

ASERS

# Journal of Environmental Management and Tourism

Quarterly

Volume XIV

Issue 5(69)

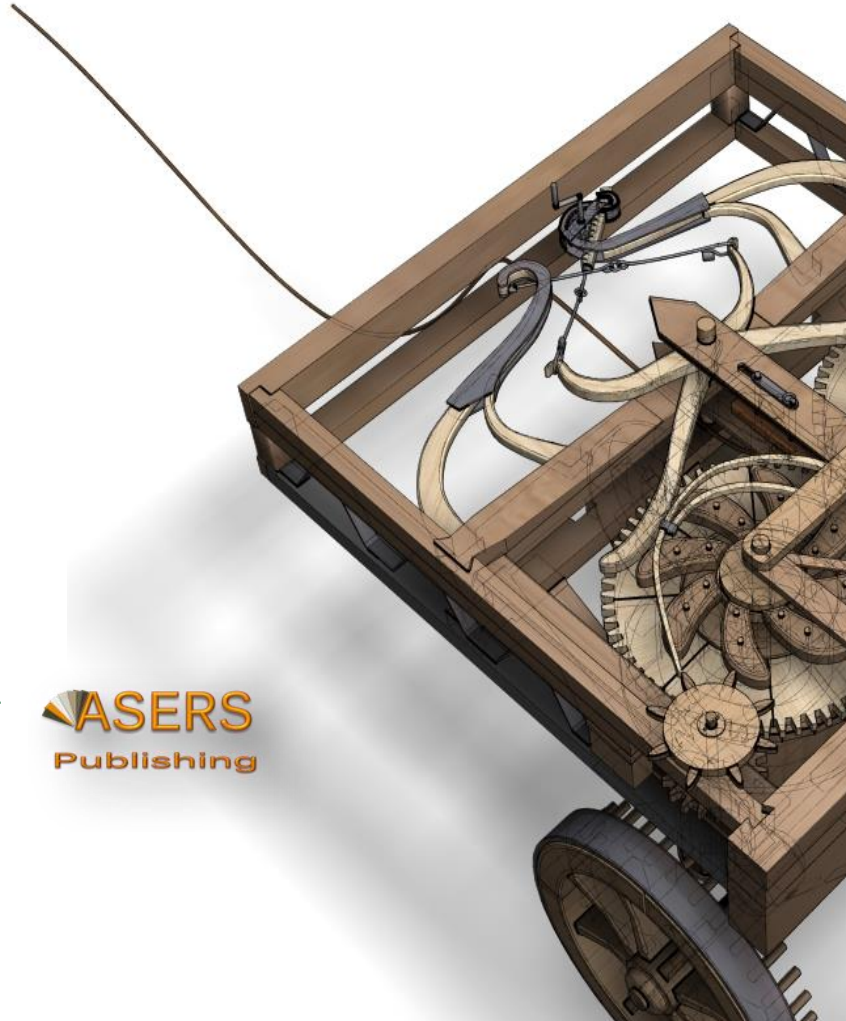
Fall 2023

ISSN 2068 – 7729

Journal DOI

<https://doi.org/10.14505/jemt>

ASERS  
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# Call for Papers Winter Issues 2023 Journal of Environmental Management and Tourism

**Journal of Environmental Management and Tourism** is an open access, peer-reviewed interdisciplinary research journal, aimed to publish articles and original research papers that contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences. The Journal publishes original research and seeks to cover a wide range of topics regarding environmental management and engineering, environmental management and health, environmental chemistry, environmental protection technologies (water, air, soil), pollution reduction at source and waste minimization, energy and environment, modelling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies.

Authors are encouraged to submit high quality, original works that discuss the latest developments in environmental management research and application with the certain scope to share experiences and research findings and to stimulate more ideas and useful insights regarding current best-practices and future directions in Environmental Management.

Also, this journal is committed to a broad range of topics regarding Tourism and Travel Management, leisure and recreation studies and the emerging field of event management. It contains both theoretical and applied research papers and encourages obtaining results through collaboration between researchers and those working in the tourism industry.

The journal takes an interdisciplinary approach and includes planning and policy aspects of international, national and regional tourism as well as specific management studies. Case studies are welcomed when the authors indicate the wider applications of their insights or techniques, emphasizing the global perspective of the problem they address.

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**Journal of Environmental Management and Tourism** is indexed in SCOPUS, RePEc, CEEOL, ProQuest, EBSCO and Cabell Directory databases.

Details regarding the publication in this journal are here: <https://journals.aserspublishing.eu/jemt/about>

<b>Deadline for submission:</b>	21 <sup>st</sup> October 2023
<b>Expected publication date:</b>	December 2023
<b>Website:</b>	<a href="https://journals.aserspublishing.eu/jemt">https://journals.aserspublishing.eu/jemt</a>
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DOI: [https://doi.org/10.14505/jemt.v14.5\(69\).19](https://doi.org/10.14505/jemt.v14.5(69).19)

## Role of State Institutions in Protecting the Environment. Improving Management System of the Public Services

Yuliya KIM

Karaganda University of Kazpotrebooyuz, Karaganda, Kazakhstan

ORCID: 0000-0001-8990-1400

[ego-uk@mail.ru](mailto:ego-uk@mail.ru)

Serik DARIBEKOV

Karaganda Buketov University, Karaganda, Kazakhstan

ORCID: 0000-0001-7838-6458; SCOPUS ID: 57190605280

[Seka28@mail.ru](mailto:Seka28@mail.ru)

Laura KUNDAKOVA

Zhezkazgan University named after O. A. Baikonurov, Zhezkazgan, Kazakhstan

ORCID: 0000-0002-2985-1939

[kundakova@mail.ru](mailto:kundakova@mail.ru)

Dinar SIKHIMBAYEVA

Karaganda University of Kazpotrebooyuz, Karaganda, Kazakhstan

ORCID: 0000-0003-3822-6200; SCOPUS ID: 56809461700

[sdinara2007@yandex.kz](mailto:sdinara2007@yandex.kz)

Gulnara SRAILOVA

Karaganda University of Kazpotrebooyuz, Karaganda, Kazakhstan

ORCID: 0000-0002-6342-8683; SCOPUS ID: 57217042221

[gulnara.srailova@mail.ru](mailto:gulnara.srailova@mail.ru)

**Article info:** Received 23 May 2023; Received in revised form 7 June 2023; Accepted for publication 31 July 2023; Published 1 September 2023. Copyright© 2023 The Author(s). Published by ASERS Publishing 2023. This is an open access article distributed under the terms of CC-BY 4.0 license.

**Abstract:** The development and implementation of environmental policy and the application of relevant legislation is an area of public administration responsibility that is important for the protection of the environment. With the growing challenges facing governments around the world, the effective functioning of public services is becoming increasingly important. In the 21<sup>st</sup> century, public services based on a capacity-based approach will be a key competitive advantage for states. The provision of key public services, such as health care, sanitation, electricity and water, is critical to achieving global development goals. The relationship between public administration and ecology includes the role of state institutions in environmental protection and sustainable development, as well as the impact of environmental issues on the effectiveness of public administration. Governments around the world should attach great importance to environmental issues, as environmental problems can seriously affect the well-being of the population and the economy.

**Keywords:** environmental protection; public services; motivation; sustainability.

**JEL Classification:** Q51; H77.

### Introduction

For public administration to strike a balance between economic interests and environmental protection, Governments must create incentive mechanisms and support measures for enterprises operating in accordance with environmental requirements. It is also important to ensure that environmental expertise is carried out when making decisions in the field of public administration in order to minimize possible negative consequences on the environment. Public administration plays an important role in the development and implementation of environmental policy, as well as in the creation and enforcement of legislation aimed at protecting the



environment. At the same time, environmental problems can affect the effectiveness of public administration in a negative way. For example, environmental pollution can lead to diseases in the population and, consequently, an increase in health care costs. In addition, environmental disasters can lead to an economic crisis and a decrease in government revenues.

Nowadays, considering climate change, the depletion of natural resources and other environmental problems, public administration must consider the state of the environment and the environmental consequences of its actions. At the same time, the economic interests and needs of the various sectors of the economy must also be considered. Public administration must strive to maintain sustainable economic development without upsetting the ecological balance.

## 1. Literature Review

Finding the right balance between economic interests and environmental protection can lead to an improved quality of life for citizens, improve environmental performance, and contribute to the sustainable development of society as a whole. Over the past decade, Kazakhstan has made more intensive efforts to improve the situation regarding the quality of public administration. Despite recent reforms, rigid power structures, lack of transparency and subjectively high levels of corruption have affected the quality of governance in Kazakhstan over the past decade.

Low salaries among civil servants contributed significantly to the spread of corruption. As a result, internal corruption has had a negative impact on Kazakhstan's administration and the effectiveness of the political process and governance in the country, reducing the effectiveness of reform measures and political processes within the country. Public administration issues point to the need to increase transparency and decentralization in public administration, citizen participation and be more open in governance, the rule of law, professional ethics, and integrity.

The government positions administrative reform as a key component of its 100 Concrete Steps plan (2015). The importance of this task has been recognized, and the initiatives that have resulted from it are encouraging. However, despite progress in many areas, such as performance budgeting and e-government expansion, much remains to be done, in particular focusing on the right balance between economic interests and environmental protection.

Kazakhstan has taken a number of measures under which the open government policy is implemented. In 2015, the laws of the Republic of Kazakhstan "On Access to Information" and "On Public Councils" were adopted. The government is actively involved in various initiatives to support and promote open government, including the Extractive Industries Transparency Initiative and the Open Budget Index. However, government transparency needs to be increased and the legal framework needs to be streamlined to facilitate enforcement and reduce opportunities for corrupt practices. In this context, the authorities intend to intensify the fight and strengthen the rule of law by announcing measures to promote competition and the private sector, as well as to improve the efficiency of the administration.

Reforms are needed to improve people's living standards and quality of life, address stagnant productivity, and accelerate the transition to a low-carbon economy. Realizing the problems associated with professional ethics and honesty in the public sector, as well as the need to modernize public administration, the authorities have taken the necessary measures in recent years to solve these problems. In addition to changes in legislation and institutions, attention must be paid to administrative reform and the introduction of effective public administration. Improving the interaction between society and the state through constructive dialogue and open communication can contribute to more effective development and implementation of public policy.

The growth of civic engagement in Kazakhstan indicates the maturity of society and the need for its participation in the governance process. To understand and clarify the signs and tasks of personnel management in public service, it is necessary to refer to the basics of personnel management.

With regard to problems related to environmental protection at the level of public administration, it is worth noting the lack of a legislative framework and strategic documents in Kazakhstan concerning "green" workplaces. Despite this, government agencies such as the Ministry of Labor and Social Protection, Ministry of National Economy and Ministry of Energy are aware of the risks of massive job losses and the negative impact on certain communities and industries in the transition to a green economy. The concept of transition to a "green economy" provides the possibility of creating several thousand new jobs in various sectors through the measures envisaged. However, there is no officially approved definition of "green" jobs in Kazakhstan.

Environmental taxes and fines collected at the local level are not used effectively to improve the environment and the development of a "green" economy. Only about 30% of the collected environmental

payments are used to finance environmental protection activities. In fact, environmental payments at the local level are used as subsidies for other economic or social projects. In this regard, it is necessary to:

- explore opportunities to improve the efficiency of using collected environmental payments to protect the environment at the local level;
- encourage businesses to invest in resource-saving and clean technologies by optimizing energy subsidies and reorienting environmental permitting and enforcement requirements towards comprehensive pollution prevention measures, not just end-of-life remediation measures.

Sustainability is always considered in the strategic planning of organizations at the global level, as pointed out by Das, Biswas, Jilani and Uddin (2019). They consider the social impact of their activities on employees, communities, and stakeholders. This may involve promoting diversity and inclusion, ensuring fair labor practices, supporting local communities, and fostering positive social relationships. This integration of sustainability helps organizations align their operations with the broader goals of environmental protection, social well-being, and economic prosperity.

According to Zhao, Liu and Wu (2020) organizational environmental strategy to reduce negative environmental and ecological impacts includes defining a vision, goals, plans, and activities that promote environmental safety. Organizational environmental strategy encompasses a proactive approach to ensure environmental safety. This includes complying with environmental regulations, conducting regular environmental audits and assessments, managing environmental risks, and integrating environmental considerations into the organization's decision-making processes.

Researchers like Xiang-De Liu (2021) investigate the impact of green public employees' attitudes, green behavior intentions, organizational environmental strategy, green lifestyles, and formalism on green behavior adoption. Their findings can inform the development of strategies and interventions to promote sustainability within organizations, improve environmental performance, and contribute to broader sustainability goals.

Lu, Liu, Chen, Long and Yue (2019) argue that human behavior has always played a key role in climate change and environmental disasters. The arguments put forward by them highlight the critical need for individuals, communities, and societies to recognize the role of human behavior in climate change and environmental disasters. By promoting awareness, education, and responsible actions, individuals and organizations can contribute to mitigating and adapting to these challenges, ultimately fostering a more sustainable and resilient future.

According to Salim et al. (2020), international organizations and government agencies should develop clear strategies to protect the environment and promote environmentally responsible behavior among employees. These strategies contribute to a collective effort in protecting the environment, mitigating climate change, and achieving sustainable development goals.

Kamysbaev, Omarbakiev and Yeralina (2020) conduct a comparative analysis of personnel management principles and practices in developed countries, such as those in Western Europe and North America. They compare these principles with the existing personnel management practices in Kazakhstan to identify similarities, differences, and potential areas for improvement. Voronkina (2020) offers insights into the domestic and international perspectives on personnel management. It provides a platform for understanding different approaches, identifying best practices, and stimulating further discussion and research in the field of personnel management in Kazakhstan.

The research of Kaparov (2018) is likely a comprehensive resource that aims to contribute to the enhancement of public administration and governance in Kazakhstan. It offers insights, analyses, and recommendations for policymakers, practitioners, and researchers in the field of public service development and reform in the country, while Nurtazin (2018) offers a focused analysis of personnel management practices within the local government sector in Kazakhstan. It provides insights, recommendations, and practical guidance for personnel practitioners, policymakers, and researchers interested in understanding and improving personnel work in local government administration.

Turisbekov (2020) highlights best practices and strategies for effective public service management in Kazakhstan. The authors may draw on national and international experiences to present practical approaches for improving organizational efficiency, service delivery, and performance within the public service sector.

Akchurin and Abdina (2018) discuss the conceptualization and design of a career growth system for public servants in Kazakhstan, identifying the criteria for career progression, outlining the necessary qualifications, skills, and competencies for different levels of public service positions, and exploring strategies for performance assessment and promotion. The authors provide recommendations for policymakers, HR practitioners, and public

administrators on how to design and implement such systems to attract, develop, and retain high-quality personnel.

When analyzing the experience of foreign scholars in the field of public administration, the following works can be highlighted: Stelina (2019), Mullagulov (2018), Lockhart (2018). Their researches contribute to the understanding of key concepts and principles in public administration, such as the legal framework of public service, the significance of human resource quality, and the relationship between employee competencies and organizational performance. Analyzing the experiences and perspectives of foreign scholars, these works provide insights that can inform the development of effective public administration practices and policies, as follows.

Stelina (2019) presents theoretical models of the legal institution of public service and examines its role within the legal system. The work likely explores the legal frameworks and principles that govern public service, emphasizing its significance in upholding democratic values, ensuring transparency, and promoting effective governance.

Mullagulov (2018) emphasizes the importance of human resources in public administration and highlights the impact of human resource quality on the effectiveness of public services. The work likely explores the role of competent and skilled public servants in driving efficiency and enhancing various spheres of economic and social life.

Lockhart (2018) highlights the direct link between organizational efficiency, productivity, and the competencies of employees in the field of public administration. The work likely discusses the importance of recruiting, developing, and retaining competent and skilled employees to ensure the effectiveness and success of public organizations.

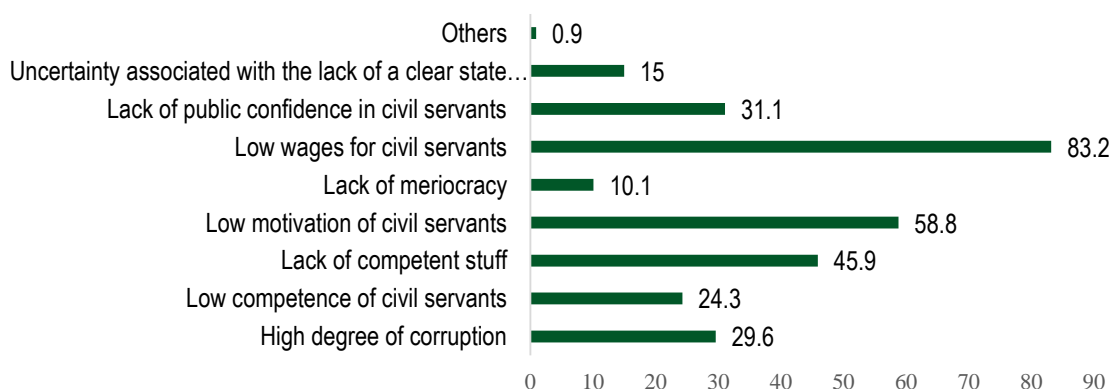
Thus, continuous development and improvement of human resource policies are prerequisites for successful economic and social reforms. This is only possible with the active cooperation of state bodies and the public. In this regard, high demands are placed on the modern civil service, which provides services in the field of public administration, defense, and compulsory social security. Engaging citizens in decision-making processes, incorporating their perspectives, and ensuring transparency and accountability are key elements of successful reforms. Civil service acts as an intermediary between the state and the public, facilitating communication, responsiveness, and effective service delivery.

## 2. Enforcing Environmental Regulations and Standards

According to the Concept of development of public administration in the Republic of Kazakhstan until 2030 (Decree № 522 of February 26, 2021), the system of public administration faces a serious challenge of forming a model of decision-making based on the active participation of civil society. This is especially important in light of current social processes and new economic challenges, such as the pandemic.

The results of a survey conducted by the Academy of Public Administration under the President of the Republic of Kazakhstan as part of the Astana Civil Service Hub project showed that the main problem, according to respondents, is the low level of salaries of civil servants in Kazakhstan, as mentioned by 83.2% of respondents. This low remuneration affects the overall motivation of civil servants, as confirmed by the results of the survey (Figure 1).

Figure 1. Actual issues of public service in Kazakhstan



Source: compiled by authors



Most participants (58.8%) believe that there is indeed a low level of motivation to work in the public sector among the country's civil servants. In addition, 88.1% of respondents agree that the main problem in human capital is the lack of competent personnel (59.5%), as well as the low competence of civil servants (28.6%). The assessment of the current state of public service in Kazakhstan given by the majority of respondents is relatively low (47.6%), while only 10.5% of participants gave a high assessment. Nevertheless, based on the results of the study, it can be assumed that the civil service is seen by Kazakhstanis as a fairly stable and attractive institution to work.

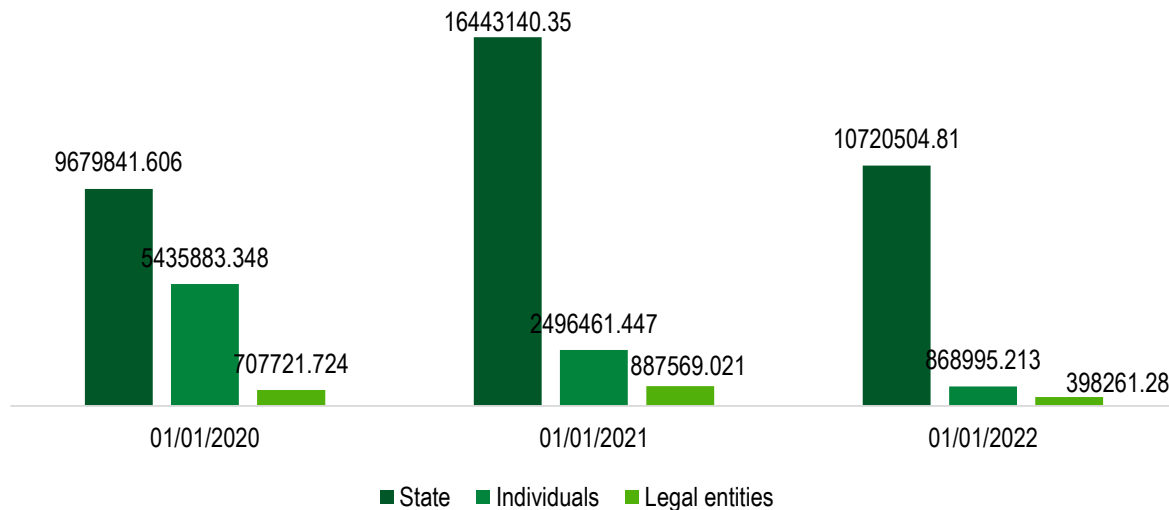
For a long time, the Republic of Kazakhstan lagged behind in the implementation of administrative reform, not taking into account global trends and scientific achievements in the field of management. The results of national and international research in this area are recognized as valuable and applicable to the administrative system of Kazakhstan, but in practice they have not been effectively applied.

Currently, other countries demonstrating high efficiency of public administration have abandoned the model of administrative order with its linear-functional and vertical-hierarchical structure and moved to a network structure and interactive model of decision-making and implementation.

International experience has shown that the public service model evaluated and implemented in Kazakhstan can serve as an important transitional stage to participatory governance. However, unlike many other countries, Kazakhstan has not yet made this transition and continues to develop its service delivery model as the most consistent with the principle that public bodies should fulfill their mission of serving the population. Limited resources for public sector development, uncertainty and unpredictability of social, economic and environmental factors, as well as increasing demands of citizens force government agencies to take decisive measures to improve governance using best management practices.

When considering the factors affecting the motivation system of public service employees, a more specific understanding of the approaches that enhance potential, develop professional careers, and achieve high performance in public service can be developed. At the same time, each of the identified factors affecting the formation and development of managerial personnel should take into account the influence of modern trends in the development of Kazakhstani society and the national economy. This is due to the need to apply the principles of a systematic approach and conduct comprehensive scientific research. An important factor affecting the management system of civil servants is corruption, the damage from which amounted to the maximum share in the total damage in 2019 - 5%. In 2020, its share decreased to 2.9%, and in 2021 it increased to 4.4% (Figure 2).

Figure 2. Damage from corruption crimes in Kazakhstan, 2019-2022



Source: compiled by authors

The challenges arising in the external environment challenge any state to reform the administrative system and adapt it to the global changes and demands of society. These changes require reducing public expenditures, reducing the number of civil servants, optimizing the structure of government, improving the quality and efficiency of public administration, and providing services in the field of public administration.

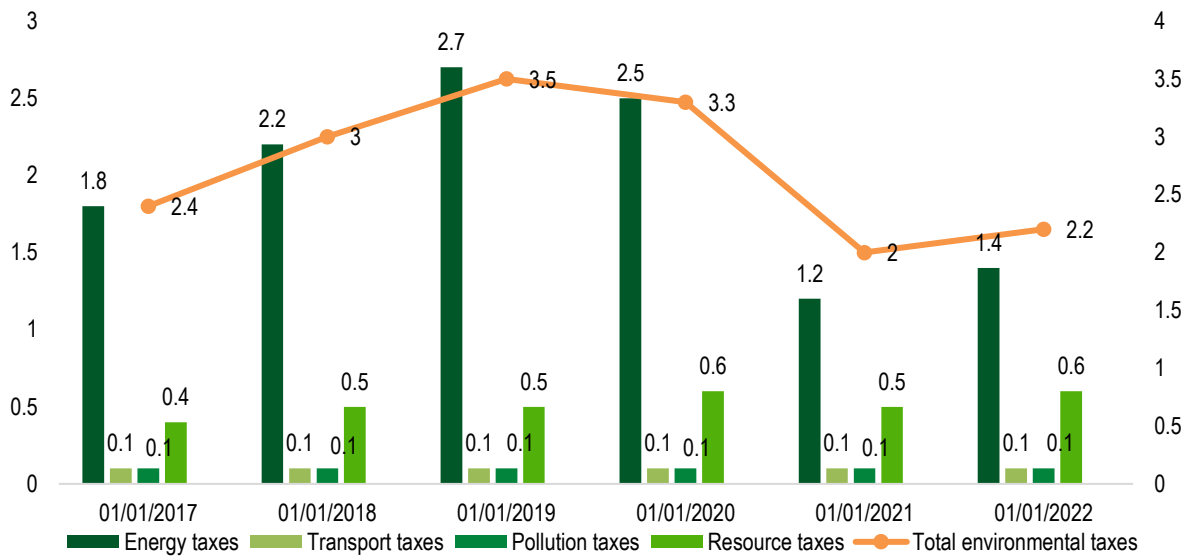
Public servants play an important role in developing, implementing, and enforcing environmental regulations and standards. They develop and enforce legislation, develop environmental policies and programs,

and monitor and supervise compliance with these regulations. Their work aims to protect nature, biodiversity, restore ecosystems and prevent pollution.

Recently, these issues have received special attention due to the deterioration of the environmental situation caused by technological progress. Kazakhstan, with its vast territory and significant natural resources, is no exception. However, the country's leadership gives priority attention to improving the environmental situation, expanding the use of renewable energy sources, and fostering a respectful attitude toward nature.

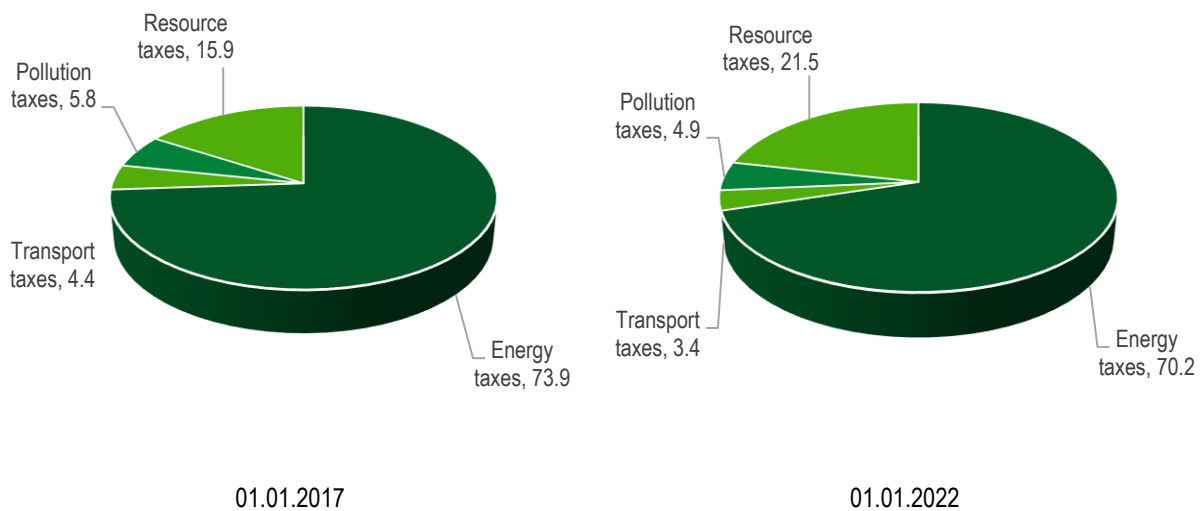
The main event in the field of ecology in 2019 was the creation of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. The purpose of this central executive body is to improve the country's environmental policy, create conditions for the development of the waste management sector and effective taxation (Figure 3 and Figure 4).

Figure 3. Share of environmental taxes in GDP, %



Source: compiled by authors <https://www.stat.gov.kz>

Figure 4. Structure of environmental taxes, %



Source: compiled by authors <https://www.stat.gov.kz>

Civil servants play an important role in the field of environmental taxation. Environmental taxation is a mechanism for using tax instruments to encourage the sustainable use of resources and environmental protection. Their involvement is crucial for the effective implementation of environmental taxation as a tool for environmental protection and sustainable development. The relationship between civil servants and environmental taxation can be considered from several aspects:

- Development and implementation of tax policies: Government officials responsible for tax policy can develop and implement tax measures aimed at reducing the negative impact on the environment. This may

include the introduction of tax incentives or rebates for businesses engaged in environmentally friendly activities, as well as higher tax rates on emissions of harmful substances or the use of non-natural resources.

- Monitoring and control compliance with environmental taxation: Civil servants working in tax authorities and environmental agencies monitor and control compliance with environmental taxation. They conduct audits, checks and analyzes of tax returns of enterprises to ensure that environmental taxes are correctly calculated and paid. In case of violations, civil servants can apply sanctions and fines in accordance with the law.

- Education and advice: Government officials also play a role in educating and advising businesses and taxpayers on environmental taxation. They can provide information, training and advice to help businesses understand and comply with environmental tax requirements.

- Government officials involved in environmental taxation often collaborate with other organizations and stakeholders to effectively implement environmental policy and achieve their goals. Here are some examples of collaboration:

- cooperation with environmental organizations: Public servants can cooperate with non-governmental organizations involved in environmental protection for the exchange of information, consultations and joint development of environmental policy. This makes it possible to take into account the opinion of experts and members of the public when making decisions and creating tax mechanisms;

- partnerships with businesses: Government officials can partner with businesses, especially those that are active in environmental activities or have environmental innovations. Engagement with such enterprises allows for the exchange of experience, training programs and the development of tax incentives to encourage the environmental responsibility of business;

- coordination with other government agencies: Government officials involved in environmental taxation often cooperate with other government agencies, such as environmental agencies, tax authorities, ministries and departments, to coordinate their actions and ensure consistency in tax policy and environmental measures;

- interaction with international organizations: As part of the global efforts to protect the environment, government officials can cooperate with international organizations such as the United Nations, the World Bank.

### 3. Predictions Values for Public Services and Their Implications

To develop a trend model for predicting the values of the indicator "Public administration and defense services; compulsory social insurance services, million tenge" for 2023-2024 using statistical data from the Republic of Kazakhstan, several steps are typically followed. Checking the time series for anomalies using the Irwin criterion (Table 1) to detect outliers or anomalies in the time series dataset. It is assessed whether a data point significantly deviates from the other values in the series.

Table 1. Checking for anomalous observations in a time series

Year	Services in the field of public administration and defense; compulsory social security services, million tenge	Observed value of the Irwin criterion	Calculation formulas
01.01.2010	669.867,8		<ul style="list-style-type: none"> <li>▪ Calculation formulas;</li> <li>▪ Observed value of the Irwin criterion:  <math display="block">\lambda_t = \frac{ y_t - y_{t-1} }{\sigma_y}, \quad t = \overline{2, 11}</math> </li> <li>▪ Critical value of the Irwin criterion:  <math display="block">\lambda_{0,05} = 1,5</math> </li> </ul>
01.01.2011	815.065,7	0,256	
01.01.2012	1.009.479,9	0,343	
01.01.2013	1.225.449,9	0,381	
01.01.2014	1.386.994,2	0,285	
01.01.2015	1.516.375,2	0,228	
01.01.2016	1.708.422,4	0,339	
01.01.2017	1.645.153,2	0,112	
01.01.2018	1.814.341,0	0,299	
01.01.2019	1.948.244,8	0,236	
01.01.2020	2.316.089,2	0,649	
01.01.2021	2.519.136,0	0,358	
01.01.2022	2.612.487,4	0,549	

Source: compiled and calculated by authors

With 95% probability we can say that the original time series does not contain anomalous observations, because all the values of the Irwin criterion, which were considered, are below the critical value. Further, using the "ascending" and "descending" criteria, it was determined that the time series in question contains a trend component (Table 2). Identifying the trend component in a time series is an essential step in understanding its behavior and making forecasts. It enables the selection of appropriate modeling techniques, such as trend analysis, regression, or time series decomposition, to capture and analyze the trend component properly.

Table 2. Checking for a trend

General view of the criterion of "ascending" and "descending" series (Violation of at least one inequality is sufficient for a trend to exist)	Estimated values with a chance of error $0,05 < \alpha < 0,097$
$v(n) > \left[ \frac{2n-1}{3} - 1,96 \sqrt{\frac{16n-29}{90}} \right]$	3 < 5
$K_{max} < [K_0(n)]$	6 > 5

Source: compiled and calculated by authors

Approximation of the initial data was performed using a polynomial of the first degree:

$$y_t = a_0 + a_1 t + \varepsilon_t$$

The parameters of the selected growth curve were estimated using the least squares method. As a result, the following trend model was obtained:

$$y_t = 540305,49 + 155012,22t$$

To assess the quality of the resulting model two main steps were performed: checking the adequacy and assessing the accuracy of the model. To check the adequacy of the model, a series of residuals, i.e., the discrepancy between the values calculated by the model and actual observations, was investigated. The residual component has several important properties, including zero mathematical expectation, randomness and conformity with the normal law of distribution. The results of the residual series analysis conducted to test the adequacy of the model are presented in Table 3.

Table 3. Checking the adequacy of the model

Property under test	Used statistics		Border	Conclusion
	Name, calculation formula	Received value		
Accident	Criterion of "peaks" (turning points): $p > \left[ \frac{2}{3}(n-2) - 1,96 \sqrt{\frac{16n-29}{90}} \right]$	6 > 4	4	Adequate
Normality	RS- Criterion: $RS = \frac{e_{max} - e_{min}}{S}$	2,84	2,80-3,91	Adequate
The mathematical expectation of the levels of the residuals series is 0	T-Student statistics: $t_{observ..} = \frac{ e }{S} \sqrt{n}$	0	2,23	Adequate

Source: compiled by authors

To assess the accuracy of the model, the average relative approximation error was calculated:

$$E_{rel..} = \frac{1}{n} \sum_{i=1}^n \frac{|e_t|}{y_t} \cdot 100\% = 4,42\% , \text{ a value that indicates a sufficient level of model accuracy.}$$

Thus, the model is qualitative and can be used for forecasting. Using the corresponding values of the variable, a point forecast was calculated in the created model. In order to obtain the interval, forecast, the confidence interval was determined at a given level of significance. The results of the point and interval forecasts for the years 2023-2024 are presented in Table 4.

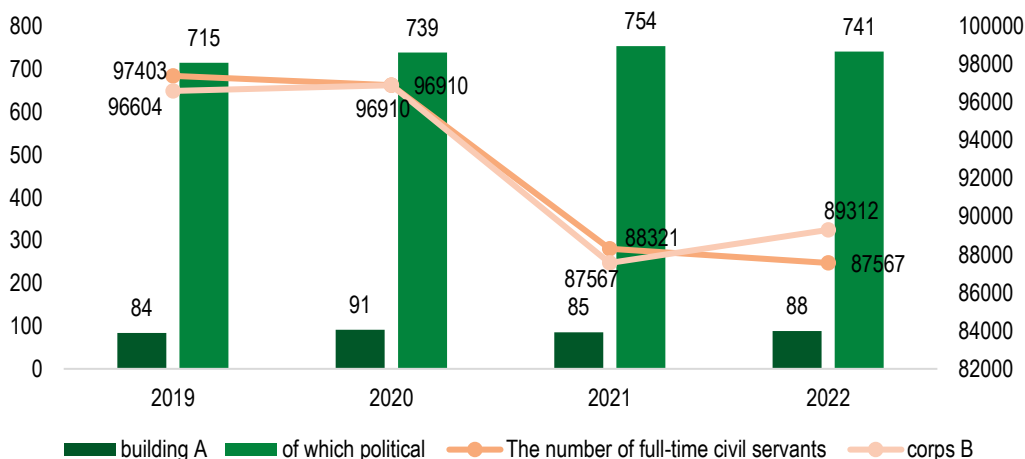
Table 4. Point and interval forecasts of the volume of services in the field of public administration and defense; services on compulsory social security, 2023-2024

Year	Point forecast, million tenge	Interval forecast million tenge	
		Max	Min
01.01.2024	2.865.488,835	2.595.348,098	3.135.629,571
01.01.2025	3.020.501,058	2.739.861,758	3.301.140,357

Source: compiled by authors

According to the presented calculations, we can observe an increase in the volume of services provided by civil servants in Kazakhstan, which is associated with the formation of new regions (Abay, Zhetysu, Ulytau), the new district "Turan" in Shymkent city, the reorganization of the Ministry of Education and Science (by dividing into the Ministry of Education and Ministry of Science and Higher Education), the opening of offices of the National Center for Human Rights in the regions, as well as increasing the number of foreign ministry staff in general have caused a growth of 1,732 e(Figure 5).

Figure 5. Number of civil servants in the RK, 2019-2022



Source: Data of the Committee on Statistics of the Republic of Kazakhstan for 2009-2022. <https://www.stat.gov.kz>

Thus, according to the study, the effectiveness of the performance of the Government of Kazakhstan has upgraded by improving the quality of the state apparatus and maintaining stability in the political and economic course, as well as in the level of public satisfaction with the provision of basic public services. This includes better environmental governance, stronger enforcement of environmental regulations, sustainable development planning, and public participation in environmental decision-making processes. It's important to note that ensuring environmental effectiveness requires a comprehensive and holistic approach, including strategies for natural resource management, climate change mitigation and adaptation, biodiversity conservation, pollution control, and sustainable development. Evaluating the environmental effectiveness of the government involves assessing a wide range of environmental indicators, monitoring progress, and implementing targeted policies and actions to address environmental challenges specific to Kazakhstan's context.

### Conclusion

Modern public administration increasingly emphasizes the importance of achieving a balance between economic interests and environmental protection. This indicates a growing awareness of the relationship between economic growth and environmental protection, rather than their mutually exclusive nature. One of the promising areas of development of public administration in this area is the improvement of management mechanisms, including the development of strategies, policies and programs in the field of environmental protection. This requires the use of modern technology, data analysis, and the active involvement of the public.

Also, it is important to improve coordination between government agencies responsible for economic development and environmental protection, as well as the establishment of rules and regulations that would oblige enterprises to take into account the environmental consequences of their activities, avoiding corrupt



practices. In general, the prospects for the development of public administration in the field of balance between economic interests and environmental protection are associated with the adoption of integrated and long-term approaches to management, considering public opinion, sharing knowledge and experience between countries and using the latest technologies and tools.

### Acknowledgments

We would like to thank Karaganda University of Kazpotrebsoyuz for supporting this research. We would also like to thank our colleagues who gave insight and knowledge that considerably aided the research.

### Credit Authorship Contribution Statement

**Yuliya Kim** conducted the investigation and most of the research on topic, was of full control of project administration and validation, wrote the original draft and made the Formal analysis.

**Laura Kundakova** wrote the conceptualization and methodology of the paper based on foreign and local experience in the system of management's improvement of the public services.

**Serik Daribekov** made the data curation according to the official resource of the new concept of public administration: key aspects. <https://strategy2050.kz/ru/news/novaya-kontsepsiya-gosupravleniya-klyuchevye-aspekty/>.

**Dinar Sikhimbayeva** made the supervision of the paper, was responsible for Funding acquisition and was fully involved in the process of Formal analysis of the paper.

**Gulnara Srailova** did review and editing and made the Visualization of the paper, worked on the final presentation and qualitative readability of the paper, finalized the Content and Conclusions.

### Declaration of Competing Interest

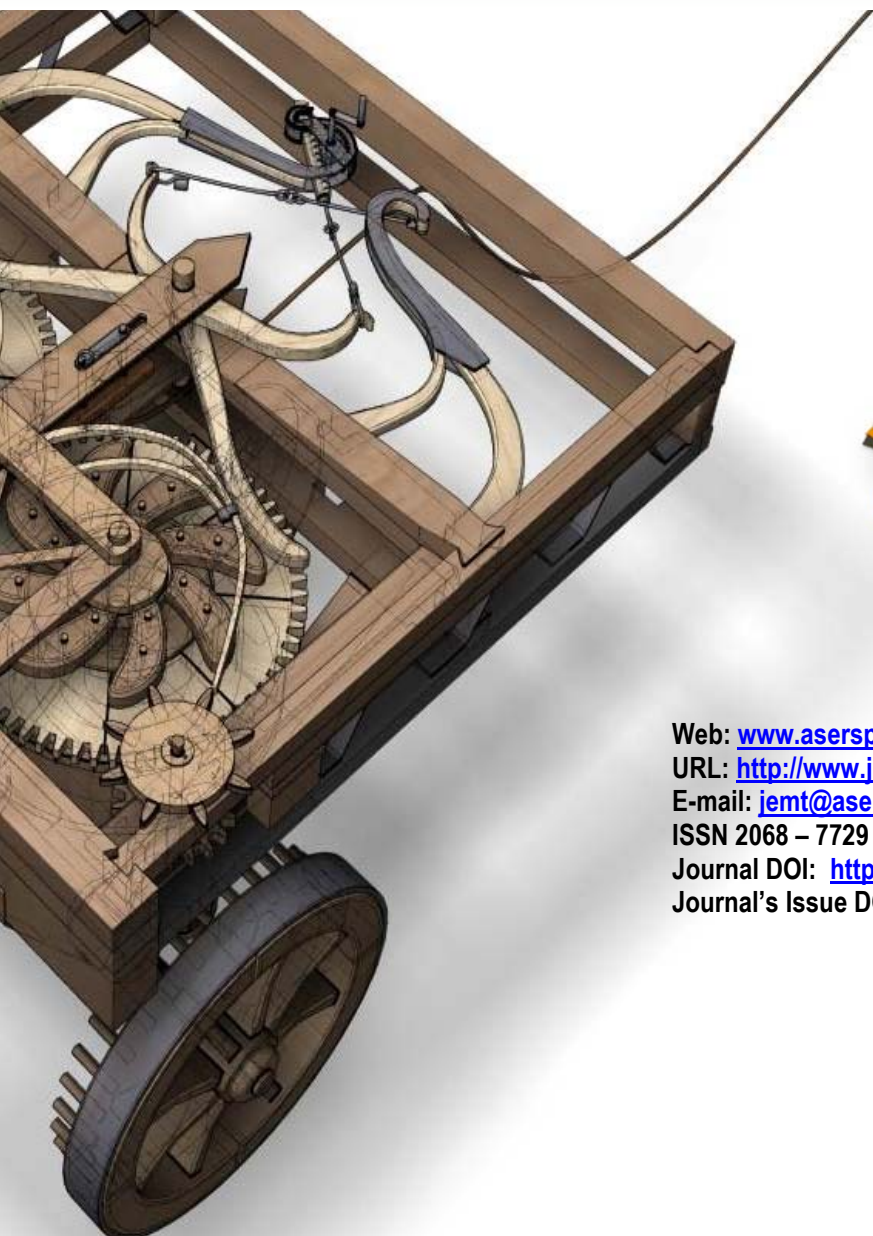
The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Journal's Issue DOI: [https://doi.org/10.14505/jemt.v14.5\(69\).00](https://doi.org/10.14505/jemt.v14.5(69).00)