International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

A Decadal Analysis of School Enrollment and Dropout Trends in Himachal Pradesh

Lalit Kumar[1], Prof. Sanjeet Singh[2]

[1]Research Scholar, Department of Economics, Central University of Himachal Pradesh, Himachal Pradesh- 177101,
[2]Professor, Department of Economics, Central University of Himachal Pradesh, Himachal Pradesh-177101,

Abstract
Education plays a crucial role in the development of both individuals and society. It enables people to acquire knowledge, strengthens essential skills, and think more critically. When learners have access to quality education, they are better equipped to understand real-life problems, identify practical solutions, and develop confidence in their own abilities. At a broader level, education contributes significantly to economic progress by improving employability, enhancing income opportunities, and fostering innovation and entrepreneurship. According to Census 2011, Himachal Pradesh recorded an overall literacy rate 82.80 percent, with male literacy at 89.53 percent and female literacy at 75.93 percent. The present study analyse the trends in student enrollment from primary to higher secondary levels, along with dropout rates from primary to secondary levels across all management schools in Himachal Pradesh. The finding reveals a steady decline in student enrollment during the study period. The highest enrollments were observed in the districts of Kangra and Mandi, while the lowest were reported in Kinnaur and Lahaul-Spiti. It is further observed that enrollment at the secondary and higher secondary levels tends to be lower as compared to primary and upper primary levels. The dropout rate was higher at the higher level of education. Targeted interventions are thus necessary, like counselling, awareness programmes for improving student retention across Himachal Pradesh.

Keywords: Enrollment, Dropout, Inter-District Disparity

Introduction

Education plays a pivotal role in strengthening social and economic development while fostering a more inclusive and equitable society. It helps individuals in becoming responsible and informed citizens by cultivating compassion, courage, resilience, scientific curiosity, creativity and deep commitment to ethical values.

Education fosters critical thinking, creative imagination and capacity to make responsible decisions in everyday activities. In addition to providing avenues for improved employment and financial security. It is essential to reducing poverty, improving gender equality and strengthening democratic principles. The global education development agenda, reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development and adopted by India in 2015, aims to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030.

Literacy is one of the key indicator of social development. It is closely linked to knowledge acquisition and formal education and it has a direct relationship with economic growth. According to census, a person is considered literate if they can read and write with understanding in any language. The United Nations Educational Scientific and Cultural Organization (UNESCO) has defined literacy as the, " ability to identify, understood, interpret, create, communicate and compute, using printed and written materials associated with varying context. Literacy involves a process of learning to enable an individual to achieve their goals, expand their knowledge and potential, and actively participate in society.

According to Census 2011, overall literacy rate of the Himachal Pradesh at 82.80 percent, with male literacy at 89.53 percent and female literacy at 75.93 percent. Among the districts, Hamirpur reported the highest literacy rate at 88.15 percent, followed by Una at 86.53 percent and Kangra i.e. 85.67 percent reflecting strong educational outcomes in these regions. While, Chamba reported the lowest literacy rate with 72.17 percent and the lowest rate of female literacy in the state at 61.67 percent, there are still gaps in tribal and remote areas.

Enrollment and dropout rates indicate the performance and effectiveness of an education system. Enrollment reflects the number of students enrolled at different levels of education. A higher enrollment indicates that a larger number of students are entering an educational system, which is a positive indication of increasing awareness and effective government initiatives. However, this progress is often slowed by the problem of student dropouts, where learners leave school before completing a particular level of education.

Dropout rates are because of various reasons such as economic constraints, limited parental support, long distances to reach schools, inadequate educational infrastructure, and socio-cultural problems related to early marriage or child labor. Through various government initiatives and awareness programmes have contributed to increased enrollment in recent years, ensuring sustained student retention through secondary and higher level of education continues to need further efforts. Improvement in school infrastructure, access to affordable financial academic support, and providing a safe and inclusive learning environment are key measures that effectively reduce dropout rates.

Review of literature

Chouhan (2013) observed that the dropout rate of students was higher in rural areas compared to urban areas at the primary level. The study reveals that literacy rates were affected by various factors such as; poor economic conditions, financial constraints, inadequate educational facilities, lack of awareness and depending on child labor dependency. Dewasi and Roy (2018) reported that the introduction of Sarva Shiksha Abhiyan increased the total enrolment of students between 2000-2015, this is an indication that this national programme has been useful in increasing access to education.

Halawar (2019) found that in the Dharwad district of Karnataka, the share of girl students was relatively higher in government schools, whereas enrollment of boys was greater in private institutions. The enrollment of student in government schools increased from between 2016-17 and 2017-18, due to adoption of innovative strategies to attract students and the improvement in the quality of education. Mishra and Azeez (2014) identified multiple factors contributing to student dropouts including parental illiteracy, minor health issues, lack of motivation, poor interest in studies, financial difficulties and lack of motivation, poor family environment and infrastructure etc.

Gouda and Sekher (2014) suggested that improving school infrastructure, enhancing the quality of education and increasing investment in education sector are crucial to reducing dropout rates. Mollah

(2018) found that student enrolment among boys increased by 8.67 percent, while among girl it rose by 19.43 percent more than twice the rate of boys and average annual dropout was 40.13 percent among girl students as compared to 41.45 percent among boy students during 2004-05 to 2013-14.

Research Methodology

The present study aims to examine the educational attainment of students in Himachal Pradesh. Enrollment and dropout rate have been considered as key measures of educational attainment. Enrollment trends were analysed across all educational stages from primary to higher secondary levels and while, dropout rates were examined from the primary level to secondary levels in schools under all management types (including government, private, and centrally managed institutions) for the period 2014-15 to 2023-24.

The study is based on secondary data obtained from the official website of Samgra Shiksha Himachal Pradesh' U-DISE (Unified- District Information System for Education) report for the period 2014-15 to 2023-24 and Statistical Abstract of Himachal Pradesh. The data were systematically tabulated, computed and analyzed using statistical tools such as Mean ($\bar{X}$), Standard Deviation (S.D) and coefficient of variation (C.V) were employed to measure inter- district disparities and evaluate the consistency and distribution of enrolment and dropout rates over the study period. The use of statistical measures provides a comprehensive understanding of regional disparities and trends in educational performance within the state.

Results and Discussion

Table 1: Year wise calculated $\bar{X}$/S.D/C.V of Enrollment of Students in Himachal Pradesh

Sr. No	Year	$\bar{X}$	S.D	C.V
1.	2014-15	120258.17	79518.83	66.12
2.	2015-16	119438.33	77870.45	65.20
3.	2016-17	117254.08	76476.45	65.22
4.	2017-18	115906.42	75056.83	64.76
5.	2018-19	114511.25	73905.39	64.54
6.	2019-20	113289.08	73531.60	64.91
7.	2020-21	111109.58	72204.06	64.98
8.	2021-22	111012.33	72034.30	64.89
9.	2022-23	108065.9	69772.78	64.57
10.	2023-24	105498	67658.40	64.14

Source: Compiled and computed by the researcher using data extracted from U-DISE Reports (2014-15 to 2023-24)

Table 1 depicts that the year wise combined analyses of student enrollment from primary level to higher secondary level in Himachal Pradesh for the period 2014-15 to 2023-24. The table clearly indicates that the mean ($\bar{X}$) enrolment of student's gradual decline over the decade, decreasing from 1,20,258.17 in 2014-15 to 1,05,498 in 2023-24. This downward trend may be attributed to factors such as migration, declining birth rates and increased adoption of family planning practices. The S.D also exhibits a decreasing trend from 79,518.83 in 2014-15 to 67,658.4 in 2023-24, indicating a reduction in the dispersion of enrolment data overtime, similarly, C.V ranges between 66.12 to 64.14, reflecting a marginal decline in variability. The slight reduction in C.V suggest that enrolment patterns have become more stable

and uniform across regions. Therefore, overall enrolment of students per year declined in Himachal Pradesh.

Table 2: District wise calculated X̄/S.D/C.V of enrollment of students in Himachal Pradesh

Sr. No	District	X̄	S.D	C.V
1.	Bilaspur	70777.00	2506.35	3.54
2.	Chamba	115589.90	4369.05	3.77
3.	Hamirpur	87038.20	4206.75	4.83
4.	Kangra	277269.60	13694.75	4.93
5.	Kinnaur	12753.50	1241.17	9.73
6.	Kullu	89485.80	4143.58	4.63
7.	L-Spiti	4096.60	428.28	10.45
8.	Mandi	183967.50	11048.14	6.00
9.	Shimla	156636.80	8498.74	5.42
10.	Sirmour	120424.20	3479.69	2.88
11.	Solan	141686.50	3366.74	2.37
12.	Una	103886.20	4397.89	4.23

Source: Compiled and computed by the researcher using data extracted from U-DISE Reports (2014-15 to 2023-24)

Table 2 depicts the district-wise analyses of student enrollment from primary to higher secondary level in Himachal Pradesh for the period 2014-15 to 2023-24. The data clearly shows that Kangra district recorded the highest mean enrollment of students i.e. (2,77,269.60), followed by Mandi (1,83,967.50) and Shimla (1,56,636.80), reflecting the relatively larger population base and educational infrastructure in these the districts. In contrast, Lahaul- Spiti (4,096.60) and Kinnaur (12,753.50) reported the lowest mean enrolment, which may be attributed to their low population density and challenges topographical conditions. In terms of variability, Solan (C.V = 2.37) and Sirmour (C.V = 2.88) exhibited the least fluctuation, indicating stability in student enrollment across the study period. Conversely, Lahaul-Spiti with a C.V = 10.45 and Kinnaur C.V = 9.73 depicted the highest variability. This indicated that the enrolment pattern has not been consistent and might have been influenced by factors such as migration, climatic constraints, and geographical isolation.

Table 3: Educational level wise calculated X̄/S.D/C.V of enrolment of students in Himachal Pradesh

Year	Description	Primary	Upper Primary	Secondary	Higher Secondary
2014-15	X̄	49063.42	30830.83	22125.92	18238.00
	S.D	30487.16	20082.91	15187.30	14233.39
	C.V	62.14	65.14	68.64	78.04
2015-16	X̄	48426.08	30804.42	21324.75	18883.08
	S.D	30261.93	19624.77	14370.83	14016.60
	C.V	62.49	63.71	67.39	74.23
2016-17	X̄	47988.83	30400.67	20684.08	18180.50
	S.D	30154.11	19509.55	13723.31	13478.99
	C.V	62.84	64.17	66.35	74.14

2017-18	$\bar{X}$	48231.75	29209.92	20697.33	17767.42
	S.D	30392.06	18438.04	13730.51	12822.46
	C.V	63.01	63.12	66.34	72.17
2018-19	$\bar{X}$	48389.92	28411.50	21010.92	16698.92
	S.D	30537.03	18151.49	13612.91	11909.67
	C.V	63.11	63.89	64.79	71.32
2019-20	$\bar{X}$	48044.00	28144.83	20274.92	16825.33
	S.D	30597.79	18036.40	13225.28	11970.95
	C.V	63.69	64.08	65.23	71.15
2020-21	$\bar{X}$	46266.67	28324.33	19479.17	17039.42
	S.D	29554.08	18417.56	12465.65	11993.91
	C.V	63.88	65.02	63.99	70.39
2021-22	$\bar{X}$	45916.08	28557.92	18035.75	18502.58
	S.D	29497.34	18601.94	11641.87	12437.61
	C.V	64.24	65.14	64.55	67.22
2022-23	$\bar{X}$	44570.83	27837.58	18217.33	17440.17
	S.D	28151.57	18068.16	11968.15	11804.49
	C.V	63.16	64.90	65.69	67.68
2023-24	$\bar{X}$	43553.08	27769.5	18556.25	15619.17
	S.D	27273.74	17841.43	12192.02	10638.43
	C.V	62.62	64.24	65.70	68.11

Source: Compiled and computed by the researcher using data extracted from U-DISE Reports (2014-15 to 2023-24)

Table 3 depicts the $\bar{X}$/S.D/C.V for students' enrolment in Himachal Pradesh at various educational levels. At the primary level of education, the average annual enrollment decreased from 49,063.42 in 2014-15 to 43,553.08 in 2023-24 while the C.V varied between 62 to 64, showing moderation in variation with almost relatively uniform trends in districts. Similarly, at the upper primary level, this average enrolment showed a decline from 30,830.83 to 27,769.50, with a slight variation in the coefficient of variation from 63 to 66, indicating gradual decline and hence showing more stabilized trends across districts. At the level of secondary, the average enrollment of students decreasing from 22,125.92 to 18,556.25, while the C.V. fell from 68.64 to 65.70. This downward shift in C.V. may be indicated that enrollment disparities among districts have gradually narrowed, pointing toward an increasing uniformity in student distribution at this stage. At higher secondary level, mean enrollment remained relatively stable over the years, declining marginally from 18,238.00 to 15,619.17. Although the C.V. remained the highest among all educational levels, declined from 78.04 to 68.11, implying that while inter-district variability persists at this stage, disparities has reduced over time.

Table 4 District wise calculated $\bar{X}$/S.D/C.V of dropout rate of students in Himachal Pradesh from 2014-15 to 2023-24

	Primary			Upper Primary			Secondary		
District	$\bar{X}$	**S.D**	**C.V**	$\bar{X}$	**S.D**	**C.V**	$\bar{X}$	**S.D**	**C.V**
Bilaspur	0.37	0.51	135.53	0.54	0.59	110.38	4.71	2.79	59.28
Chamba	0.62	0.61	97.68	1.45	0.82	56.49	11.03	2.74	24.81
Hamirpur	0.66	0.73	110.02	0.15	0.43	290.49	1.52	1.47	96.31

Kangra	0.42	0.66	158.27	0.33	0.7	213.29	3.71	1.32	35.43
Kinnaur	5.24	1.32	25.09	5.58	1.54	27.47	13.97	3.37	24.11
Kullu	0.89	0.75	83.35	1.62	0.95	58.27	9.33	2.85	30.51
L&S	6.04	4.17	69.14	4.33	3.13	72.63	20.01	1.71	8.59
Mandi	0.27	0.34	119.4	0.48	0.55	115.13	5.42	1.95	35.85
Shimla	3.05	1.03	33.75	1.68	0.54	31.48	6.19	1.23	19.81
Sirmour	0.69	0.78	11.62	1.22	0.84	68.51	12.17	3.82	31.38
Solan	0.62	1.33	215.13	1.39	91	65.41	7.97	2.34	29.34
Una	1.57	1.43	90.75	1.52	1.44	94.58	4.95	2.98	60.19

Source: Compiled and computed by the researcher using data extracted from U-DISE Reports (2014-15 to 2023-24)

Table 4 depicts the district wise calculated $\bar{X}$/S.D/C.V of student dropout rates in Himachal Pradesh. At the primary level, dropout rates continued to remain very low in the majority of districts, reflecting student retention during the initial stage of schooling. However, the relatively higher mean dropout rates were recorded in Lahaul-Spiti and Kinnaur, which are 6.04 and 5.24, respectively, due to geographical remoteness and low population density. The highest variability in districts such as Solan and Kangra was noted to be 215.13 and 158.27%, respectively, indicating inconsistent dropout patterns during the study period. At the upper primary level, dropout rates showed a minor increase, Kinnaur and Lahaul-Spiti represented high rates of 5.58 and 4.33, respectively. Hamirpur recorded the lowest rate of 0.15, indicating some successful strategies for student retention. At the secondary level, dropout rates steadily rose reaching the peak in the districts of Lahaul- Spiti (20.10) and Kinnaur (13.97). On the other hand, the lowest average dropout rates were recorded in Hamirpur, Bilaspur, and Kangra at all levels of education, reflecting better socio-economic conditions, along with robust educational infrastructure and improved access to education.

Table 5 Educational Level wise calculated $\bar{X}$/ S.D/ C.V of dropout rate of students in Himachal Pradesh

Year	Description	Primary	Upper Primary	Secondary
2014-15	**$\bar{X}$**	0.91	1.33	9.09
	S.D	1.31	1.22	4.46
	C.V	142.99	91.95	49.09
2015-16	**$\bar{X}$**	1.05	0.91	5.98
	S.D	1.08	0.88	3.91
	C.V	103.03	96.61	65.38
2016-17	**$\bar{X}$**	1.21	1.18	7.07
	S.D	1.76	1.16	3.52
	C.V	145.36	98.80	49.77
2017-18	**$\bar{X}$**	0.69	0.76	6.52
	S.D	1.39	0.94	3.51
	C.V	200.20	123.15	53.89

2018-19	**$\bar{X}$**	0.60	0.66	7.79
	S.D	0.83	0.75	3.15
	C.V	138.35	114.85	40.42
2019-20	**$\bar{X}$**	0.99	0.78	7.27
	S.D	1.37	0.96	4.04
	C.V	138.51	123.82	55.62
2020-21	**$\bar{X}$**	1.91	1.41	7.67
	S.D	1.60	1.28	2.76
	C.V	83.84	90.47	35.96
2021-22	**$\bar{X}$**	0.39	0.60	1.57
	S.D	0.70	0.62	1.68
	C.V	182.05	102.56	106.66
2022-23	**$\bar{X}$**	1.39	1.99	6.67
	S.D	1.19	1.32	3.43
	C.V	85.85	66.48	51.54
2023-24	**$\bar{X}$**	0.57	0.69	4.89
	S.D	1.08	0.89	3.10
	C.V	189.31	128.99	63.39

Source: Compiled and computed by the researcher using data extracted from U-DISE Reports (2014-15 to 2023-24)

Table 5 depicts educational level wise calculated $\bar{X}$/ S.D/C.V of student dropout rates in Himachal Pradesh. The mean dropout rate at the primary level remained uniformly low and ranged between 0.39 to 1.91, reflecting effective retention of students in the foundation period of education. However, C.V were very high in 2017-18 (200.20), 2021-22 (182.05) and 2023-24 (189.31) which indicate inter-district variations. The mean dropout rate at upper primary level varied from 0.60 to 1.99 and C.Vs varied from 66.48 to 128.99, indicating moderate variation in district level performance related to retention. The average dropout rate was comparatively higher in all years at the secondary level of education and varied from 1.57 to 9.09, while the C.Vs varied from 35.96 to 106.66, indicating noticeable variability but relatively lower compared to the previous stages. The highest dropout rate was observed during 2014-15 (9.09) and the lowest in 2021-22 (1.57), reflecting gradual improvement over time in reducing the number of dropouts and promoting continuation of students.

Conclusion and Policy Implications

The student enrolment in Himachal Pradesh has been gradually falling across all educational levels from 2014-15 to 2023-24. The Kangra and Mandi districts still show comparatively higher enrolment due to their larger populations, easier access to schools and better educational facilities. In contrast, student enrollment in districts; Kinnaur and Lahaul–Spiti remains low, which is largely linked to difficult terrain and scattered settlements. The dropout rates of students are low in primary level and increased notably at secondary stage. The study recommends that schools conduct regular counselling and awareness activities to help motivate students and improve parental involvement. It also emphasises the need to improve

educational infrastructure and adapt learning environments to better reflect the diverse socio-economic and geographical realities of students across the state.

Reference

1. Chouhan, P., "A Study on Literacy and Educational Attainment of Scheduled Castes Population in Maldah District of West Bengal'', Journal of Geography and Research planning, 2013, 6(1), 19-30.
2. Dutta, S., and Sivaramakrishnan, L., "Disparity in the Literacy Level among the Scheduled and Non-Scheduled Population: Indian Scenario in 21st century", Trans. Institute Indian Geographers, 2013, 3(2), 185-200.
3. Dewasi, P., and Roy, S. C., "Impact of Sarva Shiksha Abhiyan on the Enrollment of Students at the Primary and Upper Primary Level of education in India", International Journal of Basic and Applied Research, 2018, 8(6).
4. Gouda, S., and Sekher, T. V., "Factors Leading to School Dropouts in India: An Analysis of National Family Health Survey-3 Data'', Journal of Research & Method in Education, 2014, 4(6), 75-83, 1041-1050.
5. Halawar, S. V., "A Study on School Dropouts and Students Strength of Dharwad District of Karantaka", International Journal of Current Microbiology and Applied Science, 2019, 8(2), 1887-1896.
6. Mishra, P. J., and Azeez, A., "Family Etiology of School Dropouts: A Psychosocial Study'', International Journal of Multidisciplinary Approach and Studies, 2014, 1(5), 136-146.
7. Mollah, K., "A Comparative Study on Enrollment and Dropout up to Secondary Stage in Relation to Gender in India", International Journal of Creative Research Thoughts, 2018, 6(1), 866-872.
8. Ramaswamy, U., "Education and Inequality'', Economic and Political Weekly, 1985, 20(36), 1523-1528.
9. Government of Himachal Pradesh, Statistical Abstract of Himachal Pradesh, Department of Economic and Statistics, 2017-18, Shimla.
10. Government of Himachal Pradesh, Unified-District Information System for Education, Samgra Shiksha of Himachal Pradesh, Shimla.