

TECH SCIENCE

ISSN 3030-3702

**TEXNIKA FANLARINING
DOLZARB MASALALARI**

**TOPICAL ISSUES OF TECHNICAL
SCIENCES**



№ 3 (4) 2026

TECHSCIENCE.UZ

№ 3 (4)-2026

**TEXNIKA FANLARINING DOLZARB
MASALALARI**

**TOPICAL ISSUES
OF TECHNICAL SCIENCES**

TOSHKENT-2026

BOSH MUHARRIR:

KARIMOV ULUG'BEK ORIFOVICH

TAHRIR HAY'ATI:

Usmankulov Alisher Kadirkulovich - Texnika fanlari doktori, professor, Jizzax politexnika universiteti

Fayziyev Xomitxon – texnika fanlari doktori, professor, Toshkent arxitektura qurilish instituti;

Rashidov Yusuf Karimovich – texnika fanlari doktori, professor, Toshkent arxitektura qurilish instituti;

Adizov Bobirjon Zamirovich– Texnika fanlari doktori, professor, O'zbekiston Respublikasi Fanlar akademiyasi Umumiy va noorganik kimyo instituti;

Abdunazarov Jamshid Nurmuxamatovich - Texnika fanlari doktori, dotsent, Jizzax politexnika universiteti;

Umarov Shavkat Isomiddinovich – Texnika fanlari doktori, dotsent, Jizzax davlat pedagogika universiteti;

Bozorov G'ayrat Rashidovich – Texnika fanlari doktori, Buxoro muhandislik-texnologiya instituti;

Maxmudov Muxtor Jamolovich – Texnika fanlari doktori, Buxoro muhandislik-texnologiya instituti;

Asatov Nurmuxammat Abdunazarovich – Texnika fanlari nomzodi, professor, Jizzax politexnika universiteti;

Mamayev G'ulom Ibroximovich – Texnika fanlari bo'yicha falsafa doktori (PhD), Jizzax politexnika universiteti;

Ochilov Abduraxim Abdurasulovich – Texnika fanlari bo'yicha falsafa doktori (PhD), Buxoro muhandislik-texnologiya instituti.

OAK Ro'yxati

Mazkur jurnal O'zbekiston Respublikasi Oliy ta'lim, fan va innovatsiyalar vazirligi huzuridagi Oliy attestatsiya komissiyasi Rayosatining 2025-yil 8-maydagi 370-son qarori bilan texnika fanlari bo'yicha ilmiy darajalar yuzasidan dissertatsiyalar asosiy natijalarini chop etish tavsiya etilgan ilmiy nashrlar ro'yxatiga kiritilgan.

Muassislar: "SCIENCEPROBLEMS TEAM" mas'uliyati cheklangan jamiyati;
Jizzax politexnika insituti.

**TECHSCIENCE.UZ- TEXNIKA
FANLARINING DOLZARB**

MASALALARI elektron jurnali
15.09.2023-yilda 130343-sonli
guvohnoma bilan davlat ro'yxatidan
o'tkazilgan.

TAHRIRIYAT MANZILI:

Toshkent shahri, Yakkasaroy tumani, Kichik
Beshyog'och ko'chasi, 70/10-uy.
Elektron manzil:
scienceproblems.uz@gmail.com

Barcha huquqlar himoyalangan.

© Scienceproblems team, 2026-yil

© Mualliflar jamoasi, 2026-yil

MUNDARIJA

Maxarov Qodirbek, Ismatillayev Muzaffar

SUN'YI INTELLEKT TEXNOLOGIYALARI ASOSIDA TEZ YORDAM

QO'NG'IROQLARINI QAYTA ISHLASH TIZIMI5-11

Ergasheva Oxuna, Raximova Mehrbonu

TABIIY TILNI QAYTA ISHLASH YONDASHUVI BILAN INTEGRATSIYALASHGAN RAQAMLI

TIBBIYOTNI MASOFADAN MONITORING QILISH DASTURINI ISHLAB CHIQUISH12-18

Jamalova Gulchexra

O'ZBEKISTON SOLIQ MA'MURIYATCHILIGINI TASHKIL ETISHDA

SUN'YI INTELLEKTDAN FOYDALANISHNING TIZIMLI TAHLILI VA

BOSHQARUV MEKANIZMLARINI TAKOMILLASHTIRISH 19-24

Arziqulov Husan

O'ZBEK TILI UCHUN SUN'YI INTELLEKT ASOSIDA UZLUKSIZ NUTQNI TANISH TIZIMINI

YARATISH: KORPUS, AKUSTIK MODEL VA TIL MODELINI LOYIHALASH 25-31

Isakov Iskander, Xabibullaeva Dilnoza, Orazimbetov Temurbek

IDROKDAN AVTONOMIYAGACHA: KO'RISHGA YORDAM BERISH VA

NEYRONLARNI TIKLASHDA MULTIMODAL SUN'YI INTELLEKTNING

NARRATIV SHARHI (2020-2026)..... 32-44

Daliyev Sherzod

YER OSTI SIZOT SUVLARI DINAMIKASI O'ZGARISH JARAYONINI

MATEMATIK MODELLASHTIRISH 45-52

Muradov Sirojiddin

EHTIMOLIY XAVFLARNI BAHOLASHDA FORSAYT

TEXNOLOGIYASIDAN FOYDALANISH 53-62

Vasiyev Xayrullo, Abduolimova O'g'ilo

TO'QIMACHILIK MAHSULOTLARI SIFATINI XALQARO 4 BALLI BAHOLASH TIZIMI

ASOSIDA BOSHQARISH METODIKASINI TAKOMILLASHTIRISH 63-68

Ergashxo'jayeva Sabohat, Shodmanov Jasur

ISHLAB CHIQUV KORXONALARIDA CHANG HOSIL BO'LISH MANBALARI VA

UNI BARTARAF ETISH USULLARI 69-75

Ismoilov Muxriddin, Rahimov Anvarjon, Asatov Shavkat, Norbayeva Malikaxon

EKSPERIMENTAL O'LGACHLARDI STATISTIK TAHLIL VA

XATOLIKLARNI KAMAYTIRISH USULLARINING TAHLILI 76-82

Jurayev O'tkirbek

BULUTLI HISOBLASH TIZIMLARIDA MA'LUMOTLARNI XAVFSIZ SHIFRLASHNING

GIBRID KRIPTOGRAFIK ALGORITMI 83-91

<i>Ismailov Ilxom, Raximov Rustamjon</i> MACHINE LEARNING YONDASHUVI YORDAMIDA O‘ZBEKISTON VILOYATLARINI QISHLOQ XO‘JALIGI KO‘RSATKICHLARI BO‘YICHA KLASTERLASH VA TASNIFLASH	92-100
<i>Almataev Tojiboy, Zokirjonov Azizbek</i> EXPERIMENTAL INVESTIGATION ON LITHIUM-ION BATTERY AGING UNDER UZBEKISTAN’S CLIMATE	101-114
<i>Юнусалиев Эльмурод, Тошпулатов Ильхомжон</i> ИЗГОТОВЛЕНО ИЗ МЕСТНОЙ ДРЕВЕСИНЫ ПОДГОТОВЛЕННЫЕ БАЛОЧНЫЕ КОНСТРУКЦИИ УСТОЙЧИВОСТЬ К РАСТЯЖЕНИЮ I	115-121
<i>To‘xtaniyozova Muhayyo, To‘rayev Azizbek</i> O‘ZBEKISTON RESPUBLIKASIDA QURILISH MATERIALLARI SIFATI VA XAVFSIZLIGINI TA‘MINLASHNING INNOVATSION USULLARI: KOMPLEKS TAHLIL VA METROLOGIK BAHOLASH	122-132

CLUSTERING AND CLASSIFICATION OF UZBEKISTAN'S REGIONS BY AGRICULTURAL INDICATORS USING A MACHINE LEARNING APPROACH

Ismailov Ilkhom Tursunbayevich

Candidate of Technical Sciences (PhD)

Senior Lecturer, Department of Artificial Intelligence and Data Analysis

Samarkand Branch of Tashkent University of Information Technologies named after Muhammad al-Khwarizmi

Email: ilxomismailov1988161287@gmail.com

Rakhimov Rustamjon Tukhtayevich

Associate Professor, Department of Artificial Intelligence and Data Analysis

Samarkand Branch of Tashkent University of Information Technologies named after Muhammad al-Khwarizmi

Email: rustamjonraximov@gmail.com

Annotation. In this article, the agricultural indicators of 12 regions of the Republic of Uzbekistan and the Republic of Karakalpakstan for the years 2010–2024 were analyzed using machine learning, and the regions — including the Republic of Karakalpakstan — were divided into clusters based on their performance efficiency. The database was obtained from the official website of the National Statistics Committee of the Republic of Uzbekistan at <https://stat.uz>. A total of 36 agricultural indicators were collected and used for analysis. The K-Means and Hierarchical Clustering machine learning algorithms were applied. Based on the agricultural data, the regions and the Republic of Karakalpakstan were divided into 3 clusters using K-Means and Hierarchical Clustering algorithms.

Keywords: K-Means, Hierarchical Clustering, clustering, agriculture, Machine Learning, Uzbekistan.

MACHINE LEARNING YONDASHUVI YORDAMIDA O‘ZBEKISTON VILOYATLARINI QISHLOQ XO‘JALIGI KO‘RSATKICHLARI BO‘YICHA KLASTERLASH VA TASNIFLASH

Ismailov Ilxom Tursunbayevich

Texnika fanlari fan nomzodi (PhD)

Muxammad al-Xorazmiy nomidagi Toshkent axborot texnologiyalari universiteti Samarqand filiali “Sun’iy intellekt va ma’lumotlar tahlili” kafedrasida katta o‘qituvchisi

Raximov Rustamjon Tuxtayevich

Muxammad al-Xorazmiy nomidagi Toshkent axborot texnologiyalari universiteti Samarqand filiali “Sun’iy intellekt va ma’lumotlar tahlili” kafedrasida dotsenti

Annotatsiya. Ushbu maqolada O‘zbekiston Respublikasining 12 ta viloyati va Qoraqalpog‘iston Respublikasining 2010–2024 yillardagi qishloq xo‘jaligi ko‘rsatkichlari machine learning yordamida tahlil qilingan hamda viloyatlar — Qoraqalpog‘iston Respublikasi bilan birga — samaradorlik darajasiga ko‘ra klasterlarga ajratilgan. Ma’lumotlar bazasi O‘zbekiston Respublikasi Davlat statistika qo‘mitasining rasmiy veb-sayti <https://stat.uz> dan olindi. Tahlil uchun jami 36 ta qishloq xo‘jaligi ko‘rsatkichi to‘plandi va ishlatildi. K-Means va Ierarxik Klasterlash machine learning algoritmlari qo‘llanildi. Qishloq xo‘jaligi ma’lumotlari asosida viloyatlar va Qoraqalpog‘iston Respublikasi K-Means va Ierarxik Klasterlash algoritmlari yordamida 3 ta klasterga ajratildi.

Kalit so‘zlar: K-Means, Ierarxik Klasterlash, klasterlash, qishloq xo‘jaligi, Machine Learning, O‘zbekiston.

DOI: <https://doi.org/10.47390/ts-v4i3y2026N12>

Introduction

One of the most important sectors of Uzbekistan's economy is agriculture, which holds a significant share in the country's overall Gross Domestic Product (GDP). During 2010–2024, significant changes took place in agriculture in Uzbekistan. In particular, the number of farms increased, modern technologies were introduced, and export potential expanded. However, notable differences exist among the various regions and the Republic of Karakalpakstan in terms of agricultural development and efficiency.

Traditional statistical methods often fail to fully analyze multi-dimensional data when objectively assessing and analyzing the agricultural efficiency of Uzbekistan's regions, and they are limited in identifying hidden patterns within that data. Identifying and analyzing such patterns using machine learning is considered the most effective approach.

The main objective of this study is to apply modern machine learning methods to cluster the regions of the Republic of Uzbekistan by agricultural efficiency and to identify the characteristics of each cluster. To achieve this, the following tasks were defined:

- Collecting and analyzing agricultural indicator data for the regions of the Republic of Uzbekistan and the Republic of Karakalpakstan for the years 2010–2024.
- Clustering the regions of the Republic of Uzbekistan and the Republic of Karakalpakstan using the most modern machine learning clustering algorithms — K-Means and Hierarchical Clustering.
- Comparing the effectiveness of the different clustering methods applied.
- Identifying the factors that most significantly influence agricultural efficiency.
- Developing recommendations for each identified cluster.

Literature review

In recent years, Machine Learning methods have been widely applied in the field of agriculture. In particular, a 2024 study by Prity and colleagues used nearly 9 of the most advanced machine learning models to recommend agricultural products [1]. Zhang and colleagues demonstrated in 2023 that the Random Forest Machine Learning algorithm outperforms traditional regression models in predicting crop yields by identifying nonlinear relationships [2]. In 2024, Dey and colleagues applied SVM, XGBoost, Random Forest, KNN, and Decision Tree machine learning models to classify horticultural crops in agriculture, with the XGBoost model achieving an accuracy of 99.09% [3].

Clustering algorithms are also being used for various purposes in the agricultural sector. A study published in 2022 compared the results of K-Means, Fuzzy C-Means, Hierarchical, and DBSCAN algorithms for delineating effective management zones [4]. Another study evaluated more than 20 clustering algorithms and found that Fuzzy C-Means and K-Means do not always produce good results [5]. In 2024, Xu and colleagues achieved an overall accuracy of 92.38% in soil classification using a multi-feature approach based on Random Forest [6].

Research on regional agricultural analysis is being conducted in many countries. In particular, Huseynov and colleagues in 2024 divided 44 agricultural enterprises in Russia into 4 cluster groups [7].

Overall, Machine Learning algorithms are currently being widely applied in agriculture — particularly in predicting crop yields, classifying crops, and identifying management zones. Of course, Machine Learning algorithms have both advantages and disadvantages, and it is therefore recommended to use multiple algorithms together.

Methodology

Dataset

In this study, data collection was the primary concern. Data was gathered from the open database of the official website of the Statistics Agency of the Republic of Uzbekistan at <http://www.stat.uz>. The data covered a total period of 15 years, from 2010 to 2024, resulting in 195 total observations.

The geographic scope included 12 regions of the Republic of Uzbekistan — Andijan, Bukhara, Jizzakh, Kashkadarya, Navoiy, Namangan, Samarkand, Surkhandarya, Syrdarya, Tashkent, Fergana, and Khorezm — as well as the Republic of Karakalpakstan.

A total of 36 indicators were selected for the years 2010–2024. These included 8 production output indicators, covering stone fruits, grain crops, fruits and berries, vegetables, subtropical fruits, seed fruits, and nut-bearing crops. There were 5 livestock product indicators, namely milk, eggs, honey, Karakul pelts, fish, and silk cocoons. Share by farm type consisted of 9 indicators, covering the shares of peasant farms, farmer farms, and organizations. Growth rates comprised 9 indicators, including growth rates in crop farming, livestock farming, and overall agriculture. General volume indicators totaled 5, covering crop farming, agriculture, and agricultural-forestry-fishery products.

Data Preparation

No missing values were identified in the dataset collected for the years 2010–2024 — that is, all data was 100% complete. Outliers were checked for each indicator, and it was determined that there were no outlier values and that all values were real. The data from the most recent year was taken as the primary dataset for clustering. Z-score normalization was applied to normalize the data, bringing all values into the range of [0, 1].

Algorithms Used

K-Means Clustering

The K-Means Clustering algorithm divides n observations into k clusters. The algorithm iteratively updates the centroids and assigns each point to its nearest centroid. To find the optimal number of clusters k , the Elbow Method was applied. This method is based on the inertia metric, which measures the sum of squared distances from each point to its own centroid.

The quality of clustering was measured using the Silhouette Score, which compares how close each point is to its own cluster versus how far it is from neighboring clusters.

Hierarchical Clustering

Hierarchical Clustering builds clusters in the form of a hierarchical tree. Unlike the K-Means algorithm, this method does not require the number of clusters to be specified in advance. Within this algorithm, Ward's minimum variance method was applied. The main objective of this algorithm is to minimize the internal variance at each step when clusters are merged — that is, the algorithm ensures cluster compactness by combining the groups that are closest and most similar to one another.

Evaluation Metrics

The following evaluation metrics were used in this study:

- Silhouette Score — a metric that evaluates the quality of separation and logical density of clusters. It takes values in the range of -1 to 1, with higher values indicating better clustering.
- Davies-Bouldin Index — an indicator that evaluates the mutual similarity and density of clusters. The lower the value, the higher the quality of clustering.
- Calinski-Harabasz Score — an indicator that calculates the ratio of inter-cluster to intra-cluster variance. The higher the value, the better the clusters are separated from one another.

Results

Descriptive statistics

The key indicators for the regions and the Republic of Karakalpakstan were analyzed for the year 2024. It was found that Tashkent region has the highest volume, while the Republic of Karakalpakstan has the lowest indicators, with the difference between them exceeding 4 times. It was also found that Namangan, from the Fergana Valley, also has relatively high indicators (fig 1).

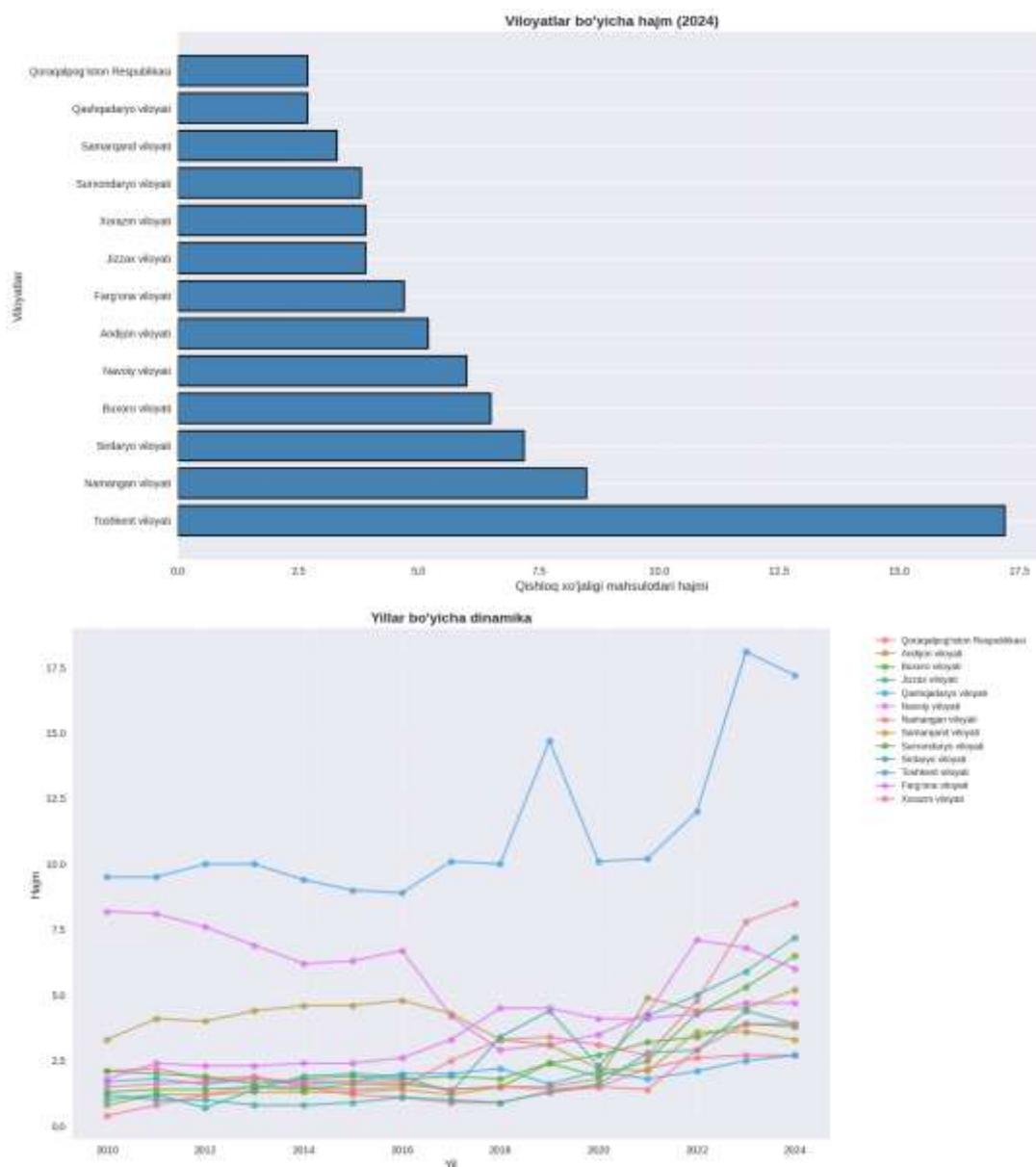


FIGURE 1. Descriptive indicators of the regions

Correlation analysis

The correlation matrix identified the relationships among the indicators. Pairs with a high correlation of $r > 0.9$ were identified: 1) Total agricultural volume \leftrightarrow Crop farming products, with a correlation coefficient of $r = 0.96$; 2) Farmer farms \leftrightarrow Share of peasant farms, with a correlation coefficient of $r = 0.92$; 3) Growth rate \leftrightarrow New technologies, with a correlation coefficient of $r = 0.88$ (fig 2).

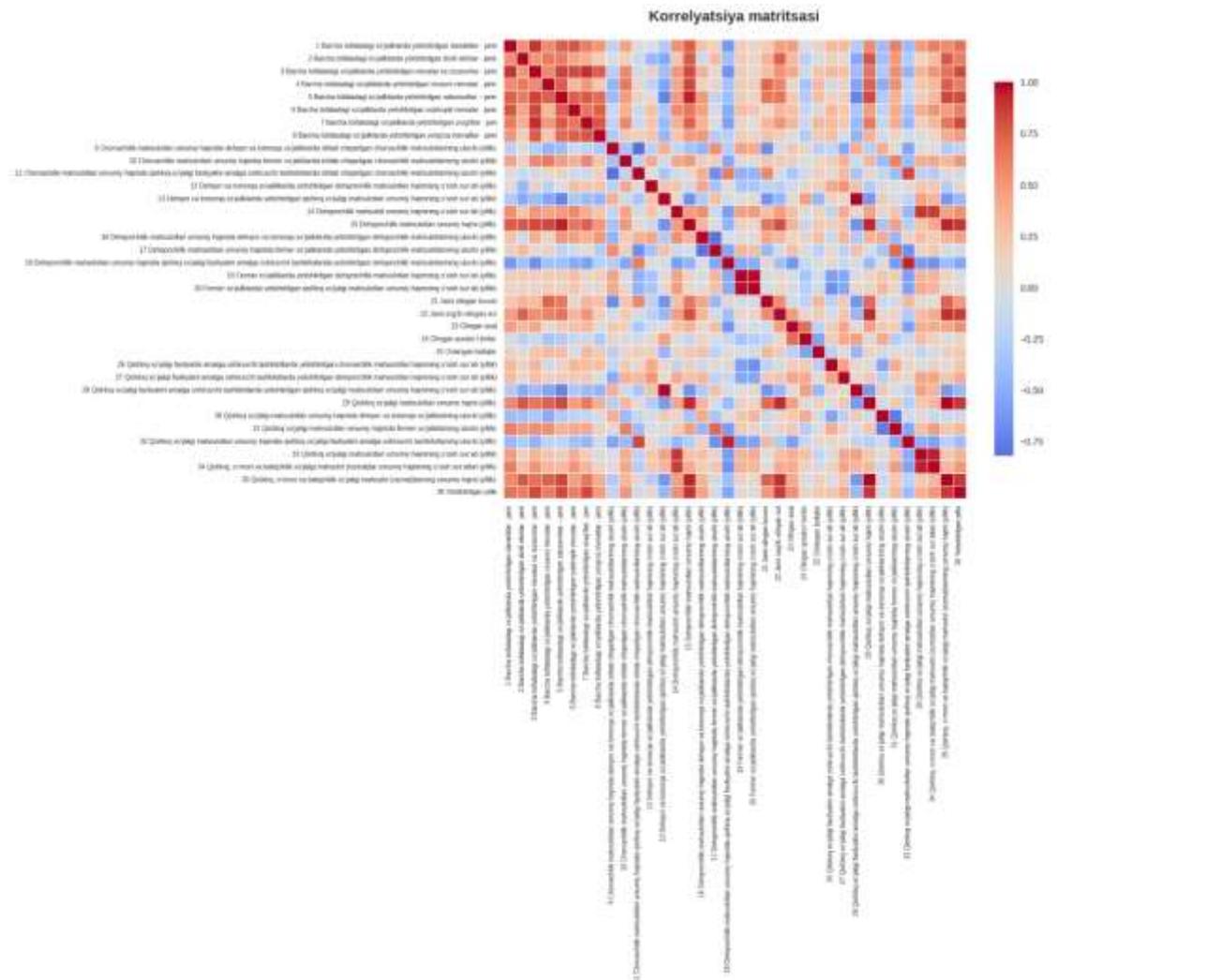


FIGURE 2. Heat map of indicators

K-Means results

Evaluation metrics were compared to determine the optimal values of k. The value of $k = 3$ yielded the best result: Silhouette Score = 0.1849, Davies-Bouldin = 1.0701, Calinski-Harabasz = 3.54 (fig 4).

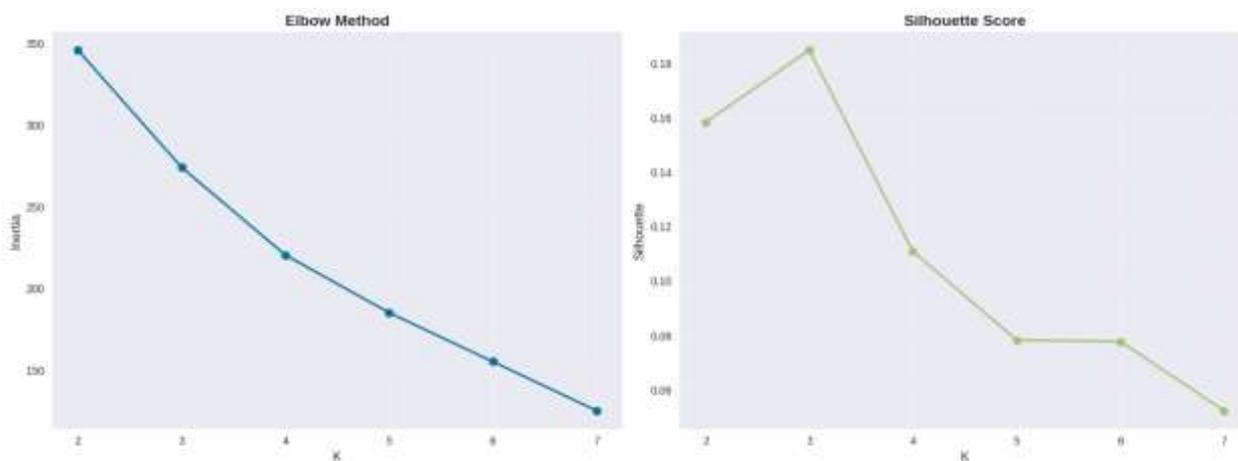


FIGURE 3. Results of evaluation metrics for determining k values in the K-Means algorithm

Cluster Distribution

Using the K-Means algorithm, the data was divided into 3 clusters (fig 5):

- Cluster 0 (4 regions): Andijan, Namangan, Samarkand, Fergana
- Cluster 1 (8 regions): Republic of Karakalpakstan, Bukhara, Jizzakh, Syrdarya, Surkhandarya, Kashkadarya, Navoiy, Khorezm
- Cluster 2 (1 region): Tashkent

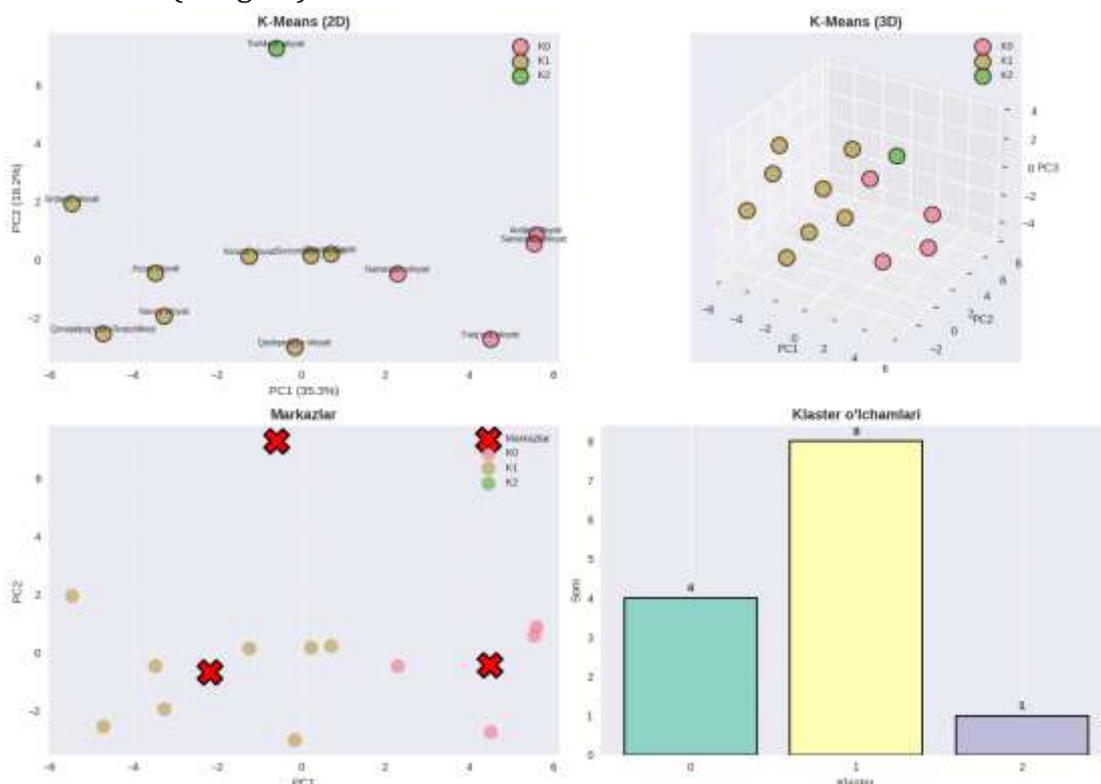


FIGURE 4. Visual representation of the K-Means clustering results

Hierarchical Clustering results

Three linkage methods were compared for Hierarchical Clustering: Ward: 0.1849, Complete: 0.1781, Average: 0.1849 (fig 6). The results of the three methods were relatively close to one another. The dendrogram clearly showed the hierarchical relationships among the regions.

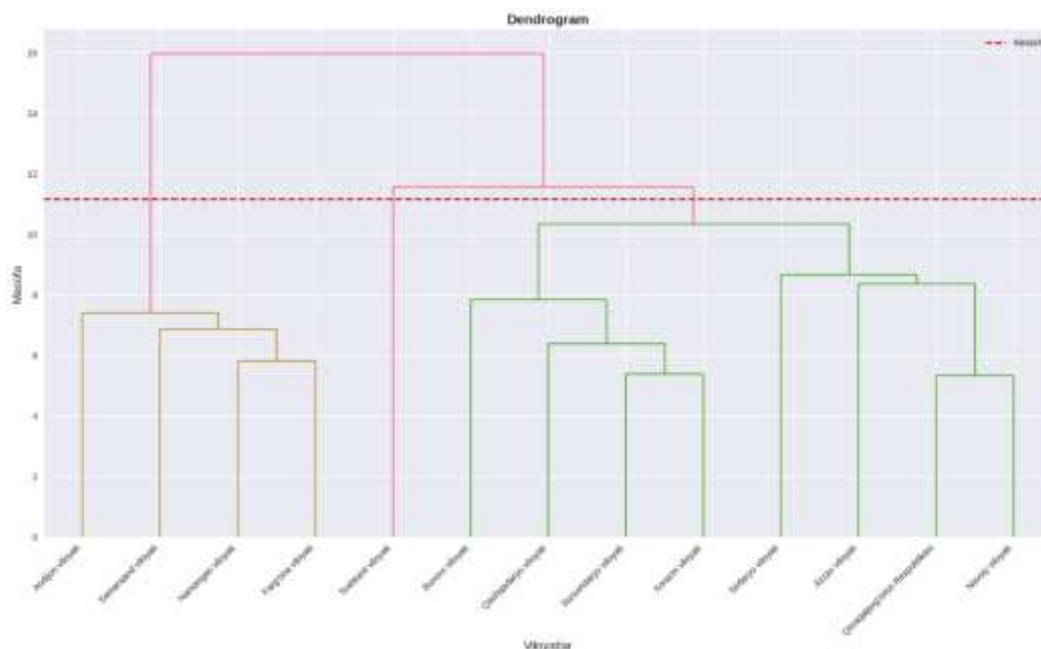


FIGURE 5. Hierarchical dendrogram showing the hierarchical relationships among regions

In Hierarchical Clustering, the data was also divided into three clusters (fig 7):

- Cluster 0 (8 regions): Republic of Karakalpakstan, Bukhara, Jizzakh, Syrdarya, Surkhandarya, Kashkadarya, Navoiy, Khorezm
- Cluster 1 (4 regions): Andijan, Namangan, Samarkand, Fergana
- Cluster 2 (1 region): Tashkent

Evaluation metrics: Silhouette: 0.1849, Davies-Bouldin: 1.0701

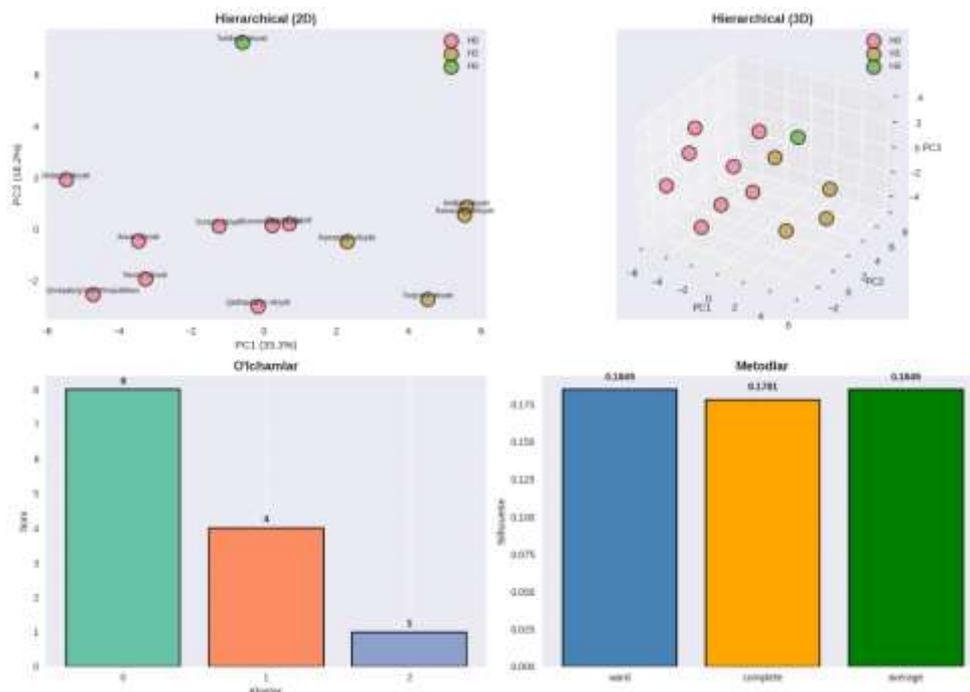


FIGURE 6. Visual representation of the Hierarchical Clustering results Comparison of Methods

Two models were compared: K-Means and Hierarchical Clustering produced identical results (fig 8).

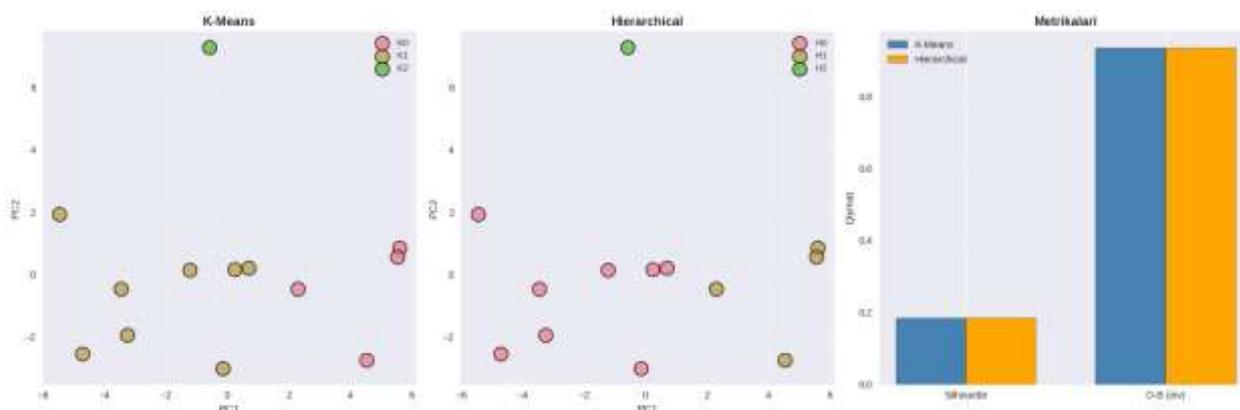


FIGURE 7. Comparative results of the K-Means and Hierarchical Clustering algorithms

Discussion

The analyses conducted reveal a significant imbalance between the agrarian potential of the republic's regions and the volume of agricultural products they produce. Both methods divided the 13 regions into 3 main groups, which confirms the robustness of the research findings.

- Cluster 0 — High efficiency: Tashkent region
- Cluster 1 — Medium efficiency: Andijan, Namangan, Samarkand, Fergana
- Cluster 2 — Developing efficiency: Republic of Karakalpakstan, Bukhara, Jizzakh, Syrdarya, Surkhandarya, Kashkadarya, Navoiy, Khorezm

The following practical recommendations are proposed for these clusters:

For Cluster 0 (high efficiency), the priority tasks are to expand export-oriented production capacities, attract investments into research and development projects, and establish centers of advanced practice and experience.

For Cluster 1 (medium efficiency), the focus should be on accelerating technological modernization processes to increase production productivity, providing material and technical support to farmer farms, and fundamentally improving existing irrigation systems.

For Cluster 2 (developing efficiency), the priorities are to increase investments directed at modernizing regional infrastructure to stimulate sustainable agricultural growth, expand technical assistance programs, and systematically introduce special incentives, low-interest credits, and promising pilot projects.

The main limitations of this study include the fact that it is restricted to aggregated data at the regional level and therefore does not fully capture internal disparities within regions, that important factors such as soil fertility were not taken into account in the analyses, and that no international comparative analysis was conducted.

Conclusion

The results of the conducted research demonstrated that the 13 regions of Uzbekistan are divided into three distinct clusters based on agricultural indicators, and that a high degree of regional heterogeneity exists. From a methodological standpoint, both the K-Means algorithm and the Hierarchical Clustering method exhibited strong visualization capabilities. The fact that the production gap between the highest-efficiency cluster and the developing cluster amounts to 2.2 times reveals the scale of regional imbalance. Theoretically, this work has proven the robustness of a multi-algorithmic approach to applying Machine Learning (ML) methods in the agricultural sector, while practically, it has provided policymakers with a tool for the rational allocation of resources and objective assessment.

Based on the research findings, it is advisable in the short term to introduce rapid assistance programs for low-efficiency regions, launch pilot projects in medium-efficiency clusters, and promote export potential in high-efficiency groups. As a medium-term strategy, specialized innovation centers should be established on the basis of each cluster, along with measures for interregional experience exchange and infrastructure modernization. The long-term goal should be to ensure the gradual growth of all regions by bringing low-performing regions up to the medium-efficiency level and raising high-efficiency clusters to international standards.

In future research, it will be important to deepen the scope of analysis to the district level, and to integrate data on soil fertility, climate change, and remote sensing. Conducting comparative analyses with Central Asian countries would also further enrich the research. In conclusion, Machine Learning methods are a powerful tool for analyzing and strategically planning the agricultural sector of Uzbekistan. The results of this research serve as a valuable resource for government authorities, investors, and academic circles, and contribute to the sustainable development of the sector.

Adabiyotlar/Literatura/References:

1. Prity, F.S., Hasan, M.M., Saif, S.H., et al. Enhancing Agricultural Productivity: A Machine Learning Approach to Crop Recommendations. *Human-Centric Intelligent Systems*, 4, 497–510. (2024). <https://doi.org/10.1007/s44230-024-00081-3>
2. Zhang, Q., et al. Maize yield prediction using federated random forest. *Computers and Electronics in Agriculture*, 210, 107930. (2023). <https://doi.org/10.1016/j.compag.2023.107930>
3. Dey, B., Ferdous, J., Ahmed, R. Machine learning based recommendation of agricultural and horticultural crop farming in India under the regime of NPK, soil pH and three climatic variables. *Heliyon*, 10(3), e25112. (2024). <https://doi.org/10.1016/j.heliyon.2024.e25112>
4. Tagarakis, A.C., et al. Clustering and Smoothing Pipeline for Management Zone Delineation Using Proximal and Remote Sensing. *Remote Sensing*, 14(1), 127. (2022). <https://doi.org/10.3390/rs14010127>
5. Gavioli, A., de Souza, E.G., Bazzi, C.L., Schenatto, K., Betzek, N.M. Identification of management zones in precision agriculture: An evaluation of alternative cluster analysis methods. *Computers and Electronics in Agriculture*, 199, 107139. (2022). <https://doi.org/10.1016/j.compag.2022.107139>
6. Xu, J., Chen, C., Zhou, S., Hu, W., Zhang, W. Land use classification in mine-agriculture compound area based on multi-feature random forest: a case study of Peixian. *Frontiers in Sustainable Food Systems*, 7, 1335292. (2024). <https://doi.org/10.3389/fsufs.2023.1335292>
7. Huseynov, R., Aliyeva, N., Bezpалov, V., et al. Cluster analysis as a tool for improving the performance of agricultural enterprises in the agro-industrial sector. *Environment, Development and Sustainability*, 26, 4119–4132. (2024). <https://doi.org/10.1007/s10668-022-02873-8>

TECHSCIENCE.UZ

**TEXNIKA FANLARINING DOLZARB
MASALALARI**

№ 3 (4)-2026

TOPICAL ISSUES OF TECHNICAL SCIENCES

**TECHSCIENCE.UZ- TEXNIKA
FANLARINING DOLZARB MASALALARI**
elektron jurnali 15.09.2023-yilda 130346-
sonli guvohnoma bilan davlat ro'yxatidan
o'tkazilgan.

Muassislar: "SCIENCEPROBLEMS TEAM"
mas'uliyati cheklangan jamiyati;
Jizzax politexnika insituti.

TAHRIRIYAT MANZILI:

Toshkent shahri, Yakkasaroy tumani, Kichik
Beshyog'och ko'chasi, 70/10-uy.

Elektron manzil:

scienceproblems.uz@gmail.com