

DOI: <https://doi.org/10.31073/mivg202202-341>

Available at (PDF): <http://mivg.iwpim.com.ua/index.php/mivg/article/view/341>

UDC 332.2 (477): 349.41

SOME ASPECTS OF REFORMING THE WATER MANAGEMENT SYSTEM AND EFFICIENT USE OF RECLAIMED LANDS IN UKRAINE

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Abstract. *The necessity and the basic directions of the scientific vision of further reforming the systems of water resources and land reclamation management are determined. The need for such a reform is dictated by the fact that, despite the adoption on October 4, 2016, by the Verkhovna Rada of Ukraine of the Law “On Amendments to Certain Legislative Acts of Ukraine on Implementing Integrated Approaches to Basin Management” and a number of by-laws, the system of water management and land reclamation management in Ukraine still remains virtually unreformed since post-Soviet times as two mutually exclusive functions remain in this system: the water management function and the land reclamation management function. Moreover, the statutory grounds for the introduction of integrated basin management have been deliberately used to eliminate economic entities which managed reclamation infrastructure, which has made it much more difficult to separate the above-mentioned functions, as required by Directive 2000/60/EC of the European Parliament and the Council of Europe “On establishing a framework for Community action in the field of water policy”, the implementation of which into Ukrainian law is a mandatory task under the Association Agreement with the EU. Recent adoption (on February 17, 2022) by the Verkhovna Rada of Ukraine of the Law “On Organization of Water Users and Stimulation of Hydrotechnical Land Reclamation” was confirmed by the President of Ukraine on May 6, 2022. It is an important step towards reforming the water management as for the first time in Ukraine the law introduces a new organizational and legal form for the management of reclamation systems, namely water user organizations. But this Law does not address the main issue of the reform – the separation of the above-mentioned functions. Therefore, the success of further reforming of the systems of water resources and land reclamation management will directly depend not on the speed of development and adoption of bylaws to the Law “On Organization of Water Users and Stimulation of Hydrotechnical Land Reclamation”. It will depend on the earliest possible adoption of the “Concept of reforming the water management system of Ukraine” by the Government of Ukraine, the project of which was prepared and approved by all interested ministries and departments in 2019, but was deliberately blocked by then leaders of the Ministry of Ecology and Natural Resources of Ukraine. Therefore, the work on reforming the systems of water resources and land reclamation management is unsystematic and, in many cases, the practical steps being implemented, especially in improving the structure of the State Agency Water Resources of Ukraine, are mostly destructive. Minimizing their negative impact will require considerable efforts and time. This article aims at scientific substantiation of the list and sequence of measures, including at the legislative level, the implementation of which will bring the systems of water resources and land reclamation management in Ukraine in line with European water legislation, and thus ensure full implementation of the provisions of integrated management on the basin principle not only formally but also in the spirit.*

Key words: system, reform, management, efficiency, water resources, reclaimed lands, irrigation, drainage, water user

Introduction. Resolving the tasks of sustainable provision of water resources and increasing the use of irrigation and drainage in Ukraine to fulfill the functions of a guarantor of world food security is impossible without radical

reform of the existing, mostly still “Soviet” system of water resources and land reclamation management. This is especially important in the view of the extremely low level of own water resources provision; unacceptable inefficient

use of the available irrigation and drainage potential; and dangerously high, the highest in Europe (over 0.6°C/10 years), growth rate of the average annual air temperature and, as a result, progressive reduction of the availability of water resources for the use with simultaneous increase of the need for them, including the expansion of irrigation areas and water regulation to minimize the negative impact of climate change on the sustainability and efficiency of agriculture.

First of all, an institutional reform should be implemented, the main aim of which should be, in accordance with the requirements of the “EU Water Directive”, the separation of the functions of water resources and land reclamation management. Therefore, the system of water resources management through the adoption of the Water Strategy of Ukraine should be oriented towards achieving an acceptable level of water security through the full implementation of integrated water resources management on the basin principle. For the effective land reclamation management, it is necessary to create all necessary conditions for the involvement of landowners and land users to the management and operation of irrigation systems at both the intra-farm and on-farm levels. This problem should be solved by implementing the provisions of the already adopted Law of Ukraine “On Water User Organizations and Stimulation of Hydrotechnical Land Reclamation” and the adoption of the Law of Ukraine “On Amendments to Certain Legislative Acts Regarding the Improvement of Management Systems of Engineering Infrastructure of State-Owned Reclamation Systems”. It is these laws and by-laws to them that should become the basis of a new system of management of the engineering infrastructure of irrigation and drainage systems, capable of ensuring not only effective management of the existing infrastructure, but also creating and implementing mechanisms for attracting investments for its modernization and further development. All these institutional and legislative changes should be based on the principles of harmonization of national legislation with the relevant EU legislation.

Actuality of research. One of the most important problems of sustainable development is the protection and preservation of natural resources, primarily water, in connection with their limitation at both the global level and directly in Ukraine. Today, about 2 billion people in the world lack access to safe drinking water. A significant part of them lives in vulnerable regions where various conflicts, including military ones, taking place. Since 2014, such regions include the regions of Ukraine – Donbas

and Crimea, and from February 24, 2022 – almost all the territory of Ukraine. In addition, in terms of availability of water resources ready to use, Ukraine belongs to the countries with low water supply. According to this indicator, Ukraine ranks 111th among 152 countries of the world, and ranks 17th among 20 European countries [1–3].

The problem of water scarcity is further complicated by climate changes, which for Ukraine are characterized by the highest rate of increase in average annual temperature in Europe (over 0.6°C/10 years), as a result of which Ukraine is undergoing a process of progressive dehydration of its territory. Due to a significant increase in total evaporation along with an almost unchanged amount of precipitation, the amount of water withdrawn from the territory of Ukraine today is increasing up to 25–42 cubic km comparing to the period of 1961–1990 [4]. Accordingly, the flow of rivers decreases (from 10–20% in the north up to 40–50% in the south) and in low-water rivers of the Kherson, Odesa, Mykolaiv, Dnipropetrovsk, and Zaporizhia regions, its complete cessation is predicted starting from 2041 [4–6]. At the same time, with the growing shortage of water resources, the conditions of natural moisture supply of the territory of Ukraine are deteriorating significantly. In the period from 1991 to 2020, the area of dry and very dry zones increased by 7%, and the area of arable land with an annual climate balance deficit of more than 300 mm exceeded 10 million ha [1]. The last number can be defined as the one which characterizes Ukraine’s general need for irrigation. At the same time, the actual state of the use of irrigation potential (over 2 million ha) and drainage potential (over 3 million ha), which has been available since Soviet times, can be characterized as a crisis because in recent years (until 2022) the area of actual irrigation did not exceed 550 thousand hectares and the area of active water regulation (drained lands) was even smaller (about 300 thousand hectares). The state of on-farm network is especially critical [1; 3; 7].

Currently, there is no reliable and systematic information regarding the technical condition of engineering infrastructure objects and the operation of reclamation systems, allocation by the owners and water users, location, etc. This makes it difficult to make effective management decisions regarding their use, modernization, and restoration [3; 8].

Among the most important reasons for the extremely unsatisfactory state of the use of the existing potential of irrigation and drainage systems are the inefficient structure of water resources and engineering infrastructure

management; the detachment of water users from the management of water distribution and water supply processes; insufficient level of funding due to the lack of funds in the state budget. At the same time, the conditions for attracting investments for the implementation of measures for the modernization and reconstruction of the existing engineering infrastructure and the expansion of irrigation and water regulation areas have not been created.

The imperfection of the management system primarily requires legislative regulation of the issues of reforming the organizational structure of water resources management and effective use of reclaimed lands considering the interests of all water users. It also requires carrying out legal and institutional reforms covering all the elements of the structure of supply, transportation, distribution, and consumption of water resources that should be based on the best global experience. Therefore, the measures to reform the systems of water resources and land reclamation management developed with the participation of the experts from the World Bank and FAO and approved by the CM of Ukraine in the “Strategy for Irrigation and Drainage in Ukraine until 2030” (2019) and the Action Plan for its implementation (2021) are classified as priority.

Analysis of the latest studies and publications. Analysis of organization schemes for state governance of water resources in the UK, The Netherlands, Germany, Sweden, Canada, and the United States of America shown that there are different schemes of water resources management ranging from the ones based only on basin principle to the mixed ones. However, for all schemes the participation of state authorities at national and regional (basin) levels is mandatory and the most successful is the basin organization of water management [3; 1; 4]. In the most complete and balanced way such a system was implemented in France and has been in operation since 1964 [11; 12].

Water management in France is entrusted to the Ministry of Ecology, Energy and Sustainable Development (regulation and control). Also, this Ministry is a coordinator of the Inter-Governmental Committee on Water Resources. At the regional and local levels Ministry delegate its responsibilities to the regional authorities of the environmental protection, to the Departments of territories management, and to the prefectures’ co-ordinators in each river basin. A separate governmental authority is the National Water Resources and Environment Administration, which is responsible for monitoring and coordinates its actions with the Ministry of Ecology [11].

For the purpose of involvement of society and solving water problems, even at the central national level in France, there is an additional consulting representative organization, which cooperates with the Ministry of Ecology – National Committee of Water Resources. It brought together delegates from water users, regional communities, governmental authorities, as well as representatives and heads of basin committees.

This organization is taking part in the development of state policy; resolving of problems which are common for two or more basins; discussing and agreement of all projects and measures at the level of large regions; the determination of water prices and requirements for the quality of water supply and discharge.

The French case is an example of an effectively functioning system of water resources management, which unites all stockholders in conflict-free water resources management within a hydrographic watershed. Basin organizations perform not only planning and control functions, but also control the performance of functions by other bodies that manage water resources.

In France a unique system for financing all necessary functions of environmental issues has also been created based on the principle of “polluter pays”. The above-mentioned aspects of water resources management in France can be used for Ukraine as well [11; 13].

The analysis of international experience regarding the operation and maintenance of reclamation systems’ infrastructure and international practices of reforming the land reclamation management showed that economic relations in the field of reclamation of various countries of the world are largely determined by the forms, amount, and conditions of state financial support and regulations of economic processes.

In countries with a developed market economy, investments in hydromelioration measures are carried out by land owners, land users, and the state. National wide objects and objects of inter-economic importance are constructed, as a rule, at the expense of state subsidies and loans, are on the balance sheet of state enterprises, and are maintained at the expense of state funds. On-farm facilities are created at the expense of landowners and land users’ own funds as well as soft loans and state funds.

In the global practice of agricultural production, complex land reclamation in combination with the use of scientifically based agricultural technologies and technical means is a crucial condition for sustainable and highly efficient agricultural production. For example, in China the share of reclaimed lands reaches

44.4%, in India – 35.9%, in the USA – 39.9%. In the USA, China, India, and European countries the development of meliorative agriculture is the basis of state policy to ensure food security. Restoring the key role of land reclamation in ensuring the sustainability of agriculture in Ukraine in the face of climate change is one of the priority tasks of Ukraine's agrarian policy.

The purpose of the research is to determine the modern aspects of reforming the systems of water resources and land reclamation management in the context of substantiating the main paths of their enhancement aimed at improving the access of all stakeholders to water resources of good quality and restoring the potential of irrigation and drainage as the ground for increasing the efficiency of the reclaimed lands use on the base on international practices and experience.

Materials and methods. The research was carried out based on the methodological approaches that are used in international practice and meet the requirements of international and European standards; legislative acts on the support and regulation of relations in the field of water resources management and land reclamation; current legal documents and generally accepted methods in Ukraine.

The research methodology includes methodical approaches based on system analysis and generalization of knowledge regarding the current state and features of the functioning of the systems of water resources and land reclamation management both in Ukraine and abroad.

Research results. In recent years, Ukraine has already implemented and continues to implement actions aimed at reforming the systems of water resources and land reclamation management. Therefore, all actions are based on the task of

harmonizing Ukrainian water legislation with the six EU water directives (Fig. 1).

In accordance with the Action Plan for the Implementation of the Agreement approved by the Decree of the Cabinet of Ministers of Ukraine, obligations regarding harmonization with water directives were assigned to various ministries: the Water Framework Directive and the Marine Environment Directive to the Ministry of Environmental Protection and Natural Resources; Directive on drinking water to the Ministry of Health; Directive on the treatment of urban wastewater to the Ministry of Regional Development, Construction and Housing and Communal Services; Nitrate Directive to the Ministry of Economic Development, Trade and Agriculture; Directive on assessment and management of flooding risks to the State Emergency Service of the Ministry of Internal Affairs.

The main legislative document of Ukraine on the use of water resources is the Water Code, which entered into force on July 20, 1995 with relevant changes and amendments [15]. According to it, the purpose of water legislation is to regulate legal relations in order to ensure the preservation and scientifically based rational use of water for the needs of citizens and branches of the economy of Ukraine. The latest changes to the Water Code and a number of other regulatory acts are related to the signing of the Association Agreement between Ukraine and the European Union in 2014 and, accordingly, the need to harmonize Ukrainian legislation with EU directives. The implementation of the provisions of Directive 2000/60/EC of the European Parliament and the Council "On establishing the framework of the Community's activities in the



Fig. 1. European integration of water policy of Ukraine

field of water policy” dated October 23, 2000 [15] into the practice of water resources management in Ukraine began with the adoption of the Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine on the implementation of integrated approaches in water resources management according to the basin principle” (adopted by the Verkhovna Rada of Ukraine on October 4, 2016, No. 1641-VIII) [4].

Subsequently, in the development of the provisions of this law, five important documents for the implementation of basin management of water resources were approved: “Names of sub-basins and water management plots within river basin districts”; “Procedure for developing water management balances”; “Model provision on basin councils”; “List of pollutants for determining the chemical state of surface and underground water bodies and the ecological potential of an artificial or significantly modified surface water body”; “On approving the boundaries of river basin districts, sub-basins, and water management plots”.

Today, the work on the implementation of the system of integrated management of water resources according to the basin principle [16–20] is focused on the creation of a new monitoring system of surface water and the development of river basin management plans. Unfortunately, due to the lack of funds and financial mechanisms for their involvement, the deployment of these works is far from desired, although, as noted, the plans for nine basins should be ready by 2024.

In general, the process of implementing integrated management while meeting the requirements of European directives formally very often does not meet them in the spirit. First of all, in the already mentioned Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine Regarding the Implementation of Integrated Approaches in the Management of Water Resources Based on the Basin Principle” the powers of the basin councils were reduced to the role of advisory bodies under the State Agency of Water Resources, which made it impossible for them to perform the functions of monitoring the activities of the basin administrations and, accordingly, water users will never get real opportunities to participate in water resources management. The law also does not foresee the separation of the function of water resources management from the function of reclamation infrastructure management. Moreover, the lack of legislative regulation of this issue made it possible for then leaders of the State Agency of Water Resources to implement a number of destructive decisions aimed at the

liquidation of economic entities that managed the reclamation infrastructure with the transfer of their functions to the basin authorities, which significantly complicated the possibility and procedure of transferring the reclamation infrastructure to the State Agency of Land Reclamation and Fisheries of Ukraine, which in 2021 was designated by the Cabinet of Ministers of Ukraine as responsible for the operation of this infrastructure and the implementation of the state policy on land reclamation. Neither this law nor the Water Code foresee the creation of the National Water Council under the Cabinet of Ministers of Ukraine as a body responsible for the development and control of the implementation of the state water policy by a significant number of Ministries and departments responsible for the implementation of its certain parts. The creation of such a body was foreseen by the draft of the “Concept of reforming the system of water resources management” developed and prepared for the consideration by the Cabinet of Ministers of Ukraine in 2019 simultaneously with the “Strategy for Irrigation and Drainage in Ukraine until 2030”. Unfortunately, then leaders of the Ministry of Ecology and Natural Resources and the State Agency of Water Resources blocked the submission of the “Concept...” for the consideration by the Cabinet of Ministers of Ukraine and until now Ukraine has neither a systematic vision of approaches for reforming the systems of water resources and land reclamation management nor a full-fledged coordinating body responsible for developing such a vision. Unresolved issues regarding the separation of the function of reclamation infrastructure’s operation along with the provision of water supply and water discharge services from the functions of water resources management significantly slow down the process of full implementation of integrated management of water resources according to the basin principle and the implementation of the tasks approved by the Cabinet of Ministers of Ukraine in the “Strategy for Irrigation and Drainage in Ukraine until 2030” [2] and the Action Plan for its implementation [22].

Thus, for almost a year and a half, the Decree of the Cabinet of Ministers of Ukraine dated May 24, 2021 “Some issues of distribution of individual powers of central executive bodies in the field of land reclamation” regarding the transfer of powers to implement state policy on land reclamation and land reclamation infrastructure to the State Agency of Land Reclamation and Fisheries of Ukraine, as a tool for implementation these powers, has not been fully implemented. The State Agency of Water Resources with the

support of the Ministry of Ecology and Natural Resources under the completely fabricated pretext of the need to provide water resources to other regions and consumers (except for irrigation) advocates the need to leave a number of national wide canals under its management (Kakhovskij, Inguletskyj, Dnipro-Donbas, etc.), i. e. retain among its functions the function of providing services using engineering infrastructure, which completely contradicts with the requirements of the European Water Directive and creates prerequisites for a conflict of interests diverting from solving urgent issues of water resources management. Among them are the issues of funding the development of river basin management plans, measures for their implementation, and development of a water monitoring system. The lack of a full-fledged modern monitoring system with equipped observation points and a modern laboratory base does not allow timely diagnostics of the state of one or another basin and, accordingly, reasonably form a list of measures, the implementation of which will allow maintaining the proper state of water resources to meet the needs of all water users. It is also necessary to expand the powers of basin councils to the level of kind of basins' water parliaments fully responsible for the state of water resources within specific basin [21]. Until now, there is also no understanding of what a water resource is: how it is formed, how it accumulates, where it is concentrated, how it is spent according to the water management balance, and how to manage it effectively. When monitoring system will start to work and basin councils will be given real powers, they, together with basin authorities, will receive financial and management tools to implement river basin management plans, will have the opportunity to decide what to do when water conditions deteriorate, how to prevent unauthorized discharges and uncontrolled water withdrawals that disturb ecological balances within watersheds, etc. This synergy will give a better cumulative effect for improving water resources and keeping them in good condition for us and the next generations of Ukrainians, particularly regarding the climate change.

Regarding the reform of the system for the land reclamation management, the first legislative act on this issue was the Law of Ukraine "On Organizations of Water Users and Stimulation of Hydrotechnical Land Reclamation" adopted in 2022. Its adoption introduces a new organizational and legal form for melioration systems management – water user organizations (WUOs). WUOs have the right to acquire free ownership of on-farm reclamation systems as well as part of

inter-farm systems – pumping stations, canals and pipelines of a lower level, which are currently in state ownership. In general, positively evaluating the very fact of the adoption of this law, especially in terms of creating conditions for the possibility of attracting funds from water users for measures to modernize existing irrigation areas, at the same time it is necessary to emphasize a number of provisions that are not resolved by the adopted law. First of all, the Law practically makes it impossible to create water user organizations both on lands where there is no irrigation and drainage infrastructure and on lands that are registered as irrigated or drained, but where irrigation or water regulation is not actually carried out. This is due to the fact that the law deprives the current owners of inter-farm and on-farm systems of the right to initiate the creation of WUOs, i. e. it cannot be done by those business entities that have reliable information about the availability of reclamation infrastructure that can be transferred to WUOs, its condition, project capacities, reserves for increasing areas of irrigation and water regulation. The issue of free access to pipeline networks also remains unresolved, which will also significantly complicate the possibility of performing works on their reconstruction and replacement with new ones.

Unfortunately, the draft Law of Ukraine "On Amendments to Certain Legislative Acts Regarding the Improvement of the System of Management of Engineering Infrastructure Objects of State-Owned Reclamation Systems", submitted to the Verkhovna Rada of Ukraine [23] does not create such conditions as well. In general, one gets the impression that the drafters of this Law and the Law "On Organizations of Water Users and Stimulation of Hydrotechnical Land Reclamation", which are mainly representatives of the All-Ukrainian Agrarian Council, see the main goal of adopting these Laws not in the creation of the conditions for the restoration and further expansion of irrigation and drainage areas, but in giving water users the right to actual monopoly management of the irrigation and drainage infrastructure through the transfer the ownership of the lower-level irrigation and drainage infrastructure to the WUOs and the acquisition of the right to manage the state-owned inter-farm irrigation and drainage infrastructure by means of the legal establishment of water users' control over the activities of supervisory boards of operators, which will be created for operating the state reclamation infrastructure in case of the adoption of the above-mentioned Law in its current version. To some extent, this goal is confirmed by the very content of the

Laws and the fact that the development of these laws is conducted without proper justification, although this was provided for by the already mentioned Action Plan for the implementation of the Strategy. Thus, the work provided for in the Action Plan on substantiating the institutional and economic foundations of the creation of a state-owned business entity and the transfer to it the management of state-owned infrastructure objects along with the assessment of the ability to financially support the functioning of the water supply and reclamation complex have not been completed. In the absence of these results, it is impossible to quantitatively assess the impact of these Laws on further development of hydrotechnical reclamation and the ability of water users organizations and operators to carry out their economic activities under self-sufficiency conditions as well as the availability of economic prerequisites for attracting investments for reconstruction and modernization of irrigation and drainage infrastructure both at the international (operators) and at the intra-economic level (WUOs).

This issue will also not be solved by the right of operators to independently form tariffs and services for water supply and discharge in the absence of a national regulator provided by the draft Law “On Amendments and Supplements to Certain Legislative Acts Regarding the Improvement of the Management System of Engineering Infrastructure Objects of State-Owned Reclamation Systems”. As evidenced by

the results of the studies carried out at the Institute of Water Problems and Land Reclamation [24–25], at the current level of the use of design capacities, almost no irrigation and, especially, drainage system of Ukraine will not be able to work without state funding support, and even more to implement projects for the reconstruction and modernization of engineering infrastructure.

The possibility of transferring operators to self-sufficiency will appear only when the areas of actual irrigation and water regulation reach at least 70% of the design capacity of the systems. Therefore, the presence of a national regulator of tariffs, as well as the mechanisms of state support of both the operators and WUOs for the entire period of the implementation by them of investment projects aimed at increasing irrigation and drainage areas, not only for three years as provided for in the draft Law, should be a mandatory component of state reclamation policy. An approximate list of mechanisms for such support, which not only can but must be supplemented in the process of reforming, is shown in Fig. 2

In general, assessing the results of the reform of the systems of water resources and land reclamation management in Ukraine, it is necessary to state the lack of a systemic vision of this process, which causes the preparation and adoption of laws that, already at the time of adoption as it was in the case of the Law “On Amendments to Certain Legislative Acts of Ukraine on implementation of integrated approaches in the management of water resources

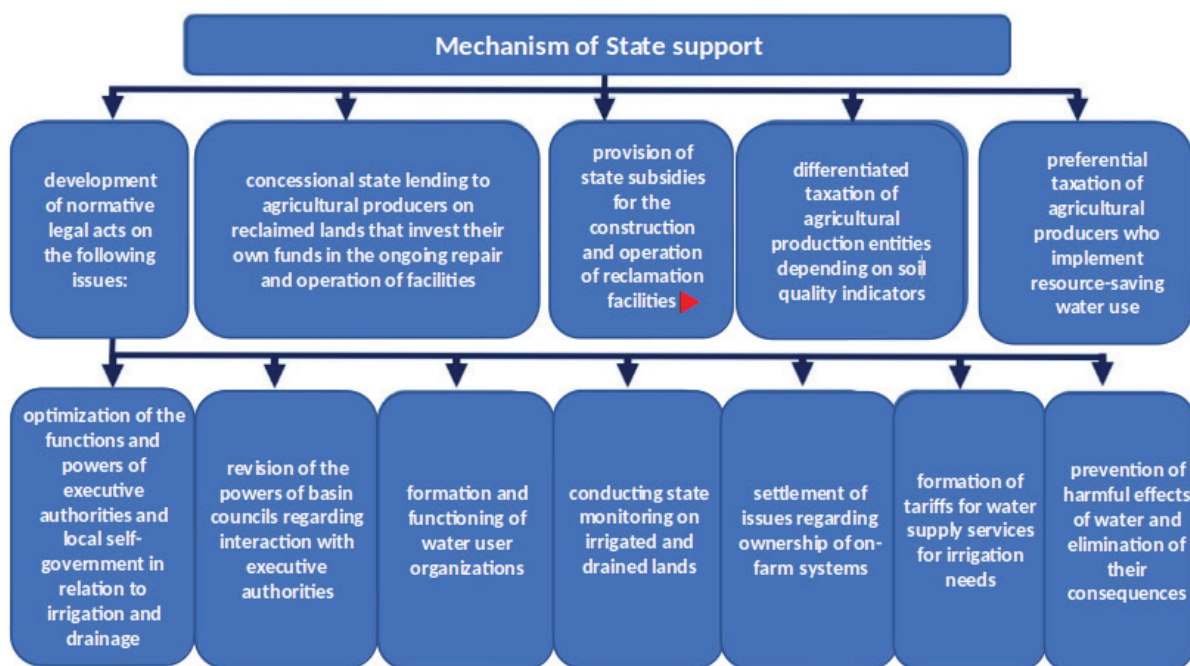


Fig. 2. Mechanisms of state support for reforming the system of land reclamation management

according to the basin principle” and the Law “On organizations of water users and stimulation of hydrotechnical reclamation”, need significant changes and amendments.

A certain fetishization of the role of water users and the expectation that they will be the main driving force of the reform process will not contribute to the effectiveness of the reform process. Unfortunately, the analysis of reforming according to a similar scheme in the countries of the former socialist camp shows that the creation of legislative, organizational, and legal conditions for the establishment of water user organizations did not lead to the most important result of the reform – namely, the increase of areas under irrigation and water regulation.

In our opinion, this happened due to insufficient level of state support, both organizational and especially financial. Therefore, we see the possibility of acceleration, mainly the increase in the efficiency of the reform process, in a significant strengthening of the role of the state. This can be realized by firstly completing the process of full transfer of the entire engineering infrastructure with all canals without exception to the sphere of management of the State Agency for Land Reclamation and Fisheries, which will make it possible to start the implementation of investment projects for the modernization and reconstruction of inter-farm network. The first project can and should be an investment project on the reconstruction of the Lower Dniester irrigation system, which is ready to be financed by the European Bank for Reconstruction and Development. The following projects involving foreign investments should be proposed based on the results of the inventory of engineering infrastructure and reclaimed lands, which should also include an assessment of the damage caused by the military aggression of the Russian Federation. The combination of these results will make it possible to determine what share of funds for the implementation of projects should be collected from the aggressor as reparations and what part should be involved in the form of investments. The availability of the inventory results will make it possible to start the process of creating WUOs on lands that are considered as reclaimed but on which neither irrigation nor water regulation has been carried out for a long time although the appropriate engineering network (on-farm systems) still exists. Of course, for this purpose it is also necessary to legislate the right of today’s owners of this infrastructure to initiate the creation of WUOs, to whose ownership of this infrastructure can be transferred. Therefore, the presence of WUO

should be considered as a prerequisite for the possibility of obtaining financial support for the implementation of irrigation and water regulation restoration projects on lands that are statistically recorded as irrigated or drained. The availability of reliable data on such lands will also provide an opportunity for the full introduction of a two-rate tariff, the first permanent component of which should cover all lands that are statistically recorded as irrigated or drained. In general, it is necessary to emphasize that the process of reforming the systems of water resources and land reclamation management in Ukraine should be returned as soon as possible to the framework outlined by the draft of the mentioned “Concept of reforming the systems of water resources and land reclamation management” by adopting it as soon as possible and resuming the process of unconditional implementation of the “Action Plan on the implementation of the irrigation and drainage strategy”. This will return the reforming process to the principles of the EU Water Directive, on the one hand, and will make it possible, on the other hand, to minimize the lobbying influence of the All-Ukrainian Agrarian Council, the main goal of which, as already noted, is an attempt to redirect the reforming process along the path of hidden raiding to take over the working irrigation infrastructure, not to create conditions for expansion of irrigation and drainage areas.

Returning the reform process to the path outlined by the “Concept...” and “Strategy...”, in addition to conducting an inventory of infrastructure and land, will require to resolve the issue of creating a national irrigation and drainage operator and a national tariff regulator as soon as possible. The issue of expanding the powers of basin councils to the level of water “parliaments” of the basins and the creation of the National Water Council instead of the established Interdepartmental Coordination Council, whose powers are insufficient to implement the powers of formation and control of the implementation of the national water policy, should also be resolved as soon as possible. It also requires a solution to the issue of the creation and functioning of the Water Fund as the main source of funds for the implementation of river basin management plans. This includes the full legislative implementation of the “polluter pays” principle. All these changes must be reflected in the Water Strategy of Ukraine, which is being developing in accordance with the decision of the National Security and Defense Council of Ukraine, and legislated by introducing changes and amendments to the mentioned Law “On Organizations of Water Users and Stimulation

of Hydrotechnical Reclamation”, the Law “On Land Reclamation”, the Law “On Implementation integrated approaches...”, and, certainly, in the Water Code of Ukraine. Of course, the entire set of legislative changes must be based on clear compliance with the provisions of the EU directives mentioned at the beginning of the paper.

Conclusions. The process of reforming the systems of water resources and land reclamation management started in Ukraine is characterized by a lack of systematicity and is focused mainly on the introduction of the institute of water users, which is not always considered as the most important and sufficient condition for the deployment of the process of restoring the existing potential of irrigation and drainage systems.

As a result, for many years there has been no investments in the modernization and reconstruction of the existing irrigation and drainage infrastructure; no prerequisites have been created for attracting investments, including international financial investments, for the implementation of such projects; and the existing systems of water resources and land reclamation management has not yet been reformed in terms

of the complete disunion of the functions of water resources management and the management of irrigation and drainage infrastructure.

Until now, the issues of the creation of the National Water Council, the Water Fund, the National Operator of Irrigation and Drainage Infrastructure, the tariff system for irrigation and drainage services, and the national tariff regulator remain unresolved.

Prompt resolution of the outlined problems at the conceptual and legislative level as well as the ensuement of unconditional execution of the tasks already approved by the Cabinet of Ministers of Ukraine in the “Strategy for Irrigation and Drainage in Ukraine until 2030” and “Plan of Measures for its Implementation” taking into account the damage, destruction, and losses caused by the military aggression of the Russian Federation will give an opportunity to start the process of restoring the potential of irrigation and drainage with the aim of transforming reclaimed lands into a guarantor of the sustainability of agriculture in the face of climate change and transforming Ukraine into a guarantor of world food security.

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УДК 332.2 (477): 349.41

ДЕЯКІ АСПЕКТИ РЕФОРМУВАННЯ СИСТЕМИ ВОДНОГО ГОСПОДАРСТВА ТА ЕФЕКТИВНОГО ВИКОРИСТАННЯ МЕЛІОРОВАНИХ ЗЕМЕЛЬ В УКРАЇНІ

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Анотація. Визначено необхідність та обґрунтовано основні напрямки наукового бачення подальшого реформування системи управління водними ресурсами та ефективного використання меліорованих земель. Необхідність такого реформування диктується тим, що, не дивлячись на прийняття

04.10.2016 року Верховною Радою України ЗУ «Про внесення змін до деяких законодавчих актів України щодо впровадження інтегрованих підходів в управлінні водними ресурсами за басейновим принципом» та ряду підзаконних актів на його виконання, система управління водними ресурсами та меліорацією земель в Україні до цього часу залишається, практично, не реформованою ще з пострадянських часів, адже і до сьогодні в цій системі залишаються дві взаємовиключні функції: функція управління водними ресурсами і функція управління меліоративною структурою. Більш того, законодавчо визначені підстави для запровадження інтегрованого управління за басейновим принципом були свідомо використані для ліквідації суб'єктів господарювання, які здійснювали управління меліоративною інфраструктурою, що значно ускладнило можливість розділення вищезазначених функцій, як це вимагає Директива 2000/60/ЄС Європейського Парламенту і Ради «Про встановлення рамок діяльності Співтовариства у сфері водної політики» від 23 жовтня 2000 року, імплементація положень якої в українське законодавство є обов'язковим завданням відповідно до Угоди про асоціацію з ЄС. Недавнє прийняття (від 17.02.2022 року) Верховною Радою України ЗУ «Про організації водокористувачів та стимулювання гідротехнічної меліорації земель», підписаний Президентом України 06 травня 2022 року, хоча і є важливим кроком на шляху реформування системи управління водними ресурсами та меліорацією земель, адже цим Законом в Україні вперше запроваджується нова організаційно-правова форма з управління меліоративними системами, а саме організації водокористувачів (ОВК), але також не вирішує головне питання реформування – розділення функцій. Тому успішність подальшого реформування системи управління водними ресурсами та меліорацією земель напряму буде залежати не від швидкості розроблення та прийняття підзаконних актів до ЗУ «Про організації водокористувачів та стимулювання гідротехнічної меліорації земель», а від якнайшвидшого прийняття КМУ «Концепції реформування системи управління водними ресурсами України», проєкт якої був підготовлений і пройшов погодження всіх зацікавлених міністерств і відомств ще у 2019 році, але був свідомо заблокований ще тодішнім керівництвом Міністерства екології і природних ресурсів України. Через це робота з реформування системи управління водними ресурсами та меліорацією земель ведеться безсистемно, а в багатьох випадках практичні кроки, що реалізуються, особливо в частині удосконалення структури Держводагентства України, в своїй більшості є деструктивними і мінімізація їх негативного впливу буде потребувати значних зусиль та часу. Дана стаття ставить своїм завданням науково обґрунтувати перелік і послідовність заходів, у тому числі і на законодавчому рівні, реалізація яких дасть змогу привести систему управління водними ресурсами та меліорацією земель в Україні у відповідність до вимог Європейського водного законодавства, і тим самим забезпечити в повному обсязі впровадження положень інтегрованого управління за басейновим принципом не лише за формою, але й за змістом.

Ключові слова: система, реформування, управління, ефективність, водні ресурси, меліоровані землі, зрошення, дренаж, водокористувач