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# Legal analysis of the interaction between the state and citizens in the context of solid household waste regulation in the Republic of Kazakhstan

In the modern world, the problem of waste management is becoming more urgent and requires society to constantly regulate and adopt effective legislative mechanisms. In the article, the authors consider an important aspect in this area — the interaction between the state and citizens in the context of waste management. The interaction of these entities plays a key role in creating an effective solid waste management system aimed at ensuring environmental safety and sustainable development of society through the analysis of regulatory legal acts, statistical data and good practices in this area. The article discusses several key problems related to solid waste management in Kazakhstan, including a lack of information for citizens (for example, it is not enough to publish materials on websites, they must be updated regularly), unavailability of infrastructure (sorting centers are located far from public accommodation, it is not possible to take garbage to specially designated places), low motivation (due to monthly utility bills for garbage collection, many people consider, that the relevant institutions should be engaged in the collection and sorting of solid household waste or do not understand the danger of consequences for the environment), inconsistencies in legislation have been identified (there are no mechanisms for imposing fines for non-sorting garbage, as abroad) and insufficient financing (if we do not have finances, whatever industry we take, we cannot achieve high results). In order to improve the situation in society, the need to develop mass educational programs related to garbage sorting, develop infrastructure related to the sorting of solid household waste, further reform legislation related to environmental and sustainable development, and focus on strategies to attract investors and funds to this industry was justified. In the article, based on the comprehensive directions adopted by the state to support citizens in the collection and sorting of solid household waste, we came to the conclusion of a settlement of the problem associated with waste recycling. A concrete solution to these problems is manifested in the definition of general directions of development in waste management.

*Keywords:* Environment, environmental legislation, the right to a favorable environment, waste, solid household waste, waste management, state regulation of waste, waste sorting, waste recycling, stimulation of waste sorting, environmental harm reduction, the role of citizens in waste sorting.

## *Introduction*

Among the major contemporary environmental issues, threats to the environment cause great concern. The fear of threats leading to environmental crises is related to waste. Waste has a negative impact on the health and life of humanity, as well as on the normal functioning of the environment and the quality of natural resources.

There are several reasons why the issue of waste has attracted particular attention in recent years: firstly, until a certain point in time, specifically until technological progress and urbanization became integral to people's lives, we could say that environmental conflicts did not create many obstacles and dangers. Secondly, new materials have emerged, some of which are difficult to decompose naturally, while others allow for recycling. Anthropogenic pressures accumulate large amounts of household waste in nature, polluting the land, air, and water, causing concern about future environmental threats.

The problem of waste is aggravated by the presence of the problem of solid household waste in many countries, including Kazakhstan. Economic activity in the country, the structure of production and consumption in society reflect the indicators of waste generation. The situation is aggravated by the lack of strict regulations on the sorting of solid household waste and garbage, as well as the necessary regulatory

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legal acts regulating issues related to waste and garbage on the part of the state, including the mandatory involvement of citizens as primary factors in sorting.

The purpose of researching the interaction between the state and citizens in the field of waste management can be multifaceted, including:

- explaining the importance of state and citizen interaction in waste management to maintain a clean and healthy environment;
- studying the current state of the waste management system and identifying problem areas in the interaction between the state and citizens;
- providing citizens with specific recommendations for improving education and information dissemination, expanding waste collection and recycling infrastructure, enhancing legislative control, and fostering better interaction.

Scientists around the world propose working on effective methods for recycling materials. This approach not only reduces the negative impact on nature but also allows for significant resource savings, as the recycling process is cheaper than the primary production and processing of materials. Considering that resource extraction accounts for half of the world's carbon dioxide emissions, the cost of the damage it causes to nature will be measured by the deterioration of human life and quality of life.

The state plays a pivotal role in overseeing the enforcement of legislation related to the establishment of a legal framework and waste management. However, active citizen participation in the processes of waste sorting and disposal is a critical aspect of addressing this issue and supporting the state in its waste management efforts.

Zero waste initiatives help to effectively manage waste, reduce and prevent its generation, address the triple planetary crisis, protect the environment, enhance food security, and improve human health and well-being. Consequently, the state must create conditions for educating citizens about environmental legislation, increasing their responsibility in waste sorting, studying recycling and disposal technologies, and providing information on recycling methods. Measures have been taken in the country to increase the costs of production facilities by ensuring reliable and high-quality information on various aspects of environmental protection, and companies adhere to standards for sorting and recycling industrial waste. However, we observe in everyday life that ordinary citizens lack a culture of waste sorting, and the accumulated waste in landfills in our country (125 million tons of solid household waste piled up) attests to this statement.

Many issues can be resolved by properly organizing household waste sorting by citizens. The need for changing social and legal responsibility regarding waste is becoming increasingly relevant every day. The time has come to shift from the former stance of “out of sight, out of mind” to a new perspective of “from waste to success”. This shift is driven by the fact that many countries around the world (such as Japan, Singapore, Germany, Norway, etc.) are achieving success through these positions. The greatest success is a clean environment.

## *Methods and Materials*

This study was conducted through a systematic analysis of secondary data from published literature, including research articles, documented works, studies of international and domestic legislative frameworks, and analysis of the positive experiences of some countries in waste management. Online databases such as Google Scholar, Science Direct, and Scopus were utilized, employing a keyword search approach with terms such as “solid waste management”.

The current state of the waste management system has been examined, solutions to some problems in the interaction between the state and citizens have been proposed, and attention has been drawn to the importance of enhancing citizen efforts in waste collection and sorting.

## *Results*

It is estimated that humanity produces 2.24 billion tons of solid household waste annually, of which only 55 percent is disposed of at controlled facilities. Approximately 931 million tons of food products are damaged or discarded each year, and aquatic ecosystems are buried under plastic waste, with up to 14 million tons falling into the oceans annually. Data related to each city resident also deserve attention. As a result of anthropogenic processes, each city resident today generates between 500 and 800 kg of waste per year, and in some countries up to 1000 kg, with this number continually increasing.

In Kazakhstan, the level of recycling and further disposal of waste remains low. According to the Ministry of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan, in 2021 the volume of

solid household waste (SHW) generated in Kazakhstan amounted to 4.2 million tons, of which 3.2 million tons were municipal waste collected by specialized enterprises and individual entrepreneurs engaged in waste collection and transportation, totaling 676 units. The majority of waste comes from households (65.6 %), 20.2 % from production waste (equivalent to household waste), 10.5 % from street litter, and 2.2 % from market waste.

The share of recycled and disposed SHW in 2021 was 21.1 %.

This share has been increasing year by year: in 2020, it was 19.1 %; in 2019, it was 14.9 %; in 2018, it was 11.5 %; and in 2015, it was only 1.8 %.

Conversely, the volume of municipal waste has been growing at a rate of 13.6 % per year, reaching 4 million tons. Meanwhile, the share of recycling and disposal of municipal waste decreased from 20.5 % in 2020 to 13.6 % in 2021 [1].

In accordance with the order of the Minister of Ecology, Geology, and Natural Resources of the Republic of Kazakhstan dated December 28, 2021, No. 508 "On Approval of Rules for the Management of Municipal Waste", the ministry has developed and approved rules for the management of municipal waste as part of systematic measures for waste management. These rules include requirements for separate waste collection [2]. As we have observed, the source of waste generation is closely linked to the lives of citizens, with 65.6 % of waste originating from household waste.

There are two solutions to the problem of slowing down the environmental danger signal posed by waste: reduced production and increased recycling. These interconnected processes form a vicious circle intertwined with the laws enacted by the state and the active actions of citizens in the waste management sector. The solutions may seem obvious at first glance, but there are challenges in their implementation. Many of these challenges are related to the proper definition of mechanisms for the interaction between the state and citizens in waste sorting. These mechanisms include: the formation of a legislative framework for waste sorting, conducting educational and informational campaigns, creating infrastructure for waste sorting, providing financial incentives, engaging through public organizations, among other mechanisms. Systematizing these mechanisms will help achieve effective interaction between the state and citizens in the context of waste regulation.

The Kazakh legislator outlined the direction of further steps towards the implementation of environmental standards of the European Union (hereinafter — the EU) in waste management policy, the creation of an electronic waste management system, as well as the improvement of the solid waste disposal and recycling system.

The Environmental Code of the Republic of Kazakhstan regulates the management of solid household waste. The legal basis for the formation of waste statistics is recognized by Order No. 223 "On the Methodology for the Formation of Environmental Statistics Indicators", adopted by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan on December 25, 2015. In accordance with this order, statistics of all waste across the country are consolidated, and a range of measures is implemented.

In order to implement Article 335 of the Environmental Code of the Republic of Kazakhstan, it was necessary to develop a waste management program, which will become an integral part of the environmental permit.

An order by the Minister of Ecology, Geology, and Natural Resources, dated August 9, 2021, "On Approval of the Rules for Developing a Waste Management Program", was adopted. This program emphasizes the importance of determining the volume and composition of waste generated based on a phased waste management principle and/or received from third parties. It approved the rationale for analyzing information on the methods of accumulation, collection, transportation, and disposal of the specified waste, as well as their recovery and recycling. Additionally, Article 329 of the Environmental Code of the Republic of Kazakhstan provides for the phased implementation of measures to reduce the volume of waste generation, give waste a second life, increase the share of recycling and disposal, and promote waste utilization.

Additionally, the Republic of Kazakhstan operates under the standard ST RK 3699–2020 "Production and Consumption Waste. Waste Management Hierarchy at All Stages of the Technological Cycle".

For the first time, the implementation of the waste management hierarchy at all stages of the technological cycle, taking into account GOST R 56828.31–2017, has taken the next step to implement the Environmental Code of the Republic of Kazakhstan, Directive 2008/98/EC of the European Parliament and of the Council of November 19, 2008 ST RK "Production and consumption waste". The Association of

Environmental Organizations of Kazakhstan by order of the Ministry of Trade and Integration of the Republic of Kazakhstan; "KazWaste Exchange" (KazWaste Exchange is a single database of buyers and suppliers of various types of waste in Kazakhstan and CIS countries) is aimed at the idea of their convenient search.

Recycling companies are already registered on the website and are ready to purchase secondary raw materials. A mobile application is planned to be launched to improve the platform's functionality [3], and on March 20, 2020, with the participation of other legal entities and individuals who own waste and are engaged in its disposal and/or recycling, it was adopted as part of the National Standardization Plan. Based on this document, solid household waste management is conducted in the country. Individual entrepreneurs or legal entities (specialized organizations) must carry out the appropriate operations related to the collection, sorting, transportation, recovery, and/or disposal of municipal waste in a manner that does not pose a threat of environmental damage and without causing harm to human life and/or health.

In our country, a "Unified Environmental Protection Information System" (UEPIS) has been established. Within this information system, a state register of industrial and household waste is maintained. The state register includes a geoinformation data system for each object, indicating the spatial location of waste, types and sources of origin, components of waste (chemical and physical properties affecting the assessment of danger to the population and the environment, etc.), quantitative and qualitative indicators, technical and environmental conditions for the storage, disposal, and discharge of waste. Additionally, it encompasses secondary utilization based on the lifecycle (technologies for operation, decontamination, recycling). Unique data are systematically collected and periodically updated to ensure accuracy and completeness.

In response to the negative impact of waste on human health, the economy, and the environment, the world marked March 30, 2023, for the first time as "International Zero Waste Day" at the initiative of the United Nations. This day will be observed annually. It calls for the prevention and reduction of waste globally and promotes the transition of society to a circular economy model.

"The waste crisis undermines the Earth's ability to sustain life. Each year, waste costs the global economy billions of dollars. By treating nature as a dump, we are digging our own grave. It is time to consider the losses that waste inflicts on our planet and find a solution to this greatest threat", said United Nations Secretary-General António Guterres in a video message dedicated to this day [4].

"International Zero Waste Day" aims to promote sustainable consumption and production models, support society's transition to waste management, and raise awareness of how zero-waste initiatives contribute to advancing the 2030 Sustainable Development Agenda. These initiatives should be supported by member states and continued. Most citizens believe that waste sorting should be carried out by factories. There are those who think that collecting all waste in one bag using the method they have learned is effective. However, waste sorting actually requires specific knowledge. In reality, initial sorting would help prevent many problems.

Let's consider the effectiveness of the waste sorting system using the example of a state that has reached a "zero" waste level (Japan), using advanced technologies in waste disposal and sorting, and a state immersed in waste in the world (Bangladesh) to justify the need to start from the bottom, that is, start with the consumer population. This is due to the fact that the experience of these states, which live in 2 different directions in relation to waste and pay great attention to land area and population, will undoubtedly help each member of the ecological system to determine the next steps.

Bangladesh is the most populous country in the world in terms of territory. There are 1,120 people per 1 km. According to the Environmental Sustainability Index, Bangladesh is ranked 177th in 2022. Japan is ranked 39th [5].

Garment factories are concentrated in Bangladesh and other Southeast Asian countries with cheap labor. Clothing supply agreements are executed through subcontracting or contractual arrangements. To maximize company profits, factories are constructed using inexpensive building materials and often in violation of safety regulations, leading to extremely unfavorable working conditions. Large volumes of waste accumulate in this garment production and agriculture, narrowing river channels [6; 105–108].

The land issue is the most difficult in a country like Japan, and the waste situation is the most urgent. There are 1,100 roasting plants in this country, which use all the resources of the world, and then burn in a furnace, where the processing level reaches 90 %. However, the incineration waste is the lowest. The population of the country sorts waste in 27 positions (for comparison: in our country, waste sorting is installed in 2 different boxes. The boxes are yellow and green. Recyclable inorganic waste (plastic, glass,

waste paper, metal, small-scale machinery) should be placed in yellow containers. And you can throw food, wood, textiles and leather into green boxes). Using the example of one Osaka city with a population of about 13 thousand people, it was shown that waste sorting was postponed at the level of a house, apartment, block, district, city, and use for needs was put in its original place, in the future in each house, apartments, blocks, residents of districts, cities are not required, but at the level of they were converted by the municipality through almost 500 partners. The developer introduced the Osaki System procurement system. Residents have the opportunity to receive funds from sorting each balance in accordance with certain tariffs. It also stands out because it is a country with an annual income of more than $1 million from the sale of processed raw materials. And every Japanese person wonders what can be made from pre-waste before producing it, and offers it to consumers with waste-free or biodegradable packaging for sale. As a result, the remaining 10 % of the processing also reaches zero [7; 60–62].

This is due to the fact that energy generation from incineration produces “greenhouse gases”, adding an additional burden on the environment. Therefore, to address the global waste problem, authorities need to assist the population, introduce additional incentives for manufacturing enterprises, and engage with the public.

*Discussion*

In Kazakhstan, the basics of waste classification are fixed in the Environmental Code, and they are divided into types according to common characteristics by origin, properties and management technology. Types of waste in accordance with the waste classifier are divided into hazardous and non-hazardous waste and identified by the classifier with the assignment of a six-digit code. The owner of the waste decides for himself which code to give them. In accordance with environmental legislation, it is established that waste formers are recognized as owners of waste. This directs their responsibility to ensure compliance with environmental requirements related to waste management, based on the principle of “polluter pays”.

At the same time, the biggest problem is that the system of separate sorting and garbage collection is poorly organized, the share of low-waste and resource-saving enterprises is very low in practice. Despite the fact that direct processing of industrial waste is given special attention by both the state and business, large enterprises in the country are interested in strengthening the waste recycling system and a number of measures are being taken.

Essentially, waste management policy of Kazakhstan is defined in the “Green Concept” and is aimed at implementing separate waste collection, developing the waste recycling sector with the production of secondary products, and attracting investments, including through public-private partnerships.

Thus, the management of solid household waste in Kazakhstan is a significant issue at the national level. The improvement and development of the Republic of Kazakhstan's legislation in the field of solid household waste management is one of the state's top priorities in environmental protection, sustainable development, and combating climate change.

Waste recycling efforts are closely linked to the construction of waste processing plants in the country. Modern incineration and waste processing plants, equipped with the full range of necessary facilities, represent a sector dedicated to the recycling and disposal of solid household waste from urban residents. The use of safe thermal methods will allow for a rapid reduction in landfill areas and a decrease in costs associated with generating electrical resources.

By 2025, the construction of such plants and the generation of electricity (with a combined capacity of 100.8 MW) amounting to 185 billion tenge is planned in Astana (scheduled by the end of 2023, though not at full capacity), Almaty, Shymkent, Atyrau, Taraz, and Aktobe (by the end of 2024). These cities accumulate 1.0–1.3 million tons of solid household waste annually, with current recycling rates not exceeding 15 %. According to the ministry's estimates, 70–77 % of accumulated waste should be disposed of to approach global benchmarks (70 %). Since there are 5 million tons of waste across the Republic that are neither planned for incineration nor recyclable, 125 million tons of solid household waste form mountainous dumps on 3,520 landfills covering an area of 16,000 hectares, of which only 623 landfills meet environmental and sanitary standards. Moreover, 27 landfills are operating beyond their pre-established capacity limits [8]. Out of the 6 planned plants, only 2 have been commissioned, with the plant in Astana beginning operations in October 2023, making it the only solid household waste processing plant in Central Asia [9].

The Almaty waste processing plant, LLP “Green Recycle”, which began operations at the end of 2018, does not operate at full capacity during the winter period. In the summer months, 3 out of 4 lines are operational, with 1 line held in reserve in case one of the active lines requires maintenance.

During the operation of waste processing plants, several obstacles have arisen, necessitating their analysis. However, some circumstances affect the continuity of operations, and these problems are as follows:

- Dry and Wet Waste: The mixing of dry and wet waste leads to non-compliance with the initial condition of the raw materials, altering their properties. For example, since paper and cardboard are not collected separately from food waste, only 50 % of them are suitable for recycling during the sorting process, which also reduces quality and results in recyclers being unwilling to purchase them.

- Glass Containers: Glass containers are also sorted on the lines, with colorless bottles needing to be separated from colored ones. If they are not sorted correctly, it leads to losses during separation and washing.

- Aluminum and Steel Cans: These are collected separately but are inefficient unless gathered in large quantities. Therefore, a significant portion is sold abroad.

- Market Demand: All recycled products are sold, but buyers of recyclable materials prefer to purchase in large quantities — typically from 100 to 300 tons at a time. This requires maintaining large storage facilities.

- Economic Viability: Preliminary estimates suggest that a plant project should break even in about 15 years, giving the investor a chance to recoup the invested costs. However, during this time, equipment may break down and become obsolete.

- Operational Stability: For stable plant operations, any type of waste can be provided, but sorting operations require additional costs.

- Energy Production Dependency: Plants' readiness to handle any waste is explained by their dependence on electricity production volumes. To ensure that a company like KEGOC sells electricity at higher prices for 15 years through sales and reception, a constant and stable high load on the plants is required.

- Lack of Business Incentives: There are no specific advantages for business operators in the “waste business” except for low tariffs. Government support for environmental business projects is only declarative.

Problems related to waste recycling activities indicate various issues in the interaction between the state and citizens regarding waste management, which can be grouped as follows:

Lack of Information: *Citizens may lack sufficient knowledge about the rules and requirements for waste management, leading to incorrect sorting and disposal of waste*. Considering that the majority of waste comes from households (65.6 %), with 20.2 % from production waste (equivalent to household waste), 10.5 % from street litter, and 2.2 % from market waste, it is important to highlight that citizens are the primary generators of waste. Therefore, it is crucial to reduce the share of this sector in waste sorting and to educate citizens on proper waste sorting practices.

Infrastructure Unavailability: *In several locations, there may be insufficient resources for the collection, processing, and disposal of waste, making proper waste management challenging for citizens or leading to a lack of motivation to participate.* At the state level, particular attention must be given to the pre-construction phase of waste processing plants. It is impossible to fully supply plants with raw materials without mandating that the country's residents sort waste and develop the necessary infrastructure to support this practice. The incineration of mixed waste results in the accumulation of ash and slag, which includes hazardous waste (such as mercury, tungsten, etc.) that, when primarily buried, spreads into the air, soil, and environment. Economically, it is not viable to build plants to process only 15 % of the waste supplied to them (current figures indicate that only this amount is processed). Before constructing incineration plants in cities, more sorting centers for solid household waste need to be established, and efforts should be made to send dry waste that has not lost its natural properties for recycling. Even the costs of washing waste can be reduced by requiring the population to perform basic sorting. Today, accumulated waste can be processed in a short time if plants are fully operational. However, the focus should be on achieving zero waste rather than merely addressing the problem of increasing the amount of waste processed by the plants.

Low Motivation: *Some citizens may not see direct benefits or understand the importance of proper waste management, leading to a lack of motivation to follow the rules and guidelines.* It is essential to implement a system of subsidies and incentives for active participation in the waste management program and focus on motivation. Additionally, educational activities and campaigns dedicated to raising awareness and managing waste should be conducted consistently and systematically. Everyone must understand the importance of waste sorting and focus on preventing environmental damage.

Legislative Inconsistencies: *In some cases, waste management laws and regulations may be inconsistent or ineffective, making compliance difficult and leading to disagreements between the state and*

*citizens*. Comprehensive waste management legislation covers a wide range of issues, from mandatory sorting and disposal to reducing the volume of waste generated. Best practices from countries that have succeeded in waste management demonstrate the close relationship of "Reduce, Reuse, Recycle" with the implementation of policies at the state level and the continuous updating of standards and regulations to reflect the latest scientific and technological advancements. Thus, it is not enough for the state to simply enact legislation; it must also include efforts such as raising awareness about the importance of waste management from early childhood to old age, consistently promoting educational programs (rather than sporadic campaigns), and actively integrating innovative technologies and methods in waste management. Additionally, there should be stricter penalties for violating waste management laws. Improving waste management legislation requires the active participation of all stakeholders: government agencies, the private sector, public organizations, and citizens.

Insufficient Funding: Insufficient funding for waste management programs can limit the state's ability to organize infrastructure and conduct informational campaigns. It is important to develop and implement strategies to attract sufficient resources for this purpose. This should include exploring not only government funds but also user fees and innovative ways of attracting financing from the private sector. In global practice, more than 30 % of waste management services, from primary collection to recycling, are funded through public-private partnership (PPP) activities. Additionally, 54 % of countries have specific legislation regulating the use of PPP mechanisms in the waste management sector [10].

Thus, to further improve the waste management situation in Kazakhstan, a comprehensive set of effective measures is required across all sectors, including solid household and municipal waste as well as industrial waste.

## *Conclusions*

The article identifies several key issues related to waste management in Kazakhstan, including lack of information, inadequate infrastructure, low incentives, legislative inconsistencies, and insufficient funding. To improve the situation, a comprehensive approach is required, involving strategies for environmental (sustainable) educational programs, infrastructure development, legislative reform, and funding. We believe that successfully addressing these issues requires joint efforts from the state, the private sector, public organizations, and citizens, and should be carried out in the following directions:

1. The state and citizens should actively continue transitioning their current actions towards zero waste.

2. Mechanisms to reduce waste generation, give waste a second life, increase recycling and disposal rates, and enhance citizen participation in step-by-step waste disposal measures should be developed. Additionally, mechanisms for state support and incentives should be systematized.

3. The country needs to establish an effective waste sorting system, as further disposal and recycling are impossible without each citizen and enterprise understanding its importance.

4. Implement a system of annual payments to incineration plants for waste incineration, regardless of the volume processed. In the absence of this remainder, state guarantees should ensure financial stability even during plant downtimes. Attention should be given to measures related to long-term waste processing without additional efforts (e.g., plastic recycling would reduce the import volume of plastic items and eliminate the need for starting a new cycle).

5. Address the issue of 65.6 % of waste accumulated from households by systematizing waste sorting and disposal by citizens in daily life and continuing to involve production enterprises in waste disposal to achieve zero waste.

6. Allocate funds for waste sorting by entities other than the citizens themselves, targeting recycling products.

7. Emphasize continuous deepening of knowledge among citizens and enterprises regarding waste sorting and disposal.

8. Strengthen the role of social partnership programs in ensuring the accessibility of waste sorting facilities.

9. Despite the various problems highlighted in the interaction between the state and citizens, a comprehensive exploration within this scientific article is not feasible. Each of these issues should be considered as a separate research subject.

By addressing these points, Kazakhstan can move towards a more sustainable and efficient waste management system, ensuring better environmental outcomes and public health.

This study would like to conclude with the following notable words of the Norwegian Minister for the Environment, a politician who led the United Nations World Trade Organization (1998–2003), and leader of the International Commission on Environment and Development, Gro Harlem Brundtland, in her report "Our Common Future" at the 42nd session of the United Nations (in which the concept of "sustainable development" was first introduced): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs", defining that the environment is the place of our lives, and development is our actions to improve our well-being, striving to embellish our fate granted to us from above. These concepts are inseparable" [11].

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А.Ж. Әбдіжәми

## Қазақстан Республикасындағы қатты тұрмыстық қалдықтарды реттеу жағдайындағы мемлекет пен азаматтардың өзара іс-қимылына құқықтық талдау

Қазіргі әлемде қалдықтарды басқару мәселесі өзекті бола түсуде және қоғамнан үнемі реттеуді және тиімді заңнамалық тетіктерді қабылдауды талап етеді. Автор мақалада осы қалдықтарды реттеу саласындағы маңызды аспектіні, яғни мемлекет пен азаматтар арасындағы өзара әрекеттестікті зерттеу арқылы саладағы түйіндерге назар аударып, басты бағыттарды зерттейді. Бұл өз кезегінде осы

саладағы нормативтік-құқықтық актілерді, статистикалық мәліметтерді талдау негізінде мемлекет пен азаматтар арасында тиімді іс-қимылды әрі қарай жалғастыру мақсатын көздейді. Аталған субъектілердің өзара іс-қимылы арқылы экологиялық қауіпсіздік пен қоғамның тұрақты дамуын қамтамасыз етуге бағытталған қатты тұрмыстық қалдықтарды басқарудың тиімді жүйесін құру рөлі артады. Мақалада Қазақстандағы қатты тұрмыстық қалдықтарды басқарумен байланысты бірнеше түйінді мәселелер, соның ішінде азаматтарға ақпараттардың жетіспеушілігі (мысалы, сайттарда материалдар жариялау жеткіліксіз, олар үнемі жаңартылуы тиіс), инфрақұрылымның қолжетімсіздігі (сұрыптау орталықтары тұрғындар орналасқан жерден қашық, үйлерінде жинақтап арнайы орындарға апару мүмкіндігі жоқ), ынталандырудың төмендігі (қоқысты шығару үшін ай сайын коммуналдық төлем төлегендіктен, көпшілік тиісті мекемелер айналыссын деп есептейді немесе экологияға келетін зардаптардың қаупін түсінбейді), заңнаманың сәйкес келмеуі (шетелдердегідей қоқысты сұрыптамау үшін айыппұлдар салу механизмдері жоқ) және қаржыландырудың жеткіліксіздігі (қай саланы алсақ та қаржы болмаса алысқа бара алмаймыз) анықталды. Қоғамдағы жағдайды жақсарту үшін қоқысты сұрыптауға байланысты жаппай білім беру бағдарламаларын әзірлеу, қатты тұрмыстық қалдықтарды сұрыптауға байланысты инфрақұрылымды дамыту, экологиялық және тұрақты дамуға байланысты заңнаманы одан әрі реформалау және осы салаға инвесторлар мен қаражаттарды тарту стратегиясына назар аудару қажеттілігі негізделген. Сонымен қатар қатты тұрмыстық қалдықтарды жинау және сұрыптау бойынша азаматтарды қолдау жөнінде мемлекет қабылдаған кешенді бағыттар негізінде қалдықтарды қайта өңдеуге байланысты мәселені реттеу туралы қорытынды жасалған. Бұл мәселелерді нақты шешу қалдықтарды реттеудегі дамудың жалпы бағыттарын анықтауда көрінеді.

*Кілт сөздер:* қоршаған орта, экологиялық заңнама, қолайлы қоршаған ортаға құқық, қалдықтар, қалдықтарды басқару, қалдықтарды мемлекеттік реттеу, қалдықтарды сұрыптау, қатты тұрмыстық қалдықтар, қалдықтарды қайта өңдеу, қалдықтарды сұрыптауды ынталандыру, қоршаған ортаға келетін зиянды төмендету, азаматтардың қалдықтарды сұрыптаудағы рөлі.

А.Ж. Абдижами

## Правовой анализ взаимодействия государства и граждан в контексте регулирования твердых бытовых отходов в Республике Казахстан

В современном мире проблема управления отходами становится более актуальной и требует от общества постоянного регулирования и принятия эффективных законодательных механизмов. В статье рассмотрен важный аспект в этой области — взаимодействие между государством и гражданами в контексте регулирования отходов. Взаимодействие указанных субъектов играет ключевую роль в создании эффективной системы управления твердыми бытовыми отходами, направленной на обеспечение системы экологической безопасности и устойчивого развития общества посредством анализа нормативно-правовых актов, статистических данных и положительной практики в данной сфере. Кроме того, изучено несколько ключевых проблем, связанных с управлением твердыми бытовыми отходами в Казахстане, в том числе нехватка информации для граждан (например, недостаточно публиковать материалы на сайтах, они должны регулярно обновляться), недоступность инфраструктуры (сортировочные центры находятся вдали от мест размещения населения, нет возможности вывозить мусор в специально отведенные места), низкая мотивация (из-за ежемесячной оплаты коммунальных услуг за вывоз мусора, многие люди считают, что сбором и сортировкой твердых бытовых отходов должны заниматься соответствующие учреждения или не понимают опасности последствий для экологии), выявлены несоответствия законодательства (отсутствуют механизмы наложения штрафов за несортировку мусора, как за рубежом) и недостаточное финансирование (если у нас нет финансов, какую бы отрасль мы ни взяли, мы не можем достичь высоких результатов). Для улучшения ситуации в обществе обоснована необходимость разработки массовых образовательных программ, связанных с сортировкой мусора, развития инфраструктуры, взаимосвязанной с сортировкой твердых бытовых отходов, дальнейшего реформирования законодательства, связанного с экологическим и устойчивым развитием, и сосредоточения внимания на стратегии привлечения инвесторов и средств в эту отрасль. Автор на основе принятых государством комплексных направлений по поддержке граждан по сбору и сортировке твердых бытовых отходов пришел к заключению урегулирования проблемы, связанной с переработкой отходов. Конкретное решение этих проблем проявляется в определении общих направлений развития в регулировании отходов.

*Ключевые слова:* окружающая среда, экологическое законодательство, право на благоприятную окружающую среду, отходы, твердые бытовые отходы, управление отходами, государственное регулирование отходов, сортировка отходов, переработка отходов, стимулирование сортировки отходов, снижение вреда окружающей среде, роль граждан в сортировке отходов.

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