions. To determine the actual availability of institutions, an analysis of age-wise population with the levels of institutions becomes pertinent, which is examined in the following section through the institution–population ratio.

Table 4
Access to Educational Institutions in Himachal Pradesh

District	Total Population	Area in sq. km.	Educational Institutions Schools + HEI	Population served by each school	Population served by each HEI	Area served by each educational institution (sq. km.)
Bilaspur	3,82,056	1,167	1,028+(11)*	372	34,732	1.1
Chamba	5,18,844	6,528	1,748+(17)*	297	30,520	3.7
Hamirpur	4,54,293	1,118	990+(29)*	459	15,665	1.1
Kangra	15,07,223	5,739	3,137+(56)*	480	26,915	1.8
Kinnaur	84,298	6,401	313+(3)*	269	28,099	20.3
Kullu	4,37,474	5,503	1,179+(9)*	371	48,608	4.6
Lahaul and Spiti	31,528	13,833	284+(2)*	111	15,764	48.4
Mandi	9,99,518	3,951	2,836+(35)*	352	28,558	1.4

Shimla	8,13,384	5,131	2,676+(34)*	304	23,923	1.9
Sirmaur	5,30,164	2,825	1,575+(18)*	337	29,454	1.8
Solan	5,76,670	1,936	1,293+(27)*	446	21,358	1.5
Una	5,21,057	1,549	912+(24)*	571	21,711	1.7
Himachal Pradesh	68,56,509	55,673	17,971+(265)*	382	25,874	3.1
All India	1,02,86,10,328	32,87,240	15,16,892	678	NA	2.2**

**Figures in parenthesis represent Higher Educational Institutions (HEI);*
***Only for Schools*
Source: *UDISE data for 2013–14; Census 2011 for population data; Himachal Pradesh Government website for Technical Education, 2013; Statistical Outline of Himachal Pradesh 2013–14.*

Institution–Population Ratio

The institution–population ratio (IPR) gives the availability, defined earlier as the physical existence of educational institutions in accordance to the requisite strength of student population of a certain cohort. The indicator that is used in this context is the ratio of schools at a particular stage in relation to the population in the relevant age-group. This indicator manifests the education resource position in relation to educational demands and also the extent to which the provision of education facilities are being utilised (Sinha, 1988). The IPR in the study has been calculated using the number of schools at particular level to total students belonging to that required age-group. This factor reflects the availability of school facilities as per the actual requirement across various levels.

Table 5 shows IPR for the various levels of education across districts. The State's average shows that there is one school for every 57 students at the primary level, which further declines to one school for every 163 students at the upper-primary level, and further to 234 students at the secondary and senior secondary levels. The ratio at the higher education level is one institution for every 2,730 persons in the age-group 18–25 years. These figures only reflect on the reach of our educational system and indicate a difficult scenario on accessibility for students, as the ratios decline as we move up the education level. Sparse spatial distribution can be inferred from the reduction in the number of institutions across levels, thereby indicating that many students are forced to move from one place to another to attend these educational institutions.

Primary and Upper Primary Schools: Table 5 shows the spatial variation in the availability of primary schools and population in the age-group 6–11 years within the districts. The districts of Una—one primary school for 95 students,

Table 5
Institution–Population Ratio in Himachal Pradesh

Districts	6–10 years population served by each Primary School	11–13 years population served by each Middle School	14–17 years population served by each Secondary and Senior Sec. School	18–25 years population served by each College*
Bilaspur	53	161	200	3,948
Chamba	48	134	249	5,106
Hamirpur	77	171	239	1,499
Kangra	75	203	260	3,190
Kinnaur	34	114	101	6,539
Kullu	51	199	303	9,003
Lahaul and Spiti	12	38	62	4,669
Mandi	51	148	222	2,580
Shimla	42	120	182	2,778
Sirmaur	52	160	250	2,971
Solan	67	192	280	1,599
Una	95	249	271	2,047
Himachal Pradesh	57	163	234	2,730

**College — Statistical Outline of Himachal Pradesh 2013–14*
Source: *Calculated using the UDISE data for 2013–14 and Population of Census 2011.*

Hamirpur—one primary school for 77 students and Kangra—one primary school for 75 students, showed the lowest proportion of primary schools available, in relation to the population in this specific age-group. On the other hand, the sparsely populated district of Lahaul and Spiti had one primary school for 12 students followed by Kinnaur which had one school for every 34 students. The scenario with regard to the districts was similar for the upper primary schools also. The School Population Ratio (SPR) was relatively low at both the primary and upper primary levels, representing a high level of access in almost all the districts of the state.

Secondary and Senior Secondary Schools: The SPR calculated for the secondary schools included the number of schools at this level and

population in the age-group 14–17 years. At this level, the accessibility to schools in Shimla district was good with one school available for 182 persons in the relevant age-group, this could mainly be due to it being the State capital, followed by the districts of Bilaspur and Hamirpur. On the contrary, the districts of Kullu (303 students/school) and Solan (280 students/school) had lower levels of access.

Higher Educational Institutions: This includes the number of higher educational institutions, such as degree colleges, Universities, engineering colleges, polytechnics, etc., available in a district in relation to the total population in the age-group of 18–25 years. The highest availability of colleges is for Hamirpur, Solan and Una districts. The lowest availability of higher educational institutions is in Kullu and Kinnaur districts with just one higher educational institution available for 9,003 and 6,539 students, respectively. Overall, the SPR too shows a tapering end with the availability declining as one progresses from one level of education to the other.

Enrolment in Educational Institutions

Participation in an educational system is a reflection of the reach of educational facilities that the government has provided for its people. The participation rates, therefore, denote the effectiveness and importance of education to the people and society at large. This section tries to analyse the levels of educational participation at various levels of education in Himachal Pradesh. Although there are various measures of educational participation, the Gross Enrolment Ratios (GER) has been used here, mainly due to data constraints.

Gross Enrolment Ratio at School Level

Gross Enrolment Ratio (GER) is the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. Table 6 presents the GER from Class I to Class XII for the districts in Himachal Pradesh for the year 2013–14. At the State level, the GER for School education is 100.08 per cent, whereas it is 100.16 per cent for girls and 100.00 per cent for boys. According to Table 6, the district of Solan has the highest total GER (109.87 per cent), followed by Shimla (105.25 per cent) and Una (101.18 per cent). The lowest level of total GER is recorded in the far-flung and remote districts of Lahaul and Spiti (83.04 per cent) and Chamba (95.18 per cent), Mandi (95.50 per cent).

While comparing the GER for boys and girls separately, the highest GER for girls is recorded in Solan (107.69 per cent), Shimla (105.67 per cent) and Hamirpur (102.12 per cent); whereas for boys, the highest

Table 6
Gross Enrolment Ratio at the School Level

Classes I–XII			
District	**Boys**	**Girls**	**Total**
Bilaspur	99.89	100.91	100.37
Chamba	96.61	93.67	95.18
Hamirpur	102.12	102.12	102.12
Kangra	97.70	98.87	98.24
Kinnaur	96.07	98.2	97.14
Kullu	99.60	101.22	100.39
Lahaul and Spiti	78.74	87.39	83.04
Mandi	94.64	96.43	95.5
Shimla	104.86	105.67	105.25
Sirmaur	99.36	99.54	99.45
Solan	111.80	107.69	109.87
Una	101.35	100.98	101.18
Himachal Pradesh	100	100.16	100.08

Source: *UDISE 2013–14.*

GER is recorded in Solan (111.80 per cent), Shimla (104.86 per cent) and Hamirpur (102.12 per cent). The noticeable fact here is that out of the 12 districts in the State, the GER for girls is more than the GER of boys in as many as eight districts, which include Bilaspur, Kangra, Kinnaur, Kullu, Lahaul and Spiti, Mandi, Shimla and Sirmaur. The enrolment has increased manifold over the years in the State with the post-elementary enrolment showing a phenomenal increase primarily due to the government interventions through schemes such as SSA and RMSA which are intended to improve the participation and quality of education and minimise wastage.

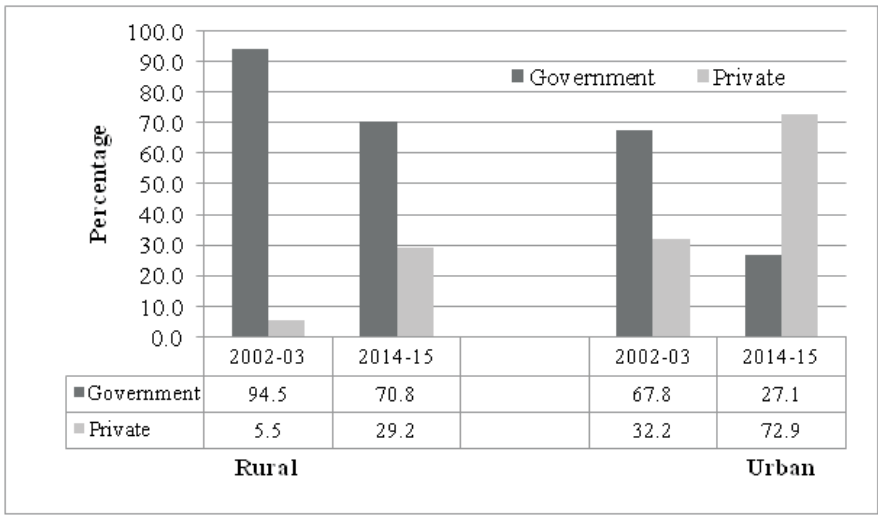
Enrolment in Private Schools

The given statistics clearly highlight the impressive progress made by the State as far as enrolment into the schooling system is concerned in the past few years. One of the emerging trends that can be observed as far as the school enrolment is concerned is the rapid increase in enrolment in schools under private management in contradistinction to a decline in enrolment in schools run by the

government. This change in trend could be a cause of concern, as the success of schooling revolution can be mainly attributed to the efficiently run government schools of Himachal Pradesh. This reversal in school participation is also visible across all districts in both rural and urban areas.

The mushrooming of private schools is visible in many pockets of India and numerous studies suggest that many of these schools are of poor quality and this phenomenon seems to have engulfed Himachal Pradesh also. The State government in a study conducted to identify the issues of declining enrolment in government schools has cited low-quality government schools with lower levels of basic amenities and facilities, compared to its private counterparts. Other factors include the age of admission, which is three years for private schools compared to six years for government schools. Although the government runs Balwadis which is the counterpart to the pre-primary level, these Balwadis fall under the ambit of the Directorate of Women and Child Development, as a part of the ICDS programme, therefore the study puts their coordination as one of the main issues. Rise in income and living standards, along with declining fertility rates are some of the causes identified in the report for rising private school participation.

Taking the DISE and UDISE data for the two periods 2002–03 and 2014–15 at the elementary level, it is evident that the private enrolment share has increased significantly. The share of enrolment in private schools



	Rural			Urban	
	2002-03	2014-15		2002-03	2014-15
Government	94.5	70.8		67.8	27.1
Private	5.5	29.2		32.2	72.9

Figure 3. Percentage Share of Enrolment in Elementary Schools — Himachal Pradesh
Source: *DISE 2002–03 and UDISE, 2014–15.*

was as low as 7.06 per cent in 2002–03 to the total enrolment, which rose to 37.39 per cent in 2014–15. On the contrary, the share of government schools drastically declined from 92.94 per cent in 2002–03 to 62.61 per cent in 2014–15. The share of enrolment in urban areas exhibits a phenomenal increase in a span of 12 years. The DISE data (Figure 3) for the elementary level clearly shows that the share in private school enrolment has increased from 32.17 per cent in 2002–03 to 72.94 per cent in 2014–15 in urban areas. On the contrary, there is a divergent trend with falling government school enrolment with only 27.06 per cent to the total share in 2014–15 as compared to a 67.83 per cent in 2002–02 in urban areas. The trend was also similar in rural areas as the share of enrolment in privately managed schools increased from 5.54 per cent to 29.23 per cent for the same periods.

Looking at the distribution of enrolment at the district level given in Table 7, it is apparent that the enrolment in schools managed by the private sector have increased across all the districts. The percentage change between the two time periods has been relatively higher in the districts that have a higher share of urban population, as compared to those with a higher share of rural population. Kangra registered over 50 per cent of the total enrolment in private schools, whereas the figure stood at only 10 per cent in 2002–03. Likewise, the district of Hamirpur, which is considered to be an education hub, also saw a similar trend with almost 50 per cent of the total enrolment in the private schools. The predominantly rural districts of Kinnaur, Lahaul and Spiti and Sirmaur also demonstrated a sharp decline in enrolment in government schools. The highest decline was visible in the district of Kinnaur, followed by Sirmaur and Lahaul and Spiti.

Private school enrolment in Himachal Pradesh, akin to the trend observed in several other States, shows higher enrolment of boys as compared to girls in all the districts.

Table 7
District-wise Percentage Share of Enrolment in Elementary Schools

District	2002–03		2014–15	
	Government	Private	Government	Private
Bilaspur	93.30	6.70	85.71	14.29
Chamba	95.27	4.73	62.46	37.54
Hamirpur	89.67	10.33	50.24	49.76
Kangra	89.25	10.75	47.75	52.25

Kinnaur	98.03	1.97	69.47	30.53
Kullu	91.23	8.77	69.42	30.58
Lahaul and Spiti	95.14	4.86	74.62	25.38
Mandi	92.95	7.05	68.42	31.58
Shimla	98.01	1.99	61.33	38.67
Sirmaur	98.25	1.75	73.52	26.48
Solan	90.69	9.31	58.78	41.22
Una	92.64	7.36	60.27	39.73
Himachal Pradesh	92.94	7.06	62.61	37.39

Source: *DISE 2002–03 and UDISE 2014–15.*

This difference shows an increasing trend over the years, and also the gender gap in participation in enrolment is wider at the lower levels, mainly an outcome of mushrooming of private schools at the primary level across the State. Taking the DISE data for percentage share of enrolment from Classes I to XII for the year 2014–15, Figure 4 clearly shows the wide gender gap that exists in enrolment. The districts with lower sex ratios, such as Lahaul and Spiti, Kinnaur and Sirmaur exhibited a higher proportion of female enrolment in government schools, as compared to the male students.

An important feature that emerges from the facts just discussed is the increase in private enrolment combined with a decline in government school enrolment, also a

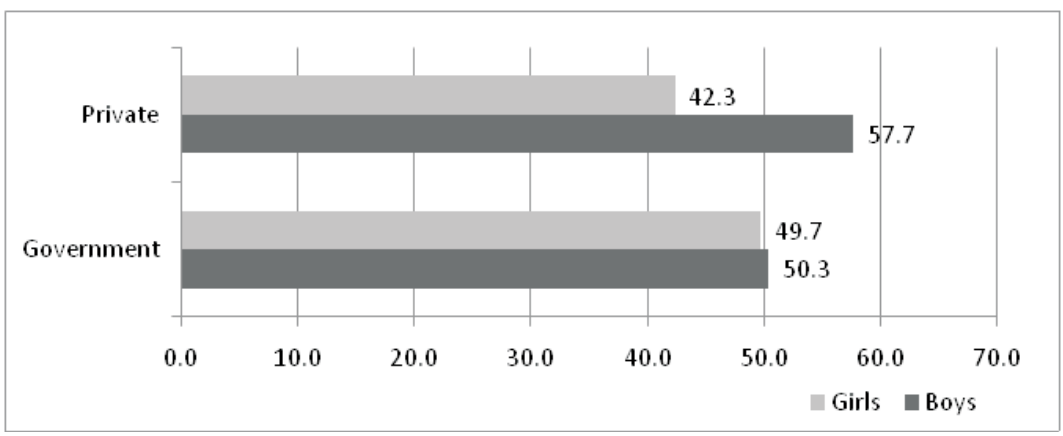


Figure 4. Gender-wise Percentage Share of Enrolments in Schools — Himachal Pradesh
Source: *UDISE 2014–15.*

wide gender gap in the participation with higher male enrolment within the private school. This is a serious cause of concern as it dilutes the efforts made by the government and also has implications for the overall development. Deeper focus needs to be given to this changing scenario especially when a lot of emphasis is being given to improve the access and facilities in schools run by the government; fresh initiatives and efforts need to be taken by the government to deal with these issues. Although the State government has taken initiatives, such as introducing English from Class I, opening model government schools to stimulate enrolment, but these steps need to be pursued with great vigour. Since there is demand for private schooling, the quality of the same can be enhanced through government partnership, which may resolve multiple issues provided it is planned, managed and executed in the most desired manner keeping in view the local context and demand.

Enrolment in Higher Education

One of the biggest challenges of researching higher education is the paucity of data. Scarcity of data comes as an even bigger challenge when we look at participation levels, mainly because wide variety of courses for various streams of technical, professional and general education are offered by diverse institutions. Therefore, an attempt has been made in this section to examine the participation levels in higher education using the baseline data recently collected by Directorate of Higher Education, Himachal Pradesh Government for Rashtriya Uchchatar Shiksha Abhiyan (RUSA), under the Ministry of Human Resource Development for the State Higher Education Plan, 2014–15. Looking at Table 8, it is evident that the number of those enrolled in different courses at the higher education level has increased manifold in the recent past and the number of participants has more than doubled in a span of eight years. An interesting observation that can be made from Table 8 is that the number of females enrolled in higher educational institutions is relatively higher than the males—there were 54 per cent females enrolled as compared to 46 per cent males.

Gross Enrolment Ratio at Higher Education Level

The gross enrolment ratio for higher education in Himachal Pradesh was 24.4 per cent in 2011–12, which is slightly higher than the national average of 20.8 per cent. Looking at the district-wise GER, most of the districts are below this average. The highest GER is observed for Shimla district (43.4 per cent) and this can be primarily attributed to a greater concentration of higher education institutions in the State capital of Shimla as compared to other districts and also the presence of the State University. The other districts

Table 8
Number of Students Enrolled in Higher Educational Institutions in Himachal Pradesh

Year	Total Enrolment	Male	Female
2006–07	95,663	47.53	52.47
2007–08	95,900	47.44	52.56
2008–09	1,09,425	47.15	52.85
2009–10	1,55,891	49.71	50.29
2010–11	1,81,310	52.90	47.49
2011–12	1,92,847	50.30	49.70
2012–13	1,81,052	48.80	51.19
2013–14	1,90,934	46.01	53.99

Source: *Himachal Pradesh State Higher Education Plan–RUSA, 2014–15.*

with higher GER are Una, Hamirpur and Solan—these districts also have a larger concentration of higher education institutions. The lowest GER is recorded in Lahaul and Spiti (1.6 per cent), Kinnaur (5.1 per cent) and Chamba (7.8 per cent) districts, which are also the most backward and far-flung districts of the State. The districts of Kullu, Sirmaur, Bilaspur, Kangra and Mandi have GER below the state-level average. These low levels of enrolment rates represent that a large proportion of those who graduate from the schooling system do not enroll themselves into higher education, and those who do mainly move towards urban areas where there exists a concentration of educational facilities, like Shimla, Solan and Hamirpur. The gap in participation at the school and higher education levels raises some very pertinent issues of why students discontinue. Issues pertaining to access, low learning outcomes and other social factors are common causes which need to be investigated.

Undergraduate Courses

Table 9 summarises the course-wise break-up of students in the under graduate courses across various disciplines for 2012–13. It can be noted that among all the disciplines, the number of students pursuing Arts as their undergraduate course is much higher than those pursuing Science or Commerce. Veterinary Science and Agriculture had the lowest number of students enrolled. One significant trend that can be noted in the course-wise break-

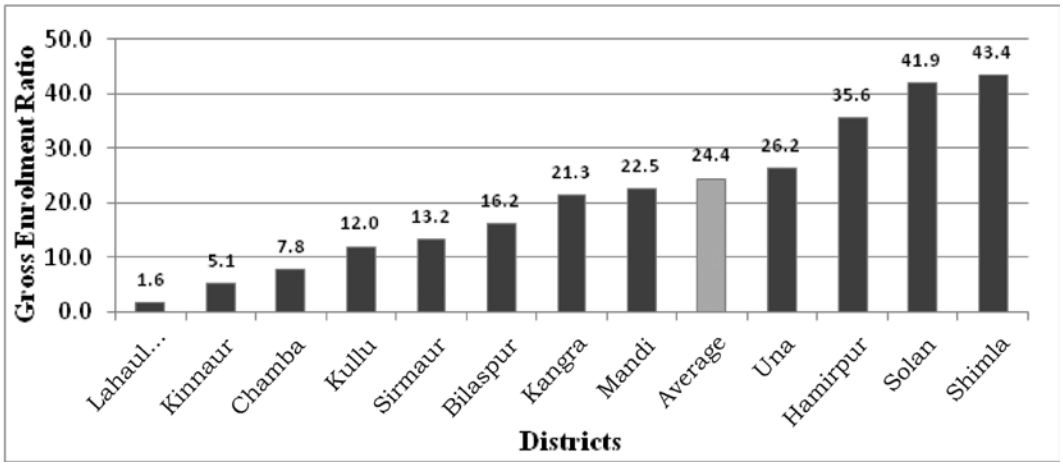


Figure 5. Higher Education Gross Enrolment Ratio–Himachal Pradesh, 2011–12
Source: *Himachal Pradesh State Higher Education Plan–RUSA, 2014–15.*

Table 9
Students Enrolled in Undergraduate Courses in Himachal Pradesh, 2012–13

Faculty/Discipline	Total Enrolment		
	Males (%)	Females (%)	Total
Arts	37.74	62.26	50,725
Science	40.89	59.11	22,124
Commerce	53.62	46.38	18,395
Management	61.01	38.99	2,724
Agriculture	39.71	60.29	685
Medicine and Allied Health Science	23.47	76.53	10,449
Engineering/Architecture/ Technology	78.67	21.33	36,232
Law	62.42	37.58	2,102
Veterinary Science	51.49	48.51	235
Others	35.84	64.16	14,156
Total	49.07	50.93	1,57,827

Source: *Himachal Pradesh State Higher Education Plan — RUSA, 2014–15.*

up for undergraduate courses is that the number of female students is higher than the male students. Table 9 also shows the percentage-wise break-up for girls and boys for different courses. It can be noted that while Arts, Science, Agriculture and Medicine are the favourite options for girls, the popular courses for boys are Commerce, Management, Engineering and Veterinary Science.

Postgraduate Courses

A similar trend can be observed in postgraduate courses wherein a higher proportion of students opt for Arts discipline, as compared to other subjects. A similar trend of more females being enrolled than males is visible at the postgraduate level. Veterinary Science and Law had lower enrolment as compared to Arts, Commerce, Sciences and Management in the period 2012-13. The number of females opting Commerce and Law at postgraduation level is more than the males, which shows a reversal of the trend for undergraduate courses.

Conclusion

The distribution of educational institutions is largely based on the population size of an area, which further has a huge bearing with the physical setting. Himachal Pradesh with such a setting has

Table 10
Students Enrolled in Postgraduate Courses in Himachal Pradesh, 2012–13

Faculty/Discipline	Total Enrolment		
	Males (%)	Females (%)	Total
Arts	43.25	56.75	6,028
Science	32.57	67.43	3,061
Commerce	30.69	69.31	3,193
Management	55.79	44.21	2,287
Agriculture	50.18	49.82	279
Medicine and Allied Health Science	53.13	46.88	640
Engineering/Architecture/Technology	68.83	31.17	770
Law	28.38	71.62	74
Veterinary Science	58.33	41.67	36
Others	49.30	50.70	1,710
Total	42.90	57.10	18,078

Source: *Himachal Pradesh State Higher Education Plan — RUSA, 2014–15.*

shown a tremendous growth in the availability of educational institutions over the last few decades. Inspite of this growth, there are some pockets that face shortage of institutions, especially after the elementary level. The availability of higher and technical educational institutions is the lowest and this makes accessibility more difficult for students as school graduation rates have increased. Participation across all levels has increased in totality, but the backward and far-flung districts of Lahaul and Spiti, Kinnaur and Chamba show lower levels of participation, which is the lowest for higher education level.

Problems of access to schools seem to have been met with, but the challenge of quality seems to plug the system, evident in the low learning outcomes of children in assessment studies. The role of the rising private sector needs to be tapped so that the benefits of different management can be maximised for the students coming from different socio-economic backgrounds. The government schooling system needs to be made more accountable and all stakeholders including teachers, administrators, policymakers, community and parents need to take active responsibilities.

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