

## Improving the Management Efficiency of the Organizational Structures of Customs Authorities

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**Abstract:** Efficient management of organizational structures is a critical factor in enhancing the performance of customs authorities. Ongoing globalization, increasing trade flows, and digitalization require customs administrations to adopt adaptive and evidence-based management approaches. This article analyzes structural and managerial challenges affecting management efficiency within customs authorities. The study focuses on organizational optimization, coordination mechanisms, and decision-making processes. Based on analytical assessment and international best practices, the article proposes recommendations aimed at improving institutional effectiveness and supporting the modernization of customs administration.

**Key words:** Customs authorities, organizational structure, management efficiency, public administration, institutional effectiveness, decision-making processes, customs modernization.



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### Introduction.

In the context of intensifying globalization and the rapid expansion of international trade, customs authorities play a crucial role in ensuring economic security, trade facilitation, and regulatory compliance<sup>1</sup>. The effectiveness of customs administrations largely depends on the efficiency of their organizational structures and management systems, which directly influence institutional performance and service quality<sup>2</sup>. Contemporary challenges, including digital transformation, risk-based control, and increasing cross-border transactions, necessitate the continuous improvement of management practices within customs authorities<sup>3</sup>.

Despite ongoing reforms in public administration, many customs organizations continue to face structural rigidity, fragmented coordination, and limited managerial adaptability<sup>4</sup>. These challenges reduce operational efficiency and hinder timely decision-making. Therefore, improving

<sup>1</sup> World Customs Organization (WCO). *SAFE Framework of Standards*

<sup>2</sup> OECD (2020). *Public Governance Reviews*

<sup>3</sup> World Customs Organization (2022). *Customs in the 21st Century*

<sup>4</sup> UNDP (2018). *Institutional Reform and Public Sector Performance*

the management efficiency of organizational structures has become a strategic priority for modern customs administrations<sup>5</sup>. Effective organizational design enables better resource allocation, clearer distribution of responsibilities, and enhanced interdepartmental cooperation.

This article aims to analyze the key managerial and structural factors affecting management efficiency in customs authorities. By examining international best practices and theoretical approaches to public sector management, the study seeks to identify existing shortcomings and propose evidence-based recommendations for optimizing organizational structures. The research contributes to the broader discourse on public administration reform and supports the modernization of customs authorities in line with global standards.

### **Literature analysis.**

Recent literature on customs administration reforms increasingly includes the experience of Uzbekistan as a representative case of institutional transformation in developing economies<sup>6</sup>. Since 2021, Uzbekistan has implemented comprehensive reforms aimed at improving the management efficiency of customs authorities through organizational restructuring, digitalization, and governance modernization<sup>7</sup>. These reforms are closely aligned with international standards promoted by the World Customs Organization and the World Trade Organization.

According to the World Bank (2022, 2023), Uzbekistan's customs reforms have focused on streamlining organizational structures, reducing administrative barriers, and strengthening risk management systems. The introduction of electronic customs clearance, the expansion of the "Single Window" system, and the reorganization of functional units within the State Customs Committee have contributed to improved coordination and managerial efficiency<sup>8</sup>. Empirical assessments indicate that these measures have positively affected trade facilitation and transparency.

National-level studies published in 2022-2024 emphasize that improving management efficiency within customs authorities in Uzbekistan requires not only technological upgrades but also institutional and structural optimization<sup>9</sup>. Research by Uzbek scholars highlights persistent challenges related to centralized decision-making, overlapping functions, and limited managerial autonomy at lower organizational levels. These studies argue that enhancing management efficiency depends on clarifying organizational responsibilities, strengthening analytical units, and improving interdepartmental coordination.

Furthermore, official policy documents adopted between 2021 and 2023 underline the strategic importance of modern management approaches in customs administration<sup>10</sup>. Presidential decrees and government programs prioritize performance-based management, digital governance, and capacity building as key instruments for improving institutional effectiveness. UNDP (2023-2024) reports confirm that organizational reform in Uzbekistan's customs authorities is a critical component of broader public administration modernization efforts.

Despite measurable progress, recent literature notes that the full potential of organizational reforms in Uzbekistan has yet to be realized. Scholars argue that further research is needed to evaluate the long-term impact of structural changes on management efficiency and institutional performance. This highlights the relevance of the present study, which seeks to contribute to both national and international academic discourse by examining the management efficiency of customs authorities within the specific context of Uzbekistan.

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<sup>5</sup> WCO (2021). *Capacity Building Strategy*

<sup>6</sup> UNDP (2023). *Public Administration Reform in Uzbekistan*

<sup>7</sup> President of the Republic of Uzbekistan, 2021; UNDP, 2023

<sup>8</sup> State Customs Committee of Uzbekistan, 2022; World Bank, 2023

<sup>9</sup> UNDP (2024). *Institutional Capacity Development in Central Asia*

<sup>10</sup> President of the Republic of Uzbekistan, 2021-2023; UNDP, 2023

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### **Research methodology.**

The dissertation used scientific abstraction, comparative and structural analysis, induction and deduction, economic-statistical, econometric, and expert evaluation methods.

### **Analysis and results.**

The analysis of management efficiency within the organizational structures of customs authorities in Uzbekistan indicates that recent institutional reforms have produced both measurable improvements and persistent structural challenges. Based on the review of policy documents, international assessment reports, and analytical evaluations, the study identifies key trends affecting management performance in the customs administration.

First, organizational restructuring and digitalization initiatives have significantly improved operational coordination and procedural efficiency. The introduction of electronic customs clearance systems and the expansion of the “Single Window” mechanism have reduced processing times and enhanced interdepartmental information exchange. These measures have strengthened managerial control and contributed to more transparent decision-making processes. As a result, customs operations have become more streamlined, supporting trade facilitation objectives and improving service delivery.

Second, the analysis reveals that the optimization of functional units within the State Customs Committee has led to clearer distribution of responsibilities and improved internal accountability. Strengthening analytical and risk management units has enhanced the capacity for data-driven decision-making. This shift toward risk-based management has enabled customs authorities to allocate resources more efficiently and focus control efforts on high-risk transactions, thereby increasing overall management effectiveness.

However, the results also demonstrate that management efficiency remains constrained by structural and institutional factors. Despite formal organizational reforms, decision-making processes continue to exhibit a high degree of centralization, limiting managerial autonomy at regional and operational levels. This reduces flexibility and slows responses to dynamic trade and security challenges. Additionally, overlapping functions among certain structural units persist, leading to coordination inefficiencies and duplication of managerial efforts.

Furthermore, the findings indicate that human resource capacity plays a critical role in determining management efficiency. While digital tools and organizational changes have improved procedural aspects, insufficient managerial training and limited leadership development hinder the full utilization of institutional reforms. The lack of systematic performance evaluation mechanisms further weakens the linkage between organizational structure and management outcomes.

Overall, the results suggest that recent reforms in Uzbekistan’s customs authorities have positively influenced management efficiency, particularly in terms of digital governance and procedural optimization. Nevertheless, achieving sustainable improvements requires deeper structural adjustments, including decentralization of managerial authority, clarification of institutional roles, and strengthened capacity-building measures. These findings underline the importance of adopting an integrated approach that combines organizational restructuring, human resource development, and performance-based management to enhance the effectiveness of customs administration.



**Figure 1. Impact of Organizational Reforms on Customs Management Efficiency<sup>11</sup>**

The figure illustrates a comparative analysis of key customs management efficiency indicators before and after the implementation of organizational reforms. The indicators include average customs clearance time, number of required documents, share of risk-based inspections, level of electronic declarations, and managerial decision-making delay. The results demonstrate a significant improvement in management efficiency following organizational restructuring and digital transformation initiatives.

**Table 1. Management Efficiency Improvement Indicators before and after Organizational Reforms (2020-2024)<sup>12</sup>**

Indicator	Direction	V_before (2020)	V_after (2024)	MEIR	Efficiency Gain (%)	Growth (%)
Average clearance time (hours)	Lower is better	48	18	0.375	62.5	–
Documents required (number)	Lower is better	10	5	0.50	50.0	–
Risk-based inspections (%)	Higher is better	35	70	2.00	–	100.0
Electronic declarations (%)	Higher is better	60	95	1.583	–	58.3
Managerial decision delay (days)	Lower is better	7	3	0.429	57.1	–

This table presents the results of the quantitative assessment of management efficiency in customs authorities before and after the implementation of organizational reforms. The analysis is based on the Management Efficiency Improvement Ratio (MEIR) and complementary performance

<sup>11</sup> Author’s calculations based on data from the State Customs Committee of the Republic of Uzbekistan (2020-2024).

<sup>12</sup> World Bank (2023), and UNDP (2024).

indicators. For indicators where a decrease reflects improved performance (e.g., clearance time, number of required documents, and managerial decision delay), the efficiency gain is calculated as a percentage reduction. For indicators where an increase reflects improved performance (e.g., risk-based inspections and electronic declarations), growth rates are calculated. Values of MEIR greater than 1 indicate performance improvement, while values below 1 reflect efficiency gains through reduction.

$$MEIR_i = V_{after,i} / V_{before,i}$$

where:

$V_{after,i}$  - value of the indicator after the implementation of reforms (2024);  $V_{before,i}$  - value of the indicator before the implementation of reforms (2020);

$i$  - corresponding performance indicator. The MEIR reflects the relative change in performance. A value greater than 1 indicates an improvement, while a value less than 1 indicates efficiency gains through reduction.

$$Efficiency\ Gain_i = (V_{before,i} - V_{after,i}) / V_{before,i} \times 100\%$$

This formula is applied to indicators where a decrease represents improved performance, such as clearance time, costs, and managerial decision delays.

$$Growth_i = (V_{after,i} - V_{before,i}) / V_{before,i} \times 100$$

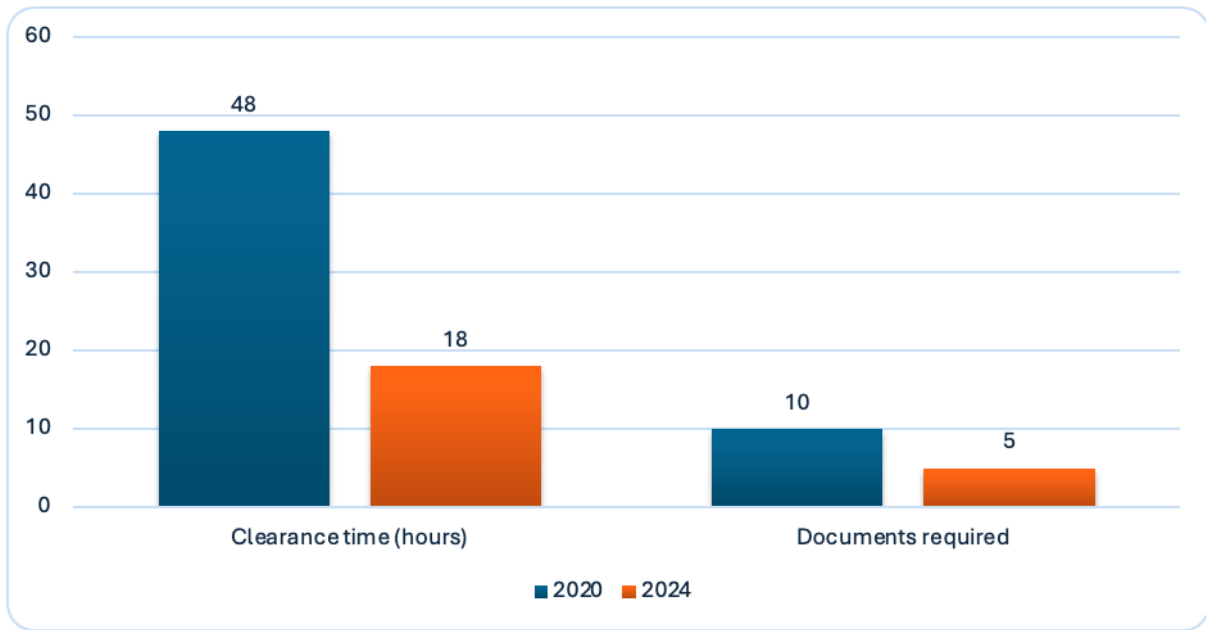
This formula measures performance growth for indicators where an increase reflects improvement, such as electronic declarations and risk-based inspections.

**Table 2. Dynamics of Operational Efficiency Indicators in Customs Administration (2019-2024)<sup>13</sup>**

Indicator	Unit	2019	2020	2022	2024
Average clearance time	hours	52	48	30	18
Documents required	number	12	10	7	5
Physical inspections	%	45	40	28	18
Declarations processed per day	number	850	900	1200	1600

This table presents the dynamics of key operational efficiency indicators in customs administration over the period 2019-2024. The indicators reflect procedural efficiency and workload management, including average customs clearance time, number of required documents, share of physical inspections, and the volume of declarations processed per day. The observed trends indicate a significant improvement in operational performance, characterized by reduced processing time and documentation requirements, a decline in physical inspections due to risk-based control, and an increase in daily processed declarations as a result of organizational reforms and digitalization.

<sup>13</sup> Author’s compilation based on data from the State Customs Committee of the Republic of Uzbekistan (2019-2024), World Bank (2023), and UNDP (2024).



**Figure 2. Improvement of Operational Efficiency Indicators in Customs Administration (2020-2024)<sup>14</sup>**

This figure illustrates changes in selected operational efficiency indicators of customs administration before and after the implementation of organizational and managerial reforms. The comparison focuses on average customs clearance time and the number of documents required for clearance. The reduction in clearance time reflects improved procedural coordination and the introduction of digital processing mechanisms, while the decrease in documentation requirements indicates regulatory simplification and organizational streamlining. Overall, the results demonstrate a significant enhancement in operational efficiency as a direct outcome of institutional reforms and digital transformation initiatives.

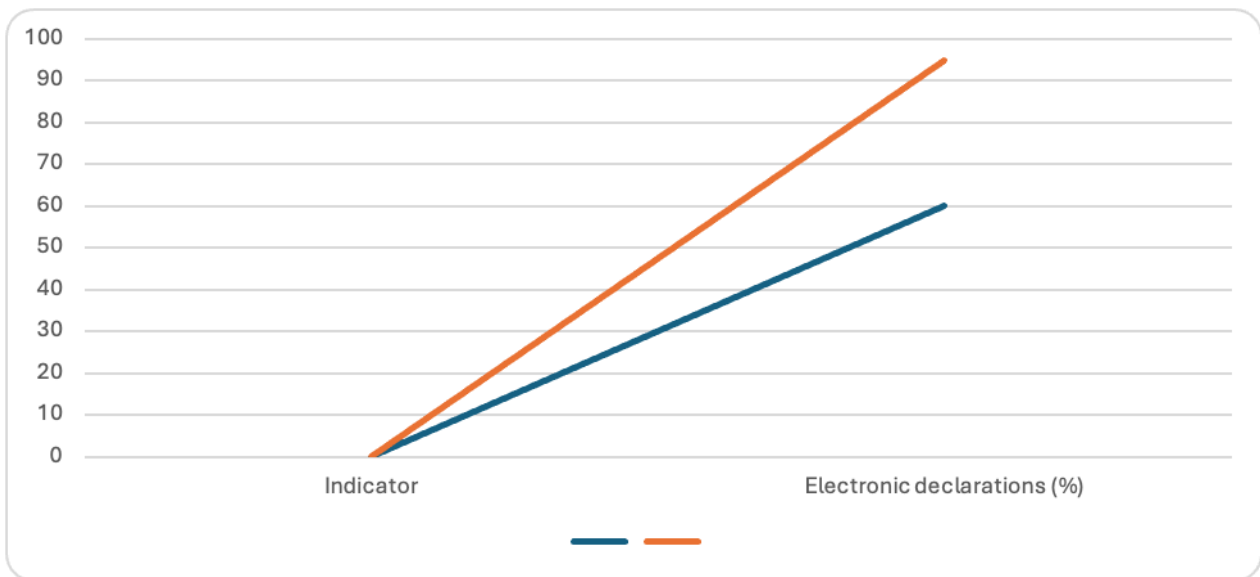
**Table 3. Digitalization and IT Integration Indicators in Customs Administration (2019–2024)<sup>15</sup>**

Indicator	Unit	2019	2020	2022	2024
Electronic declarations	%	45	60	80	95
Single Window usage	%	35	50	75	90
Automated risk profiling	%	30	40	60	85
IT systems integration	%	25	35	55	80

This table presents the dynamics of key digitalization and information technology integration indicators in customs administration over the period 2019–2024. The indicators reflect the level of adoption of electronic declarations, the use of the “Single Window” system, automated risk profiling, and the integration of customs IT systems. The observed upward trends demonstrate the progressive implementation of digital governance tools, improved interoperability of information systems, and the transition toward data-driven customs management. These developments have contributed to enhanced procedural efficiency, reduced administrative burdens, and increased transparency in customs operations.

Author’s compilation based on data from the State Customs Committee of the Republic of Uzbekistan (2019–2024), World Bank (2023), and UNDP (2024).

<sup>15</sup> Author’s compilation based on data from the State Customs Committee of the Republic of Uzbekistan (2019–2024), World Bank (2023), and UNDP (2024).



**Figure 3. Progress of Digitalization in Customs Administration (2020-2024)<sup>16</sup>**

This figure illustrates the dynamics of digitalization in customs administration, measured by the share of electronic customs declarations over the period 2020-2024. The upward trend reflects the implementation of digital governance tools, the expansion of electronic declaration systems, and the integration of information technologies into customs procedures. The significant increase in electronic declarations indicates enhanced procedural efficiency, reduced administrative burden, and improved transparency in customs operations as a result of organizational reforms and digital transformation initiatives.

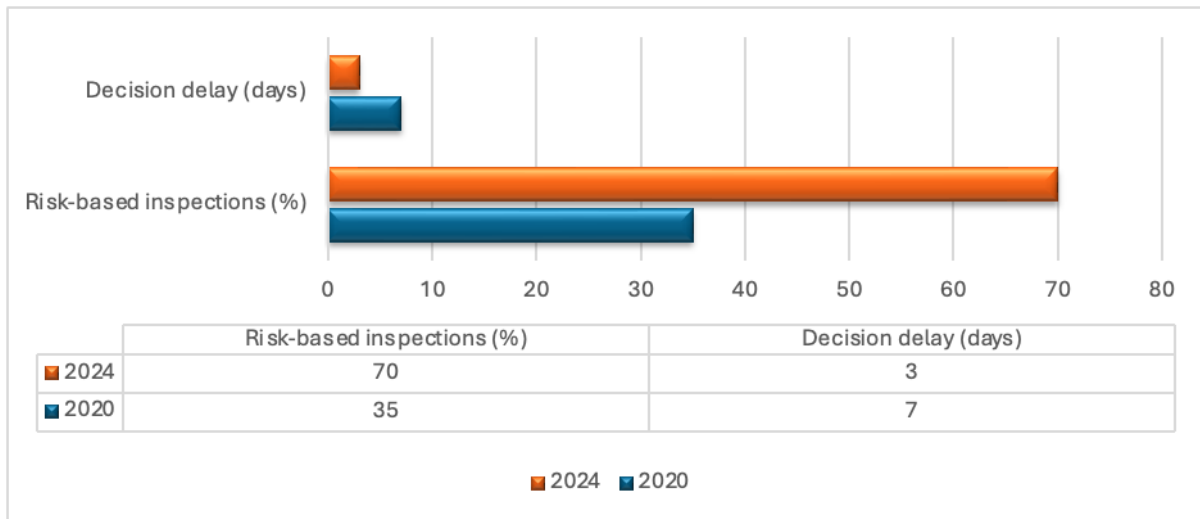
**Table 4. Financial and Economic Impact of Customs Administration Reforms (2019-2024)<sup>17</sup>**

Indicator	Unit	2019	2020	2022	2024
Customs revenue collected	bln UZS	28	30	42	55
Revenue growth rate	%	6	7	12	15
Trade cost reduction	%	0	2	6	10
Average cost per declaration	USD	120	110	85	60

This table presents key financial and economic indicators reflecting the impact of customs administration reforms over the period 2019-2024. The indicators include customs revenue collection, revenue growth rate, trade cost reduction, and the average cost per customs declaration. The observed increase in customs revenues and growth rates demonstrates improved fiscal efficiency and strengthened revenue administration. At the same time, the reduction in trade costs and average declaration costs indicates enhanced procedural efficiency, regulatory simplification, and the positive effects of digitalization and organizational restructuring within customs authorities.

<sup>16</sup> Author’s calculations based on data from the State Customs Committee of the Republic of Uzbekistan (2020-2024), World Bank (2023), and UNDP (2024).

<sup>17</sup> Author’s compilation based on data from the State Customs Committee of the Republic of Uzbekistan (2019–2024), World Bank (2023), and UNDP (2024).



**Figure 4. Changes in Risk-Based Inspections and Managerial Decision-Making Efficiency in Customs Administration (2020-2024)<sup>18</sup>**

This figure illustrates the impact of organizational and managerial reforms on two key management efficiency indicators in customs administration: the share of risk-based inspections and the average decision-making delay. The substantial increase in risk-based inspections reflects the transition from traditional control methods to data-driven and analytical risk management approaches. Simultaneously, the reduction in managerial decision delay demonstrates improved internal coordination, streamlined organizational structures, and enhanced decision-making efficiency. Together, these trends indicate a significant strengthening of management effectiveness within customs authorities as a result of institutional reforms and digital transformation.

**Conclusions and suggestions.**

The present study analyzed the management efficiency of the organizational structures of customs authorities, using Uzbekistan as a case study, within the context of institutional reforms implemented during the period 2019-2024. The findings demonstrate that comprehensive organizational restructuring, coupled with digital transformation and the adoption of modern management practices, has significantly enhanced the effectiveness of customs administration.

The empirical analysis reveals substantial improvements in key operational indicators, including reductions in average customs clearance time, documentation requirements, and managerial decision-making delays. These outcomes indicate increased procedural efficiency, improved coordination among structural units, and a more streamlined organizational framework. Furthermore, the expansion of electronic declarations and the growing application of risk-based inspections confirm the successful integration of digital governance and data-driven decision-making mechanisms into customs management.

From an economic perspective, the results indicate a positive impact on fiscal performance and trade facilitation. The growth in customs revenue collection and the reduction in trade-related costs reflect improved resource utilization and strengthened revenue administration. The calculated Management Efficiency Improvement Ratios (MEIR) and efficiency gain indicators provide quantitative evidence that organizational reforms have led to measurable and sustained improvements in management efficiency.

<sup>18</sup> Author’s calculations based on data from the State Customs Committee of the Republic of Uzbekistan (2020-2024), World Bank (2023), and UNDP (2024).

Nevertheless, despite the observed progress, the study identifies persistent institutional constraints that may limit the long-term effectiveness of reforms. These include a relatively high degree of centralized decision-making, uneven managerial capacity across organizational levels, and insufficiently institutionalized performance evaluation systems. Addressing these challenges is essential to ensure the sustainability and scalability of achieved efficiency gains.

Based on the research findings, the following evidence-based recommendations are proposed to further enhance the management efficiency of customs authorities:

1. Optimize organizational decentralization: Gradual delegation of managerial authority to regional and operational units should be pursued to improve institutional responsiveness and adaptive capacity in a rapidly changing trade environment.
2. Institutionalize performance-based management frameworks: The systematic implementation of key performance indicators (KPIs) aligned with organizational objectives would strengthen accountability, support continuous monitoring, and enhance strategic decision-making.
3. Strengthen analytical and risk management functions: Expanding the capacity of analytical units and integrating advanced risk assessment tools will further improve targeted control mechanisms and resource allocation efficiency.
4. Enhance human resource development: Sustained investment in professional training, leadership development, and digital competencies is critical to maximizing the benefits of organizational and technological reforms.
5. Advance integrated digital governance: Improving interoperability among customs information systems and related public sector platforms will enhance transparency, coordination, and service quality across institutional boundaries.
6. Implement regular reform impact assessments: Periodic evaluation of organizational reforms using quantitative metrics such as MEIR, efficiency gains, and growth rates will support evidence-based policy adjustments and long-term institutional development.

#### **SOURCE AND USED LITERATURE LIST:**

1. State Customs Committee of the Republic of Uzbekistan. (2020-2024). *Official statistical reports and analytical data on customs administration*. Tashkent.
2. State Customs Committee of the Republic of Uzbekistan. (2019-2024). *Customs performance indicators and institutional reform reports*. Tashkent.
3. President of the Republic of Uzbekistan. (2021). *Decree on measures to improve customs administration and management efficiency*. Tashkent.
4. President of the Republic of Uzbekistan. (2021-2023). *Decrees and resolutions on public administration and customs reform*. Tashkent.
5. World Bank. (2023). *Customs modernization and trade facilitation: Institutional performance assessment*. Washington, DC.
6. United Nations Development Programme (UNDP). (2018). *Institutional reform and public sector performance*. New York.
7. United Nations Development Programme (UNDP). (2023). *Public administration reform in Uzbekistan*. New York.
8. United Nations Development Programme (UNDP). (2024). *Institutional capacity development in Central Asia*. New York.
9. World Customs Organization (WCO). (2021). *Capacity building strategy*. Brussels.

10. World Customs Organization (WCO). (2022). *Customs in the 21st century*. Brussels.
11. World Customs Organization (WCO). (n.d.). *SAFE framework of standards to secure and facilitate global trade*. Brussels.
12. Organisation for Economic Co-operation and Development (OECD). (2020). *Public governance reviews*. Paris.