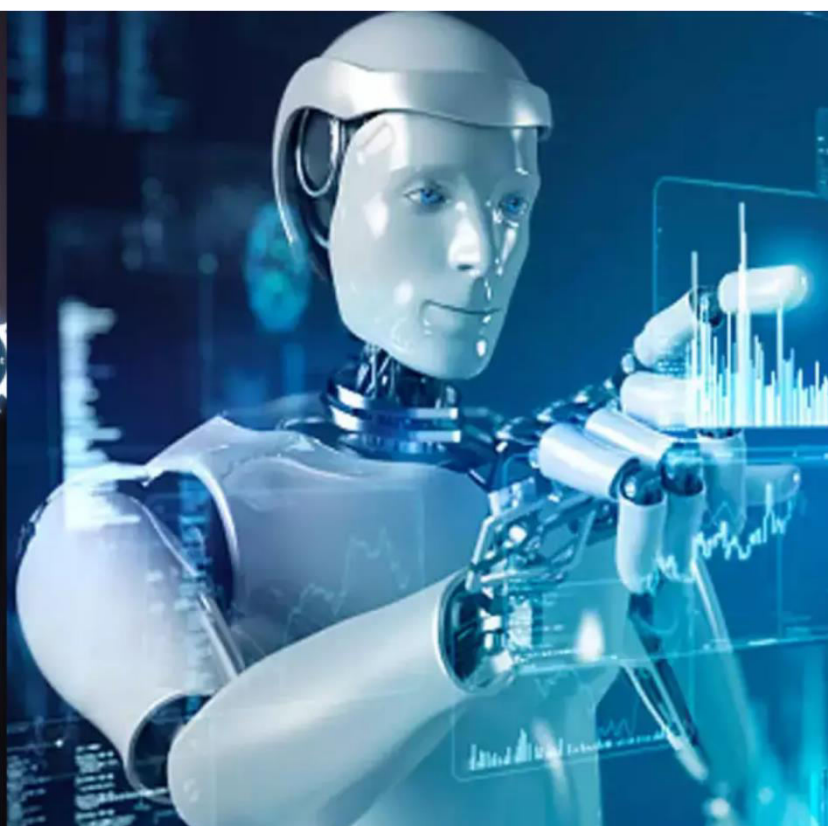




International Journal of Innovative Research in Science Engineering and Technology (IJIRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)



Impact Factor: 8.699

Volume 14, Issue 4, April 2025

Spatial and Socio-Economic Dimensions of Educational Enrolment in Hadauti: Patterns, Determinants, and Disparities

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ABSTRACT: Enrolment in educational institutions serves as a critical measure of educational advancement, social development, and human capital formation within a region. It reflects student participation across primary, secondary, and higher education levels, influenced by a range of socio-economic, cultural, and policy-driven factors. Key determinants such as population trends, infrastructure, teaching quality, gender disparities, and economic conditions significantly shape enrolment patterns. Government initiatives like universal education schemes and targeted incentives further impact student participation, especially among marginalized communities.

Variations in enrolment trends between rural and urban areas highlight underlying disparities—rural regions often grapple with inadequate infrastructure and socio-cultural barriers, while urban centers face issues like overcrowding and inequitable access. Analysing enrolment data provides valuable insights into regional educational inequalities, enabling policymakers to design informed, context-specific strategies that enhance access and equity. Understanding these dynamics is essential for advancing inclusive and equitable education for all.

KEYWORDS: Educational Enrolment, School Infrastructure, Access to Education

I. INTRODUCTION

Enrolment in educational institutions is an important indicator of educational progress, social development and overall human capital formation of a region. It reflects student participation at different levels of education such as primary, secondary and higher education. Enrolment patterns reflect not only the access and availability of educational facilities but also the socio-economic, cultural and policy factors influencing education systems.

Student enrolment is shaped by several determinants, including population dynamics, infrastructure, quality of teaching, gender inequalities and socio-economic conditions. Government policies such as universal education programmes, scholarships and incentives for backward communities also play an important role in encouraging enrolment. In addition, enrolment statistics are a valuable tool for analysing educational inequalities across different regions and demographics, helping to identify gaps in educational access and equity.

In rural and urban contexts, enrolment trends can vary considerably. For example, rural areas often face challenges such as inadequate school infrastructure, lack of trained teachers and socio-cultural barriers, which can lead to low enrolment rates, especially for girls. On the other hand, urban areas, despite having better facilities, may have problems such as overcrowded classrooms and unequal access to quality education.

II. LITERATURE REVIEW

Examination of the spatial and socio-economic aspects of educational enrolment in the literature displays a complex landscape of influencers at play regarding achievement gaps. Regional and income-based disparities in education: Evidence from Canada (Edgerton et al., 2008) This analysis shows that the gender gap persists within fields of study, with majority in science/technology being male and majority in arts as female. The authors highlight the economic pressures experienced by have-not provinces that contribute to lower levels of educational attainment, in part

emphasizing how important fiscal capacity is to educational access. They claim this reduction in government spending on education, especially in poorer areas, will increase inequality.

In a related study, (Vicky Maldonado, 2010) discusses ethnicity and educational pathways in higher education. Despite these general level considerations, these essays maintain a narrow scope which does serve one purpose: It allows researchers to avoid the simplistic cultural explanations (with the exception of the descendants of black migrants, and the Hawaiian issue) that so often elucidate the educational achievement of ethnic groups. In the final essay, Wong critiques the cultural explanations employed and resituates the question of education achievement in the context of performance, understanding the ethnic group as a fluid socially constructed entity. Data up to October 2023 "cultural values influence educational pathways often through the lens of expectations, family resources, and the socio-political context in which individuals are embedded," states the paper. Das (2023) takes forward this discussion to the Indian context by centring the urban-rural divide in educational attainment. The author highlights multiple studies emphasizing the significance of educational resources and parental encouragement in bridging the gap between urban and rural education. However, again, this highlights the role of financial assistance & empowerment initiatives in furthering educational opportunities to specific groups — particularly those less privileged. Socio-cultural norms emerge as major motivators for school participation and thus highlight the importance of specific interventions to narrow down the literacy-led gap. Yadav, Jetwal, and Khan (2018) examined the spatial patterns of literacy differences in the Hadauti region. Yadav, et.al, identified gender differences in literacy at the tehsil level of Kota Division of Rajasthan. However, due to various socio economic and cultural factors such as poverty, ignorance, social custom, conservative attitude of family etc incidence of gender disparity was found in many parts of the Division. Yadav identified the factors contributing to the disparities and proposed strategies for improving literacy rates across the Ajmer district

Study Area

The study area is located in the southeastern part of Hadauti Plateau in Rajasthan, between 24°25' to 25°51' North latitudes and 75°15' to 76°45' East longitudes. The total geographical area of this region is 14481.6 square kilometres. The east to west length of the region is 155 km and the north to south length is 180 km. This region includes the entire Bundi district, the entire Kota district except Ramganj Mandi tehsil, the entire Baran district except Chhabra, Kishanganj and Shahbad tehsils and Khanpur tehsil of Jhalawar district. There are 15 tehsils in this region, in which there are 2278 inhabited villages and 19 towns, the main ever-flowing river of this region is Chambal, whose tributaries are Kali Sindh, Parvan, Parvati and Mej. The climate here is semi-arid and sub-arid. Agriculture is the main occupation of the population here. Hadauti Region is an important industrial and agrarian region in the State of Rajasthan. There are 15 tehsils in the region and the unit of study is tehsil, as the data has been used for tehsils and used for analysis.

Analysis

Analysis of enrolment numbers helps policymakers and planners develop targeted interventions to improve educational access. It also helps understand the interplay between educational supply (availability of schools, teachers and resources) and demand (parental aspirations, awareness and socio-economic conditions). The study of enrolment trends is thus central to achieving the broader goals of inclusive and equitable education.

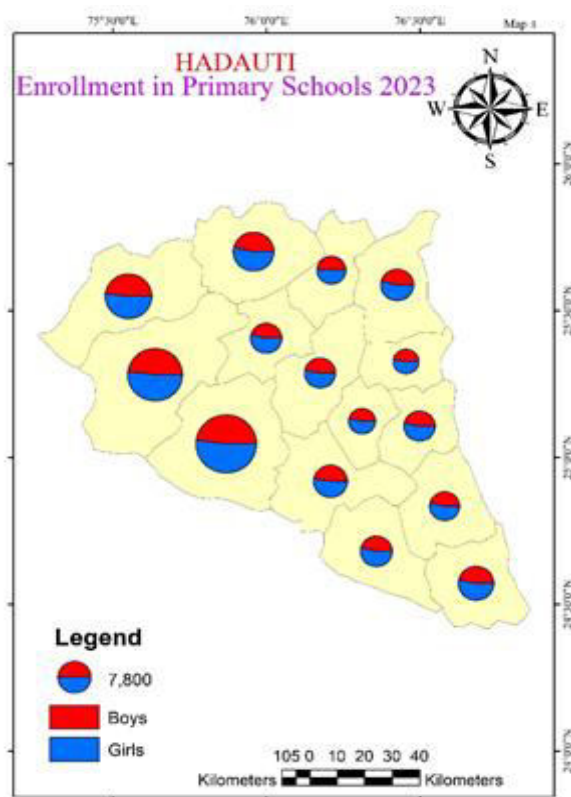
Enrolment in primary schools

In Hadauti Pradesh, a total of 151410 students were enrolled in primary schools in the session 2023-24. Table 3.5 shows the status of enrolment in primary schools in Hadauti Pradesh.

Table 1 Status of enrolment in primary schools in 2023-24

Name of Tehsil	Boys	Girls	Total
Atru	3020	3471	6491
Anta	2425	2750	5175
Baran	3307	3782	7089
Bundi	10406	11192	21598
Chhipabarod	4226	4857	9083
Digod	3279	3718	6997

Hindoli	7494	8091	15585
Indergarh	2976	3126	6102
K.Patan	3210	3845	7055
Khanpur	3323	3900	7223
Ladpura	12586	13777	26363
Mangrol	2241	2518	4759
Nainwa	5511	6389	11900
Peepalda	3572	4204	7776
Sangod	3910	4304	8214



There is a lot of variation in the enrollment numbers in the state. While the highest enrollment is seen in Ladpura and Bundi tehsils, the lowest enrollment is found in Mangrol and Anta tehsils (Map 1). One point is clearly visible from Table 1 that in all tehsils, the enrollment of girls is better than boys. These numbers prove the awareness towards women education in the society. In rural Hadaoti, the availability of primary schools within walking distance may encourage parents to send girls, as it reduces safety concerns. Co-educational schools, as well as the presence of female teachers in primary education, make parents feel more comfortable about sending their daughters.

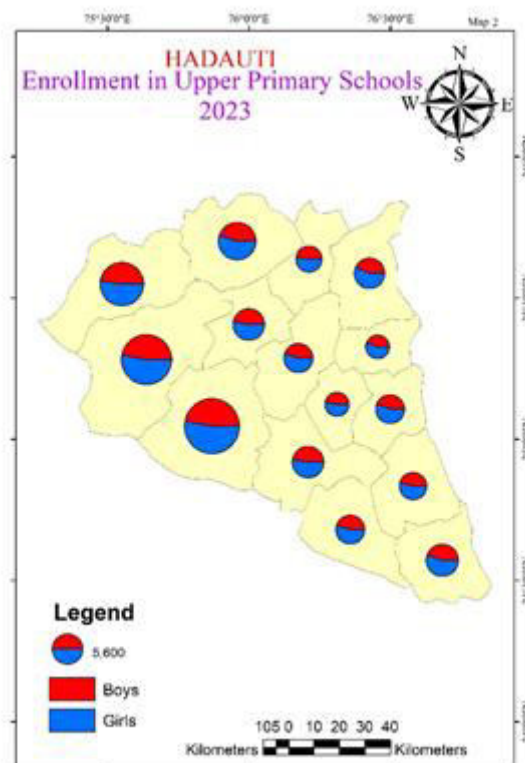
State and central government schemes such as the Balika Shiksha Abhiyan, free uniforms and mid-day meal programmes encourage girls in particular to enrol in schools. Campaigns such as Beti Bachao, Beti Padhao have emphasised the importance of girls' education, gradually changing traditional mindsets in favour of educating daughters. In rural areas boys are often required to assist in family occupations such as agriculture, cattle herding or business, while girls are considered better off attending primary school before assuming domestic responsibilities later. Families enroll girls at the primary level to provide them with some basic education before potentially abandoning their education at the higher level due to traditional roles.

Enrolment in Upper Primary Schools

In the session 2023-24, a total of 108754 students were enrolled in upper primary schools in Hadauti Pradesh, of which 50276 were boys and 58478 were girls. Thus, higher enrolment of girls than boys indicate the awakening trend of women's education. Table 2 shows the status of enrolment in upper primary schools in Hadauti Pradesh.

Table 2 Status of enrolment in upper primary schools 2023-24

Name of Tehsil	Boys	Girls	Total
Atru	2114	2487	4601
Anta	1669	1875	3544
Baran	2240	2799	5039
Bundi	7182	8113	15295
Chhipabarod	2814	3486	6300
Digod	2330	2834	5164
Hindoli	5486	6002	11488
Indergarh	1999	2148	4147
K.Patan	2852	3217	6069
Khanpur	2295	2811	5106
Ladpura	8644	9725	18369
Mangrol	1520	1896	3416
Nainwa	3847	4724	8571
Peepalda	2419	3180	5599
Sangod	2865	3181	6046



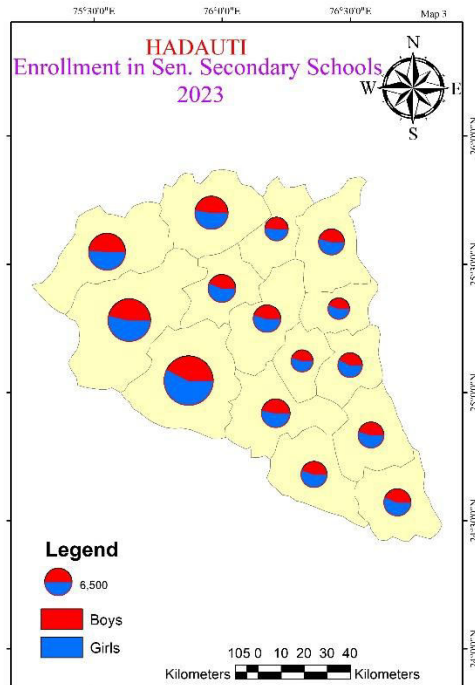
There are also considerable disparities in the enrolment numbers (Map 2). While it is more than 10000 in Ladpura, Bundi and Hindoli, the highest is 18369 in Ladpura tehsil. At the same time, re-enrolment is the lowest in Mangrol and Anta tehsils. State and central government schemes such as the Balika Shiksha Abhiyan, free uniforms, bicycles for girls, and mid-day meal programs specifically target girls to encourage them to enroll in schools. Programs that provide monetary benefits such as scholarships to families for sending girls to school tend to induce higher enrollment of girls. The Right to Education Act mandates free and compulsory education, with a particular focus on improving girls' access to education. In many rural areas, families now view basic education as beneficial to improving a girl's future, including better marriage prospects. Education for girls is often free or subsidized, while boys may face an opportunity cost as they are expected to contribute to the family's income or labor. In large families, parents prefer boys for work and enroll girls in school as an easier and cheaper option.

Enrolment in Higher Secondary Schools

In the session 2023-24, 119465 students were enrolled in secondary and higher secondary education in Hadauti Pradesh, out of which 54073 were boys and 65392 were girls. The highest enrolment was seen in Ladpura tehsil, second in Bundi and third in Hindoli tehsil. Due to the high urban population in Ladpura tehsil, there is easy availability of study opportunities for girls in higher classes. Along with this, students also get the facility of studying in coaching institutes here. In all tehsils, the enrolment of girls is more than that of boys (Table 3 and Map 3).

Table 3 Status of enrolment in higher secondary schools

Name of Tehsil	Boys	Girls	Total
Atru	2621	3150	5771
Anta	1871	2303	4174
Baran	2200	2974	5174
Bundi	7222	8320	15542
Chhipabarod	2773	3563	6336
Digod	2955	3551	6506
Hindoli	5736	5988	11724
Indergarh	2313	2463	4776
K.Patan	2867	3703	6570
Khanpur	2630	3276	5906
Ladpura	8835	12012	20847
Mangrol	1729	2221	3950
Nainwa	4410	4952	9362
Peepalda	2637	3164	5801
Sangod	3274	3752	7026



Enrolment in colleges

In Hadauti Pradesh, in the session 2023-24, 50340 students were enrolled in college education, out of which 23775 were boys and 26565 were girls. The highest enrolment was observed in Ladpura tehsil, followed by Bundi in second place and Baran tehsil in third. Ladpura tehsil has a large urban population and the very old JDB Kanya Mahavidyalaya has been attracting girl students to study in higher classes. Digod and Chhipabaraud tehsils lag behind in terms of enrolment in the region.

Table 4 Status of enrolment in colleges

Name of Tehsil	Boys	Girls	Total
Atru	501	520	1021
Anta	398	438	836
Baran	3786	3922	7708
Bundi	4018	4133	8151
Chhipabarod	202	233	435
Digod	161	189	350
Hindoli	413	543	956
Indergarh	305	320	625
K.Patan	312	336	648
Khanpur	600	626	1226
Ladpura	10715	12270	22985
Mangrol	578	914	1492

Nainwa	339	350	689
Peepalda	495	736	1231
Sangod	952	1035	1987

Awareness about girls' education has led to a change in social attitudes, encouraging more girls to enrol in colleges. Families in Hadauti Pradesh are more supportive of girls' education, recognising its benefits for their daughters' futures and encouraging them to enrol. Also, rising employment opportunities, especially in areas such as education and healthcare, are attracting more girls to pursue higher education. Improvements in college infrastructure, including separate facilities for girls, contribute to the increase in enrolment. The presence of female teachers in educational institutions encourages more girls to pursue education. Also, government schemes such as Mukhyamantri Uchcha Shiksha Scooty Yojana, Kalibai Scooty Yojana, Devnarayan Scooty Yojana are all run by the government to increase the participation of girls in higher education. Boys in rural areas are sometimes sent to work in urban areas or join their families in seasonal labor, which reduces enrollment numbers. Boys leave school earlier than girls to contribute financially to the household.

University Enrollment

In Hadauti Pradesh, there were 102435 students enrolled in college education in the session 2023-24, out of which 47239 were boys and 55196 were girls. All these universities are located in Ladpura tehsil. Here too, the enrollment of girls is more than that of boys. The points mentioned in college education are the reasons for this as well as 30% reservation in government services by the state government is encouraging girls to enroll and study in higher education.

III. CONCLUSION

The Hadauti region, with its rich cultural heritage and historical significance, has witnessed a gradual transformation in the field of education. While earlier years were marked by challenges such as limited access, infrastructural constraints, and socio-economic barriers, recent efforts have led to improvements in literacy and educational outreach. The expansion of middle and secondary education, along with vocational training initiatives, has played a vital role in empowering youth and women. These developments have fostered greater social mobility, encouraged innovation, enhanced health awareness, and stimulated regional economic growth. As a result, the Hadauti region is steadily progressing toward a more inclusive and educated society.

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