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UDC 338.43:633.1[657.24:631]
DOI: 10.37128/2411-4413-2021-4-3

INFORMATION SUPPORT FOR MONITORING THE STATE OF THE GRAIN INDUSTRY OF UKRAINE IN THE CONDITIONS OF EURO INTEGRATION

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The needs of information support for monitoring the state of the grain industry at different levels of management are investigated. For the purposes of European integration, economic and management processes must be brought to the EU requirements, in particular Directive 1306/2013 Financing, management and monitoring of agricultural policy. The analysis of the grain industry of

Ukraine in terms of production indicators, international measurement production of grain crops is carried out. The dynamics of the balance of grain crops in Ukraine for 2015-2020 is studied. The methodological foundations of the formation of basic indicators for monitoring the grain industry are generalized, the components of the structure of its information support are highlighted. The definition of information support for monitoring the grain industry as a process of scientifically grounded collection of data on the selection of objects of observation, systematization and generalization in order to ensure the management process for the formation of an effective agricultural policy is given. Based on the analysis of the state, the features of information resources of the market of services for the production of domestic consumption and export are formed. The needs of managing the grain industry at the micro, meso and macro levels are highlighted. The main directions of monitoring at the macro level for state support for the development of the industry are formulated. Peculiarities of grain industry expenses are revealed on the example of normative materials accompanying the accounting on the chain of formation of value added of the grain industry of agro-industrial complex in the sphere of processing. The features and the need for monitoring the development of the grain industry are investigated and its main criteria for the formation of a national grain strategy, coordination of its development with the situation in the world and the EU are described. The review of measures, contributing to the further development of information support of the grain industry of Ukraine, is carried out.

Keywords: information support, levels of management, accounting system, grain industry, monitoring, transaction costs, grain value chains, government regulation.

Tabl.: 5. Fig.: 1. Ref.: 28.

ІНФОРМАЦІЙНЕ ЗАБЕЗПЕЧЕННЯ МОНІТОРИНГУ СТАНУ ЗЕРНОВОЇ ГАЛУЗІ УКРАЇНИ В УМОВАХ ЄВРОІНТЕГРАЦІЇ

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Досліджуються потреби інформаційного забезпечення моніторингу стану зернової галузі на різних рівнях управління. Для цілей євроінтеграції, економічні та управлінські процеси мають бути приведені до вимог ЄС, зокрема, Директиви 1306/2013 Фінансування, управління і моніторинг аграрної політики. Проведено аналіз стану зернової галузі України за показниками виробництва, міжнародного порівняння обсягів виробництва основних зернових культур. Досліджено динаміку балансу зернових культур в Україні за 2015-2020 рр. Узагальнено методичні основи формування базових категорій моніторингу стану зернової галузі, виділені складові структури його інформаційного забезпечення. Подано визначення інформаційного забезпечення моніторингу зернової галузі як процесу науково обґрунтованого збору даних у частині вибору об'єктів спостереження, систематизації та узагальнення з метою забезпечення процесу управління для формування дієвої аграрної політики. На підставі аналізу стану галузі сформовані особливості інформаційних потреб зернової галузі на рівнях виробництва, переробки, внутрішнього споживання та експорту. Висвітлено потреби управління зерновою галуззю на мікро-, мезо- і макрорівнях. Сформовані основні напрями моніторингу на макрорівні для державної підтримки розвитку галузі. Розкрито особливості витрат зернової галузі на прикладі аналізу нормативних матеріалів, які розкривають облік по ланцюгу формування доданої вартості зернової галузі АПК у ланці переробки. Досліджено особливості й необхідність здійснення моніторингу процесу

розвитку зернової галузі й описані основні критерії для формування національної зернової стратегії, узгодження її розвитку із ситуацією у світі та ЄС. Здійснено огляд заходів, які сприяють подальшому розвитку інформаційного забезпечення зернової галузі України.

Ключові слова: інформаційне забезпечення, рівні управління, система обліку, зернова галузь, моніторинг, трансакційні витрати, зернові ланцюги доданої вартості, державне регулювання.

Табл.: 5. Рис.: 1. Літ.: 28.

ИНФОРМАЦИОННОЕ ОБЕСПЕЧЕНИЕ МОНИТОРИНГА СОСТОЯНИЯ ЗЕРНОВОЙ ОТРАСЛИ УКРАИНЫ В УСЛОВИЯХ ЕВРОИНТЕГРАЦИИ

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Исследуются потребности информационного обеспечения мониторинга состояния зерновой отрасли на разных уровнях управления. Для целей евроинтеграции, экономические и управленческие процессы должны быть приведены к требованиям ЕС, в частности с учетом Директивы 1306/2013 Финансирование, управление и мониторинг аграрной политики. Проведен анализ зерновой отрасли Украины по показателям производства, международного сравнения объемов производства зерновых культур. Исследована динамика баланса зерновых культур в Украине за 2015-2020 гг. Обобщено методические основы формирования базовых категорий мониторинга зерновой отрасли, выделены составляющие структуры их информационного обеспечения. Дано определение информационного обеспечения мониторинга зерновой отрасли как процесса научно обоснованного сбора данных по части выбора объектов наблюдения, систематизации и обобщения с целью обеспечения процесса управления для формирования действенной аграрной политики. На основании анализа состояния отрасли сформированы особенности информационных потребностей рынка зерна на уровнях производства, переработки, внутреннего потребления и экспорта. Освещены потребности управления зерновой отраслью на микро-, мезо- и макроуровнях. Сформированы основные направления мониторинга на макроуровне для государственной поддержки развития отрасли. Раскрыты особенности расходов зерновой отрасли на примере нормативных материалов, сопровождающих учет по цепочке формирования добавочной стоимости зерновой отрасли АПК в сфере переработки. Исследованы особенности и необходимость осуществления мониторинга процесса развития зерновой отрасли и описаны ее основные критерии для формирования национальной зерновой стратегии, согласование ее развития с ситуацией в мире и ЕС. Осуществлен обзор мер, способствующие дальнейшему развитию информационного обеспечения зерновой отрасли Украины.

Ключевые слова: информационное обеспечение, уровни управления, система учёта, зерновая отрасль, мониторинг, транзакционные издержки, зерновые цепи добавочной стоимости, государственное регулирование.

Табл.: 5. Рис.: 1. Лит.: 28.

Formulation of the problem. Grain industry is one of the most important for the agricultural sector and the national economy. A number of normative documents

including the Law of Ukraine «On Grain and Grain Market in Ukraine», the President's Decree «On Urgent Measures Stimulating Production and Development of the Grain Market», strategic documents for the development of Ukraine's agricultural sector and others have recognized it as a key one. For the purposes of this study, grain industry is defined as a totality of producers and processors who ensure the formation of grain supply, treatment, storage, processing and sale.

The state policy on the development of the grain industry is defined by the Law of Ukraine «On Grain and the Grain Market in Ukraine» dated № 37-IV in the edition of 24.07.2021 (basis – 1601-IX) [25] and aimed at creating legal, economic and organizational conditions for competitive production and formation of the grain market to meet the domestic needs of the state for the food, seed and forage grain, increasing exports. Article 22 of this Law states that the main areas of state control involve the establishment of quality indicators of grain and products of its processing, methods of assessing their quality, quantitative and qualitative accounting of grain and products of its processing [25]. Since Ukraine is so-called «granary» of Europe and the world, the grain industry should be managed considering the global grain market, because holding of high positions in it provides more prospects for the enhanced cooperation with the EU and other countries.

However, due to its insufficient systemacy and inconsistency, implementation of provisions of the regulatory documents of Ukraine's legislation on the grain industry does not have an effective impact on the grain production, requires improvement of regulatory mechanisms and information support for monitoring. It is the information support that enables to overcome the uncertainty of the market environment, achieve high efficiency in all areas of formation of production and financial results of the grain industry. Therefore, it is necessary to carry out scientific generalization of the state and improvement of the methodological basis of the information support of the grain industry.

Analysis of recent research and publications. Theoretical and methodical bases of the information support for monitoring the condition of branches of the agro-industrial complex have been studied by V. Zhuk [5], G. Kaletnik [8], N. Koval, V. Mazur, L. Marmul, T. Mulyk, B. Pohrishchuk, P. Sabluk [5], N. Yurchuk and others. Grain industry and food grain market have been researched by V. Andriichuk, V. Boiko, A. Dibrova, N. Holomsha [1], M. Ilchuk [6], G. Kaletnik [8; 9], I. Kyrylenko, S. Maistro, M. Malik, V. Mesel-Veseliak [13], P. Sabluk, O. Svitovyi [18], O. Shpychak [5], O. Shpykulyak [5; 21] and others.

Thus, G. Kaletnik and T. Honcharuk substantiate innovative support of the biofuel industry development in the world and domestic experience, where the grain industry plays its specific role [9, p. 157]; V. Kazmir analyze bioenergy development as a priority area of activation of the grain market [16, p. 82]; O. Yaroslavskyi justify formation of the organizational and economic mechanism for managing the economic security of grain processing enterprises [17, p. 77]. N. Holomsha, O. Holomsha conducted correlation-regression modeling of Ukrainian wheat competitiveness on the world markets [1, p. 88] and substantiated the method of factor analysis to identify the parameters of its competitiveness in the world markets, the results of which determined an objective list of favorable and constraining factors. A. Dibrova et al. investigated strategic guidelines for the grain market development and the

mechanism of its regulation [3, p. 26]. M. Ilchuk et al. studied the development of the grain market in Ukraine and conditions of its stabilization [6, p. 29]. O. Shpykuliak, O. Materynska, H. Mazur investigated the efficiency of grain production by various agricultural enterprises [21, p. 42]. V. Mesel-Veseliak clarified the potential of grain production in Ukraine [13, p. 5]. V. Kolodiichuk proposed a conceptual model of optimization of the logistics system in the grain subcomplex [10, p. 60]. O. Svitovyi emphasized the role of value added for assessing the development of the grain subcomplex [18, p. 94]. S. Lutkovska, V. Kazmir investigated the problems and opportunities of the grain market [12, p. 40], etc.

Researchers have determined that the most characteristic factors influencing the efficiency of the grain industry are as follows: government regulation; degree of integration into the world logistics systems; level of infrastructure development. Under these conditions, information support for managing the development of the grain industry plays a key role, because it helps to overcome the uncertainty of the market environment and achieve high efficiency. However, a methodological base of the information support needs scientific support and improvement under conditions of anticipatory challenges of the management practice.

Formulation of the goals of the article. The purpose of the article is to examine the state of the grain industry and develop an information model for its monitoring at various management levels. To achieve this goal, the following objectives are to be accomplished: to study the state of the grain industry; to clarify the content of the category «monitoring» in the sectoral context; to analyze the features of the monitoring information support for the industry management; to offer the ways of improvement of information technologies for the support of monitoring the grain industry development.

Presentation of the main research material. To form information support for the system of monitoring the grain industry, it is necessary to assess its state. According to the State Statistics Service of Ukraine [14], the dynamics of grain production by the area, gross harvest and yield during 2015-2020 is shown in Table 1.

Table 1

Production of grain crops and grain legume crops in Ukraine in 2015-2020

Years	All categories of farms			Including agricultural enterprises		
	Area, thousand hectares	Gross harvest, thousand tons	Yield, centners per hectare	Area, thousand hectares	Gross harvest, thousand tons	Yield, centners per hectare
2015	14,640	60,126	41.1	10,623	46,506	43.8
2016	14,337	66,088	46.1	10,398	52,022	50.0
2017	14,560	61,916	42.5	10,509	47,905	45.6
2018	14,794	70,056	47.4	10,740	56,096	52.2
2019	15,291	75,143	49.1	11,176	59,982	53.7
2020	15,283	64,933	42.5	11,141	51,717	46.4

Source: complied according to [14]

Data analysis of Table 1 shows that in 2020 the area under grain crops increased by only 4.4%, while the gross harvest increased by 8%, yield increased by 1.1 percentage points compared to 2015, and agricultural enterprises showed a higher level of yield and gross harvest during the entire period analyzed. However, there can be observed a tendency towards the reduction of profitability of production of grain and grain legume crops – while it was 43.1% in 2015, it further started to decrease and was 37.8% in 2016, 25% in 2017, 24.7% in 2018, 11.8% in 2019, and in 20% in 2020 [14].

Production efficiency was greatly influenced by the state policy regulating the

development of the industry. In particular, a current level of domestic prices (compared to the worldwide prices) was the one that according to the methodology of the Organization for Economic Cooperation and Development (OECD) it is recognized as a destabilizing factor in the development of the agrarian sector with negative unprecedented values of the state support. So, the state rather redistributed its revenues in favor of the economy than supported the industry.

The structure of the industry balance is shown in Table 2. While in 2014-2015 marketing year (hereinafter – MY) Ukraine sold 35 million tons of grain crops and grain legume crops worth $ 6.06 million, in 2019-2020 MY exports increased up to 57 million tons and revenues from it amounted to $ 9.4 million, which accounts for more than 40% of agro-exports and almost 20% of total exports. Hence, the grain industry holds a key position in the structure of national exports.

Table 2

Dynamics of the balance of grain crops in Ukraine in 2015-2020, thousand tons

Indicator	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**
Initial stocks	6,831	8,981	6,044	6,454	6,305	5,934
Cropping areas, thousand hectares	14,627	14,641	14,337	14,560	14,782	15,276
Yield, centners per ha	4.4	4.1	4.6	4.3	4.7	4.9
Production	63,859	60,126	66,088	61,917	69,800	75,077
Import	197	211	223	279	237	342
General supply	**70,888**	**69,318**	**72,355**	**68,649**	**76,342**	**81,353**
Export	35,179	39,924	45,212	40,956	47,472	57,263
Feed consumption	14,933	12,728	10,226	10,610	11,671	9,643
Food processing	6,208	5,835	5,685	5,578	5,392	5,361
Industrial consumption	1,294	1,057	1,258	1,577	1,142	1,292
Seeds	2,236	2,325	2,217	2,221	2,266	2,317
Losses	2,056	1,405	1,303	1,403	1,756	1,046
Internal distribution	**61,906**	**63,273**	**65,901**	**62,344**	**69,789**	**76,922**
Final stocks	8,981	6,044	6,454	6,305	6,554	4,431

Source: formed according to [26]

Ukraine's role in the international grain market is quite essential (Table 3). According to the forecast of the US Department of Agriculture [24], in recent decades the Black Sea countries have been the leaders in the wheat market, supplying the world with high quality grain under competitive price, and the share of the Black Sea region is about 35% of the world export due to crop production in Ukraine and Russia.

Table 3

Volumes of production of grain crops of Ukraine and leading countries on the international grain market in 2020, million tons

Country	Wheat			Forage crops			Total grain crops			
	average for 5 years*	2020 actual	2020 forecast	average for 5 years*	2020 actual	2021 forecast	average for 5 years*	2020 actual	2021 forecast	growth rate 2021 to 2020%
Ukraine	26.0	24.9	29.5	40.9	39.7	48.7	67,0	66.4	77.3	19.6
The USA	52.8	49.7	46.2	380.2	374.9	391.0	442.4	435.0	446.1	2.6
Canada	32.5	32.5	20.2	27.6	29.8	25.0	60.0	64.9	45.2	-30.4
EU	143.1	125.3	136.4	157.4	155.2	158.2	303.4	283.4	297.3	4.9
Australia	28.3	33.3	30.0	13.9	15.7	14.1	38.1	49.1	44.6	-9.1
Russia	78.4	85.9	78.0	41.9	43.1	42.9	121.4	130.2	122.0	-6.2

* 2016-2020

Source: compiled according to [22]

According to the long-term forecast of the International Grains Council (IGC) [23] and the Grain Association of Ukraine [26], it is expected that the world market will continue to increase grain production. Due to increased yields, according to the forecasts for 2021, the worldwide production will increase by 375 million tons and exceed 3 billion tons, in particular, wheat production will increase by 86 million tons up to 839 million tons. According to UCAB forecasts [19], wheat production in Ukraine will reach 34 million tons (4.1% of volume of the worldwide production) at the end of 2029, while it was 28 million tons (3.7%) in 2019. Although the area under wheat is expected to remain almost unchanged, the increase in production will be achieved due to the technology intensity by 20%. It also expected that Ukraine will continue to increase wheat exports, and at the end of 2029 it will be about 25 million tons and Ukraine will rank 6th in wheat production and share the 4th position with Canada in terms of its exports in the world. To fulfill a mission of the domestic grain industry, its tasks and efficiency factors have been set (Table 4).

Table 4

Trends and tasks of the efficiency increase in the grain industry of Ukraine

Trends	Tasks of efficiency
Management of the grain industry	researchers propose to perform it according to strategic development scenarios considering the deepening of globalization processes, increased threats, expansion of functional impacts, presence of interactions that are difficult to be structured and interests of all market's participants
Efficiency increase in the grain industry	ecological (climate change) and demographic (population growth); energy (growing of grain crops for biofuels); attractiveness of the grain market for transnational grain traders and companies; development of grain market infrastructure and effective instruments of state regulation of supply and demand in the grain market; level of credit security (level of interest rates), perfection of insurance protection; efficiency of the budget support
Limitations of the grain industry competitiveness	macroeconomic: political instability; devaluation of the national currency; frequent changes in the taxation system; ineffective direct support policy; destabilization of agricultural markets; falling investment in highly profitable logistics systems; ineffective government interventions in the grain market; non-compliance of the system of certification and standardization. Meso level: sharp market fluctuations in the grain market; price disparity; monopoly of procurement and processing enterprises, grain traders; disproportions of grain sales channels; insufficient infrastructure development. Micro level: lack of working capital; insufficient level of logistics; lack of elevator capacity; non-compliance with the technologies of growing, harvesting, drying and storage of grain; low product quality
Policy of the state support of the grain industry	increase in funding volumes of the state targeted crop produciton programs; introduction of new lending mechanisms for grain producers; strengthening the role of the Agrarian Fund in financing the production through mechanisms for harvesting future crops (fixed-term contracts); stimulating the attraction of funds by producers in domestic and foreign (IPO) stock markets; stimulation of private investments (corporatization); tax incentives for the production, sale and export of grain crops; development of agricultural insurance
Priority trends of the grain industry development	improvement of the regulatory framework for the grain market operation; improvement of protection measures for grain market participants; optimization of land tenure and land use; modernization of material and technical base of business entities; creation of the information portal based on e-logistics and digitalization (monitoring, forecasting); development of export potential of the grain market; ensuring equal economic conditions for all grain market participants and improving state support (targeted programs, tax preferences); promotion of agrarian integration and cooperation; raising the competence level of the heads and managers of business entities; diversification of grain use; introduction of credit and investment security instruments; development of the grain market infrastructure

Source: generalized by the authors according to [4; 12; 15]

According to V. Shvets, O. Tsaruk [20, p. 56], monitoring should be carried

out on the basis of information systems intended for collecting, processing, transmission, storage, compaction, analysis, visualization of statistical information, as well as its use for analysis, evaluation, forecasting and modeling of the grain industry. Thus, monitoring of the grain industry of Ukraine can be defined as a process of ongoing observation, evaluation, analysis, forecasting of the state of the grain industry and its impact on the economy. The purpose of monitoring is to assess the current state of grain producers, the logistics chain of the grain market, the impact on other sectors of the economy and macroeconomic indicators, as well as to identify the development trends in order to make sound decisions on the food security management. The content of monitoring is determined in accordance with the purpose and main tasks, which are shown in Fig. 1.

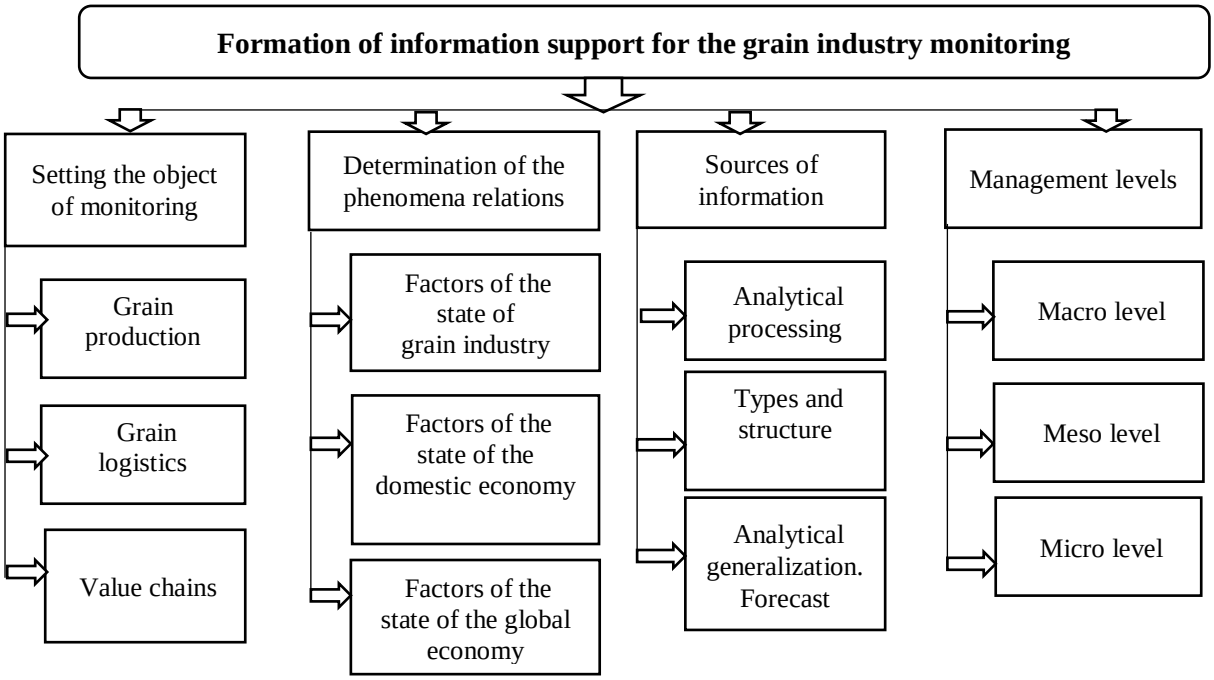

Fig. 1. **Formation of information support for monitoring the state of the grain industry**

Source: systematized by the authors according to [7; 10; 15; 20]

Therefore, it is expedient to determine the state of the grain industry within the system of monitoring, which should perform the functions of providing management bodies and other interested users with prompt, objective and relevant information on current decisions and strategy development. Methodical bases of formation of basic categories of monitoring of grain industry provide definition and selection of the system of indicators.

The main stage of monitoring is the formation of information support, because it is impossible to analyze or make sound management decisions without high quality, reliable and objective information support. The ultimate goal of information support for monitoring is to obtain data on the development of a phenomenon or process in order to make management decisions.

The development of monitoring methodology the industry is based on the determination of a target indicator (in particular, share of the grain industry in agricultural GDP) and impact factors. It terms of macroeconomics, the grain industry

can be considered as a market of pure competition, as the industry's products are standardized, it has a large number of counterparties, i.e. sellers and buyers; there is a tough competition in the market because supply exceeds demand. In addition to the target indicator and indicators of market competition and macroeconomic balances, the dynamics of the main indicators of grain production are to be monitored including quantitative analysis of yields, cropping areas and grain production by the type of products, producers, regions, etc.

Components of the logistics infrastructure are subject to monitoring including availability of grain storage tanks (elevators, warehouses); indicators of grain quality during storage; completeness of provision and technical condition of transportation; cost of transport services; potential of port capacities; administrative costs of the process of ensuring the operation of the market infrastructure of the grain industry. It let us define information support for monitoring of the grain industry as a process of science-based data collection in terms of selection of objects of the observation, systematization and generalization of accounting and information tools in order to ensure management for the formation of effective agricultural policy.

Accounting of information support of the state regulation of the grain industry has always been a priority, in particular the «Instruction on the procedure of accounting and registration of operations with grain and products of its processing at bakery enterprises of the Ministry of Procurement of the USSR» dated February 15, 1978 № 55 [27]; «Instruction on the procedure of accounting and registration of operations with grain and products of its processing at grain receiving and grain processing enterprises, regardless of the form of ownership and management», the order of the Ministry of Agrarian Policy dated July 11, 2005 № 310 (which was abolished in 2017 as the one that had lost its relevance and caused regulatory barriers) and the Ministry of Economic Development, Trade and Agriculture developed a project «Instruction on quantitative and qualitative accounting of grain and products of its processing at the grain and grain processing enterprises of all forms of ownership» [28]. So, the initial observation and movement of trade flows under these Instructions have been tested in practice and quite fully reflect the condition of the grain industry.

Thus, accounting and reporting information was formed at a sufficient level under conditions of the market economy formation in the grain industry. Some elements of costs need to be clarified at the stages of the value chain formation. However, as noted by researchers [10, p. 47], outside the system of information collection there remains a monetary equivalent of the use of production factors in the process of maintaining inventories and moving material flows from the primary source of raw materials to the final consumer of finished products through functional areas of logistics in terms of specific operations on the provision of information, financial and service flows. Information needs of the grain industry management levels are outlined in Table 5.

Therefore, information needs of the levels of grain industry management in Ukraine in the infrastructural scope are the request/needs for collecting information in the list by the functional areas of logistics: for grain production, components of costs of its sale by the grain producers and purchase by processors, costs of grain storage,

with possible costs of transshipment in ports for export, costs of grain processors and creation of new products in the value chain – flour, cereals, mixed feeds, sales of processed products in the relevant areas of the food industry, where it is used as raw materials [2, p. 238].

Table 5

Information needs of the management levels of Ukraine's grain industry in the infrastructural scope

Management levels	Objects of accounting and information monitoring		
Production	Expenses for seed grain, fertilizers, plant protection agents etc.	Costs of tillage, sowing, crop treatment and harvesting	Primary processing and storage of grain
Processing	Grain acceptance (physical unloading and placement), documentary support	Ensuring storage conditions, grain ventilation, treatment for pest control	Laboratory analysis of grain quality
Domestic consumption	Costs for ensuring the technological process of acceptance and preliminary storage of grain, preparation of raw materials for processing, processing of the grain prepared for flour, cereals, compound feeds	Financing of distribution channels for grain processing	Costs for stimulation of consumer demand: advertising, loyalty programs etc.
Export	The taxation base for operations on supply of goods/services of grain crops of commodity positions 100-1008 according to Ukrainian Classification of Commodities of Foreign Economic Activity. Receipt of the budget VAT refund	Registration of a customs declaration. The exporter draws up a tax invoice taking into account the official exchange rate	The determined result takes into account all incomes and expenses from the sale of grain
Infrastructure support	Transport costs at all stages of moving the material flow of the grain industry, the costs of cargo processing. Administration	Exchange costs associated with brokerage services	Insurance, banking services, costs of consulting services, communications

Source: systematized by the author according to [10; 20]

Measures that will contribute to further development of information support of the grain industry of Ukraine include strengthening of the state regulation of the grain market through effective response to current market challenges. First of all, it is the introduction of Agricultural Market Information System (AMIS), which is an inter-agency platform created at the initiative of the Ministers of Agriculture of the G20 countries to enhance the transparency of information on food markets, at the state level as a basis for the implementation of principles of transparency and predictability of the world grain market. In the process of information support of the grain industry, it is also important to consider current trends in the world grain market, as in this area the position of Ukraine is quite substantial, which allows to approach the economic space of the EU and the world. However, this process requires a balanced analysis, as it also has certain risks to the food security of the domestic grain industry. In particular, it is necessary to adhere to the proportions of the grain balance, exporting not raw materials but grain processing products.

Conclusions. Strengthening the position of the domestic grain industry and promoting its involvement in European integration processes requires the creation of the system of information support for the state monitoring, which should include a

full range of information collection at various levels of management.

To partially solve these tasks, we have proposed methodological bases for the formation of basic categories of monitoring industry of the grain industry, identified components of the structure of its information support. Based on the analysis of the state of the grain industry, the features of information needs at the levels of production, processing, domestic consumption and exports, and at the micro, meso and macro levels have been clarified.

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УДК 640.4:006.015.5:005.336.3
DOI: 10.37128/2411-4413-2021-4-4

СТАНДАРТИЗАЦІЯ І ОБГРУНТУВАННЯ УПРАВЛІННЯ ЯКІСТЮ ПРОДУКЦІЇ ТА ПОСЛУГ У ГОТЕЛЬНО-РЕСТОРАННОМУ ГОСПОДАРСТВІ

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Індустрія гостинності – це галузь економіки, яка швидко розвивається і сприяє розвитку інших галузей економіки країни. Розширюються культурні й ділові зв'язки України