



Article

Analysis of The Current State and Key Development Trends of Industry in Andijan Region

Maqsud Valievich Yoqubov¹

1. Lecturer, Department of Management, Andijan State University; Independent Researcher, Andijan, Uzbekistan

* Correspondence: yoqubov400@gmail.com

Abstract: This article assesses the industrial development of Andijan Region (Uzbekistan) in 2024–2025 on the basis of official statistical data. Comparative, structural and dynamic analyses were applied to industrial output, the industrial production volume index, territorial concentration, the share of manufacturing and small-business activity. In 2025, industrial output reached UZS 107,885.0 billion, a nominal increase of 19.0%, while the production volume index of 107.2% indicated stable real growth. Asaka District and Andijan City together accounted for about 55.6% of regional output; however, real output in Asaka declined (index 98.0%), whereas several smaller districts recorded growth indices of 145.9–168.3%. Manufacturing generated 96.6% of industrial output in January–July 2025, and the share of small businesses rose from 29.8% to 38.0%. The main findings reveal a high degree of territorial specialization, disparities in industrial growth across districts and cities, and the need for industrial diversification. The study proposes a phased approach to assessing industrial growth in relation to territorial concentration, sectoral specialization, the efficiency of fixed-capital utilization and investment effectiveness.

Keywords: Andijan Region, industry, fixed capital, industrial output, industrial production volume index, investment, territorial concentration, diversification

Citation: Yoqubov, M. V. Analysis of The Current State and Key Development Trends of Industry in Andijan Region. American Journal of Economics and Business Management 2026, 9(10), 818-824

Received: 03th Jul 2026

Revised: 18th Aug 2026

Accepted: 05th Sep 2026

Published: 16th Oct 2026



Copyright: © 2026 by the authors. Submitted for open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>)

1. Introduction

Sustainable industrial development in a region is closely linked to the renewal of production capacities, improvements in labor productivity and stronger intersectoral linkages. Automotive manufacturing and other manufacturing activities play a major role in the economy of Andijan Region. Territorial specialization creates opportunities for growth, while also generating concentration-related risks. New economic geography explains such concentration by the interaction of increasing returns, transport costs and market size, which can give rise to a core–periphery pattern of manufacturing location [1], and empirical measurement shows that some degree of geographic concentration is characteristic of nearly all manufacturing industries [2].

Studies of regional industrial complexes show that ageing fixed assets and insufficient investment constrain industrial transformation, and that development strategies should be differentiated for high-technology and for medium- and low-technology enterprises [3]. Evidence from China indicates that place-based industrial policy may have divergent effects: the coordinated development policy for the Beijing–Tianjin–Hebei region increased total factor productivity while reducing GDP growth, with effects differing across the three sub-regions [4]. Because official regional statistics rarely report capital

stocks, indirect methods based on growth accounting have been developed to estimate regional capital productivity [5]. Overall, international studies indicate an association between fixed-capital investment and production productivity, although the outcomes of regional policies may differ [3]–[5].

The literature on diversification provides further guidance. Sectoral concentration tends to decline as income rises, before re-specialization occurs at relatively high income levels [6]; economies diversify most readily into products that draw on capabilities close to those they already possess [7]; and at the regional level, related variety supports employment growth, whereas unrelated variety protects regions against sector-specific shocks [8]. Reviews of place-based policies further indicate that their effects are heterogeneous and depend on policy design and local conditions [9].

In Uzbekistan, the Development Strategy of New Uzbekistan for 2022–2026 provides for comprehensive socio-economic development programs for each region, with annual plans at the district and city levels [10], while international policy analysis points to a new era of industrial policy oriented toward digitalization, job creation and industrial decarbonization [11]. For Andijan Region, where industrial output is concentrated in a few large production centers, an integrated assessment that links output dynamics with territorial concentration, sectoral structure and fixed-capital efficiency has received limited attention. The purpose of this study is to identify key trends using the latest available full-year official indicators for Andijan Region, to distinguish evidence-based challenges and to develop recommendations for assessing and managing industrial development.

2. Materials and Methods

The study draws on official press releases of the Andijan Regional Statistics Department for 2024 and 2025, its 2025 annual statistical bulletin and open data from the SIAT database of the National Statistics Committee of the Republic of Uzbekistan [12]–[15]. Comparative, structural and dynamic analyses, share calculations and descriptive assessment methods were applied. Nominal output was interpreted at current prices, whereas the industrial production volume index was used separately to characterize changes in real production.

The nominal growth rate of industrial output was calculated as

$$g = (Q_{2025} / Q_{2024} - 1) \times 100\%, \quad (1)$$

and the share of territory j in regional output as

$$s_j = Q_j / Q \times 100\%, \quad (2)$$

where Q_j is the industrial output of district or city j and Q is the total industrial output of the region. Territorial concentration was characterized by the combined share of the two largest producing territories (CR_2). More refined concentration indices that control for plant size and the size of territorial units are available [2], but they require establishment-level data that are not published at the district level.

The year 2025 is the latest completed year available for the analysis. Full-year results for 2026 are not yet available; therefore, data covering different periods were not treated as directly comparable. Territorial concentration and percentage shares were calculated by the author from officially reported output figures.

3. Results

3.1. Overall dynamics of industrial production

Table 1 summarizes the main indicators of industrial production in Andijan Region in 2024–2025.

Table 1. Main indicators of industrial production in Andijan Region, 2024–2025

Indicator	2024	2025
Industrial output, UZS billion	90,627.9	107,885.0
Industrial production volume index, %	107.3	107.2
Annual change in nominal output, %	—	19.0

Source: [12], [13]. Nominal growth calculated by the author using Eq. (1): $(107,885.0 / 90,627.9 - 1) \times 100 \approx 19.0\%$.

In 2025, the value of industrial output increased by UZS 17,257.1 billion. However, nominal growth of 19.0% should not be equated with real growth of 7.2%: the former reflects changes in value at current prices, while the latter is based on the industrial production volume index. The respective indices of 107.3% and 107.2% in 2024 and 2025 suggest that real growth remained relatively stable. At the same time, the difference between nominal and real growth highlights the need to account for price effects when assessing industrial development. Accordingly, an integrated analysis of the production volume index, labor productivity and the efficiency of fixed-capital utilization is appropriate for evaluating actual industrial growth.

3.2. Territorial distribution of industrial production

Table 2 presents industrial output, its territorial distribution and production volume indices by district and city in 2025.

Table 2. Industrial output by district and city of Andijan Region, 2025

Territory	Output, UZS billion	Share of regional output, %	Production volume index, %
Asaka District	42,590.6	39.5	98.0
Andijan City	17,439.7	16.2	110.7
Qo'rg'ontepa District	4,911.4	4.6	112.6
Xo'jaobod District	4,331.2	4.0	108.1
Xonobod City	4,133.7	3.8	108.3
Baliqchi District	3,963.0	3.7	110.3
Shahrixon District	3,152.8	2.9	122.3
Jalaquduq District	2,719.6	2.5	134.2
Andijan District	2,572.1	2.4	108.9
Buloqboshi District	2,544.6	2.4	168.3
Marhamat District	2,227.3	2.1	145.9
Oltinko'l District	2,177.9	2.0	109.8
Izboskan District	2,069.9	1.9	162.9
Paxtaobod District	2,010.0	1.9	120.1
Ulug'nor District	1,228.4	1.1	136.2
Bo'ston District	981.2	0.9	116.4

Source: [12]. Shares calculated by the author using Eq. (2) relative to the regional total of UZS 107,885.0 billion. The territorial figures sum to UZS 99,053.4 billion; the difference from the regional total corresponds to output not distributed by territory in the official release.

The data show that industrial production is unevenly distributed across Andijan Region. Asaka District accounts for approximately 39.5% of regional industrial output and Andijan City for 16.2%; their combined share (CR₂) is about 55.6%. This indicates that industrial enterprises and production capacities are highly concentrated in certain localities. Such concentration may reflect advantages in production infrastructure and specialization, but it can also increase dependence on particular large-scale production chains. Asaka's production volume index of 98.0% implies a 2.0% decline in real output; enterprise-level information is needed to establish its causes. In contrast, high growth indices were recorded in Buloqboshi (168.3%), Izboskan (162.9%) and Marhamat (145.9%) districts. These figures reveal substantial differences in industrial growth rates across localities and support the need for territorial diversification, a more balanced distribution of production capacities and the allocation of investment to areas with comparatively lower industrial potential.

3.3. Sectoral composition of industry

Table 3. Structure of industrial output by type of activity in Andijan Region, January–July 2025

Type of activity	Output, UZS billion	Share, %
Manufacturing	≈53,100	96.6
Mining and quarrying	991.0	1.8
Electricity, gas and steam supply	744.3	1.4
Water supply and waste management	118.3	0.2

Source: [14]. Note: the table covers January–July 2025 and is not directly comparable with full-year figures.

As Table 3 shows, manufacturing overwhelmingly dominated the industrial structure of Andijan Region in January–July 2025, accounting for 96.6% of total industrial output. This reflects the leading role of manufacturing enterprises in the regional economy and the high degree of specialization in these activities. Over the same period, mining and quarrying accounted for 1.8%, electricity, gas and steam supply for 1.4%, and water supply and waste management for 0.2%. However, a high manufacturing share does not, by itself, demonstrate sufficient diversification within the sector. It is therefore important to examine separately the shares of automotive manufacturing, textiles, food processing and other manufacturing activities. Such analysis would help identify dependence on particular industries, prioritize investment and assess opportunities to improve the efficiency of fixed-capital utilization.

3.4. Participation of small businesses in industrial production

Table 4. Industrial output of small businesses in Andijan Region, 2024–2025

Indicator	2024	2025
Industrial output of small businesses, UZS billion	27,009.9	41,039.9
Share of total industrial output, %	29.8	38.0
Nominal output growth, %	—	52.0

Source: [13], [15]; author's calculations. The official 2025 annual bulletin reports a growth index of 151.5%, whereas the ratio of output values at current prices is approximately 152.0%; the difference may reflect methodological factors or data revisions.

Table 4 indicates a substantial increase in the economic activity of small businesses in the industry of Andijan Region. In 2024, small businesses produced industrial goods

worth UZS 27,009.9 billion; by 2025, this figure had reached UZS 41,039.9 billion, an increase of approximately 52.0% at current prices. Their share of total regional industrial output rose from 29.8% to 38.0%, an increase of 8.2 percentage points. This indicates the growing economic importance of small producers and shows that industrial production is expanding through small enterprises as well as large firms. Greater participation by small businesses may create additional opportunities to diversify industry, use local resources more efficiently and establish new production capacities across the region. To sustain this positive trend, it is important to improve small industrial enterprises' access to investment resources, encourage technological modernization and increase the efficiency of fixed-capital utilization. Nevertheless, these aggregate statistics do not directly establish that labor productivity or capital productivity has increased; additional enterprise-level economic analysis is required.

3.5. Key trends and diagnostic assessment

Table 5. Key trends in the industrial development of Andijan Region

Observed trend	Evidence	Research implications
Real industrial growth	2025 production volume index: 107.2%	Stable growth, but efficiency requires separate assessment
Territorial concentration	Asaka District and Andijan City: ≈55.6%	Territorial diversification is important
Dominance of manufacturing	January–July 2025: 96.6%	High degree of specialization
Rising share of small businesses	2025: 38.0%	Access to capital is important for small enterprises

Source: compiled by the author based on [12]–[15].

Table 5 identifies several important trends in the industrial development of Andijan Region. The industrial production volume index of 107.2% in 2025 indicates that real output continued to grow. At the same time, Asaka District and Andijan City jointly accounted for approximately 55.6% of total industrial output, indicating a high concentration of production capacities in specific areas. Manufacturing's 96.6% share confirms the region's specialization in this sector, while the increase in the share of small businesses to 38.0% points to their growing participation in industrial production. These trends highlight the importance of territorial diversification, efficient investment allocation and rational use of production potential. However, growth in industrial output does not directly imply improved efficiency of fixed-capital utilization. A reliable assessment of fixed-asset turnover, depreciation rates and capacity utilization requires enterprise-level data on average annual fixed-asset values, depreciation charges, production capacities and actual capacity loads.

4. Discussion

The results reveal a high degree of territorial concentration alongside industrial growth in Andijan Region. The literature emphasizes the importance of investment, the technological base and human capital in regional industrial transformation [3]. Other studies indicate that place-based industrial policies may have varying effects on output and productivity [4]. From the perspective of new economic geography, the dominance of Asaka District and Andijan City reflects agglomeration advantages [1]; however, it also exposes the region to shocks in a small number of production chains. The decline in real output in Asaka District despite its dominant share is consistent with evidence that a large production base does not by itself guarantee stable growth and that policy outcomes may

differ substantially across territories [4], [9]. Diversification into activities related to existing capabilities—for example, suppliers of components and services for automotive production—may therefore be a more realistic path than unrelated diversification [7], [8]. The lack of regional data on fixed-capital stocks, which limits the present analysis, has been addressed elsewhere through indirect estimation methods [5] that could be adapted to the regions of Uzbekistan.

The proposed practical approach consists of five stages: (1) continuously monitoring industrial trends by district and industry; (2) measuring dependence on major production centers using a concentration index; (3) assessing fixed-asset depreciation, fixed-asset turnover and capacity utilization at the enterprise level; (4) prioritizing modernization projects according to productivity, energy efficiency and local supply-chain benefits; and (5) evaluating the results of allocated investments by comparing indicators before and after implementation.

Scientific novelty of the study. This study proposes a five-stage integrated approach to assessing industrial development trends in Andijan Region. Its distinctive feature is that it goes beyond examining industrial output and growth rates separately and instead considers territorial concentration, sectoral specialization, the efficiency of fixed-capital utilization and investment effectiveness within an interconnected framework. The proposed approach may help identify territorial imbalances in industrial development, determine priority areas for modernization and support decisions on allocating investment resources to priority industries and localities. Additional empirical testing at the enterprise level is required to confirm its practical effectiveness.

The first priority is to strengthen the resilience of production chains in highly concentrated areas such as Asaka. The second is to improve infrastructure and market access in districts with high growth rates but relatively small initial output volumes. The third is to support technological upgrading among small enterprises through leasing, cooperation and digital management tools. These are policy and practical recommendations derived from the analysis, rather than outcomes already proven by statistical evidence.

Study limitations. Official 2025 figures may be preliminary, and some sectoral composition data cover January–July rather than the full year. The value of industrial output is not equivalent to the average annual value of fixed capital. Accordingly, the available data do not support definitive conclusions about capital productivity or the causal effects of investment.

5. Conclusion

In 2025, industrial output in Andijan Region amounted to UZS 107,885.0 billion, and the industrial production volume index reached 107.2%. Industrial production was highly concentrated in Asaka District and Andijan City, while the share of small businesses expanded substantially. These findings indicate that industrial development should be assessed not only through total output but also through territorial balance, sectoral diversification and indicators of fixed-capital efficiency.

In practical terms, it is recommended that industrial monitoring include fixed-asset turnover, depreciation of fixed assets, capacity utilization and investment effectiveness, and that differentiated modernization programs be developed for individual localities. Future studies should empirically test the effectiveness of these mechanisms using enterprise-level data.

The principal scientific contribution of the study is the proposed five-stage integrated approach to assessing industrial development in Andijan Region by jointly considering territorial concentration, sectoral specialization, the efficiency of fixed-capital utilization and investment effectiveness.

REFERENCES

- [1] P. Krugman, "Increasing returns and economic geography," *J. Polit. Econ.*, vol. 99, no. 3, pp. 483–499, Jun. 1991, doi: 10.1086/261763.

- [2] G. Ellison and E. L. Glaeser, "Geographic concentration in U.S. manufacturing industries: A dartboard approach," *J. Polit. Econ.*, vol. 105, no. 5, pp. 889–927, Oct. 1997, doi: 10.1086/262098.
- [3] O. Grozova, G. Tsvetkova, and V. Maslikhina, "Development strategies and transformation of the region's industrial complex," *J. Appl. Eng. Sci.*, vol. 18, no. 1, pp. 47–54, 2020, doi: 10.5937/jaes18-22582.
- [4] J. Liu, N. Li, and X. Du, "Did place-based industrial policy promote regional economic growth? Evidence from China," *PLoS ONE*, vol. 18, no. 4, Art. no. e0283688, Apr. 2023, doi: 10.1371/journal.pone.0283688.
- [5] P. Zdražil and I. Kraftová, "Indirect estimation of the development of capital productivity in the regions: The case of Poland," *E+M Ekon. Manag.*, vol. 24, no. 2, pp. 4–20, 2021, doi: 10.15240/tul/001/2021-2-001.
- [6] J. Imbs and R. Wacziarg, "Stages of diversification," *Am. Econ. Rev.*, vol. 93, no. 1, pp. 63–86, Mar. 2003, doi: 10.1257/000282803321455160.
- [7] C. A. Hidalgo, B. Klinger, A.-L. Barabási, and R. Hausmann, "The product space conditions the development of nations," *Science*, vol. 317, no. 5837, pp. 482–487, Jul. 2007, doi: 10.1126/science.1144581.
- [8] K. Frenken, F. Van Oort, and T. Verburg, "Related variety, unrelated variety and regional economic growth," *Reg. Stud.*, vol. 41, no. 5, pp. 685–697, 2007, doi: 10.1080/00343400601120296.
- [9] D. Neumark and H. Simpson, "Place-based policies," in *Handbook of Regional and Urban Economics*, vol. 5, G. Duranton, J. V. Henderson, and W. C. Strange, Eds. Amsterdam, The Netherlands: Elsevier, 2015, pp. 1197–1287, doi: 10.1016/B978-0-444-59531-7.00018-1.
- [10] President of the Republic of Uzbekistan, "On the Development Strategy of New Uzbekistan for 2022–2026," Decree No. PF-60, Jan. 28, 2022. [Online]. Available: <https://lex.uz/docs/-5841063>
- [11] UNIDO, *Industrial Development Report 2024: Turning Challenges into Sustainable Solutions: The New Era of Industrial Policy*. Vienna, Austria: UNIDO, 2024. [Online]. Available: <https://www.unido.org/idr2024>
- [12] Andijan Regional Statistics Department, "Industrial production in January–December 2025," Andijan, Uzbekistan, 2026.
- [13] Andijan Regional Statistics Department, "Key industrial indicators for 2024," Andijan, Uzbekistan, 2025.
- [14] Andijan Regional Statistics Department, "Structure of industrial production, January–July 2025," Andijan, Uzbekistan, 2025.
- [15] National Statistics Committee of the Republic of Uzbekistan, "Volume of industrial output produced by small business entities," SIAT open data portal. [Online]. Available: <https://siat.stat.uz>