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THE MAIN PROBLEMS OF THE POST-WAR RECOVERY OF KHERSON REGION ECONOMY

ОСНОВНА ПРОБЛЕМАТИКА ПІСЛЯВОЄННОГО ВІДНОВЛЕННЯ ЕКОНОМІКИ ХЕРСОНЩИНИ

The article is devoted to identifying and substantiating the main problems of the post-war economic recovery of the Kherson region and identifying the main vectors of their solution. The research methodology is based on both general scientific and special research methods, including logical generalisation, induction, deduction, analysis, synthesis, etc. The main problems in the field of human capital, housing, social and road transport infrastructure are identified. Critical problems in the agricultural sector of the economy are emphasised. It is reasonably proved that the key focus in the economic recovery of the Kherson region should be the implementation of the three I's policy – intelligence, innovation, investment, the combination of which will be the key to effective post-war economic recovery of the region, which requires a comprehensive approach. It is noted that the programme of such recovery requires taking into account not only the economic vector, but also the social and environmental ones. It is advisable to study and adapt the leading foreign experience of countries in post-war recovery, in particular Israel, South Korea, and Germany.

Key words: post-war economic recovery, intelligence, innovation, investment, development, entrepreneurship, economy, financial resources, Kherson region, Ukraine.

Стаття присвячена виявленню та обґрунтуванню основних проблем післявоєнного відновлення економіки Херсонської області й визначенню основних векторів їх вирішення. Методика дослідження заснована як на загальнонаукових, так і спеціальних методах дослідження, зокрема логічного узагальнення, індукції, дедукції, аналізу, синтезу тощо. Визначено основні проблеми у сфері людського капіталу, житлової, соціальної та дорожньо-транспортної інфраструктури. Наголошено на критичних проблемах в аграрному секторі економіки, зокрема близько 60% аграрних підприємств Херсонщини постраждали від війни, для фіксації наслідків якої, створили інтерактивну мапу руйнувань. Аргументовано доведено, що ключовим акцентом при відновленні економіки Херсонської області повинно стати впровадження політики трьох I – інтелект, інновації, інвестиції, саме синергетичне поєднання яких стане запорукою ефективного післявоєнного відновлення економіки регіону, що потребує комплексного підходу. Відзначено, що програма такого відновлення потребує врахування не тільки економічного вектору, але й соціального і екологічного. Доведено, що доцільним при розробці програми післявоєнного відновлення Херсонської області доцільно використовувати досвід так званих «економічних див» с: ефективне стимулювання підприємницької активності малого та середнього бізнесу, соціальна орієнтація фінансово-економічної діяльності господарюючих суб'єктів, стимулювання пріоритетних галузей і сфер діяльності, розвиток підприємницьких стартапів, посилення соціальної складової державної політики підтримки внутрішньо переміщених осіб та інших вразливих категорій населення, загальна переорієнтація з економіки сировинного типу на економіку експорторієнтованості й імпортозаміщення. Наголошено, що слід звернути увагу на те, що підґрунтям післявоєнного відновлення економіки Ізраїлю є наукові знання, розробки та впровадження нових технологій та адаптація їх до реального виробництва.

Ключові слова: повоєнне відновлення економіки, інтелект, інновації, інвестиції, розвиток, підприємництво, економіка, фінансові ресурси, Херсонська область, Україна.

Formulation of the problem. A full-scale war is an extremely critical phenomenon for all spheres of the State's activity, in which established economic ties are disrupted, financial prospects are destroyed, rapidly progressing inflation depreciates the national currency, and growing unemployment deprives the State treasury of revenues. While there is no need to "reinvent the wheel" in the country's recovery, new approaches, international assistance and consideration of national peculiarities are essential in developing and implementing effective measures to restore the economy of the country and its regions. Today, we can already hear various options for economic recovery in Ukraine and its regions, but the development of an effective plan should begin with an assessment of the main problems of post-war recovery and a study of the positive experience of countries that have managed to overcome the consequences of the war and go down in history as economic miracles. There are many positive examples of post-war reconstruction in history, including many major wars and military conflicts that took place after World War II, involving at least 60 countries. However, the restoration of the de-occupied territories is a complex issue that requires close attention from both regional and national authorities.

Analysis of recent research and publications. Scholars, both domestic and foreign, pay great attention to the development of the economy, the positive global experience of its formation and achievement of the level of a developed country. Scientists and economists are now focusing on the restoration and development of the economy and infrastructure of countries affected by war and military conflicts on their territory. For example, the issues of post-war economic recovery are of scientific interest to such scholars as Barabash L., Vasylytsiv T., Hrybanovskyi O., Derick W. Brinkerhoff, Karnausenko A., Kusnets P., Lupak R., Osadchuck Y., Petrenko V., Pokrovska N., Uninets I., Khudolii L., Fedosenko M., Shapoval N., Shushkova Y. According to Pokrovska N., scholars dealing with the topic of post-conflict economic recovery of affected countries generally assume that each reconstruction attempt is unique. In her opinion, each reconstruction is distinguished by the following common factors, namely: the origins of the conflict outbreak and its resolution; full or partial cessation of hostilities throughout the country; the level of development of the country's economy and its inclusion in global trade chains; the degree of international political support for the settlement; and the interest of donor countries in the economy of the affected country, taking into account the investment potential [6]. However, there is a lack of scientific works on the post-war economic recovery of the de-occupied territories, in particular the Kherson region.

Formulation of the purpose of the article. The purpose of the research is to identify and substantiate the main problems of the post-war economic recovery of the Kherson region and to determine the main vectors of their solution.

Presentation of the main research material. Today, almost two-thirds of the territory of the Kherson region is under occupation. Every day, Kherson is shelled with an average of 50 shells. As of the end of May 2023, 82 schools, 51 hospitals, 504 thousand square metres of housing were completely or partially destroyed. Thousands of people have suffered during the 9 months of occupation of Kherson, according to various estimates, 50-60% of residents have left for other regions of Ukraine or abroad. The road transport infrastructure of the Kherson region has suffered significant losses. As of the end of May 2023, nearly 4,000 km of roads were damaged, the airport in Chornobaivka was destroyed, and Antonov Bridge and other bridges were destroyed.

The agricultural sector of the Kherson region has suffered significantly. Before Russia's full-scale invasion of Ukraine, there were 2,913 agricultural enterprises in the Kherson region. Due to Russia's armed aggression, most of them have been damaged or destroyed to the ground. 70% of agricultural land in the de-occupied settlements is heavily damaged and contaminated with explosive ordnance. For example, Mykolaiv and Kherson regions currently have the largest number of explosive devices cleared by the SES in southern Ukraine. The current state of demining in Ukraine can be checked on the SES interactive map. Information is available on the size of the surveyed area, the number of explosive devices defused

and the number of times the SES representatives were involved (data is displayed both per day and since the start of the work). You can see demining statistics for Ukraine as a whole, as well as for individual regions. In particular, as of March 15, 2023, the number of explosive ordnance defused since the start of work is 12482 in Mykolaiv region and 18385 in Kherson region. Oleksandr Khorunzhyi, a spokesman for the State Emergency Service of Ukraine, noted the difficulties of demining in Kherson Oblast: "In addition to conventional anti-personnel and anti-tank mines, the enemy left many cassette elements (parts from Grad and Smerch MLRS missiles, which do not always explode and can self-destruct at any time). The Russians are also scattering PF-1s, the so-called petals or "butterfly mines". Despite daily demining efforts, at least 870,000 hectares remain mined in Mykolaiv and Kherson regions. According to Oleksandr Tolokonnikov, head of the press office of the Kherson Regional Military Administration, 600,000 hectares of territory in the de-occupied part of Kherson region are mined [12].

Due to the high level of mined territory, the sowing campaign is under threat in many communities. For example, according to Andriy Seletskyi, head of the Novovorontsovo village military administration, most agricultural enterprises in the community have been damaged and fields are mined. Natalia Kornienko, head of the Velyko Oleksandrivska military administration, noted that at least 95% of the community's fields, or 78,000 hectares, need to be surveyed for explosive devices. According to Ihor Bogdanov, a representative of A.G.R. Group, the amount of demining work in Kherson and Mykolaiv regions is enormous. "The fields are like a sieve. Every metre of the field will need to be examined. This will probably require specialised machines with a working width of 4-6 metres. They have armour in the front like a reaper and loosen the soil to a depth of 30 cm. But there are few such machines in Ukraine. One machine processes 40 hectares per day. That is, in 100 days, it can process only 4,000 hectares, and we need to process 10,000 hectares" [12].

According to the Association of Deminers, it can cost \$3-4 per square metre to clear a square metre of land. The head of Nibulon, Andriy Vadatursky, noted that it would be very expensive to plough the land completely – \$1,000-\$2,000 per hectare. "It's a matter of compromise between lower costs and a lower probability that everything will be clean, and vice versa. We cannot risk people's lives, so there is no simple solution." The need for rapid demining has led to a flourishing black market for deminers. According to one agricultural company, the cost of a field survey by illegal sappers on the black market is about UAH 5,000 per hectare, and demining costs USD 1-3,000 per hectare, depending on the contamination. As long as there are no centralised solutions for humanitarian demining, some farmers survey fields at their own risk. For example, Oleksandr Hordienko, a farmer from Kherson region, using a handheld metal detector and a larger device attached to a tractor, found 1,500 mines, although he believes there may be hundreds more [12].

In addition, according to the head of the Verkhovna Rada Committee on Agrarian and Land Policy, Oleksandr Haidu: "Where the harvest has already been completed, this grain has been exported from the territory of Ukraine. Where the harvesting campaign is underway, this crop is also being taken and exported from the territory of Ukraine through Crimea. In other words, Russia is stealing Ukrainian grain. As far as I know, more than 600,000 tonnes of grain from Kherson and Zaporizhzhya regions alone have been stolen so far. We cannot estimate how much more will be stolen." About 60% of agricultural enterprises in the Kherson region were affected by the war. An interactive map of the destruction was created to record the consequences.

The main challenge for the functioning of agricultural enterprises is to stabilise and maintain performance indicators at the current level. In addition, the main problems faced by farmers are: lack of skilled workers; poor protection of property rights and raiding; problems in settlements with retailers; risks associated with the possibility of power outages; unpredictable government actions; and constant changes in legislation. According to a survey conducted by the International Marketing Group, with the support of Help-Ukraine and

in cooperation with the Ukrainian Business Council, 80% of farmers need various forms of assistance, with 78.3% needing financial assistance from credit institutions or donor programmes. In addition, farmers are looking for expert advice on issues such as finance and investment, supply and marketing, partner search, and building relationships with the authorities. The most urgent changes expected by farmers from all regions of Ukraine are: the need to temporarily exempt farmers from paying the Group 4 single tax; to solve the problem of blocking tax invoices, to restore the presumption of innocence of the taxpayer; to create water user organisations for the development of irrigation; to postpone the introduction of the minimum tax burden per hectare; to extend the duty-free regime with the EU and quotas for several more years. In the short or medium term, 43% of farmers surveyed aim to maintain the current state of affairs on their farms, 28% of respondents foresee a direction for future development, and 26% plan to curtail their activities to minimise their losses [5].

Thus, both during martial law and in the post-war period, an important issue is the formation of a financial policy for regional economic development. The financial policy of the state in wartime is crucial for ensuring the development of both the national economy and its regions. In the context of a full-scale war, the processes of economic transformation become more complicated, the financial crisis spreads and its negative consequences increase. This is the reason for the incapacity and low efficiency of the existing financial policy, which is unable to respond adequately and timely to the challenges of today. In turn, economic growth in the post-war period is one of the key objectives of Ukraine's macroeconomic policy. At the same time, it is necessary to take into account the specifics of the restoration of the de-occupied territories, the full range of their needs, and to develop and successfully implement a programme for the post-war restoration of the Kherson region. A significant role should be given to supporting the development of entrepreneurship, which is the main driver of economic development.

In addition, a key focus in the recovery of the Kherson region's economy should be the implementation of the three I's policy – intelligence, innovation, and investment. It is the combination of these extremely important components that will ensure effective post-war economic recovery in the region. The country's state policy should be aimed at preserving and returning the country's intellectual potential from abroad. The Ministry of Digital Transformation of Ukraine has a very strong policy on digitalisation, which creates the necessary basis for further creation and implementation of innovations, including projects: Diia. Online Public Services, Diia.Business, Diia. Digital Education. More than 70 public services are available online on the Diia portal, including the registration of individual entrepreneurs. Ukraine has legalised the crypto sector and ranks 4th in terms of the number of cryptocurrency users. The number of users of the Diia app has exceeded 17 million, 60% of businesses in Ukraine are opened online, and more than 10,000 digital document sharing and validation operations are performed daily. In the category of leading countries in 2022, Ukraine was ranked 21st among 100 countries, and eighth in the ranking of technological competencies, according to the annual Global Skill Report 2022 by Coursera [1].

When developing a post-war recovery programme for the Kherson region, it is advisable to use the experience of the so-called "economic miracles". The common features of all "economic miracles" are: reorientation of industry to technological production, active competitive environment, stimulation of entrepreneurial activity, social orientation of financial and economic activity, as well as export-oriented production and stimulation of priority industries and areas of activity. In the context of Ukraine's financial and economic situation, it is worth paying attention to the experience of South Korea's reconstruction, based on the similarity of the situation, combining it with the in-depth social component that was marked by the "German Economic Miracle"[10]. Thus, it would be appropriate to develop entrepreneurial start-ups, restore production based on technological and technical upgrades, strengthen the social component of state policy, stimulate the development of small and medium-sized businesses, and generally reorient from a raw material economy to

an export-oriented and import-substituting economy. And, of course, this should take into account the psychological and behavioural characteristics of Ukrainians: working for results on fair terms, restoring trust in the state and its structures, forming the economic consciousness of a new type of citizen by increasing the level of financial literacy and expanding social dialogue between the state and taxpayers [10].

Israel's post-war experience in economic recovery shows that this country attaches great importance to human potential and the general well-being of the entire population. Therefore, it can be argued that the basis of the post-war recovery of the Israeli economy is scientific knowledge, development and implementation of new technologies and their adaptation to real production, when the sacramental sector of material production turns into an innovative one, and as a result, creates opportunities for the effective use of information technology, unlocking human potential and using production factors, which should be adapted for the Kherson region [8]. In addition, when developing the concept of post-war recovery, the basic principles of a smart economy should be taken into account, in which the creation and effective development of smart cities can become an important impetus for the further development of the entire economy of the country [9].

Conclusions. Thus, the issue of post-war reconstruction of the Kherson region is an important and complex issue that requires a comprehensive approach. Therefore, the programme for such recovery should take into account not only the economic vector, but also the social and environmental ones. It is advisable to study and adapt the leading foreign experience of countries such as Israel, South Korea, and Germany. The key focus in restoring the economy of Kherson region should be the implementation of the three I's policy – intelligence, innovation, investment, and support for the development of entrepreneurship and the agricultural sector of the economy. Prospects for further research will be aimed at determining the role and features of international financial and technical support for the development of the region in the post-war period.

References:

1. Annual study Global Skill Report 2022 by Coursera. Available at: <https://bit.ly/3NWy111> (accessed 10 June 2023).
2. Vasylytsiv T.G., Lupak R.L., Osadchuk Yu.M. (2017) Assessment of the level of penetration of import dependence in the context of the import substitution policy in Ukraine. *Ekonomichnyi chasopys XXI Economic journal XXI*, no. 167 (9-10), pp. 13–17.
3. Derick W. Brinkerhoff. (2007) Governance in post conflict societies: rebuilding fragile states. New York: Routledge.
4. Kusnets P.W. (2017) An East Asian Model of Economic Development: Japan, Taiwan, and South Korea. *Economic Development and cultural Change*, no. 26, pp. 15–27.
5. Opytuvannya malykh fermers'kykh hospodarstv (vid 5 do 100 Ha) z usikh rehioniv Ukrainy (2023). Available at: https://urb.org.ua/wp-content/uploads/2023/03/Farmers_Help_Final_06.03.pdf (accessed 10 June 2023).
6. Pokrovs'ka N. (2022) Conceptual principles of post-war construction of Ukraine, economic aspects. *Visnyk Skhidnoukrayins'koho natsional'noho universytetu imeni Volodymyra Dalya*, no. 4 (274), pp. 41–47. DOI: <https://doi.org/10.33216/1998-7927-2022-274-4-41-47>
7. Shushkova Yu.V. (2019) Uzahalnennia instrumentiv svitovoho dosvidu derzhavnoi polityky innovatsiinoho ta tekhnolohichnoho rozvytku ekonomiky [Generalization of instruments of the world experience of the state policy of innovation and technological development of the economy]. *Ekonomika ta derzhava Economy and the state*, no. 11, pp. 20–24. Available at: http://www.economy.in.ua/pdf/11_2019/6.pdf (accessed 10 June 2023).
8. Tanklevs'ka N.S., Karnaushenko A.S., Petrenko V.S. (2022) Izrayil's'ky dosvid pislyavoyennoho vidnovlennya ekonomiky. *Naukovyy visnyk L'otnoyi akademiyi. Seriya: Ekonomika, menedzhment ta pravo*, no. 6, pp. 20–28. DOI: <https://doi.org/10.33251/2707-8620-2022-6-20-28>
9. Uninets' I.M. (2022) Perspektyvy pislyavoyennoho vidnovlennya v Ukraini na zasadakh rozumnoyi ekonomiky. *Problemy suchasnykh transformatsiy. Seriya: ekonomika ta upravlinnya*, no. 1(4). DOI: <https://doi.org/10.54929/2786-5738-2022-4-02-01>

10. Khudoliy L.M., Tanklevs'ka N.S., Barabash L.V. (2022) Finansovo-ekonomichni ta psykholoho-povedinkovi aktsenty povoyennoho "ekonomichnoho dyva" u zarubizhnykh krayinakh. *Zbirnyk naukovykh prats' Umans'koho NUS*, Vyp. 100, CH. 2, p. 329–339. DOI: <http://dx.doi.org/10.31395/2415-8240-2022-100-2-329-339> (in Ukrainian)

11. Shapoval N., Fedoseyenko M., Hrybanovs'kyu O., Tereshchenko O. (2022) Povoyenne vidnovlennya Ukrainy. Available at: <https://kse.ua/wp-content/uploads/2022/09/Digitalinstruments-in-Ukrainian-recovery.pdf> (accessed 09 June 2023).

12. 870 tysyach hektar na pıvdni Ukrainy nashpyhovani minamy: yaki zahrozy tse nese? (2023). Available at: <http://surl.li/iaqhh> (accessed 11 June 2023).

Список використаних джерел:

1. Annual study Global Skill Report 2022 by Coursera. URL: <https://bit.ly/3NWy111> (дата звернення: 10.06.2023).

2. Vasylytsiv T.G., Lupak R.L., Osadchuck Yu.M. Assessment of the level of penetration of import dependence in the context of the import substitution policy in Ukraine. *Ekonomichnyi chasopys XXI Economic journal XXI*. 2017. No. 167 (9-10). P. 13–17.

3. Derick W. Brinkerhoff. Governance in post conflict societies: rebuilding fragile states. New York : Routledge, 2007.

4. Kusnets P.W. An East Asian Model of Economic Development: Japan, Taiwan, and South Korea. *Economic Development and cultural Change*. 2017. No. 26. P. 15–27.

5. Опитування малих фермерських господарств (від 5 до 100 га) з усіх регіонів України. 2023. URL: https://urb.org.ua/wp-content/uploads/2023/03/Farmers_Help_Final_06.03.pdf (дата звернення: 10.06.2023).

6. Покровська Н. Концептуальні засади післявоєнного відновлення України, економічні аспекти. *Вісник Східноукраїнського національного університету імені Володимира Даля*. 2022. № 4 (274). С. 41–47.

7. Шушкова Ю.В. Узагальнення інструментів світового досвіду державної політики інноваційного та технологічного розвитку економіки. *Економіка та держава*. 2019. № 11. С. 20–24. URL: http://www.economy.in.ua/pdf/11_2019/6.pdf (дата звернення: 10.06.2023).

8. Танклевська Н.С., Карнаушенко А.С., Петренко В.С. Ізраїльський досвід післявоєнного відновлення економіки. *Науковий вісник Львівської академії. Серія : Економіка, менеджмент та право*. 2022. № 6. С. 20–28. DOI: <https://doi.org/10.33251/2707-8620-2022-6-20-28>

9. Унінець І.М. Перспективи післявоєнного відновлення в Україні на засадах розумної економіки. *Проблеми сучасних трансформацій. Серія : економіка та управління*. 2022. № 1(4). DOI: <https://doi.org/10.54929/2786-5738-2022-4-02-01>

10. Худолій Л.М., Танклевська Н.С., Барабаш Л.В. Фінансово-економічні та психолого-поведінкові акценти повосного «економічного дива» у зарубіжних країнах. *Збірник наукових праць Уманського НУС*. 2022. № 100. Ч. 2. С. 329–339. DOI: <https://doi.org/10.31395/2415-8240-2022-100-2-329-339>

11. Шаповал Н., Федосенко М., Грибановський О., Терещенко О. Повоєнне відновлення України. 2022. URL: <https://kse.ua/wp-content/uploads/2022/09/Digitalinstruments-in-Ukrainian-recovery.pdf> (дата звернення: 09.06.2023).

12. 870 тисяч гектар на півдні України нашпиговані мінами: які загрози це несе? 2023. URL: <http://surl.li/iaqhh> (дата звернення: 11.06.2023).