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gulnur1989@mail.ru, 87012178280g@gmail.com**SOME REGULATORY ISSUES RELATED
TO WATER SECURITY IN THE REPUBLIC OF KAZAKHSTAN**

Abstract. This article comprehensively addresses the issues of the one pressing problems of environmental law regarding the water security of the Republic of Kazakhstan. One of the main directions of state policy in the transition to a green economy is the legal framework for water security. The study prepared a proposal to improve the current legislation in the field of water security. The methodological basis was compiled by a relatively legal analysis, a logical, systematic structural analysis.

The purpose of the article is to study the legal problems of water use and protection and to develop recommendations for improving the legal regulation of this field of public relations.

Keywords: Groundwater, Economic regulation, Groundwater management, Irrigation waters, Ecological regulation, Agricultural resources.

Introduction

For the Republic of Kazakhstan, the problem of ensuring water security in conditions of limited and vulnerable surface water resources is an important component of national security. According to expert estimates presented in the Concept for the Transition of the Republic of Kazakhstan to a "green economy", by 2030, as a result of rapidly increasing water demand and reduction of sustainable water reserves, water shortages of 13 km are expected, and by 2050 it can reach 20 km³ % of water demand). Thus, the threat of water shortage can be a major obstacle to sustainable socio-economic growth of the state. One of the directions towards a transition to a green economy is the improvement of the water management system. Water remains a key natural component of human existence and ecosystem integrity. In this regard, the rational use of water resources remains a problem that is acquiring enormous proportions.

Methods

Structural analysis method, analysis of the method of analysis, the analysis of the historical method, etc.

Results

Groundwater, as the most valuable mineral, is an important strategic resource for the sustainable development of any state. They are the most produced raw material in the world with a total water withdrawal of about 982 km³ / year.

Kazakhstan is sufficiently rich in groundwater and has 0.13% of the global groundwater resources, and for explored reserves and forecast resources among the CIS countries, it ranks second after the Russian Federation. The total value of the predicted groundwater resources is 2038 m³ / s (64.3 km³ / year - or 62.7% of the average long-term surface water resources). The projected fresh groundwater resources are estimated at 1282 m³ / s (40.4 km³ / year). More than 2.9 thousand groundwater deposits have been explored in the country, for which the value of the approved operating reserves is 495.0 m³ / s (15.6 km³ / year or 38.6% of the predicted freshwater resources).

In addition, the republic has significant potential of thermal minerals and industrial groundwater, which are of practical interest as energy resources and hydromineral raw materials, as well as for therapeutic and recreational purposes.

As for the question of raw materials orientation of economies of the Central Asian states, here one also can run across rather categorical judgments that, despite its huge raw material reserves, Central Asia is still economically too weak and backward in technology, and acts as an appendage to the economies of more developed states. Even in recent works of Indian researchers five Central Asian states were classified merely on the basis of what energy resources they possess. Thus, it is stated that as far as oil is concerned, of importance are Kazakhstan and Turkmenistan, and Uzbekistan is important mostly for gas while Kyrgyzstan and Tajikistan – for water-power resources; no other aspects of their economic development were attached equal importance[1].

The issue of extraction of rare trace elements and their compounds from industrial waters has now become of considerable relevance. An important advantage of groundwater, as a raw material source of rare elements, is the low cost of the product, because groundwater is a valuable raw material, some of their geochemical types have a relatively high processability, the exploitation of water deposits of rare elements does not require expensive mining.

Purposeful legal regulation of groundwater for water supply of the economy of the republic, as well as thermal mineral and industrial waters is very relevant for the country.

In accordance with the Water Code, "groundwater is the concentration of water in the depths" [2].

Groundwater is water in the upper part of the earth's crust (to a depth of 12–16 km) in liquid, solid and vapor states. Most of them are formed as a result of seepage from the surface of rain, melt and river waters. Groundwater is constantly moving in both vertical and horizontal directions. The depth of their occurrence, the direction and intensity of movement depend on the permeability of the rocks [3].

In the Republic of Kazakhstan, under the influence of international law norms, general provisions and principles for the use and protection of groundwater, including the mandatory monitoring of groundwater, general environmental standards and requirements for the use and protection of groundwater, and the operation of underground water sources have been enshrined. Groundwater is a natural resource and an object of legal protection that is of ecological and economic value, relations for the use and protection of which are governed by international and national law [5]. According to the program for the agro-industrial complex development for 2018, 195 billion tenge is provided for measures to increase the availability of financial services (subsidies), the development of water management and veterinary medicine, and the provision of phytosanitary security[5].

This growing interest in groundwater resources may be attributed to a number of reasons:

Groundwater was for a long time regarded as a local resource; only with the spread of vertical turbine pumps after World War II large enough volumes could be pumped to affect users at any considerable distance away.

In some parts of the world "mining" of groundwater takes place, i.e. extracting water from aquifers more rapidly than it is replenished by nature."

-Increased demand for water due to growth of population as well as for agricultural and industrial purposes. In particular, the growing urbanisation of the population has increased the dependence on groundwater resources[6].

The complexity of the country's water supply problems is determined by the fact that almost half of the renewable water resources of Kazakhstan are formed beyond its borders. Groundwater also has extremely uneven distribution over the territory, their quality and reserves vary by region of the country. Fresh groundwater has a number of significant advantages over surface water: they are usually higher in quality, better protected from pollution and contamination, their resources are less susceptible to long-term and seasonal fluctuations. In general, the Republic of Kazakhstan is quite rich in groundwater, due to which it is possible to fully provide the population with drinking, industrial and other waters in accordance with the needs of the population, industry and agriculture. Groundwater is distributed throughout our country, but they are distributed very unevenly. In addition, the quality and reserves of groundwater are different [7].

Groundwater as an object of law occupy a special position among all types of natural resources. On the one hand, they are contained in the subsoil and possess the main attributes of mineral resources, on the

other hand, they are part of the general land water resources. Groundwater has a number of features that distinguish them from other minerals, which determine the fundamental differences in the formation of their operational reserves as a process that takes place not only during geological time, but directly during the development of deposits. At the same time, fresh groundwater is hydraulically connected with surface water and participates in the general circulation of water in nature. Groundwater, like other minerals, in the quantity and quality required for industrial development is not universally distributed. Their search, study and assessment of reserves (determining the possibility of production) is carried out by specialists with geological formation, based on the analysis of geological and hydrogeological conditions [8].

Here are just a few excerpts from the current national standard governing the production and bottling of drinking water: ST RK 1432-2005 "Drinking water, packaged in containers, including natural mineral and drinking table. General specifications:

- Natural water: Water from underground or surface sources, reliably protected from pollution and retaining its natural composition and quality.

- Drinking natural mineral water: Natural water from one or more underground sources, discovered naturally or artificially, associated with the zone of formation of groundwater protected from pollution, having a characteristic taste and stable physico-chemical composition, not subjected to treatment, changing its original composition, with a minimum mineralization of 0.25 g / cubic dm [9].

In accordance with Article 13. of the Water Code, groundwater bodies include:

- 1) groundwater basin;
- 2) deposits and sections of groundwater;
- 3) aquifers and complexes;
- 4) the natural yield of groundwater on land (springs) [10].

The Law of the Russian Federation "On Subsoil", speaking in the preamble of the relations included in the subject of regulation of this Law, indicates groundwater among other objects of mountain relations. At the same time, Art. 5 of the Water Code of the Russian Federation says that water legislation regulates relations in the field of use and protection of water bodies, indicating groundwater (Article 8), among other relations objects regulated by it. In accordance with Art. 5 of the Water Code of the Russian Federation relations on the use of groundwater are governed by the legislation on subsoil and water legislation. To solve this collision, we turn to the definition of the concept of "subsoil". Under the subsoil in accordance with the Law "On Subsoil" refers to the part of the earth's crust, located below the soil layer, and in its absence - below the earth's surface and the bottom of water bodies and streams, extending to the depths available for geological study and development. This definition does not give an unambiguous answer whether the subsoil includes as its component also groundwater.

At the same time, the Law of the Russian Federation "On Subsurface Resources" contains direct norms designed to regulate activities for the extraction of groundwater. So, Art. 10, 10.1, 16, 19 indicate that subsoil plots are provided for use for the extraction of groundwater under a license (if there is an application) for a period of up to 25 years, issued on the basis of a decision of a special commission created by the federal body managing the subsoil fund household wells and wells on the first aquifer, which is not a source of centralized water supply), for the purposes of drinking water supply of the population or technological supply of industrial facilities with water.

Taking into account the fact that the use of groundwater is always associated with the drilling of wells, the device in the depths of other hydraulic structures, obtaining geological information, as well as the fact that groundwater often contains minerals or natural healing resources (mineral waters), they should be regulated in the framework of the legislation on the subsoil. However, taking into account the fact that groundwater is primarily intended for drinking water supply of the population and require maximum protection, it is advisable to add to the RF Law "On Subsoil" a separate block on the peculiarities of the protection and use of groundwater, while securing the list of state authorities, participating in the coordination of the issuance of a license for subsoil use for the extraction of groundwater, necessarily identifying among them the body for the protection and use of water resources [11].

The subsoil user is entitled to conduct exploration of any type of groundwater in the groundwater exploration area, regardless of their intended use or chemical properties, in accordance with the exploration plan and / or pilot production plan, including drilling, and other works related to the integrity

surface layer of the earth in compliance with the requirements of environmental and industrial safety, as well as the requirements for the protection of water bodies.

When conducting groundwater exploration, the subsoil user is obliged to ensure:

1) the reliability and integrity of all primary [and secondary] geological information obtained during exploration, including data from laboratory studies and analyzes;

2) timeliness and quality of conducting geological documentation (including plans for testing groundwater, geological maps and sections for them).

1. During the production period, the subsoil user must:

1) to finance the training of Kazakhstani personnel in the amount of one percent of the taxable income received by the subsoil user from the activities for the extraction of groundwater in the previous year;

2) to annually finance research, scientific and technical, and (or) developmental works in the amount of one percent of the taxable income received by the subsoil user from groundwater extraction activities for the previous year.

The volume of groundwater extracted during the pilot production, can not exceed the stated water demand. Exceeding this limitation without the permission of the competent authority entails liability established by the legislation of the Republic of Kazakhstan on administrative violations. The subsoil user has the right to apply to the competent authority with a statement on the excess of this limitation. The application must contain the amount of excess requested and its justification.

When applying to a subsoil user, the competent authority no later than thirty days from the date of appeal allows the excess of this limit, or gives a reasoned refusal. In the absence of a response from the competent authority within a specified period, the permit shall be deemed received. The refusal of the competent authority to grant permission may be challenged in court. Groundwater produced by the subsoil user as a result of exploration, including pilot extraction, is the property of the subsoil user.

According to Article 18 of the Subsoil Code of the Republic of Belarus:

- Minerals based on their physical and technological properties are divided into: ore, non-metallic, combustible, groundwater.

- Minerals based on their economic value are divided into: strategic minerals, common minerals, minerals of limited distribution, groundwater.

According to Article 25 of the Code of the Republic of Belarus on Subsoil, groundwater is subdivided into its composition, properties and purpose: fresh water, mineral water, mineralized industrial water, mineral water.

Natural mineral formations, hydrocarbons and groundwater contained in the subsoil are recognized as mineral resources. Their chemical composition and physical properties make it possible to use them in the sphere of material production and consumption directly or after processing.

Minerals also include petrified biological residues in the depths.

Minerals in accordance with this Code are divided into ore, non-metallic, combustible, common and groundwater.

Minerals are divided, taking into account their economic importance, in order to establish their respective legal status regarding the established mode of use and protection of the subsoil, into the following types:

1) strategic minerals;

2) specific minerals;

3) common minerals;

4) groundwater.

The assignment of minerals to the types provided for by paragraph 2 of this article is made by the state executive authority authorized to exercise state administration in the field of the use and protection of the subsoil, unless otherwise provided by this Code [12].

Conclusion

Common in the legislation of the countries of the former countries of the Union is the provision that groundwater is recognized as an object of legal protection, an integral part of the state water fund and an object of state ownership.

Given the above, that groundwater often contains minerals or natural healing resources (mineral waters), their regulation should be carried out within the framework of legislation on subsoil. We consider it necessary to supplement the Code of the Republic of Kazakhstan "On Subsoil and Subsoil Use" with its section: Exploration and production of groundwater. Relations on the use of subsoil for the purposes of exploration and (or) extraction of groundwater in the amount of less than two thousand cubic meters per day are regulated by water legislation. The granting of the subsoil use right for exploration and (or) extraction of groundwater in accordance with this section is carried out throughout the territory of the Republic of Kazakhstan and the relevant subsoil areas, except for:

1) the territories within which the underground structures are located, not related to the exploration and mining of mineral resources;

2) territories of burial grounds, cemeteries and burial grounds; territories in accordance with the legislative acts of the Republic of Kazakhstan. Other territories in respect of which the granting of subsoil use rights for exploration and (or) extraction of groundwater may be restricted or prohibited shall be determined by the competent authority within its competence in accordance with the approved subsoil management program.

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ҚАЗАҚСТАН РЕСПУБЛИКАСЫНДАҒЫ СУ ҚАУІПСІЗДІГІН ҚҰҚЫҚТЫҚ РЕТТЕУДІҢ КЕЙБІР МӘСЕЛЕЛЕРІ

Аннотация. Бұл мақалада Қазақстан Республикасының қоршаған ортаны қорғау саласындағы өзекті мәселелердің бірі су қауіпсіздігін қамтамасыз ету мәселелері қарастырылады. «Жасыл экономикаға» көшудегі мемлекеттік саясаттың негізгі бағыттарының бірі су қауіпсіздігін қамтамасыз етудің құқықтық негізі болып табылады. Зерттеуде су қорғау саласындағы қолданыстағы заңнаманы жетілдіру туралы ұсыныстар әзірленді. Әдістемелік база салыстырмалы құқықтық талдау, логикалық, жүйелі құрылымдық талдау арқылы құрастырылды.

Зерттеу мақсаты суды пайдалану мен қорғаудың құқықтық мәселелерін зерттеу және қоғамдық қатынастардың осы саласын құқықтық реттеуді жетілдіру бойынша ұсыныстар әзірлеу болып табылады.

Түйін сөздер: Жер асты сулары, Экономикалық реттеу, Жерасты суларын басқару, Суару суы, Экологиялық реттеу, Ауылшаруашылық ресурстары.

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НЕКОТОРЫЕ ВОПРОСЫ ПРАВОВОГО РЕГУЛИРОВАНИЕ ВОДНОЙ БЕЗОПАСНОСТИ В РЕСПУБЛИКЕ КАЗАХСТАН

Аннотация. В данной статье всесторонне рассматриваются вопросы один из актуальных проблем экологического права касательно водной безопасности Республики Казахстан. Одним из основных направлений государственной политики в условиях переходе зеленой экономике является правовое обеспечение водной безопасности. В ходе исследования подготовлены предложения по совершенствованию действующего законодательства в области водной безопасности. Методологическую основу составили сравнительно правовой анализ, формально логический, системно структурный анализ.

Цель исследования состоит в изучении правовых проблем использования и охраны воды и выработке рекомендаций по совершенствованию правового регулирования данной области общественных отношений.

Ключевые слова: Подземные воды, Экономическое регулирование, Управление подземными водами, Иригационные воды, Экологическое регулирование, Сельскохозяйственные ресурсы.

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