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CHALLENGES FOR AGRBUSINESS DEVELOPMENT IN UKRAINE FOR THE YEARS OF INDEPENDENCE

Key words: Ukraine, independence, agribusiness, challenges, war

ABSTRACT. The purpose of the study is to assess the most important challenges for Ukraine's agribusiness, as the main sector of the economy, after gaining independence in 1991, with particular emphasis on the full-scale russian invasion. The main directions of overcoming the consequences of russian aggression were systematized. In the process of processing information materials, a dialectical approach to the study of socio-economic phenomena was applied, combined with various methods: induction, analysis and synthesis, systematization and scientific prediction, statistical and computational-constructive. After Ukraine gained independence, agribusiness was the locomotive of its economy. The main damages caused to Ukrainian agribusiness by russian invaders are the direct destruction of agricultural land, its contamination, limiting access to it, disruption of logistics, blocking of ports, destruction of production facilities, crops and animals, theft of agricultural products, increase in production costs. The direct losses of the agricultural sector as a result of the war amounted to over USD 6 billion, and the total losses – to over USD 30 billion. The key directions that should be paid attention to when rebuilding the agro-industrial sector are the storage, logistics and transport infrastructure, as well as the development of science, which will not only allow the reconstruction of Ukrainian agribusiness, but will also enable innovative development of the economy.

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INTRODUCTION

In general, the entire 30-year period of independence can be considered a continuous powerful challenge for Ukraine, full of dangers and threats. The situation that arose as a result of the large-scale phase of russian military aggression in 2022 became a particularly acute challenge not only for the country, but also for the whole civilized world. The war in Ukraine will have the greatest catastrophic socio-economic consequences for Ukraine, Europe, and the world compared to the consequences of all the previous world crises. Therefore, the response of the world community to all the challenges caused by the war in Ukraine must also be adequate, timely and systematic, laying the foundations for the formation of the future world system of the financial, food, energy and military security of mankind [Shubalyi, Gordiichuk 2022].

Since the Ukraine's agro-industrial complex occupies a leading position in ensuring the necessary standard of living of a significant part of its population, in the formation of its budget, especially of its currency part, it is impossible to overestimate the importance of agribusiness for Ukrainian society. The agricultural and food sector of Ukraine accounts for almost 10% of GDP [MFAU 2022]. In 2021, 40% of Ukraine's total exports were actually agricultural products [Liga Zakon 2022]. Given the role of Ukraine in ensuring global food security, the war is a challenge not only for Ukraine, but also for many other countries of the world.

Therefore, the purpose of this article is to present the results of a study of the development of the agribusiness sphere of Ukraine under the influence of the mentioned challenges during the period of the country's independence, especially during the period of large-scale russian military aggression, and directions for solving the problems of countering these challenges and their consequences, which is of great importance both for Ukraine itself, as well as to ensure the possibility of solving the global problem of ensuring peace and security, including and food for the countries of the entire civilized world.

MATERIAL AND METHODS

The initial information for conducting this study was drawn from the operative materials of scientists and practitioners and analysts published in print and on the Internet, related to the issues forming the research problems, the results of which are presented in this article. In the course of the study, the data of the assessment of damages and losses caused by russia and the corresponding needs of Ukraine in liquidation of its consequences, carried out by the World Bank, the Government of Ukraine and the European Commission using the internationally recognized methodology Damage and Loss Assessment (DaLA) [GFDRR 2022b] were also processed, which ensures

the implementation of the possibility of obtaining a comprehensive assessment of the specified damages and needs for restoration, and which were published in the report "Rapid assessment of damage and needs for restoration of Ukraine" [GFDRR 2022a]. The results of expert evaluations by relevant specialists and the author's own observations were also used, which allowed to saturate the article with the latest modern data, which is important, since the war continues and the damage caused to Ukraine and the country's needs for the restoration of what was destroyed are constantly growing. In the process of processing the source materials, a complex of general scientific methods was used, the application of which took place within the framework of a dialectical approach to the study of socio-economic phenomena in combination with the methods of induction, scientific abstraction, analysis and synthesis, systematization and scientific prediction. In addition, such methods of economic research as calculation of dynamic series, statistical and calculation-constructive methods were also used in the work.

RESEARCH RESULTS

The challenges that Ukraine has had and is dealing with during the entire period of its independence, by their nature and content, go far beyond the understanding of the essence of the concept of challenge in established theories [Fukuyama 1992, Esposito 1999, Shye, Haber 2020, Elliott 2022]. Such a challenge for Ukraine and especially for its agribusiness sphere, such as the russian-Ukrainian war, best fits into the theoretical developments of Arnold Toynbee, who formed a specific, but close to the truth, approach to explaining the evolution of civilizations based by him well-founded law of "challenge - responce" [Toynbee 1974]. By "challenge" Arnold Toynbee meant some unpredictable factor or event that posed a threat to the ways in which a group of people had made their livelihood in the past [Danylova, Yudina 2018], which, in addition, creates new opportunities that are realized by people in the course of their response to the challenge [Schmandt, Ward 2000]. That is, the talk is about the fact that such challenges should be perceived dialectically – as threats and as factors promoting movement and development, although it sounds somewhat cynical to some extent. This fully applies to the modern challenge to Ukraine by war from russia – the Ukrainian people, with the support of the civilized part of the world, repulses the invaders, opposes their terrorism and genocide, and will do so until their complete destruction, because only in this way it will be possible to realize the possibility of Ukraine's functioning on a new, qualitatively better level. The current russian-Ukrainian war is a challenge for all civilized humanity, but the main role in overcoming it is played by Ukraine as the primary subject of this challenge. From a socioeconomic point of view, this challenge to the greatest extent concerns agribusiness as the most important and at the same time the most vulnerable part of the country's economy.

If we briefly outline the path of the Ukrainian economy during the period of independence, it can be called a road from challenge to challenge, from crisis to crisis. As soon as it seemed that life was gradually normalizing and the well-being of citizens was improving, the state faced a new crisis and a drop in GDP. V. Vynnychenko once said that "Ukrainian history cannot be read without bromine" [Gerasymenko 2021].

The fact is that on August 24, 1991, the Verkhovna Rada of the Ukrainian SSR adopted the Act of Proclamation of Independence of Ukraine, which became the starting point of its modern statehood and sovereignty, for which Ukrainians competed for many centuries, which played a decisive role in the collapse of the USSR and the final liquidation of the communist totalitarian system. However, in 1991, Ukraine actually received only the attributes of a sovereign state, but not practical independence, as it did not immediately manage to fill this independence with real meaning.

The beginning of the independent economic life of Ukraine began in unfavorable conditions and it should be borne in mind that the problems of agribusiness in Ukraine are inextricably linked with the general state of its economy (Table 1).

Table 1. Starting opportunities of Ukraine's economy after the declaration of its independence

Positive factors	Negative factors
 highly qualified and cheap labor force, 	 previously the economy of ukraine was a component of the all-union economic complex,
 cheap labor force, high level of education, significant scientific potential, significant natural resources, the developed transport network, large sea and river fleet, the ability of industry to produce a large range of products, significant potential in the development of agribussiness 	 of the all-union economic complex, deformation of the structure of the economy: predominance of heavy industry and energetics (70%), no complete cycle of production of goods in most industries (80%), 40% of products were produced by monopolistic enterprises, high cost of production and energy dependence of the economy, most of the industrial products on the world market were uncompetitive, previously 80% of enterprises worked for the needs of the military-industrial complex, lack of a legal framework, personnel and management for the functioning of the economy in market conditions,
	the population, brought up in the spirit of disdain for private property, accustomed to state care

Source: developed by the author

The economy was in a severe state of crisis and rapidly falling. The dimensions of the decrease in production in 1990-1994 turned out to be greater than during the years of the Second World War: the gross national product decreased by 44%, the volume of industrial production – by 41%, national income – by 54%. Inflation rates were crazy – 2,000% [Osvita 2022]. The situation was complicated by the rapid increase in energy prices (in 1992 – 300 times), by the drop in incomes of the population, by the presence of a card system, by the complete deficyt and queues. Millions of citizens were below the poverty line. The crisis also covered agriculture and the entire sphere of agribusiness. In 1990-1993 the volume of agricultural products decreased by 1/4. Having lost about a third of its market in russia, Ukraine was unable to win it in the West.

At the end of the 1990s, the country's economy came out of the pique, what was facilitated by a balanced budget and monetary policy, a simplified taxation system, the introduction of the national currency – the hryvnia, the expansion of domestic demand and the market, along with a favourable external environment. In 2002, the Land Code was approved, which established private ownership of land, but a moratorium on the sale of agricultural land was maintained (till 2022). Large (several hundred thousand hectares of land due to renting it from private owners who did not have the opportunity to manage it) enterprises (agricultural holdings) were created, which produced products for export (wheat, corn, rapeseed, sunflower, soy). The rest of the agricultural products were produced in smaller farms.

But the world economic crisis of 2008-2009 reached the country, which continued in Ukraine until 2010. In general, the drop in production in 2009 was 27%, and the GDP was 14.5%, which caused aggravation of social problems: a sharp drop in the standard of living of the population, significant property stratification (10% of the population of Ukraine concentrated 40% of income), social unrest caused a decrease in the natural increase of the population of Ukraine and an increase in poverty.

In 2013-2014, during the events on Independence Square and the Revolution of Dignity, Ukrainians defended the European path of development and demonstrated their readiness to fight for it. Instead, russia, having lost the opportunity to control Ukraine, resorted to criminal military aggression. During the first month of the active phase of the war, only 17% of large Ukrainian enterprises continued to work without any limitations (another 30% were able to go online) [Samaeva 2022] Now 46% of enterprises are actually not working. Business is gradually recovering, but revenues are expected to drop by 50% in 2022 compared to 2021.

The locomotive of the Ukrainian economy is agribusiness. Ukraine has historically been called the granary of Europe, as it contains about 25% of the world's black earth soils, known for their high level of fertility. Ukraine has the largest area of agricultural land in Europe with approximately 41 million ha of land, of which 32.5 million ha are used

for agricultural crops growing. Agriculture provides more than 50% of the population's consumption fund and is one of the leaders among the sectors of the economy in the commodity structure of exports, where in 2020 it occupied 45%. The share of agriculture in the GDP of Ukraine in 2020 is 9.3%. But the share of processing industry in Ukraine is only 10% [Gerasymenko 2021]. Today, Ukraine, thanks to its fertile soil and temperate climate, is the world leader in the market for the export of sunflower oil and grains.

As a result of COVID-19, in 2020 there was a reduction in agricultural activity by 18.7%, which slowed down with the coming to the end of the pandemic. It may seem a bit strange, but for Ukraine, the pandemic was not as much of a challenge as it may have been for some other countries. Everything in this world is relative – Ukraine already had the troops of russian federation in the its eastern territories.

Russia's military aggression in Ukraine, especially its active phase in 2022, has its roots. Ukraine has some of the world's largest reserves of titanium and iron ore, lithium deposits, as well as huge coal deposits, the total value of which is tens of trillions of dollars. Ukraine has sources of 117 of the 120 most widely used minerals and metals. Russia in Ukraine gained control over deposits of energy resources, metals and minerals worth at least USD 12.4 trillion. In addition to 63% of the country's coal deposits, russia has captured 11% of its oil deposits, 20% of its natural gas deposits, 42% of its metals and 33% of its rare earth and other critical mineral deposits, including lithium [Landlord 2022].

The report of the KSE (Kyyiv School of Economics) Institute project "russia will pay" states that Ukraine's losses from a full-scale war reached more than USD 127 billion, during the summer alone russia caused losses of more than USD 31 billion [Gordiychuk 2022].

The agrarian sphere of the economy, due to its peculiarity, such as the spatial-territorial location of agriculture, suffered the most as a result of military actions, if we take into account the far-reaching consequences (Table 2).

According to the latest calculations of the Ministry of Agricultural Policy and Food of Ukraine, the losses of the agricultural sector of the Ukrainian economy by the beginning of 2023 may increase to USD 40 billion [Zyatiuk 2022].

It was recorded that agricultural lands suffered two significant types of damage – mine contamination and direct physical damage. About 13% of the territory of Ukraine are mined by the russians, which limited access to the fields and approximately 2.4 million ha of winter crops with a total value of USD 1,435 billion remain unharvested. According to the FAO, taking into account the demining experience in Croatia, the cost of a demining campaign in Ukraine may cost USD 10 billion [Kravchenko 2022].

More than 5% of the land fund of Ukraine (more than 2 million ha) suffered direct physical damage as a result of military operations [Latifundist 2022a]. More than 10% of arable land turned out to be unavailable for the sowing campaign, which significantly affected the country's export potential and the state budget [Agravery 2022].

minutary aggression, 2022		
Types of losses	Quantitative characteristic	
Direct losses of the agricultural sector	more than USD 6 billion	
Indirect losses of the agricultural sector	more than USD 23 billion	
Total losses of the agricultural sector	more than USD 30 billion	
Losses of agricultural animals	more than USD 136 million	
Including, animal heads, pieces:		
- cattle	92,000	
– pigs	258,000	
- sheep and goats	42,000	
– poultry	5,700,000	

Table 2. Losses of the agricultural sector of Ukraine as a result of russia's military aggression, 2022

Source: own development based on [Agrarii-Razom 2022, Latifundist 2022a, Ukrinform 2022]

The Ministry of Agrarian Policy and Food of Ukraine says that the country as a whole has lost up to 15% of its meat and dairy production capacity [Yashchyshen 2022].

In order to weaken the Ukrainian agricultural sector, the russian federation is purposefully destroying elevator capacities. 14% of the elevators are damaged or destroyed, 10% are located in the territory occupied by russia, so access is only to 65% of the storage facilities [Superagronom 2022]. The total amount of losses due to the damage or destruction of granaries is estimated at USD 272 million [Slovoidilo 2022].

Looting by russians in Ukraine has very diversified forms and is a consistent policy in the occupied territories. Since the beginning of the full-scale invasion, the russians have stolen and exported more than USD 1 billion worth of grain from Ukraine [Lytvyn 2022]. By the end of 2022, russia can steal and export a total of 1.8 million tons of grain from the occupied territories of Ukraine, mainly to russia and Syria [Venkina 2022].

In addition to blocking ports, stealing and selling grain, the occupiers cynically set farmers' fields on fire using special incendiary shells. The number of burned fields is hundreds of thousands of hectares. It is not Ukrainian wheat that is on fire, it is the food security of the world that is on fire [Censor.Net 2022].

Russian military aggression in Ukraine has impressive consequences of a global nature, as the country's share in global exports of grain alone amounted to 10% in 2020-2021 and 14% in 2021-2022 [MFAU 2022], therefore, russia's blockade of Ukrainian seaports alone put 323 million people at risk of starvation [Prostir 2022]. Such uncertainty with

the grain corridor forced Ukraine to significantly improve transportation logistics. But rail transportation is much more expensive than sea freight. Ukrainian tracks are wider than European tracks, so it is necessary to transship grain, which requires both time and money. The European infrastructure is not capable of accepting more Ukrainian products in order to transport them by sea to other continents. Romanian and Polish ports can handle 33 million tons of grain per year with a need of 50-60 million tons.

According to the estimates of the Cabinet of Ukraine, about USD 38 billion per year is needed for the post-war reconstruction of Ukraine. Funds necessary for the restoration of critical infrastructure are included in the budget. Also, funds of the russian federation seized on the territory of Ukraine and in other countries can be used for recovery [Romank 2022a]. Another source of funding for the reconstruction of Ukraine is billions of dollars in donor international aid. The finance ministers of the EU countries were instructed to develop a mechanism for allocating at least EUR 18 billion to Ukraine in 2023, that is, about EUR 1.5 billion per month (EUR 3-4 billion if needed) [Romank 2022b].

The key directions that should be emphasized during the reconstruction of the agroindustrial complex are the finishing, storage, logistics and transport infrastructure. It should also be modern science, which should give rise to Ukraine's new economy and innovation. The war showed that autologistics should be developed and small sea routes modernized, logistic points on the borders with the EU should be developed. All this will create added value and additional jobs and will be important for the reconstruction of Ukraine not as a resource country, but as a modern and innovative one.

The plan for the recovery of Ukraine in the period 2022-2032 contains 850 projects in the field of agro-industrial complex, the implementation of which will require at least USD 37 billion of investments and will allow Ukraine to enter the TOP-25 countries in the world according to the Human Capital Index and the Economic Complexity Index [Agroportal 2022]. The post-war development of the agricultural sector involves the development of processing, the growth of added value, the development of bioenergy, animal husbandry, horticulture, etc. The overarching motive for the entire Recovery Plan is the formation of the Ukrainian "green course" Green Deal, which involves attracting of USD 10.2 billion [Lysa 2022].

The main directions of development of processing in the agricultural industry of Ukraine are proposed to increase the production of starch, syrups, gluten, lecithin, protein, premixes, meat and milk. It is quite realistic to be able to process 10-12 million tons of agricultural raw materials per year in 10 years, which will allow Ukraine to automatically close the issue of the lack of logistics infrastructure, which has been a problem for the country in recent years when exporting raw materials. In 2020, Ukraine exported USD 1 billion worth of fodder wheat. If we were to process this fodder wheat with the help of biotechnology into a number of products (bioethanol, citric acid, lactic acid, glucose

monohydrate, crystalline fructose, GFS (glucose-fructose slings) and further export, then could receive USD 3 billion in export revenue. And this is just one example [Latifundist 2022b].

The target audience of international donor organizations is rural households and farmers, who are rightly considered a factor in the fight against unemployment and a guarantee of inclusive economic growth in rural areas. In Ukraine, this strategy is all the more justified because the small farming sector is crucial for local employment. In addition, small producers are key suppliers of products at the local level. It is practically impossible that subsidies will extend to large companies. Given that access to international aid will be one of the defining competitive advantages in the agro-industrial complex in the coming years, this discrimination will intensify the processes of semi-disintegration of agrarian holdings that have already begun. Those programs that are already being implemented in Ukraine by FAO and other donors provide for the maximum size of the recipient's land bank at the level of 250-1,000 ha, what will stimulate the development of smaller farms rather than agricultural holdings. But the problem of small enterprises lies in their inability to form the necessary large batches of products, which creates problems for the sphere of its processing, therefore the development of this type of enterprises objectively requires the corresponding development of cooperation. Small farms find it difficult to compete in segments of agricultural production where scale provides a significant advantage, but they can be efficient niche producers. Moreover, the war and its consequences, in particular, the lack of budgetary support, influenced a certain reorientation of agricultural producers towards the production of less energy-intensive and more niche crops.

CONCLUSIONS

Ukraine gained independence not automatically, but as a result of centuries of struggle for it by its progressive forces. Almost the entire period of independence of Ukraine as a state (since 1991) can be assessed as a great challenge, since it has always been associated with a whole series of difficulties and threats of a different nature, the most powerful of which are actually related to russian military aggression since 2014, and especially during its full-scale phase in 2022.

For almost the entire first decade of independence, the real GDP of Ukraine decreased, and together with it, the incomes of Ukrainians fell. In the mid-2000s, this trend broke, but not for long, because the flourishing of the Ukrainian economy was hindered by global economic shocks and military aggression by the russian federation.

Ukraine is an agricultural superstate with huge potential. But today, the Ukrainian economy faced a shock unprecedented in its entire history. The full-scale military invasion

of the russians dealt a powerful blow to all links of the economic system of our state. The production of the main types of products has decreased, in particular the one that forms the basis of Ukraine's export potential – agricultural. In addition, the ports are blocked, and therefore the lion's share of foreign trade. The transport and logistics, social, marketing and engineering infrastructure of entire regions is crumbling. There is an outflow of personnel abroad and their partial relocation to the west of the country. This challenge is of global significance, as the destruction of part of Ukraine's agribusiness spills over into a threat to the food security of the countries of the world and hunger for hundreds of millions of people.

The situation is such that Ukraine's answers to the challenges that have arisen must be found both in Ukraine itself directly, at the expense of its fundamental strengthening, innovation and modernization, and in the international arena, at the expense of creating a new international legal format for solving the Ukrainian crisis, support of the country with the participation of the USA, Great Britain, China and the European Union.

Ukraine's overcoming the challenge of the russian military invasion is inevitable and predictable, although it will cost thousands of Ukrainian lives. The post-war reconstruction of the economy and the whole life of Ukraine will also require significant funds, but the sources for this have already been identified. Despite the war, large-scale destruction and reduction in production, Ukrainian agriculture is unlikely to lose its status as one of the leading export-oriented sectors of the Ukrainian economy.

Ways of ensuring national interests in modern crisis conditions, of getting out of economic depression, of accelerating socio-economic development, of strengthening finances and money, of creating an effective international legal format and mechanisms for overcoming the Ukrainian crisis, for ending the war and for restoring the territorial integrity of Ukraine require further research.

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WYZWANIA DLA ROZWOJU AGROBIZNESU W UKRAINIE PO UZYSKANIU NIEPODLEGŁOŚCI W 1991 ROKU

Słowa kluczowe: Ukraina, niepodległość, agrobiznes, wyzwania, wojna

ABSTRAKT. Celem opracowania jest ocena najważniejszych wyzwań dla agrobiznesu Ukrainy, jako głównego sektora gospodarki, po uzyskaniu niepodległości w 1991 roku, ze szczególnym uwzględnieniem inwazji rosyjskiej na pełną skalę. Dokonano usystematyzowania głównych kierunków przezwyciężania konsekwencji rosyjskiej agresji. W procesie przetwarzania materiałów informacyjnych zastosowano dialektyczne podejście do badania zjawisk społeczno-ekonomicznych, w połączeniu z różnymi metodami: indukcji, analizy i syntezy, systematyzacji i predykcji naukowej, statystycznymi i obliczeniowokonstrukcyjnymi. Po uzyskaniu niepodległości przez Ukrainę lokomotywą gospodarki był agrobiznes. Główne szkody wyrządzane ukraińskiemu agrobiznesowi przez rosyjskich najeźdźców, to: bezpośrednie niszczenie gruntów rolnych, ich skażenie, ograniczony dostęp do nich, zakłócenia logistyki, blokowanie portów, niszczenie obiektów produkcyjnych, zbiorów i zwierząt, kradzież produktów rolnych, wzrost kosztów produkcji. Bezpośrednie straty sektora rolnego w wyniku wojny wyniosły ponad 6 miliardów USD, a łączne straty - ponad 30 miliardów USD. Kluczowe kierunki, na które należy zwrócić uwagę podczas odbudowy sektora rolno-przemysłowego, to infrastruktura magazynowa, logistyczna i transportowa, a także rozwój nauki, który nie tylko pozwoli na odbudowanie ukraińskiego agrobiznesu, ale umożliwi innowacyjny rozwój gospodarki.

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