Building the resilience of local food systems in conditions of increased risks

Nataliiy ZGHADOVA PhD, Associate Professor (nataliz_225@ukr.net)

Department of Economic Theory and Financial and Economic Security, Odesa National University of Technology, Ukraine

Artem RASHEVSKYI, Applicant (artem.rashevskyi@gmail.com)

Odesa National University of Technology, Ukraine

Vladyslav TYMCHENKO, Applicant (valdis4nk@gmail.com)

Odesa National University of Technology, Ukraine

Abstract

The article summarizes new global challenges and proves that there are adequate responses to them by adjusting the value foundations of human activity on a global scale and compliance with the agreed global principles of economic behavior.

The changes in the formation of the sustainability of local food systems in the context of increased risks that have occurred in Ukrainian society under the influence of global food security processes are identified.

Key words: food sustainability, food security, risk amplification, risk management, national economy, food crisis.

JEL Classification: H 11, H 49, H 56, J 23, J 62, L 14, O 15

Introduction

The issue of creating a comprehensive risk management system is very relevant for Ukrainian companies. However, when trying to develop it, companies inevitably make mistakes. The main ones include: misunderstanding of the conceptual approach to the organization of risk mitigation, incorrect organizational structure of the risk management department and the functional model of interaction between departments within the framework of risk management. In the current situation, the activities of large corporations and companies are associated with a wide range of financial, technological, technical, legal, social, environmental, ethical, political and other risks in the production process.

International experience in managing large companies shows that most of them have an enterprise-wide risk management system in place and need to be strengthened. Despite the fact that today the field of risk and its enhancement is still a relatively young and new area, the creation and development of a corporate risk management system at an enterprise, on the one hand, should take into account the existing achievements in development.

The system of standardization in the field of risk management, on the other hand, is the main lessons and main conclusions drawn from the short-term but accumulated practical experience of managing and mitigating risks of leading companies, which is currently insufficient and requires constant study.

1. Literature review

The relationship between globalization and its related challenges and the evolution of the fundamentals of society's values has seen a growing number of research and publications in recent years, both individual and collective, including within the framework of relevant national research networks.

Among the scientists who have studied certain aspects of the integrated risk enhancement system, it is worth noting a number of domestic scientists, namely V. V. Vitlinsky, V. N. Vyatkin, V. M. Granaturova, S. M. Ilyashenko, A. B. Kondrakhinina and A. B. Matvichuk, and Na. D. Sharapova. In their works, they analyzed the theoretical foundations of risk enhancement in entrepreneurial activity, the methodology and methodology for assessing and analyzing the results of risk events in local food systems, and considered the problem of enterprise risk management standards.

Studies have paid insufficient attention to the development of an integrated risk management system, the formation of food system resilience and its strengthening in domestic companies.

Substantiation and improvement of the theoretical and methodological foundations and development of practical recommendations for the formation of a food security system in Ukraine in modern conditions has gained new relevance due to the internationalization of the world market and the strengthening of national economic openness.

Among the domestic agricultural economists, there are particularly meaningful proposals that participated in the formation of the food security system of Ukraine during its implementation. Sustainable development goals are reflected in the works of O. Borodina, S. Grigoriev, V. Dankevych, T. Zinchuk.

In-depth research is also required on the formation of local food systems and an effective food security system in Ukraine, a comprehensive assessment of its current state, identification of nutrition trends, identification of risks associated with self-sufficiency and possible food losses, and independence in the perspective of various food security factors in the face of increasing risks.

2. Research methodology, data and hypotheses

The methodology for researching the resilience of local food systems under increasing risks is a complex and multidisciplinary approach that combines economic, social, environmental and technical aspects. The main goal is to study, analyze and improve ways to ensure the stability of food supply in the face of increasing pressure on the system due to various risks, such as climate change, natural disasters, economic difficulties, etc.

The methodology should be flexible, as risks and conditions may change over time. The intended outcome is to increase the resilience of the local food system and reduce the impact of risks on food supply.

3. Local food system in conditions of increased risks

Empowering food security resilience can be an effective response to current challenges to national stability. Formation and implementation of the state policy of the corresponding orientation ensures effective response, agility and adaptability to threats of any origin and nature, including hybrid threats. unexpected changes in the security environment, preservation of stability of the state functioning before, during and after the crisis and rapid restoration of the optimal level of equilibrium under given conditions.

Such a result is achieved by ensuring an appropriate level of readiness of the state and society to respond to a wide range of threats and timely detection of threats, vulnerabilities that weaken the security of the potential, adaptive management, effective crisis management and interaction at all levels, creation of necessary and alternative strategy reserves, planning of measures and implementation of universal protocols of coordinated actions, dissemination of necessary knowledge and strengthening of trust in communications, rational use of resources, etc.

All of this significantly determines the priorities and tasks of forming a support system. Ukraine still needs to establish national stability.

Ukraine is currently facing external and internal threats of domestic origin. The threats are of a hybrid nature and are very difficult to define. They are coordinated and, at the same time, their use in different areas is very dangerous for the state and society.

Countering these threats requires significant financial, technical and human resources, and their volume is limited in many countries, and even more so in Ukraine. In recent years, Russia's aggression has caused significant material and human losses.

In the current situation, the potential for stability of the state and society is a complex and necessary system of development and requires adaptive management. They are called the functions of implementing the

system of ensuring national stability. Such mechanisms are used in Ukraine. However, their comprehensive implementation is a systemic approach and requires certain changes in the formation of the state security policy; improvement of organizational and legal support in the national security and public administration sphere, which exist and regulate interaction with the future creation of the national system (civil defense, counterterrorism, health care, social protection, cybersecurity, law enforcement, banking, etc.) Ensuring appropriate cooperation and synergy between the security and defense forces, state authorities and local governments, businesses and civil society, to create such effective coordination of services, implementation of sustainability principles in various service areas, especially in the field of national security, etc.

It is necessary to develop a system for ensuring national stability by implementing adaptive management of the stability of the state and society that meets the established goals and criteria. In this case, it is not crucial to create new state bodies and institutions and strengthen their stability, which already work and create trust between all actors involved in ensuring national stability.

This requires the introduction of a new paradigm of thinking, overcoming stereotypes, developing a security culture, grouping society, ensuring joint measures against threats, and forming responsibility and mutual assistance in society.

The choice of a model for ensuring national stability depends on the needs of the state, its participation in certain international organizations, unions, and other factors. Ukraine's experience in this area is quite different.

By studying the experience of other countries, recommendations of leading international organizations of the world's best practices are implemented, taking into account national interests and peculiarities of the development of the Ukrainian state and society.

In addition, the choice of conceptual foundations, certain models and mechanisms is scientifically grounded, which helps to avoid mistakes in the formation and implementation of a new set of projects, and for Ukraine, in particular, the creation of a system to support national stability.

Building resilience in local food systems in the face of increasing risks is a complex task that requires a comprehensive approach and consideration of various aspects that affect food supply. Let's consider some key steps for building a resilient local food system that have a significant impact on the performance of Ukraine's food security.

The possibility of growing different types of crops, which will help reduce the system's vulnerability to fluctuations in yields due to weather conditions or diseases. Supporting smallholder farmers can ensure a more diverse food supply and improve food security.

Use of resistant varieties and hybrids, selecting plants that are appropriate to local conditions and have a high level of resistance to pests, diseases and climate change.

The development of sustainable agricultural practices has become widespread. Agricultural production methods that preserve the soil and use water and fertilizers more efficiently are being popularized.

Local markets and distribution networks are an essential chain, and the development of local markets and distribution networks reduces dependence on distant sources of supply. Renewable energy and the use of renewable energy for production, such as solar panels and wind turbines, which can provide a stable energy supply.

Education and communication to engage the public in understanding the importance of a sustainable food system and to promote knowledge of sustainable agricultural practices.

Regulatory policies at local, regional and national levels. Developing policies that promote sustainable agriculture and food security, including taking into account climate change and other risks.

These steps may vary depending on the specific conditions of each local food system and region. It is important to keep in mind that sustainability is an ongoing process that requires joint efforts by government agencies, the public, farms, and other stakeholders.

During the war, the Ukrainian business suffered significantly. In fact, according to experts from the Graduate School and KUS Woosinss, up to 85% of the population has now adapted to a regime of part-time work or to a weight loss regimen, Among them, 1% have ceased operations and do not plan to resume, and 35% have stopped operations while waiting for the end of the war (according to other estimates, 27.7% of such enterprises24). At the same time, 86% of enterprises are operating at 3 percent less capacity compared to the pre-war period, and 33% of enterprises are unable to pay salaries to employees (according to other analysts, 38% of employees are dismissed), 29% cannot pay for the services of suppliers. The share of domestic enterprises that were closed in the first month of the war is 21%.

The expectations of the domestic business community regarding their own activities in 2022 are not encouraging either. Thus, only 17% of enterprises expect to at least maintain sales volumes at the level of the previous year (in this context, the expectations of small businesses are more positive than those of the average). At the same time, 34% of enterprises do not see any opportunities to obtain significant business in the current year. The most

affected are those industries in which remote work is not possible, such as transportation, postal and courier services, and the insurance industry, where businesses work directly with consumers. Agricultural enterprises, whose business is tied to a specific territory, and whose field or farm work cannot be postponed or rescheduled indefinitely, also found themselves in difficult conditions. In general, the main problems faced by the domestic business in the current environment are the lack of orders, problems with logistics and the lack of raw materials. Moreover, this also applies to enterprises that operate relatively far from the war zone.

In general, the Ministry of Economy of Ukraine estimates the losses of domestic enterprises and organizations in the first month of the war at 80 billion dollars. US DOLLARS. For example, analysts of the Advisor Group estimate the current losses of small and medium-sized businesses in the first two weeks of the war at 30-60 billion dollars. US DOLLARS. As a result of the decline in business activity, the end of domestic GDP in 2022 could be 21%.

In today's military situation, the halt or significant reduction of activity of most types of economic activity, the destruction of production and infrastructure facilities, the forced relocation of Ukrainian citizens to safe havens with an overnight increase in the level of unemployment in the country, and the threat of a global food crisis if the current campaign fails, have become one of the most pressing challenges that require an immediate response and support from the Ukrainian government.

In our opinion, the main threats that significantly complicate the process of ensuring economic stability and preserving the economic potential of the state in martial law are:

- disruption of domestic and international economic relations;
- blockages and violations of the logistics of supply and/or delivery;
- loss of secondary potential due to the continued outflow of people from the country;
- the percentage of a sufficient number of equipped platforms for the location of enterprises;
- provide overnight accommodation and accommodation for a significant number of employees along with basic social benefits;
- absence or problematic connection to the necessary engineering networks to ensure the functioning of enterprises;
- Sophisticated logistics and long-standing transfer of industrial equipment to the places of investment;
- the presence or absence of qualified specialists for assembly/disassembly of complex industrial equipment (including foreign production).

Today's realities pose a number of challenges and tasks for business and the government, the key of which is the functioning of enterprises in the context of hostilities. Businesses must resume work to fill the state budget, preserve the population's purchasing power, and strengthen the country's economic stability.

Conclusion

The government adopted the Action Plan to ensure food security under martial law. The Plan provides for monitoring the state of food security and agricultural infrastructure in general, providing support to food producers, targeted assistance to socially vulnerable categories of the population, and centralized control over food prices.

In addition, there are a number of government support programs (grants for own business, gardens and greenhouses, non-refundable assistance to small agricultural producers, and the National Food Security Platform of Ukraine from the State Consumer Service, which connects local governments with suppliers and producers.

However, given the current and projected challenges facing cities, it is critical to develop their own action plans and measures to respond at the local level.

We want sustainable food systems to become an important component of systemic transformation and make our cities more self-sufficient, resilient to global and local challenges, as well as to the challenges of wartime today, in particular, food security risks.

Given the above considerations of the content and key characteristics of the concept of local food system sustainability, it can be argued that this phenomenon is characterized by systemic features. This refers to the existence of basic system elements and links between them - objects, subjects, goals, critical parameters, functions, management principles, etc. The set of relevant elements and links forms a local food sustainability system.

This conclusion is important not only for understanding the peculiarities of applying the interdisciplinary concept of sustainability in the field of food security, but also for developing specific mechanisms and practical recommendations for the formation of public policy in this area.

In the context of the above, using a systematic approach, the article analyzes the peculiarities of ensuring food sustainability, the formation and functioning of the relevant system, identifies the common features and differences that distinguish the system of ensuring food system sustainability from the system of ensuring food security, and the possibilities of interaction between both systems at the national level.

References

- [1]. Ctoponyancka I.3. (2022) Ekonomika pegioniv Ukpaini v umovax vijni: piziki ta nappyamki zabezpechennya ctijkocti: naukovo-analitichne vidannya / nauk. ped. Lviv, «Iictitut pegionalnix doclidzhen imeni M. I. Dolishnogo HAH Ukpaini».. pp. 70. (Sepiya «Ppoblemi pegioialnogo pozvitku») https://mexдународные%20договора/p20220033.pdf (accessed 07 August 2023) (in Ukrainian)
- [2]. Ekonomika Ukrainy pid chas viiny: operatyvna otsinka, kviten (2022) [Ukraine's economy during the war: the current estimation, April 2022]. Available at: https://ces.org.ua/wp-content/uploads/2022/04/UKR Економіка-України-під-часвійни.pdf (accessed 07 August 2023) (in Ukrainian)
- [3]. Verkhovod L. (2020) Viina ta ekonomika: lehalni ta nelehalni praktyky otrymannia dokhodiv [War and economy: legal and illegal practices of income generation]. Scientific and theoretical almanac «Grani», vol. 23 (8), pp. 14–25. DOI: https://doi.org/10.15421/172071
- [4]. Kovalenko V. V. (2019) Ryzyky v systemi ekonomichnoi bezpeky pidpryiemstva ta zasoby yich neitralizatsii [Risks in the system of economic security of an enterprise and means of neutralizing them]. Vcheni zapysky Universytetu «KROK» [Scientific proceedings of the University "KROK"], vol. 3 (51), pp. 175–180. DOI: https://doi.org/10.31732/2663-2209-2018-51-175-180 (accessed 05 August 2023) (in Ukrainian)
- [5]. Skydan O., Hrynyshyn V. (2020) Risks and threats to ensuring food security of Ukraine: methodological foundations and practical evaluation. Economics & Education, vol. 5, № 2, pp. 96–101.
- [6]. Starychenko Ye. (2018) Prodovolcha bezpeka krainy yak sotsialno-ekonomichna katehoriia [Food security of the country as a socio-economic category]. Ahrosvit [Agrosvit], vol. 13, pp. 42–48. (in Ukrainian)
- [7]. Rusnak A., Boiko V. (2018). Logistics as a competitive advantage in the development of the agricultural sector in Ukraine. «Evropský časopis ekonomiky a management». Svazek 4. Vydani 4, pp. 55–61.