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# MANAGEMENT OF INTERNATIONAL COMPETITIVENESS OF THE UKRAINIAN AGRICULTURAL ENTERPRISES IN TERMS OF MARTIAL LAW (ON THE EXAMPLE OF «NIBULON» LLC)

## УПРАВЛІННЯ МІЖНАРОДНОЮ КОНКУРЕНТОСПРОМОЖНІСТЮ СІЛЬСЬКОГОСПОДАРСЬКИХ ПІДПРИЄМСТВ УКРАЇНИ В УМОВАХ ВІЙСЬКОВОГО СТАНУ (НА ПРИКЛАДІ ТОВ СП «НІБУЛОН»)

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Стаття присвячена дослідженню ключових аспектів управління міжнародною конкурентоспроможністю сільськогосподарських підприємств на прикладі ТОВ СП «НІБУЛОН» в умовах військового стану в Україні. Узагальнено виклики і загрози для реалізації вітчизняного експортного потенціалу в аграрному секторі внаслідок повномасштабного вторгнення Російської Федерації на територію України. Розглянуто експортний потенціал та зміни в динаміці щодо експорту сільськогосподарської продукції одного із лідерів вітчизняного аграрного ринку - ТОВ СП «НІБУЛОН». Проаналізовано товарну і географічну структуру експорту досліджуваного підприємства. За допомогою матриці Бостонської консалтингової групи «зростання-частка» виявлено фактичні конкурентні переваги ТОВ СП «НІБУЛОН» у розрізі стратегічних зон господарювання, зроблено висновок про рівень збалансованості бізнес-портфеля і запропоновано напрями інвестування для підвищення загального ступеня міжнародної конкурентоспроможності підприємства. Більше того, виявлено стратегічні зони господарювання компанії, які потенційно можуть виступити у ролі інвестиційного донора і, які можуть мати перспективу розвитку або ліквідації. Завдяки застосуванню методики оцінки міжнародної конкурентоспроможності продукції Б Балашші, яка ґрунтується на виявлених порівняльних перевагах (RCA), встановлено наявність і величину конкурентних переваг ТОВ СП «НІБУЛОН» і ТОВ «КЕРНЕЛ» за певними видами сільськогосподарської продукції. Використання методу стратегічного управління – SWOT-аналіз дозволило вибрати й обґрунтувати необхідний вид бізнес-стратегії розвитку компанії на міжнародному ринку, виходячи із фактичних сильних і слабких конкурентних позицій ТОВ СП «НІБУЛОН» та актуальних можливостей і загроз для компанії, викликаних перш за все процесом євроінтеграції і військовим станом в країні. За допомогою методу оцінки порівняльних переваг продукції (RCA) виявлено фактичну конкурентну позицію України на глобальному ринку пшеничного борошна, а також з'ясовано перспективи вітчизняних підприємств на ринку країн-членів ЄС, які будуть спеціалізуватись на виробництві та експорті на даному виді продовольства.

Ключові слова: менеджмент, експорт зерна, міжнародна конкурентоспроможність, агропідприємство, воєнний стан, євроінтеграція, пшеничне борошно, порівняльна перевага, матриця ВСБ «зростання-частка», SWOT-аналіз, індекс RCA.

The article is devoted to the study of key aspects of managing the international competitiveness of agricultural enterprises using the example of LLC JV "NIBULON" under martial law in Ukraine. The challenges and threats to the realization of domestic export potential in the agricultural sector as a result of the full-scale invasion of the Russian Federation into the territory of Ukraine are summarized. The export potential and changes in the dynamics of agricultural exports of one of the leaders of the domestic agricultural market – LLC JV "NIBULON" are considered.

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The commodity and geographical structure of exports of the studied enterprise is analyzed. Using the Boston Consulting Group's Matrix "growth-share", the actual competitive advantages of LLC JV "NIBULON" in terms of strategic business areas were identified, a conclusion was made about the level of balance of the business portfolio and investment directions were proposed to increase the overall degree of international competitiveness of the enterprise. Moreover, the strategic business areas of the company were identified that could potentially act as an investment donor and that could have the prospect of development or liquidation. Due to the application of methodology of B. Balassa for assessing the international competitiveness of products, which is based on the identified comparative advantages (RCA), the presence and magnitude of the competitive advantages of LLC JV "NIBULON" and LLC "KERNEL" for certain types of agricultural products was established. The use of the strategic management method – SWOT analysis made it possible to select and substantiate the necessary type of business strategy for the company's development in the international market, based on the actual strong and weak competitive positions of LLC JV "NIBULON" and the current opportunities and threats for the company, caused primarily by the process of European integration and the military situation in the country. Using the method of assessing the comparative advantages of products (RCA), the actual competitive position of Ukraine in the global wheat flour market was identified, and the prospects of domestic enterprises in the market of EU member states that will specialize in the production and export of this type of food were also clarified.

**Keywords:** management, grain export, international competitiveness, agricultural enterprise, martial law, European integration, wheat flour, comparative advantage, BCG's Growth Share Matrix, SWOT-analysis, RCA index.

**Formulation of the problem.** In terms of the martial law, Ukrainian agricultural enterprises face intensified competition in international markets. Despite significant potential due to abundant natural resources and a strong agricultural sector, these enterprises encounter challenges such as fluctuating conditions, blocking grain exports by some EU countries, stringent European Union regulations, limited access to the Ukrainian sea ports by the militaria aggression, technological gaps, and the need for innovative management practices. Ensuring international competitiveness requires addressing inefficiencies, leveraging comparative advantages, and fostering adaptation to evolving global market demands.

**Analysis** of recent research and publications. First, the theory of competitive advantages was formulated in the 18th and 19th centuries by Adam Smith and David Ricardo. Later, the scientists were significantly developed a conceptual approach to the problem of competitive advantage including management of international competitiveness of enterprises. Porter M. [5] made a significant contribution to the theory of ensuring competitive advantages of enterprises both in domestic and foreign markets. Studies by Madsen T. i Walker G. [6], Fagerberg J. [7], Snowdon B. i Stonehouse G. [8], Bruce Henderson [3], Kasych A. [9], Yuhimenko P. [10], Kozak Y. [11] are devoted directly to research the essence of international competitiveness of enterprises and its management.

**Previously unsolved parts of the overall problem**. According to the large number of native and foreign scientific works that reveal the theoretical and applied principles of the process of forming competitive advantages

in international commodity markets, it should be noted that the issue of managing the international competitiveness of agricultural sector enterprises in terms of military operations has not been sufficiently studied.

Formulation of the article's objectives. The purpose of the article is to identify and substantiate strategic directions for improving the process of managing the international competitiveness of enterprises in the domestic agricultural sector of the economy under martial law.

Presentation of the main research material. The leading place among Ukrainian agricultural enterprises focused on international markets is LLC JV "NIBULON". The company continues to remain one of the largest Ukrainian grain exporters and supplies its own products to many countries of the world. By the time of the fullscale military invasion of the Russian Federation into the territory of Ukraine, "NIBULON" had 75,6 thousand hectares under cultivation. In 2021, the company exported 5,6 million tons of agricultural products to 34 countries of the world, received record profits and significantly reduced debt. Particularly, 62,3% of "NIBULON" products were exported to Asia, 20.7% to African countries, 15.9% to European countries and 1.0% to North America. However, the outbreak of hostilities caused a serious disruption in the business operations of LLC JV "NIBULON". It is worth noting that in the period from March to August 2022, the company's exports fell by 88% compared to the figure for 2021 (Figure 1). In turn, 20% of assets came under occupation in the southern and eastern regions of Ukraine, which include: elevator complexes, transshipment terminals, production units with a significant land bank. About 68% of the company is not operating at full capacity, 662 of the company's workers were mobilized into the ranks of the Armed Forces of Ukraine, the fleet was blocked in the closed port of the city of Mykolaiv, and the river shipping developed by the company was closed. To reduce disruptions in exports, NIBULON completed the first phase of construction of a new river terminal in Izmail, Odessa region and almost doubled the volume to 2.93 million tons of exports [1].

In the export structure of LLC JV "NIBULON" wheat and corn grains continue to dominate while the share of barley in total exports has significantly decreased. At the same time, due to the strengthening of the trend towards the transition to renewable energy sources in the EU and the world, the demand for rapeseed, which serves as a raw material for the production of biodiesel, continues to grow. As an appropriate response to the situation on international JV "NIBULON" agricultural markets, LLC maintains a small but stable share of rapeseed in exports (Figure 2).

Despite the difficulties of wartime, the top management of LLC JV "NIBULON" managed to increase the company's share in national grain exports. In particular, during the 2022/23-2023/24 marketing years, its percentage in wheat grain exports from Ukraine increased from 6 to 8%, while in corn exports – from 4 to 10%, respectively [1]. The above indicates an improvement in the level of management of the international competitiveness of the studied agricultural enterprise in recent years.

In turn, the results of strategic analysis using the BCG's Growth Share Matrix indicate the relative balance of the international business portfolio of LLC JV "NIBULON". Wheat and corn fell into the "cash cows" quadrant (low growth rate of the external market, high relative share in the external market), significant export revenues from which in the future can be reinvested in the "stars" sector (high market growth rate, high relative share). Rapeseed belong to this category in the studied enterprise. In turn, barley grain fell into the "question marks" category (high growth rate, low relative share) to which, after detailed business analysis, a strategy of increasing investment in production can be applied in order to transfer the business segment to the "stars" category. Instead, soybean production falls into the "pets" segment (low growth rate, low share), which indicates the need for its gradual liquidation or repositioning (Figure 3).

Thus, the high level of international competitiveness of LLC JV "NIBULON" is characteristic of such types of agricultural products as wheat, corn and rapeseed. Moreover, the latter requires special attention from the company's management and investments in this business segment.

However, the results of the analysis using the revealed comparative advantage index (RCA) indicate that in comparison with the closest competitor – the company KERNEL LLC, the studied enterprise has a competitive advantage in the international market in the production of wheat grain (Table 1).

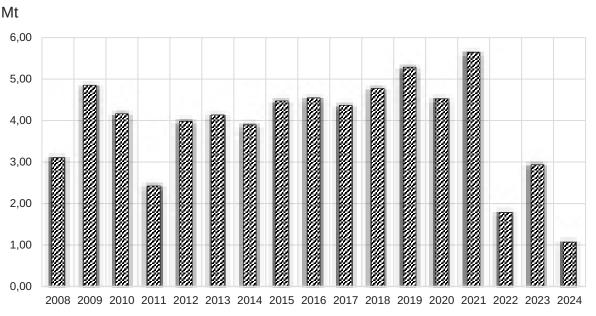


Figure 1. Export volume of LLC JV "NIBULON" from 2008 to 2024, million tons Source: adopted by the author based on the reports of LLC JV "NIBULON"[1]

Figure 2. NIBULON's export structure since 2013/2014 to 2023/2024 (%) Source: adopted by the author based on the reports of "NIBULON"[1]

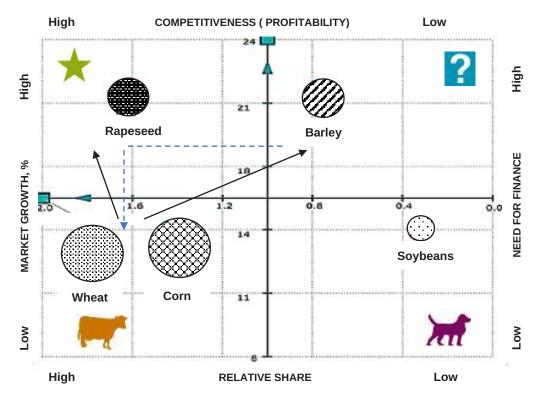


Figure 3. BCG's Growth Share Matrix of the company NIBULON LLC\*

\*Note: KERNEL LLC was taken to assess the relative share Source: adopted by the author based on the reports of "NIBULON" LLC, KERNEL LLC and FAOSTAT [1; 2; 4]

In turn, based on the results of the SWOT analysis of LLC JV "NIBULON", it is possible to conclude that it is necessary to develop and implement a *strategy of product diversification* in the direction of deepening the processing

of raw materials. This refers to the prospect of producing wheat flour with the subsequent establishment of its export. Such a management step will allow not only to avoid most of the weaknesses and threats for LLC JV "NIBULON",

Table 1
Comparative characteristics of the competitive advantage index (RCA)
of competing enterprises in the production of wheat and corn in 2022/2023

Nº	Enterprise	Product		Availability of a competitive advantage (+-)	
		Wheat	Corn	Wheat	Corn
1.	NIBULON LLC	37,2	18,3	+	-
2.	KERNEL LLC	17,7	26,6	-	+

Source: adopted by the author based on the reports of NIBULON LLC and KERNEL LLC [1; 2]

associated primarily with the consequences of military aggression, but will also allow to begin the transition to the production of products with higher added value. Ultimately, this should contribute to increasing the level of international competitiveness of the agricultural enterprise (Table 2).

Despite the fact that the Ukrainian agricultural sector in the wheat flour production segment is inferior regarding to comparative competitive advantages to countries such as Turkey, Kazakhstan, India and Egypt, it still has prospects for conquering its own niche in the market of EU member states. The latter are already inferior to Ukraine in terms of the index of comparative advantages in the production of this type of food (Table 3).

It is worth emphasizing that for domestic agribusiness, in conditions of limited logistics and storage capacities, it is more expedient to reorient from grain exports to flour. In turn, this issue needs to be resolved by harmonizing international standards and requirements for the quality of flour production. After all, according to expert calculations, the processing of every 1 million tons of wheat grain into flour creates an export added value of 100 million USD. This means that when exporting 10 million tons of wheat grain, about 1.8 billion USD in revenue can be obtained, while as a result of its processing into flour and its export in the amount of 8–9 million tons, this amount increases to almost 2.4–2.7 billion USD [12].

**Conclusions**. As a result of the study, the main strategic directions for improving the process of managing the international competitiveness of agricultural enterprises under martial law were identified and substantiated, particularly:

1. Despite the full-scale invasion of the Russian Federation into the territory of Ukraine,

SWOT analysis of the company "NIBULON"

Table 2

Strengths			Weaknesses		
1. 2. 3. 4. 5. 6.	Land resources (vast land holdings); Permanent sales channels; Qualified management and experienced employees; Natural conditions favorable for production;	2. 3. 4. 5. 6. 7.	Changes in consumer preferences; Internal production challenges; High-cost production; Tough competition; Loss of access to Mykolaiv port.		
Opportunities			Threats		
	<ul><li>Expanding the network of distributors, including foreign markets;</li><li>Integration of Ukraine into the EU common market;</li></ul>		interest rates, new credit conditions, etc.).  Martial law		

Source: developed by the author

Table 3
Comparative characteristics of competitive advantage indicators of the leading countries in wheat flour production

Country	The value of the RCA index	Availability of a competitive advantage (+-)		
Ukraine	2,2	+		
Turkey	25,5	+		
Kazakhstan	31,0	+		
Argentina	9,6	+		
USA	0,3	+/-		
Egypt	18,7	+		
EU-27	1,2	+		

Source: assessed by the author based on FAOSTAT [4]

- LLC JV "NIBULON" continues to demonstrate high indicators of the supply of agricultural products to international markets:
- 2. It was established that the international business portfolio of LLC JV "NIBULON" is balanced, and a high level of international competitiveness is characteristic of strategic business areas such as the production of wheat, corn and rapeseed;
- 3. It was found that a promising strategic commodity business unit for the enterprise under study is rapeseed, the production of which requires investment, primarily by reinvesting profits from the export of wheat and corn. In turn, the company's management may refuse to produce soybeans.
- 4. LLC JV "NIBULON" has strong international competitive advantages in the production of wheat grain;
- 5. Based on the current features of the external competitive environment, the managers of LLC JV "NIBULON" should consider the prospect of forming and implementing a product diversification strategy, which involves the production of wheat flour and its export;
- 6. It has been established domestic agricultural enterprises, including LLC JV"NIBULON", have potential competitive advantages in the production of wheat flour over competitors from the EU, which may provide them with a leading position in the European market in the future.

#### REFERENCES:

- 1. Official website of NIBULON LLC. URL: https://www.nibulon.com/pro-nas/ (accessed December 7, 2024)
- 2. Official website of Kernel. Financial reports. URL: https://www.kernel.ua/investor-relations/financial-reports (accessed December 7, 2024)
- 3. Martin Reeves, Sandy Moose, and Thijs Venema. BCG Classics Revisited: The Growth Share Matrix. URL: https://www.bcg.com/publications/ 2014/growth-share-matrix-bcg-classics-revisited (accessed December 15, 2024)
- 4. Official website of the Food and Agriculture Organization of the United Nations. URL: https://www.fao.org/faostat/en/#data (accessed December 20, 2024)
  - 5. Porter, M. E. Competitive strategy: Techniques for analyzing industries and competitors. Simon and Schuster. 2008.
  - 6. Madsen, T. L., & Walker, G. Modern competitive strategy. McGraw Hill. 2015.
- 7. Fagerberg, J. International competitiveness. *Economic Journal (London)*. 1998. № 98(391). P. 355–374. DOI: https://doi.org/10.2307/223337
- 8. Snowdon, B., & Stonehouse, G. Competitiveness in a globalised world: Michael Porter on the microeconomic foundations of the competitiveness of nations, regions, and firms. *Journal of International Business Studies*. 2006. 37(2), 163–175. DOI: https://doi.org/10.1057/palgrave.jibs.8400190
- 9. Kasych A., Astsatrian A. Management of international competitiveness of the enterprise. *Ekonomika ta sus- pilstvo*. Vypusk #32. 2021. DOI: https://doi.org/10.32782/2524-0072/2021-32-107
  - 10. Yuhimenko P. Konkurentospromojnist pidpryemstva: pidruchnyk. Tsentr uchbovoii literatury.2021. 320 p.
- 11. Kozak Y. Upravlinya mijnarodnoyu konkurentospromojnistiu pidpryemstva. 3 vydanja. Tsentr uchbovoyi literatury. 2010.312 p..
- 12. Kernasiyk Y. Glyboka pererobka zernovyh kultur: vygidna alternatyva. *Agronomia siogodni*. April 15, 2024. URL: https://agro-business.com.ua/agro/ahronomiia-sohodni/item/29464-hlyboka-pererobka-zernovykh-kultur-vy-hidna-alternatyva.html (accessed December 22, 2024)