

The Anatomy of Regional Massification: Higher Education in Khorezm Region, Uzbekistan, 2020–2025

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Abstract: This article examines the transformations within the higher education system of the Khorezm region, Uzbekistan, from 2020 to 2025, based on official statistical data. The primary sources include the annual publication "Education in Uzbekistan" by the National Statistics Committee and a departmental reference note on the region compiled as of 16 June 2025. Over the five-year period, the number of higher education institutions increased from three to eight, and the student population expanded from 22,800 to 60,600—representing a factor of 2.66, surpassing the national average of 2.51. The predominant driver of this growth was the non-state sector, which contributed to 53.4 percent of the total increase over the five years and now enrolls 33.3 percent of all students in the region. Conversely, the capacity of academic staff lagged: the student-to-staff ratio increased from 19.8 to 29.1, and the proportion of staff holding academic degrees remained between three and ten percentage points below the national average throughout the period. This article identifies the cause of this disparity as the centralisation of doctoral training and proposes a tripartite institutional typology of the regional network.

Keywords: Khorezm region, Uzbekistan, higher education, regional education system, private higher education, branch campus, academic staff, doctoral training, centre–periphery relations, path dependence.

Introduction: The process of massification that commenced in Uzbekistan's higher education system after 2017 has been comprehensively documented at the national level. However, the manner in which this process manifested within the provincial regions — including the institutional decision-making at the central level that was implemented regionally, the sources of financial support for growth, and the resultant outcomes — has remained largely unexplored. Most existing research relies on national indicators and primarily draws empirical data from institutions located in the capital (Uralov, 2020; Smolentseva & Platonova, 2023; Ubaydullaeva, 2024). In the international scholarly discourse, inquiries into processes at the provincial scale have been conducted only twice — specifically concerning Fergana and Bukhara (Megoran, 1997; Coffelt & Koziel, 2025).

The Khorezm region is of particular interest in this context. Initially, until the year 2020, it was among the least represented territories in the nation: with three

higher education institutions and 22.8 thousand students, it constituted approximately four percent of the national student population. Subsequently, over the next five years, the rate of development in this area surpassed the national average. Most notably — and this is the most significant point — the regional network currently comprises institutions of three distinct types: independent state institutions, branch campuses of central institutions, and private universities. This diverse structure provides a valuable basis for examining centre–periphery relations.

Among the existing scholarly works concerning the educational history of the region, the dissertation by Atajanova (2020) stands out as the most comprehensive. It documents the establishment of Urgench State University, the Urgench branch of the Tashkent Medical Academy, and the Urgench branch of the Tashkent University of Information Technologies. Furthermore, it introduces into academic discourse the sequence of normative acts from 1992 to 2010,

alongside data on student enrollment figures. The significance of this work resides in its compilation of regional factual data. However, its analysis concludes in 2017, it does not employ a theoretical framework, and it does not compare regional data with national indicators.

The present article aims to address this gap. Its purpose is to quantitatively describe the changes that occurred in the higher education system of the Khorezm region between 2020 and 2025 and to compare these with national indicators. Three research questions are posed: First, from which structural sources did growth in the region originate, and how does it compare with the national average? Second, what impact did this growth have on the capacity of the region's academic staff? Third, how does the institutional structure of the regional network reflect centre–periphery relations? The study's novelty resides in three elements: it provides the first systematic comparison of the region's higher education indicators with national data for 2020–2025; it quantitatively measures the gap in academic staff capacity; and it develops an institutional typology of the regional network.

METHODS

1. Sources

The study relies on two categories of official sources. The first is the annual statistical compendium 'Education in Uzbekistan,' published by the National Statistics Committee of the Republic of Uzbekistan (2025). For the academic years 2020/21–2024/25, it details, by region, the number of educational institutions, student enrollments, indicators from the non-state sector, admissions, graduations, the number of academic staff, and data on fundamental doctoral studies. The strength of this source lies in its adherence to a consistent methodology, facilitating direct comparison of regional and national data.

The second source is a departmental reference note regarding the Khorezm region, compiled as of 16 June 2025 (Khorezm Regional Administration, 2025). It provides detailed information for each higher education institution within the region, including the year of establishment, the number of academic staff, the student population, the research capacity level, the number of faculties and departments, the inventory of teaching facilities and student accommodations, as well as the research output for the preceding two years. This source supplies institution-specific data that are not included in the statistical compendium.

A cross-verification of the two sources affirms their mutual consistency: the aggregate of the student populations across the eight institutions, as listed in the departmental note, is 60,632. Meanwhile, the compendium reports a figure of 60.6 thousand students for the 2024/25 academic year. This discrepancy is accounted for by admissions occurring in the first half of 2025.

2. Methods of analysis

Three methods were employed: a statistical-comparative analysis, whereby regional and national dynamics are contrasted; a structural analysis, which decomposes aggregate growth according to ownership form and institution type; and an institutional typology, categorizing network institutions based on their legal and organizational status. The indicators derived for this study include the number of students per academic staff member; the proportion of staff possessing academic degrees relative to total academic staff; the proportion of the non-state sector within the student population; and the region's contribution to national indicators.

3. Limitations

Three limitations must be acknowledged. Firstly, the current edition of the statistical compendium commences with the 2020/21 academic year, and therefore, no continuous quantitative series has been constructed for the years 1991–2019; this period is only referenced in institutional terms. Secondly, the departmental note represents a cross-sectional snapshot at a single date and does not provide a time series. Thirdly, the indicator of “research capacity” is calculated somewhat differently in the departmental and statistical sources; consequently, only data from the statistical compendium were utilized for the dynamic analysis.

RESULTS AND DISCUSSION

1. Expansion of the network

In the 2020/21 academic year, three higher education institutions operated within the Khorezm region: Urgench State University, the Urgench branch of Tashkent Medical Academy, and the Urgench branch of Tashkent University of Information Technologies. By the 2022/23 academic year, their number had increased to eight, and this figure has remained unchanged since then (see Figure 1).

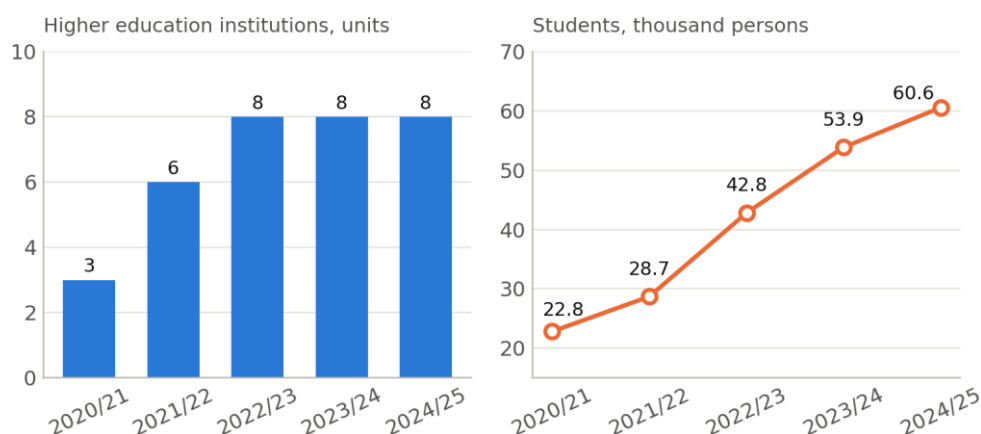


Figure 1. Higher education institutions and students in Khorezm region, 2020/21–2024/25

Source: compiled by the author from National Statistics Committee (2025).

Although the number of institutions more than tripled between 2020/21 and 2022/23, student enrollment experienced consistent growth over the entire five-year period, increasing from 22.8 thousand to 60.6 thousand, representing a factor of 2.66. This growth surpasses the national average of 2.51. In essence, the Khorezm region did not lag behind the national trend of expansion; rather, it somewhat outpaced it.

Simultaneously, the region's proportion within the national student population remained virtually unchanged, registering 3.99 percent in 2020/21 and increasing marginally to 4.23 percent in 2024/25. This stability is anticipated, given that expansion transpired

uniformly across the entire country. It is noteworthy that the region preserved its relative standing. Additionally, a characteristic of the network expansion was the stabilization of the number of institutions: no new institutions were established after 2022, yet student enrollment increased by a factor of 1.4. Consequently, the growth observed over the past three years was entirely achieved within the existing institutions.

2. The non-state sector as the principal source of growth

A structural decomposition identifies the principal source of the region's growth precisely (Figure 2).

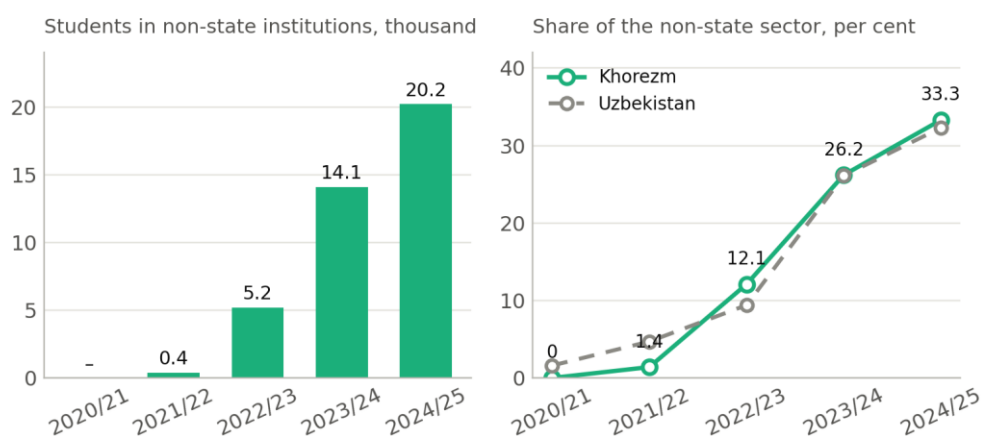


Figure 2. Formation of the non-state higher education sector in Khorezm region, 2020/21–2024/25

Source: calculated by the author from National Statistics Committee (2025).

During the years 2020 and 21, the region did not host any non-state higher education institutions. The first such institution was established in 2021, followed by the third in 2022; since then, the total number has stabilized at three. The student enrollment increased significantly from 400 to 20,200 individuals.

The relative expression of these figures is sharper still: the share of the non-state sector in the regional student body now stands at 33.3 per cent. Of the absolute five-year increase of 37.8 thousand students, 20.2 thousand — that is, 53.4 per cent — is attributable to the non-state sector.

For comparison, the national share of the non-state sector is 32.3 percent. Khorezm region consequently exceeds the national average in this regard. This circumstance is not unique to the region but reflects a broader national trend. The notable difference lies in timing: the non-state sector emerged in the region one year later, in 2021, yet it rapidly attained and surpassed

the national level.

3. Institutional structure of the network

As of 2025 the eight higher education institutions of the region may be divided into three types by legal and organisational status (Table 1).

Table 1. Higher education institutions of Khorezm region as of 16 June 2025

Institution	Est.	Type	Students	Staff	Research capacity, %
Urgench State University	1992	State	24,803	911	35.5
Mamun University	2021	Non-state	9,160	217	60.8
Urgench Ranch Technology University	2021	Non-state	6,995	195	34.0
Tashkent Medical Academy, Urgench branch	2005	Branch	6,685	508	32.5
Urgench State Pedagogical Institute	2022	State	6,676	157	27.3
Urgench Innovation University	2022	Non-state	3,366	114	35.1
Tashkent University of Information Technologies, Urgench branch	2005	Branch	2,783	94	34.0
State Academy of Choreography, Urgench branch	2021	Branch	164	15	13.0
Total	—	—	60,632	2,211	34.2

Source: Khorezm Regional Administration (2025). Totals calculated by the author.

The table discloses three important features. First, the core of the network is a single institution: Urgench State University concentrates 40.9 per cent of the region's students and 41.2 per cent of its academic staff. The quality indicators of the regional system thus depend largely on the condition of one institution. Second, three institutions are branch campuses of central institutions, enrolling 15.9 per cent of the region's students. Branch status means that decisions

on staffing policy, curricula and research direction are taken at the centre. Third, although the non-state sector constitutes a third of the network, considerable variation exists within it: research capacity stands at 60.8 per cent at Ma'mun University — the highest figure in the region — at 35.1 per cent at Urgench Innovation University and at 34.0 per cent at Urgench Ranch Technology University. Treating the non-state sector as a single homogeneous phenomenon would therefore be mistaken.

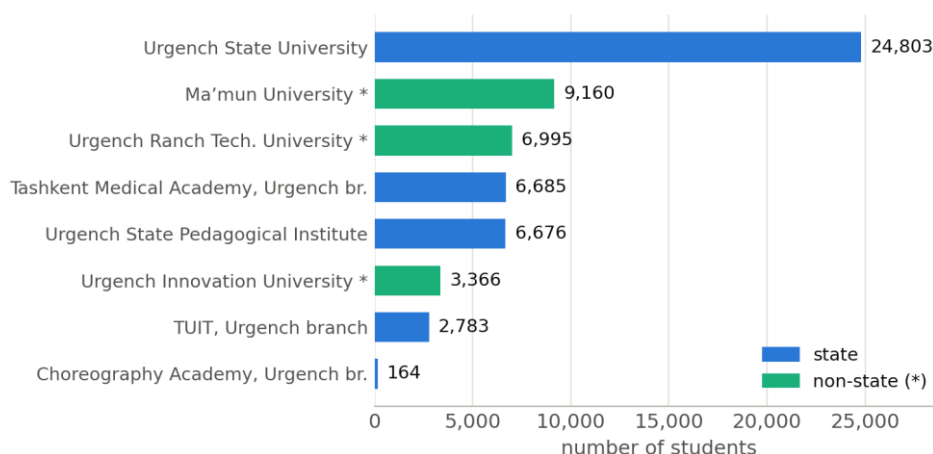


Figure 3. Distribution of students by institution in Khorezm Region, 2025.

Source: Khorezm Regional Administration (2025).

Figure 3 shows how uneven the distribution is: the largest institution enrolls 24,803 students and the smallest 164 — a difference of 151 times. In the middle range four institutions cluster between 6,600 and 9,200

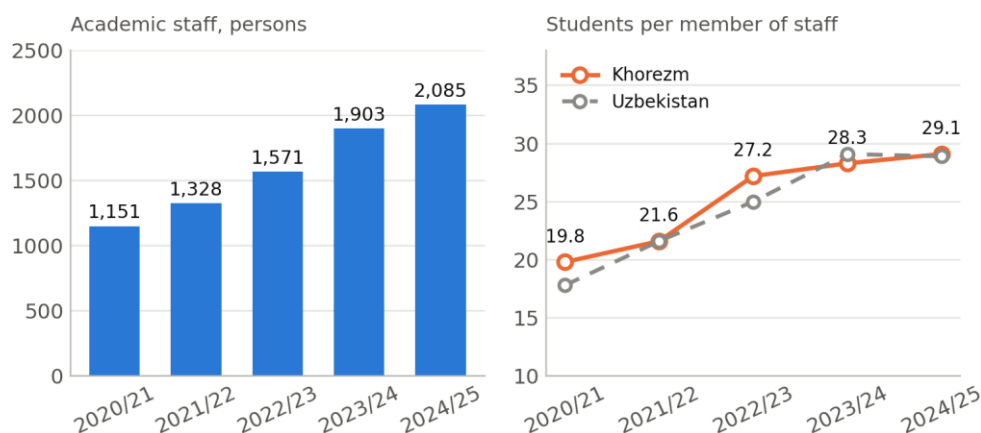


Figure 4. Academic staff and teaching load in Khorezm region, 2020/21–2024/25

Source: calculated by the author from National Statistics Committee (2025, p. 152).

The number of academic staff rose from 1,151 to 2,085 — a factor of 1.81. This considerably exceeds the national figure of 1.55, which indicates that the region expanded its staff base more actively than the country as a whole.

Measured against student numbers, however, the picture changes: the number of students per member of staff rose from 19.8 to 29.1. In 2020/21 this indicator was worse than the national average of 17.8; by

students.

4. Academic staff capacity

The effect of massification on staffing is particularly visible at regional level (Figure 4).

2024/25 the two had converged (29.1 against 28.9). The region thus eliminated its initial disadvantage by expanding staff numbers rapidly, but the overall level of workload deteriorated in step with the country as a whole.

The qualitative side of staff composition is a separate matter (Figure 5).

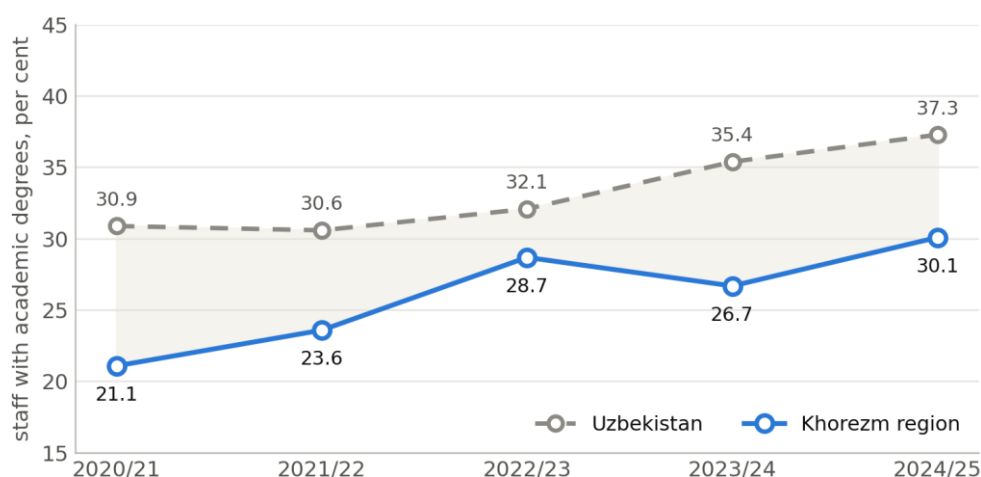


Figure 5. Share of academic staff holding academic degrees: Khorezm region and Uzbekistan, 2020/21–2024/25

Source: calculated by the author from National Statistics Committee (2025, p. 152). Note: from 2023 holders of the PhD were included among Candidates of Sciences, so both series contain a methodological break; the comparison concerns the gap between the series, not their absolute levels.

This constitutes the primary conclusion of the article. The number of personnel possessing academic degrees within the region increased from 243 to 628, representing a factor of 2.58, which is a significant accomplishment in absolute terms. In relative terms, their proportion grew from 21.1 to 30.1 percent.

When contrasted with the national indicator, the discrepancy is evident. Over the five-year span, the regional statistic consistently remained below the national average: 21.1% compared to 30.9% in 2020/21 (a disparity of 9.8 percentage points), 28.7% versus 32.1% in 2022/23 (a difference of 3.4 points), and 30.1% in comparison to 37.3% in 2024/25 (a gap of 7.2 points). Consequently, the disparity diminished to its

smallest extent in 2022/23 and subsequently widened again. This fluctuation is attributable to the fact that the majority of staff recruited in the region after 2022 lacked academic degrees, whereas at the national level, the criteria for accounting holders of the PhD were modified during the same timeframe.

The practical meaning of this gap is that higher education institutions in the region carry the same teaching load as the national average with less qualified staff.

5. The training of research personnel

The source of the gap in staff capacity should be sought at the level of post-graduate education (Figure 6).

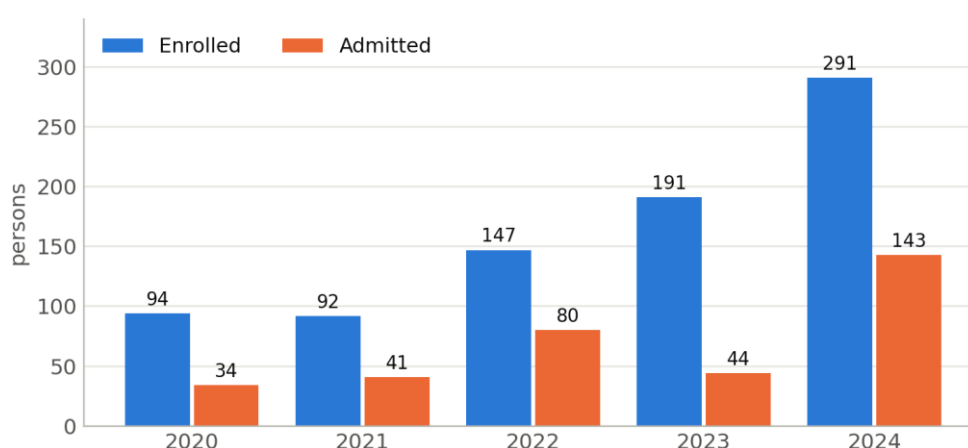


Figure 6. Basic doctoral studies in Khorezm region, 2020–2024

Source: National Statistics Committee (2025, pp. 162–163).

The number of students in basic doctoral studies rose from 94 to 291 — a factor of 3.10, slightly above the national figure of 2.99. Admissions, however, have been uneven: 34 in 2020, 80 in 2022, falling back to 44 in 2023 and rising to 143 in 2024.

The region's proportion within the national doctoral cohort has modestly increased from 3.5 to 3.6 percent — effectively remaining stable. Its representation within the national student population, however, stands at 4.23 percent. Consequently, the region's contribution to the training of research personnel is lower than what its share of students would suggest. This imbalance directly accounts for the discrepancy in

staff capacity discussed in section 3.4.

The departmental note provides a comprehensive overview: between 2017 and 2025, a total of 722 candidates for academic degrees were registered within the region, including 279 engaged in basic doctoral studies, 580 functioning as independent researchers pursuing the PhD, and 83 working towards the DSc (Khorezm Regional Administration, 2025). The predominance of independent researchers suggests that academic degrees in the region are predominantly attained through personal initiative rather than through institutionally supported doctoral programs.

6. Admissions, graduations and material provision

Table 2. Principal indicators of higher education in Khorezm region, 2020/21–2024/25

Indicator	2020/21	2021/22	2022/23	2023/24	2024/25	Growth
Institutions, units	3	6	8	8	8	2.67
of which non-state	–	1	2	3	3	–
Students, thousand	22.8	28.7	42.8	53.9	60.6	2.66

Indicator	2020/21	2021/22	2022/23	2023/24	2024/25	Growth
of which in non-state institutions	–	0.4	5.2	14.1	20.2	–
Admitted, thousand	6.9	7.3	10.1	15.9	16.8	2.43
Graduated, thousand	3.2	4.2	4.0	8.8	9.7	3.03
Academic staff, persons	1,151	1,328	1,571	1,903	2,085	1.81
of which holding academic degrees	243	314	451	508	628	2.58
Doctoral candidates, persons	94	92	147	191	291	3.10

Source: National Statistics Committee (2025, pp. 118–122, 152, 162). Ratios calculated by the author.

Comparison of the indicators in Table 2 yields three conclusions. First, the number of graduates grew faster (3.03) than the number of students (2.66), which reflects the completion of cohorts admitted in 2017–2019. Second, admissions slowed after 2023/24 (from 15.9 to 16.8 thousand), which may indicate that the network is approaching its capacity limit. Third, the number of staff holding academic degrees grew faster (2.58) than the total number of academic staff (1.81) — a positive tendency, although one that follows from the low starting level.

According to the departmental note, as of 2025, the region possessed 23 teaching buildings with a capacity of 21,130 seats, and 15 student residences accommodating 4,988 students. When measured against the student population, the provision of teaching spaces stands at 34.9 percent, and residential accommodations at 8.2 percent. The first figure is reasonably explained by the prevalence of extramural and evening study programs. Conversely, the second figure underscores a significant constraint: the regional system is primarily oriented towards local students and exhibits limited capacity to attract students from other territories. The number of international students — 1,208, or 1.9 percent of the total — corroborates this conclusion.

7. A model of regional massification

In summary, the findings allow for a comprehensive description of the regional model of massification, characterized by three key features. Firstly, growth was predominantly driven by the non-state sector, which contributed to 53.4 per cent of the five-year increase; in regional contexts, this facilitated the expansion of coverage without necessitating additional capital investment from the government budget. Secondly, there exists a persistent disparity in staff capacity: although the region increased its staff numbers at a rate higher than the national average (1.81 compared to 1.55), it failed to close the qualitative gap (30.1

against 37.3 per cent). Thirdly, the network exhibits a dependence on a single institution: Urgench State University constitutes 40.9 per cent of the student population and 41.2 per cent of the staff, rendering the system vulnerable — an issue at one institution is reflected across the entire regional indicators.

8. Centre and periphery

The institutional structure of the regional network exhibits three forms of centre–periphery relation simultaneously.

The first model is the branch model. Three institutions serve as subdivisions of central authorities and accommodate 15.9 percent of the region's students. The rationale behind this model is that the central institution transmits its academic and methodological expertise to the provincial level. In practice, this arrangement also entails dependency; the branch's fields of study, staffing policies, and development plans are determined by the central institution. Documentary evidence of this dependence is exemplified by the experience of the Urgench branch of Tashkent University of Information Technologies, where, due to the branch's limited research capacity, the training of specialists in certain fields continued to be conducted at the central institution (Atajanova, 2020, p. 96). This exemplifies the limitations of the branch model: until a region develops its own research capacity, a branch remains subordinate to the central institution.

The second exemplifies the model of an independent state institution, exemplified by Urgench State University (established in 1992) and Urgench State Pedagogical Institute (established in 2022). Their status facilitates the development of research capabilities at a local level. The university's attainment of 210 doctoral candidates, alongside 17 Doctors of Sciences (DSc) and 130 Doctors of Philosophy (PhD) trained over the past two years, demonstrates that this potential is being effectively realized.

The third model pertains to the non-state institutions.

These entities are not institutionally affiliated with either the central government or regional authorities, and their staffing policies are guided by market principles. This accounts for the 60.8 percent research capacity of Ma'mun University: a non-state entity has the capacity to attract qualified personnel under competitive conditions. The simultaneous presence of the three models within a single geographical area provides an ideal natural laboratory for investigating regional higher education systems.

9. The nature of the capacity gap

Two mechanisms should be considered in explaining the gap identified in sections 3.4 and 3.5. The first is the centralisation of research training: the region accounts for 3.6 per cent of the national doctoral cohort but 4.23 per cent of the national student body, which means its capacity to replenish its own staff from its own resources is constrained. The second is the migration of personnel: a proportion of those who obtain academic degrees move to institutions in the centre. Official statistics do not measure this flow directly, but indirect evidence exists — the number of staff holding degrees rose from 451 in 2022/23 to only 508 in 2023/24, an increase of 57, even though 191 doctoral candidates were enrolled in the region during that period.

Both mechanisms result in the same outcome: the province is responsible for training bachelor's degree holders, while the training and retention of research personnel become challenging. This phenomenon can be understood within the framework of path dependence — specifically, the model established during the Soviet era, where the central authority trained researchers and the provinces provided education, has persisted despite institutional changes over the past thirty years. Similar resilience of inherited arrangements amidst rapid formal reforms has been documented in other post-Soviet systems (Silova et al., 2007; Azimbayeva, 2017).

10. Limitations of the findings

The conclusions rely on official statistics and are consequently limited. Several unresolved issues remain: the actual organisational model of education within non-state institutions; the decision-making mechanisms between branches and their parent entities; the genuine volume of personnel movement from the province to the central authorities; and the employment conditions of graduates. Addressing these questions necessitates access to institution-level documentation, the holdings of the Khorezm Regional State Archive (754, 555, 445, 188, and 346), and qualitative research methodologies. To date, these archival collections have been almost entirely unexamined in the context of studying the history of

higher education in the region.

CONCLUSIONS

The analysis permits six conclusions.

Initially, between 2020 and 2025, the higher education system in the Khorezm region experienced substantial growth: the number of institutions increased from three to eight, and the student enrollment expanded from 22.8 thousand to 60.6 thousand, representing a factor of 2.66. This growth surpasses the national average of 2.51.

Second, the principal source of growth was the non-state sector, which accounts for 53.4 per cent of the five-year increase; non-state institutions now enrol 33.3 per cent of the region's students.

Third, the regional network consists of three types of institutions: independent state institutions (51.9 percent of students), branch campuses of central institutions (15.9 percent), and non-state institutions (32.2 percent). Its primary institution is Urgench State University, which enrolls 40.9 percent of all students in the region.

Fourth, the region expanded its staff numbers faster than the national average (1.81 against 1.55), yet a qualitative gap persisted: the share of staff holding academic degrees stands at 30.1 per cent against 37.3 per cent nationally.

Fifth, the source of that gap lies in the centralisation of research training: the region accounts for 3.6 per cent of the national doctoral cohort but 4.23 per cent of the national student body.

Sixth, the further development of the regional system necessitates a shift from quantitative expansion to qualitative enhancement: increasing the scope of research training, establishing mechanisms for the retention of trained personnel, and expanding the availability of student accommodation to attract students from other regions.

REFERENCES

1. Atajanova, F. E. (2020). *Xorazmda ta'lim va ilmfanning rivojlanishi (1991–2017 yy.)* [The development of education and science in Khorezm (1991–2017)] [PhD dissertation]. Urgench State University.
2. Azimbayeva, G. (2017). Comparing post-Soviet changes in higher education governance in Kazakhstan, Russia, and Uzbekistan. *Cogent Education*, 4(1), 1399968. <https://doi.org/10.1080/2331186X.2017.1399968>
3. Coffelt, T. A., & Koziel, J. A. (2025). Professional development for faculty in Uzbekistan. *Frontiers in Education*, 10, 1523886.

<https://doi.org/10.3389/feduc.2025.1523886>

4. Kholmuminov, S., Kholmuminov, S., & Wright, R. E. (2019). Resource dependence theory analysis of higher education institutions in Uzbekistan. *Higher Education*, 77(1), 59–79. <https://doi.org/10.1007/s10734-018-0261-2>
5. Khorezm Regional Administration. (2025). Xorazm viloyati oliy ta'lim tizimi bo'yicha umumiy ma'lumot [General information on the higher education system of Khorezm region] [Departmental reference note, 16 June 2025]. Khorezm Regional Administration.
6. Megoran, N. (1997). Problems and possibilities for higher education in Uzbekistan: The English department of Ferghana State University. *Central Asian Survey*, 16(3), 353–362. <https://doi.org/10.1080/02634939708400997>
7. Muratov, B., & Wilkins, S. (2024). The development of Uzbekistan as a transnational higher education hub: Government and institution rationales, and early outcomes. *Journal of Higher Education Policy and Management*, 46(5), 523–541. <https://doi.org/10.1080/1360080X.2023.2288588>
8. National Statistics Committee of the Republic of Uzbekistan. (2025). O'zbekistonda ta'lim: Statistik to'plam [Education in Uzbekistan: Statistical compendium]. National Statistics Committee.
9. Ruziev, K., Rabbimova, D., & Mamasolieva, M. (2025). Reforming doctoral education in Uzbekistan: Models, rules and norms of behaviour. *Higher Education Policy*, 39(2), 500–526. <https://doi.org/10.1057/s41307-024-00382-z>
10. Silova, I., Johnson, M. S., & Heyneman, S. P. (2007). Education and the crisis of social cohesion in Azerbaijan and Central Asia. *Comparative Education Review*, 51(2), 159–180. <https://doi.org/10.1086/512021>
11. Smolentseva, A., & Platonova, D. (2023). The transformations of higher education in 15 post-Soviet countries: The state, the market and institutional diversification. *Higher Education Policy*, 36(2), 370–393. <https://doi.org/10.1057/s41307-022-00293-y>
12. Tukhtaboyev, K. (2025). The role of Urgench State University named after Abu Rayhan Beruni in the development of science in Uzbekistan (in the years of independence). *Oriental Journal of Social Sciences*, 5(9), 158–163.
13. Ubaydullaeva, D. (2024). The internationalisation of higher education in Uzbekistan: Staff perspectives on a top-down process. *Europe-Asia Studies*, 76(10), 1644–1667.

<https://doi.org/10.1080/09668136.2024.2320163>

14. Uralov, O. S. (2020). Internationalization of higher education in Uzbekistan. *Social Sciences & Humanities Open*, 2(1), 100015. <https://doi.org/10.1016/j.ssaho.2020.100015>

Legal acts

15. Decree of the President of the Republic of Uzbekistan No. PF-5847 of 8 October 2019 “On approval of the Concept for the development of the higher education system of the Republic of Uzbekistan until 2030”. <https://lex.uz/docs/-4545884>