

**V.V. Ksendzuk, Ph.D. in Economics, Assoc. Prof.
I.M. Melnyk, applicant**
Zhytomyr Polytechnic State University

Natural capital of an enterprise: accounting and analytical dimension

The economic justification of natural capital in the enterprise management system is becoming important in connection with the spread of the concept of environmental economics. However, the concept of «natural capital» arises, which requires the introduction of changes in the accounting and analytical system of the enterprise. Therefore, the study defines the essence of natural capital as a set of renewable and non-renewable natural resources (assets) and services for their conservation, restoration and rational use, implemented by business entities or within the assimilation potential of natural resources. The influence of natural capital components on accounting and analytical support of economic processes is also analyzed, and a mechanism for the influence of natural capital on the management of environmental activities of the enterprise is developed. This allowed us to take into account the environmental influence and risks of business entities and justify the functioning of the enterprise's management system in the conditions of using natural capital for the following areas: organizational structure, production process, strategic planning, accounting and analytical system.

Keywords: natural capital; natural resources; environmental economics; management system; accounting and analytical support; enterprise.

Urgency of the research. The environmental component in the activities of business entities becomes relevant in connection with the emergence and aggravation of the situation in terms of the disproportionate development of society and changes in the environment. Social responsibility of business is no longer something innovative, on the contrary, enterprises are looking for new forms of interaction with society and the restoration and preservation of the natural resource potential of the region, country and the world.

Issues of ownership and use of natural capital are of particular importance and require the application of appropriate procedures for the management of this type of asset in the enterprise. Performance and results will depend on the ability to manage risks arising from such phenomena as climate change, depletion of mineral resources, reduction of cultivated land and other agricultural land, deforestation, increasing freshwater scarcity, loss of biodiversity and extreme weather conditions.

According to the report of World Wide Fund for Nature «Living planet-2012» [11], the world economy annually spends 50 % more resources than it can recover during this period. Energy consumption is projected to grow by 55 % between 2009 and 2035. By 2030, the world's population will be about 8 billion.

In such conditions, the use of natural capital becomes a kind of measure of development not only of the country, but also of individual economic entities. One of the international indicators that characterize the development of environmental policies of countries is Environmental Performance Index [28], which is developed jointly by Yale and Columbia University in collaboration with the world economic forum. This index is based on 24 performance indicators in ten categories covering environmental health and ecosystem viability.

In 2018 Ukraine ranked 109th in the environmental performance Index among 180 countries. Appendix A provides an assessment of the indicators that make up this Index. The country has the lowest rating in terms of climate and energy – 143; biodiversity and habitat – 140; ecosystem viability (natural resource management) – 139; air pollution – 122.

The data analyzed confirm the existence of problems in the field of accounting and analytical reflection of the components of natural capital. Therefore, the study of these issues requires a special approach, taking into account the current state of the natural environment and the features of legal regulation in the field of accounting and economic analysis.

Khvesyuk M.A., Bystriakov I.K., Klynovyi D.V. consider that «the most significant problems in most regions of Ukraine today are incomplete inventory of available natural resources, as well as a low level of their capitalization. This situation does not contribute to their active involvement in economic turnover, and the lack of a proper institutional environment, such as a weak level of development of market institutions, including the legislative framework, business structures, and financial system, generally slows down the process of using modern corporate forms of management that would ensure the solution of problems of sustainable socio-economic development of natural resource complexes in regions. In this regard, a full-fledged economic assessment of natural wealth should be the core of the process of improving economic activity as a whole» [22].

In addition, due to the current trends of sustainable development, «Declaration of natural capital» states that «when making management decisions at all economic levels, from an enterprise to a large corporation, region or country, managers should take into account the cost of natural capital in their products and services. In Ukraine,

unfortunately, there is no adequate assessment of natural capital in the system of accounting for the national wealth of the state» [10].

Therefore, we believe that the accounting and analytical justification of natural capital and its components, as well as the identification of the features of reflection in the management systems of business entities is an important area of research.

Analysis of recent research and publications. As shown by the analysis of scientific literature sources, today in Ukraine among scientists the problems of using, evaluating and restoring natural capital are studied quite often. The issue of natural capital management at enterprises, in particular, the formation of information support in the accounting and analytical system, is raised in particular detail. Today the accounting system does not stipulate for damage to ensure that their reproduction is not below a certain critical level. The problems of natural capital in their works have been studied by domestic scientists: O.O. Veklych, L.M. Horbach, S.I. Dorohuntsov, D.M. Kolotylo, M.Lesechko, L.Maksymiv, L.H. Melnyk, P.P. Pastushenko, V.P. Rudenko, M.A. Khvesyk, A.Chemerys, N.M. Maliuha, I.V. Zamula [17].

Among foreign scientists N.Georgescu-Roegen, K.Boulding, H.Daly, R.Costanza, P.Hawken, H.Dieter, E.F. Schumacher, consider the concept of natural capital and justify the need to implement this concept in the accounting system.

Purpose of research. Taking into account the problems described above, the main objectives of this study are:

- determine the problem of natural capital and implement an economic justification in the light of the reflection of its components in the accounting and analytical system;
- integrate natural capital into the enterprise's decision-making process and reveal its place in the accounting and analytical system.

Statement of basic materials. Revealing a certain research topic, it is advisable to focus on the concept of «environmental economics» («green economics»), which was recognized as a tool for implementing the principles of sustainable development at the UNO Conference on environment and development in Rio de Janeiro+20 (2012).

The concept of environmental economics assumes that governments, businesses and society implement the principles of sustainable development in their activities. For example, business entities attract investments in natural capital to restore forest resources that use renewable energy sources, develop technologies for the production of environmentally friendly food, distribute limited resources and improve their management. The restoration and preservation of the environment is the main motive for the operation and management of enterprises.

In the scientific literature, ecological economics is interpreted as «a new field of research dealing with the relations between natural ecosystems and socio-economic systems in the broadest sense, relations that solve many problems of humanity, as well as for building a sustainable future» [21].

Vlasenko V.A. believes that «the environmental economics is a model of economic development that leads to increased human well-being, economic growth and social justice, while reducing risks to the environment and the deficit of natural resources» [5].

The UNEP report «Environmental Economics Initiative» defines the environmental economics as a system of economic activities related to the production, distribution and consumption of goods and services that contributes to the well-being of mankind over a long period of time without exposing future generations to the risks of environmental disasters [27].

Hnatyshyn N.A. notes «in order for sustainable development to exist, it is necessary to form a sustainable economy that would allow us to get out of the ecological and economic crisis. <...> Environmental economics recognizes environmental restrictions, but is based mainly on traditional economic concepts. In this way, it helps to introduce environmental concepts into the economy. Environmental economists take into account in their research the irreversibility of environmental changes, the unpredictability of long-term consequences of human activity, issues of sustainable development and the need to respect the equality of people, countries and generations» [7].

In other words, we can conclude that the management of natural resources, which are one of the supporting and forming components of the activities of economic entities, should meet the principles of environmental economics and ensure the formation of appropriate information support. Furthermore, this issue is relevant in the light of the difficult socio-economic situation in Ukraine, resource and energy dependence on foreign markets, and the low quality of life of the population.

With consideration to modern environmental requirements of the society in the activities of enterprises and reflecting in their reports the results of natural resource management and the environmental component of accounting and analytical objects will contribute to the reproduction and preservation of the environment.

The basic asset of the environmental economics is natural capital. The term «natural capital» was first used in 1973 by E.F. Schumacher in his book «Small is Beautiful». As Helim Dieter points out, natural capital is a concept which time has come, but it can also be affected by vested interests over time, as has happened with

sustainable development [24]. The concept is based on the desire to preserve natural capital and increase it so that future generations can take advantage of gifts of nature [13].

In the famous report of the UN International Commission «Our common future» (1987), next to the definition of sustainable development, which has become a classic, there is also the concept of «natural» or «environmental capital». In particular, it is argued that «the industrialized world has already used most of the planet's environmental capital», and «we borrow natural capital from future generations without the intention or ability to repay this debt» [26].

«Implementation of this concept in accounting requires clarification of all basic concepts, because the utility of such assets is measured not only in economic benefits. Almost all natural capital assets are already subject to accounting and balance sheet accounting: land, biological assets, environmental expenditures, natural resources, etc. But the accounting system does not stipulate for simultaneous assessment of damage to ensure that their reproduction is not below a certain critical level. What is the essence of capital is to provide sources of their reproduction along with assets. Three principles are the basis for the development of a methodology for accounting for natural capital: public goods are provided at the expense of public funds; the polluter of the environment compensates for all costs of restoration; the increase in assets is due to environmental growth» [24].

Therefore, the study considers the interpretation of the concept of «natural capital» and attempts to identify the features of this definition in the accounting and analytical dimension.

«Sustainable exploitation of natural resources presupposes the consideration of environment not just as a storehouse of natural treasures (resources), but as natural capital, as a whole, which provides conditions for the existence of life. In the EU countries, this concept of "natural capital" is increasingly used, which is a fairly new category that combines economic and environmental approaches to identify and quantify the natural environment and related ecosystem services in order to better make decisions for the management, conservation and restoration of the natural environment. Natural capital is an ecological reserve of all natural resources and conditions that provides the necessary goods, flows and ecosystem services to support life» [10].

Burkynskiy B.V. and Horiachuk V.F. «for the purpose of economization, we propose to consider natural capital as: 1) a part of natural resources that is owned by economic units of the country and used for the purpose of creating added value. This definition corresponds to the classical definition of capital as a value that creates added value; 2) identical to the concept of "natural resources". Herewith, natural capital consists of the "active" part of natural resources, which provides the creation of added value, and the "passive" part, which can potentially be used for these purposes» [2].

The definitions proposed by the authors reveal the concept of «natural capital» as one of the types of capital that should create added value. In our opinion, the concept under study is somewhat broader, since it includes not only natural resources, but also does not cover such processes as: restoration, conservation of the environment, use of natural resources, and so on.

Thus, natural capital is recognized by foreign researchers as a source of various environmental or natural services, which include: support for the composition of the atmosphere, climate improvement, support for the hydrological cycle, including flood control and provision of drinking water, waste absorption, nutrient cycling, soil formation, plant pollination, food supply, support for plant and animal species, providing the gene pool, scenic landscapes, recreational places [25].

If we consider natural capital from an accounting and analytical point of view, then, accordingly, we can identify a number of economic operations that will be a part of the processes of the environmental direction of the enterprise. Therefore, in this case, the interpretation of the definition of «natural capital» requires a detailed description and justification. After all, in accounting, the processes of using natural resources and restoring or preserving them will have their own characteristics.

Scientists F.Berks and K.Folk divide natural capital into three main components: non-renewable resources that are allocated from the ecosystem; restoration resources provided by the ecosystem; and environmental services [25].

Veklych A.A. and Yakheieva T.M. define natural capital as a fund that produces natural goods and environmental services (for example, assimilation of emissions and discharges, regulation of water flow, prevention of soil erosion, etc.), adding that only complete, undisturbed, full-fledged, structurally diverse ecosystems, which are an important component of natural capital, can perform such functions [4]. These scientists also identify natural capital with natural resource potential. Just as L.S. Hryniv does. The author calls natural capital the natural resource potential and defines its two main functions: participation in the production function of the economy and ensuring the reproduction of nature through exchange processes of energy and matter within the local territory (biophysical function) [9]. Although, we believe that for accounting and analytical purposes, this identification is incompatible, since the accounting system generates information about economic processes carried out due to the interaction of assets of the enterprise. But the natural resource potential is a set of natural resources and does not include assimilating capital, which is described in their study by N.M. Maliuha, I.V. Zamula [17]. Scientists note that «natural capital consists of natural resources (natural assets that bring benefits by using them in the process of human life) and assimilation potential (natural assets that bring benefits through self-regulating, self-perpetuating functions of the environment)» [17].

Therefore, in our opinion, the natural resource potential defines the description and justifies the assessment of individual components of natural capital in accounting, but does not take into account the processes of restoration, conservation of natural resources, which is one of the components of natural capital.

In the thesis research of O.V. Kryven, natural capital is interpreted as «a set of terrestrial ecological systems (ecosystems), which is the initial capital asset (a stock of natural resources), from which resources are involved in economic turnover (the flow of resources, a derivative asset) and, along with other assets (traditional physical capital), take a direct part in production» [15].

It is also worth noting the definition proposed by M.Yu. Shlapak: «natural capital is the entire complex of natural resources, which is not limited to either the current role in the economic system, or our knowledge of the potential for such a role in the future» [23].

So, after analyzing the definitions that identify Ukrainian and foreign scientists, we can distinguish such groups of approaches:

- natural capital as natural resources;
- natural capital is an identical concept to the natural resource potential;
- natural capital as a set of natural resources and environmental services.

For the purpose of improving the system of accounting and analytical support of business operations, it is advisable to define natural capital as a set of regenerative and non-renewable natural resources (assets) and services for their conservation, restoration and rational use, implemented by business entities or within the assimilation potential of natural resources. Thus, accounting information should not only disclose the economic benefits of using the company's assets, but also focus on the environmental (natural) characteristics of the components of accounting statements.

In the Law of Ukraine «On accounting and financial reporting in Ukraine» [14], economic benefit is interpreted as «the potential opportunity for an enterprise to receive funds from the use of assets». In our opinion, taking into account the results of the study, it is necessary to supplement the provisions of legal regulation in the field of accounting and add an interpretation of the concept of «environmental benefits».

The study suggests that the environmental benefits of natural capital should be understood as the benefits that an enterprise receives in the form of conservation, restoration and rational use of natural resource potential, as well as possible potential benefits associated with the use of natural assets in the future.

The next stage of the study is to determine the components of natural capital, which will identify the objects of accounting and economic analysis.

In the scientific literature, the structure of natural capital is proposed to be considered as a set of the following components: non-renewable natural resources (mineral resources and fuel and energy resources of the subsoil), renewable natural resources (land, forest, water and recreational resources, solar energy, etc.) and the assimilation ability of the environment. This understanding of the structure mainly reflects existing ideas about it and is supported by the availability of methodological approaches to evaluating the allocated components of natural capital» [2, p. 9].

Experts of World Bank define natural capital as a stock of natural production resources that are endowed with society: all reserves in «natural storerooms» that can be used for production purposes, including soil, water, air, and minerals [6].

Horiachuk V.F. offers to consider natural capital «as a set of three components:

- natural resources i.e. reserves in "natural storerooms" that can be used for production purposes, including soil, water, air, minerals, etc.;
- natural resources that do not have a reserve form (for example, sunlight, wind energy, etc.);
- state of the environment (degree of air pollution, quality of drinking water, etc.)» [8].

«Examples of natural capital include categories and functions that are different in nature and meaning, such as minerals, water, waste assimilation, carbon dioxide absorption, farm land, habitat, minerals, erosion control, recreation, visual enjoyment, biodiversity, temperature and oxygen regulation, and the like» [10].

Povydysh L.I. [19] generalizes the classification of natural resources in his research, based on technical and technological improvements and processing of natural resources, economic viability (available and potential); completeness (exhaustible and inexhaustible); form of ownership (private, public, public); origin and climatic properties (mineral, climatic, water, land, biological, soil); the types of economic use (industrial, agricultural, non-production); the economic feasibility of replacing the (essential and nonessential); in terms of economic filling (nonfatal and fatal).

Furdychko O.I., Artiushok K.A. study natural resources differentially by certain types of resources: land, water, forest, fossil minerals [20].

Zhuk P.V. [12] identifies the following types of natural resources: mineral, water, land, forest, natural and recreational.

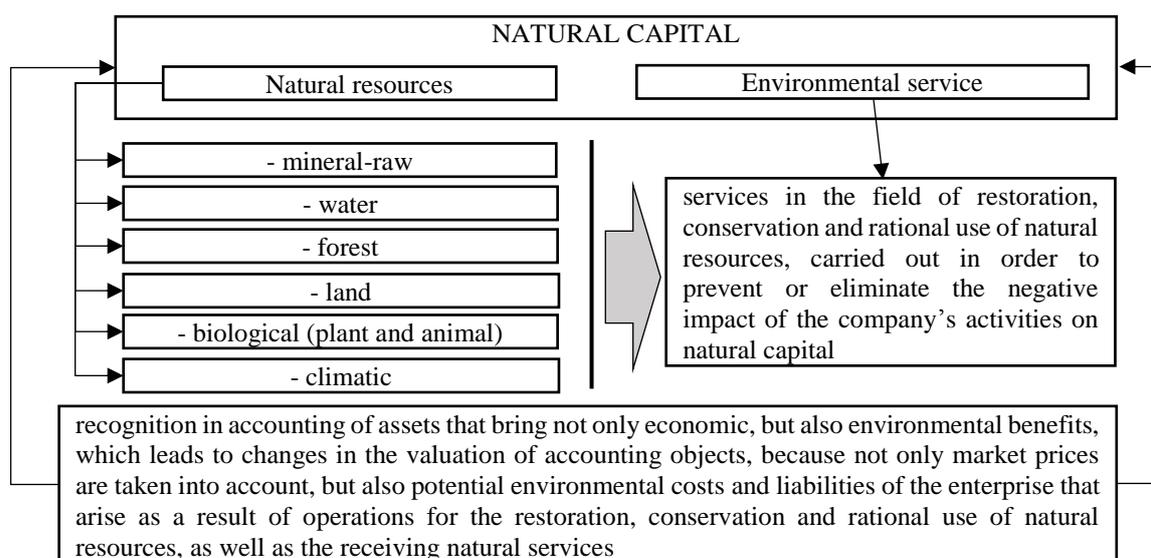
Valyukh A.M., assessing the issues of harmonization of the main legal acts regulating the formation of a strategy for the development of natural capital between Ukraine and the European Union, identifies natural capital

and its components that regulate forest, land, water legislation, legislation in the field of biodiversity, air protection, climate change and GMO) [3].

According to the results of the study on the interpretation of the definition of «natural capital», it is also worth paying attention to such a component as environmental services. Scientists suggest that this term is understood as «a type of activity which main content is to improve the state of the natural environment through the prevention or elimination of harmful effects of components of the production process: conscious human activity, the actions of objects and means of labor» [18].

Based on the approaches of scholars in Figure 1, the structure of natural capital is shown; it is proposed to use in accounting and economic analysis for building a quality and informative financial and non-financial performance statements.

To characterize the components of natural capital, the attribute of origin is chosen, because we believe that this classification has the greatest impact on accounting and analytical support. Depending on the sphere of activity in which the enterprise carries out business operations, the accounting policy provisions will be formed.



Source: developed by the author

Fig. 1. Influence of natural capital components on accounting and analytical support of economic processes

Summing up the above research results, it is reasonable to build a mechanism for accounting for natural capital in the environmental management system of an enterprise. Nevertheless, information support is formed in accounting, which is the basis for making decisions on the management of economic activities of the enterprise. Therefore, the integration of components of natural capital in the process of making managerial decisions of the enterprise is a prerequisite for improving the methodological support of accounting and economic analysis.

«The process of managing a particular resource is considered as a single whole, within which there are interconnected information flows that pass through all management functions (planning, accounting, control, and so on)» [16].

The activity of business entities consists of economic operations that are carried out in the conditions of the existence of a set of risks and taking into account the capabilities of the enterprise, which are formed under the influence of the external and internal environment. The management system is formed from elements that are responsible for making decisions in specific areas of the enterprise. Natural capital as a new object of management will affect the following activities: production, sales, marketing, innovation, financial and innovation. In addition, it is necessary to take into account the peculiarities of the functioning of the enterprise's management system in the conditions of using natural capital in the following areas:

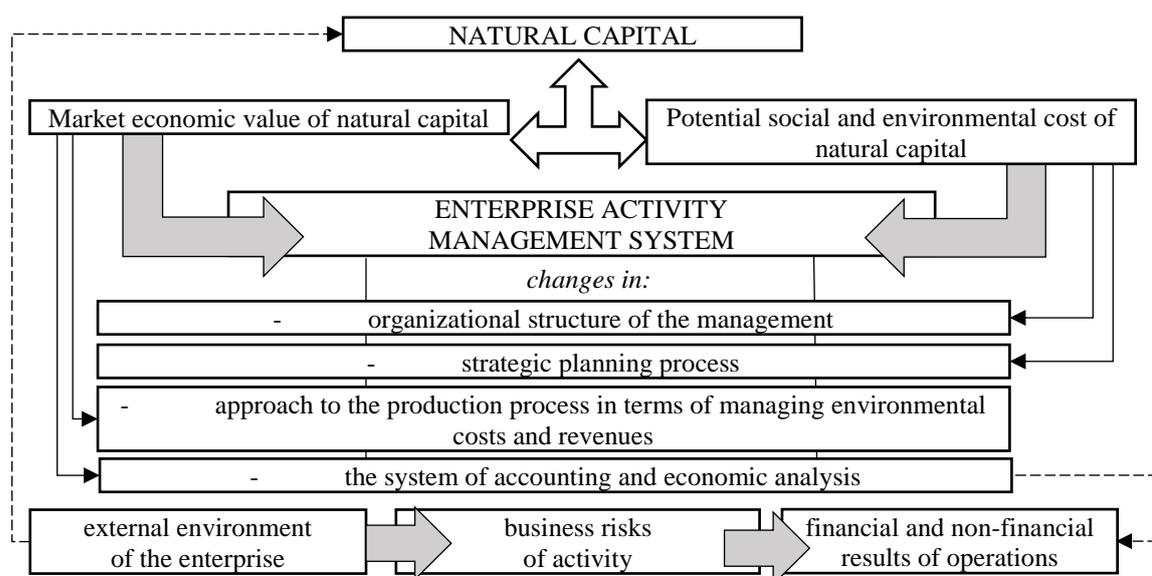
- improving the functional organizational structure of the enterprise and its adaptation to changes, which provides flexibility to changes in the environment and appropriate adaptation, through the rational use of all components of natural capital (restoration of forest plantations, the use of energy-saving technologies, waste and emissions management, etc.);
- improving the strategic planning system taking into account the specifics of the environmental component of activities by implementing an effective system for managing environmental revenues and expenditures, budgeting, and managing financial flows;

- a systematic approach to the production process in the context of the formation of a new model of environmental cost management;
- formation of environmental revenues of the enterprise;
- creating an integrated accounting and economic analysis system that involves taking into account potential environmental revenues, expenses and liabilities of the enterprise arising from the implementation of operations for the restoration, conservation and rational use of natural resources, as well as the receipt of natural services.

Figure 2 shows the mechanism of influence of natural capital on the process of environmental management of the enterprise.

Analyzing the results of the study, we can conclude that consideration of the economic, environmental and social components of natural capital affects the functioning of the management decision-making system. The mechanism of influence of natural capital on the process of managing the company's activities has been formed, which allows us to assess the changes that should find a place in the management system of business entities that use natural capital in their activities. Thus, for the formation of high-quality, reliable and complete accounting and analytical support, the theoretical foundations of changes in the management system are justified.

It is worth paying attention to such factors of adaptive changes as risks in the business environment. «The overall risk of environmental management is formed by four main components. Two of them relate to any type of economic activity. They are market risk and time risk. The other two are specific to the field of environmental management. This is a natural environmental risk, which in most cases is not related to human activity, and a natural man-made or natural-anthropogenic risk, which is based on human production activity. In practice, in natural capital assessment methods, the risk factor can be represented as a multiplier coefficient to the estimated cost of natural capital, or as a component of the discount rate, if the natural resource assessment is carried out according to the income approach» [1].



Source: developed by the author

Fig. 2. The mechanism of influence of natural capital on the process of environmental management of the enterprise

Conclusions and prospects for further research. So, based on the research, the problem of natural capital is outlined in the context of the interpretation of this concept in the scientific literature. For the purpose of improving the system of accounting and analytical support of business operations, it is advisable to define natural capital as a set of regenerative and non-renewable natural resources (assets) and services for their conservation, restoration and rational use, implemented by business entities or within the assimilation potential of natural resources.

Justification of the essence of the concept of «natural capital» has become the basis for the formation of proposals for improving the provisions of legal documents in the field of accounting and reporting indicators. In particular, there is a need to supplement the regulatory documents with the concept of «environmental benefits», which are defined as the benefits that an enterprise receives in the form of conservation, restoration and rational use of natural resource potential, as well as possible potential benefits associated with the use of natural assets in the future.

Apart from that, analyzing the approaches of scientists to the separation of components of natural capital, we describe their influence on reflection in accounting and analytical system of business operations of the company, carried out with the aim of forming a theoretical foundation of creating quality and informative financial and non-financial performance reporting.

This made it possible to integrate natural capital into the decision-making process of the enterprise by taking into account the influence of the external environment and the risks of business entities based on the justification of the features of the functioning of the enterprise's management system in the conditions of using natural capital abroad (organizational structure, production process, strategic planning, accounting and analytical system).

References:

1. Bystrjakov, I. and Klynovyj, D. (2014), «Metodychni pidhody do udoskonalennja ekonomichnoi' ocinky pryrodnoho bagatstva Ukrai'ny», *Ekonomika pryrodokorystuvannja i ohorony dovkillja*, pp. 16–19.
2. Burkyns'kyj, B.V. and Gorjachuk, V.F. (2013), «Ocinka pryrodnoho kapitalu regioniv Ukrai'ny jak umova formuvannja zelenoi' ekonomiky», *Ekonomichni innovacii'*, zb. nauk. pr., IPREED NAN Ukrainy, Odesa, Issue 52, pp. 9–20, [Online], available at: <http://dspace.nbuv.gov.ua/handle/123456789/67358>
3. Valjuh, A.M. (2018), «Adaptacija zakonodavstva shhodo formuvannja derzhavnoi' strategii' rozvytku pryrodnoho kapitalu Ukrai'ny vidpovidno do vymog Jevropejs'kogo Sojuzu», *Investycii': praktyka ta dosvid*, No. 9, pp. 126–130.
4. Veklych, O. and Jahejeva, T. (2004), «Urahuvannja pryrodnoho kapitalu jak bazovogo komponenta ekonomichnoho rozvytku Ukrai'ny», *Ekonomika Ukrai'ny*, No. 12, pp. 75–80
5. Vlasenko, V.O. (2013), «Ekologichna ekonomika jak instrument uprovadzhennja stalogo rozvytku: ponjattja ta pryncypy pravovogo reguljuvannja», *Zovnishnja torgivlja: ekonomika, finansy, pravo*, No. 5–6, pp. 22–28, [Online], available at: [http://zt.knteu.kiev.ua/files/2013/5-6\(70-71\)/uazt_2013_5-6_6.pdf](http://zt.knteu.kiev.ua/files/2013/5-6(70-71)/uazt_2013_5-6_6.pdf) (accessed 18.01.2020).
6. Kratkii slovar' terminov Vsemirnogo banka, [Online], available at: <http://www.worldbank.org/depweb/beyond/mirross/glossary.html> (accessed 18.01.2020).
7. Gnatyshyn, M.A. (2010), «Stalyj ekologo-ekonomichnyj rozvytok: evoljucija pogljadiv», *Efektivna ekonomika*, No. 12, [Online], available at: <http://www.economy.nayka.com.ua/?op=1&z=409> (accessed 18.01.2020).
8. Gorjachuk, V.F. (2012), «Pryrodnyj kapital jak ekonomichna kategorija», *Ekonomichni innovacii'*, Issue 48, [Online], available at: <http://dspace.nbuv.gov.ua/bitstream/handle/123456789/67168/09-Goryachuk.pdf?sequence=1> (accessed 20.01.2020).
9. Gryniv, L.S. (2002), «Teoretyko-metodologichni zasady formuvannja ekologichno zbalansovanoi' ekonomiky», D.Sc. Thesis of diss., 08.08.01, L'vivs'kyj nacional'nyj un-t im. Ivana Franka, L., 375 p.
10. Dronova, O.L. and Zapotoc'kyj, S.P. (2018), *Suchasne pryrodokorystuvannja: suspil'no-geografichnyj kontekst, navchal'no-metodychnyj posibnyk*, Print-Servis, K., 214 p., [Online], available at: http://www.geo.univ.kiev.ua/images/doc_file/navch_lit/PosibnikDronovaZapot2018.pdf (accessed 20.01.2020).
11. Vsemirnyi fond okhrany dikoi prirody (2012), *Zhivaya planeta 2012. Bioraznoobrazie, bioemkost' i otdetstvennye reshieny*, doklad, WWF, [Online], available at: https://wwf.ru/upload/iblock/473/lpr_2012_rus_web.pdf (accessed 20.01.2020).
12. Zhuk, P.V. (2013), «Osoblyvosti metodychnyh pidhodiv do ocinky vykorystannja pryrodnyh resursiv girs'kogo regionu na zasadah stalogo rozvytku», *Regional'na ekonomika*, No. 2, [Online], available at: <http://dspace.nbuv.gov.ua/bitstream/handle/123456789/68178/07-Zhuk.pdf?sequence=1> (accessed 20.01.2020).
13. Zhurakovs'ka, I.V. (2019), «Jak buhgalters'kyj oblik mozhe spryjaty zberezhenju i prymnozhenju pryrodnoho kapitalu», in Chudovets, V.V. (ed.), *Oblik, analiz i kontrol' v strategii' rozvytku ekonomiky Ukrai'ny*, materialy V Mizhnar. nauk.-prakt. konf. (27 kvitnja 2019 r.), Issue 12, Part 1, IVV Luc'kogo NTU, Luc'k, pp. 123–125, [Online], available at: http://oia.lntu.edu.ua/files/Tezu_2019_kviten.pdf#page=123. http://oia.lntu.edu.ua/files/Tezu_2019_kviten.pdf#page=123 (accessed 20.01.2020).
14. VRU (1999), *Zakon Ukrai'ny «Pro buhgalters'kyj oblik ta finansovu zvitnist' v Ukrai'ni» vid 16 lypnja 1999 roku*, No. 996-XIV, [Online], available at: <https://zakon.rada.gov.ua/laws/show/996-14> (accessed 23.01.2020).
15. Kryven', O.V. (2006), «Pryrodnyj kapital v systemi formuvannja ekologichno zbalansovanoi' ekonomiky», Abstract of Ph.D. diss., 08.01.01, L'vivs'kyj nacional'nyj un-t im. Ivana Franka, L'viv, 20 p.
16. Lozovs'kyj, O.M. and Kuz'mins'ka, O.O. (2014), «Osoblyvosti upravlinnja pidpryjemstvom v suchasnyh rynkovykh umovah gospodarjuvannja», *Molodyj vchenyj*, No. 4 (07) (1), pp. 77–79.
17. Malyuga, N.M. and Zamula, Y.V. (2010), «Prirodnyi kapital: identifikatsiya i buhgalterskoe izmereni», *Vestnik ekonomicheskoi nauki Ukrainy*, No. 1 (17), [Online], available at: <https://cyberleninka.ru/article/n/prirodnyy-kapital-identifikatsiya-i-buhgalterskoe-izmerenie> (accessed 20.01.2020).
18. Orel, O.I. (2014), «Ekologichni posluzhy jak instrument nacional'noi' ekologichnoi' polityky», *Zbalansovane pryrodokorystuvannja*, No. 1, pp. 101–108.
19. Povydysh, L.I. (2009), «Pryrodno-resursnyj potencial terytorii': sutnist', funkcii' ta struktur», *Problems of a systemic approach to the economy enterprises*, Vol. 4, No. 12.
20. Furdychko, O.I. and Artjushok, K.A. (2013), *Suchasni teoretychni pidhody do ocinjuvannja pryrodnyh resursiv, Zbalansovane pryrodokorystuvannja*, No. 4, pp. 5–9.
21. Khachilevskaya, R.Y. and Safonov, P.Y., *Problemy ustoichivogo razvitiya i ekologicheskoi ekonomiki i ikh reshenie v Rossii*, [Online], available at: <http://RSEE.org/> (accessed 20.01.2020).
22. Hvesyk, M.A., Bystrjakov, I.K. and Klynovyj, D., *Pryroda, jaka robyt' nashu kraiu bagatoju*, [Online], available at: http://www.nas.gov.ua/text/pdfNews/Pryroda_article.pdf (accessed 20.01.2020).

23. Shlapak, M. Ju. (2010), «Pryrodnyj kapital jak bazovyj ponjatijnyj element ekologichnogo rahivnyctva», *Regional'na ekonomika*, No. 2, pp. 106–110.
24. Dieter, H., (2019), «Natural capital: assets, systems, and policies», *Oxford Review of Economic Policy*, Vol. 35, Issue 1, pp. 1–13.
25. Folke, C., Hammer, M., Costanza, R. and Jansson, A. (1994), *Investing in Natural Capital: The Ecological Economics Approach to Sustainability*, Island Press, Washington, 492 p.
26. Report of the World Commission on Environment and Development: Our Common Future, [Online], available at: <http://www.un-documents.net/wced-ocf.htm> (accessed 23.01.2020).
27. UNEP The Green Economy Initiative (2009), [Online], available at: <http://www.cbd.int/doc/meetings/im/wscbteeb-mena-01/other/wscbteeb-mena-01-unep-green-economy-araben.pdf> (accessed 23.01.2020).
28. Wendling, Z.A., Emerson, J.W., Esty, D.C., Levy, M.A. and de Sherbinin, A. et al. (2018), *Environmental Performance Index*, Yale Center for Environmental Law & Policy, New Haven, CT, [Online], available at: <https://epi.yale.edu/> (accessed 23.01.2020).

Ксендзук Валентина Віталіївна – кандидат економічних наук, доцент, доцент кафедри економічної безпеки, публічного управління та адміністрування Державного університету «Житомирська політехніка».

Наукові інтереси:

- ризики в зовнішньоекономічній діяльності;
- участь України в міжнародних організаціях.

Мельник Ірина Миколаївна – здобувач кафедри обліку і аудиту Державного університету «Житомирська політехніка».

Наукові інтереси:

- обліково-аналітичне забезпечення діяльності лісгосподарських підприємств.

Стаття надійшла до редакції 09.01.2020.