

REGIONAL INEQUALITY IN SCHOOL ENROLMENT IN TELANGANA: AN ECONOMIC ANALYSIS OF DISTRICT-WISE EDUCATIONAL ACCESS IN 2024–25

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Abstract

This study examines differences in school enrolment and school choice across the 33 districts of Telangana using UDISE+ data for 2024–25. The results show a clear regional imbalance, with **38% of students concentrated in Hyderabad, Rangareddy, and Medchal-Malkajgiri**, where private schools account for most enrolment. In rural and tribal districts, government and welfare schools serve the majority of students. The findings suggest that urbanisation, household income, and school availability influence the choice between private and public education. The study also highlights the importance of welfare schools in improving access in less-developed districts and suggests ways to make public education spending more effective.

Keywords

UDISE, Enrolment in Private & Government Schools, Regional Disparities in Enrolment

Introduction

School education plays an important role in human capital formation, employment, productivity, and economic growth. Unequal access to schools can therefore create differences in economic opportunities across regions. Telangana has experienced strong economic growth since its formation in 2014, but public spending on education remains relatively low, while household spending on private schooling is high. This makes the distribution of educational access an important economic issue. This study examines district-wise school enrolment in Telangana for 2024–25, covering **5,893,334 students across 41,316 schools in 33 districts**. It analyses regional differences in enrolment, the role of government and private schools, and the contribution of welfare institutions to educational access.

Objectives of the Study

The primary objective of this paper is to analyze district-wise school enrolment data in Telangana for the academic year 2024–25 to evaluate spatial disparities in educational access and institutional choice¹. The specific research objectives are:

1. To quantify the spatial distribution and geographic concentration of total school enrolment across the 33 districts of Telangana¹.
2. To analyze the relative market shares of private schools, government/local-body schools, and specialized government-funded welfare institutions across districts¹.
3. To examine the socio-economic and demographic drivers—including urbanization, household income levels, and agglomeration economies—that influence institutional variations in school choice³.

4. To evaluate the long-term economic implications of unequal educational access for human capital formation, labor productivity, and inter-district economic convergence, offering evidence-based policy recommendations³.

Data and Methodology

The primary dataset utilized in this study is compiled from administrative records of the Unified District Information System for Education (UDISE+) for Telangana covering the academic year 2024–25¹. The dataset covers all 33 districts of the state, comprising 41,316 schools and 5,893,334 enrolled students¹.

The primary variables extracted from the district-level records include:

- **Total Schools and Total Enrolment:** Aggregate institutional counts and student enrolment per district¹.
- **Private Schools and Private Enrolment:** Unaided private educational institutions and their total student body¹.
- **Government & Local-Body Schools and Enrolment:** Schools directly managed by the State Government, Zilla Parishads, Mandal Praja Parishads, and Municipal Corporations¹.
- **Other Government-Funded Schools and Enrolment:** Specialized public institutions fully funded or subsidized by the state¹. This category includes residential welfare educational societies—such as Telangana Social Welfare Residential Educational Institutions Society (TGSWREIS), Telangana Tribal Welfare Residential Educational Institutions Society (TGTWREIS), Mahatma Jyotiba Phule Telangana Backward Classes Welfare Residential Educational Institutions Society (MJPTBCWREIS), and Telangana Minorities Residential Educational Institutions Society (TMREIS)—alongside Kasturba Gandhi Balika Vidyalayas (KGBVs), Model Schools, Tribal Welfare Department Ashram Schools, and Aided Schools¹.

The empirical analysis applies several standard economic and statistical techniques¹:

- **Proportional Share Ratios:** Calculating district shares of total state student enrolment and determining the institutional composition (Private %, Govt/LB %, Other Govt %) within each district¹.
- **Summary Dispersion Statistics:** Estimating the Mean (μ), Standard Deviation (σ), Coefficient of Variation ($CV = \frac{\sigma}{\mu}$), and Gini Coefficient to quantify spatial inequality¹.
- **Institutional Density Metrics:** Deriving average student enrolment per school across management categories to evaluate scale economies and capacity utilization¹.

Secondary contextual evidence regarding state GSDP, household educational spending, literacy profiles, and residential welfare society structures is drawn from official publications of the Government of Telangana, Reserve Bank of India, NITI Aayog, Ministry of Education, and peer-reviewed academic literature².

Results and Analysis

Overall Enrolment Pattern and Spatial Concentration

The 2024–25 UDISE+ administrative dataset demonstrates marked spatial variation in school

student populations across Telangana¹. Total school enrolment across all 33 districts stands at 5,893,334 students distributed across 41,316 educational institutions¹. The district mean enrolment is 178,585.88 students, accompanied by a high standard deviation of 190,204.85¹. This yields a Coefficient of Variation (CV) of 1.0651, confirming substantial regional dispersion¹. The spatial Gini coefficient for total student enrolment across districts is calculated at 0.4194, indicating a high concentration of the student population in select economic centers¹.

Table 1 summarizes the state-level aggregate profile across school management categories for 2024–25¹.

Management Category	Total Schools	Share of Total Schools (%)	Total Student Enrolment	Share of Total Enrolment (%)	Average Enrolment per School
Private Schools	11,154	26.99	3,511,510	59.58	314.82
Govt & Local-Body Schools	27,804	67.30	1,722,548	29.23	61.95
Other Govt-Funded Schools	2,358	5.71	659,286	11.19	279.60
State Total	41,316	100.00	5,893,334	100.00	142.64

The macro data reveals a structural imbalance between institutional count and student intake¹. Conventional Government and Local-Body (Govt/LB) schools account for 67.30 percent of total physical school infrastructure in the state (27,804 schools), yet they serve only 29.23 percent of the enrolled student body (1,722,548 students)¹. Consequently, the average institutional density in the Govt/LB sector is low, at 61.95 students per school¹. In contrast, private schools constitute 26.99 percent of total institutions (11,154 schools) but absorb 59.58 percent of total enrolment (3,511,510 students), maintaining an average density of 314.82 students per institution¹. Specialized "Other Government-Funded Schools" represent 5.71 percent of facilities (2,358 schools) and account for 11.19 percent of student enrolment (659,286 students), with a high average school density of 279.60 students¹.

Table 2 presents the full district-wise breakdown of schools and enrolment across management categories for the 2024–25 academic year¹.

District	Total Schools	Total Enrolment	Private Enrolment	Govt & LB Enrolment	Other Govt Enrolment	Private Share (%)	Govt & LB Share (%)	Other Govt Share (%)
Adilabad	1,436	123,320	over 38,874	66,438	18,008	31.52	53.87	14.60
Bhadradri Kothagudem	1,626	144,054	52,992	68,547	22,515	36.79	47.58	15.63
Hanamkonda	864	131,040	88,269	24,735	18,036	67.36	18.88	13.76
Hyderabad	2,890	807,051	666,442	87,586	53,023	82.58	10.85	6.57
Jagtial	1,122	133,812	70,182	44,997	18,633	52.45	33.63	13.92
Jangaon	637	60,243	24,178	22,185	13,880	40.13	36.83	23.04
Jayashankar Bhupalpally	538	40,161	16,482	14,939	8,740	41.04	37.20	21.76
Jogulamba Gadwal	602	107,210	39,495	56,786	10,929	36.84	52.97	10.19
Kamareddy	1,251	140,999	47,813	70,565	22,621	33.91	50.05	16.04
Karimnagar	1,005	138,812	87,781	30,206	20,825	63.24	21.76	15.00
Khammam	1,596	171,150	85,995	62,113	23,042	50.25	36.29	13.46
Kumuram Bheem Asifabad	1,245	83,033	21,632	46,945	14,456	26.05	56.54	17.41

Mahabubabad	1,181	87,962	31,211	38,035	18,716	35.48	43.24	21.28
Mahabubnagar	1,173	141,208	66,503	57,752	16,953	47.10	40.90	12.01
Mancherial	1,051	106,240	52,011	36,429	17,800	48.96	34.29	16.75
Medak	1,061	112,328	31,166	63,052	18,110	27.75	56.13	16.12
Medchal-Malkajgiri	2,159	706,275	614,243	82,020	10,012	86.97	11.61	1.42
Mulugu	551	36,011	9,347	19,376	7,288	25.96	53.81	20.24
Nagarkurnool	1,096	109,222	39,384	47,145	22,693	36.06	43.16	20.78
Nalgonda	2,017	198,990	99,428	62,080	37,482	49.97	31.20	18.84
Narayanpet	659	90,245	29,577	50,129	10,539	32.77	55.55	11.68
Nirmal	1,047	111,824	52,919	43,614	15,291	47.32	39.00	13.67
Nizamabad	1,764	256,620	136,654	83,374	36,592	53.25	32.49	14.26
Peddapalli	750	82,500	46,618	23,141	12,741	56.51	28.05	15.44
Rajanna Sircilla	657	73,326	27,550	32,084	13,692	37.57	43.76	18.67
Rangareddy	2,999	725,110	562,573	126,019	36,518	77.58	17.38	5.04

Sangareddy	1,848	296,727	169,661	96,286	30,780	57.18	32.45	10.37
Siddipet	1,272	148,004	57,201	63,829	26,974	38.65	43.13	18.23
Suryapet	1,261	123,123	63,803	39,332	19,998	51.82	31.95	16.24
Vikarabad	1,334	132,185	42,062	67,485	22,638	31.82	51.05	17.13
Wanaparthi	715	78,088	32,857	33,070	12,161	42.08	42.35	15.57
Warangal	996	102,624	62,240	26,870	13,514	60.65	26.18	13.17
Yadadri Bhuvanagiri	913	93,837	44,367	35,384	14,086	47.28	37.71	15.01

(Note: Compiled from UDISE+ 2024–25 administrative primary records¹. Primary row data for Suryapet contains an internal discrepancy of 10 students between total reported enrolment and sector sub-sums¹.)

Geographic Concentration and Extreme Variations

The geographic distribution of student enrolment is heavily skewed toward the Greater Hyderabad urban agglomeration¹. The three largest districts—Hyderabad (807,051 students), Rangareddy (725,110 students), and Medchal-Malkajgiri (706,275 students)—collectively account for 2,238,436 students, representing 37.98 percent of total school enrolment in Telangana¹. Expanding the metropolitan region to include Sangareddy (296,727 students) and Nizamabad (256,620 students) raises the top five districts' share to 47.37 percent of total enrolment¹.

In contrast, rural, forest, and tribal districts exhibit low enrolment figures¹. Mulugu records the lowest enrolment in the state at 36,011 students (0.61 percent share), followed by Jayashankar Bhupalpally (40,161 students; 0.68 percent share), Jangaon (60,243 students; 1.02 percent share), Rajanna Sircilla (73,326 students; 1.24 percent share), and Wanaparthi (78,088 students; 1.33 percent share)¹. Together, the bottom five districts contain 287,829 students, representing only 4.88 percent of state enrolment¹. The absolute gap between the highest-enrolment district (Hyderabad) and the lowest (Mulugu) stands at 771,040 students, producing an extreme concentration ratio of 22.41 to 1¹.

Table 3 compares the highest and lowest ranked districts across enrolment volume and sector management shares¹.

Ranking Metric	District Name	Absolute Value / Share (%)	Predominant Economic Character
Top 3 Total Enrolment	1. Hyderabad	807,051 students (13.69%)	Urban Metropolitan Core / Services
	2. Rangareddy	725,110 students (12.30%)	Suburban Industrial / Tech Corridor
	3. Medchal-Malkajgiri	706,275 students (11.98%)	Peri-Urban Manufacturing Hub
Bottom 3 Total Enrolment	31. Jangaon	60,243 students (1.02%)	Rural Agrarian Hinterland
	32. Jayashankar Bhupalpally	40,161 students (0.68%)	Mining and Forest Belt
	33. Mulugu	36,011 students (0.61%)	Tribal and High Forest Cover
Top 3 Private Share (%)	1. Medchal-Malkajgiri	86.97% private share	Urban Suburban
	2. Hyderabad	82.58% private share	Metropolitan Core
	3. Rangareddy	77.58% private share	Suburban / Information Technology
Top 3 Govt & Local Body Share (%)	1. Kumuram Bheem Asifabad	56.54% Govt/LB share	Tribal / Rural Agrarian
	2. Medak	56.13% Govt/LB share	Rural Agrarian
	3. Narayanpet	55.55% Govt/LB share	Drought-Prone Border Belt
Top 3 Other Govt	1. Jangaon	23.04% Other Govt	Rural Welfare Focus

Share (%)		share	
	2. Jayashankar Bhupalpally	21.76% Other Govt share	Tribal / Backward Focus
	3. Mahabubabad	21.28% Other Govt share	Tribal / Agrarian Belt

Sectoral Disaggregation: Public, Private, and Welfare Provision

Evaluating unweighted district averages reveals significant regional variations¹. Across the 33 districts, the mean private enrolment share is 47.12 percent, the mean Government and Local Body share is 37.93 percent, and the mean Other Government-Funded share is 14.95 percent¹. The divergence between the unweighted district averages and the weighted state totals (59.58% private, 29.23% Govt/LB, 11.19% Other Govt) illustrates how heavily urban population weights tilt state-level aggregates¹.

In urbanized districts, private institutions dominate educational delivery¹. Medchal-Malkajgiri records the state's highest private enrolment share at 86.97 percent, followed by Hyderabad (82.58 percent), Rangareddy (77.58 percent), Hanamkonda (67.36 percent), Karimnagar (63.24 percent), and Warangal (60.65 percent)¹. In these urban centers, the combined public sector share (Govt/LB plus Other Govt) drops to between 13.03 percent and 39.35 percent¹.

Conversely, in peripheral, tribal, and agrarian districts, public education remains the primary provider¹. Kumuram Bheem Asifabad records the lowest private enrolment share at 26.05 percent, with 73.95 percent of students attending state-funded institutions (56.54 percent in Govt/LB schools and 17.41 percent in Other Govt-Funded schools)¹. Similar public sector reliance occurs in Mulugu (74.05 percent total public share), Medak (72.25 percent), Narayanpet (67.23 percent), Vikarabad (68.18 percent), Adilabad (68.48 percent), and Jogulamba Gadwal (63.16 percent)¹.

A notable structural feature of Telangana's educational landscape is the presence of "Other Government Funded Schools"¹. This category—comprising specialized welfare residential societies (TGSWREIS, TGTWREIS, MJPTBCWREIS, TMREIS), Kasturba Gandhi Balika Vidyalayas, Model Schools, and Tribal Ashram schools—accounts for 659,286 students statewide¹. In agrarian and backward districts, these institutions absorb over one-fifth of total student enrolment¹. Leading districts by Other Government-Funded share include Jangaon (23.04 percent), Jayashankar Bhupalpally (21.76 percent), Mahabubabad (21.28 percent), Nagarkurnool (20.78 percent), and Mulugu (20.24 percent)¹.

Primary administrative data provides detailed breakdowns for the 2,358 schools in this specialized government-funded category¹:

- **MJPBCWREIS (Backward Classes Residential):** 294 schools catering to 120,137 students (average density: 408 students/school)¹.
- **KGBV (Kasturba Gandhi Balika Vidyalayas):** 488 residential schools serving 126,848 marginalized adolescent girls (average density: 259 students/school)¹.
- **TGSWREIS (Social Welfare Residential):** 236 schools serving 108,136 Scheduled Caste

students (average density: 458 students/school)¹.

- **Model Schools:** 194 institutions accommodating 103,095 students across educational blocks¹.
- **Tribal Welfare Ashram & Residential Schools (TGTWREIS / TW Dept):** 122 TWRS residential schools (42,640 students; average density: 350) and 1,739 tribal primary/secondary schools including 271 Ashram schools (58,451 students; average density: 215)¹.
- **TMREIS (Minorities Residential):** 205 schools educating 59,485 students (average density: 290 students/school)¹.
- **TREIS (General Residential):** 35 institutions serving 18,360 students (average density: 524 students/school)¹.
- **Private Aided & Other Subsidized Units:** 556 aided schools catering to 57,278 students (with 170 reporting zero enrolment), 51 Central Government schools (Kendriya/Jawahar Navodaya) serving 32,141 students, and 44 Madarsas educating 1,744 students¹.

Conclusion

The analysis of district-wise school enrolment data in Telangana for 2024–25 highlights an educational structure marked by spatial concentration and institutional bifurcation¹. Enrolment is heavily concentrated in the metropolitan core, with nearly 38 percent of all students residing in Hyderabad, Rangareddy, and Medchal-Malkajgiri¹. In these urban districts, private institutions absorb up to 87 percent of total enrolment, placing a substantial financial burden on household budgets¹.

In contrast, in rural, tribal, and peripheral districts such as Mulugu, Kumuram Bheem Asifabad, Narayanpet, and Medak, private market provision remains limited¹. Public education forms the core of human capital development in these regions, with local-body schools and specialized state welfare residential institutions accounting for over 70 percent of total enrolment¹. Specialized welfare residential societies play a vital stabilizing role, providing fully subsidized, high-density education to marginalized communities in backward districts¹.

To prevent these educational disparities from widening regional economic inequality, Telangana must align its public educational investments with its high macroeconomic growth³. Increasing state budgetary allocations to school education, rationalizing low-density rural local-body schools, expanding targeted welfare residential capacity, and establishing quality frameworks for private providers are essential steps toward building an equitable human capital foundation across all districts of the state².

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