

Ministry of Education and Science of Ukraine
Poltava State Agrarian University

**SECURITY MANAGEMENT OF THE XXI
CENTURY: NATIONAL AND GEOPOLITICAL
ASPECTS. ISSUE 3**

Collective monograph

In edition I. Markina, Doctor of Economic Sciences, Professor



Nemoros s.r.o.
Prague, 2021

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*Recommended for publication by Academic Council of
Poltava State Agrarian Academy
(Protocol No.15 dated 23 February 2021)*

*Recommended for publication by Academic Council of
the Institute of education content modernization of
the Ministry of Education and Science of Ukraine
(Protocol No. 2 dated 24 February 2021)*

*Recommended for publication by Scientific Institution of
the Information Systems Management University
(Protocol No. 1-21 dated 25 February 2021)*

The monograph is prepared in the framework of research topics: «Management of national security in the context of globalization challenges: macro, micro, regional and sectoral levels» (state registration number 0118U005209, Poltava State Agrarian Academy, Ukraine), «The concept of investment and financial and credit support of technical and technological renewal and development of agricultural production as a component of food and economic security» (state registration number 0120U105469, Poltava State Agrarian Academy, Ukraine), «Macroeconomic planning and management of the higher education system of Ukraine: philosophy and methodology» (state registration number 0117U002531, Institute of education content modernization of the Ministry of Education and Science of Ukraine, Ukraine), «Infocommunication aspects of economic security» (Protocol 1-21 of February 25, 2021, Information Systems Management University, Latvia).

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Fundamental Researchers,
Nemoros s.r.o.,
Rubna 716/24, 110 00, Prague 1

ISBN 978-611-01-2365-5

Nemoros s.r.o.,
Rubna 716/24, 110 00, Prague 1
Czech Republic, 2021

PREFACE

In the early 21st century, the world faces with cardinal transformations accompanied by changes in geopolitical configurations, integration processes and other changes that affect the state of national and geopolitical security. The events of the last decade have revealed an exacerbation of the problems of global security and the ambiguous impact of the processes of globalization on the development of different countries. Under the circumstances, the rivalry between the leading countries for redistribution of spheres of influence is stirring up and the threat of the use of force methods in sorting out differences between them is increasing. The global escalation of terrorism has become real, the flow of illegal migration and the probability of the emergence of new nuclear states are steadily increasing, and international organized crime is becoming a threat. In addition, in many countries there is an exacerbation of socio-political and socio-economic problems that are transforming into armed conflicts, the escalation of which is a real threat to international peace and stability. These and other factors have led to the fact that the potential of threats to global and national security has reached a level where, without developing a system state policy to protect national interests and appropriate mechanisms of its implementation, there may be a question of the existence of individual countries as sovereign states.

The threat of danger is an immanent, integral component of the process of civilization advancement, which has its stages, parameters and specific nature. Obviously, the problem of security in general, and national one in particular, should be objectively considered in terms of its role participation in the development process, that is, to set it up as both destructive and constructive functions (as regards the latter, it is necessary to emphasize the undeniable fact that the phenomenon of safety is based on counteraction to the phenomena of danger, the necessity of protection from which exactly stimulates the process of accelerating the search for effective mechanisms of counteraction).

Taking into account the fact that the traditional means of national and geopolitical security as a mechanism in its various models, forms, systems have reached their limits, since they do not contribute to solving the problems of globalization of the civilization development, there is an objective need to form a paradigm of security management in the 21st century, which aims to confront destruction processes; to harmonize activities of socio-economic systems: society, organization, the state, the world. The joint monograph «Security management of the XXI century: national and geopolitical aspects. Issue 3» is devoted to these and other problems. The progress in the development of the theory of security management on the basis of the analysis of theoretical and methodological works of scientists and the experience of skilled workers presented in the joint monograph creates opportunities for the practical use of the accumulated experience, and their implementation should become the basis for choosing the focus for further research aimed at improving the security

management system at the national and international levels. In the joint monograph, considerable attention is paid to solving practical problems connected with the formation of the organizational and legal mechanism of organization of the security system in terms of globalization by developing methods, principles, levers and tools of management taking into account modern scientific approaches.

In the monograph, the research results and scientific viewpoints of the authors of different countries are presented in connection with the following aspects of security management: national security, food, environmental and biological security, economic and financial security, social security, personnel and education security, technological and energy security, information and cyber security, geopolitical security. The authors have performed a very wide range of tasks – from the formation of conceptual principles of security management at the micro, macro and world levels to the applied aspects of management of individual components of national security.

The monograph «Security management of the XXI century: national and geopolitical aspects. Issue 3» consists of four parts, each of which is a logical consideration of the common problem.

The structure of the monograph, namely the presence of particular parts, helps to focus on the conceptual issues of the formation and development of national, economic, financial, social, food, environmental, biological, personnel, educational, technological, energy, information, geopolitical security, and problems of the maintenance of the practical process of application of the developed cases.

The results of the research works presented in the joint monograph have a research and practice value.

The advantage of the joint monograph is the system and logic of the structure, the simplicity and accessibility of the material presentation, the presence of examples and illustrations.

We believe that the monograph will become one more step towards a scientific solution of the problems concerning the formation of an effective system of security management under trying circumstances of globalization.

Publication of the monograph «Security Management of the XXI century: National and Geopolitical Aspects» is scheduled to be annual. Currently, Issue 3 is offered to our readers.

*With best regards,
Iryna Markina,
Honored Worker of Science and Technology of Ukraine,
Doctor of Economic Sciences, Professor,
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Ukraine*

*To the bright memory of the outstanding scholar Iryna Markina
We are missing you... remember... appreciate...*

Science is a peculiar branch of human activity that has a notable impact on the development of society. Iryna Anatoliivna Markina, an outstanding scientist, Doctor in Economics, Professor, Honored Worker of Science and Technology of Ukraine, made an indispensable contribution to the development of modern management science.

I. Markina is the founder of the scientific school Methodology and Practice of Modern Management, which provides scientific staff training, raising the quality level of scientific and pedagogical staff of higher educational institutions, holding scientific events, in particular, scientific and practical conferences, round-tables, training workshops, etc. Under her supervision, about 50 candidate theses and 4 doctoral dissertations were prepared and defended.

Professor I. Markina initiated the annual international scientific-practical conference «Management of the XXI century: globalization challenges» and the All-Ukrainian scientific-practical Internet conference «Management of economic activity resource provision in real sector enterprises» at the Department of Management of Poltava State Agrarian Academy. Leading scientists from Ukraine and the CIS countries, EU countries, the USA participate actively in these scientific events. Edited by Professor I. Markina, more than 30 monographs were published. In terms of the approved research topics with state registration and assignment of the ISBN international standard number, 7 collective monographs, edited by Professor I. Markina, were published in English. The leading scientists and graduate students submitted their research papers to the monographs. Professor Markina's school is distinguished by the freedom of thought, creativity, and the search for new ideas.

The role of I. Markina's scientific school of management is remarkable for the development of science not only because the professor managed to create a new effective methodology in this field of knowledge but also because a great number of her followers continue implementing its basic approaches.

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**«Anyone who is confident in
their own safety is absolutely
defenseless»**

PART 1. THE DEVELOPMENT OF THE MODERN PARADIGM OF SECURITY MANAGEMENT AT THE NATIONAL AND GEOPOLITICAL LEVELS

CONTROL RESTRICTIONS OF THE MANAGEMENT SAFETY

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Preparedness managers to additional actions initiated by the complication of activities against the facilitation of awareness, focused on the creation of a multi-level management system with feedback. Company controllability is considered from the point of the sustainable process of achieving results. Their sustainability is provided due to the control system ability to preserve its integral quality under the influence of the factors of the unknown origin. This is reached by means of the business-processes integral reproduction technologies through the elimination of uncertainties making the processes unstable. Such measures are worked out at the preliminary stage of developing control system on the base of the business-processes management technologies. As a result the mechanisms taking into account the loss of value, because of the system errors of the unstable origin, are created. These mechanisms provide the readiness of management to take decisions in the non-standard situations.

Business controllability is determined by the increase in qualitative definiteness by decreasing a number of vagueness preventing processes' improvement but not ensuring it's non-imperfectness by the correspondence to tolerances.

Some effects of various origins influence the activity of an enterprise in the process of its functioning. Such effects depend on the openness level of management system being developed, and on the competency of its developers. Classification of the scales of management threatening factors is made exactly on the basis of these effects. The notion of two classes of effects classified according to the degree of their revelation, and the scales of their manifestation, is introduced to this work. The suggested classes are

named according to the depth of plunging into the problem to neutralize it.

1. Effective Measures of Failures' Description

The controllability of the enterprise is provided not on the account of gliding along the surface, even if it sounds tempting, but through the profound factors revealing.

Thus, the first class of effects is named “superficial failures”. Such effects are revealed quite easily, and enterprise management is normally exercised at this level. Managers usually focus their attention exactly to superficial failures and strive to eliminate these effects. Practice shows that their actual influence on business is insignificant, and the improvements obtained are negligible.

The second class of effects is “deep-seated failures”. As a rule, effects of this kind are of non-systemic nature. The nature of their origin is obscure, calling for scrupulous and costly investigation. Since such effects are unpredictable, it is quite difficult to reveal them at the design stage of business. Nevertheless, the enterprise management must reveal deep-seated failures before the functioning starts, since those inflict serious damage on business and even lead to bankruptcy. Neutralizing such effects is quite costly. However, the efficiency of traditional efforts is insignificant due to wrong interpretation and lack of readiness from staff.

2. Classification of Failures

Enterprise managers should have at their disposal some means of defining apturtenance to a definite class of failures. This motivates managers to study the nature of failures more closely and to reveal the main properties and features providing a key to understanding of reasons and mechanisms of the development of business processes [1].

Let us examine the essence of various classes of failures as presented in Table 1 below.

Determination of failure class is an important goal, since error may result in taking wrong managerial decisions. Let's consider an example of erroneous interpretation of failures. Assumingly, some sales volume reduction is observed at an enterprise. Managers relate this fact to the market situation change. They take some steps to lower the production volumes and shift over to other kinds of commodities. However, the actual reasons for this deviation are as follows:

- purchasing raw materials at low prices, with the subsequent worsening of the quality of end product;
- high liquidity of staff resulting in insufficient qualification of employees;
- launching aggressive promotion campaign by competitors to attract new customers, thus, affecting the income of the enterprise considered.

3. Significance of the stating the failure class

The task of managers comes to the work on the processes improvement

by supporting them in a stable state. The estimation of stability comes to the determination of corridor in controllability parameters permissible mutability. Preliminarily it is necessary to determine tolerances' limits operationally including the requirements on their measurement as well as the rules of possible actions on the satisfaction of tolerances requirements at the very beginning.

Table 1

The essence of various classes of failures

Failures' Objects	Failures' Classes	
	Deep-seated failures	Deep-seated failures
Enterprise incomes	Insignificant reduction of sales volume	Reduction of sales volumes to a critical denomination
Current expenses of enterprise	Tendency towards the growth of variable expenses	High ratio of operational leverage accompanied by intense growth of the level of variable expenses
Enterprise asset structure	Reduction of autonomy ratio	Growth of financial leverage ratio and lack of the effect of financial leverage
Structure of enterprise assets	Reduction of absolute solvency ratio	Absolute insolvency due to lack of funds
Structure of financial liabilities of enterprise concerning urgency of cancellation	Increasing the sum and the percentage of short-term financial liabilities	High ratio of urgent financial liabilities
Enterprise net cash flow	Lowering cash flow value	Negative value of cash flow
Manifestation scale	Leading to insignificant drop of business value. Reflecting on one class of indices (liquidity, solvency, autonomy etc.)	Leading to destruction of business value. Claiming for big resources to be revealed and eliminated. Reflecting on all classes of activity indicators.
Error location	Some local detection and elimination of failures is possible	Revelation is quite difficult (all the system architecture needs to be checked).
Direction of process development	Horizontal (embracing one layer enterprise activities)	Vertical horizontal (going through the entire activity of enterprise from top to toe)

Managers take superficial failures being of external nature, for deep-seated ones. In this case, some actions have been taken that have changed

the enterprise strategy. At that, it is planned to develop the enterprise in a wrong direction [2]. Therefore, intervention into the stable process was exercised, while the existing internal problems remain unsolved. In the course of modification, some errors were made, and, when the revealed errors were being eliminated, some new errors were entered into the system. Such actions lead to accumulation of superficial failures. A big flow of changes implies a very costly attendance. As a result, the complex influence of superficial failures may paralyze the managers' activities. However, their things are much worse if some errors of deep-seated origin have been overlooked. Their consequences manifest themselves after a significant period of time, and the managers are totally unprepared to neutralize them. This effect brings about the untimely diagnostics of architecture errors, with the subsequent costly reform of the entire system of management or its separate parts [3]. The existence of such errors also affects innovation improvements. Against the background of deep-seated failures, innovations are assessed wrong. There is no desired efficiency when the expected time comes.

The determination of tolerances is used for revealing how the process occurs and how it could occur but not as the tool of a forced interruption in this process. One should conduct the determination of tolerances after the exclusion of all special defects having non-systematic origin.

4. From Diagnostics to Improvement

The used methods of diagnostics of failures allow to estimate the innovation processes, which are suggested to be conducted at the enterprise. 3 main rules were proposed for their accomplishment.

Rule 1. The state of the system, corresponding to the deep-seated failure, needs to be immediate improved.

Rule 2. The improvement of management system is carried on neutralizing deep-seated failures and proving innovations.

Rule 3. The denomination of the value characterizing the proved innovation and leading to the deep-seated improvement is equal in module to the denomination of the value losses in case of the deep-seated failures.

Taking the developed rules into account, the examined enterprise introduced some innovational improvements of the management system (see Table 2).

The improvement status needed is determined according to the value of the rank defined:

- profound changes should be included into the company's development plan immediately;
- superficial changes will not be examined since they are classified as an intervention affecting sustainable process, - although some of them are subject to further investigation within the framework of the value concept

of management [7].

Table 2

Working out and assessing innovational changes of management system

№	Improvement	Value change, %	Rank	Improvement status	Action status
1.	Management development through specialized trainings	6,4	5	Superficial improvement	Reject
2.	Introduction of the system taking into account the influence of employee's executive discipline upon his (her) salary	14,7	3	Profound improvement	Accept
3.	Development of staff motivation system aimed at achieving operational efficiency	8,2	4	Superficial improvement	Reject
4.	Using a consulting event to develop aggressive marketing campaign	1,7	6	Superficial improvement	Reject
5.	Service restructuring	2,2	6	Superficial improvement	Reject

Thus the implementation of managerial principles forming algorithm in the technology of running enterprise's valuation led to the increase of business stability. Such an increase was obtained by quality improvement of business information environment, declining variants efficient from the position of value, appearance of options of substantiated given norms

The suggested approach helps enterprise management to reveal negative impacts which are subdivided according to the level of their problem immensity. Furthermore, the approach described allows one to be hardened to errors entailing drastic consequences. Moreover, managers now have at their disposal some new tools allowing them to make diagnostics of existing failures and check prospective improvements of management system. Based on these, controllability of enterprise is enhanced.

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CONCEPTUAL FRAMEWORK FOR CORPORATE GOVERNANCE IN CRISIS PERIOD ON EXAMPLE OF HOSPITALITY INDUSTRY IN LATVIA

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Since 2019, the pandemic caused by COVID-19 has caused a crisis in all spheres of life, there are many restrictions, including on crossing national borders and moving within one country. To limit the spread of the pandemic, many international measures have been adopted that have had a far-reaching, even catastrophic impact on tourism and the hospitality business. Many hotels around the world are in danger of bankruptcy.

Although it is internationally recognized that Latvia is relatively good at dealing with this crisis situation, almost all hotels in Latvia have suffered heavy losses. The unfavorable economic situation forces hotel managers to reconsider their development strategy, namely to optimize their activities by reducing costs and using marketing tools. Those companies that manage

to reduce costs without losing the quality of services provided are most in demand and competitive during the crisis.

The topic of this study: impact of COVID-19 to the hospitality industry in Latvia and related crisis management measures.

Object of study: hospitality business in Latvia.

Subject of the study: anti-crisis management at the macro level caused by the impact of COVID-19.

The question of the study: how does spread of COVID-19 pandemic impact hospitality industry in Latvia and how to evaluate crisis management measures implemented in that area of business with an aim to minimize mentioned impact?

The authors have analyzed the conceptual foundations of anti-crisis management in general, taking into account the current situation in the hospitality industry of Latvia in the context of the crisis caused by COVID-19 in particular.

The study was conducted from April 1, 2020 to October 17, 2020. The authors were using the following methods of data analysis: collection and synthesis of statistical data, interviews with specialists.

Literature review: Essence, Goals and Functions of Crisis Management. Anti-crisis management as an independent field of scientific knowledge

At any stage of the economic cycle and in any economic context, the process of crisis management has a certain theoretical basis. This type of management is one of the economic disciplines, such as economic theory and political economics, which serves as a methodological basis for it, and as an applied component - the theory of management, the foundations of restructuring and financial analysis. It should be emphasized that crisis management is an independent field of scientific knowledge, which is determined by law and has its own specifics.

In the scientific literature there are different approaches to the concept of crisis management, which are presented in Table 1.

All market economy actors operating at the macro and micro levels, depending on the phase of the economic cycle, use different systems and strategies to ensure their sustainability. So A. Belyaev in the context of the crisis considers management as a process of financial recovery of the company, i.e. the author considers this process only at the level of an economic unit (micro level). This definition is flawed, since the author narrows the concept of crisis in it, without indicating the reason for its formation, describing in detail the process of recovery of the company (Arutyunov, 2016).

E. Zharova sees anti-crisis management as a set of problems at the macro and micro levels. The inaccuracy of this definition is that this type of control is a set of tasks, not a set of solutions, because in fact management involves defining goals, tasks, types of solutions and means of overcoming

them (Burkeev, 2016).

Table 1

Approaches to defining the concept of management in a crisis situation

Source	Concept of management in a crisis situation
A. Belayev (Arutyunov Yu.A., Crisis management. Handbook 2016, p.52)	Process related to the company's financial recovery.
J.Zharova (Burkeev A.M. The Economic Mechanism of a Company's Anti-Crisis Management. Book, 2016, p. 27)	A complex of problems related to the state, economy, industry, organizations and people.
A. Bolshakov (Akhnovskaya I.A. Management of anti-crisis companies in an unstable economic environment // Young Scientist. 2015 № 2-6 (17), p. 915)	Elimination of possible market difficulties, bankruptcy, ensuring stable business conditions.
J. Miroshnichenko (Gorelikov K.A. Crisis Management. Handbook, 2016, p. 38)	A multi-dimensional, complex process that includes a specific marketing plan, specific financial procedures and emergency staff mobilization measures.
A. Gryaznova (Arsenova E.V., Kryukova O.G., Ryakovskaya A.N. Foreign practice of anti-crisis management. Handbook, 2016, p. 22)	A system of emergency management decisions and measures aimed at diagnosing, preventing, neutralizing and overcoming crisis phenomena and their causes.

Source: Nikitina, 2018

A. Bolshakov gives a more correct definition of “anti-crisis management”, pointing out both the essence of the concept (complexity) and the object (prevention), which affects both the economy as a whole (market) and a separate link (company). However, in the definition A. Bolshakov does not indicate a plan to eliminate problems and stabilize the economy, as a set of goals, tasks, solutions to eliminate the subject of influence, that is, the crisis itself (Akhnovskaya, 2015).

In the definition, A. Gryaznova reveals the subject of management in the form of a system of measures and decisions, describing in detail their tasks aimed at overcoming and neutralizing the object, i.e. the crisis, as well as its sources (causes). Of all the definitions given, this one most fully reveals the economic nature and content of the concept of “crisis management” (Arsenova et al, 2016).

Given the above approach to the definition of “crisis management”, one can formulate one more definition of this concept - a set of organizational

and economic measures to identify the causes of the crisis and ways of overcoming it by the subject of the socio-economic system.

Anti-crisis management at the macro level

The main goal of this management in stable working conditions at the national level is the implementation of a set of measures to prevent crisis phenomena aimed at economic growth, employment of the able-bodied population, stabilization of prices, stability of the national currency, foreign economic balance and other pressing tasks of material well-being.

The state should, first of all, ensure the creation of a legal basis for the functioning and development of the economy, as well as conditions for market actors at the macro and micro levels (Jiwang, et al, 2017).

At the macro level during the crisis, the main tasks of public administration are:

Elimination of causes and negative socio-economic consequences;

- stabilization of economic processes and recovery from crisis;
- providing conditions for the further development of the national economy.

- management objectives used in macro-level crisis situations:

- Reducing the decline in the industrial sector of the economy;
- stabilizing social production and ensuring growth rates to meet consumer demand for manufactured goods, vital services (medicine, education, culture, housing and communal services, etc.) (Lalond,2016).

The main task to achieve the main relevant management goals at the macro level in a crisis is to ensure the continuity of business development conditions:

- timely identification of potential threats to functional areas of business leading to its destruction or suspension, search for material, technical and financial resources for the implementation of its functional areas of development;

- creation of personnel redundancy and replacement system;

- ensuring the constant readiness of the personnel and material and technical base for the implementation of a set of measures to preserve the business unit (Alferov, 2018).

In accordance with the stated goals and objectives, management at the national level should create conditions for the activation and strengthening of entrepreneurship, especially innovation and investment, taking into accounts the stability of the national currency. This is achieved at the expense of a complex of monetary, credit and financial policies (Gorelikov, 2016).

Analysis of crisis management in the period of COVID-19 pandemic on example of the hospitality industry of Latvia

The first wave of growth in diseases caused by COVID-19 was a serious test of strength for many business units in the field of hospitality. So, in

March and summer, the amount of income in the hotel business was about 37-38% to the previous year (see Table 2), and in April and May hotels did not make a profit at all (see Fig. 1).

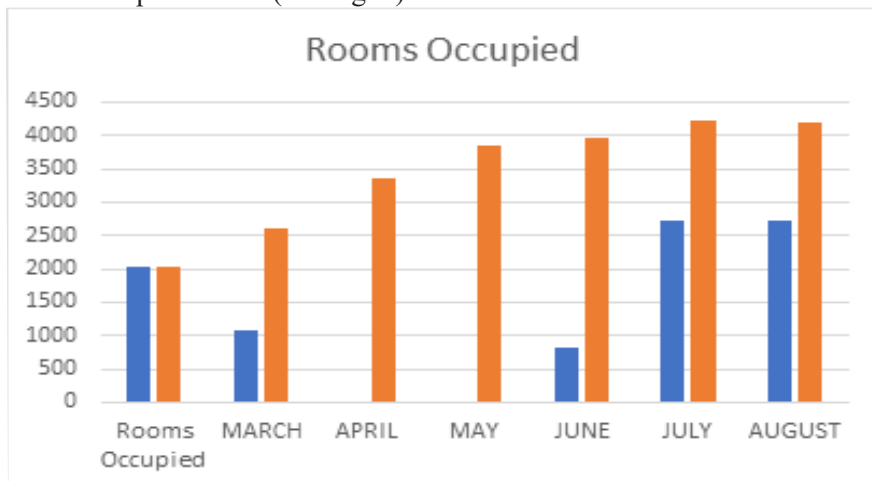


Fig. 1. Dynamics of hotel occupancy and economic losses due to the COVID 19 crisis from March 2020 to August 2020

Source: Central Statistical Bureau Latvia, 2020

Thus, the development of an optimal anti-crisis development plan is the main and only way for a hotel company to survive adverse crisis times. The problem of maintaining and developing the hotel business during the economic crisis has become a common urgent task for hotel owners both in the Latvian and global markets. In fact, during the crisis what was happening was adaptation of all hotel activities to new economic conditions with timely financial support from the state (Santos del Valle, 2020).

In September 2020, the second wave of growth in incidence rates began COVID-19 and the list of countries in which 14-day quarantine should be observed upon arrival grew many times (for example, as of 10.09.20. the only countries that it was possible to travel in and enter to Latvia from were Estonia, Lithuania, Cyprus, Finland). It is obvious that for hotel companies it was difficult to survive, many tourist enterprises began to close due to their inability to survive that period, since hotel occupancy dropped to an absolute minimum (on average from 3.00% to 10.00% maximum). The Government unfortunately did nothing during that period to support the tourism industry or its employees (only later 3.11.20. the Cabinet of Ministers decided on the necessary financial assistance). As a result of these bureaucratic costs in Riga, Tallink Hotel and Marriot were forced to announce their complete closure in October, the Wellton hotel chain merged its hotels and left only

Wellton by Riverside open (the rest of the hotels are closed), and in the Radisson hotel chain only Radisson Latvian and Radisson Elizabeth hotels remained open (the rest were closed).

Table 2

Dynamics of hotel occupancy and economic losses due to the COVID 19 crisis from March 2020 to August 2020

March	2020	2019	April	2020	2019	May	2020	2019
Occupied rooms	1089	2611	Occupiedrooms	0	3350	Occupiedrooms	0	3845
Room occupancy %	23.52	51.12	Room occupancy %	0	74	Room occupancy %	0	80
Total revenue	Less rev than37%	Total revenue	Less rev than100%	Total revenue	Less rev than100%			
ADR	76	72	ADR	0	72	ADR	0	94
Guests total	1274	3273	Guests total	0	4491	Guests total	0	5080
CXL Reservations	430	140	CXL Reservations	202	70	CXL Reservations	216	85
June	2020	2019	July	2020	2019	August	2020	2019
Occupied rooms	810	3968	Occupied rooms	2737	4216	Occupied rooms	2711	4204
Room occupancy %	17	90	Room occupancy %	61	90	Room occupancy %	59	90
Total revenue	less rev than 38 %	Total revenue	Less rev than 37 %	Total revenue	Less rev than 38 %			
ADR	52	87	ADR	50	95	ADR	48	95
Guests total	1255	5706	Guests total	4726	6317	Guests total	4576	6717
CXL Reservations	268	35	CXL Reservations	280	79	CXL Reservations	428	108

Source: Central Statistical Bureau Latvia, 2020

Taking into account the opinion of expert Janis Naglis, the president of the Latvian Association of Hotels and Restaurants (LVRA), a minimal restoration of tourist flow is expected, according to an optimistic scenario, around May 2021, and according to a moderately pessimistic one, not earlier than the spring of 2022. Since the beginning of the crisis COVID-19 in Rigamore than 20 hotels have closed their doors to customers. Some of them never resumed work after the first outbreak of the disease; many announced a temporary cessation of their activities (Latvian TV Daily News, 2020).

The future scenario of hotel closures is closely related to whether the industry can receive support from the state and municipality. Without support, the wave of hotel closures can continue, and from six to eight thousand hospitality workers will join the ranks of the unemployed.

The authors believe that in order to “hibernate” the entire tourism industry and thereby save it, the moratorium on insolvency should be extended to the

maximum extent possible. It is also necessary to find a solution that allows freezing payments on loans, utility payments and reducing real estate tax payments as much as possible. In addition, it was essential to develop a system of criteria that were close to those for downtime benefits in order to obtain salary grants for staff. “The hotel sector would be pleased if the Latvian government followed the example of other countries and applied a reduced value added tax rate of 5%,” said the executive director of the LVRA Santa Graikste in an interview (Latvian TV Daily News, 2020).

It should be noted that on November 3, 2020, the Cabinet of Ministers nevertheless approved the proposal of the Ministry of Economy to allocate 4,746,290 Euros to support hotels to cover operating costs, including staff salaries, utilities and various other payments. It is estimated that as a result of this decision, about 200 hotels in Latvia can receive support, so an average of 23,731 Euros can be allocated per applicant. Support for entrepreneurs will be available until June 2021 and is an extremely important measure to support the field of hospitality.

According to various experts, the impact of Covid-19 on the world economy cannot yet be estimated, so long as the forecasts are based only on the assumption that we may face an even more serious crisis than in 2009. And this is justified, because the Covid-19 pandemic has already caused serious damage to the real world economy, which we see in the form of a fall in national gross domestic product (GDP), a loss of millions of jobs and a fall in regular incomes of enterprises and citizens, and consumption. And in addition to all this, the «fear factor» of the corona virus causes fluctuations in financial markets. This time, tourism problems are global, and tourists have little alternative to travel (UNWTO, 2020).

Based on the presented goals, tasks and functions of the macro and micro level, the company management system in a crisis situation should have several features:

- flexibility and elasticity inherent in matrix control systems;
- strengthening of informal leadership, patience, confidence and motivational enthusiasm;
- seeking the most appropriate features of good governance in complex situations and their diversification;
- reducing centralism to ensure timely decision-making and response to new challenges;
- intensity of integration processes, contributing to concentration of efforts and effective use of the potential of best practices.

The management process itself is carried out by the flow of information between the management and managed subsystems. Obtaining reliable and complete information plays an important role in making a concrete decision on how to deal with a crisis. Summarizing the methodology of anti-crisis

management, a consecutive 9 step-crisis algorithm can be proposed:

1. Diagnosis of the crisis, including research and evaluation of information on the internal and external economic environment in order to identify crisis phenomena and processes.

2. Predicting the development of crisis events by diagnostic results (Zharova, 2016).

3. Market prevention aimed at improving the effectiveness of preventive measures and their cheapening.

4. Protecting the strategic interests of enterprises to ensure the protection of the national strategic interests of the state.

5. Social support for citizens of the country, including the introduction and development of new forms of social relations while maintaining the directions of social assistance recommended to them.

6. Stimulation of economic activity for successful development of the most competitive enterprises (enterprises). As a result, promising tools and directions of the company are determined, new business organization and promotion schemes are introduced, the professional level of management is improved, more innovations are applied, etc.

7. Reducing the risk of negative consequences of anti-crisis measures.

8. Coordination of efforts aimed at eliminating conflicting measures, developing standard rules, optimizing the implementation process and the relationship between anti-crisis management measures.

9. Elimination of measures that need to be abolished or clarified during the transition period from crisis to post-crisis in the national economy, that is, preventing the adoption of measures to suppress the crisis that do not correspond to the current or future economic situation in the country (Zharova, 2016).

The purpose of the above-described algorithm is to step-by-step optimize the actions to overcome the crisis at the macro level, which then reduces the probability of its occurrence and the severity of the processes taking place in it.

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OVERVIEW OF THREATS TO NATIONAL ECONOMY WITH APPLICATION OF THEIR CLASSIFICATION CRITERIA

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The very category “state economic security” is essentially multicontextual (referring to the “contextual approach” by P. Unger [1]), thus, determination of its contents would depend on a selected approach. From a number of now applied within economic security studies approaches (protective, activity-based, resource-oriented, harmonization [2]), the preference is often given to the protective one, primarily because the very notion of “security” is closely related to “insecurity”, that is, to the presence of threats imposed on the objects of security. The imperative (core) notions for explaining the phenomenon of state economic security are the notions of “threat”, “protection”, and “self-protection”. Thus, economic security of a state must be maintained stemming from the applied use of these notions.

From the standpoint of the protective approach, contents of the category

“state economic security” should be formulated as follows: state economic security is the precondition for stable functioning and further development of a national economy, and its availability manifests national economy’s perceptiveness to actualization of threats with various nature and origin and according to the currently relevant needs, knowledge level and attitudes.

The higher the level of national economy’s perceptiveness to actualization of economic threats, the lower its economic security. And the other way round: low level of national economy’s perceptiveness to actualization of economic threats assumes high level of its economic security.

The level of national economy’s perceptiveness to actualization of various threats would depend upon its current and long-term economic potential and also upon the opportunities of using this potential in the most efficient way.

In order to maintain the economic security of a state as per the context of the category “state economic security” one would need to have a clear understanding about the contents of the category “threats to national economy” and also same clear understanding about the development of its category from the standpoint of the process approach. A threat of any origin is always a process, with its beginning and ending, that is, it emerges, develops and then gets actualized, as demonstrated in [3].

Lack of an exact definition of the notion “threat to national economy” leads to misguided equation between threats as such on the one hand and the consequences from their actualization on the other. This, in turn, leads to errors in determination of vectors and guidelines for all further security-providing activities on the side of a state. In such a case, both resources and time are thus spent on fighting the consequences from actualization of specific threats, while significantly less resources would have been spent on early detection of threats, determination of probability of their actualization, prevention, neutralization and averting the development of not just one threat but several threats combined. In some cases, stages in parallel development of several threats may coincide, thus leading to multiplication of threats and the emergence of a whole area of threats that potentially could ruin the whole national economy as such.

We suggest to consider threats to national economy as processes and phenomena taking place within its external and internal environments. Under a certain combination of preconditions and circumstances, these processes and phenomena may cause negative changes within the economy of a state. These changes may be of various scale and location, however, their consequences would be anyway negative (see Fig. 1).

Nowadays threats to the national economy of Ukraine are not mentioned in any of the state-level documents. The Strategy for National Security of Ukraine (approved by the Presidential Decree as of September, 14, 2020, #392/2020 [4]) only mentions that Ukraine will be introducing a national

system of sustainability which is aimed at providing a high level of society and state readiness to react to a wide range of threats. This assumes, inter alia, the assessment of risks, timely determination of threats and vulnerabilities.

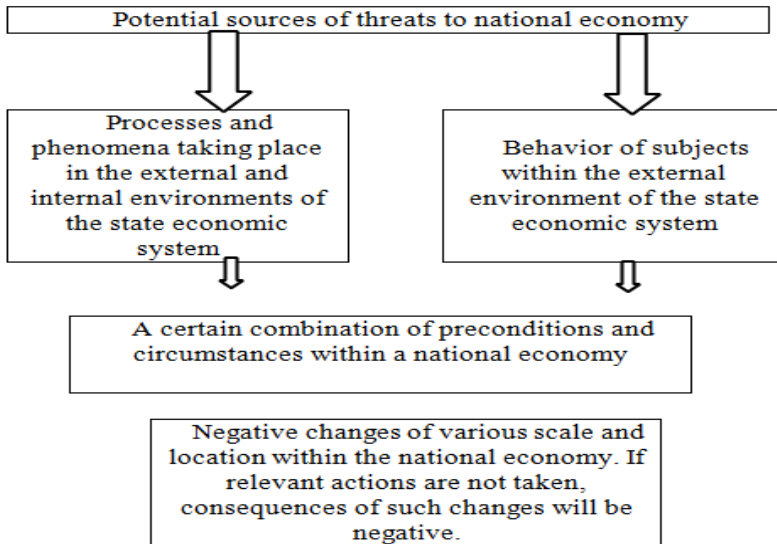


Fig. 1. Components defining the notion of “threat to national economy”

In studies on the threats to national economy an important place belongs to their classification following a range of criteria (by the object, location, source, scale of impact and consequences, degree of maturity and so on). Ranging the threats to national economy following certain criteria can be understood as the first step in the direction to better understanding of threats sources and origin and realization of all the consequences from these threats for a national economy. This, in its turn, serves as a basis for these threats prevention and elimination, or at least for hindering the development of threats through concentration of efforts aimed at overcoming the consequences from threats actualization. Criteria for classification of threats to national economy (see Table 1) allow describing various threats in terms of their scale and consequences. This, in turn, would allow determining the actions the state should take to hinder the development of threats or at least to foresee the consequences from its actualization and prepare for threat actualization. Description of threats to national economy serves as the basis for further diagnostics and monitoring of threats development, while the results from these two activities become the backbone for all further security-providing activities of the state within the economy.

Multicriteria description of threats to national economy allows for a comprehensive evaluation of their nature and scale along with studying their impact on other threats in their interdependencies and the causes of their emergence. All of the above is highly important for state-level decision-making aimed at preemptive actions taken against these threats, as opposed to fighting the consequences from these threats actualization.

Table 1

Criteria for classification of threats to national economy

Criteria	Types of threats
Presence of threat signs	obvious
	hidden
Scale of a threat	global
	nationwide / all-state
	regional
	local (or sector-specific)
Time of threat duration	permanent
	periodical
	short-term
Intensity of impact	highly dangerous
	dangerous
	minor
Consequences from threat actualization	unsurpassable/catastrophic
	partially overcomable, yet critical
	mostly overcomable
Environment of threat emergence	internal
	external
Nature of threat	natural (the threat does not depend on the actions taken by authorities)
	artificial (the threat is the direct consequence from the quality and timeliness of authorities decisions and their determination in implementation of these decisions)
Probability of situational conditions under which the threat will be actualized	potential
	real

Probability of forecasting the emergence of a threat	forecasted / expected
	somewhat forecasted
	unforecasted/unexpected (black swan event)
Frequency of threats' emergence	systemic
	periodical
	chaotic
Stages in threat development	actualized
	activated
	threats being implemented
Development dynamics	dynamic
	with weak dynamics
	slow

Examples of threats to national economy are presented in Table 2.

Thus, one of the most serious threats among those the national economy of Ukraine is facing today is the systemic nature of economic corruption in the country.

It would be a mistake to consider corruption as such to be a threat. A range of experts in this field adhere to the following opinion: economic corruption exists as long as there are state interests that need to be satisfied by public officers, and as long as these public officers have personal interests of their own at the same time. This is exactly why a real threat to the national economy of Ukraine is not economic corruption as such but rather its systemic nature of manifestations.

Systemic nature of economic corruption in Ukraine can be described as some sort of an architectonic triangle of the following features:

- institutionalization (substitution of random, periodical corrupted behavior of the selected public officers by more regular corruption acts that are following specific informal rules);
- collectivism (emergence of hierarchical and heterarchical groups among the public officers to organize and coordinate corruption acts as well as to shape the interrelations and interdependencies (both horizontal and vertical) between public officers across various departments and organizations;
- constructivism (integrating corruption schemes and networks into the skeleton of a national economy, thus assigning corruption a meaningful role in stabilization of national economy).

Thus, economic corruption in Ukraine has become actively systemic quite a long time ago, thus causing significant changes not only within the

economy but also in the society. These changes have been described in the contemporary research studies with a great deal of detail. Overcoming these changes in the near future seems to be really challenging.

Table 2

Examples of descriptions for threats to national economy

Threat	Description
Systemic nature of economic corruption	Obvious, nationwide, permanent, especially dangerous, forecasted, dynamic, real, systemic, unsurpassable, internal, artificially created threat which is actualized in full (there are obvious negative changes in the economic system of the state)
Gradual but unavoidable loss of competitive advantages	Hidden, nationwide, permanent, especially dangerous, internal, potential, activated, slow, systemic, somewhat forecasted, partially overcomable, artificially created threat
Raiding	Hidden (not obvious), periodical, dangerous, internal, real, activated, dynamic, forecasted, partially overcomable, artificially created threat that emerges in certain types of economic activity

Hidden threats are much more dangerous since they, as opposed to obvious threats, are actualized, activated and implemented in a rather implicit, not obvious way. These threats are often invisible, thus, they tend to get gradually accumulated inside the state economic system, slowly reaching the threshold after which they become unsurpassable. For example, gradual but unsurpassable loss of competitive advantages belong to such hidden threats to the national economy of Ukraine.

After the Soviet split, Ukraine failed to manage wisely the competitive advantages it had left at its disposal. At the same time, nowadays Ukraine still has some potential drivers which could boost its economic growth, namely, IT production, other intellectual services, design, innovations, R&D. However, in most cases these, still available, competitive advantages are not being reproduced for a range of reasons. One of the key among these reasons is reputation and business climate both being severely damaged by the systemic economic corruption. The case of IKEA is a striking example of how an implemented threat leads to the loss of a competitive advantage, namely, loss of attractiveness for foreign investors.

Being present in 43 countries across the world, the Inter IKEA Group has made multiple attempts to open a trading venue in Ukraine. Back in 2005 it initially planned to have nine shops in Ukraine — in Kyiv, Odessa, Dnipro, Kharkiv and Lviv, with the total number of 8 ths employees. According to different sources, the initially planned investments of IKEA were ranging between \$1 bln and \$1.7 billion. Besides, IKEA never enters a new country

alone, it comes along with around 50 other companies. But for the assigned land plots IKEA was expected to provide a colossal bribe in the amount of several dozen millions USD.

IKEA is known globally for its transparency and active fight against corruption. Thus, the company refused to enter Ukrainian market. The former general director of IKEA Russia Lennart Dahlgren then announced that the Group did not have funds for such a payola and also asked why land in Kyiv suddenly costs three times more than in Moscow or London [5].

As a result from such manifestations of corruption, the first IKEA shop in Ukraine was opened on the rented premises in Blockbuster Mall and as an “urban store” only. This happened as late as February 2021.

Due to such losses of competitive advantages Ukraine may soon find itself “stuck” (for a long term, if not forever) at the stage of raw materials production and industrial development (which is the current stage of Ukraine’s development, actually). Even the great economic potential of the agricultural sector, provided it is used wisely, would be able to raise the population welfare level by 10-20% at best.

Another source of the threat of losing the competitive advantages in Ukraine is the presence of both formal and informal limitations. Problems with the rule of law are yet to be solved. Decision-making at the public level lacks reasoning and systematicity. Moreover, decisions made are oriented solely on the interests of the state authorities while business interests are completely ignored.

Raiding as a sociopolitical phenomenon is one of the key threats to economic security of Ukraine these days. The scale of raiding in Ukraine has been enormous for quite a while by now.

The legal framework that is supposed to prevent illegal and quasi-legal takeovers of enterprises in Ukraine is actually gradually improving. However, its current state can’t be called satisfactory for now. For example, till now the very notions of “raiding” and “raider” do not have their legal definitions, and this fact complicates the process of determining those responsible for property violations. There have been several regulatory acts under discussion, however, none of them has been fully approved. Thus, there are gaps in Ukrainian legislation, and there are also contradictions between the provisions of some laws. Moreover, provisions of one law/regulatory act at times contradict those of the other.

To some extent, imperfection of the legal framework of fighting against raiding Ukraine has been caused by the insufficient understanding of the very phenomenon of raiding. This lack of understanding also causes the related methodological problems and the pendency of endemic corruption in the country. Search for the ways to solve these problems and further active use of these new ways would eventually improve the quality of the legal

framework needed for fighting raiding in Ukraine.

Fragmentary nature of the legal framework for the fight against raiding in Ukraine has been caused by the inconformity and contradictions in the selected legal and regulatory documents as well as by the dispersed responsibility for enterprise takeover according to various legal and normative acts. Such serious gaps in legislation has caused a situation when raiding acts are gradually becoming quasi-legal, and this, obviously, complicates the fight against raiding in Ukraine.

Therefore, provision of state economic security is always based on thorough studying of threats to a national economy. This studying of threats to a national economy includes their general description based on specific criteria of threats classification. The description, in its turn, allows organizing permanent monitoring over the threats to national economy along with their prevention or at least postponement in threats actualization.

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INTERNATIONALIZATION AND BUSINESS PROCESS REENGINEERING OF MANUFACTURING COMPANIES AS A PRECONDITION OF ENERGY EFFICIENCY OF PRODUCTION AND INCREASING OF ENERGY SECURITY

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In the conditions of the European integration vector for the development of post-soviet countries, which Ukraine and Lithuania need to include, the importance of implementing the concept of change management in the work of industrial enterprises, which is aimed at increasing the energy efficiency of production, is becoming more and more acute. A prerequisite for this phenomenon is a lot of factors, which for a long time had a negative impact on the work of industrial companies of different sectors of Ukraine and Lithuania. These factors include:

- high level of physical wear of production equipment;
- long time orientation of industrial products to the eastern markets, primarily the market of the Russian Federation;
- outdated technological processes and design and technological documentation of production products, which has not changed since the Soviet Union and was in line with the outdated requirements of customers of industrial products;
- the absence of a scientific component in the production of industrial products, resulting in a decrease in the level of competitiveness of products both on the domestic and on external (international) markets;
- significant loss of market segments as a result of political actions, economic wars from Russia in relation to the Ukrainian and Lithuanian economic systems;
- low level of good citizens of the countries, as a result of the increase of the level of internationalization of labor resources, as a result of an increase in the level of labor migration into the countries of the European Union;
- raising the level of external borrowing (eurocredit) countries to fill their own budgets and not always effectively use them, as a consequence of the growth of external debt and the reduction of liquidity of economic systems of countries;

- high energy intensity of production of industrial products, due to outdated technological processes for production equipment, resulting in an increase in the cost price and the final price of finished products and low level of competitiveness of products [1].

All these factors necessitate the internationalization and reengineering of business processes of industrial companies in order to increase the level of energy efficiency of production. In our opinion, there is an urgent need to reengineering the business processes of industrial enterprises, which consists in radical redevelopment of processes in the manufacturing sector, which is: implementation of reinvention of fixed assets; updating of production technologies of finished products; application of energy benchmarking, which is aimed at reducing the level of energy costs of production, energy intensity of finished products on the basis of successful practices of enterprises of Ukraine and Lithuania; the introduction of start-ups in the activities of the industrial enterprises of the two countries and the experience of the EU countries that contain measures of energy-efficient nature (for example, the introduction of renewable energy technologies based on the energy of the sun, wind, geothermal sources, land, on the production, resulting in lower production costs the final product); Implementation of best practices in the reengineering of business processes of Lithuanian enterprises aimed at increasing the level of energy efficiency of production, in the work of Ukrainian industrial enterprises, as well as the mechanism of feedback, when the experience of Ukrainian enterprises that implemented reengineering of business processes is implemented in work Lithuanian companies. All this causes the actualization of the subject of this research [1]. Many scholars are involved in scientific research dealing with the transformation of business processes in the enterprises' activity. Thus, the role of institutional transformations in the activities of financial organizations is considered in the work of such scientists as D'Espallier B., Goedecke J., Hudon M., Mersland R. [2]. During the assessment of the radical transformations of business processes, attention should be paid to the partaking of the state institutions. The scholar Abu-Shanab A. considered the practical aspects of state regulation of the manufacturing companies reengineering [3]. The mechanisms of business processes transformation at the manufacturing companies in the energy sector and the methods for their assessment were proposed by Sotnyk I., who also explored the challenges of energy enterprises' functioning and the ways of their solution [4]. The study of technological transformations and their impact on the work of companies in the countries is also significant. These aspects are attended in the research of the scientists: Dev N., Neetu A. [5]; Lorentz A., Ciarli T., Savona M., Valente M. [6].

Another important aspect in shaping the concept of technological change

is the formation of an effective management of innovations in the course of radical transformations. Scientists Oliinyk V., Kozmenko O., Weibe I., Kozmenko S., carried out research of processes of innovation management at the level of production in the work of the enterprise [7].

Scientists Kharlamova H., Stavvytskyy A., Zarotiadis G. carried out the discussion of the impact of technological changes on the imbalance of EU companies' revenues [8]. Gassot Y. investigated the management of financial transformations in the implementation of e-business innovations in the work of country companies [9].

An important role in improving the efficiency of economic activities of industrial enterprises is an introduction of the re-engineering of business processes as an element of the ongoing transformational changes in the business processes at the enterprise. Hrabal M. carried out the research of managerial accounting of the process-oriented activity, which improved the process of estimating the effectiveness of the reengineering measures in the business structures' activity [10]. Scientists Shevchenko T., Danko Y., Krasnorutsky O. studied the transformational changes in the natural management, namely the waste management in the activity of economic agents of the EU countries [11].

Based on the analyzed work of economists, it should be noted that among the main shortcomings in the study of internationalization and reengineering of business processes of enterprises should be underestimated the study of energy efficiency of production in the system of business processes reengineering of companies in the conditions of internationalization at the project level, because this parameter can significantly affect the overall performance of industrial companies and the formation of competitive prices of industrial products in the domestic and foreign markets.

Given the relevance of the implementation of internationalization and reengineering of business processes of industrial companies as part of improving energy efficiency, it is necessary to note the following blocks of research, which can be stolen as the basis of a joint Ukrainian-Lithuanian project.

Block 1. Research of the theoretical and methodological basis of internationalization and reengineering of business processes of industrial enterprises in the context of increasing the level of energy efficiency of production. Block 2. Improvement of organizational and economic provision of internationalization and reengineering of business processes of industrial companies aimed at increasing the level of energy efficiency of production. Block 3. Methodological support of internationalization and reengineering of business processes of industrial enterprises in the context of increasing the level of energy efficiency of production. Block 4. Concept of a forward-looking growth in the management of transformations (reengineering)

of business processes of industrial enterprises in the conditions of internationalization. Block 5. Institutional support for internationalization and reengineering of business processes of industrial enterprises as a component of increasing the level of energy efficiency of production. Block 6. Scientific and applied principles of internationalization and reengineering of business processes of industrial enterprises as a component of increasing the level of energy efficiency of production [12].

The expected results of the implementation of the joint Ukrainian-Lithuanian project should include the following:

- comparative statistical analysis of the work of industrial enterprises of Lithuania and Ukraine, taking into account the research of energy dependence of production of both countries;

- formation of prerequisites for the introduction of internationalization and reengineering of business processes of manufacturing companies in Ukraine and Lithuania, including the introduction of energy efficient technologies in industry, which makes it possible to understand the necessity of reengineering business processes of industrial companies in the conditions of internationalization;

- improvement of the theoretical positions of internationalization and reengineering of business processes of industrial companies, which is to improve the conceptual apparatus and classification marks of internationalization and reengineering of business processes of production activity in the field of energy saving, which enables to systematize the theoretical basis of internationalization and management of changes in the work of manufacturing enterprises;

- improvement of the organizational and economic mechanism of internationalization and reengineering of business processes of manufacturing companies, which enables to determine effective mechanisms of transformation of business processes of enterprises in the field of energy efficiency of production;

- formation of mechanisms of private partnership between countries on implementation of projects of internationalization and reengineering of business processes of manufacturing companies, their intergovernmental partnership in the field of energy efficiency of production, which promotes the establishment of effective relations between Lithuania and Ukraine in the industrial sphere;

- improvement of the risk management system for the introduction of energy efficient technologies in the work of Lithuanian and Ukrainian industrial enterprises, which promotes the formation of effective risk management methods in the course of reengineering business processes of industrial companies in the conditions of internationalization of production;

- improvement of the system of methods for assessing the effectiveness

of internationalization and reengineering of business processes of industrial enterprises, which makes it possible to carry out a qualitative assessment of the effectiveness of changes in the work of Ukrainian and Lithuanian enterprises;

- improvement of the process of reengineering the business processes of industrial companies, based on the concept of cutting-edge growth and benchmarking (transfer of experience of Lithuanian enterprises to the work of Ukrainian industrial companies), which enables to introduce benchmarking technologies in practice and increase efficiency in the energy and other spheres of the enterprises;

- improvement of the criterial basis of the necessity and effectiveness of realization of reengineering of business processes of industrial enterprises taking into account the experience of work in Ukraine and Lithuania, which enables to make a qualitative management decision on conducting reengineering of business processes of industrial companies;

- formation of conceptual foundations of internationalization and reengineering of business processes under the innovative development of industrial enterprises, which includes the experience of leading innovation companies in Lithuania and Ukraine and the introduction of this experience in the work of other manufacturing enterprises of both countries on the basis of benchmarking;

- improvement of approaches (cost, profitable, market) to energy efficiency of Lithuanian and Ukrainian enterprises, which enables to determine the direction of valuation of business in the course of reengineering, reengineering of business processes of enterprises in internationalization in the energy-efficient sphere;

- formation of effective organizational and economic support of the interstate partnership between Ukraine and Lithuania in the field of management of changes in business processes in the work of industrial enterprises, resulting in an increase in the level of energy efficient production of both countries;

- development of investment attractiveness of industrial enterprises of Ukraine and Lithuania on the basis of development of interstate cooperation programs in the industrial sphere (aerospace, aerospace, engineering), which will allow to raise the level of investment attractiveness of industrial enterprises of both countries for potential and real investors;

- applied testing of the proposed theoretical and methodological support for the internationalization and reengineering of business processes of industrial companies as a component of raising the level of energy-efficient production.

Also, to justify the project, it is worthwhile pointing out the types of effects that will be gained. Economic effect. The formation of the methodological

basis for internationalization and reengineering of business processes of industrial companies, which is aimed at reducing the cost of production of final products, as a result of the introduction of energy saving technologies, as well as reduction of production costs can be achieved as a result of the introduction of a horizontal (process-oriented) management structure, as a result of reduced administrative and overhead costs of production. The social effect is the creation of new jobs during the implementation of the Ukrainian-Lithuanian project on the one hand, and the optimization of labor resources, which consists of internal and external rotation of personnel at enterprises in implementing internationalization and reengineering of business processes. The ecological effect is to reduce environmental damage in the reengineering of business processes of industrial companies as a result of an increase in the level of compliance with the emission standards of enterprises emission standards, which are regulated in the European Union.

In conclusion the results of this research will contribute to further progress in the implementation of the Association Agreement between Ukraine and the EU and in addressing energy consumption in industry [13].

After the project implementation, it is planned to continue providing methodological support both in Lithuania and in Ukraine related to the dissemination of best practices.

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SUSTAINABLE DEVELOPMENT THROUGH GEO-TOURISM

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In 1984, the United Nations entrusted the work of identifying long-term environmental strategies for the international community by identifying a group of 22 people drawn from member states of both the developing and

developed worlds. In 1987, the World Conference on Environment and Development (WCED) published a report entitled, ‘Our Common Future’ [1], often known as the ‘Brundtland Report’, after its chair, the then Prime Minister of Norway, Gro Harlem Brundtland. The term ‘Sustainable Development’ was used in the Brundtland report as “the development that meets the needs of the present without compromising the ability of the future generations to meet their own needs” [2]. In the 1992 United Nations Conference on Environment & Development (UNCED) on ‘Earth Summit’ in Rio de Janeiro, several environmental issues were raised by the government representatives, NGOs and accredited journalists. The aim of the UNCED conference was to identify an agenda towards sustainable development in the future. Thus sustainable development became a challenge to both policy makers and researchers [3]. The 2002 World Summit on Sustainable Development (WSSD) was held in Johannesburg and was attended by 104 nation states. The challenge of sustainability was connected to environmental, economic and social development [4].

According to the United Nations, the 17 Sustainable Development Goals can be achieved through 5Ps – People, Planet, Prosperity, Peace and Partnership [5].

Geo-tourism is defined as “a tourism that sustains and enhances the identity of a territory, taking into consideration its geology, environment, culture, aesthetics, heritage and the well-beings of its residents” [6]. “Geo-tourism is a knowledge -based tourism, an interdisciplinary integration of the tourism industry with conservation and interpretation of abiotic nature attributes, besides considering related cultural issues, within the geosites for the general public” [7].

Geo-tourism is also defined as “A form of natural area tourism that specifically focuses on landscape and geology. It promotes tourism to geosites and the conservation of geo-diversity and an understanding of Earth sciences through appreciation and learning. This is achieved through independent visits to geological features, use of geo-trails and view points, guided tours, geo-activities and patronage of geosite visitor centers” [8]. Geo-tourism becomes strategic when geo-tourism is ingrained in the mission of the organization. Geo-tourism is a product of environmental responsibility, cultural responsibility and intangible heritage. The benefits of geo-tourism are economic development, social development of the local population, experiencing and sharing the excitement about the heritage and culture.

The essential requirements for building a successful geopark are:

- inventories of geological heritage, natural heritage, cultural heritage and intangible heritage;
- uniqueness of the heritage sites or objects or artefacts and tradition of

the village;

- developmental strategy such as economic development and geo-tourism;
- accessibility to travel by road, sea or air to the geopark sites and locations;
- heritage location and pre-existing limits;
- formal management structure;
- permanent team working for geopark;
- connections between the heritage sites, nature, history and human with story;
- integrating local society and stakeholders with the cultural sites, geological sites and historical sites;
- financial plan and forecast;
- site management;
- brand strategy and master plan [9].

A geopark visitor, also called a geo-tourist, is the next person in the geopark supply chain who uses the services of geopark for a fee. In return, the geo-tourist carries a lasting memory together with knowledge about the earth and its heritage, a sense of satisfaction or excitement. A visitor contributes to the value of geopark through payment of a service fee which is used for the development of geopark. It is, therefore, necessary to track geo-tourists and follow up with them in order to understand their needs and identify the purpose for using the geopark facility and services. Planning and implementing strategies to increase footfall (visits) of geo-tourists, maintain and repeat visits are an important area of geopark operations. The strategies create value for a geopark. Like customers for a business organization, geo-tourists are the pillars on which a geopark stands. The geo-tourists may be classified into several categories depending on the frequency of visits and duration of stay at a geopark. There are five categories of geo-tourists based on frequency and regularity of visits. The first category are predominant visitors- the geo-tourists who visit a particular geopark on a regular basis and are brand or service loyal to a particular geopark. These visitors cherish the value offered by the geopark. The geopark management has to adopt innovative strategies to retain these predominant visitors (geo-tourists) to continue their visits on a regular basis with repeated intervals, thus help in geopark revenue generation. These visitors should be motivated, treated as special and continue with specific programmes of interest targeted at them.

The second category of geo-tourists are mixed visitors, those geo-tourists who are not particularly brand loyal to any particular geopark, but visits all geoparks equally. The geopark management identifies these geo-tourists and formulates special promotional campaigns that are of interest to them in order to increase their frequency of visits.

The third category of geo-tourists are casual visitors, those infrequent visitors to a geopark and these visitors have no specific purpose for visiting a geopark, their visits are casual and are called casual geo-tourists or casual visitors.

The fourth category of geo-tourists is non-visitors, as the classification suggests, these visitors could be first time visitors or they have not visited a geopark because they may not be aware of its existence or services. The geopark management has to focus on creating awareness among these non-visitors so that their first visit becomes interesting and fruitful. The geopark management is responsible for creating interest among these classes of geo-tourists through promotional strategies.

The fifth category of geo-tourists is lost-visitors, those who were visitors earlier but lost to another geopark or stopped visiting a particular geopark due to some reason or the other. The reason for stopping the visit could be dissatisfaction with a product or process or a service. It is the responsibility of the geopark management to identify the reasons for stopping the visit and analyze the cause of dissatisfaction among these lost visitors. The geo-tourists may also be categorized according to the size or infrastructure. These could be individual geo-tourists, group geo-tourists (small and large) and institutional geo-tourists. The geo-tourists may also be categorized based on the location of domicile or region, such as: local visitors, regional visitors, national visitors and foreign visitors.

The geo-tourist categorization is represented in table 1 below.

Table 1

Categorization of geo-tourists

Feature	Categories of geo-tourists
Frequency and regularity of visits	Predominant visitors
	Mixed visitors
	Partial Visitors
	Non-visitors
	Lost visitors
Size or infrastructure	Individual geotourists
	Group geotourists
	Institutional geotourists
Location of domicile or region	Local visitors
	Regional visitors
	National visitors
	Foreign visitors

Source: based on [10]

However, it is suggested that in order to develop long term relationship with the geo-tourists, a geopark must develop a “Geo-tourist Target Plan” report. This report helps understand the types of geo-tourists visiting the geopark.

The researchers also suggest that a geopark must initiate a separate “Target List”, also called “Geo-tourist Master List” aimed at various categories of geo-tourists: individuals and groups of geo-tourists, geo-tourist agents and institutional geo-tourists, for targeting. Thus, three different types of “Geo-tourist Master Lists” may be generated with code numbers assigned to each of the geo-tourists and geo-tourist agents mentioned herein. These codes could be linked to Customer Relationship Management software. This method could be useful and effective in planning promotional inputs and programmes for geo-tourists. These code numbers are further be integrated to RFID chip and connected to geo-tourist for efficient tracking and promotions.

Geo-tourist engagement strategies are strategies developed to attract and retain geo-tourists/geopark visitors, and to offer them a sense of feeling, well-being, belonging and value. Geopark strategy could be planned both at the strategic and operational levels. In preparing a geo-tourist engagement strategy, there are two key elements involved. One element is the identifying the position of a geopark, its product or service in the mind space of a geo-tourist; and the other element is the operational effort to transform a lost geotourist (geopark visitor) or non-visitor along the path of casual (partial) visitor-mixed visitor to predominant visitor. The researchers term this effort as the transformational effort.

The Geo-tourist Engagement Model may be explained as follows:

The researcher ranks the geopark visitors on a 5-point scale, also called “Scale of Engagement” as follows:

Predominant visitor +5, Mixed visitor +3, Casual visitor +1, Non-visitor 0 and Lost visitor -1.

The geopark organization may form two groups of task forces- strategic task force focused largely towards the “predominant visitor” side and an operational task force focused largely towards the “lost visitor” side on the “Scale of Engagement”.

A “Predominant visitor” will always have a higher chance of “geopark brand recall” and a “positive feeling” compared to that of a “Lost visitor”. Therefore, the strategic task force will have a higher degree of “Strategic Engagement” towards the “Predominant visitor” side with decreasing strategic engagement towards the “Lost visitor” side of the scale. In similar way, the operational task force will have a higher degree of “Operational Engagement” towards the “Lost visitor” side of the scale. This generates

a high transformational effort at the “Lost visitor” side of the scale and decreasing operational engagement towards the “Predominant visitor” side of the scale. The research suggests that the above “Geo-tourist Engagement Model” helps a geopark manager in optimizing resources at the geo-tourists.

A method of improving geopark visitor footfall is to collaborate with geo-tourist agents and tour operators in bringing geo-tourists to the location. A detailed strategy and a commission to the geo-tour operators in bringing geo-tourists to the geopark locations are to be planned. There is a need to train these agents /supply chain partners in enhancing geo-tourism capabilities.

Geo-tourist Management Document is a document that provides information about classification of geo-tourists, their potential and revenue generated in value. The ranking is undertaken in a descending order. ABC Analysis or Pareto’s law is because focusing on a minority segment (a core group) contributes a significant value generator. Identifying the minority group of geo-tourists who contribute to the majority of geopark revenue enables a geopark to manage its resources efficiently.

Geo-tourist agent document provides information about classification of geotourist agents / partners of the geopark supply chain, their potential, yield (revenue generated) and ranking based on revenue contributed to geopark. This is undertaken using ranking method with ABC analysis.

Geoparks are instruments in promoting sustainable geo-tourism with focus on people, planet, prosperity, peace and partnership. Geo-tourists are key stakeholders that promote development of geoparks. Efficient and effective management of geo-tourists with focus on value chain network contributes to value creation.

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ENVIRONMENTAL SECURITY - A KEY TO SUSTAINABLE ECONOMIC AND ENVIRONMENTAL DEVELOPMENT OF UKRAINE

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One of the major contemporary issues is the preservation of habitat quality under the conditions of high anthropogenic impact on ecological systems. The quality of land depends on the quality of agricultural products

that directly affect human condition and health. Therefore, issues of land use greening and food security in Ukraine are closely connected and need further research and improvement.

The maximum possible satisfaction of consumer needs makes producers look for new technologies in the production and sale of products. However, recently there have been some contradictions as the natural capacities and resource potential of the planet are limited and cannot always be self-restoring. Soil degradation, desertification, ozone depletion, unpredictable climate change, and natural disasters are convincing evidence of the imbalance in the natural system.

Ecological safety is the environmental condition, which secures the prevention of deterioration of the ecological situation and the occurrence of hazard to human health, i.e. ensuring the ecological balance on Earth by implementing a set of appropriate measures.

According to the famous researcher in the field of ecology V. F. Reimers, environmental safety should be based on certain principles [1]. They are as follows: 1) awareness that humanity, as an integral part of nature, is entirely dependent on the environment; 2) recognition of the limitation and exhaustibility of the natural resource (ecological) potential of the land and individual regions, the need for its qualitative and quantitative inventory; 3) the unacceptability of artificial expansion of natural resource (ecological) potential beyond natural systemic constraints; 4) assessment of the admissible maximum of extraction of natural resources and change of ecosystems as a habitat; 5) the need to develop preventive environmental bans in advance of the economic depletion of natural resources or their indirect destruction; 6) the obligation to create a social and economic mechanism of homeostasis in the system of “man – nature”; 7) urgent and mandatory need to regulate the number of people, reduce their pressure on the environment at the local, regional and global levels; 8) acceptability of merely “environmentally friendly” technologies and equipment in all sectors of the economy; 9) the transition to resource-economic technologies and miniaturization of products to the business practices safe for nature and people; 10) recognition of the law of optimality and in management – the principle of reasonable sufficiency in the use of methods of obtaining life benefits in spatial and temporal specific limits (restrictions on environmental, social, and economic risk factors); 11) understanding that without an adequate living environment (ecosystem integrity) it is impossible to preserve and develop living things, including its species (humans, in particular) and natural systems of a lower level of hierarchy.

It is worth noting that in Ukraine there are many non-governmental organizations on environmental protection. Thus, the first NGO, which was established in 1946, is the Ukrainian Society for Nature Protection

(UkrSNP). Until the mid-1960s, UkrSNP was the only voice of the environment in the decision-making projects of public administration; concurrently, UkrSNP sought to introduce a comprehensive environmental and economic approach to economic management and to form the Ministry of Ecology in the structure of the USSR Government. Moreover, in 1967, due to this organization, the Government of the Ukrainian SSR created the State Environmental Committee, as a central authority. This happened three years before the establishment of the US Environmental Protection Agency and 21 years before the establishment of similar government agencies in Moscow. Today the main goals of the Ukrainian Society for Nature Protection are [2] 1) to promote the formation of civil eco-society, the rule of environmental law; to initiate, organize and participate in the implementation of practical environmental actions and measures, promoting the greening of all spheres of life in the context of Ukraine's national security; 2) to provide civil support of Ukraine's environmental policy, assistance in improving the legislative and regulatory framework, to accelerate the process of harmonization of Ukraine's environmental legislation with the requirements of international standards, in particular, with the EU standards; 3) to implement educational activities among the population to promote public environmental awareness, to introduce a system of professional environmental training of civil servants, managers and officials who make responsible decisions at the local, regional, and state levels; 4) to provide public control over the observance of constitutional and legal guarantees of environmental rights of Ukrainian citizens, to assist in preventing ecological offenses, to implement independent civil control, ecological expertise, and audit in the field of environmental protection; 5) to conduct scientific research and promote Ukraine's transition to the principles of sustainable development.

Besides, the All-Ukrainian Ecological League has been operating for 18 years in a row. Its activities are aimed at forming a developed civil society as a major factor in balanced development and a feature of a democratic state. This organization is initiating the creation of the National Platform of "Sustainable Development Goals for Ukraine" to unite the efforts of government officials, local authorities, businesses, scientists, and the public to ensure economic development and social protection taking into account the opportunities and the needs of the natural environment.

In our opinion, the food security of our country depends on the following factors: the level of the agricultural sector development and the production of organic products; environmental protection; rational use of natural resources; ensuring the environmental security of human life and activity; food industry development; the level of export-import operations; the level of purchasing power and culture of the population; opportunities to use

innovative technologies; financial capabilities of enterprises; logistics and investment attractiveness of agricultural enterprises; state support, granting benefits to agribusiness enterprises, and efficient fiscal policy.

One of the main components of food security is economic and physical affordability. The affordability of food is implemented through the purchasing capacity, taking into account the purchasing power, price, and availability in the appropriate quantity and quality.

The indicator of the consumption of basic food products per capita is largely integral. It characterizes at the same time different aspects of food security together: food availability in the domestic market, as well as its economic and physical affordability (Table 1).

Table 1
Dynamics of annual food consumption per capita, kg / year

Indicators	2017	2018	2019	2019 in % to 2017
Meat and meat products	51,7	52,8	53,8	104,1
Milk and dairy products	200,0	197,7	201,7	100,9
Eggs, pcs	273	275	279	102,2
Fish and fish products	10,8	11,8	12,5	115,7
Sugar	30,4	29,8	28,5	93,7
Vegetable oil	11,7	11,9	11,2	95,7
Potatoes	143,4	139,4	135,6	94,5
Vegetables and melons food crops	159,7	163,9	167,5	104,8
Fruits, berries, and grapes	52,8	57,8	59,2	112,1
Bread products	100,8	99,5	97,2	96,4

Source: Compiled by the authors according to [3]

Consumption trends of basic food products per capita in 2017-2019 are as follows: consumption of meat and meat products increased by 4.1%; milk and dairy products by 0.8%; eggs by 2.2 %; fish by 15.7%; vegetables by 4.8%; fruits, berries, and grapes by 12.1%. Consumption of vegetable oil decreased by 4.3%; potatoes by 5.5%; bread products by 3.6%.

Recent research has indicated that there are many low-quality goods in the consumer market. The main reasons for the poor quality of food sold to the population are weak material and technical base and insufficient equipment of many enterprises of the food industry and trade; low level of sanitary and industrial culture; use of low-quality raw materials and components; a sharp decrease in production and industry control due to the dissolution of

economic management bodies in the laboratory service, as well as the desire of manufacturers to reduce the cost of product quality control. Preventive actions to combat substandard products should be applied at the state level, as food and food safety are among the main factors determining the health of the population of Ukraine and the preservation of its gene pool. Such factors include the introduction of modern operational methods of control, NAACP system (Food Safety Management Quality System) at all enterprises; creation of bodies of independent examination to allow the identification of goods whenever the buyer of the goods doubt about its range and quality; strengthening the sanction for food counterfeiting (introduce fines that would exceed the cost of a batch of counterfeit products at least twice); decertification of counterfeiters in case of repeated abuses.

According to the European Regional Office of the World Health Organization, the current state of health of the Ukrainian population is characterized by extremely high morbidity and mortality, low life expectancy. Failure to ensure rational consumption of basic foodstuffs and their unbalanced content of micro and macro elements is the main cause of human mortality. According to the Population Division of the United Nations Department of Economic and Social Affairs, the average life expectancy in the world has increased from 65 years in 1990-1995 to 70 years in 2010-2019 (Table 2).

Table 2

Average life expectancy in some countries, years

Country	The average life expectancy of the population	Including	
		women	men
Ukraine	68,6	74,8	62,8
Russia	66,3	73,2	59,8
China	74,7	76,9	72,7
the USA	78,4	80,9	75,9
India	66,8	68	65,8
Japan	82,3	85,7	79

Data in Table 2 show that the highest life expectancy is in Japan – 82.3 years, and the lowest is in Russia and India – 66.3 and 66.8 years, respectively. In Ukraine, this figure is 68.6 years, which is lower than the average, which reaches almost 71 years. In all countries without exception, the life expectancy of men is lower than that of women.

The current population in Ukraine, as of December 1, 2020, was 41,629.9 thousand people. Compared to January-November 2019, the volume of

natural decrease increased by 33.3 thousand people. A significant excess of the number of deaths over live births characterized natural population movement in January-November 2020: 49 live births per 100 deaths [3].

Income is an indicator of the economic affordability of food. In January-December 2020, the size of the average monthly nominal salary of full-time employees of enterprises, institutions, and organizations (with 10 or more employees) was up to UAH 11,591 and compared to the corresponding period of 2019, increased by 10.4%. The average salary in all regions was higher than the minimum; however, only in four of them, it exceeded the average level in Ukraine: Kyiv – 17,086 UAH, Donetsk region – 12,647 UAH, Kyiv region – 11,887 UAH, Dnipropetrovsk region – 11,681 UAH. The lowest level of nominal wages, which did not exceed 81% of the average in the economy, was observed in Chernivtsi, Volyn, Chernihiv, Kherson, and Ternopil regions. The index of real wages in January-December 2020 compared to the corresponding period of 2019 was 107.4% [3].

Recently, due to rising food prices, the population has become more prudent in shopping. The consumer price index (inflation index) in 2020 was 105.0% (in 2019 – 104.1%) as a whole. Food and non-alcoholic beverages went up by 4.9%. Prices for sugar, eggs, grain products, and sunflower oil increased the most (by 47.7-21.7%). Fruit, bread, beef, pasta, rice, milk and dairy products, fish and fish products, butter, and soft drinks were 12.9-2.0% more expensive. At the same time, vegetable prices decreased by 12.1%. Poultry meat fell in price by 4.8% and pork by 1.7%. According to statistics, the main item of household consumption expenditure in 2020 is food, which share was 51.6% with a 60 percent threshold. For comparison, food expenditures in EU households do not exceed 12% of total consumer expenditures, and the main expenditure item is housing and energy expenditures accounting for almost a quarter of such expenditures.

As already mentioned, land resources are a key factor in ensuring food security. Ukraine has unique opportunities: of the 60 million hectares of the state territory, more than 70% are agricultural lands. Therefore, in our country, it is necessary to create all conditions for the land potential to be used more efficiently to ensure the food security of the state. In terms of the black soil area (28 million hectares), our country ranks fourth in the world after Russia, the United States, and China. The world now needs an increase in food, and Ukraine can provide the biggest growth. According to various estimates, we have the potential to feed more than 600 million people. Thus, according to the World Bank, in Ukraine, the level of labor productivity in the economy is 5 times lower than in EU countries. Comparing the average value added per worker in agriculture in the EU and Ukraine, it found that in Ukraine, it is 6 times less; we are 20 times behind France. This has a significant impact on the food security index [4]. In the Global Food

Security Index (GFSI), Ukraine ranks 76th out of 113 countries. The index is a dynamic quantitative and qualitative model of benchmarking, built on 34 unique indicators that measure the driving forces of food security in developing, as well as in developed countries.

Support for the appropriate level of food self-sufficiency, which is the stable provision of food security in Ukraine, involves the use of state support for domestic agricultural producers and the implementation of measures to control imported products to protect domestic producers from foreign competition. According to P. Sabluk and Yu. Luzan, “non-compliance with the requirements of the legislation on the state support of agricultural producers through direct expenditures from the state budget and significant reduction of their volumes under certain programs, contribute to the development of subsectors of the agricultural sector, which led to a deterioration in the structure of food production” [5].

In 2020, according to the State Statistics Service of Ukraine, the volume of agricultural products at actual prices, according to estimates, amounted to 885,627 million UAH. The crop production index compared to 2019 is 86.1%, including at enterprises – 83.5%, households – 92.2%. In the livestock industry, the index of production in 2020 compared to 2019 – 97.4%, including at enterprises – 99.1%, households – 95.5% [3]. Under such conditions, regarding the production of agricultural products and the provision of food for the population of Ukraine, it is necessary to consider the constant growth of the share of agricultural products in the structure of exports. In particular, according to the Ministry of Economic Development, Trade, and Agriculture of Ukraine, in 2019, the share of agricultural products in the structure of exports was 44.2%. In January 2020, agricultural products worth \$ 1.98 billion were exported to foreign markets, which is 14% more than in the same period of 2019 [6].

Issues of environmental development are still relevant for all countries around the world, and Ukraine is no exception. Our country is affected by the ecological crisis, which is caused primarily by excessive atmospheric pollution, disruption of relationships in ecosystems, and irrational use of land resources.

A purely operational approach and environmentally destructive economic activity have led to the disruption, as well as to the destruction of natural landscapes. In 2017, Ukraine took first place in the ranking of plowed countries with 33.5 million hectares (56.1% of arable land from the total area of the state) of arable land. The second and third places are occupied by Moldova (53.7%) and Poland (35.7%), respectively [7]. An alarming consequence of the high degree of plowing of soils in the country is their degradation, water and wind erosion, and reduced land resource productivity.

Based on various scientific sources, we have generalized the parameters of degradation processes in arable soil of Ukraine: –dehumidification with an intensity of 0.5-1.5 t / ha annually with a sign of reducing losses until the end of the 1980s. Since 2005, the intensity of dehumidification is 0.42 - 0.51 t / ha each year; – increase in the deficit of the mobile nutrients ratio, in particular, nitrogen and potassium (respectively, 41.5-56.4 kg / ha in 2001 and 32.9-64.2 in 2018); – increase in the acidity of black soil, most noticeable in Cherkasy and Sumy regions ($\Delta\text{pH} = 0,3 - 0,5$); – overconsolidation, which is foremost noticeable in the Western Forest Steppe and is generally common in 40% of arable land, destruction of the structure, the formation of boulders and crusts; – decrease in the capacity of the upper layer of soil due to the spread of erosion processes, which extends by several centimeters in black and drained soil of Polissya; – secondary salinization and salinization of irrigated soils, operation of peatlands.

Assessment of ecological stability of the territory within the regions of Ukraine by calculating the coefficient of ecological stability (C ec.st.) is given in Table 3. The score of anthropogenic load (S a. l.) characterizes the degree of human impact on the environment, including land resources.

According to the scientific methodology of the Institute of Land Management of UAAS, if the coefficient of ecological stability is less than 0.33 – the territory is environmentally unstable; from 0.34 to 0.50 – refers to the stable unsteady; from 0.51 to 0.66 – is within the limits of average stability; if it exceeds 0.67 – the territory is environmentally stable. If the anthropogenic load score is 5 points it is a high degree of anthropogenic load (industrial land, transport, settlements); 4 points – significant (arable land, perennials); 3 points – average (natural forage lands, tinned beams); 2 points – insignificant (forest belts, shrubs, forests, swamps, underwater); 1 point – low (micro natural reserves).

Thus, within the regions of the country, the coefficient of environmental stability ranges from 0.71 in the Zakarpattya region to 0.27 in the Zaporizhzhia and Kirovohrad regions.

Table 3

Characteristics of the environmental condition in the regions of Ukraine as of 2019

Regions	C ec.st.	Environmental stability of the territory	S a. l.	The level of anthropogenic load
Vinnitsia	0,33	unstable	4	significant
Volyn	0,57	average	3	average
Dnipropetrovsk	0,28	unstable	4	significant

Donetsk	0,29	unstable	4	significant
Zhytomyr	0,55	average	3	average
Zakarpattya	0,71	stable	3	average
Zaporizhzhya	0,27	unstable	4	significant
Ivano-Frankivsk	0,62	average	3	average
Kyiv	0,43	average	3	average
Kirovohrad	0,27	unstable	4	significant
Luhansk	0,41	unsteady	3	average
Lviv	0,53	average	3	average
Mykolayiv	0,28	unstable	4	significant
Odesa	0,31	unstable	4	significant
Poltava	0,33	unstable	4	significant
Rivne	0,60	stable	3	average
Sumy	0,42	unsteady	3	average
Ternopil	0,34	unsteady	4	significant
Kharkiv	0,34	unsteady	4	significant
Kherson	0,34	unsteady	3	average
Khmelnysky	0,35	unsteady	4	significant
Cherkasy	0,36	unsteady	3	average
Chernivtsi	0,51	average	3	average
Chernihiv	0,47	unsteady	3	average

Source: according to data [8]

Moreover, only one region is environmentally stable (Zakarpattya region) and 6 are within the limits of average stability (Volyn, Zhytomyr, Ivano-Frankivsk, Lviv, Rivne, Chernivtsi). All other areas of the region are stable unsteady and environmentally unstable. In general, in Ukraine, the anthropogenic load is 3 and 4 points and is characterized by an average and significant degree of load.

Soil and its condition are the main and most powerful components of the environment in terms of territory. Adverse anthropogenic evolution of soil is a legitimate concern of agricultural producers. Arable soil is in an unsteady condition.

It is well known that the supply of nutrients to the soil is ensured by the application of fertilizers. Organic fertilizers remain the most important resource for soil humus reproduction. According to the research, land resources are provided with mineral fertilizers by 48% and organic – 5%

of need. When such an insufficient amount of fertilizers is applied, there is a lack of humus and nutrients in the soils of Ukraine, i.e. the removal of nutrients must be replenished by returning them to the soil. According to the latest agrochemical survey of soil, there is almost no soil with a high humus content in Ukraine, and if in 1990 there were 36.9%, today – only 3%.

Regarding this situation, a very important conclusion should be drawn: along with changes in soil characteristics, agricultural technologies must also change. Moreover, the soil-preserving aspect of the latter should prevail over the negative results of anthropogenic soil change. The soil protection orientation should dominate in the methods of their cultivation [9, p. 16].

Thus, soil with rather unsatisfactory properties (degraded and infertile) in the land structure of our state occupies a large area. According to the Institute of Land Management, the area of such soil exceeds 6.5 million hectares, i.e. – 20%. According to other scientific institutions (“Sokolovsky Institute of Soil Science and Agrochemistry” NSC, “Institute of Agriculture” NSC), the area of soil that has undergone degradation processes and infertile soil reached about 10 million hectares. As a result, every year, losses from the use of such lands in Ukraine as a whole reach about 400 million UAH [9, p. 15]. Therefore, there is an urgent need to take effective measures to protect and restore the natural environment, soils foremost. Long disregard of these issues will lead to a situation in which reforms will prove ineffective and futile. After all, a country that does not care about its safe environment and the activities of the economic complex has no future.

The production of organic products, which strictly limits the use of artificial chemically synthesized fertilizers and pesticides, is one of the promising areas of ensuring the production of environmentally friendly products. The use of antibiotics and growth stimulants is prohibited in livestock husbandry. Among the methods of organic agriculture, a special place is given to crop rotations that restore and preserve soil fertility. Crop rotation is also a natural system of plant protection against pests. The cultivation of genetically modified crops is strictly prohibited. Certification authorities constantly ensure that animals are kept on a large territory sufficient for the free movement to meet high standards of welfare.

Today, Ukraine has a significant potential for the production of organic agricultural products, their export, and consumption in the domestic market. Some results have already been achieved in the development of domestic organic production. In recent years, with a steady positive dynamics of growth of agricultural land, which is certified organic production, there is sustainable growth in the number of operators of the organic market, as well as the level of consumption of organic products in Ukraine. Official statistical reviews of IFOAM confirm that in 2002, in Ukraine, there were 31 farms with the status of “organic”. In 2019, there were 617 operators of

the organic market, of which 470 – agricultural producers. The total area of agricultural land with organic status and the transition period amounted to about 468 thousand hectares (1.1% of the total agricultural land area of Ukraine) [10]. According to the area of agricultural land used for growing organic products, Ukraine ranks 20th in the world among more than a hundred countries, ahead of such leaders of the organic movement as Hungary, Denmark, the Netherlands, Sweden, and Switzerland.

The domestic consumer market of organic products in Ukraine continues to expand through the main supermarket chains. The main types of organic products produced in Ukraine are cereals, milk and dairy products, cereals, meat and meat products, fruits and vegetables (Table 4).

Table 4

Volumes of the consumer market of organic products in Ukraine, 2004-2019

Year	2004	2009	2012	2015	2016	2017	2018	2019
mln. Euro	0,1	1,2	7,9	17,5	21,2	29,4	33,0	36,0

Ukrainian organic products are bought by EU countries most of all. In 2019, Ukraine ranked 2-nd out of 123 countries in terms of imports of organic products to the EU, rising two places compared to the previous year. Thus, in 2019, 3.24 million tons of organic agri-food products were imported into the EU, more than 10% of which are Ukrainian. At the same time, Ukrainian imports to the EU increased by 27% – from 265.8 thousand tons in 2018 to 337.9 thousand tons in 2019 [11]. Currently, imported Ukrainian organic products are certified quite successfully by foreign entities that use a versatile evaluation system.

Environmental responsibility in the field of agricultural land use plays an important part in the food security of the country, as the problem of providing quality food is critical for the population. The estimated loss from food contamination in Ukraine is more than 6 billion dollars per year. From time to time, there are scandals in the world with newly discovered substances that are hazardous to health, and the emergence of new forms of infections questions the possibility of sustainable development of society. This situation can lead to the fact that increasing the level of consumption of agricultural products (above all – food) can reduce the quality of life in general. Furthermore, this is primarily a decrease in the health of the population, which leads to a loss of human capital [12].

Thus, affecting the environment, environmental safety also affects humans. In this context, the quality of air, water, land, as well as the quality of food, which is usually suitable for life and quality, is important.

Resolving the issue of food security and the production of environmentally

friendly and useful products requires strict control by the state in terms of the natural environment condition, as well as the production of quality food. The state must also take care of the affordability of these environmentally friendly and high-quality food products for the population, as a healthy nation is a strong country.

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THE ECONATURAL, ECONOMIC AND MARKETING POTENTIAL OF THE ORGANIC PRODUCTION DEVELOPMENT IN THE WORLD

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The agri-food market development influences the change of its structure. New consumer demands have been emergent. In particular, product quality, environmental friendliness, safety is very important under current conditions. More and more people are interested in healthy and wholesome food. At the same time, the environmental factor plays very important role. Careful treatment of land resources and the environment is the basis of the sustainable development concept, which acquires new features under the influence of globalization factors.

Thus, the situation analysis of the world agri-food market shows the growing interest of consumers in healthy and wholesome food together with a direct contribution to the preservation of the natural environment. Under such conditions, meeting the growing demand for organic products continues to be one of the strategic directions of agricultural development in most countries. The organic agriculture role is more important right now due to humanity's understanding of the environmental threat resulting from the development of agricultural technologies and in particular the intensification of agriculture. As a result, alternative methods of agricultural production are most in-demand under globalization conditional.

These technologies must take into account the level of biological diversity, conservation of the environment and natural resources, the high standards of appropriate animal husbandry and production methods. This affects of products that are manufactured using substances and processes of natural origin.

The organic production's economic advantages are a significant reduction in production costs as a result of abandoning the use of expensive fertilizers and plant protection products, as well as reducing the energy intensity of production. The organic production social benefits are the development of

rural infrastructure, the creation of additional jobs in rural areas, and the improvement of the nation's health as a whole. Environmental benefits are the preservation and restoration of biodiversity in agricultural landscapes, which affects the reproduction of soil fertility and environmental protection.

The concept healthy lifestyle is complex and multifaceted. In general, this concept characterizes the rejection of transgenic foods, limiting the fats consumption, the predominance of environmentally friendly foods in the diet, including vegetables, fruits and berries.

In the up-to-date scientific literature there is a significant number of works that address issues of organic production [1; 2; 4; 6; 7; 9], which note the prospects of this area, especially in the context of globalization and increasing consumer demand to food.

Fesenko A.M. believes that organic production is a system of activities organization that would minimize the use of artificial, unnatural substances and technologies, allow obtaining products with the most natural properties and the production process itself does not violate the ecological balance [4, p. 243]. Melnik V.O. considers organic agriculture from the point of view of legal practice, as «the organization of production of ecologically pure agricultural production with use mainly natural, natural technologies of plants cultivation and animal's husbandry» [6, p.231]. EU Regulation 834/2007 considers organic production to be a holistic food management and production system that combines best practices in terms of environmental conservation, biodiversity, conservation of natural resources, the application of high standards of animal husbandry and production methods, which meets certain requirements for products manufactured using substances and processes of natural origin [3]. Definition by R.M. Bezus is filled with social meaning: being self-sufficient, organic farmers improve the land and build a model of food production independence from expensive external materials [1, p. 24].

In our opinion, organic production is a system of traditional technologies based on the natural properties of the resources involved without additional intervention of artificial stimulants, which ensures harmonization of economic, social and environmental relations through the production of environmentally friendly food at an affordable price for most members.

Organic products are environmentally friendly products made from the use of dumpless tillage technology, without the use of fertilizers, herbicides, pesticides, genetically modified elements and other components that change the natural female, the smell and color of the product.

The organic production has a lot of competitive advantages both for enterprises and for consumer's. Among them there are following: high quality and safety of products, which is achieved primarily due to the absence of pesticide residues, pesticides, genetically modified organisms, etc.; positive

impact on human health; safety for the environment; positive impact on the reproduction of natural resources, in particular soil fertility; preservation of nutrients; improving the quality and safety of processed products.

A significant increase in interest from producers and consumers to organic products is there in the world. Similar trends are observed in Ukraine. However, in Ukraine, there are certain inhibitory factors that hinder the rapid development of this agri-food market sector. Destructive factors are: underdeveloped consumption culture, orientation of enterprises to short-term profit, imperfect pricing policy, inefficient market segmentation, suboptimal structure of the range of organic products and industry combination.

The organic production has been development in t 77.8%, or 186 countries in the world. This sector of the market is the most popular for European countries, 48 countries in this region, or 94.1 %, develop this kind of activity (Table 1).

Table 1
Indicators of the organic production coverage in the world, 2018

Regions of the world	Countries with data on organic agriculture	Share of countries that provided data, %	Organic agricultural land, hectares	Per capita consumption, Euro
Africa	47	77,0	2003976	0,01
Asia	42	82,4	6537226	2,4
Europe	48	94,1	15635505	50,5
Latin America and Caribbean	33	68,8	8008581	1,5
North America	3	75,0	3335002	119,9
Oceania	13	54,2	35999373	33,5
World	186	77,8	71519663	12,9

Source: summarized by authors by [5; 8; 10; 11]

In the Asian region, 82.4%, or 42 countries, have been covered by organic production. Organic production in Africa, Latin America and the Caribbean has been development in 77 % and 68.8% of countries, respectively. In North America it is 3 out of 4 countries, in Oceania – 13 out of 24 countries. Per capita, the most organic production has been consumed in North America – 119.9 euros, and in European countries – 50.5 euros per person,

in Oceania, consumption of organic products is 33.5 euros. In other regions, this indicator is much lower.

The total organic agricultural land area in 2018 was 71519.7 thousand hectares. The largest organic land area is in Oceania (35999.4 thousand hectares, which is 50.3% of all organic land). Australia is the leader in the organic land area not only in the region but also in the world. Europe ranks second place in the organic land area (15635.5 thousand hectares, or 23 % of the total of organic land area). In 2019, 72.3 million hectares were under organic agricultural management worldwide. The region with the most organic agricultural land is Oceania, with 35.9 million hectares, followed by Europe with 16.5 million hectares, Latin America (8.3 million hectares), Asia (5.9 million hectares), North America (3.6 million hectares) and Africa (2.0 million hectares). Oceania has half of the global organic agricultural land. Europe, a region that has had a very constant growth of organic land over the years, has over 23 percent of the world's organic agricultural land followed by Latin America with 12 percent [8].

Organic food and drink sales reached more than 106 billion euros in 2019. In 2019, the countries with the largest organic markets were the United States (44.7 billion euros), Germany (12.0 billion euros), and France (11.3 billion euros). The largest single market was the United States (42 percent of the global market), followed by the European Union (41.4 billion euros, 39 percent) and China (8.5 billion euros, 8.0 percent). The highest per-capita consumption in 2019, with 344 euros, was found in Denmark. The highest organic market shares were reached in Denmark (12.1 percent), Switzerland (10.4 percent) and Austria (9.3 percent).

Thus, although North America and Europe generate most sales, their share of the total market is shrinking. The coronavirus crisis is predicted to accelerate this trend as more regional markets for organic foods develop. In particular, the share of developing countries, such as China, India, Brazil and Indonesia, is likely to grow at a fast rate in the coming years. The pandemic, which began in spring 2020, has had a profound impact on our daily lives, as well as on the organic food industry. Consumers are turning to organic foods as they look more closely at personal health, wellness and nutrition. Organic is likely to benefit as the food industry transitions to a post-COVID world [8].

Considering the potential of organic production in terms of regions of the world, it is important to note that Africa is developing quite rapidly in this area. There were more than 2 million hectares of certified organic agricultural land in 2019. Compared to 2018, Africa reported 177054 hectares more, a 9.5 percent increase. There were at least 850000 producers. Tunisia was the country with the largest organic area (with almost 287000 hectares in 2018), and Uganda had the largest number of organic producers

(more than 210000). The country with the highest organic share of the total agricultural land in the region was the island state São Tomé and Príncipe, with 24.9 percent of its agricultural area being organic. The majority of certified organic products in Africa are destined for export markets. Key crops are coffee, olives, cocoa, nuts, oilseeds, and cotton (see page 189). Five countries in Africa have legislation on organic agriculture, and five countries are drafting legislation. Six countries have a national standard but no organic legislation.

The total area dedicated to organic agriculture in Asia was more than 5.9 million hectares in 2019. There were 1.4 million producers, most of which were in India. The leading countries by area were India (2.3 million hectares) and China (over 2.2 million hectares). Timor-Leste had the highest proportion of organic agricultural land (8.5 percent). Twenty-one countries in the region have legislation on organic agriculture, and seven countries are drafting legislation.

As of the end of 2019, 16.5 million hectares of agricultural land in Europe (countries, than belong to European Union is 14.6 million hectares) were managed organically by over 430'000 producers (European Union: almost 344000). In Europe, 3.3 percent of the agricultural area was organic (European Union: 8.1 percent). Organic farmland has increased by over 0.97 million hectares compared to 2018. The countries with the largest organic agricultural areas were Spain (2.4 million hectares), France (2.2 million hectares) and Italy (2.0 million hectares). In twelve countries, at least 10 percent of the farmland was organic. For example, Liechtenstein has the lead (41.0 percent), followed by Austria (26.1 percent) and Estonia (22.3 percent). Retail sales of organic products totalled 45.0 billion euros in 2019 (European Union: 41.4 billion euros), an increase of 8.0 percent since 2018. The largest market for organic products in 2019 was in Germany, with retail sales of 12.0 billion euros, followed by France (11.3 billion euros) and Italy (3.6 billion euros) [8; 10-11].

In Latin America, over 224000 producers managed almost 8.3 million hectares of agricultural land organically in 2019. This constituted 11 percent of the world's organic land and 1.2 percent of the region's agricultural land. The leading countries were Argentina (3.7 million hectares), Uruguay (2.1 million hectares) and Brazil (1.3 million hectares). The highest organic shares of total agricultural land were in Uruguay (15.3 percent), French Guiana (11.3 percent) and the Dominican Republic (5.5 percent). Many Latin American countries remain important exporters of organic products such as coffee, cocoa, and bananas. In Argentina and Uruguay, temperate fruit and meat are key export commodities. Nineteen countries in the region have legislation on organic agriculture, and two countries are drafting legislation. Brazil has the largest market for organic products in Latin America. Like

Asia, demand is coming from a growing middle class seeking healthy, nutritious foods.

In North America, over 3.6 million hectares of farmland were managed organically in 2019. Of these, 2.3 million were in the United States and 1.3 million in Canada, representing 0.8 percent of the total agricultural area in the region. New records were achieved in both the US organic food market and organic non-food market. Organic food sales reached 50.1 billion US dollars an increase of 4.5 percent compared to 2018. Sales of organic non-food products jumped by 8.7 percent to 6 billion US dollars. Almost six percent of the food sold in the United States is now organic. In the United States, the COVID-19 pandemic has had dramatic consequences for the organic sector. Demand for organic fresh produce grew substantially from March onward as consumers continued at-home eating in the face of restaurant closures. In fact, the Organic Produce Network predicted double-digit growth of fresh produce sales in its analysis during the year. Fresh fruit and vegetable sales averaged 18 percent year-over-year growth in each of the first three quarters. Canada's total organic market (including food and non-food items) reached 6.93 billion Canadian dollars, up from 3.5 billion in 2012, with a compound annual growth rate of 8.7 percent. The market share of organic food and beverages sold through mainstream retailers has grown from 2.6 to 3.2 percent (2019) [8].

Oceania is a region that includes Australia, New Zealand, and the Pacific Island states. There were over 18'000 producers, managing almost 36.0 million hectares. This constituted 9.7 percent of the region's agricultural land and half of the world's organic land. More than 99 percent of the organic land in the region is in Australia (35.7 million hectares, most of which is extensive grazing land), followed by New Zealand (almost 89'000 hectares) and Samoa (over 41'000 hectares). The highest organic shares of all national agricultural land were in Samoa (14.5 percent), followed by Australia (9.9 percent), Fiji (5.5 percent), Vanuatu (4.5 percent), Solomon Islands (3.5 percent) and French Polynesia (3.4 percent). Four countries in Oceania have legislation on organic agriculture, and twelve countries have a national standard but no organic legislation [8].

Australia has a strong climate: drought, hot summer temperatures and an abundance of fuel loads, such as dry leaf litter. As a consequence, over ten million hectares of bushland were incinerated. For some of the hardest-hit regions, re-establishing their organic status will take much time, and some have lost entire orchards and native tea tree plantations. Many of these operators will be without production for years. Due to the drought and shortages of available feed for many livestock producers, the year 2020 has seen the largest demand for organic hay and grain for at least a decade with livestock fodder.

The availability of land resources is the basis for the effective development of organic production. Effective use of agricultural land is essential for sustainable development of the agricultural sector of Ukraine. Land resources are the basis of material and non-material production. The development of productive forces, the scale of production and the material well-being of the people depend on the level of land use efficiency. Land resources are needed by all sectors of the economy, but their role in different areas of social production is not the same. If in industry, in addition to mining land is only a spatial basis, in agriculture it is the main means of production. The role of land in agricultural production is depended by the fact that it has a specific unique characteristic, it is fertility. Due to this characteristic, the land actively influences the process of agricultural production. There are the following types of soil fertility:

a) the natural fertility is characterized by the ability of the soil to provide plants with essential nutrients due to the stock created by soil-forming processes, as well as determined by climatic conditions;

b) the artificial fertility is created in the process of production of material goods, when a person, not satisfied with the potential of the earth, formed under the influence of natural factors, his activities trying to improve the physical-chemical and biological properties of the soil;

c) the economic (effective) fertility is a consequence of the organic unity of natural and artificial fertility [10].

The world land fund structure has been characterized in table 2.

Table 2

World Land Fund

Category of lands	Area, million km²	Share of land area, %
Glaciers	16,3	11
Polar and alpine deserts	5	3,3
Tundra and forest tundra	7	4,7
Swamps outside the tundra	4	2,7
Lakes, rivers, reservoirs	3,2	2,1
Irrigated deserts, rocky soils and coastal sands	18,2	12,2
Forests	40,3	27
Grassy-shrub pastures and natural meadows	28,5	19
Agricultural area	19	13

Land for industrial and urban purposes	3	2
Soils prone to erosion, salinization, waterlogging, lateritic and gypsum crusts, etc	4,5	3
Drought in general	149	100
Forests	40,3	27
Grassy-shrub pastures and natural meadows	28,5	19
Agricultural area	19	13
Land for industrial and urban purposes	3	2
Soils prone to erosion, salinization, waterlogging, lateritic and gypsum crusts, etc	4,5	3
Drought in general	149	100

Source: summarized by authors by [10]

The land fund of the planet is 13,400 million hectares. The largest share (25%) is in Asia, the smallest (6%) - in Australia and Oceania. The largest share of pastures is in Africa (24%). Arable land (11% of the land fund) provides 88% of food. Pastures and meadows, which occupy 26% of the land fund, give another 10% of products.

Countries and regions are unequally provided with land resources, especially agricultural lands. Eurasia accounts for 59% of the world's arable land, North and Central America – 15%, Africa – 15 %, South America – 8 %, Australia – 3 %. Most (80 %) of the world's arable land is located in the arid zone. The largest share of pastures is located in Africa (24 %) and Asia (18 %). The average world indicator of agricultural land supply per capita is 0.23 ha. In different countries, this figure differs significantly. In Australia it is 2.45 hectares per person, in Canada – 1.48 hectares, in Ukraine – 1.07 hectares, in Russia – 0.9 hectares. In China, Bangladesh and Belgium there is 0.07 ha per capita, in Egypt – 0.05 ha, in Japan – 0.03 ha.

The agricultural land is land provided for the production of agricultural products, agricultural research and training activities, the location of relevant production infrastructure, including the infrastructure of wholesale markets for agricultural products, or intended for these purposes.

Agricultural lands include agricultural lands (arable lands, perennial plantations, hayfields, pastures and fallow lands) and non-agricultural lands (field protective forest belts and other protective plantings, except for those

referred to lands of other categories etc.)

Arable land is any land capable of being ploughed and used to grow crops. For the purposes of agricultural statistics, the term often has a more precise definition. For example, arable land is the land under temporary agricultural crops (multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years). The abandoned land resulting from shifting cultivation is not included in this category. Data for arable land are not meant to indicate the amount of land that is potentially cultivable. In the Eurostat glossary the similar definition use: land worked (ploughed or tilled) regularly, generally under a system of crop rotation. Non-arable land can sometimes be converted to arable land through methods such as loosening and tilling (breaking up) of the soil, though in more extreme cases the degree of modification required to make certain types of land arable can become prohibitively expensive [10].

Pasture is land used for grazing. Pasture lands in the narrow sense are enclosed tracts of farmland, grazed by domesticated livestock, such as horses, cattle, sheep, or swine. The vegetation of tended pasture, forage, consists mainly of grasses, with an interspersed of legumes and other forbs (non-grass herbaceous plants). Pasture is typically grazed throughout the summer, in contrast to meadow which is ungrazed or used for grazing only after being mown to make hay for animal fodder. Pasture in a wider sense additionally includes rangelands, other unenclosed pastoral systems, and land types used by wild animals for grazing or browsing.

Hay is mowed and dried grass from meadows, fields, steppes, forests and even swamps. Straw is the dried stems of different crops (cereals, legumes, flaxseed, buckwheat and others) that remain after harvest (threshing) [10].

Australia is the country with the most organic agricultural land. It is estimated that 97 percent of the farmland is extensive grazing areas. Organic agricultural land in Australia was 27.1 million hectares in 2016 and 35.69 million hectares in 2019. Argentina is second, followed by Spain in third place (Fig. 1).

The 10 countries with the largest organic agricultural areas have a combined total of 56.5 million hectares and constitute almost 80 percent of the world's organic agricultural land. Apart from the organic agricultural land, there are further organic areas such as wild collection areas. These areas constitute approximately 35 million hectares. There is a significant increase in the of organic agricultural land area in 2019 compared to 2016. Also during this period there is a change of leaders. In 2016, the first five positions have been occupied by such countries as Argentina, China, the United States, Spain, Italy, and Uruguay. In 2019, the leaders were Argentina, Spain, France, USA, and India. Ukraine occupies 20th position

with organic agricultural land area 468 thousand hectares. The share of the world's agricultural land that is organic is 1.5 percent. The highest organic share of total agricultural land, by region, is in Oceania (9.6 percent) followed by Europe with 3.3 percent and Latin America with 1.2 percent. In the European Union, the organic share of the total agricultural land is 8.1 percent. In the other regions, the share is less than one percent. Many individual countries, however, have a much higher organic share, and in 16 countries, 10 percent or more of the agricultural land is used for organic production. Most of these countries are in Europe. The country with the highest organic share is Liechtenstein, with 41 percent of its agricultural land under organic management. It is important to note that many island states have high shares of agricultural land under organic management, such as Samoa and São Tomé and Príncipe.

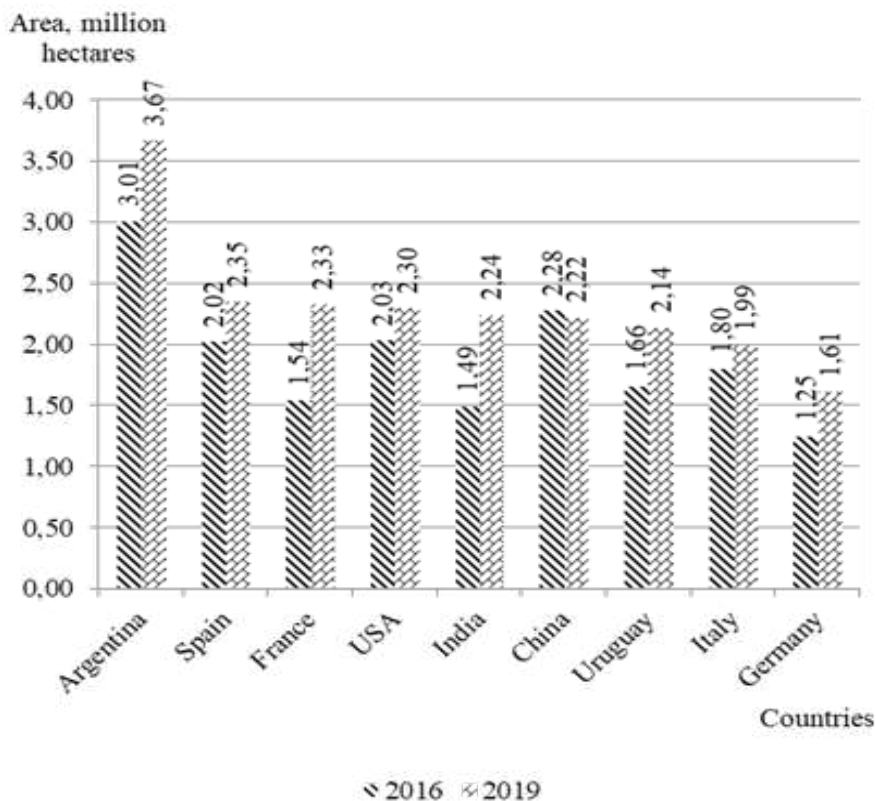


Fig. 1. Countries with the largest areas of organic agricultural land (without Australia)

Source: summarized by authors by [8]

Thus, organic production is a very promising area of the agricultural sector development. Global trends in this area are positive. The organic products demand is constantly increasing because people pay more and more attention to their health. The organic production development potential depends primarily on the availability of organic agricultural land, so it is necessary to pay attention to the tillage technology, fertilization and ensure careful treatment of land resources.

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COMPETITIVENESS ANALYSIS OF THE REGIONAL HIGHER EDUCATION SYSTEMS OF UKRAINE IN THE CONTEXT OF THE NATIONAL SECURITY

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Introduction. Globalization processes intensify competition between universities and higher education (HE) systems of states and regions. The consequences of these processes are especially significant for national security of post-Soviet countries oriented towards integration into the European educational and scientific space. Ukraine is one of such countries. On the one hand, the Ukraine is reforming its HE system by adopting international quality standards; on the other hand, the country is experiencing significant losses due to the military conflicts, educational and labor migration.

According to the UNESCO Institute for Statistics [13] the number of outbound internationally mobile students from Ukraine increased from 35.316 to 72.063 for the period 2010-2018. The Top 5 countries where Ukrainian youth migrates the most include neighbouring nations with higher quality of life standards and higher incomes. According to a survey of foreign students in Poland [4], these reasons motivate the majority of Ukrainian youth to stay abroad after studying abroad.

Imbalances in social and economic development, including in HE, are a factor in youth losses, especially at the regional level. These problems are especially relevant for border regions, as well as areas with difficult environmental situations. The aforementioned factors, along with several other social and economic problems related to regional HE systems, emphasize the importance of a comprehensive analysis and identification of ways to increase educational competitiveness.

The purpose of this study is to help increase the competitiveness of HE systems in Ukraine's regions based on a comprehensive analysis of their quality, social responsibility and economic efficiency.

The first part of the study offers a conceptual model for analyzing the competitiveness of HE systems based on quality, social responsibility and economic efficiency. In the second part we propose the methodological framework and list of indicators for analyzing the regional HE systems based on developed conceptual model. The third part contains the results

of an analysis of HE systems in 25 regions of Ukraine, as well as strategic areas for improving their competitiveness.

Methodological approaches to the competitiveness analysis of the regional higher education system. Higher education is a particular type of social activity and a sector of the regional economy. Firstly, according to classical works and contemporary studies of HE (e.g. Altbach [1], McCowan [7], Teichler [11]) this sector is crucial in the development of human, social and intellectual capital. The second characteristic is the generation of new knowledge and skills that result from the activity of higher education institutions (HEIs) and provide not only benefits in the labour market, but also shape the innovation potential of economic growth in other sectors of the economy. The third characteristic is related to a set of general and specific functions of HE in the regional development (Table 1).

Table 1

Matrix of the relationship between general and specific functions of higher education

		Special functions of higher education		
		Teaching	Research	Public services
General public functions of higher education	Social	Development of social capital through social interaction and intercultural communication	Generation of new ideas, knowledge that are implemented into social innovations and provide social security	Implementation of the ideas of responsibility in the socio-cultural, ecological spheres of society
	Economic	Development of intellectual capital, which ensures competitiveness in the labor market	Generation of ideas that are implemented into innovations and provide the economy's competitiveness	Implementation of the ideas of social responsibility in the economic sphere of society
	Political	Development of leadership skills that provides for the formation of the society's political elite	Generation of new knowledge that provides security at the level of national, regional and local political systems	Critical comprehension and public discussion of social issues and politics.

Source: developed by the authors

The special features of HE as an object of analysis and competitiveness management are also related to the influence of state and regional regulatory institutions, on the one hand and irrational behavior models in the educational services market, on the other hand.

The features defined above are important for understanding the factors

of HE competitiveness as well as its impact on the economic growth and sustainable development of the region and national security.

From the standpoint of an inter-disciplinary approach, we propose the definition of higher education as a system of interconnected informal (values, ways of thinking, behaviour, etc.) and formal (laws, standards, educational providers, stakeholders, etc.) institutions that provide understanding of the key role of knowledge in self-improvement, its storage, transmission and generation of new knowledge for the implementation of individual and institutional development goals, as well as determine the intellectual potential and competitiveness of all spheres of a society's life.

The proposed definition provides outlines of the institutional architecture of the regional HE system, the identification of its components, including (Fig. 1): 1) formal and informal providers, 2) products, 3) internal and external stakeholders.

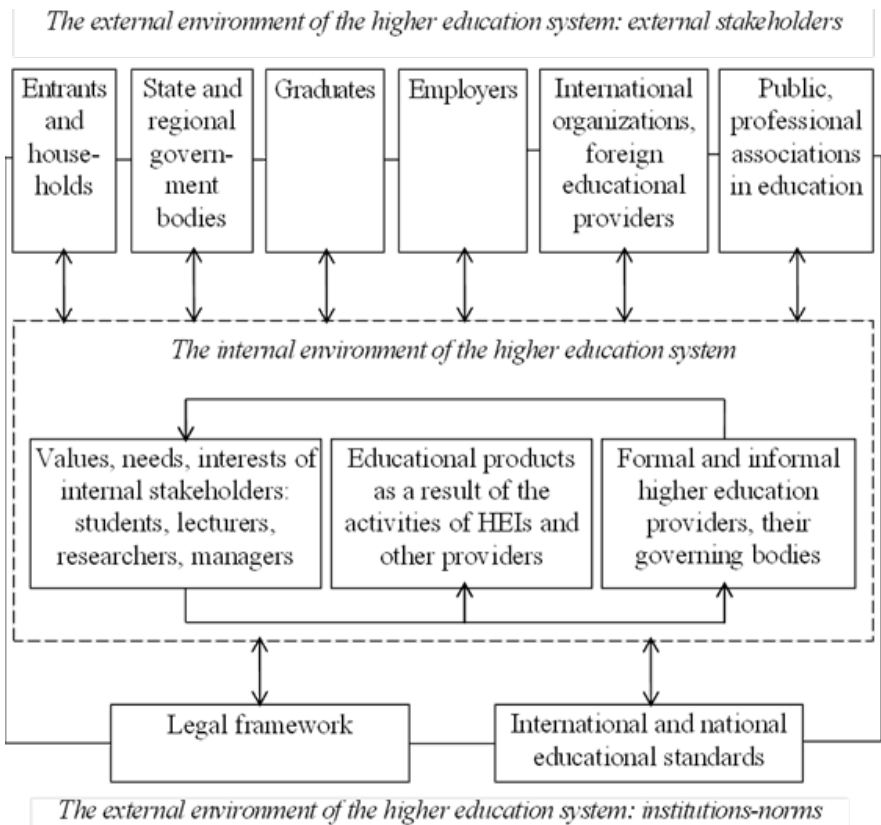


Fig. 1. Institutional architecture of the higher education system

Source: developed by the authors

The study of goals on the HE development, defined in particular by the Global Goals of Sustainable Development, the Incheon Declaration [16; 17], shows that such goals have significant differences when it concerns their adaptation to the regional or national level of the country's development. At the same time, summarizing the development goals related to the HE indicates that its global competitiveness can be interpreted as the function of three key variables – quality, social responsibility and economic efficiency.

The conceptual model for analysis of the HE system competitiveness [6] is based on the following highlights:

1) providers, their products and stakeholders are the main elements of the higher education system. Stakeholders' interests, the potential and performance results (products) of providers form the basis of the model and are key objects for institutional analysis;

2) quality, social responsibility and economic efficiency are the key criteria for institutional analysis of the higher education system competitiveness;

3) it is advisable to develop different types of applied models of analysis, depending on the level of decision-making (local, regional, national) in higher education competitiveness management.

The proposed conceptual model makes it possible to substantiate methodological approaches to the development of analytical framework and determining factors of the higher education system competitiveness at the regional level.

Indicators for competitiveness analysis of the regional higher education system. On the basis of a conceptual model for the HE analysis, we propose methodological approaches to competitiveness measurement according to three criteria – quality, social responsibility and economic efficiency.

Taking into account international principles of quality management, the features of the HE system as a governance object, the needs of balancing interests of stakeholders we offer a scheme for the quality analysis by the following criteria: 1) consumers' satisfaction (students, graduates, employers, etc.); 2) quality of the institutional environment; 3) quality of performance results in HE; 4) quality of suppliers (entrants, secondary education institutions, etc.).

Lists the indicators of the higher education system quality at the regional level, which also take into account the peculiarities of its organization in Ukraine.

The indicators of the analysis of HE quality have different weights for particular stakeholder groups. In this regard, the proposed list can be used as a “set of possible indicators” to make decisions for improving the competitiveness of HE by quality criterion.

The generalization of theoretical and methodological approaches to understanding the essence of social responsibility of HEIs [5] as well as

Guidance of International Organization for Standardization, gives grounds to distinguish three types of classifications in the analysis of this object:

Table 2

Indicators of quality in competitiveness analysis of the region's HE system

Analysis object	Analysis indicators
Consumers' satisfaction	<ul style="list-style-type: none"> • Level of students' and graduates' satisfaction with the HE quality • Level of employers' satisfaction with the HE quality
Quality of the institutional environment	<ul style="list-style-type: none"> • Availability of institutions that monitor the HE quality • Number of lecturers and researchers per 10,000 inhabitants • Average age of lecturers and researchers in HEIs
Performance results	<ul style="list-style-type: none"> • Employment rate of HEIs graduates • Number and share of HEIs students – winners of international and national competitions • Number of patents per HEIs researcher • Number of HEIs in the world university rankings • Share of international students in HEIs • Number of works with international indexation per lecturer and researcher of HEIs
Quality of suppliers	<ul style="list-style-type: none"> • Average / median grade of the document on secondary education of entrants / first-year students of HEIs • Share of first-year students with the competitive score of 180 or higher at the External Independent Testing Exam

Source: developed by the authors.

- the first type: areas of social responsibility: legal, social, economic, environmental.
- the second type: internal and external stakeholders who are interested in the fulfilment of HE goals;
- the third type: main activities in HE, which ensure the implementation of its basic goals and functions.

Taking into account the above mentioned approaches to understanding the content and levels of social responsibility, it is possible to define a set of indicators for measuring the competitiveness of the HE system by the criterion of social responsibility (Table 3).

In a broad sense, the higher education system is effective if it enhances the quality of life of its stakeholders, generates new knowledge, and ensures innovative development and competitiveness of business entities in the region of HEI activity. In a narrow sense, the economic efficiency of the HE system can be measured through the ratio of economic results and assets of the system.

Table 3*Indicators of social responsibility in competitiveness analysis of the region's HE system*

Analysis object / HE stakeholders	Analysis indicators
Students	<ul style="list-style-type: none"> • Number and share of students with disabilities and special needs • Number of the recorded facts of violations of students' rights • Number and share of students participating in projects related to regional development • Number and share of students enrolled out of the funds of local budgets
Lecturers, researchers and HEI management	<ul style="list-style-type: none"> • Average salary in the region's HE system • Number of the reported facts of violations of the rights of lecturers and researchers • Number and share of lecturers and researchers involved in regional development projects
Regional management authorities	<ul style="list-style-type: none"> • Regional budget funds directed to the development of the region's higher education • Volume of the regional contract for the training in regional HEIs • Index of Regional Human Development

Source: developed by the authors

Summarizing methodological and applied approaches to the analytics of HE efficiency developed in the works of Brint and Clotfelter [2], Matyukh [13], Moyseyenko and Hrynkevych [8], we propose to use three types of economic efficiency indicators:

- 1) result indicators that reflect the activity of the HEIs in absolute terms;
- 2) performance indicators that make it possible to compare absolute indicators per unit of HEIs assets, student, etc.;
- 3) income diversification indicators that reflect the specific weight of income sources from various activities in total revenues of the HE system.

Table 4 presents the system of indicators for monitoring the HE competitiveness by the criterion of economic efficiency.

Competitiveness analysis of the HE system involves not only the development of the indicators system, but also the use of reliable tools for measuring them, information and managers capable of achieving target indicators of competitiveness improvement. In this context Higher Education Reform Experts give the example of using "Close the loop" principle in monitoring the higher education. The essence of the principle is to monitor only those indicators on which it is obligatory to make appropriate management decisions.

Table 4*Economic efficiency indicators in competitiveness analysis of the region's HE system*

Analysis object	Analysis indicators
Results	<ul style="list-style-type: none"> • Number of students per 10 thousand people of the region • Number and share of students studying under contract • Revenue of the region's HE system • Average salary of employees with HE
Performance	<ul style="list-style-type: none"> • Number of innovative enterprises in region • Share of innovative products in region • Unemployment rate among people with HE • Revenue of the region's HE system per unit of HEIs assets • Revenue of the region's HE system per employed in HEIs
Income diversification	<ul style="list-style-type: none"> • Revenue share from educational activity in total revenues of the region's higher education • Revenue share from research activity in total revenues of the region's higher education • Revenue share of extra budgetary funds in total revenues of the region's higher education

Source: developed by the authors

Modern model for improving the higher education competitiveness in Ukraine's regions. Despite numerous works on economics and management in higher education, there is little research, which can be used to justify strategic priorities for the development of regional HE systems with a list of target indicators.

The purpose of this part of the study is to substantiate the strategic priorities for the HE development in the regions of Ukraine, taking into account national interests, regional peculiarities, as well as the globalization of the educational and scientific space.

In accordance with this goal, the analysis of problems of the HE competitiveness in Ukraine's regions by the criteria of quality, social responsibility and economic efficiency is conducted; the regional priorities for enhancing the HE competitiveness in Ukraine with the use of appropriate indicators are substantiated.

The results of testing the model indicate a significant asymmetry of regional HE systems by the competitiveness indicators. In the analysis of quality the most noticeable is the unequal distribution of Ukraine's regions by the level of international academic reputation of HEIs, in particular, their number in world university rankings (Table 5).

Table 5

Ukraine's HEIs and their scores in the world rankings (2018-2020)

Region of Ukraine	The Times Higher Education World University Rankings	QS World University Rankings
Kyiv (Ukraines Capital)	Taras Shevchenko National University of Kyiv (800-1001+) National Technical University of Ukraine – Igor Sikorsky Kyiv Polytechnic Institute (1001+)	Taras Shevchenko National University of Kyiv (411-420; 541-550)
		National Technical University of Ukraine – Igor Sikorsky Kyiv Polytechnic Institute (501-550; 701-750)
		National University of Kyiv-Mohyla Academy (1001+)
Donetsk region	-	Vasyl Stus Donetsk National University (801-1000)
Lviv region	Ivan Franko National University of Lviv (1001+)	Lviv Polytechnic National University (751-800)
	Lviv Polytechnic National University (80-1001+)	
Sumy region	Sumy State University (1001+)	Sumy State University (801-1000; 701-750)
Kharkiv region	V.N. Karazin Kharkiv National University (1001+)	V.N. Karazin Kharkiv National University (401-410; 491)
		The National Technical University «Kharkiv Polytechnic Institute» (701-750; 651-700)

Source: Quacquarelli Symonds [10]; Times Higher Education [14].

Only 8 of the 281 Ukrainian HEIs were ranked in the Times Higher Education World University Rankings and QS World University Rankings in 2018-2020. These universities represent only 5 of 26 Ukraine's regions. It should be noted that these regions had also the high quality indicators of secondary education of HEIs entrants, in particular in mathematics [15], see Fig. 2.

The tendency of increasing imbalance in the number of entrants coming to the region for HE and leaving it is dangerous for balanced regional development. The donor regions that have the greatest loss of intellectual potential as a result of interregional and international migration (from 70% or more of potential students) include 10 regions (Fig. 3).

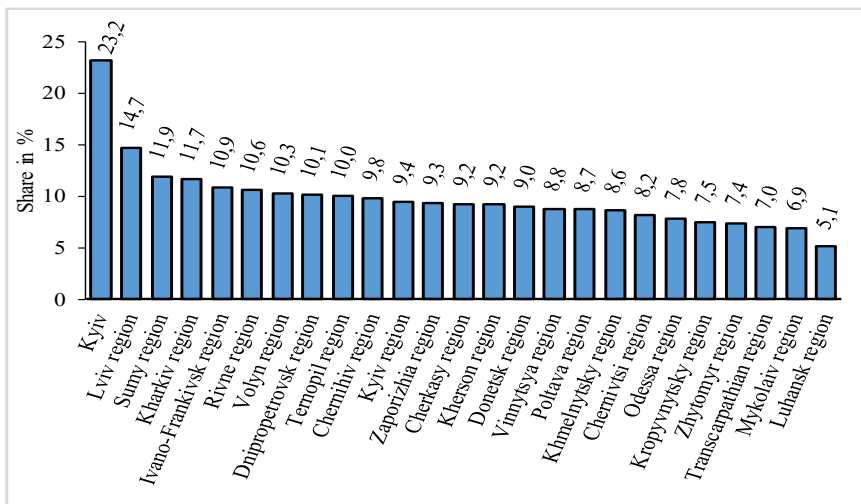


Fig. 2. Share of HEI entrants with the score in math 180 or higher at the External Independent Testing Exam, % (2019)

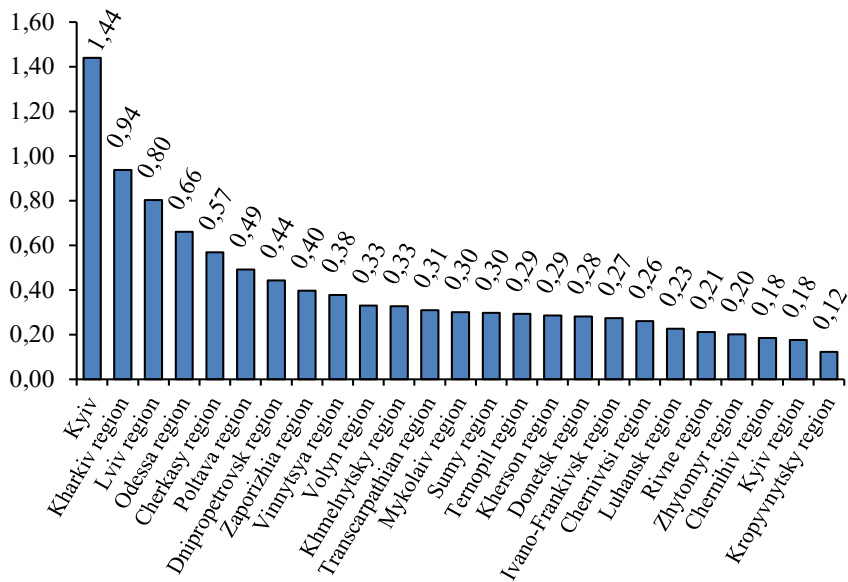


Fig. 3. Ratio of HEI entrants and high school graduates participating in the External Independent Testing Exam in this region (2019)

Source: calculated by the authors using [12; 15].

Taking into account the Global Sustainable Goals, the objectives determined in Ukraine’s Regional Development Strategies as well as the results of the quality analysis of the HE systems in Ukraine’s regions we propose the following priority directions of increasing their competitiveness (Table 6).

Table 6

Priority areas for improving the competitiveness of HE systems in Ukraine’s regions by the criterion “Quality”

Priority areas	Regions of Ukraine	Target indicators
<i>Entrants and students</i>		
Increase in the attractiveness of the region for higher education entrants, reducing human losses as a result of interregional educational migration	Kropyvnytskyi, Kyiv, Chernihiv, Kherson, Zhytomyr, Transcarpathian, Donetsk, Volyn, Rivne, Vinnytsia, Khmelnytskyi, Mykolaiv regions	Ratio of HEI entrants and high school graduates participating in the External Independent Testing Exam in this region
Increase in the attractiveness of the region for international students	Dnipropetrovsk, Lviv, Odesa regions, the city of Kyiv	Share of international students
<i>Lecturers and researchers</i>		
Improving the academic reputation of HEIs through publications in editions indexed in international scientometric databases	Kropyvnytskyi, Rivne, Kherson, Mykolaiv, Khmelnytskyi, Chernihiv, Zhytomyr, Poltava, Vinnytsia, Ivano-Frankivsk, Cherkasy regions	Number of works per 100 HEIs lecturers and researchers in scientific journals indexed in international scientometric databases (Scopus, Web of Science, etc.)
<i>HEI management</i>		
Improving the academic reputation of HEIs in national rankings	Chernihiv, Zhytomyr, Cherkasy, Kherson, Volyn, Rivne, Kropyvnytskyi, Poltava, Zaporizhzhia, Khmelnytskyi, Mykolaiv, Luhansk, Transcarpathian, Ternopil, Ivano-Frankivsk regions	Region’s HEI rating in the National Academic Rating “Top 100 Ukraine”
Improving the international academic reputation of HEIs	The city of Kyiv; Kharkiv, Lviv, Dnipropetrovsk, Sumy, Odesa, Chernivtsi, Vinnytsia, Donetsk, Ivano-Frankivsk regions	Number of region’s HEIs and its scores in the world university rankings (e.g. The Times Higher Education World University Rankings; QS The World University Rankings, etc.)

Enhancement of the region's HEIs participation in international educational associations	Kherson, Kropyvnytskyi, Zaporizhzhia, Khmelnytskyi, Kyiv, Lviv, Rivne, Zhytomyr regions	Number of the region's HEIs – participants of international associations
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Source: developed by the authors.

Ukraine does not exceed 1% (2019), whereas, for example, in Poland, this indicator is twice as high [3], Fig. 4.

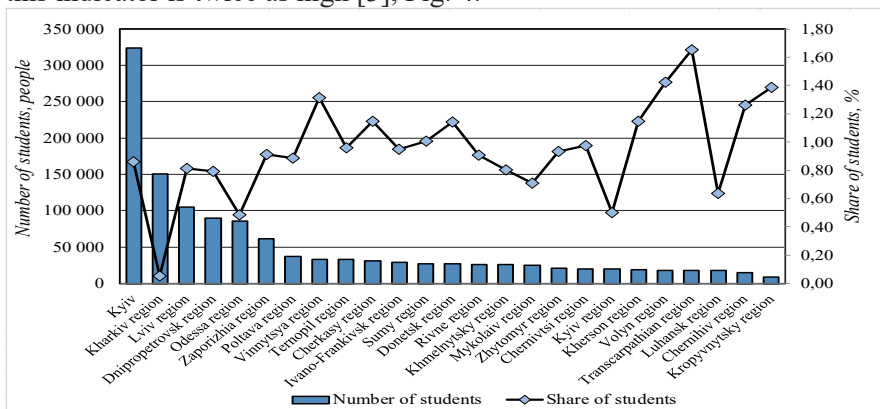


Fig. 4. Number and share of students with disabilities in HEIs

Source: calculated by the authors using [12]

The significant differences in distribution of the Ukrainian regions by the financial support of HEIs are noticeable. The share of HEI students studying at the expense of local budgets confirms this conclusion (Fig. 5).

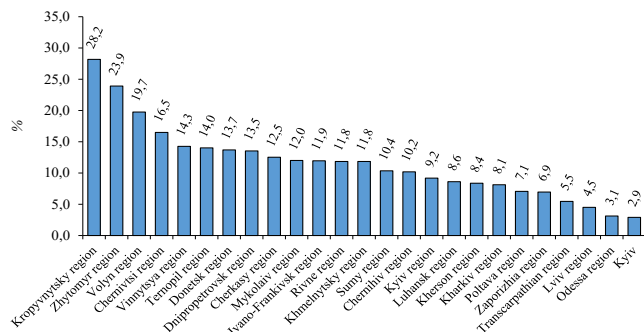


Fig. 5. Share of HEIs students studying at the expense of local budgets, % (Ukraine's regions, 2019)

Source: calculated by the authors using [12]

The priorities for enhancing the competitiveness of HE systems in Ukraine's regions by the criterion of social responsibility are defined in Table 7.

Table 7

Priority areas for improving the competitiveness of HE systems in Ukraine's regions by the criterion "Social responsibility"

Priority areas	Regions of Ukraine	Target indicators
<i>Entrants and students</i>		
Increasing the accessibility of higher education to people with special educational needs	All the regions of Ukraine	Number of students with disabilities in HEIs
<i>Share of students with disabilities in HEIs</i>		
Increasing the level of providing students with dormitories and their quality	Ivano-Frankivsk, Transcarpathian, Kherson, Zaporizhzhia, Mykolaiv, Lviv, Poltava, Vinnytsia, Donetsk, Cherkasy, Kropyvnytskyi (Kirovohrad), Zhytomyr, Chernihiv, Kyiv, Khmelnytskyi, Sumy, Volyn, Dnipropetrovsk regions, the city of Kyiv	Level of the provision of HEI students with dormitories
<i>Students, lecturers and researchers, HEI management</i>		
Increasing the level of academic integrity and respecting the rights of lecturers, researchers and students	Kherson, Rivne, Luhansk, Donetsk, Odesa regions	Number of the reported facts about violations of the rights of lecturers, researchers in HEIs
<i>Regional authorities in higher education</i>		
Increasing the role of local authorities in shaping the volume and structure of training for regional development needs	Donetsk, Odesa, Transcarpathian, Kharkiv, Lviv, Luhansk, Zaporizhzhia, Poltava, Dnipropetrovsk regions, the city of Kyiv	Share of students studying at the expense of the local budget, %

Source: developed by the authors

The lack of statistical data on revenues and expenditures in HE at the regional level makes it difficult to analyze its competitiveness by the criterion of economic efficiency. By performance criterion in the economic efficiency analysis of HE systems, the regional distribution of patents for inventions

and utility models per 100 researchers is the most disproportional. In most Ukraine's regions, the level of interconnection of research and innovative activity results remains low. This conclusion confirms the indicator of the number of innovative enterprises in the regions of Ukraine (Fig. 6).

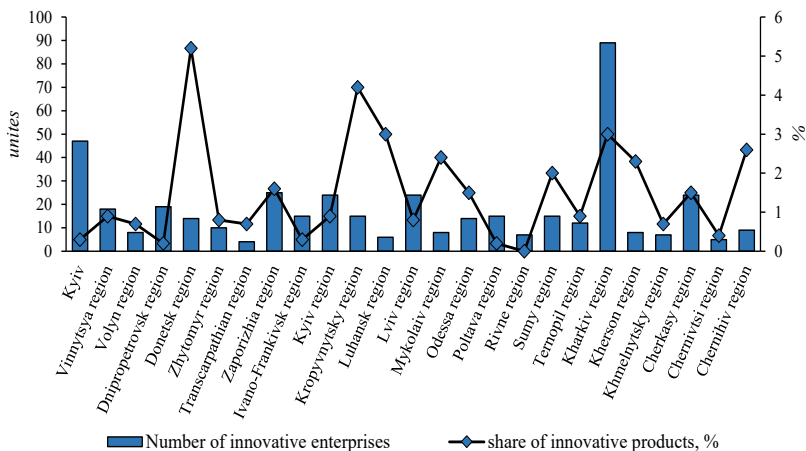


Fig. 6. Number of innovative enterprises and the share of innovative products in industry, % (Ukraine's regions, 2019)

Source: calculated by the authors using [12]

The priority areas for enhancing the competitiveness of higher education systems in Ukraine's regions by the criterion of economic efficiency are identified in Table 8.

Table 8

Priority areas for improving the competitiveness of HE systems in Ukraine's regions by the criterion "Economic efficiency"

Priority areas	Regions of Ukraine	Target indicators
<i>HEI graduates, employers</i>		
Increasing the employment rate of HEIs graduates studied at the expense of state and local budgets	Lviv, Ternopil, Transcarpathian, Chernihiv, Donetsk, Cherkasy, Ivano-Frankivsk, Kropyvnytskyi, Rivne, Kharkiv, Khmelnytskyi, Dnipropetrovsk regions, the city of Kyiv	Official employment rate of graduates studied at the expense of state and local budgets, %
<i>Lecturers and researchers, HEI management</i>		

Increasing the effectiveness of scientific research	Chernihiv, Sumy, Mykolaiv, Dnipropetrovsk, Kharkiv, Volyn, Zaporizhzhia, Lviv, Kyiv, Odesa, Transcarpathian, Zhytomyr, Cherkasy, Kropyvnytskyi, Poltava, Kherson, Chernivtsi, Ivano-Frankivsk regions, the city of Kyiv	Number of patents for inventions, utility models, industrial designs per 100 HEIs researchers
Increase in the revenues from R&D in the region	All the regions of Ukraine	Revenue share from scientific activity in total revenues of the region's HEIs
<i>HEI management, employers</i>		
Increasing the level of HEIs cooperation with domestic and foreign enterprises in innovative activity	Transcarpathian, Chernivtsi, Poltava, Khmelnytskyi, Mykolaiv, Volyn, Kherson, Rivne, Dnipropetrovsk, Cherkasy, Ivano-Frankivsk, Chernihiv, Vinnytsa, Donetsk, Kropyvnytskyi, Kyiv, Zhytomyr, Odesa, Zaporizhzhia, Ternopil, Lviv regions, the city of Kyiv	Share of enterprises that cooperate with HEIs in innovative activity, %

Source: developed by the author

Thus, the results of analysis of the competitiveness indicators of HE systems in the regions of Ukraine points out to significant imbalances in their development in terms of quality, social responsibility and economic efficiency. For example, the high values of indicators of academic reputation of lecturers and researchers, the level of entrants' preparation for the External Independent Testing Exam in Lviv region ensure the leadership position by quality criterion. Whereas, the low level of innovative activity in the region's industry, the problems of providing students with dormitories, the accessibility of higher education for socially vulnerable groups of the population, the low share of foreign students cause a decrease in the competitive position of Lviv region among other regions of Ukraine.

According to the set of indicators used to estimate the HE system competitiveness of Ukraine's regions, the Top-10 leaders include the city of Kyiv, Kharkiv, Lviv, Sumy, Chernivtsi, Dnipropetrovsk, Odesa, Poltava,

Ivano-Frankivsk, Transcarpathian regions. These regions provide not only high indicators' values of the HEI academic ranking, but also a greater balance of educational, social and economic indicators of competitiveness development.

The priority areas for improving the competitiveness of HE systems in Ukraine's regions, defined on the basis of the proposed conceptual model and the correspondent analytical framework, can be used in the design of both national and regional strategies for enhancing the higher education system of Ukraine.

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SYMBIOSIS OF STRATEGIC PLANNING AND TIME MANAGEMENT AS A TOOL OF BUSINESS CONSULTING

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The problem of time costs and constant lack of time in various spheres and areas of human life is becoming increasingly important. The time factor does not have the properties to increase and accumulate, which means that the success of a particular individual or organization depends on the efficient use of time. With the growing interest in time management, the latest concepts of time management are emerging and evolving [11].

To understanding modern time management, it is necessary to analyze the stages of its development. Therefore, researchers identify several stages in the development of time management (Fig. 1).

The stage of Taylorism covers the period 1910-1940. F. Taylor believed that in Western society in the early XX century formed a kind of stereotype

of «working with coolness», when workers due to natural inclination, «natural laziness» of man, as well as due to the established cultural tradition of «circular guarantee» deliberately slow down work. The «golden mean» between unreasonable requirements for speed and productivity, and «natural laziness» is, according to Taylor, it is in the methods of scientific production management; necessarily include such an important area as time management [6].

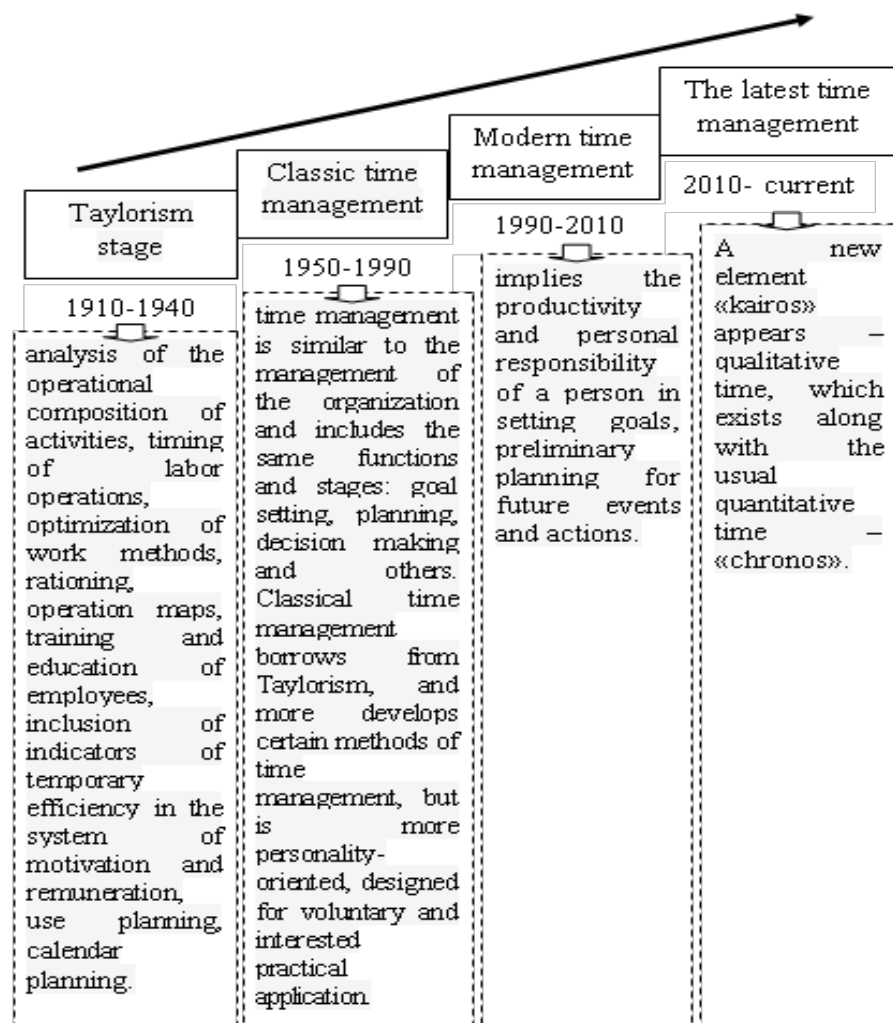


Fig. 1. Stages of time management formation [formed on the basis of 5; 6; 10]

Classical time management covers the period 1950-1990. The ideas of time management developed within the theoretical and applied management. There was an enrichment of management as a science that emerged at the intersection of economics, psychology and sociology.

Although time management is more humanitarian in nature, it uses the ideas and methods of mathematics and cybernetics. It was during this period that such sections as systemic, situational, synergetic approaches, decision theory, and others were added to management theory. There was a wide variety of research and practical recommendations in practical management and, inextricably linked to it, time management consulting. Modern time management covers the period from the 1990s to the horse of the 2010s. At this stage, it acts not only as a social practice, but is one of the most important areas of business consulting. That is, there are not only individual consultants, but also entire consulting organizations specializing in time management.

The first stage of this stage involves the needing to record cases. It was characterized by the compilation of lists of future cases in order to organize and reasonably allocate time between different activities. Time is distributed in the order of receipt of cases and for a small period of time.

The second stage involves calendar planning, i.e. forecasting the event until a certain point in the future, so the widespread use of flip calendars and notebooks for recording business meetings, organizers and more. Cases were distributed for a longer period, but the principle of priority is not observed. Cases are simply entered in the notebook in the order of receipt and executed in the available time. If a case is not completed, its implementation is simply postponed to the future, regardless of how important the case is.

The third stage is planning according to priorities. To the parameters of the two previous systems is added the ranking of tasks by importance and urgency. The goals of the activity are also divided into short-, medium- and long-term. The concept of daily planning is born: first the list of tasks is written down, and then they were distributed to performance according to degree of importance and urgency.

The third stage of time management takes a significant step in the direction of value planning. Productivity is significantly increased through purposeful daily planning and setting priorities. The third stage was considered the pinnacle of time management, but it has some serious shortcomings, not related to the idea itself, but to the imperfection of the paradigms and the lack of some vital elements.

The fourth stage is modern time management. Today, the organization of time was considered in close connection with the life position of the individual as a tool for the maximum realization of personal potential in accordance with life values, worldview and worldview of man. The human

mission is considered as a prerequisite for the formation of goals, goals as a subject for equipping with criteria, values as a basis for priorities and the desire for self-development as the main motivator [6].

The latest time management has been developing since 2010 to the present.

A significant point and difference from the previous stages is the priority of the importance of the case over its urgency. A new element of «kairos» appears – qualitative time, existing along with the usual quantitative time – «chronos». This stage absorbs all the advantages of the first, second and third generations, and gets rid of their disadvantages. In addition to the features of classical and modern concepts, this stage of development involves taking into account aspects of the digital transformation socio-economic relations between different actors at different levels of interaction [1; 4].

Based on the approaches, we formulate the definition of time management as a basic concept of research. In this study, time management will be understood as a subsystem within the overall management system of the organization, which is characterized by the features shown in Fig. 2.

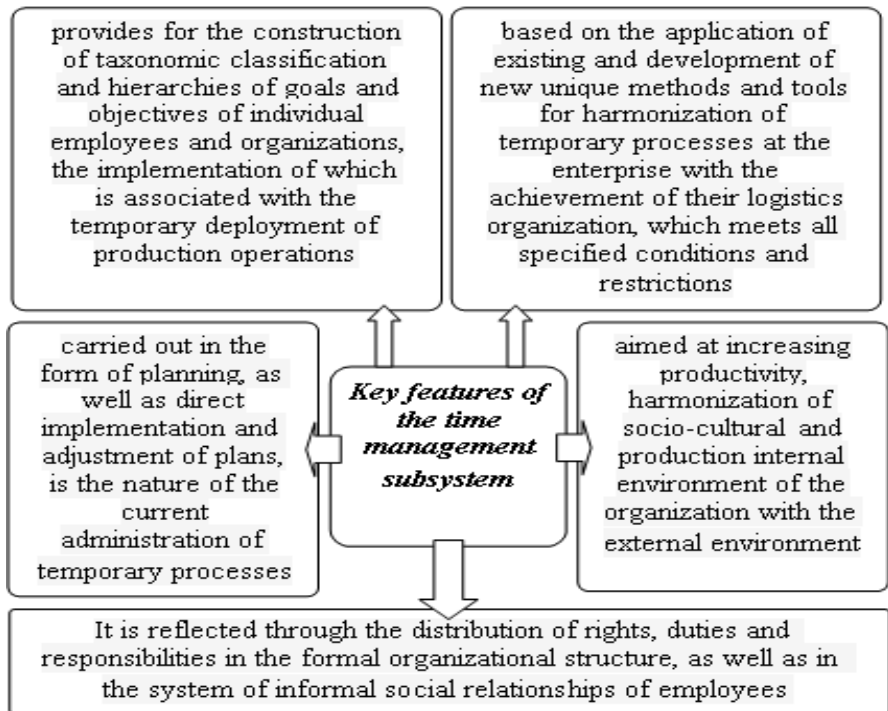


Fig. 2. Key features of the time management subsystem [formed on the basis of 1; 2; 4; 8]

The effectiveness of a modern business entity largely depends on the effective management of the leader, one of the main functions of which is strategic planning. Planning is the process of defining goals, developing tasks and methods of achieving them. Strategic planning is the basis for the management of employees of the enterprise, the process of determining the strategy or directions of enterprise development, decision-making on the allocation of resources within this strategy, including capital and human resources.

Strategic planning consists of several interrelated elements:

- documentation. When implementing a strategic plan, a simple schematic business plan is not enough. The plan should adequately reflect the details of goals and directions of development. It is necessary to develop a system of separate but interconnected plans such as: the main direction of development, production plan, design and estimate (for specific tasks) plans, etc.;

- availability and relevance of information. Forecasting the prospects of the enterprise can be based only on reliable, timely data that have undergone analytical processing;

- management of the planning process. Senior management must be able to respond quickly and adapt to change, control the process of adaptation of employees, because for the normal functioning of the enterprise changes are inevitable;

- organized planning. the main goal of planning is a synergetic effect: maximum achievements at minimum costs. However, to achieve synergy, the planning process must be subject to a certain order [7; 9].

In general, planning and time management were inextricably linked, as the latter involves the acquisition of such important skills as prioritization, planning, delegation of responsibilities and powers, ranking goals. The solution of these tasks facilitates the solution of more serious tasks: acquiring skills of rational use of time resources, increasing their own efficiency and effectiveness of work, organization of work and leisure processes, etc. At the same, the main tasks of time management in the field of planning include:

- analysis of time spent on certain tasks;
- goal setting, formulation and definition;
- drawing up a plan to achieve the goal, as well as setting priorities;
- goal realization;
- compiling a list of tasks to be performed;
- time recording by timing [7].

Based on the above, it is advisable to highlight the basic rules of time management:

- need to be able to set strategic goals in all areas of life that matter: work, family, personal life, self-development, relationships with loved

ones and friends, financial well-being, education. The main goals are the driving forces of life. They provide meaning and direction, facilitate the «procedure» of weeding out unnecessary cases;

- need to skillfully approach the choice of ways to achieve the desired result. Even after some time, goals may not change over the years, methods of achievement may change as needed;

- need to follow the daily ritual of composing tasks for the day and follow them;

- no need to create multiple lists;

- it is always necessary to bring the case to an end [3].

Complementing these principles with the methodology proposed by Covey, we can add six principles of building a time management system:

coherence (coherence) – interconnectedness, unity of all elements of the individual time management system (according to Covey: unity between vision and mission, roles and goals, priorities and plans, desires and discipline);

balance – «balance» in this case means a harmonious distribution of time so that it was enough to achieve important goals in various spheres of life (family, work, health, etc.);

concentration – need to constantly remember the key importance of activities for your life and focus primarily on such matters. To do this, Covey suggests focusing not on daily planning, but weekly. Weekly planning allows you to reserve fairly long periods of time (afternoon-day) for important but not urgent matters;

humanity – in relations with other people, time management is focused on «efficiency», which is much more important than the observance of «rituals». If communication with a person has gone beyond the established framework, but at the same time helps to establish a deep and full-fledged relationship, you should not feel guilty;

flexibility – plans are your servants, but not masters! Plans should be comfortable, consistent with habits, work style and criteria. If necessary, it is advisable to adjust the planned;

compactness – tools for planning and time control (for example, the organizer) should be as compact and convenient to work in any «field» conditions. Such portability will help not to lose any important idea, having fixed it in time [10].

The Covey time management system consists of two sections: strategic long-term planning and weekly short-term planning. Long-term planning unfolds in the following chain: the individual «mission» of the individual - the role - the goals. Short-term planning is presented as follows: actual roles - tasks - weekly plan - daily plan execution and delegation.

It can be determined that modern foreign time management is

characterized by three trends:

- 1) «humanization»;
- 2) differentiation;
- 3) computerization.

“Humanization” means the priority of individual time management, associated with personal growth and self-improvement, and, to a certain extent, the rejection of role and social time management. If role and social time management are a means of adapting a person to external time (the time of organizational and technological processes), then individual time management is aimed at comprehending and mastering his own internal time. The main aspect of inner time is personal self-determination: a clear understanding of one’s life values and a conscious choice of worthy and ambitious life goals. Thus, the humanization of time management means its psychologization – a serious rapprochement with the psychology of personal self-knowledge, development and self-improvement, with various spiritual practices.

Thus, if a strategic plan helps to clarify the desired goal, then competent time management will help maintain a useful ratio of the company.

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IMPLEMENTATION OF TRANSPORT AND LOGISTICS STRATEGY AS A NECESSARY COMPONENT OF SOLVING URGENT PROBLEMS OF REGIONAL DEVELOPMENT IN THE CONDITIONS OF POST-CONFLICT TRANSFORMATION

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Today, the development and implementation of transport and logistics strategy is the prerogative of functional management and is a necessary component in solving urgent problems of regional development. State regional policy allows considering the composition of the subsystems of the region based on the theory of organization, can serve as a basis for a systematic analysis of the region depending on the scale of management, production capacity, population and marketing infrastructure. The basis of regional planning is a reasonable formation of its goals and criteria. The development strategy of the region should be based on the theory of program-target management and provide for setting strategic and tactical goals, as well as criteria for achieving them - quantitative indicators that determine the extent or composition of the assessment of the goal compared to other possible options for regional development.

Theoretical and methodological foundations of regional development management and strategy development in the system of state regional

policy are considered in the works of many domestic and foreign scientists, including Voronina V. E., Galgash R. A., Gridzhuk I., Dzyunzyuk V. B., Christenson K., Ovcharenko E. I., Semenenko I. M., Schumpeter J. and others.

Analysis of literature sources in the direction of [1-10] showed the presence of deep developments on the research topic.

It is necessary to strive for the most efficient use of available resources in the region for the most adequate adaptation to change. To achieve this, management should be focused on maintaining systemic balance, i.e. to appropriately allocate available financial resources in certain areas of production, economic and social activities. In general, the most important feature of the socio-economic system is to maintain a balance between technical, economic, social and environmental subsystems of regional development.

The social subsystem of regional development is the object of management; therefore, it must be considered as an independent system with its inherent connections and patterns. Therefore, when developing plans, it is necessary to take into account the indicators that characterize the state of the social subsystem of the region. As follows from the practice of management, at certain stages of development, social parameters can play a priority role.

Successful regional development planning is largely due to external factors that affect the functioning of the region. The group of external factors influencing the development of the region includes factors that are differentiated by the nature of origin: macroeconomics, mesoeconomics (related to the activities of industries, markets); microeconomic (determined by the behaviour of individual organizations).

The second group of factors (according to the way of influencing the region): network (influencing the region through partnerships of various kinds with well-known recipients); social («penetrated» into the region through the psychological characteristics of individual and group behaviour and interests, on the one hand, and related to the region groups - shareholders, bank managers, government officials, all stakeholders in the sustainable development of the region) on the other ; environmental factors (determined by the socio-economic situation in the country, do not act selectively and do not have specific and permanent recipients).

The sectoral structure of the region is a fundamental factor that has a significant impact on all aspects of life in the region, and hence on the formation of its concept of socio-economic development. Of course, industry affiliation plays an important role in reflecting many parameters of the enterprise, but at the same time, it must be recognized that in matters of social activity of the enterprise and its evaluation by society, industry

affiliation is not so dominant. Society tends to compare enterprises not by industry, but primarily by social parameters, such as the degree of social protection of workers, the level of organization and remuneration, working conditions, the availability of social infrastructure, the threat to the environment and more.

Based on such interconnection, they should ensure the unity of the planning system and the correlation of plans with each other, which, in turn, should be ensured by common principles and methods of planning, as well as a single information base; it, in particular, should include the concept of socio-economic development of the country, priority areas of socio-economic development of individual industries and regions, a single system of indicators.

Strengthening the social orientation of regional transformations requires the formation of a new system of indicators, which will lead to the development of new forms, methods of calculation, a new statistical base. The new indicators will have to reflect new psychology of thinking, a new level of professionalism of managers of different levels of government, whose activities will be evaluated by society. Regional authorities cannot do without a strategically comprehensive program to address interrelated social development issues. It should determine the dynamics of key indicators [1].

In the context of hostilities in eastern Ukraine, since 2014, the state has been forced to change its policy on regional development. Considering regional development as an integral part should take into account local development. In the context of the conflict, the problems of regional development of Luhansk and Donetsk regions become very important every day and the main task of the state is to formulate policy in such a way as to ensure balance and effective use of unaccounted development potential of these problem regions. To solve one of the urgent problems of regional development of the Luhansk region, in the process of analysis, we identified the possibility of developing and implementing a transport and logistics strategy. On the balance of the department of development and maintenance of the road network of the region of the regional state administration, there are 146 regional roads and 470 districts with a length of 1731.9 km and 2216.1 km, respectively. The total length of public roads of local importance is 3948.0 km.

Restoration of road infrastructure and improvement of transport connections is carried out by the Regional target program of road construction in Luhansk region for 2016-2022, approved by the order of the head of the regional state administration - head of the regional military-civil administration from 06.04.2016 № 189 (as amended) [8].

In 2019, due to a subvention from the state budget to local budgets for financial support of construction, reconstruction, repair and maintenance

of local roads, streets and roads of communal property in settlements, 529843.19 thousand UAH were disbursed, including:

- overhaul of public roads of local significance - UAH 55,990.30 thousand, 5.5 km repaired;
- overhaul of streets and roads of communal property in settlements 80344.1 thousand UAH, repaired 98225 m²;
- current average repair of public roads of local significance - UAH 128,377.66 thousand, 19 km were repaired;
- current minor repairs, maintenance - 265131.11 thousand UAH [8].

In 2020, due to a subvention from the state budget to local budgets for financial support of construction, reconstruction, repair and maintenance of roads of local significance, streets and roads of communal property in settlements, funding in the amount of UAH 661,001.0 thousand is provided. including on:

- overhaul of public roads of local significance - 5000,0 thousand UAH,
- overhaul of streets and roads of communal property in settlements of 80 000,0 thousand UAH, it is planned to repair 13160,0 m²;
- current average repair of public roads of local significance - 443 801.0 thousand UAH, it is planned to repair 57.2 km;
- current minor repairs, maintenance - 132,200.0 thousand UAH [10].

In 2020, the construction of a complex for the shipment of grain on the railway transport of LLC «Golden Agro» will be completed.

100 t / hour, up to 25 thousand tons of single storage.

The redistribution of cargo turnover between modes of transport when using these specialized complexes will negatively affect the performance of freight transport by road. Introduction by the Resolution of the Cabinet of Ministers of Ukraine of 11.03.2020 № 211 «On prevention of the spread of acute respiratory disease COVID-19» on the territory of Ukraine ban on the carriage of passengers by rail, regular and irregular carriage of passengers by road in urban, suburban, intercity on city bus routes in the mode of a minibus, the restriction of the number of passengers on urban road and electric transport significantly affected the indicators in the field of passenger transportation (Fig. 1).

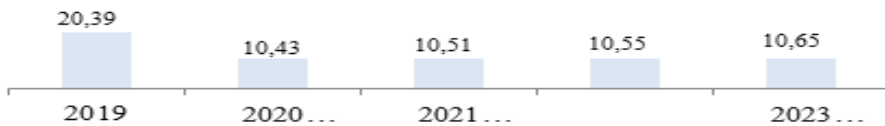


Fig. 1. Passenger traffic, million people

Source: generated by the authors according to the source [10]

Due to the unsatisfactory condition of the road surface and unregulated

logistics of road transport by road, there is an advantage for agricultural enterprises in the transportation of products of their production, the use of rail transport.

The general strategic goal of modern social policy is to improve the quality of life of the population, the implementation of which should be aimed at the activities of the entire system of public administration.

From the standpoint of a systems approach, the region as an object of strategic management can be considered in a set of interconnected subsystems:

- regional economy, which includes all the infrastructure that ensures the viability of the region;
- production sphere, which includes all branches of material production that produce the gross regional product;
- agro-industrial complex, which includes agriculture and forestry, territory and natural resources as a source of regional wealth;
- social sphere, which includes all areas of reproduction and spiritual development of the population of the region;
- financial and economic sphere, which provides macroeconomic proportions, financial relations of the region's industries in the form of the region's budget;
- the sphere of management, which includes a set of state and regional authorities in the region.

The calculation of the quality of life of the population determines the change in the standard of living of the population according to the main criteria. Choice of alternative development options. Depending on the state of the external environment (STEP-analysis) and the internal environment of the region (SWOT-analysis), as well as the list of basic competition strategies, several options for strategic development are formed. In strategic management it is necessary to give preference to consideration of three options of development of events:

- Pessimistic, when there is a deterioration of the socio-economic situation and quality of life, ie the main indicators change by 1-5% in the direction of deterioration compared to the baseline. Difficult economic situation in the region; budget problems do not allow for expanded production. It is advisable to apply strategies of «fire extinguishing», «retreat», «guerrilla warfare», «reduction» and «liquidation».
- Realistic, based on the stabilization of the socio-economic situation and quality of life, ie the main indicators change by 1-2% in the direction of improvement compared to the baseline. The region maintains its position at the achieved level, providing the necessary standard of living. To do this, apply strategies of «focusing», «differentiation», «harvesting», «retaliation», «defense and strengthening».

- Optimistic, when there is an improvement in the socio-economic situation and quality of life, the main indicators change by 3-5% to improve compared to the baseline, increases living standards, which allows for expanded reproduction, aggressive marketing policies, maintaining leadership in some sectors of the economy.

The forecast of socio-economic development provides a scientific justification for the prospects of social and economic development of the region based on management goals and forecast criteria for management subsystems by extrapolating the actual trends in the economy.

The initial data for the forecast are actual data on the development of economic sectors for the last 7-10 years of socio-economic development of the region, analysis of the regional budget; consolidated balance of labor resources in the region; assessment of prospects for the development of innovative sectors of the economy and leading enterprises in the region. Calculation of resource and investment needs. Based on the set strategic ideas of development and innovative projects, technical and economic calculations of the necessary resources (labour, material, technical, energy) are performed, and the calculation of financial resources determines the investment needs. The proposed strategies for the development of the region are necessary for making alternative management decisions to bring out the crisis of certain sectors of the economy, depending on the state of the environment and available resources. Regarding the possibilities of implementing the transport and logistics strategy in the Luhansk region, studies show that its implementation is essential and will solve the urgent problem of regional development in the field of transport and logistics, preserve road quality and create a competitive environment for business development and become the basis for state regional policy. Finding ways to better implement the strategy is also an ongoing process. In the context of post-conflict transformation, some strategic tasks are easy to solve, others are unsolvable. The implementation of the strategy is possible with the combined influence of the whole set of management decisions and many step-by-step actions performed by different target groups and individuals.

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FEATURES OF THE MODERN MARKET OF INFORMATION AND CONSULTING SERVICES

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Improving the efficiency and competitiveness of agro-industrial production in the absence of a clear policy of agri-food development and insufficient funding and state support for the creation of material and

technical base, market, social infrastructure, lack of effective management and regulation, becomes possible only through fuller use of available efficiency reserves, including the most powerful internal reserve - the application of new knowledge embodied in innovations, innovations in the form of intensive technologies, organizational projects, introduction of new production functions, as well as various information about the market, which allows companies to respond reasonably and in a timely manner, to develop entrepreneurial activity.

Based on this, economic and management information reduces uncertainty in management decisions, which prevents losses or reduces losses, and therefore, information and consulting services are becoming the most important product in today's market, including for agri-food businesses. The agri-food sector needs not only resources (land, labor and capital), but also knowledge and information that can be considered a special kind of work. In the conditions of transfer of agriculture to an innovative way of development scientific and technical support in the form of information and consulting services is an important factor of efficiency of its functioning. The level of development of information and consulting services is a reliable indicator of the general state of the economy of agro-industrial production [1; 4].

In modern conditions in the agri-food sector, along with the market of resources, the market of information and consulting services is developing, which is a set of economic, legal and organizational relations for the purchase and sale of such services that arise between their suppliers and consumers in agriculture.

Experts offer two methodological approaches to the construction of classification features of consulting services, these services are usually distinguished depending on the method used (functional approach) and depending on the subject of consulting (industry approach)[7; 10]. Based on this, it is proposed to systematize the classification of consulting services on the most common two grounds - functional and substantive, which are presented in Fig. 1.

The subjects of this market are information and consulting services and agricultural producers of various forms of ownership and types of management. The object of the market, which the subject of sale or exchange, is information systems and technologies, consulting services.

Given the above, the main factors in the formation of supply and demand in the market under study, which determine the level of demand for information and consulting services, their price should include:

- market scale - in the largest agricultural regions there is a higher and stable level of demand for such services than in small or regions with a high level of urbanization;

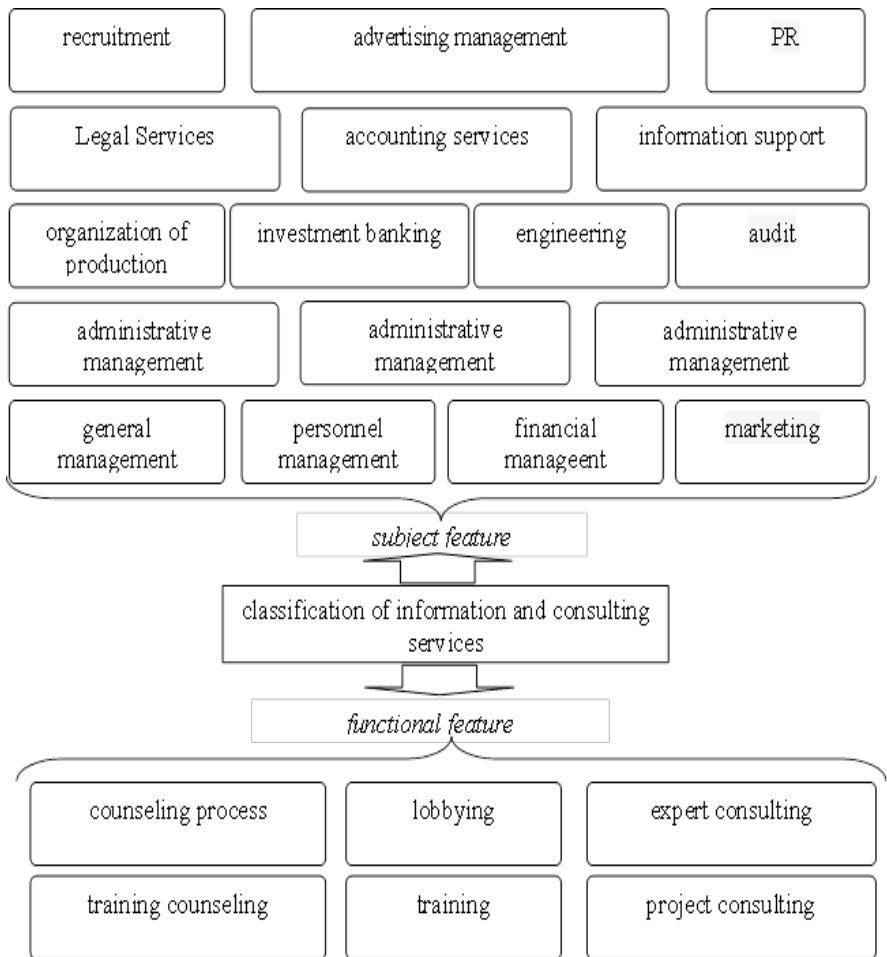


Fig. 1. Classification of information and consulting services [formed by the authors on the basis of 1; 4; 6; 9]

- the level of income of rural producers - as you know, with increasing income, the demand for these services increases;
- consumer preferences - in the absence of own funds, and in the absence of the possibility of obtaining long-term credit, the demand for services to improve production, optimize sales, increase efficiency increases compared to investment design services;
- competitive environment - the availability of services provided to other consulting services.
- instead, as the main factors of supply in the market of information and

consulting services, it is advisable to highlight;

- costs of providing services - the lower the unit costs, the more services can be provided by the service at a certain price level;
- savings in consulting costs, in turn, depend on the level of remuneration of qualified professionals, as well as on the prices of resources used;
- scientific and technical progress in the field of information technology is the use of new methods, forms, mechanisms, tools of research and consulting;
- the number of market participants (services, firms) is the achievement of the largest supply possible in conditions of perfect competition. At the same time, the existence of such perfect markets is impossible due to a number of objective reasons, including the need for licensing for the provision of relevant services, free advice to certain categories of customers by government services, etc .;
- state support and control is the participation of public authorities in the consultation process, increasing the availability of the main areas of counseling for broad categories of stakeholders, quality control of services provided [2; 5; 8].

The generalization of the forms of organization of various information and consulting services allowed to determine their main types, shown in Fig. 2.

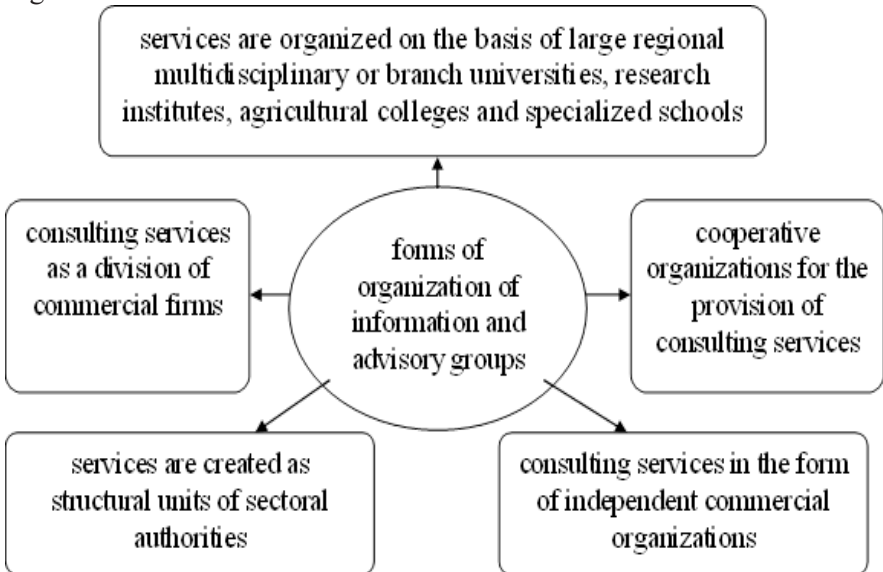


Fig. 2. The main types of forms of organization of information and consulting services are various [formed by the authors on the basis of 3; 4; 7; 9]

The specifics of information and consulting services in the field of agri-food take into account the objective features of the industry and the essence of the information and consulting process. At the heart of these differences, first of all, are natural and biological features that determine the technical and technological, organizational and socio-economic specifics. Therefore, for the progressive development of domestic agriculture it is necessary to solve the following most important tasks of an informational nature:

identification of areas of development that will allow the company to gain significant advantages over competitors;

development of fundamentally new approaches to conducting production and marketing activities that allow the business entity to strengthen market positions;

timely forecasting of market changes in the agricultural market and making operational management decisions.

Today the market of information and consulting services in many countries of the world is developing rapidly, however, in Ukraine its condition does not meet modern requirements in all aspects.

One of the factors that slows down the process of innovative development of the agri-food sector is the low level of technological equipment, while the world experience of agriculture is already directly related to information technology.

In recent years, information and consulting support for rural producers has become relevant again. The Ministry of Agrarian Policy and Food of Ukraine and other subjects of the agri-food sphere focused on the following areas of development of information and consulting activities:

- creation of an infocommunication system of the agri-food sphere, aimed at ensuring automated data exchange at all levels, as well as effective use of information technologies in the activities of regional and district management bodies of the agri-food sphere;

- creation of an automated information system that will integrate information support for the activities of state bodies in order to effectively implement the processes of management and regulation of agri-food markets. The tasks of such a system are: providing management and specialists with operational data on the results of assessment and analysis of situations, as well as information support for decision-making processes. It is based on modern technologies that allow for comprehensive informatization and automation of the agri-food authorities on the basis of centralized information resources, adaptive tools for data access, as well as service tools for their processing;

- creation of a system of remote monitoring of agricultural lands, which will allow to accurately assess the size of arable land in areas of intensive and risky agriculture, their productivity, identify negative soil processes, signs

of crop damage, pest distribution areas, as well as monitor emergencies; creating a system of information on the agri-food market to study the situation on agricultural products, products of processing industry, material and technical resources and services for the village, analysis and forecasting of agricultural and food markets, providing market information to agri-food authorities to regulate the market, support for producers, providing market participants with information on prices, sales and purchases of products, material and technical resources [1; 4; 9].

In modern conditions, when the growth of agricultural production is associated with difficulties, there is fierce competition among agricultural producers both within the country and between countries, mass bankruptcy, inefficiency of agribusiness entities, a special role is given to the information and advisory service of agricultural enterprises, and its main task should be to help solve the problems of rural producers through the integration of education, agricultural science in production, ensuring cooperation with organizations that influence the development of the agricultural sector.

Improving the efficiency of agricultural production is possible on the basis of making optimal management decisions, the introduction of new equipment and advanced technologies.

In this regard, one of the main functions of information and consulting activities in the field of agri-food should be the identification for the purposes of information and consulting services of completed scientific developments.

It should begin with the compilation of a register of developments and a description of their real significance. The evaluation of innovations is carried out according to several parameters, and the conclusion will contain a development passport. The ranking by importance of the list of developments with passports is entered into the database and becomes available to farmers.

The function of information and consulting services should also include the formation, updating and provision of commercial information to farmers about the markets, price monitoring, which is of interest to consumers who interact in the market space.

The formation of the reverse flow of information from farmers also occupies an important place in the work of information and consultation centers. One of the main tasks of information and consulting services is the process of summarizing the views and requests of primary producers in accordance with their problems.

An important function is also to provide assistance to farmers on their development strategy. Considerable attention in the activities of information and consultation centers should be paid to the educational function. This is primarily work in the framework of seminars, conferences, training courses,

farmers' self-education groups.

Note that it is possible to assess the effectiveness of consulting activities by the effectiveness of the implementation of a particular innovation. In addition, to increase the effectiveness of consulting activities requires the development of organizational and economic relations at the stages of creation of scientific knowledge and their implementation in economic activities, and information and consulting service should become a link between these stages [2; 6; 8; 9].

In the implementation of innovative activities in agriculture is necessary to delineate the areas of responsibility of different departments and levels of management of scientific activities, combining their efforts for the development of the agricultural sector, which will include:

- use of various types of stimulation of innovative activity (special risk insurance, exemption from certain types of taxes, direction of its modernization of production, etc.);
- training of qualified specialists for innovation activity;
- development of facilities with high scientific and production potential.

Thus, the formation of the market of information and consulting services for agriculture lies not so much in the plane of commercially attractive business, as in the plane of the need to implement and master innovations to increase the competitiveness of domestic agriculture.

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DEVELOPMENT MANAGEMENT AS A KEY ASPECT OF ACHIEVING SUSTAINABLE DEVELOPMENT GOALS

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In today's economic environment, most countries of the world are in special operating conditions, determined both by globalisation influences and the dynamism of the external environment as a whole.

Despite the availability of a large volume of accessible information, international communication, active development of information technology, it is increasingly difficult to predict the future state of economic systems, due to the large number of factors that may affect their behaviour, such negative phenomena as financial, economic crises, leading to bankruptcy and deterioration of the socio-economic situation in the world are increasingly spreading.

The reasons for this are both global development trends, the most important of which today is progressive globalisation, and the specifics of the economic development of each individual country

The acceleration of technological development, the intensification of the role of human resources and changes in other factors of modern production

are interlinked with the problems of balance and dynamism

Therefore, every enterprise must adapt to these changes by improving its production programmes, logistics infrastructure, commercial and sales policies and by developing appropriate long-term strategies, among other things. The development of the enterprise is an important process on the way to this, because it is the main reason that enables an enterprise to enter a market or to maintain its position in existing markets.

Undoubtedly, a modern enterprise is a dynamic and open system whose activities depend on the conditions of the external environment in which it operates.

At present, the external environment of each business entity is characterised by the speed of change, which is difficult to predict. The task of each enterprise is primarily to maintain its current state and further improve it, since this is what ensures the competitiveness of the enterprise on the market. It is to this end that the activities of the enterprise should be aimed at creating the conditions for its continuous development.

In general, the category «development» characterizes qualitative changes in the enterprise, in particular, O. Kuzmin and O. Melnik interpret the concept of «development» as a process of transformation, transition from one qualitative-quantitative state to another, changes of the highest level [9, p. 36].

V. Andriychuk defines the category of «enterprise development» as the development, which is understood as irreversible, purposeful and natural changes in the economic system, the sequence of its transition from one state to another qualitatively on the basis of improving technology, technology and work organization, the introduction of innovations in management, etc. [1, p. 705].

Considering scientific approaches to the interpretation of the concept of «enterprise development», we see that a number of scientists interpret it as «... a unique process of transformation of an open system. as a unique process of transformation of an open system in space and time, which is characterized by a permanent change in the global objectives of its existence by forming a new dissipative structure and transferring it into a new attractor (one of the alternative trajectories of enterprise development) of operation» [6].

B. Vasilenko believes that «the development of the enterprise is not a one-time transformation to achieve «the best» (and therefore, eternal) state of the system, but a continuous process over time, the course of which is not always constant and continuous, most often going dynamically with overcoming various scales of crises» [3].

Enterprise development can take place according to different scenarios, results, timeframes, models and the like. Moreover, we agree with the

opinion of A. Kaplin who argues that the development of the system from the point of view of the modern scientific picture of the world is characterized by two levels of evolution: the first one characterized by stability, linearity and predictability and the second one characterized by instability and nonlinearity [7, p. 59].

That is, non-linearity, multivariability (alternativeness), stochasticity, unpredictability, constructive role of chaos (disorder), randomness in the emergence of the new become characteristic features of enterprise development in the current environment [4].

According to the laws of organization, they were first formulated by Oleksandr Bogdanov, who, as the founder of the modern theory of systems and organizations, noted that «an organized whole turns out to be ... practically greater than the mere sum of its parts ... Not because it has created new activities out of nothing, but because its existing activities connect more successfully than the supports opposing them» [2].

That is, development is an objective cause, not dependent on us. Development is an irrevocable, purposeful, regular change of matter and consciousness. Perhaps for this reason it is accepted to distinguish two forms of development:

- evolutionary;
- revolutionary (Fig. 1).

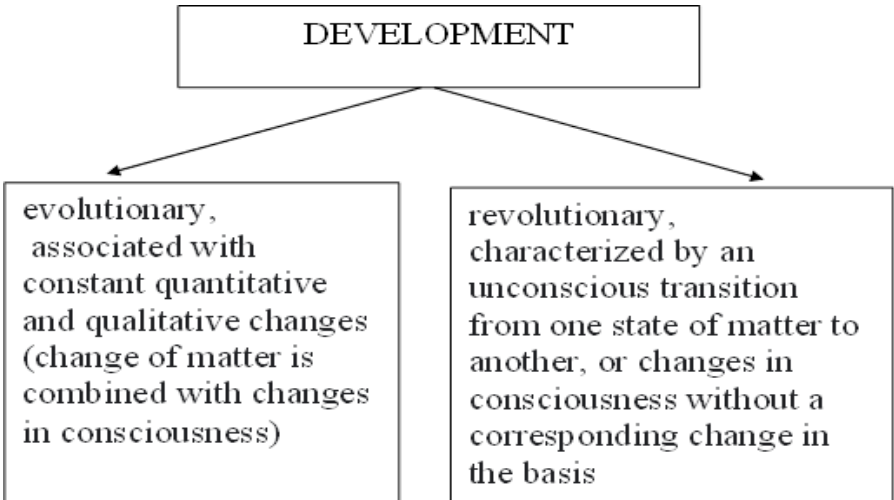


Fig. 1. Forms of development [3]

Let us consider the theories of enterprise development by different authors. Thus, according to the theory of directed development, the development of an enterprise is seen as individual and depends on its ability to adapt to

changes in the internal and external environment. The enterprise transitions from one state to another, reaching a state of equilibrium [1].

In the theory of cyclic development of the enterprise, the development of the enterprise is the result of cyclic development of world and national economies with declines and gains.

The adherents of the business cycle theory consider the development of the enterprise, which goes through a certain life cycle, for which the following stages are implied: generation, growth, stabilization and decline.

In the «business is visible» theory, development will cease if economic resources are highly concentrated on current activities, which will lead to underfinancing in the future.

The theory of «foregone development». Development will come to a halt if economic resources are severely limited in the future, thus contributing to underinvestment in the current period.

In the «negotiable» theory of development of the enterprise is located between the decline, not identified prospects for development.

The theory of «generating ideas in the absence of new business». Development will come to a halt if the development ideas cannot be absorbed by the managers.

However, the prevailing theory of development in most countries is the old growth theory. According to V. Tregobchuk, «the concept of sustainable economic development is recognized by the world community as a dominant ideology of human civilization development in the XXI century, a strategic orientation for ensuring material, social and spiritual progress of the society» [12, p. 31].

It should be noted that Ukraine has recognized the concept of sustainable development as a priority and adopted the National Strategy for Sustainable Development, which is based on the need for balance between welfare, society and the economy. According to scholars, «steel development is development which satisfies the needs of the present without compromising the ability of future generations to satisfy their own needs» [5].

The issue of sustainable development was first announced in 1992 at the UN Conference on the Environment and Development in Rio de Janeiro, where representatives of 179 countries adopted the program of economic and social development of humanity in the future century, formulated in the document «The order of the day in the XXI century».

This programme was based on the concept of sustainable development, which called for «modification of the biosphere and the use of human, financial, living and non-living resources to meet human needs and improve the quality of life» [11].

In 2002, the World Summit on Sustainable Development in Johannesburg adopted the «Plan of Implementation at the Highest Level» which identified

specific actions and their implementation timeframes [10].

Thus, our country joined the world's countries which undertook the obligation to ensure steel development in line with the global Steel Development Goals. The country developed and in the spring of 2017 grabbed the National Development Goals Outline: Ukraine. This document identifies 86 development objectives and 172 benchmarks for achieving the Millennium Development Goals, taking into account the peculiarities of national development.

It is clear that a necessary condition for achieving the Millennium Development Goals is the existence of a well-developed national institutional structure of steel development management. That is why we agree with the opinion of experts on the positive practice of identifying national authorities responsible for the goals of steel development and establishing statistical observations in this area, Introducing a real system of monitoring and control, including parliamentary control over the activities of the government to achieve the Millennium Development Goals, and involving all sectors of society in this process.

The main source of development is the basic economic inequality is satisfaction of unnecessary needs under conditions of limited resources [1, p. 705].

So, the mechanism of enterprise development depends on the economic potential of the enterprise on the one hand and the satisfaction of the unmet needs of society in goods and services, which the enterprise provides to it in exchange for the ability to obtain profits – on the other hand.

Thus, the economic potential is seen as a totality of available and due to mobilization of the basic sources, assets of the enterprise, elements of the potential of an integral economic system which are used and can be used for economic growth and socio-economic progress [13].

The basic theory of development of the vast majority of the countries of the world is the theory of old growth. Ukraine has also prioritized the concept of sustainable development and adopted the National Strategy for Sustainable Development, which is based on the need for balance between welfare, society and the economy [14]. The concept of sustainable development requires a new approach to solving global and state organization problems, which requires substantial changes in all spheres of social life and, in particular, the development and functioning of enterprises. Ukraine has formulated a framework for ensuring sustainable development in line with the global goals of sustainable development.

National targets for sustainable development and national indicators of achieving the Sustainable Development Goals have been identified, most of which are subject to quantitative measurement; The framework for monitoring in this area has been established; tasks have been set to bring the

country's social and economic development strategies and plans in line with the Millennium Development Goals.

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FUNDAMENTAL GROUNDS OF SOCIOECONOMIC SECURITY EVALUATION WITHIN AN URBAN GEO SYSTEM

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Ongoing development of economic security studies has led to the detection of new types and objects of economic security. Along with such categories of economic security studies as “economic security [of an object]” and “social security [of an object]” recently experts in the field have started to operationalize the category of “socioeconomic security” [of an object]. This category is universal in nature as it can be applied to absolutely all elements of the state socioeconomic system. Specification of objects in socioeconomic security can be carried out through determination of elements within this system.

One of these objects of socioeconomic security is a city (as an urban geo system), and research on this direction of economic security studies has only started to emerge and develop.

From the standpoint of the system approach, a city is a complex, managed, open socioeconomic system, and also an urban geo system, which is capable of self-organization and self-regulation by means of social interaction between its elements. Besides that, this system is also dissipative in nature, with a range of unbalanced processes within it. Urban geo system as the basis of a city system also has a complex structure and its own list of functions. It is extremely sensitive to the influences of the external environment, and its functioning often causes a range of accompanying problems. All of the above determines the necessity to consider it as an object of socioeconomic security.

Within the subject matter of the economic security studies on urban geo systems there are two interrelated directions — evaluation and provision of the socioeconomic security of a city. Its evaluation along with other components (resources, quality of management, implementation of approved decisions, quality of elements’ interaction within the urban geo system, its potential, etc.) together serve as the basis for provision of socioeconomic security of a city.

Evaluation as a separate direction in economic security studies of the macro-, meso- and microlevels has already received quite a lot of attention.

However, the same cannot be said about the evaluation of socioeconomic security on the level of urban geo systems.

Several approaches can be used for evaluation of socioeconomic security of the urban geo system, namely:

- objective - when actual or modelled quantitative indicators are used for evaluation;
- subjective - opinions of the representatives of various social groups within a city are used for evaluation, along with the opinions of entrepreneurs, public servants and so on. These opinions are collected using various tools, including sociological surveys dedicated to different topics;
- mixed - elements of both objective and subjective approaches are combined under this one.

As a rule, evaluation is most precise under the objective approach. However, for its application, the choice of specific indicators needs to be thoroughly grounded. This grounding of specific indicators to be used directly predetermines the reliability of socioeconomic security evaluation at the urban geo system level. In the absolute majority of cases, evaluation of economic or socioeconomic security of a specific object does not include such grounding of the indicators used, or this grounding is poor and unconvincing.

Lack or poor grounding in the selection of indicators to be used for evaluation of economic or socioeconomic security of a certain object was for the first time revealed in [1], and this fact is a serious bottleneck in the evaluation methodology of the economic security studies.

Another logical assumption has been put forward in [2]: evaluation of economic security on an object level should be based on the indicators that describe the key constructs quantitatively, thus revealing the contents of the category under evaluation. This assumption has become the basis for the suggested in [2] construct approach to economic security evaluation at the state level. This approach can be also adapted for the purposes of socioeconomic security evaluation at the level of an urban geo system.

We find it feasible to present the fundamental grounds of socioeconomic security evaluation at the urban geo system level using the construct approach as presented in [2]. The operational logic of this evaluation is presented in Fig. 1.

Socioeconomic security is a synthetic category which has both economic and social components. However, it would not be appropriate to consider the category “socioeconomic security of an urban geo system” is an automated combination of the two categories - “social security of an urban geo system” and “economic security of an urban geo system”. Socioeconomic security of an urban geo system has emerged on the edges between these two categories, however, not as a result of their merger. As described in [3], it reveals the

mutual conditionality, interdependence and complementarity of the relations that are being formed in the process of interaction between economic and social security of a city.

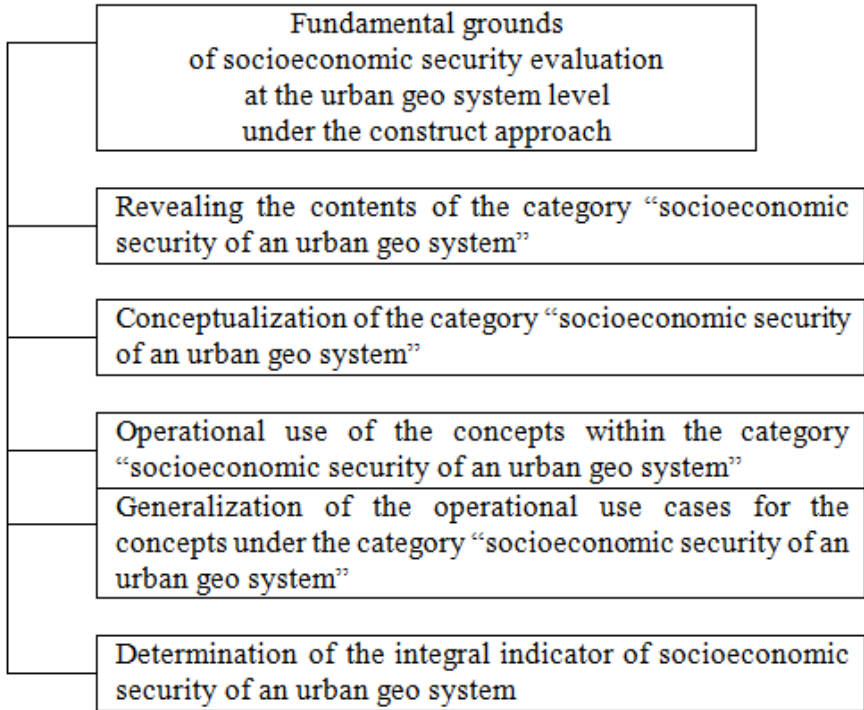


Fig. 1. Fundamental grounds of socioeconomic security evaluation at the urban geo system level under the construct approach

Following M. Weber, the presented here contents of the category “socioeconomic security of an urban geo system” is “inactive” [4, p. 132]. In the terminology of Weber, to understand the “active”, we need to simplify the determination, that is, to conceptualize it, and then, to make the concepts operational, thus making specific indicators under observations out of them. This would allow collecting data on socioeconomic security of an urban geo system, thus enabling an explanatory observation about it.

Conceptualization of the category “socioeconomic security of an urban geo system” is necessary because the category in question is multifaceted and therefore complex. Concepts within this category are its subcategories. They specify various preconditions present in the contents of the category. These preconditions provide satisfaction of the population with their residence and activities within a city as well as adherence of their interests and rights under

the well-balanced interests of all elements within the urban geo system. For this, the urban geo system would need to demonstrate efficient use of its potential, security-oriented management and effective communications established between state authorities, city authorities, population and local businesses.

Concepts within the category “socioeconomic security of an urban geo system” can be also understood as specific aspects in understanding of this category. Considering several concepts in their interrelations, interdependence and mutual influence on each other would guarantee adequate presentation of the phenomenon in question — the socioeconomic security of an urban geo system.

The concepts under the category “socioeconomic security of an urban geo system” are as follows:

- population satisfaction with the residence and activities within a city;
- safeguarding the interests and rights of a city residents;
- balancing the interests of various elements of an urban geo system.

These concepts under the category “socioeconomic security of an urban geo system” must be fully operational. This would allow assigning each concept its own operand which is a specific indicator under observation. This, in turn, would allow taking the next step - moving from purely theoretical constructs to specific instruments of evaluation.

Calculating the integral indicator of the socioeconomic security of an urban geo system would require carrying out calculation operations with the operands of the concepts within this category.

At first glance, implementation of the suggested here algorithm of socioeconomic security evaluation for an urban geo system should not have much complications, as it was the case in [1] (where secure state of a region has its features, subfeatures and the indicators of these subfeatures) or as in [2] (where contents of the notion “state economic security” was revealed through constructs and the indicators of these constructs). Using the suggested here algorithm for evaluation of socioeconomic security of an urban geo system should not have been complicated if it wasn’t for the multisubjective nature of this evaluation. This multisubjective nature is especially explicit for the key concept under the category “socioeconomic security of an urban geo system” - population satisfaction with the residence and activities in a city.

Overall, satisfaction of population needs in residence and activities in a city is usually determined through the quality of urban environment. The latter, in its turn, determines the level of comfort when it comes to residence and population activities and also satisfaction of various individual needs.

The Encyclopedia of Contemporary Ukraine defines urban environment as a combination of natural and artificially created material environment

which emerged due to the influence of urbanization processes on the natural environment [5]. Thus, human livelihood is always in interaction with the urban environment. At the same time, despite all the interrelations, the notions of “urban environment quality” and “population’s life quality” are not exactly the same.

Despite all the popularity of the notion “urban environment quality”, there is no commonly acknowledged definition of this notion. Thus, we suggest to consider urban environment quality as a degree to which various elements of an urban geo system are adequate to the needs and requests of the local population, including those of comfortable residence and having various types of economic activity. The human chooses a city with more affordable residence options and more employment opportunities (or higher chances to start an own business), a city with high quality of services (including healthcare which becomes vitally important considering the current pandemic situation), a city with opportunities to get good-quality education and wide leisure options.

To describe the quality of an urban environment it would be feasible to use the operands that characterize the material side of life (income, consumption), the state of health, education, personal activities (including employment), social interactions and relations, natural environment (as of today and in the future), physical security. These operands have been selected on the basis of the Report by the Commission on the Measurement of Economic Performance and Social Progress by J.E. Stiglitz, A. Sen and J.-P. Fitoussi [6, p. 14].

It would be obviously hard to select those operands that describe the satisfaction of all population groups with the residence and urban activities in an unambiguous way. Population of any city is divided into groups, the most obvious of which are groups by age and those by professional activity (employed people, business owners, public servants and so on). This division leads us logically to the key feature of the concept “population satisfaction with residence and activities within a city” - its subjectivity. Satisfaction of needs as well as safeguarding of the interests and rights assumes the existence of at least three generalized subjects within a city - population, economic agents (business units) and public authorities.

This subjectivity of the key concept within the category “socioeconomic security of an urban geo system” makes evaluation of socioeconomic security of an urban geo system also multisided, thus also covering three generalized subjects within a city. Further specification of those three subjects would narrow down the subjects (for example, the youth, the retired, small and large businesses). In turn, a rank in evaluation of socioeconomic security in an urban geo system would predetermine the choice of a concept’s operands.

It is obvious that the operands of the urban environment quality for each

subject of the socioeconomic security evaluation within an urban geo system would be different. The very problem of operands dominates the picture here, and its solution could be achieved by means of P. Unger's contextual approach [7].

P. Unger was convinced that for some questions there can't be objective answers as such. An answer to a question is always predetermined by a combination of preconditions the researcher is stemming from. This idea is explicitly manifested in any evaluation overall and in evaluation of the socioeconomic security of an urban geo system in particular. We would like to demonstrate differences in the standpoints of evaluators on the example of such an important element of any urban environment as the quality of communal services.

Residents of large cities in Ukraine are justly evaluating the quality of local communal services as being average or even poor. Such negativity in evaluations is caused primarily by the mismatch between the quality of these services on the one hand and their price on the other. Other reasons include: frequent breakdowns and delays in repairs of the water supply and water disposal systems; same applies to heating and electricity systems; unsatisfactory maintenance and servicing of the communal housing; not to mention the nearly non-existent energy-saving initiatives. Same non-existent is the renovation of the housing sector, while elevators in many houses (put into service long before 2000) are in their limit, pre-crash state. Thus, from the standpoint of urban residents, such an unsatisfactory quality of the communal services can be treated as a direct threat to the level of population satisfaction with the residence and activities in a city as well as a threat to their interests and rights.

However, in parallel to such low assessments of the communal services' quality on the side of local residents, the same residents often do not fulfil their obligation of paying, timely and in full, for these services.

In early days of March 2021 Ukrainian analytical agency Opendatabot published the statistics on the growth of population debts as delayed payments for the communal services. This statistics confirms that the largest share of these population debts falls on the heating supply enterprises. At the end of December 2020 population debts on communal services payments reached 73.6 bln UAH. The monthly growth of debt amounted to 7.5 bln since just one month earlier it was at the level of 66.1 bln UAH [8]. At the beginning of 2021 population debt on communal services payments was at the level of 80 bln UAH already.

Enterprises providing housing & communal services state that the unsatisfactory quality of these services is predetermined by the debts size. However, as it is demonstrated in [9], efficiency of the housing sector and of the communal services is not entirely in the direct dependence from the

amount of financing from the local budgets. Other important factors include: readiness of the local authorities to approve the unpopular decisions and to raise tariffs so that to make the prices for communal services economically well grounded; overall quality of the administrative decisions concerning communal services organization; efficient control over communal services provision.

Therefore, differences in the standpoints of evaluation subjects lead to application of different operands in relation to the quality of communal services provision. Similar differences in standpoints can be also observed in relation to other components of the urban environment quality, including healthcare, education and urban transport.

Thus, evaluation of the socioeconomic security of an urban geo system is essentially much more complex than evaluation of economic security at an enterprise level or evaluation of regional socioeconomic security. This complexity is primarily caused by differences in the standpoints of various subjects involved in this evaluation. The complexity, in its turn, requires a thorough and detailed description of all the interests on the side of all the subjects involved in evaluation. Such a description of interests will help with the selection of operands for further operational use of the concepts which specify the contents of the category “socioeconomic security of an urban geo system”.

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PART 2. CHALLENGES AND THREATS TO ECONOMIC SECURITY UNDER THE TRANSFORMATION OF NATIONAL AND TRANSNATIONAL RELATIONS

DIAGNOSIS OF ECONOMIC STABILITY IN THE PROCESS OF OPTIMIZING THE FINANCIAL CONDITION OF AN ENTERPRISE

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In connection with the rapid pace of transformation of the domestic economy, the integration of financial markets, the constant intensification of competition, domestic business entities of any organizational and legal form of ownership have to neutralize the negative effect of internal and external factors, as well as minimize financial and economic risks. To neutralize and minimize them, as well as to improve the economic efficiency of enterprises, it is necessary to control the financial and economic environment. Such control is possible only when making a comprehensive analysis of the property, capital, and financial results, as well as finding reserves to improve the financial condition of an enterprise, which is practicable with the use of an effective model of financial diagnosis of an enterprise. In the fact, financial diagnosis provides an opportunity to more accurately assess the financial condition of an enterprise and predict management decisions that will help optimize the overall performance of the entity: profitability, financial stability, liquidity, business activity, etc.

Before analyzing the etymological foundations of the concept and essence of «diagnosis of economic stability of an enterprise» it is advisable to define the concept of «diagnosis» and «economic stability of an enterprise».

The research of the scientific understanding of the category of «diagnosis» in economics suggests that to date there is no single interpretation of this concept. The versatility of the definition lies in the individual vision by economists – diagnosis is identified with:

- search, analysis, detection of possible errors, and development of ways to improve system management [6];
- determining the state of the object, subject, phenomenon, or management process, identifying weaknesses and «bottlenecks» in them [8];
- analysis of the value and ratio of criteria (indicators) of an enterprise, market, and institutional environment, taking into account changes in ratios

to determine: the causes of problems and hierarchical levels of systems (the level of the function performed, structure or parameters [9];

- stage of the decision-making process based on the analysis of cause-effect relations [5];

- research activities aimed at identifying, analyzing, and evaluating the problems of improving the efficiency of the management system of an organization and identifying key directions for their solution [4];

- assessment of economic parameters of enterprise operation by studying individual indicators, the availability of incomplete information to find possible prospects for the development of an enterprise, and the consequences associated with current management decision-making [8].

Accordingly, in this study, it is proposed to define diagnosis as analysis and establishment of the nature of violations in the everyday course of economic processes on the basis of typical features that are specific to such a violation, as well as preventing them to bring the system into operation. It is with the diagnosis of a problem that its solution begins. Diagnosis of the object in the research determines the state in which the object is and identifies problem areas that slow down the development in the present and the future (Fig. 1).

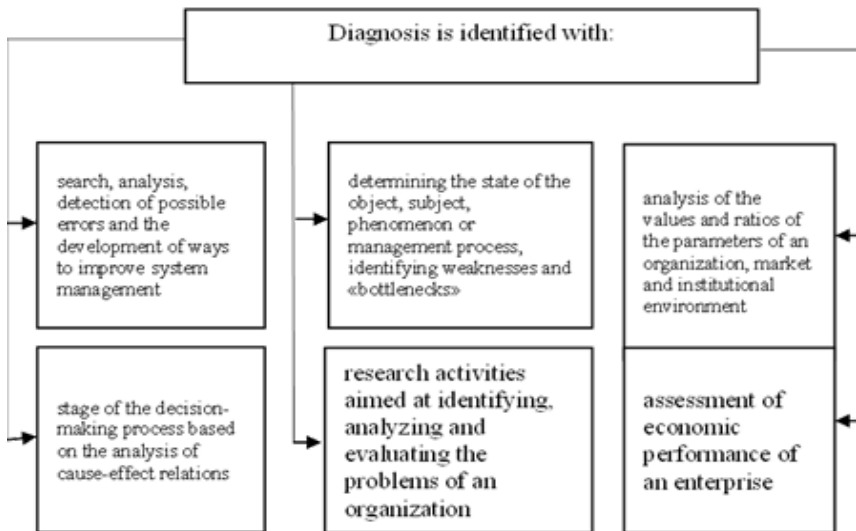


Fig. 1. Characteristics of the concept of «diagnosis» [developed on the basis of 8]

Based on the provisions of the current legislation of Ukraine, the definition of the financial condition of an enterprise is interpreted as a set of

parameters that show the availability, location, and level of resource use by an enterprise, as well as the actual and potential financial capabilities of an enterprise [4].

Salyha S. Ya. characterizes the financial condition of an enterprise as an economic category that reflects the state of capital during its cycle and the ability of the business entity to self-development in a certain period of time [7]. Summarizing the ideas of the authors concerning the concept of diagnosis of the financial condition of an enterprise, it is worth noting that the purpose of diagnosis should be a comprehensive analysis, which will promote meeting the needs of internal and external users, and its results can be the effectiveness of the business entity activities, changes in the financial and economic condition.

The proposed mechanism for diagnosing the financial condition of an enterprise makes it possible:

firstly, to react in time to the change of factors of the external and internal environment of an enterprise;

secondly, to reduce the impact of risk arising from uncertainty;

thirdly – the ability to make rational management decisions.

It is possible to reduce outgoing cash flows through:

- reduction of costs that are included in the cost of products;
- reduction of costs that cover the company's profits.

Improving the financial condition of an enterprise can be achieved by ensuring the growth of incoming and reducing outgoing cash flows. Increasing the size of incoming cash flows can be achieved through:

- increase in revenues from sales of goods and services;
- selling the share of fixed assets;
- refinancing of receivables [9, p. 135].

The first step in improving the financial condition of domestic enterprises should be to search for the optimal ratio of equity and debt capital, which would ensure a minimal financial risk with maximum return on equity. Conducting the optimization of liquidity of an enterprise can be realized through the operational mechanism of financial stabilization – using a system of measures aimed at reducing financial liabilities and the growth of monetary assets that provide these liabilities [7, p. 53].

The main direction of improving the financial situation is the growth of sales revenue. And the sales revenue and its size depend on the number of sold products and what is set per unit of sold products [9, p. 134].

It is also reasonable to pay attention to the fact that to improve the financial condition, producers of goods and services have to sell all products stored in warehouses.

The analysis of the developments of national and foreign authors on the purpose, objectives, process, methods, techniques, tools, results of the

diagnosis of financial situation, their generalization made it possible to form a mechanism for diagnosing the financial condition, which, according to the authors, is complex and corresponds to transformational dynamic conditions of domestic business entities.

The most important factor in the sustainability and development of an enterprise is to forecast the state of its finance because to properly manage production, one should also constantly use information about its condition and changes that occur.

Besides, measures to maintain the financial condition at a sufficiently high level may be:

- constant monitoring of the external and internal environment of an enterprise;
- development of measures to reduce the external vulnerability of an enterprise;
- development of action plans in case of problematic situations, implementation of preventive measures;
- introduction of plans for practical measures in the event of a crisis, making risky and non-standard decisions;
- coordination of actions of all participants and control over the implementation of measures and their results [3, p. 278];
- calculation of forecast values of product sales (sales plans) and investment plans, product cost, etc.;
- identification of sources aimed at financing economic activities, as well as budget financing, long-term, and short-term lending, etc.;
- coordination of financial divisions of an enterprise [1, p. 83];
- aggregate measures associated with changes in the structure and components of on-balance-sheet assets;
- transferring tangible and financial assets that are available at an enterprise to the monetary form [3, p. 279].

It is found out that the state of enterprise finance is the result of the mutual influence of all components of the financial relations system of an enterprise; it is characterized by a set of production and economic factors and is determined by a system of indicators that reflect the state, availability, location, and use of financial resources.

It is expedient to generalize the basic directions for optimizing the finance condition of domestic enterprises (Fig. 2).

Characterizing the financial and economic activities of domestic business entities, the following aspects should be noted: the growing role of timely and thorough analysis of the financial condition, liquidity assessment, identifying solvency and economic stability, as well as search for ways to improve and strengthen financial stability. It is important to objectively assess the potential for profit growth of an enterprise.

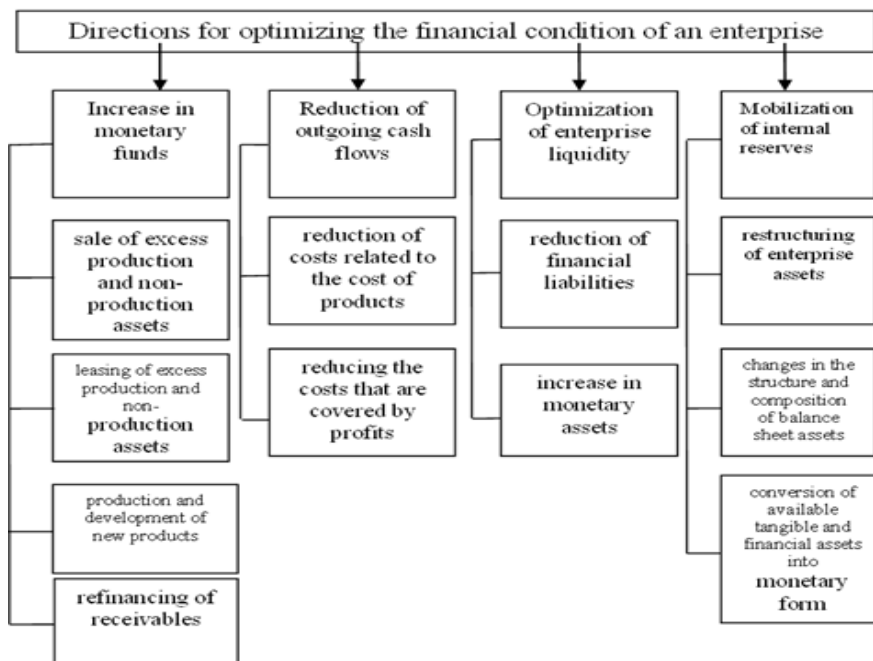


Fig. 2. Directions for optimizing the financial condition of an enterprise [developed on the basis of 1, 2, 4, 6]

During the research, the main measures were identified, their implementation will improve the financial condition of enterprises. The main task of the head of an enterprise is to increase revenue and reduce costs. Therefore, for providing financial stability it is necessary not only to eliminate the deformations caused by shortcomings of economic activity of enterprises and miscalculations of economic policy but also to create conditions for strengthening the finances of enterprises by introducing modern mechanisms for diagnosing the financial condition.

Having determined the economic essence and importance of diagnosing the financial condition of an enterprise, it is expedient to study the information base for diagnosing the financial condition of business entities.

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COMPETITIVE STRATEGIES FOR LAND MANAGEMENT BASED ON DECENTRALIZATION, EUROPEAN PRACTICE OF RESOURCE CONSERVATION AND ENVIRONMENTAL INNOVATION

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Land relations as an integral part of production relations occupy a special place in social production and require purposeful coordination of actions, adequate forms of land ownership, forms of land management and land

use in all sectors of the economy. Based on this, land use, and in a broad sense - land resources, requires focused management. Land management is a process of continuous improvement of land relations, land use and land tenure, land management and land management of farms, optimization of land distribution between branches of the economic complex and rationalization of their use in each of them, development and implementation of land protection measures and productivity. economic efficiency of use.

Management of land resources in Ukraine is carried out by regulating land relations through regulations, ensuring the requirements of land legislation, systematic control over the use and protection of land, the use of means of influencing violators of this legislation. Thus, the functions of state regulation of land relations are the functions of state management of land resources. Successful implementation of public administration and regulation requires an objective analysis of the characteristics of the land fund, trends in its use. The hierarchy of the structure of rational land management in Ukraine is quite complex and multifaceted. Depending on the powers, structure, purpose and tasks of state bodies in the field of land management, the following forms of management can be distinguished as a general, special and regional.

Expanding the essence of land management in market conditions, it can be noted that these are the processes of registration and dissemination of information on land ownership, value and use of land and related resources [2]. Such processes include the definition of land rights and land boundaries in relation to land management, detailed confirmation by appropriate documents and the provision of relevant information necessary for the functioning of the circulation of land. He later noted that the main problem of organizing a land management system that meets the requirements of transition economies is the lack of appropriate scientific base, including a lack of knowledge about the rational scale of state intervention in the allocation, use and restoration of land resources, effective mechanisms for combining administrative and market ways to regulate these processes, optimal organizational structures and forms of management [11]. The development of management as a specific type of activity, the growth of its role, the constant expansion of the network of governing bodies is a natural expression of socio-historical progress. Without it, there can be not only processes of production, but also exchange, distribution, consumption, service, finance and all the communication channels through which these processes are carried out. A wide range of management tasks is solved by state, local and internal economic management. In turn, public administration is divided into general and departmental (sectoral).

General public administration is carried out by state bodies of general and

special competence and has a territorial (regional) character. It applies to all lands within a certain territory (Ukraine as a whole, region, administrative district, city), regardless of the category of land and the subjects of land rights. Departmental (sectoral) land management is performed by ministries, committees, services on the principle of jurisdiction of enterprises, organizations to which land is provided, and does not depend on its territorial location. Local government belongs to the competence of local governments and can be both general and special. Internal management of land is carried out by owners and users of land [3; 7].

Land management is complex, as it affects the interests of many subjects of land relations, which requires a systematic approach to managing the use and protection of land resources, coordination of organizational and technological solutions with possible environmental and economic consequences. Management functions are performed by legislative, executive authorities and local governments, which regulate land relations, determine the overall strategy for the development of land tenure and land use, lawmaking, law enforcement, etc. The content of executive and administrative bodies for land management is forecasting and planning their use; establishing norms and procedures for land tenure, land use, distribution and redistribution of land; operational and administrative, regulatory and control activities for the use and protection of land. The basis of the processes that take place in the land management system is a continuous information exchange.

The means of ensuring this exchange are land management, land cadastre and land monitoring. Land management is a set of relationships between elements of the management system aimed at the rational use of these resources [4]. The nature of the land management system has changed over several epochs in accordance with the economic basis, goals and criteria of social order. In any social system of government performed two functions: ensuring the national interests and the interests of individual members of society (or their groups). New land relations and economic conditions have formed a new management system, the main characteristics of which are: a sharp transition from administrative-planning to market-entrepreneurial model; delimitation of functions and subjects of state and non-state administration; development of processes of democratization of public relations; integration of Ukraine into the world information and technological process; unification of political, social and socio-economic processes. Land management in market conditions is a system of interrelated economic, legal, organizational, political and other measures by which the state influences the interests of various participants in land relations in order to organize the rational use of land resources and their protection. The organization of land use management is one of the most important state

tasks.

The mechanism of such management can be represented as an organic combination of three inherent aspects - legislative, economic and environmental support. Considering these components in the relationship, special attention should be paid to the formation of an effective system of economic levers - the most effective and complex method of influence in the field of land management. The economic essence of land management in market conditions, in our opinion, is to justify the measures taken as the implementation of land policy of the state and aimed at improving the efficiency of land use as an economic resource. Among the many areas of land reform can be identified as follows: the distribution of land by type and form of ownership, purpose, as well as sustainability of land use as an object of management; establishment of appropriate land use regimes; formation of land use structure on the basis of diversity.

The strategic goal of state policy in the field of land management, reform and regulation of land relations as an integral part of state socio-economic policy is to provide conditions for efficient land use and land market development as one of the key conditions for sustainable economic development. citizens. The existing system of land management is more pronounced administrative, control nature. Its functioning is carried out mainly by the distribution of executive power vertically, which is far from complete [5; 8; 10].

Horizontally, the improvement of land legislation and the implementation of powers in the field of land use and protection takes place in three directions in accordance with the composition of land and environmental regulations, which are grouped as follows: own environmental or environmental legislation; natural resource legislation, including land; other areas of legislation that regulate relations arising in the process of land use and protection - civil, administrative, financial, etc. In the modern conditions of reforming land relations, the inclusion of land in the sphere of trade becomes obvious the need to introduce a more effective management mechanism based on economic methods of influence.

The main elements of the economic mechanism include: the establishment of differentiated land payments; economic stimulation of rational land tenure and land use, application of economic sanctions for mismanagement of land, reduction of soil fertility; economic protection against the seizure of agricultural land for other purposes (industry, transport, etc.); credit, financial and investment policy of the state. It should be noted that currently the differentiation of land fees does not adequately reflect the differences in the location and fertility of land plots, even within one district, and does not take into account the contribution of landowners in improving land use. Free use of land has had a negative impact on quality and has been one of

the reasons for the deterioration and low efficiency of land use. In general, the economic mechanism of land management has the form of a system of management methods: economic incentives, economic guarantees and economic sanctions [1, 6, 9].

In order to economically stimulate the rational use of land, owners and users should be able to temporarily be exempt from paying for land, receive benefits for the payment of land tax. The state or local authorities may allocate budget allocations for the restoration or reclamation of land, monetary compensation for their temporary conservation, set higher prices for environmentally friendly products, encourage owners to improve soil quality, increase their fertility, productivity of forest lands. An important block in the methods of economic regulation of land relations are economic sanctions applied for offenses in the form of various monetary compensations related to compensation for damage. Fines are often used in practice as a measure to influence violators of land law. Penalties (up to the withdrawal of the allocated land plot) are established for loss of soil fertility, development of erosion, violation of land and environmental legislation. The main purpose of the pollution payment system should be to influence the economic behavior of economic entities, rather than penalties for non-compliance with pollution standards.

In the current system of management, payments for pollution are a way to mitigate the negative effects of economic activity and perform primarily the function of accumulation of funds within environmental funds. This is, of course, a very important function, especially in the context of a sharp reduction in budget funding for environmental activities, but in the long run should increase the incentive role of this type of payment. To this end, it is necessary to solve the following problems of a methodological nature: to take into account the role of the enterprise in the socio-economic situation of the region and its economic condition; the size of the rates should be related to the possible costs of measures to reduce pollution (for example, the cost of environmental equipment, taking into account the payback period, etc.). The main criterion for establishing the amount of payments should be the degree of response of the enterprise to market signals aimed at changing the cost of production due to these payments; the amount of payments should depend on the type and structure of pollution and the environmental situation of the territory in which the enterprise is located.

Incentive payments can have several purposes, such as minimizing waste, encouraging the reduction of waste-generating products, stimulating the production of substitutes, etc. The pollution payment system should focus on the end results and be interlinked with overall economic development priorities.

Thus, in our opinion, land management should be understood as a

systematic, purposeful action of the state and society on land relations and land use. This action should be based on knowledge of objective laws and information in order to ensure the effective functioning of land resources of the country as a whole, regions and specific territories. The concept of "land management" in modern conditions is changing and improving. This is due to changes in the content of land relations and the implementation of land reform. Since the main issues of reform are diversified land use and parity development of various forms of ownership of agricultural land, public land management is to form a mechanism of rational land use, which would influence the behavior of land relations and ensure effective functioning in specific natural conditions.

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INNOVATION AND INVESTMENT APPROACH TO ENTERPRISE POTENTIAL DEVELOPMENT IN PROJECT MANAGEMENT: HUMAN CAPITAL, MARKETING AND ECONOMIC SECURITY

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One of the first steps in organizing of a comprehensive system for developing the potential of business entities is to analyze the existing potential of the business and see how it can be improved. At this stage, you can invite a third-party consultant who can help you to analyze the market, identify areas where value can be added, and identify innovative opportunities, both internal and external. For example, the analysis may identify the need to improve dissemination methods to reach more customers. On the other hand, research can show the possibility of improving products and services

with a target on a specific audience. It is desirable to start the organization of a comprehensive system of potential development of business entities with the definition of business strategy. After summarizing the innovation potential, it is possible to gather a team, identify concrete strategies and find out what needs to be done to make companies more innovative [2]. It is necessary:

- to find out which interventions will bring the best profit from investment and identify necessary resources;
- change products and services based on completed research;
- develop the best business processes to satisfaction business needs;
- provide better tools for employees to improve their skills;
- train staff so as they can study and implement new processes;
- evaluate specific issues, for example, related to intellectual property.

The foundation of business innovation relies on your staff and their attitude. Smart companies always encourage the creative thinking of their employees. For example, creating a way for employees to express their innovative ideas, it can be a platform for suggestions, forums for employees to discuss ideas, or personal brainstorming sessions. Or to appointment a «champion of innovation» for management and monitoring of innovative projects, which contributes to the empowerment of employees [3; 6]. It is important to allow team members to take calculated risks and think about alternatives because people need to know that the company supports them when they generate ideas. For example, when an employee experiences a new process, the company must be prepared for both success and failure. This is a part of the creative process. Successfully innovative projects must also be rewarded with incentives such as bonuses or other forms of compensation. These tools will promote the loyalty of your creative and innovative staff. One of the options for attracting innovation to the business may be the establishment of the project «Business Laboratory» - a system for finding ideas to create new products with the involvement of employees. Today, any business faces the task of increasing profits, including new businesses. The project «Business Laboratory» is closely related to the strategic objectives of the enterprise and shows an effective system for finding new ideas [1; 7]. It is main task - to involve in the process not only management but also other categories of staff. In each enterprise, some workers need to be perceived as talented specialists of his business, able to offer initiatives that can become full-fledged products. All categories of employees are taking part in the project because the ability to initiate ideas does not depend on age or specialization. The main selection criterion is an active vital position, a high professional level, and assessment of the effectiveness of activities, creative and innovative capabilities, and participation in development programs. Thus, commands are formed with a small number of people who are

engaged in generating ideas. The expert commission determines leadership initiatives that are recommended for implementation. Perspective ideas that did not go to the leaders are sent to refinement. From another quantity, a bank of ideas is formed. Old and new teams, for the existence of a project, except giving new proposals, can work out any ideas and prove them to the project initiative. Of course, while the idea is not processed and not analyzed, its significance and perspective will be difficult to appreciate. The business laboratory develops horizontal connections between employees of units, stimulates the exit beyond template communication, and expands interaction and contacts [8]. Another means of attracting innovations in business is to launch their own information platforms. The purpose of their creation is to attract and evaluate innovative ideas of personnel. The use of worker's creative ability today is a sufficiently distributed tool in the world by which many companies solve various tasks and develop their business. The first step is to create convenience, with remote access, and useful for all corporate portal workers. The activity of the platform can be carried out in two directions. First - conducting competitions whose purpose is determined by departments, directorates, departments, branches of business structure. Each employee of the company can become participants that must solve specific tasks for improving technological and business processes, creating new products, optimization of production operations, etc. Competitions must have limited terms, and the proposed solutions can evaluate only customers [9; 10]. The best ideas are taken to introduce, and the authors will receive a reward.

This platform is not limited only by doing competitions but also becomes a kind of ideas bank. Various ideas will be gathered, discussed, and refined. Moreover, the platform has a defined topic that corresponds to the strategy of the enterprise and can cover different areas of its activities. Ideas may be different: from simple, those employees can introduce independently at their workplace, to that which requires additional economic calculations and opening projects. The main thing for the idea is to be well worked out, and the worker who gave to be interested in transforming it into life and is ready to take part in its implementation [4]. All offers that are located on the platform are open access to the company's employees. Experts of those units in which sphere of the activity are engaged in a specific idea carrying out their evaluation and selection. In this case, each worker registered on the platform can evaluate, leave comments and leave an offer for revision, to offer an optimal option for the realization of a specific initiative. The creative addition is that user activity can be encouraged by introducing its own innovation currency in which the number of earned points will be converted to perform productive actions on the platform. For example, for each submitted proposal, its author can receive 100 points, the same

quantity for its approval by experts, and 500 points - after the realization of initiative [5]. Employees can exchange points on real prizes on the platform. Difficulties due to the fact that not all manufacturing units are accessible to the main internal information resource, you can solve by providing access to employees from home or mobile device that has access to the Internet.

It is anticipated that such resource will be able to satisfy various needs of the company's employees: from receiving information about various aspects of the company's activity, access to the necessary documents, and methodological guidelines for the preparation of online applications [6].

The following example aims to increase the flow of new ideas and increase the speed of their realization, finding new tools, approaches, and forms of interaction of workers to generate more proposals that will help businesses achieve ambitious goals and overtake competitors.

Compare your own efficiency with competitors can help indicator of TSR (Total Shareholder Returns). Investment profitability indicator in the company's shares from an investor point. Consists of the amount of the profitability of dividends and profitability from the growth of market value.

Steps within the project, boundary to make the company become innovative. It is necessary, to begin with, to set a long-term ambition target and display it in clear indicators - EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization), costs, quality, delivery discipline, and more. They will be touched as manufacturing and functional divisions. It is important to set targets, based on marketing and technological strategy [9]. This means that it is necessary to study markets, new technologies to see in which technologies and practices the company lags behind competitors. In addition to traditional searches for ideas within their processes, due to continuous improvement, you can turn to the search for ideas in the external environment - these are conferences, seminars, scientific schools, patent bases, etc. This work must be systematized and decide who will do it, for example, the Center of Technical Development. His task is to form a comprehensive development program, which will provide a constant lead over competitors by indicators of production cost. Representatives of other directorates should assist the team in this, which will finish the issues in their areas in the external environment. Ideas can be different - from a low-cost means of cost optimization on aggregate that can be realized by the brigade forces - to large investment projects that will require a different level of involvement of management.

The company may organize a platform for discussion and promotion of startup projects. The startup platform is organized according to the example of Roman amphitheatres, where students sit on multi-tier rows and the lecturer stands in the center and communicates with the audience [10]. This platform is one of the elements of creating conditions for the development

of personnel and organization so that people can come up with any ideas - strategic, new, relevant, discuss them and work out. Usually, all this has been long, but this happens in a closed space, in the format of committees, departments, and today a new forum for discussion is required.

Search for ideas with the help of crowdsourcing platforms. The search for potential partners and innovative technologies that can be implemented in the company may take place at international crowdsourcing platforms, such as InnoCentive Inc.

Examination of proposed ideas is carried out in two steps. At the first step, proposals are selected that generally meet the task, and those who have passed into the second step - are analyzed for compliance with the defined criteria. Each criterion has its weight in evaluation, and the correspondence is determined in the points. In further the ideas that scored the highest score will be processed.

It should be noted that when using crowdsourcing platforms, solving of the problem could come from other industries.

The main task of this project is to create a customer is a reasonable feeling that the product or service is made precisely for him and satisfies his personal needs. Thus, modern technologies allow you to go to true customization, and not to its simulation. The difference of a new industrial structure, which provides a complex of advanced production technologies, from the previous structure, is that the previous one is built on a scale effect. The scale effect is connected with a change in the value of the unit of products, depending on the scale of its production by the company in the long run. Reducing costs per unit of production while increasing the creating of production is called «economies of scale». Today it can be noted that the scale effect stops working, or its influence is significantly reduced and continues to decrease. This leads to a situation where competitiveness, first of all, receives individualized products under the order of specific consumers by introducing constructive or design changes. In the previous industrial structure, this was achieved by introducing customization solutions in the latest stages of the production cycle. But the transition from the serial product requires a fundamentally different production management system: the number of control objects sharply increases, there is an increase in the control parameters on the previous cycle of technology development, which is associated with the massive introduction of information systems. The complexity of management of the production system, taking into account that it cannot be separated from the entire life cycle, grew up greatly. On a change of hierarchical, matrix management systems come systems based on the setecentric principle. But the introduction of new control systems is possible only in production systems of a new industrial structure based on advanced production technologies [1]. At the same time, it is difficult to

find a company in which would have such a production, so the output is artificially created testing grounds that will allow you to work out production competencies because of the constant embedding of new technological solutions to the production system. No manager in the world would ignore the theme of innovation and did not see the future of any company in them. Except of innovations, most companies are concerned about increasing of operating efficiency and try to solve this task by trial and error method using the arsenal of different approaches which market and consultants offering.

But in practice the following is:

Innovations based on the Theory of Constraints (TOC) - 98% of failures;

Innovations based on the method of Quality Function Deployment (QFD) - 98% of failures;

Innovations based on the technology of thrifty production (LEAN) - 98% of failures;

Innovations based on the project management method (SCRUM) - 98% of failures;

Innovations based on open innovations - 98% of failures.

Factors that will contribute to the success of innovation and, accordingly, the lack of unsuccessful implementation attempts:

the ability to detect and solve compromises;

- the ability to detect and solve problems by compromises;

- availability at the meta-level of clear course related to consumer value;

- system thinking;

- management of dynamic values;

- a clear understanding of complexity - fast training cycles, S-figurative curves, schemes - and the need in fast training cycles;

- a clear understanding of the presence of a «critical mass in a critical moment»;

Mandatory understanding that the client/consumer has a gap between the word and deed and understanding how to deal with it.

Herewith it is impossible to reduce the value of intangible objects that effect on the introduction of innovations, namely:

Impact skills should be enough;

- a great ability to work together in interdisciplinary groups is required;

- perseverance, decisiveness and desire to work on a difficult task;

- high ability to cope with constant failures;

- the ability to admit that ideas have zero value;

Ability to form and maintain a clear sense of forward movement inside the group.

The success of innovation means that material and intangible elements were perceived correctly.

Introducing a system that would contribute to an increase innovative

potential of the enterprise most often occurs with difficulties.

The first problem - is resistance of workers against innovation, and the second is the lack of participation of senior management in the process. Prevention of such situations should be given to priority, because they are capable to slow down the implementation process and not only not lead to improvements, but also to worsen the situation in the collective.

The interest of personnel in the introduction of changes may decrease through an inefficient organization of project work: lack of coordinator, support management, reliable monitoring and evaluation system. Lack of planning and effective management can lead to an incorrect distribution of loads between employees, overworking which interfering effective cooperation.

Another group of reasons for the resistance of workers to changes forms the flow of information, communication in the group. Any delays, errors in the information, the lack of feedback, or a clear planning system cause concern to employees, because the purpose for implementation of innovation is fuzzy, as well as the benefit expectation from its implementation. In a condition of lack of information, gossips are often distributed, which only complicates the state of affairs. The solution is: build a reliable and effective communication system at all levels.

It is impossible to exclude people's behavior and their personal attitude to changes. Changes always make their share of uncertainty in a familiar situation that not everyone can accept calmly. In addition, among the reasons for resistance to changes can be called unwillingness to take on additional responsibilities, commitment to traditions and negative experience in the past. Reduce these fears can an adjusted communication system, preliminary training, support of the management and transparency policy, and openness in conducting any changes [5].

One of the main problems that arise in the enterprise is the lack or insufficient training of employees to introduce innovations. Without understanding the essence, goal, concepts and without having tools for its implementation, they make mistakes more often and eventually are disappointed in the system. Resistance of personnel can be expressed in different ways, for example, they may deny the need of changes, trying to sabotage any measures, or accepting formal participation. In extreme cases, this can lead to depression that often occurs in a such situation. Thus, to prevent resistance of innovation by workers possible thanks to qualitative training and planning of the implementation, preliminary training, forming an effective communication system, support and motivation from management.

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STATE SUPPORT FOR INNOVATIVE DEVELOPMENT AND CREDITING OF ENTERPRISES IN THE AGRICULTURAL SECTOR OF UKRAINE

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Agriculture is now a leading industry in Ukraine with a considerable export potential. However, only 2% of Ukrainian utilized agricultural area are cultivated under the cost-effective agricultural technologies, while the total losses reach 30%. This, inter alia, is due to the fact that the industry funding is rather complex. There is a trend in the agricultural sector to reduce the financial resource capacities in the commercial farm units of all types. The majority of agricultural farm units lack the funds to be invested in innovations.

Among the researchers who have studied this problem, the following should be mentioned: O.V. Hryvkivska and O.Ye. Hudz' [2; 4], whose works reveal the forms and methods of state support for agriculture in the context of ensuring innovation and investment security; T.H. Bondaruk, M.Y. Demianenko, P. Pyvovar [1; 5; 13], who analyzed the impact of budget funding on the development of agricultural production; H.V. Korniychuk, R.I. Lopatyuk, L.V. Tranchenko, H.V. Sydor, N.M. Feschenko [9; 10], who revealed the prospects of crediting for ensuring innovative development of agricultural enterprises, principles and features of attracting investments to agricultural enterprises; M.M. Humeniuk, L.L. Kalinichenko [3; 8], who described the mechanism for effective operation of agricultural enterprises in the frameworks of creating the innovative model of development of Ukraine. The analysis of published works, however, revealed a need to deepen the research aimed at forming a modern system of funding the innovations of agricultural enterprises.

The methodological framework of the research bases on the leading scientific progress of Ukrainian and foreign scientists to ensure the development of agricultural enterprises. The research has used a number of both general and special research methods that are interrelated and

consistently implemented in the course of research. Analysis, synthesis, and logical generalization are used to identify trends and reveal the specifics of funding the innovations of agricultural enterprises, as well as to generalize the existing experience in increasing the efficiency of agricultural enterprises. System approach, statistical and economic methods, as well as graphical and analytical method are implemented for visual reflection of the processes under research, along with the socio-economic phenomena.

It is worthwhile to emphasize that funding the innovations of agricultural enterprises has a certain peculiarities, which is due to a number of important factors, such as a significant time lag between the investing costs and obtaining results, long period of reproduction of the fixed assets, seasonality of production, given the need for ensuring continuity of the production processes. Reproduction of the main fixed assets takes rather a long time. Living organisms subject to the biological reproduction laws are used as material and supplies. Also climatic conditions of the region significantly impact the performance of agricultural enterprises. The sources of funding the economic activity of agricultural enterprises are represented by their own financial resources, state funding, and credit resources. It is such factors as the actual need, existing opportunities and the importance of crediting in creating the conditions for the successful development of agricultural enterprises that determine the increased research interest to exploring the prospects of their increased involvement. Thus, according to Prostobank Consulting, special credit programs for small agricultural enterprises in Ukraine are offered by commercial banks of Raiffeisen Bank Aval PJSC, ProCredit Bank PJSC, Credit Agricole Bank PJSC, and Megabank PJSC.

The conclusion of credit agreements is significantly determined by the high demand of agricultural enterprises for fixed assets, significant physical depreciation and obsolescence of available funds, seasonality of production, unsatisfactory financial and economic condition of the majority of enterprises. Currently, the features of the existing crediting programs for innovations of small agricultural enterprises are a flexible repayment schedule, credit purpose, as well as an expanded list of assets that can act as collateral. The state program to provide subsidies on repaying part of the credit interest rate slightly facilitates the access of agricultural enterprises to credit resources, while concessional crediting provided for the introduction of competitive selection of agricultural goods producers for these payments.

Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2015 No. 300 “On the approval of the Procedure for using the funds provided in the state budget for financial support of measures in the agricultural sector by reducing the cost of credits” [6] provides for reimbursement of the economic entities in the agricultural sector that attracted credits. The reimbursement amounts to 1.5 of the discount rate of the National Bank of

Ukraine, effective on the date of accrual of interest, but not higher than the amounts provided by credit agreements, reduced by five percentage points.

Compensation is currently applied to the interest rates on the credits raised for the purchase of fixed assets for agricultural production, the implementation of costs associated with the construction and reconstruction of agricultural production facilities, as well as short-term loans raised to cover production costs. For the borrowers operating in the livestock sector, the reimbursement amount may not exceed UAH 15 million, and for borrowers operating in other agricultural activities (including processing of agricultural products) may not go beyond UAH 5 million [6].

However, the annual financial support for innovations of agricultural enterprises and the increased volumes of the aid do not yet provide sufficient progress. The reason for this lies mainly in the incompleteness of the legal framework governing such the support for agricultural enterprises. Also the actual needs in reimbursement lack the correct definition and well-reasoning thus leading to the loss of rights to receive the reimbursement. The current legal framework does not allow to significantly increase the volume of concessional crediting for innovations of the agricultural enterprises. Regional competitive tenders under this state program are often held quite formally, without proper definition of the criteria for making appropriate decisions.

However, the practice of state support of agricultural enterprises is determined not only by the peculiarities of this industry. There are a number of features inherent in Ukrainian enterprises of the agricultural sector. It is worth to emphasize the low level of rural infrastructure, along with the rupture of previously developed technological and economic links between different areas of agricultural sector, the need for significant financial investments to maintain soil fertility, as well as the fact that Ukraine lags far behind developed countries in terms of science and technology progress and advanced technologies introduction [1].

An important role in intensifying the innovations of agricultural enterprises is provided for by the budget support in two ways. Firstly, it is provision of various benefits reducing the amounts of fiscal payments to the state budget. Secondly, it is the budget allocations for agricultural production. In recent years, the state has coordinated the implementation of more than thirty programs of this kind. But according to WTO requirements, these programs are subject to reduction by 20% within six years after Ukraine's accession to the WTO. It is currently regulated that the amounts of budget support for agricultural production or trade should not exceed 5% of the concrete product value.

Pursuant to the approved programs of budget support of agriculture, direct funding is possible only after the commencing of the Law of Ukraine

on the State Budget of Ukraine for the current year along with the Procedures for the use of budget funds, according to the relevant programs. The Law defines the amounts of budget allocations for the Ministry of Economic Development and Trade of Ukraine. In 2020, the Cabinet of Ministers of Ukraine adopted Resolution No. 279 “On amendments to the Procedure for the use of funds provided in the state budget for the development of viticulture, horticulture and hop growing” [6]. Also, a maximum percentage of reimbursement has been set for each area of state support to the economic entity. The maximum amount of funding should not exceed UAH 25 million for one budget year.

According to the results of recent research, the total increase in budget allocations in terms of support programs of the agricultural sector is distributed mainly in the next proportion: budget livestock subsidies and state support for crop production – 36.2%; financial support of agricultural sector enterprises through the mechanism of cheaper credits – 31.0%; reimbursement of establishing and supervision of new orchards, vineyards and berry fields – 11.5%; financing of programs to reduce the cost of insurance premiums actually paid by agricultural market participants – 19.0% [7; 11; 14].

One of the most important sources of funding for innovations is the own funds of agricultural enterprises. At the same time, the level of depreciation allocations is insufficient for the full reproduction of the fixed assets. The net profit remaining at the disposal of agricultural enterprises does not provide for starting large-scale and cash-consuming projects aimed at high-quality technical re-equipment of the production. Agricultural sector enterprises of all ownership forms faced the problem of accumulating own equity to modernize production. The actual service life for most of the equipment and facilities exceeds the standards by 2–3 times. The annual depreciation of fixed assets sometimes exceeds their renewal volumes. Agriculture is seized by a large number of non-attractive facilities for investment. The existing technologically backward capital-intensive and energy-intensive industries are not capable of producing high-quality goods in accordance with the international standards. Thus, the agricultural production currently experiences a constant de-industrialization, with more and more cases of transition to manual labor.

Innovations of agricultural producers under the crisis conditions of Ukrainian economy and sharp shortage of financial and investment resources are gradually winding up. There is a stable degradation of existing scientific and technical and innovative potential in the industry. There are less advanced developments with their novelty becoming less relevant. The enterprises lack potential to implement innovations using their own resources.

The current shortage of investment resources in Ukraine also prevents from attracting citizens to finance long-term programs and innovative projects. The experience of implementing the state policy of stimulating savings shows the need to focus efforts on comprehensive support for the formation and development of non-bank financial institutions. This kind of support contributes to the tax incentives for innovation, depreciation benefits, venture financing, cooperation of incentive funds, budget loans, state subsidies and reimbursements.

Under crisis conditions, processes of crediting the innovations of agricultural enterprises are currently slowing down. Currently the short-term crediting has become a common practice. Thus, insolvency of borrowers increases, and all the relevant negative consequences appear. Commercial banks mostly do not take into account the specifics of seasonality in agricultural production.

In 2020 The Verkhovna Rada of Ukraine has lifted the moratorium on the sale of utilized agricultural areas dated July 1, 2021 (draft law No. 2178-10). The World Bank estimates that the opening of the land market in Ukraine will provide an additional 1.5% to GDP growth annually. According to T.S. Milovanov, in the first year of the land market, GDP of Ukraine will gain an additional USD 700 million, and not less than USD 4 billion by 2025. According to the current statistics, the cost of lease of Ukrainian land per hectare ranges from USD 50 to USD 70 per year, depending on the region. With the opening of the land market, the price per hectare will vary from USD 1,500 to USD 2,000, and the cost of rent will rise to USD 100–150. Subsequently, the value of land will significantly increase and reach the level of European prices.

Thus, opening of the land market will let farmers have the right to pledge their land as collateral in a commercial bank, obtain credits and invest in enterprise development, perform innovations, technical modernization and re-equipment of the production. Ukraine authorities also plan to create a Deposit Guarantee Fund for small and medium farmers (at the expense of state funds). Possibilities of reducing credit rates for small farms are considered (up to 5–7% or even 3–5%, currently the cost of a credit is 17–20% per annum). Legislation has been amended to allow the family farming business to pay taxes under a simplified scheme. Cooperation with the European Union is directed towards this purpose (EUR 26 million will be allocated to support small agricultural businesses, according to the signed agreement). These measures implemented as a whole should contribute to the increased performance and production volumes, rise of the total capitalization of Ukrainian agriculture.

Therewith, the problem of pricing of domestic agricultural products needs to be addressed. This will prevent the outflow of money from the

agricultural sector of Ukraine and provide adequate and comprehensive state support to the industry. Further researches should focus on developing an effective mechanism for combining efforts and coordinating the interaction of public authorities, institutions, enterprises, commercial banks, information and consulting agencies to attract long-term investment in the innovative development of Ukrainian agricultural enterprises. It is also worth considering the feasibility of comprehensive implementation of relevant programs for regional innovation along with projects aimed at intensifying innovations of agricultural enterprises.

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ENSURING THE FINANCIAL SECURITY OF THE STATE THROUGH THE INTRODUCING NEW FORMS OF INVESTMENT IN UKRAINE

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In the current crisis conditions that accompany the development of the world economies in recent years, one of the main tasks of the development is to ensure stability at the state level. This, in turn, cannot be achieved without increasing the efficiency of all economic entities, which largely depends on its level of security. Security issues are mainly considered in terms of national or economic security of the state, regions, individual industries or sectors of the economy, enterprises, and population. But today we can talk about «... the right to the existence of such an economic category as financial security» [1, p. 89-90], which contains many internal and external aspects.

Modern challenges to the financial security of many countries, which, at the current stage of their development, are characterized by instability and cyclicity, require some coherence and unification of the categorical apparatus, identification of basic characteristics «financial security» and the

factors that threaten it, clarification and monitoring of the indicators that characterize the level of financial security and the development of effective measures to protect all financial interests.

Financial security cannot be considered apart from economic security, as it is its most important component. So L. Schwab identifies such components of economic security «... as technological, resource, social and financial security» [2, p. 540-541]. At the same time, financial security occupies one of the key positions in the formation of economic security.

O. Baranovsky presents a detailed definition of financial security «... as a degree of protection of financial interests; the level of security of subjects of all levels of financial resources management; the state of the components of the financial market; quality of financial instruments and services; the state of financial flows in the economy, which allows us to consider it one of the most important system-forming elements of economic security of the state» [3, p. 28].

This formulation of financial security can be associated with the concepts of independence and balance, which also have the same nature with stability.

The correlation between economic and financial security has been highlighted via comparing their characteristics (see Fig. 1). As you can see from Fig. 1, given all selected features, there are differences between economic and financial security, but they are not significant and are related to the level of their impact on the object, the security of which they provide.

Thus, when considering the essence of financial security, its connection and subordination to economic security should be considered determinative. It is the provision of financial security of the object that creates the preconditions for ensuring its economic security.

One of the main factors in ensuring the financial security of the state is a sufficient level of investment in the economy. The development of production, solving social and environmental problems, compliance with modern requirements of available financial and human capital depends on the appropriate level of investment.

It should be understood that the owners of free funds are faced with the dilemma: to invest or to save. On the one hand, it will contribute in promoting development, increasing profitability, however the risks of additional costs and capital losses are high as well. In this regard, at the present stage of economic development it is necessary to introduce new forms of investment that will help increase the efficiency of investment activities and ensure the financial security of the state.

Most researchers believe that currently Ukraine needs to intensify investment processes to ensure the financial security of the country's economy [8, p. 25-27; 9, p. 64-67]. At the same time, a lot of attention is paid to the sources and usage of these investments: foreign or national;

public or private; real or financial [10, p. 128; 11, p. 33-35; 12, pp. 134-135]. However, the issue of the modern types of investments and their forms is not covered at the appropriate level in modern research.

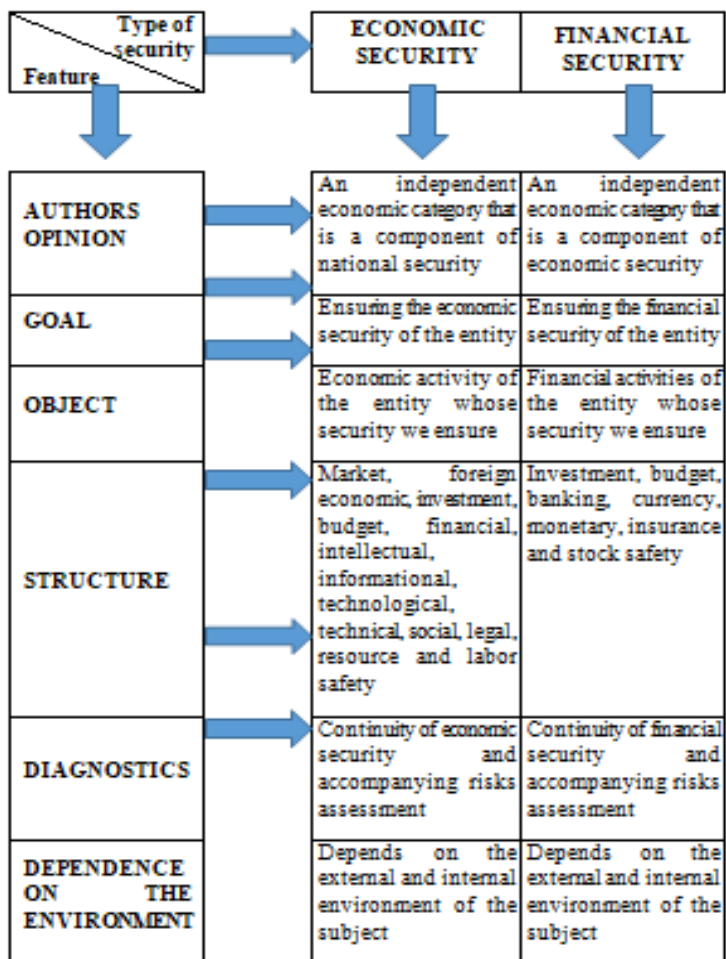


Fig. 1. Comparative characteristics of economic and financial security
The source: compiled by the author based on [3, 4, 5, 6, 7]

If to consider what could be the object of investment, then everything is clear - values (see Fig. 2).

As for the results of investing, most authors tend to consider the result to be possible additional value or return on investment, but the result may

be something else. Thus, the law stipulates that investments can result not only in profits, but also in any social or environmental effect. This is very important for the concept of a new type of investment for the Ukrainian economy - impact investment.

Property and intellectual values	
→	funds, target bank deposits, shares, stocks and other securities (except promissory notes)
→	movable and immovable property (buildings, equipment and other tangible assets)
→	intellectual property rights
→	a set of technical, technological, commercial and other knowledge, designed in the form of technical documentation, skills and production experience required for the organization of a particular type of production, but not patented one («know-how»)
→	rights to use land, water, resources, buildings, structures, equipment, as well as other property rights
→	other values

Fig. 2. Property and intellectual values [13]

Leading place in assessing the economic potential of the national economy is taken by foreign investment. After analyzing the last seven years of the practice of attracting foreign investment (hereinafter FDI) to Ukraine, it can be noted that there were several periods with a negative balance of FDI on foreign direct investment in Ukraine and from Ukraine - 2013, 2014, 2017 and 2020 (see Table 1).

Table 1

*Foreign direct investment in Ukraine from 2010 to 2020 (million USD) **

Years	FDI in Ukraine		FDI from Ukraine		Surplus	
	de facto	before the previous period	de facto	before the previous period	de facto	before the previous period
2010	6495	1679	736	574	+5759	23.7%
2011	7207	712	192	-544	+7015	21.8%
2012	8401	1194	1206	1014	+7195	2.6%
2013	4499	-3902	420	-786	+4079	-43.3%

2014	410	-4089	111	-309	+299	-92.7%
2015	2961	2551	-51	-162	+3012	907.4%
2016	3284	323	16	67	+3268	8.5%
2017	2202	-1082	8	-8	+2194	-32.9%
2018	2355	153	-5	-13	+2360	7.6%
2019	3070	715	648	653	+2422	2.6%
2020	-343	-3413	56	-592	-399	-116.5%

*since 2014 - without taking into account the occupied territories (Crimea, Sevastopol, parts of Donbass)

The source: <https://bank.gov.ua>

2020 was the most critical year, FDI inflows to Ukraine decreased by \$ 343 million, and FDI from Ukraine increased by \$ 56 million compared to 2019. This situation is due to insufficiently rapid progress in the implementation of structural reforms and uncertainty with further prospects for overcoming the COVID-19 epidemic in Ukraine.

It should be noted that in the last 10 years the world has undergone certain transformations and fundamental changes that affect not only the form and instruments of investment, but also their fundamental principles. As a result of these processes, new types of investment have emerged, which include impact-investments - a fundamentally new investment paradigm.

Impact-investment is a new term used to describe investments made in many asset classes, sectors and regions. In 2019, the Global Network of Impact Investors (hereinafter GIIN) for the first time developed a methodology for estimating the overall size of the impact-investment market. In 2020, GIIN published an annual survey of investors affecting the market, which includes an updated analysis of market size. According to GIIN estimates, as of the end of 2019, more than 1,720 organizations managed \$ 715 billion in impact-investment (for comparison: in 2015, \$ 77 billion was attracted, and in 2017, the volume of involvement in this sector was 114 billion US dollars) [14].

The impact investment market includes a number of types of investors characterized with the help of the type of organization, location of headquarters and size of the investor.

Impact-investments are a new paradigm of investment activity, which opposes the established view that social and environmental problems can only be solved with the help of the state or charity, and market investments should be aimed merely at obtaining financial results.

The term «impact-investment» can be interpreted as an investment to obtain a social and / or environmental effect along with profit. Based on

the above-mentioned definition, we can identify several main features of impact-investments (see Fig. 3).

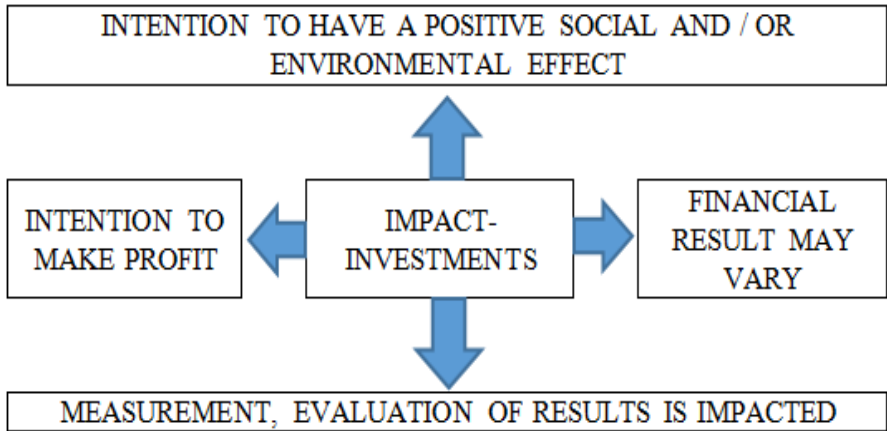


Fig. 3. The main features of impact-investment

The source: author's development

1. Intention to have a positive social and / or environmental effect. The investor chooses to invest in a project, the implementation of which is aimed at solving a problem and has a positive social and / or environmental effect.

2. Measurement, evaluation of results is affected. A peculiarity of the impact-investment is the obligation of the investor to evaluate and inform the public about the achieved social and environmental results, to ensure transparency and accountability of the development of funds in the investment process.

3. Intention to make profit. When making impact-investments, investors expect to make profit or, at least, to return the invested capital.

4. The financial result may vary. Investors aim at obtaining a financial result that may be below or equal to the risk-adjusted market interest rate.

Currently, there has been a positive Ukrainian experience of impact-investments. For instance, Urban Space 100 is a restaurant in Ivano-Frankivsk, the shareholders of which are 100 locals. 80% of the profits of the founders and owners of shares of this social enterprise are spent on the development of urban infrastructure, landscaping, creating conditions for sports. Today in Kyiv the idea of Ivano-Frankivsk residents - Urban Space 500 - is being implemented.

Impact Hub Odessa is looking for and developing new ideas for social transformations. Impact-investors spent almost \$ 5 million on the development of the Impact Hub and the Green Theater in Odessa. Today, Impact Hub Odessa is 1,300 m² of educational space, 7 regular programs in

various fields, more than 200 supported social projects, 1,700 public events and 50,000 guests a year.

Impact-investments, like any other type of investment, are associated with various risks: the risk of the business project itself, liquidity risk, the risk of the complexity of leaving the project, the risk of lack of market demand, competition risk, financial risk, currency risk, reputation risk, the risk of not achieving the planned social and environmental effect (impact).

Despite the attractiveness and growing interest in the impact-investment market, investors are also facing challenges.

The most pressing problems include the following:

- lack of capital due to high risk / return;
- lack of high-quality investment proposals;
- lack of institutional structures that meet the needs of investors;
- lack of a single interpretation of the concept of «impact-investment market» and its segments;
- insufficient research and information;
- difficulty in assessing the impact, insufficient number of methods;
- insufficient number of specialists with relevant skills in this field;
- insufficient state support for the impact-investment market.

The prospect of implementing the impact-investment mechanism in Ukraine will significantly increase the level of financial security in the country and attract private capital to address social and environmental issues, which, on the one hand, will reduce the burden on the state budget and, on the other, serve as private initiative and corporate social responsibility. It should be emphasized that the paradigm of impact-investments has a noticeable social-oriented nature and fully meets all the requirements for financial security in the country and the model of social-economic development of Ukraine.

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«GREEN» MODERNIZATION OF THE NATIONAL ECONOMY IN THE CONTEXT OF SOCIO-ECONOMIC SECURITY AND SUSTAINABLE DEVELOPMENT

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Recent decades have seen changes in the understanding of the tripartite relationship between society, the economy and nature. Most economic development and growth strategies have previously encouraged the rapid accumulation of physical, financial and human capital, but due to excessive depletion of natural capital, natural resources and ecosystems have been sacrificed.

The term «sustainable development» was first used in 1980 in the publication of the International Union for Safety and Health at Work and was interpreted as the integration of the conservation and development to ensure a change in the planet that can ensure the safe survival and well-being of all people. However, this definition became widespread after the publication in 1987 of the report «Our Common Future» of the UN Commission on Environment and Development (WCED), headed by the Prime Minister of Norway G. H. Brutland [1].

The state of the environment can be transformed from degradation in an unstable type of economy, to a state of ecological equilibrium in an economy of equilibrium type, and to a state of environmental recovery in an environmentally sustainable type of economy. Thus, sustainable development is determined by a set of quantitative and qualitative changes in the socio-ecological and economic system and the ability to live a balanced life through the ability to maintain stability and stability of all involved subsystems at different levels of the national economy. critical points for the transition of the national economy from one relatively stable state to another. Sustainable or «green» growth focuses on economic development to ensure the accumulation of financial capital needed to overcome poverty through the creation of social and human capital, as well as to address environmental issues, thus increasing the value of natural capital.

The concept of sustainable development is based on a large number of different models, theories, concepts, the essence and content of which, as well as the urgent needs of today, have determined the cognitive perception of relevance and timeliness of its adoption and implementation. The green economy is designed to address the challenges of achieving the goals of sustainable development, in particular the long-term sustainability of the socio-economic system together with the sustainability of the natural environment. That is, the «green» economy is a mechanism for sustainable development, and its formation involves a review of living standards in order to preserve the natural environment, increase resource efficiency, develop environmentally friendly activities and restructure the economy to increase the share of green sectors. In fact, the green economy should be seen as a path to sustainable development.

Today, the term «green economy» is broad, ie it covers any theory that considers the economy as part of the environment in which it is based. Until the recognition of the «green» economy as a mechanism for sustainable development, it, in fact, remained the privilege of rich countries. Today, the situation has changed and it is developing countries that can gain additional benefits and incentives for economic growth through the implementation of green economy strategies. However, there is a need to improve public policy, including measures in the field of pricing and regulation, in order to

create market incentives for a more rational allocation of capital in the field of resource use to more technological sectors, taking into account social and environmental impacts, especially in developing countries.

The author of the theory of green economy is David Pearce.

The formation of a «green» economy, based on a fundamentally new type of technology and economic relations, is natural. On the one hand, this is due to the need to move to sustainable development, which allows to overcome the threat of global environmental catastrophe and ensure the transition to the priorities of social (personal) human development. On the other hand, the achieved scientific and technical level of society at the present stage creates the preconditions for solving the tasks.

The substantiation of the global «green» new course preceded the development of the concept of «green economy». The initiative for global change was made by the United Nations, which in 2009 launched the Green Economy Initiative program, which was developed, popularized and supplemented. Thus, in December 2015, the EU Commission adopted the EU Action Plan for the Circular Economy, which identified the circulation of plastics as a key priority [2], committing to “prepare a strategy addressing the challenges posed by plastics throughout the value chain and taking into account their entire life-cycle»[3].

The goals of the proclaimed «green» course included the need to rehabilitate the world economy and ensure its post-crisis development, reduce poverty, as well as reduce carbon emissions and combat the destruction of ecosystems. The further development of the provisions of the Global Green Course is reflected in the UNEP report «Towards a Green Economy: Ways to Sustainable Development and Poverty Eradication» (2011) [4].

Among the many international forums that focused on the green economy, the UN Conference on Sustainable Development «Rio + 20» (Rio de Janeiro, 2012) [5], during and after which in the reports and documents of the UN structures state that the basis of the transition to sustainable development is the formation of a «green» economy. «Green» economy is a field of economics, according to which the economy is considered a dependent component of the natural environment, exists within it and is part of it; aimed at preserving public welfare through the efficient use of natural resources, as well as the return of end-use products to the production cycle.

The transition to a «green economy» in different countries will take place differently, as it depends on the specifics of natural, human, physical (artificial) and institutional capital of each country, its level of development and socio-economic priorities, environmental culture. The final document of the UN Conference in Rio de Janeiro «The future we want» (2012) emphasizes that in the transition to a «green» economy, each country can choose an approach in accordance with its national plans, strategies and priorities for

sustainable development, there should be no rigid set of rules [5]. In 2015, the Sustainable Development Goals (SDGs) were adopted, agreed by all UN member states as a general call to action to eradicate poverty, protect the planet and ensure that all people have peace and prosperity. 2030 [6]. CSWs came into force on January 1, 2016 (Fig. 1).

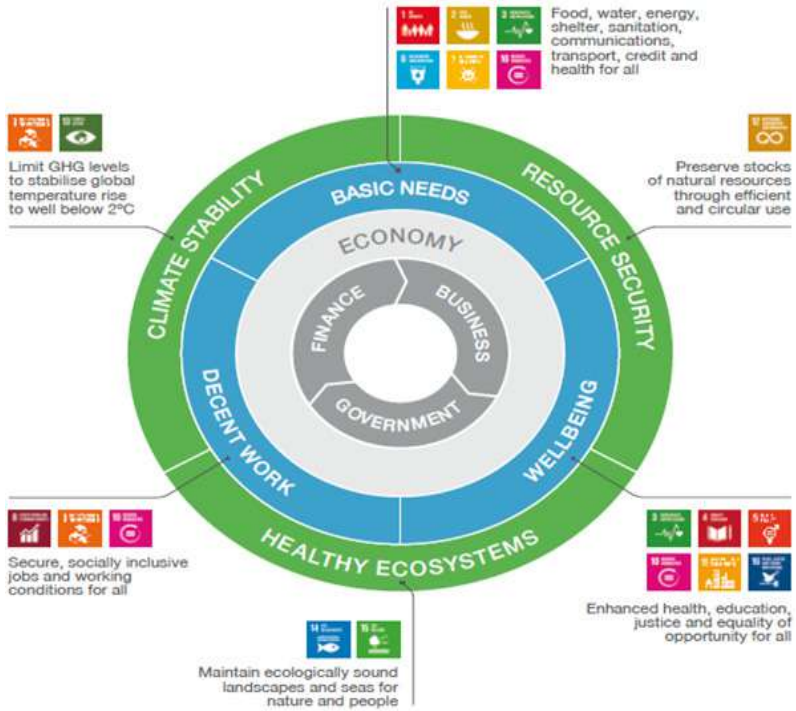


Fig. 1. Sustainable development goals and objectives of the economy [6]

Proponents of the concept of «green» economy consider the currently dominant economic system imperfect, as evidenced by the crises and failures of the market mechanism, its wasteful nature. Of course, it has yielded some results in improving the living standards of society, and especially of certain groups, but the negative consequences of this system are enormous: environmental problems, depletion of natural capital, lack of fresh water, food, energy, large-scale poverty, inequality. All this poses enormous threats to future generations [7].

Skeptics of the introduction of a green economy argue that modeling based on natural ecosystems will not always be effective, they are skeptical of the greening of the economy. However, many countries show the advantages of the «green economy» by their own example, and not only Scandinavia,

which is traditionally considered a leader in environmental protection, but also the countries of Asia, Africa and South America.

The transformation of economies into «green» is taking place not only in developed countries such as Germany, Japan, Spain or the United States, but also in Bangladesh, Brazil, China, India, Mexico and Morocco. The Republic of Korea was the first to announce the implementation of the concept of «green» growth as a national strategy. An example of successful «greening» of industry is Norway - a country that ten or twenty years ago was considered one of the most polluted in Europe, and is now included in the ranking of the cleanest countries in the world. This is not hindered by the fact that Norway is among the top three oil and gas exporting countries, behind Russia and Saudi Arabia, and has many industrial giants.

The general desire of the world community to «green» the economy as much as possible, contributing to the achievement of sustainable development goals, has led to a new stage in this process, namely the popularization of the circular economy. The European Commission has adopted an ambitious Economic Package cycle, which includes measures to help stimulate Europe's transition to a circular economy, strengthen global competitiveness, promote sustainable economic growth and create new jobs [8].

To date, governments in many developed countries have incorporated goals, objectives and specific tools to support green growth into their own long-term strategies or have developed separate strategies for green growth. The global financial and economic crisis of 2008-2009 prompted the world to address the issue of improving resource efficiency, developing new environmentally friendly industries and activities, the introduction of «green» technologies - that is, those changes that will ensure harmonious coordination of economic, social and environmental development and become a catalyst for global economic growth. The objective preconditions for the transition to sustainable development and the «green» economy have two key interrelated dimensions, which can be conditionally called resource and energy (Table 1).

Interpreting the information in table. 1., note that the indicator «ecological footprint» characterizes the size of the average area of the planet (in global hectares) per capita (or per unit of production) required to provide the necessary natural resources and utilization (disposal, treatment) of waste that are formed. The Global Footprint Network and the World Wildlife Fund (WWF) estimate that the average per capita environmental footprint is currently approaching 2.6 global hectares with a global biopotential capacity of 1.7 hectares. one inhabitant (Global footprint, 2016), which means exceeding the allowable load on the planet's ecosystems by more than 50% [9].

Table 1

Measurements of objective preconditions for the transition to sustainable development and the development of a green economy

Prerequisite measurement:	Resource	Energetic
Characteristics of the problem	The resource problem is due to a significant excess of the allowable load on ecosystems that maintain the stability of physical living conditions on Earth.	Problems of energy measurement have their origins in the resource dimension. They are a natural consequence of exceeding the permissible limits of impact on natural systems.
Causes of the problem	Today the production complex uses only 5-10% of extracted natural resources. The rest returns to nature, but in a more toxic and more unregulated state, causing the destruction and pollution of natural systems. The objectivity of the problem can be assessed by indicators of «ecological footprint» (footprint) and indicators of ecological thresholds (according to N.F.Reimers).	Energy production on Earth has reached the limit followed by the destruction of the planet's energy system (these processes cause, in particular, global climate change). According to NF Reimers, the ecological load on the Earth's biosphere in the late 80's was approaching dangerous thresholds of self-destruction of the planet's energy system - the threshold of exit from the steady state - 0.1-1.5% of normal, the threshold of degradation (destruction) - tenths and percentages of the norm).
Possible solutions	Changing the technological basis of existing production and the transition from subtractive to additive technologies. The use of material and resource innovations of the Third Industrial Revolution.	Transition to renewable energy sources. Reducing the energy intensity of human life processes by increasing the energy efficiency of human life processes.

Source: systematized by the author based on [10]

With such a hypertrophied load, ecosystems unsatisfactorily perform their functions of restoring natural resources and cleaning up pollution and destroy themselves under the pressure of the eco-destructive press, which leads to a slowdown in their functional activity. It is known that Ukraine ranks 51st among 121 countries in terms of «ecological footprint», which is equal to 3.19 hectares. This value is lower than in Russia (4.4 ha), the

EU (4.72 ha) and the United States (7.19 ha) [9].

The basis of the «green» economy is «green» technologies that work not with the consequences, but with the causes of environmental problems, radically changing approaches, products, and, most importantly, consumer behavior. In general, the solution of the resource problem is possible due to changes in the technological basis of production and the transition from subtractive technologies to additive ones. The first is based on cutting off all the excess during the production process (English subtract - subtract), the other - on the contrary - on adding (English add - add) only what is necessary, which in practice eliminates the inevitability of waste.

To solve the energy problem that objectively exists in the economy, it is necessary to reduce the energy intensity of processes and increase the energy efficiency of human life not by percent, but by times.

The dynamics of the interaction of the financial system, the real economy and sustainable development is still at an early stage of its formation, but it is appropriate to consider in terms of other fundamental changes in the financial system itself, including the emergence and introduction of new financial technologies (fintech). Recently, the idea of expanding the scope of «green» financing through the use of new financial technologies, including digital finance (digital finance) to mobilize small and medium investors and provide loans to small companies. To achieve this goal, the Sustainable Digital Finance Alliance was established at the annual MEF in Davos in 2017, working with UNEP on online fundraising projects to finance low-carbon production. A number of new technologies are currently being used, including the introduction of blockchain technology, the Internet of Things and artificial intelligence.

The practical experience shows the strengthening of the reform of the financial system, which supports the transition to sustainability in the real economy: countries are gradually beginning to combine actions in the financial system in order to achieve broad national goals for sustainable development and climate change. Due to a number of tactical steps taken in response to minimizing risks or solving specific environmental problems, the transition to a more strategically oriented policy of «green» development is beginning.

The main purpose of greening and «greening» the financial system is to mobilize and increase the motivation of public and private capital to invest in industries that ensure sustainable development, because without this all the planned environmental measures will become a regular declaration. However, so far the real achievements in the transformation of global finance, taking into account the principles of sustainable development, are insignificant. There are both objective barriers at the macro and micro levels, and subjective ones - a lack of political will to change. And international

cooperation on these issues is still at an early stage of its development, which includes mainly the exchange of experience and coordination of actions. At the same time, there are more and more reasons to believe that in the long run the trend towards greening international finance will become irreversible, despite the fact that its dynamics will most likely be non-linear, with periodic ups and downs characteristic of global development. economy in general.

According to the UNEP project, the new economic approach should be enshrined in a new agreement between the governments of the New Global Green Deal, which will contain key ideas for building a «green» economy. UN experts have formulated «green» responses to the global economic crisis and reduced access to food and energy resources. These answers are measures to implement a «green» economy, implemented in the relevant areas of transformation [11].

The EU currently has a number of sophisticated innovation programs that already contribute to the greening of the EU economy. These include the Roadmap for the Transition to a Competitive Low Carbon Economy (NEE) by 2050, the European Energy Efficiency Plan to 2020, the Roadmap for Energy Development to 2050, the Roadmap for the Transition to a Resource Efficient Europe, and the Environmental Technologies Action Plan (ETAP). The Competitiveness and Innovation Framework Program (CIP), the Research and Technology Development Framework, the Innovation and Regional Development Program, the EU Circular Economy Action Plan (2015), etc.

Balanced mobility and efficient use of energy and materials have been identified as priority areas for ensuring the transformation of the European economy on a green basis. In addition, according to a study by the International Labor Organization, «greening» the economy provides new opportunities for business and employment, stimulating investment and innovation. However, the effective implementation of a green economy requires intensified efforts to strengthen national strategies that promote clean technologies and green jobs.

Ukraine, like most countries, has adopted the concept of «green» growth, which is based on knowledge and innovation, advanced technologies, energy efficient production lines, social and environmental progress, because it is the «green» economy will facilitate the transition to inclusive sustainable development. The issue of transition to the model of sustainable development is a priority for Ukraine, especially given the existing socio-economic development, insufficient technological level of industrial production, low energy efficiency of the vast majority of industrial enterprises and housing and communal services. This decision was significantly influenced by the negative geopolitical situation (military actions in eastern Ukraine), which

in turn forced a revision of the state policy on carbon energy consumption.

The Association Agreement between Ukraine and the EU has also been an important reason for adopting a «green» course, as its provisions oblige Ukraine to harmonize national legislation with European legislation on sustainable development. Thus, part 2 of Art. 289 stipulates that «the Parties recognize the importance of taking full account of the economic, social and environmental interests not only of their respective populations but also of future generations and ensure that economic development, environmental and social policies are supported jointly» [12]. This Agreement provides, inter alia, for cooperation in the field of development and maintenance of renewable energy, taking into account the principles of economic feasibility and environmental protection.

The Ukrainian government has implemented and is trying to reorient its economy in the direction of «greening», for which a number of fundamental and strategically oriented documents were adopted, in which the priorities of economic development are environmental protection, industrial modernization, innovation and resource conservation and energy saving and development. energy sources (RES). In 2015, the National Action Plan on Energy Efficiency for the period up to 2020 was adopted. [13], in 2017 the Energy Strategy of Ukraine for the period up to 2035 - security, energy efficiency, competitiveness [14] was approved, and on July 18, 2018 the Strategy of low-carbon development until 2050 was approved [15].

The transition of our state to a «green» economy is carried out in the appropriate segments and with the use of certain tools. In the Ukrainian economy there are several segments of «green» growth (Fig. 2).

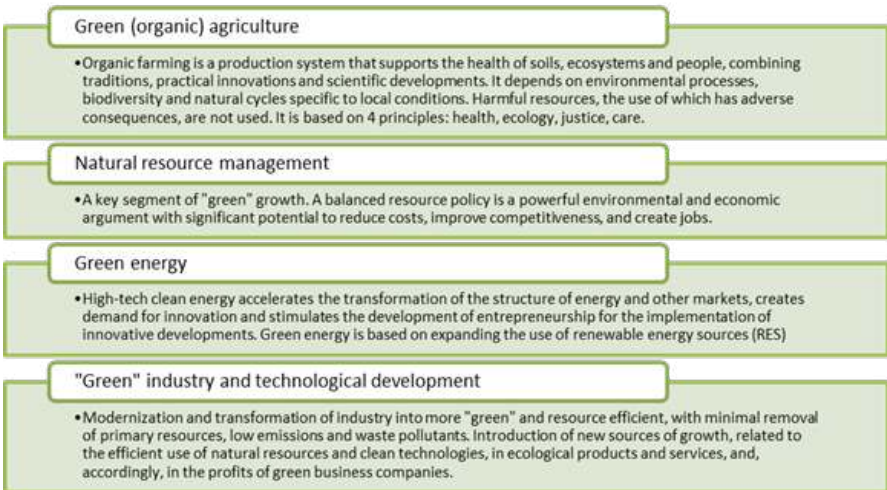


Fig. 2. Segments of «green» growth of the Ukrainian economy

The theoretical basis underlying the concept of a green economy requires integrated approaches and significant long-term investment in economic sectors that prevent the development and spread of environmental threats. Among them: the renewable energy sector, low-emission transport, energy-efficient construction, «clean» technologies in production, waste management, sustainable agriculture and forestry.

«Green» technological development. It is known that investments in innovation and R&D directly affect the resource efficiency of the economy, contribute to the transition to a «green» economy. In Ukraine, the number of new technological processes introduced into production increases every year, in particular new or significantly improved low-waste, resource-saving ones, while the share of industrial enterprises that introduced innovations (products and / or technological processes) in the total number of industrial enterprises decreases (Table 2).

Table 2

Introduction of innovations at industrial enterprises in Ukraine

Indicator	Years					Deviation 2019/2018		Deviation 2019/2015	
	2015	2016	2017	2018	2019	+/-	%	+/-	%
Share of the number of industrial enterprises that implemented innovations (products and / or technological processes) in the total number of industrial enterprises,%	15,2	16,6	14,3	15,6	13,8	-1,8	-	-1,4	-
Number of new technological processes and units introduced into production	1217	3489	1831	2002	2318	316	15,78	1101	90,47
Of these, new or significantly improved low-waste, resource-saving processes	458	748	611	926	857	-69	-7,45	399	87,12

Source: systematized and calculated by the author based on [16]

These tables confirm the lack of a clear trend in the intensification of innovative activities of Ukrainian industrial enterprises for the introduction of resource-saving low-waste technologies.

Organic agriculture, as an important segment of «green» growth

in Ukraine, is only developing, as the demand for such products among Ukrainian consumers is low due to its relatively high cost, but among European consumers it is in demand, motivating to increase organic production. In 2019, the total area of agriculture land, which have the status of organic and transitional period, amounted to almost 468 thousand hectares (1.1% of the total area of agricultural land in Ukraine). At the same time, 617 operators of the organic market worked, of which 470 were producers of agricultural products [17]. Under modern conditions in Ukraine, the domestic consumer market of organic products is expanding due to the main supermarket chains. Key organic products produced in Ukraine include cereals, cereals, milk and dairy products, meat and meat products, vegetables and fruits. Ukrainian organic products are supplied mainly to the markets of EU member states. In 2019, Ukraine ranked 2nd among 123 countries in terms of imports of organic products to the EU (in 2018 it ranked 4th). During 2019, 3.24 million tons of organic agri-food products were imported to the EU, and more than 10% - of Ukrainian origin, and Ukrainian imports to the EU increased by 27% - from 265.8 thousand tons in 2018 to 337.9 thousand tons in 2019 [17]. According to Organic Eprints, Ukraine is the most important supplier of organic products to the EU from the European continent. In the structure of imports, 70% are grain crops, and 15% - oilseeds (oilseeds, except soybeans - 10.8%, soybeans - 5%). The largest countries consuming organic products from Ukraine are the Netherlands, Germany, USA, Switzerland, Italy, Great Britain, Austria, Poland, Czech Republic, France, Hungary, Romania, Belgium, Bulgaria, Lithuania, Canada and Denmark [16; 17].

Green energy. Note that the «landscaping» of agriculture involves not only the production of organic products, but also the cultivation of energy crops and their use for energy purposes - for the transition to biofuels. Thus, on the one hand, Ukraine strengthens its competitiveness in European markets by exporting products, and on the other hand, it reduces the need for traditional energy sources, contributing to the country's energy security.

The transition to sustainable development and «green» growth can be evidenced by increased energy efficiency, reduced energy intensity of GDP, etc., because carbon, energy and resource intensity of production and consumption is one of the key indicators of «green» growth.

Over the past few years, Ukraine has made significant efforts to modernize and reform its own energy sector and related markets. Energy efficiency and development of RES in Ukraine have become a guarantee of energy sovereignty and national security of the state. And joining the global climate agreement has given the country new opportunities to implement a strategy of «green» growth in Ukraine, transforming the resource-dependent and energy-intensive model of the economy into an innovative and energy

efficient one.

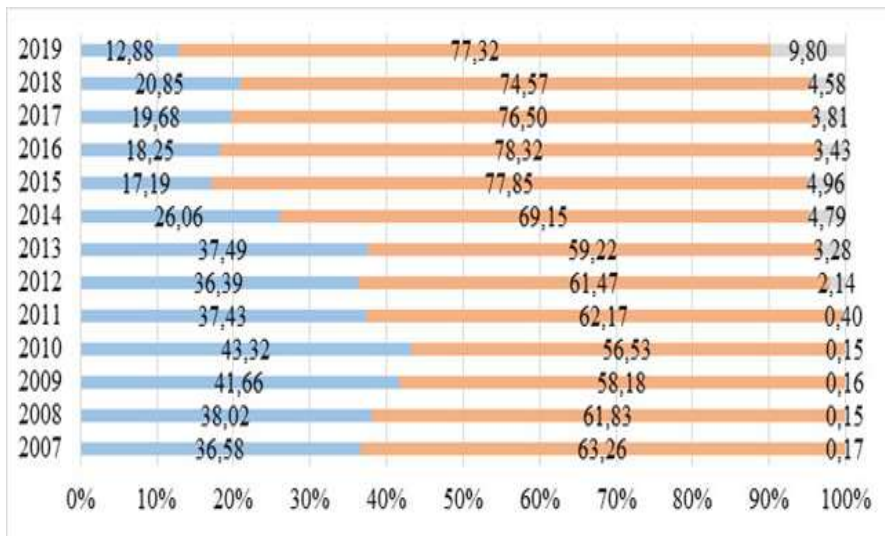


Fig. 3. The structure of RES in Ukraine by origin in 2007-2019, where the first digit is hydropower, the second digit is biofuel energy and waste, the third digit is wind and solar energy

Source: calculated and illustrated by the author based on [16]

Today, there are dozens of RES-powered power plants in Ukraine, but the country still lags far behind the leading European countries in terms of their capacity. Despite the growing share of RES, it still remains much lower than the world's leading countries. The structure of energy supply from renewable sources is dominated by biofuel and waste energy, hydropower - in second place, and wind and solar energy - has the lowest share. Despite the lag in the supply of renewable energy from many countries around the world, in recent years there has been a positive growth rate. Thus, in 2019, the total supply of energy from renewable sources compared to the previous year increased by 1.07%, in 2018 - by 10.11%, in 2017 - by 8.05%, in 2016. - 33.93% [16]. Thus, despite the constant increase in electricity production from RES, the share of alternative energy sources (wind, solar, hydro) in electricity generation is kept at a negligible level - less than 2%. Transformation of Ukraine into a powerful player in the market of «green» energy is possible not only in the conditions of deepened cooperation between government agencies and producers, but also through increasing investment in energy sector technology.

Natural resource management. The main barriers to efficient use of resources are, in particular:

- use of obsolete technologies and equipment, which causes a high level of loss of resources in the chain from production to final consumption and their inefficient use;
- lack of motivation of business entities to implement the latest, for example, resource-efficient technologies and environmental innovations;
- low level of access of enterprises to environmental loans and investments;
- imperfect waste management system, which complicates the transformation of waste into an additional resource and source of growth.

Modernization of production and structural transformations are hampered by the systemic problems accumulated over the years, in particular:

- the predominance of export raw materials and clans that resist the transition to international standards of energy and resource efficiency;
- inefficient tax policy that stimulates the development of raw materials industries and speculative services, as well as the minimization of tax liabilities;
- inefficient system of budget support, which contributed to the consumption of subsidies issued to agriculture and extractive industries;
- high level of burden of social benefits on economic activity, the mismatch between wage dynamics and labor productivity.

In the business environment, the dominant model remains to stimulate quantitative economic growth at any cost, typical of the early stages of industrial development, on the principle of «growth now, and purification - then.»

It should be noted that most of the considered «problems, barriers, obstacles and inhibitions» are directly related to or are derived from the imperfection of the system of regulations that should provide regulation and incentives in this area.

The development of Ukraine's «green» economy is characterized by a significant number of problems and obstacles of various kinds. Thus, the following problems and obstacles are identified, which do not allow to effectively implement and promote the concept of «green» economy, in particular:

- shortage of own financial resources;
- lack of the necessary infrastructure for the widespread introduction of modern technologies;
- lack of modern legal framework aimed at «greening» the country's economy;
- shortcomings of the management system both at the national and regional levels;
- the desire of owners to earn on the rapid sale of raw materials and semi-finished products without investing in complex and environmentally

friendly production.

Problematic issues related to the regulatory framework can be divided into two main groups:

1) related to non-compliance (ignoring) or insufficient implementation of a number of already adopted regulations, including the national level (laws, codes);

2) related to the lack of regulatory framework in certain areas, such as accounting and regulation of greenhouse gases.

Thus, for the accelerated «greening» of the Ukrainian economy, all its segments, it is advisable to use the tools of «green» modernization, recommended by relevant international institutions, tested by developed countries, but taking into account national characteristics. This list includes economic instruments such as taxes, emissions trading schemes and the abolition of subsidies; as well as legislative measures, including setting standards. Non-economic measures include voluntary actions and tools of influence based on information.

Thus, the introduction of the concept of «green» economy is an important component of the process of moving the national economy and the country as a whole towards sustainable development, achieving which requires a consistent abandonment of overexploitation of natural and energy resources and search for more progressive and innovative business models. Thus, the task facing Ukraine is the transition of the national economy to a «green» model of development based on sustainable production and consumption, efficient use of resources, as well as promoting business activities in the way of resource- and energy-efficient, environmentally friendly production.

It is worth noting that at the present stage the process of transition to sustainable development, both globally and nationally, is incomplete, especially due to the growing tendencies of protectionism in the world, when each state defends its own interests and goals, guided by economic components. At the same time, we believe that the implementation of the foundations of sustainable development at the national level is possible under the conditions of overcoming economic needs, addressing today's environmental challenges and meeting social expectations. This process will create the preconditions for the implementation of relevant treaty initiatives at the international level.

Despite Ukraine's international commitments, participation in various UN activities and programs in the field of sustainable development, numerous attempts to establish bodies responsible for the implementation of the concept, the institutional environment is at a very low level. This is evidenced by international rankings, in which Ukraine's position can be described as below average. Problems of institutional support for sustainable development of Ukraine need to be effectively addressed.

Therefore, the main areas of intensification of the transition to a «green» economy on the basis of sustainable development are: raising public awareness of the need to implement relevant concepts; creation of bodies of state power responsible for the implementation of the concept of sustainable development and within local self-government bodies; establishing cooperation at the international, national and micro levels; development and practical implementation of programs, strategies, plans for sustainable development based on positive world experience; monitoring and evaluating the effectiveness of activities in the direction of sustainable development of Ukraine; active promotion of sustainable development ideas in scientific, educational, business circles, etc.

Thus, the «green» economy is the foundation for the implementation of the concept of sustainable development based on more efficient resource and energy consumption, reduction of CO₂ emissions, reduction of harmful effects on the environment and the development of a socially integrated society. However, «greening» the economy requires «reformatting» current and future investments, as well as additional costs beyond the conventional approach, developing international strategies and scenarios for «green» development.

Ukraine has chosen a course of «greening» the economy on the basis of sustainable development. There is a development of «green» (organic) agriculture, increasing the supply of energy from renewable sources, increasing investment in innovation and research and development, which allows to increase resource efficiency, implement low-waste, resource-saving processes. There is a «reorientation» from investing in fossil fuels, resource-intensive and polluting industries and technologies to the development of «green» energy sources, energy saving measures, environmental technologies and low-carbon infrastructure.

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STRATEGIC ASPECTS OF THE REFORMING OF HEALTH INSTITUTIONS ON THE CASE OF VINNYTSIA REGIONAL PSYCHIATRIC HOSPITAL №2

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In recent years, the system of financing of health-care institutions has been reformed, including granting them the status of communal non-profit enterprises and introducing cooperation with the National Health Service of Ukraine. The reform has necessitated a clear understanding of the purpose of each institution in the health-care market, its strategic advantages and opportunities for development.

Health care facilities, while being budgetary institutions, did not pay sufficient attention to the need for their own development and constantly complained about the lack of State and local funding. The reform forces the management of medical enterprises to build a clear strategy for their own development.

Let`s elaborate a strategy for the development of a typical municipal non-profit enterprise on the case of the institution «Vinnytsia Regional Psychiatric Hospital 2», analyzing the current state of the establishment, conditions and work carried out, related to the organization of compulsory treatment in a special institution.

The main advantages of the current enterprise include location, high levels of support (human and available technical) resources.

The main problems are insufficient funding for the creation of appropriate conditions for the application of compulsory medical measures (hereinafter CMM) in hospital conditions for patients who have committed socially dangerous acts (hereinafter SDA)

In order to solve the existing financing problems, specialized medical posts have been optimized and salary costs have been reduced. There is a need to insulate facilities and upgrade power grids in order to further save energy costs.

In order to ensure an effective adaptation to the new system of financing of medical reform in 2020, key strategic directions were chosen, such as follows: the ensuring a high level of safety; increasing the level of satisfaction of patients; optimizing the activity of the institution.

Within these strategic directions, we propose to choose the main initiatives by which the enterprise will be able to provide a high level of treatment and efficient use of available resources: energy efficiency; Cooperation with the Ministry of Social Policy to resolve vital social and welfare issues in the application and termination of the CMM for this category of patients and to provide legal support; opening of an infectious disease department; distribution of patients by gender.

To better understanding the essence of the proposed strategy, let's present key performance indicators of the institution.

MNE «Vinnytsia Regional Psychiatric Hospital 2» serves residents of Vinnytsia and other regions. 27 patients were admitted on the basis of court decisions during 2019, and in the first half of 2020 there were 23 patients.

As of 2019, patients were served by 189 workers, of which the number of medical staff positions was 21.25, but physically there were 13 doctors. More detailed information is the following:

- the actual staffing of medical staff positions by individuals was 61%
- staffing of the average staff of 112% (excess due to employees who are on maternity leave);
- there is an insufficient staffing of medical personnel.

In total, there were 120 beds in the medical departments as of January 1, 2020, and as of July 1, 2020 - 110 beds. In total, there were 120 beds in the medical departments as of January 1, 2020, and as of July 1, 2020 there were 110 beds.

More detailed information on the use of bed places is the following:

- “the work of the bed” in 2019 was 237 days a year;
- the average duration of treatment is 4733 days.

The package of medical services of the National Health Insurance Fund does not include coercive measures of a medical nature. Such services are paid for by the transitional medical subvention of the Ministry of Health.

Basic data on the equipment is the following:

- the level of equipment does not differ depending on the department;
- sufficient level of equipment in the laboratory.

Basic data of the laboratory is the following:

- in 2019 the laboratory conducted 1113 analyzes;

- available in the laboratory equipment needs updating and retrofitting.

The institution has a number of non-medical departments, in which together there are 20.5 rates of specialists (accountant, economist, etc.) and 41.75 rates of other personnel (driver, cook, driver for washing and repairing overalls, etc.). Now the work in these departments is automated, but with an insufficient amount of computer and software.

Basic data on the infrastructure of the institution is the following:

- the total area of all premises - 16877.6 sq.m, of which 15332.2 sq.m (90.8% of the total area of the institution) are medical areas and 1545.4 sq.m (11%) are non-medical;
- due to the reorganization of the institution, (reduction of beds) part of the premises of the institution (medical departments) is not used, but they are heated in winter.
- small areas are leased;
- workshops are not used, so they were closed to save utility costs;
- the premises are not energy efficient, as only 29.5% of all windows of the building are made of metal, facades, plinth, and roof are not insulated, there are no automatic regulators on the heat units;
- buildings with rooms for receiving patients are equipped with ramps;
- elevators are not used (due to lack of funding).

The main sources of funding are the following: state (68.0%) and local (32.0%) budgets.

The majority of the funds received are spent on staff salaries (61.1% - 2019, 60.6% -2020) and utilities (22.2% - 2019, 24.9% - 2020). Other expenditures (16.7% in 2019, 14.4% in 2020) include expenditures on medicines and dressings, food, other services, payments to the public, and other expenditure items.

Let us carried out a SWOT analysis of the «Vinnytsia Regional Psychiatric Hospital 2».

We will focus separately on the internal (Fig. 1) and external environment (Fig. 2) of the institution, taking into account the purpose and objectives of the study.

Let`s start with the strengths of the institution. A successful location of the institution outside the city (at a distance of 5 km), which makes it impossible and prevents direct interaction of socially dangerous persons with residents of the city is a positive factor. An institution has a developed infrastructure and a separate territory.

The buildings of the institution are adapted for the use of CMM. To solve the problem of irrational and inefficient energy use of premises has begun and continues the process of optimizing, including replacement of lighting, window units with energy-efficient ones. The institution is staffed with highly specialized specialists in the field of psychiatry for the provision

of CMM. for the patients. The relatively high level of bed occupancy (345 days a year), which indicates the effective use of the bed capacity. Medical, social, legal and rehabilitation services are constantly being studied and improved.

	Positive impact	Negative impact
Internal environment	<p style="text-align: center;">Strengths</p> <ul style="list-style-type: none"> • high level of competence of employees in professional and legal aspects of work with stationary (CMM). • actual compliance with the conditions of stay according to the Rules of stay of patients on (CMM). • high level of beds occupancy • a wide range of provided medical, social, and legal rehabilitation services • high level of staffing by paramedics • optimization was carried out with the transformation of the hospital and its staff into a special institution for the provision of psychiatric care in the use of (CMM) • felicitous location • compact location of departments 	<p style="text-align: center;">Weaknesses</p> <ul style="list-style-type: none"> • a large share of utility costs • Insufficient number of doctors • non-energy-inefficient building • obsolete medical equipment • lack of a laboratory • no infectious department

Fig. 1. Analysis of the internal environment of MNE «Vinnytsia Regional Psychiatric Hospital №2»

	Positive impact	Negative impact
external environment	<p style="text-align: center;">Opportunities</p> <ul style="list-style-type: none"> • the ability to get an additional flow of patients with the increasing capacity of the institution • development of the local regulatory framework • modernization of the sanitary-epidemic regime taking into account the epidemiological situation • routing of patients • formation of an infectious department • distribution of department by gender • optimization of unused premises 	<p style="text-align: center;">Threats</p> <ul style="list-style-type: none"> • medical reform that does not take into account the needs of the special contingent • insufficient level of funding for the institution

Fig. 2 Analysis of the external environment of MNE «Vinnytsia Regional Psychiatric Hospital №2»

One of the shortcomings is the high percentage of the agency's expenditure on utilities. Such costs are like the following: outdated and imperfect equipment, closure of the laboratory during the reorganization,

the absence of an infectious disease department, not creating conditions for better performance.

Among the capabilities of the institution is the fact that the institution has a favorable location and available human and technical resources that can be used for cooperation with neighboring regions. As well as the proximity of the regional center can be considered as an opportunity to attract highly specialized specialists in the treatment process.

The institution can increase the efficiency of work by improving the work of the laboratory. This can be done by purchasing automated analyzers, allowing high-level analysis, that will improve the overall quality of medical services.

Much of the institution premises are not used for its intended purpose, but it is possible to increase the number of beds or rent the premises hospital. Among the threats is the risk that the changes that occur during the medical reform can adversely affect the activities of the institution. Since there is no clear funding mechanism that directly affects the work quality of the hospital.

Let's note that the implementation of selected measures is based on a systematic approach using the principles of strategic management, including the priority of selected areas, justification of problem-solving mechanisms, system resources, planned implementation of planned activities, command principle, inclusion and initiative of the whole team, constant informing the team on the results of transformations, as well as providing external conditions for the transformation of the planned Ministry of Health of Ukraine in the Concept for the development of mental health care in Ukraine for the period up to 2030.

Thus, the mission of the enterprise reflects the general mission of applying inpatient coercive measures of a medical nature at the interregional level, namely - providing residents of Vinnytsia region and other regions for whose services a transitional subvention of the Ministry of Health and specialized medical, social and psychological rehabilitation.

The enterprise sees itself as a specialized institution for the providing psychiatric care in the hospital for all types of CMM, where the individual rehabilitation programme is constantly improved and patients receive free legal assistance, general and vocational education in educational programs, taking into account the level of intellectual development, employment opportunity.

As a result of the continued transformation of the departments, medical care will be provided during the transition period to bring the inpatient conditions of the (CMM) in line. As for now, it is impossible to assess the economic impact of implementing this option, as it is a qualitative result aimed to improve the provision of assistance to persons with mental and

behavioral disorders who are in conflict with the law and have committed socially dangerous acts.

Also, the implementation of this measure includes the following:

- quarterly monitoring of the use of funds;
- bringing the material and technical equipment of the institution and its territory into compliance;
- development of a model of social and labor rehabilitation of patients;
- carrying out of the state standardization on the assignment of the certificate of system of management of quality.

During the development of the strategy, the following strategic directions of the institution's development were identified: increasing the level of patient satisfaction and optimizing the institution's activities, ensuring a high level of staff safety in performing functional duties by serving the special contingent. Based on this, a number of initiatives have been developed, the implementation of which will ensure the achievement of the institution's strategic goals.

The major strategic initiatives should also include the following:

1. Ensuring a high level of security in the performance of functional duties by:

- assistance in bringing to a modern level of technical equipment of a special institution;
- testing of staff in the framework of the prevention of infectious diseases.

2. Increasing patient satisfaction by:

- improvement of navigation in the hospital (equip with information signs);
- computerization of processes reflected on paper;
- conducting an annual audit of existing equipment and its condition.

Optimization of the institution should take place by performing the following measures: the arrangement of the lighting system of corridors and domestic premises (toilets) with motion sensors; installation of a system of automatic regulation of temperature and consumption of the heat carrier depending on temperature; replacement of lighting lamps with energy-saving LED lamps; adjustment of hydraulic modes of the heating system; installation of taps-dispensers for a shower; cleaning the heating surface of capacitive water heaters; installation of aerators on water taps; modernization of the facade of the building and insulation of the roof of buildings; organization and reconstruction of supply and exhaust ventilation systems; replacement of windows with energy efficient ones.

As a result of the implementation of these measures, additional resource savings are also expected. Estimated savings are shown in table 1.

Thus, measures of strategic improvement of activity of MNE «Vinnytsia regional psychiatric hospital №2» based on influence on factors of internal

environment are developed. The implementation of our proposed measures will increase the efficiency of the institution and optimize the management system.

Table 1

Expected resource savings due to the implementation of measures to optimize the activities of MNE «Vinnytsia Regional Psychiatric Hospital №2 Vinnytsia Regional Council»

Name of the resource	Basic consumption	Projected consumption	Expected savings
Electricity, kW	625972	438180	187792
Thermal energy, thousand kW	2540640	1321133	1219507
Cold water supply, m3	17434	14041	3393

The analysis performed allows us to state unequivocally that the change of the status and financing model itself is more likely a threat to health care institutions, since the management of enterprises is not ready for market conditions of existence. That is why, the position of the leadership on the adoption of strategic responsibility is so important. In addition, we note that we examined the regional hospital while the situation in the district and peripheral institutions is much worse.

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