

DOI: <https://doi.org/10.32782/2524-0072/2025-77-37>

UDC 330.34:631.1

FORMULATION OF STRATEGIC DIRECTIONS FOR THE DEVELOPMENT OF FOREIGN ECONOMIC ACTIVITY OF AGRICULTURAL ENTERPRISE IN TERMS OF THE EU INTEGRATION (BASED ON ASTARTA HOLDING PLC)

ФОРМУВАННЯ СТРАТЕГІЧНИХ НАПРЯМІВ РОЗВИТКУ ЗОВНІШНЬОЕКОНОМІЧНОЇ ДІЯЛЬНОСТІ СІЛЬСЬКОГОСПОДАРСЬКОГО ПІДПРИЄМСТВА В УМОВАХ ЄВРОІНТЕГРАЦІЇ (НА ПРИКЛАДІ АГРОХОЛДИНГУ «АСТАРТА»)

Faichuk Oleksandr

Ph.D in Economics, Associate Professor,
National University of Life and Environmental Sciences of Ukraine
ORCID: <https://orcid.org/0000-0003-4710-4563>

Konopliastyi Andrii

Master in Economics,
National University of Life and Environmental Sciences of Ukraine
ORCID: <https://orcid.org/0009-0006-3332-4126>

**Файчук Олександр Михайлович,
Коноплястий Андрій Вікторович**

Національний університет біоресурсів і природокористування України

The article is devoted to the formation of strategic directions for the development of foreign economic activity of Ukrainian agricultural enterprises in terms of the European integration, based on the inductive method. As a case study, the domestic vertically integrated agricultural holding *Astarta* was selected. The company specializes in growing grain and oilseed crops (including organic), sugar production, dairy farming, soybean processing, and bioenergy. It was found the high economic performance of *Astarta*'s is largely due to its strong integration into the European and international agri-food markets. Approximately half of the company's foreign currency revenues are generated from the export of agricultural raw materials - grain and oilseeds. One of the key success factors of *Astarta* in foreign markets is its responsible and consistent compliance with international quality standards for final products. Some of the opportunities and threats for Ukrainian agricultural enterprises in terms of the EU intergration were summarized. Through a SWOT-analysis, the main strengths and weaknesses of *Astarta* in domestic and foreign markets were identified, along with the systematization of opportunities and threats facing the enterprise under conditions of European integration and martial law. The TOWS-analysis method made it possible to formulate and justify key strategic directions for the development of *Astarta*'s foreign economic activity. To leverage opportunities through its strengths, the company is advised to focus on scaling up production and entering new markets, particularly in EU member states, with organic food products. To counteract the threats arising from the European integration, several strategic directions were proposed based on the enterprise's strengths: deepening soybean processing to the stage of soybean protein concentrate production for further export, developing compound feed production and gradually entering export markets using the enterprise's own raw material base, launching export-oriented bioethanol production, fully aligned with the principles of the EU Green Deal. Moreover, it was established that *Astarta*'s weaknesses can be mitigated by using available opportunities, such as expanding the production and export of ISCC-certified soybean oil. Finally, reducing exports of raw agricultural materials (grain and oilseeds) and optimizing production chains to enhance flexibility during wartime disruptions was determined to be a justified strategic step to eliminate *Astarta*'s weaknesses amid external threats. As a result of the study, universal principles were proposed for developing strategic directions for the foreign economic activity of domestic agricultural enterprises in terms of the EU integration – resilience, sustainability, and a focus on deep processing of agricultural raw materials.

Key words: strategic directions, development, foreign economic activity, agricultural enterprise, European integration, SWOT-analysis, TOWS-analysis.



Стаття присвячена формуванню стратегічних напрямів розвитку зовнішньоекономічної діяльності сільськогосподарських підприємств України в умовах євроінтеграції на основі індуктивного методу. В якості бази дослідження було обрано вітчизняний вертикально-інтегрований агрохолдинг Астарта, який спеціалізується на вирощуванні зернових та олійних культур (у тому числі органічних), виробництві цукру, молочному скотарстві, переробці сої та біоенергетиці. Виявлено, що високий економічний результат фінансово-господарської діяльності досліджуваного підприємства значним чином впливає із високого рівня його інтегрованості у європейський і міжнародний агропродовольчі ринки. Встановлено, що близько половини валютних надходжень компанії формується завдяки експорту сільськогосподарської сировини – зерна і насіння олійних культур. З'ясовано, що одним із ключових факторів успіху Астарт на зовнішніх ринках є відповідальне і чітке дотримання міжнародних стандартів якості на кінцеву продукцію. Узагальнено деякі можливості і загрози для українських підприємств агросектору в умовах інтеграції України до ЄС. За допомогою проведеного SWOT-аналізу було виявлено головні сильні та слабкі сторони агрохолдингу Астарта на вітчизняному і зарубіжному ринках, а також систематизовано можливості та загрози для досліджуваного підприємства в умовах євроінтеграції та воєнного стану. TOWS-аналіз дав змогу сформулювати й обґрунтувати ключові стратегічні напрями розвитку зовнішньоекономічної діяльності агрохолдингу Астарта. З метою використання можливостей за рахунок сильних сторін підприємству запропоновано сконцентрувати зусилля на масштабуванні виробництва і виході на нові ринки, зокрема країн-членів ЄС, з органічним продовольством. У свою чергу, задля подолання існуючих загроз від процесу євроінтеграції завдяки сильним сторонам підприємства обґрунтовано декілька стратегічних напрямів: поглиблення переробки сої до стадії виготовлення соєвого протеїнового концентрату з подальшою його поставкою на зарубіжні ринки; розвиток виробництва та поступовий експорт комбікормів на сировинній базі підприємства і започаткування експорто-орієнтованого виробництва біоетанолу, що повністю узгоджується із принципами Зеленої Угоди ЄС. Натомість, встановлено, що слабкі сторони досліджуваного підприємства можуть бути подолані за рахунок можливостей при умові обрання стратегічного напрямку щодо розширення виробництва та експорту соєвої олії, сертифікованої відповідно до стандарту ISCC. І зрештою, скорочення обсягів експорту сільськогосподарської сировини (зернових та олійних культур) та оптимізація виробничих ланцюгів для підвищення гнучкості в умовах воєнних потрясінь має бути виправданим стратегічним кроком для усунення слабких сторін агрохолдингу Астарта при наявних зовнішніх загрозах. В результаті дослідження було запропоновано універсальні принципи для розробки стратегічних напрямів розвитку зовнішньоекономічної діяльності вітчизняних підприємств агросектору за умов євроінтеграції – стійкість, сталість і орієнтир на глибоку переробку сільськогосподарської сировини.

Ключові слова: стратегічні напрями, розвиток, зовнішньоекономічна діяльність, сільськогосподарське підприємство, євроінтеграція, SWOT-аналіз, TOWS-аналіз.

Formulation of the problem. The negotiation process regarding Ukraine's accession to the EU poses a significant challenge both for the national economy as a whole and specifically for its agricultural sector, which continues to be a powerful source of foreign currency inflows into the country and ensures the realization of competitive advantages of Ukrainian agricultural enterprises. The existing threats and opportunities created by the European integration process push company management to seek and implement innovative approaches to identifying and shaping the strategic priorities for the development of enterprises' foreign economic activities.

Analysis of recent research and publications. As noted by a team of researchers led by Tyurina N. [1], for the effective implementation of a foreign economic strategy, an enterprise needs to adhere to a unified strategic development direction in order to eventually achieve long-term competitive advantages in international markets. Moreover, they believe that it is essential to define priorities - that is, to develop a strategy that best corresponds to the market situation and most

effectively utilizes and leverages the enterprise's strengths. In turn, Kosenko S. [2] argues that a foreign economic activity strategy must take into account the interconnection between the internal and external environments: the internal – in terms of utilizing the enterprise's resource potential, and the external – from the standpoint of its ability to compete in foreign markets. On the other hand, Karvatska N. [3] believes that a company's foreign economic strategy is a comprehensive plan for achieving its goals in the field of foreign economic activity. This strategy defines the tasks and principles of behavior, taking into account competitive advantages and risks, in the context of limited resources and a changing external and internal environment. Regarding to the agricultural sector, Dotsiuk S. [4] notes that an important strategic direction for domestic enterprises should be the production and export of grain crops – particularly those that have held the largest share in exports over recent years. A similar view is shared by the Ukrainian scientists Kvasha S., Pavlenko O., and Vakulenko V. [5], who argue that among the strategic priorities for the development of foreign economic activity in Ukraine's agricultural sector

is a significant increase in the export volumes of crop production.

Previously unsolved parts of the overall problem. Considering the large number of scientific studies dedicated to exploring the essence of development strategies for enterprises' foreign economic activity and identifying strategic directions for the development of the agricultural sector in international markets, the issue of practical formation of strategic directions for the foreign economic activity of agricultural enterprises in terms of the EU integration, based on the application of various methodological approaches to strategic analysis and planning, remains insufficiently covered.

Formulation of the article's objectives. The purpose of the article is to formulate and substantiate the main directions for the development of foreign economic activity of the native agricultural enterprises in terms of current challenges related to Ukraine's accession to the European Union by using the methodological approaches to strategic analysis and planning.

Presentation of the main research material. Astarta Holding PLC is a vertically integrated agro-industrial holding, it has evolved into a notable example of socially responsible business in Ukraine. The company specializes in the production and export of agricultural commodities to international markets, thereby contributing to the development of Ukraine's agro-industrial sector and its integration into the global economy. The company's mission is to contribute to the development of a strong Ukraine characterized by a high level of trust,

through the realization of the full potential of Ukrainian land and people. This goal is pursued by developing business based on the principles of partnership, ethics, and sustainable development. Among the key areas of activity of the agro-industrial holding Astarta Holding PLC are the following: crop production (the company cultivates approximately 215 thousand hectares of agricultural land); sugar production (annual output ranges from 250 thousand to 500 thousand tons of sugar); livestock production (the total dairy herd comprises 27,5 thousand cows, ensuring an annual milk production of 115 thousand tons); soybean processing with an annual processing volume of 230 thousand tons, (Astarta ranks second among Ukrainian companies in this sector); bioenergy development (the total capacity of the company's biogas plants reaches 150 thousand cubic meters of biogas per day). According to the outcomes of the company's financial and operational performance Astarta Holding PLC accumulated total revenues at EUR 612 million, including net profit at EUR 83 million in 2024 [6]. The commodities of Astarta consistently undergo quality control and certification in accordance with international standards, which enables the company to effectively conduct sales and expand its export geography. Over the past five years (2020–2024), the Astarta's export value has increased from EUR 209 million to EUR 395 million (see Fig. 1). It is noteworthy that during the same period, the share of foreign currency revenue in total income also increased from 50 to 65%, indicating a growing degree of

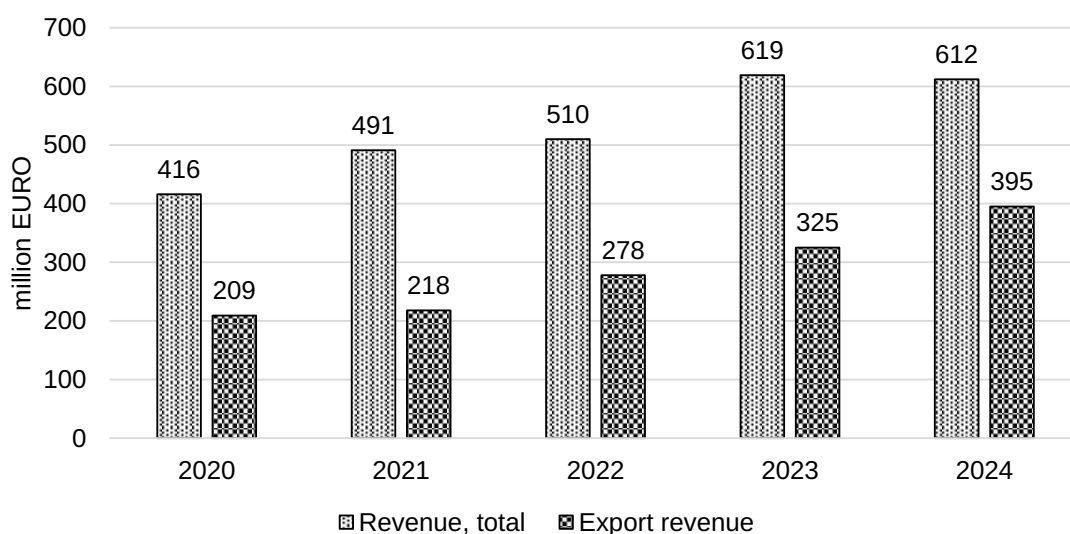


Figure 1. Total revenue and export value of Astarta Holding PLC from 2020 to 2024, million EURO

Source: adopted by the author based on the reports of Astarta Holding PLC [6]

the company's trade integration with international markets.

In the export value structure of agricultural products by Astarta Holding PLC, grains and oilseed crops dominated, accounting for 47% of total exports in 2024. It is also worth noting that during the analyzed period, sugar exports increased significantly, reaching EUR115 million by the end of the period (see Fig. 2).

A prominent component in the structure of Astarta's foreign economic operations is the organic food segment. In 2024, the volume of organic products supplied by Astarta amounted to 2.3 thousand tons, compared to 3.6 thousand tons in 2023. This category includes soybeans, flax, mustard, winter rapeseed, sunflower seeds, and chickpeas. The main importers of Astarta's organic crops were Italy, the Netherlands, and Moldova.

In addition to being one of the leading players in the domestic sugar industry, Astarta has significantly strengthened its presence in the global market. In 2024, the company supplied 197 thousand tons of sugar worldwide, accounting for 50% of its total sugar sales, which is four times more than in 2023. Consequently, Astarta accounted for 26% of Ukraine's total sugar exports in 2024 and ranked among the country's top sugar exporters, delivering products to 41 countries. The main export destinations included EU member states as well as countries in the Middle East and North Africa (MENA) region. Following the European Union's

restriction on duty-free sugar imports from Ukraine, capped at 263 thousand tons for 2024, Astarta's sales division successfully diversified export routes toward more distant markets. Notably, Astarta became the first Ukrainian company to commence sugar exports abroad in 2024, having developed a fully integrated logistics cycle - from the factory conveyor belt to loading into the ship's hold.

Astarta's soybean processing segment is predominantly export-oriented, with 82% of soybean products sold to foreign markets in 2024. Specifically, 93% of soybean oil and 79% of soybean meal were exported outside Ukraine, reaching 13 countries in 2024, compared to nine in 2023. The key export destinations included Hungary, Poland, and Romania. Furthermore, Astarta was the first Ukrainian company to export soybean products to Hungary and Romania, and it continues to build a strong customer base in these markets [6].

Astarta Holding PLC benefits from its strong reputation as a reliable and trusted trade partner, owing to its consistent compliance with the highest standards of product quality and certification. Throughout the production process, the company systematically monitors the quality, quantity, and safety of raw materials, inputs, and finished products in accordance with international standards such as ISO 9001, ISO 22000 / FSSC 22000, and ISCC. This represents a key strength of the company, particularly in terms of the European integration.

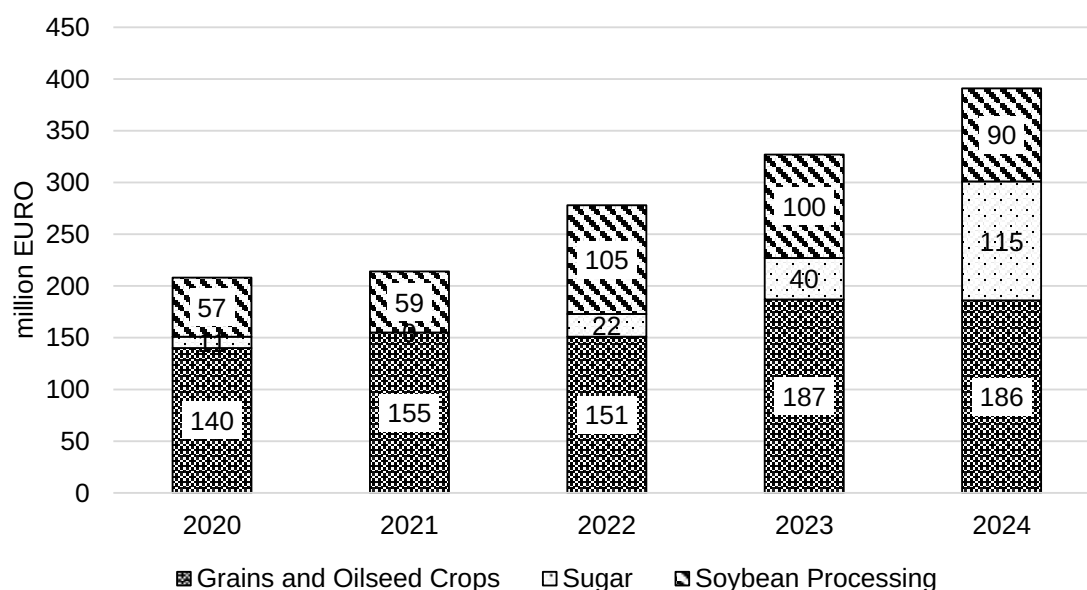


Figure 2. Dynamics and Commodity Structure of Exports by Astarta Holding PLC in 2020–2024, million EURO

Source: adopted by the author based on the reports of Astarta Holding PLC [6]

It is important to note that, in the course of accession negotiations with the European Union, Ukraine is required to gradually harmonize its legislation and regulatory mechanisms with EU legal and normative frameworks. This process creates favorable conditions for the export of agricultural products to EU member states, as compliance with EU standards is a key prerequisite for access to the Single Market. Ukrainian agricultural enterprises have gained the opportunity to adapt to a range of requirements, including: sanitary and phytosanitary (SPS) standards; environmental certification and product traceability; quality and food safety requirements. Furthermore, within the negotiation framework, Ukraine has enhanced cooperation with European certification bodies, which is expected to facilitate the production and export of high value-added agricultural products in the future. However, despite the generally positive dynamics, Ukrainian agri-food producers face high costs of compliance with EU standards, as well as increased competition from European producers. Additionally, limited tariff-free quotas for certain product categories (e.g., honey, sugar, meat) continue to act as barriers to the expansion of Ukrainian producers' presence in EU markets [7].

Considering the sector-wide expectations from the EU integration, it is appropriate to apply one of the strategic planning tools – TOWS-analysis in order to identify promising strategic directions for the development of foreign economic activity of agricultural enterprise, particularly Astarta Holding PLC. This tool enables the formulation of specific strategies for realizing the company's economic potential in both domestic and international markets. In other words, it works by aligning the company's internal strengths and weaknesses with relevant external opportunities and threats (see Table 2). However, a preliminary SWOT analysis should be conducted beforehand (see Table 1).

Therefore, the primary focus in the development and implementation of the strategic growth plan, including foreign economic activities of Astarta Holding PLC should be on resilience, sustainability, and transformation towards the production and export of highly processed products with increased added value. At the same time, it is essential to continue actively integrating cutting-edge technologies in both management and operational processes, while simultaneously advancing sustainability and business resilience systems aligned with ESG criteria.

Thus, one of the priority directions for the development of Astarta's foreign economic activity – *ST-Strategies (Using Strengths to Mitigate Threats)* is the *deepening of soybean processing*, particularly through the production and subsequent export of soy protein concentrate (SPC) to EU member states. It should be noted, the European market for textured vegetable protein is projected to reach USD 1.98 billion in 2025, and is expected to grow to USD 3.34 billion by 2030, demonstrating a compound annual growth rate of 10.95% over the period 2025–2030 [8]. According to the projection the company's top management has already launched an investment project aimed at constructing a new production line within the existing crushing facilities at the Globyno Processing Plant in Poltava region. As a result, the plant will be capable of producing SPC in addition to its current outputs – soybean meal and oil. In 2024, Astarta successfully completed the required regulatory approvals and continued the construction of the facility. Moreover, the company has adapted its infrastructure to accommodate SPC production and has been actively researching potential client bases in key aquaculture feed markets [6]. The second strategically justified direction for Astarta Holding PLC – *ST-Strategies* – is the *development of compound feed production and export*, leveraging the company's existing raw material and technical infrastructure. According to the Ukrainian scientist Nikishyna O. [9], this market segment possesses significant export potential and contributes to the deeper processing of grain, thereby adding greater value to domestic agricultural resources. Moreover, she emphasizes the strategic importance of producing feed products in compliance with the principles of the EU Green Deal, aligning the sector with current European sustainability and environmental priorities. Also, the third direction for Astarta Holding PLC – *ST-Strategies* – could be *production and export of bioethanol*. Forecasts indicate that sustained demand growth will continue to support bioethanol imports to the EU in the coming years. In contrast, diesel fuel imports are likely to be restricted due to new traceability and reporting regulations. Within the framework of the European Green Deal, the European Commission has adopted legislative proposals that will significantly influence the use of biofuels in the road, aviation, and maritime transport sectors, both in the medium- and long-term. These developments create strategic opportunities for certified and sustainable

Table 1

SWOT-analysis of Astarta Holding PLC in 2024

STRENGTHS (S)	WEAKNESSES (W)
<p>1. Market leadership: The company is the largest producer of sugar and milk in the Ukrainian market, and ranks second in terms of soybean processing volumes.</p> <p>2. Vertical integration: Astarta operates a closed production cycle for most of its key products, including soybean meal, soybean oil, and sugar.</p> <p>3. Robust logistics infrastructure: The company owns certified grain elevators (in line with international standards) and operates its own fleet of grain trucks.</p> <p>3. Innovation and technology: Implementation of advanced systems such as automated maintenance management (CMMS) and AgriChain enhances efficiency and reduces operational costs.</p> <p>4. High sustainability performance: Ranked 2nd among 89 global agricultural companies in the ESG rating by Sustainalytics</p>	<p>1. Raw material export dependence: Approximately half of the company's foreign currency earnings come from the export of unprocessed grain and oilseeds.</p> <p>2. High employee turnover: In 2024, the staff turnover rate reached 23%, indicating challenges in workforce retention.</p> <p>3. Seasonal nature of production: Business performance is significantly influenced by weather conditions and seasonal fluctuations in agriculture.</p> <p>4. Inefficient management system: The current managerial structure does not fully align with the operational needs and complexity of the company</p>
OPPORTUNITIES (O)	THREATS (T)
<p>1. European integration and the EU Green Deal: Simplified export procedures to EU member states and potential to attract new partners and investors.</p> <p>2. Rising demand for organic food products: Opportunity to enter new markets with organic and environmentally friendly goods.</p> <p>3. Digital transformation of the domestic agricultural sector: Enables a significant increase in the company's product competitiveness.</p> <p>4. Growing demand for biomass-based energy: Provides strong incentives for the development of the company's bioenergy segment.</p>	<p>1. Competition: Intensifying competitive pressure from European producers.</p> <p>2. Martial law conditions: Ongoing security risks for employees and disruptions in logistics due to the war.</p> <p>3. Price volatility on global markets: Instability in global prices for sugar, oilseeds, and grain may reduce business profitability.</p> <p>4. Climate change: Adverse effects on agricultural yields due to increasingly unpredictable weather conditions.</p>

Source: adopted by the authors

bioethanol producers seeking to access the EU market [10].

The fourth promising direction in the development of Astarta`s Holding PLC foreign economic activity – *WO-Strategies (Using Opportunities to Overcome Weaknesses)* is the *expansion of soybean oil production and export*, certified in accordance with the ISCC standard. This strategic focus is expected to enable the company to broaden its existing sales markets within EU member states. It is worth noting that, since 2022, Astarta's crushing plant has been certified under the ISCC EU scheme (International Sustainability and Carbon Certification), demonstrating the company's compliance with sustainable production practices in the soybean processing sector. ISCC certification confirms that the producer meets sustainability criteria recognized by the EU, which facilitates access to new clients and strengthens relationships with

existing partners. The ISCC EU standard was developed for the biomass and bioenergy sectors to ensure compliance with the EU Renewable Energy Directive (RED). It emphasizes greenhouse gas emission reduction, sustainable land use, environmental protection, and social sustainability.

The fifth promising direction for the development of foreign economic activity of Astarta Holding PLC – *SO-Strategies (Using Strengths to Capitalize on Opportunities)* is *manufacturing and facilitate expansion into new markets (particularly, EU member states) by organic food*. Ultimately, it should provide rapid profit enhancing.

Ultimately, the sixth direction – *WT-Strategies (Minimizing Weaknesses and Mitigating Threats)* is the *reducing the export volume of raw materials* (grains and oilseed crops) and conducting audits, optimizing production

Table 2

TOWS-analysis of Astarta Holding PLC in 2024

	OPPORTUNITIES (O)	THREATS (T)
	SO-Strategies (Using Strengths to Capitalize on Opportunities)	ST-Strategies (Using Strengths to Mitigate Threats)
STRENGTHS (S)	1. Implementation of innovative IT solutions (e.g., AgriChain) to enhance the efficiency of organic product manufacturing and facilitate expansion into new markets. 2. Utilizing a strong ESG rating to attract international capital and establish partnerships in sustainable projects, including biogas and organic food production.	1. Enhancing the resilience of production processes to climate change through the implementation of advanced agrotechnology and agroanalytics. 2. Developing proprietary logistics infrastructure (trading operations, grain elevators, and truck fleet) to minimize supply chain disruptions caused by the ongoing conflict. 3. Establishing a deep processing segment for agricultural raw materials by leveraging innovative leadership and a well-developed culture of vertical business integration. 4. Leveraging vertical integration to scale up biofuel production capacity.
	WO-Strategies (Using Opportunities to Overcome Weaknesses)	WT-Strategies (Minimizing Weaknesses and Mitigating Threats)
WEAKNESSES (W)	1. Optimizing management systems through broader implementation of digital platforms, satellite monitoring, and artificial intelligence (AI) technologies. 2. Expanding production and export to the EU of higher value-added processed products (e.g., soybean oil) that comply with ISCC sustainability criteria. 3. Securing "green" financing for infrastructure modernization projects.	1. Seeking partners for risk management and agricultural production insurance to mitigate operational uncertainties. 2. Conducting audits and optimizing production chains to enhance flexibility during wartime disruptions. 3. Reducing the export volume of raw materials (grains and oilseed crops) to focus on higher value-added products and mitigate risks.

Source: adopted by the authors

chains to enhance flexibility during wartime disruptions.

Conclusions. As a result of the study, the main strategic directions for the development of foreign economic activity of Astarta Holding PLC in terms of current challenges related to Ukraine's accession to the European Union by using the SWOT-analysis and TOWS-analysis were formulated and substantiated:

1. Manufacturing and facilitate expansion into new markets by organic food (SO-Strategies – Using Strengths to Capitalize on Opportunities);

2. Deepening of soybean processing; development of compound feed production and export; production and export of bioethanol (ST-Strategies – Using Strengths to Mitigate Threats);

3. Expansion of soybean oil production and export, certified in accordance with the ISCC standard (WO-Strategies - Using Opportunities to Overcome Weaknesses);

4. Reducing the export volume of raw materials (grains and oilseed crops) and optimizing production chains to enhance flexibility during wartime disruptions (WT-Strategies – Minimizing Weaknesses and Mitigating Threats).

Thus, general recommendations for shaping the strategic directions of foreign economic activity development for Ukrainian agricultural enterprises under conditions of European integration pertain to the need for managers to place particular emphasis on resilience, sustainability, and transformation towards the production and export of highly processed products with increased added value.

REFERENCES:

1. Tiurina N., Karvatska N., Nazarchuk T., Petyak A. (2025) Theoretical aspects of strategic planning of a company's foreign economic activity. *Herald of Khmelnytskyi National University. Economic sciences*. No 2. P. 33–40. DOI: <https://doi.org/10.31891/2307-5740-2025-340-4>
2. Kosenko S. (2011) Teoretychni polozhennia stratehii zovnishnoekonomichnoi diial'nosti pidpriemstv: vyznachennia ta klasyfikatsiia. *Ekonomika ta upravlinnia pidpriemstvamy mashynobudivnoi haluzi: problemy teorii ta praktyky*. (3)15. P. 117–128.
3. Karvatska N. The essence, features and process of forming a foreign economic strategy for the development of an enterprise. The 5th International scientific and practical conference “Prospects of modern science and education”. 2023. Stockholm. Sweden. International Science Group. 664 p. 229–236.
4. Dotsiuk S. (2022)2. Suchasni aspekty zovnishnoekonomichnoi diialnosti ahrarykh pidpriemstv Ukrainy [Modern aspects of foreign economic activity of agricultural enterprises of Ukraine]. *Ekonomika ta suspilstvo – Economy and society*, vol. 39. DOI: <https://doi.org/10.32782/2524-0072/2022-39-21>
5. Kvasha S., Pavlenko O., and Vakulenko V. (2024) Stratehichni priority rozvitku zed agrarnoi haluzi Ukrainy. *Naukovyi visnyk Uzhhorodskoho natsionalnoho universytetu*. Vol. 51. P. 45–49. DOI: <https://doi.org/10.32782/2413-9971/2024-51-7>
6. Astarta Holding PLC. Annual Report 2024. URL: <https://astartaholding.com/wp-content/uploads/2025/04/2024-annual-report.pdf> (accessed July 7, 2025)
7. Peregovory pro vstup Ukrainy do ES: povnyi gid u 12 putanniah. Vstup Ukrainy do ES. Kraina. Komunikatsiina komanda ofisu vitsepremierki z putan yevropeiskoi ta yevroatlantuchnoi integrtsii. URL: <https://eu-ua.kmu.gov.ua/news/peregovory-pro-vstup-ukrayiny-do-yes-povnyj-gid-u-12-pytanniah-i-10-mifah-2/> (accessed July 12, 2025)
8. Europe Textured Vegetable Protein Market size & share analysis – growth trends & forecasts up to 2030. URL: <https://www.mordorintelligence.com/industry-reports/europe-textured-vegetable-protein-market> (accessed July 15, 2025)
9. Nikishyna O. Tendentsii rozvytku ukrainskogo rynku kombikormovoyi produktsii v umovah nestabilnosti. *Acta Academiae Beregsiensis. Economics*. 2024. Vypusk 5. P. 145–162. URL: <https://fkd.net.ua/index.php/fkd/article/view/3235>
10. European Union: Biofuels Annual. USDA. URL: <https://www.fas.usda.gov/data/european-union-biofuels-annual-4> (accessed July 17, 2025)