





Agro Policy Report

APD/APB/03/2023

Assessing the effectiveness and efficiency of agricultural policy Ukraine in 2021 (Analytical report)

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About the Project "German-Ukrainian Agricultural Policy Dialogue" (APD)

The project "German-Ukrainian Agricultural Policy Dialogue (APD)" has been implemented with the support of the Federal Ministry of Food and Agriculture (BMEL) since 2006 and is currently being implemented until 2024 at its request through the executor of GFA Consulting Group LLC, as well as a consortium consisting of IAK Agrar Consulting, Leibniz Institute for Agricultural Development in Transition Economies and AFC Agriculture and Finance Consultants GmbH. The recipient of the project is the National Association of Agricultural Advisory Services of Ukraine "Dorada". The beneficiary of the project is the Ministry of Agrarian Policy and Food of Ukraine. The project should support Ukraine in the areas of sustainable agriculture, efficient processing industry and international competitiveness in accordance with the principles of market and regulatory policies taking into account the development potential that arises under the Association Agreement between the EU and Ukraine. To meet this goal, the Project should provide information on German experience, in particular, East German, as well as international European experience in development of agrarian and forestry policy framework, as well as on the organization of relevant agrarian and political institutions.

The APD consists of two thematic pillars, one of them – the land component – is managed by BVVG German AgriForest Privatization Agency, a state-owned enterprise that is responsible for the administration of state-owned agricultural and forestry land in (Eastern) Germany. Under the land component, the project offers an exchange of experience and know-how between Ukrainian and German land management experts from BVVG and additional German land management institutions. The land component focusses on political, legal and technical issues related to land management and accompanies the current discussions in Ukraine concerning land market development.



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Introduction

Effective and efficient policies, including agricultural policies, are essential to sustainably meet the growing demand for safe and quality food. While the growing demand for food, feed, fuel and fibre offers significant opportunities for agriculture, public agricultural policy in a single country or intergovernmental grouping should address the following issues that would lead to sustainable increases in resource productivity (land, labour, capital, irrigation water) and management efficiency, environmental sustainability, including greenhouse gas emissions, and improved adaptation and resilience to climate change and other pressures. State support for agriculture in a number of countries has increased in recent years in response to global economic and non-economic crises, and only a small share of global budgets has been allocated to long-term goals such as climate change, greening of technologies, and other food system sustainability issues.

In order to improve decision-making at various levels and help governments better understand how much and what form of support is provided, international organisations, including OECD AND THE WTO, EU and others, have developed methodologies and indicator systems that translate policy measures into numbers in a comparable way over time and across countries. The overall assessment of the efficiency and effectiveness of agricultural policy in the European practice of regulating and developing the agricultural sector and rural areas has become mandatory through its fixation in the current EU legislation and has proved its capability and necessity over time. Ukraine cannot yet demonstrate consistency in its approaches to strategising and evaluating the effectiveness of implementing rural and agricultural development strategies. However, being a candidate for EU membership, it has to adapt a number of EU norms and procedures to the practice of strategic management of the agro-industrial complex. This report is one of the attempts of the export community, NGOs and academics to assess, at least not the formalised agricultural policy, but a set of decisions implemented in 2021. The assessment will be carried out in accordance with the methodology "Draft Methodology for Evaluation of Agricultural Policy of Ukraine (Agricultural Policy, Agricultural Trade Policy, Rural Development Policy)", which is largely close to the EU methodology and the conditions and possibilities of its use in Ukraine.

The assessment is based on a system of indicators substantiated in the methodology, structured into four groups, calculated sub-indicators that deepen certain analytical parameters, and expert assessments.

Methodology for assessing the effectiveness of agricultural polisy and the spesifics of its implementation

Agricultural policy and the system of specific measures to regulate and coordinate the agricultural sector of the economy require assessment not only in terms of their existence, development and implementation, but also their effectiveness and efficiency. This is important for a comprehensive final assessment of the activities of state institutions and business entities, identifying shortcomings, unresolved issues and new problems that need to be addressed in the future by improving the policy. Agricultural policy can be positively assessed only if it ensures high efficiency and competitiveness of the agri-food sector, improvement of the social status of peasants and higher level of rural development. Hence, there is a need to develop criteria for assessing the efficiency and effectiveness of agricultural policy, a system of indicators for such assessment, a methodology for their calculation, and recommendations for interpreting the system of indicators in order to formulate a comprehensive assessment.

Given the above, we consider the following to be the main criteria for assessing the effectiveness and efficiency of agricultural policy:

- the state of the country's food security;
- the reproducibility of the economic capacity of agricultural producers has become more stable;
- the level of sustainable development of rural areas.

The content of the criteria is revealed by summarising a wide range of interdependent development parameters, and the details of the assessment are revealed through a system of measures - indicators that are systematised into relevant groups.

The methodology for comprehensive assessment of policy effectiveness and efficiency is based on the EU methodology. Taking into account the positive experience of European countries in managing the agricultural sector and the practice of evaluating strategies and agricultural policies, as well as the general vector of civilisation development chosen

by Ukraine - integration into the EU, we propose to use the methodology and methods of agricultural policy assessment approved by the European Commission and approved by the European Parliament to the maximum extent possible. Given the official status of an EU candidate and the upcoming start of membership consultations, assessments of the effectiveness of agricultural policy formulated in "plain language" will help to find common ground in discussions and highlight Ukraine's capabilities and intentions in agricultural matters.

The detailed system of indicators for assessing the efficiency and effectiveness of agricultural policy is proposed to be systematised into 4 groups (similar to the EU methodology):

- Context indicators;
- Impact indicators;
- Issues/result indicators;
- Result indicators.

As the Ukrainian statistical system is not adapted to the accumulation of data on monitoring the implementation of agricultural policy similar to the EU CAP, and Ukraine is not a member of the EU, which does not yet apply the requirements for strategy planning and reporting under the EC Regulations, we will not be able to use some of the indicators of the EU methodology in full.

Agricultural policy assessment indicators as of January, 01, 2022

I. Context indicators

Indica- tor index	Indicator.	Unit of measureme nt	Values for 2021	ies for 020	+/- 2021/ 2020	Notes.
Socio-ec	onomic indicators					
S.01	Population	Million people	41,6	41,9	-0,3	

S02	Age structure	Coefficient	0-14 14,9 15-64 67, 16-59 59, 18 and old 82.1 60 and old 24.8 65 and old	4 2 er er		
S.03	Territory.	Million kilometres ²	17.7 603,5	603,5	-	
S.04	Population density	Persons/km ²	69	69	-	
S.05	Employment rate	%	55,7			
S.06	Self-employment rate	%	45,5			
S.07	Unemployment rate	%	9,9			
S.08	GDP per capita	UAH person	131 240,4	101 138,0	+30102	
S.09	Poverty rate	%	24,7	24,7	-	
S.10	The structure of the economy	%		Agriculture 9.3 Industry 14.7	-	
S.11	Employment structure	%	Agriculture 17.2 Industry 14.8		-	
S.12	Labour productivity by economic sector	Thousands of UAH individual		Total 270.5 Agriculture 146.0 Industry 267.9	-	
Industry	y indicators					
S.13	Employment by type of economic activity	Thousands of people	2692,7	2721,2	28,5	
S.14	Labour productivity in agriculture	Thousands of UAH individual		146,0	-	
S.15	Labour productivity in forestry	Thousands of UAH individual	-	-	-	
S.16	Labour productivity in the food industry	Thousands of UAH person	-	-	-	

S.17	Agricultural holdings (farms)	Units	48 868	47 803	+1065	
S.17	Agricultural district	Units	-	-	- 1005	
S.19	Agricultural area for organic	Thousand	422,0	462,0	-40,0	
0.10	farming	ha	122,0	102,0	10,0	
S.20	Irrigated land	Thousand	_	551,4	_	
0.20		ha		331, 1		
S.21	Units of livestock	Million	_	_	_	
		heads				
S.22	Farm labour force	Thousands	2692,7	2721,2	-28,5	
		of people		,_		
S.23	Age structure of farm	%	-	-	_	
	managers					
S.24	Agricultural training for farm	%	-	-	-	
	managers					
S.25	Agricultural income factor	%	-	-	_	
S.26	Agricultural entrepreneurial	Million UAH	-	-	-	
	income					
S.27	Total factor productivity in					
	agriculture	Thousands	-	9,52	-	
		of UAH				
C 20	Gross fixed capital formation	unit				
S.28	in agriculture	Million LIAL		E40462 0		
C 20	Forests and other wooded	Million UAH	10 000 0	540463,0	-	
S.29	land	Million	10 686,8	10 686,8	-	
S.30	Tourism infrastructure	hectares				
		Objects.	_	-	-	
	nental indicators Ground cover					
S.31	Areas with natural and other	-	-	-	 	
S.32	specific restrictions	Units	77/2074	77/2072 0	_	
	openie reactications	UTILS	77/2074, 5	77/2072,8		
S.33	Intensity of farming	ha / Person	15,34	15 10	-0,16	
S.33	Conservation status of	na / reisuil	15,54	15,18 5250,3	-0,10	
3.3 1	agricultural habitats	Units/ha		5250,5	_	
	(pastures)	Ullics/IId				
S.35	Agriculture of high natural	Units	-	-	_	
2.33	value					
S.36	Protected forest	Million	2074,5	2072,8	+ 1,7	
		hectares	,	,	'	
S.37	Water abstraction in	Million m ³	970	1453	-483,0	
	agriculture (irrigation)					
S.38	Water quality	-	-	-	-	
S.39	Soil organic matter in arable	%	3,16	3,16	_	
	land					

S.40	Water erosion of soil	%	-	-	-	
S.41	Renewable energy production in agriculture and forestry	kWh	-	-	-	
S.42	Energy use in agriculture, forestry and the food industry	Million kWh	-	6700,0	-	
S.43	Emissions from agriculture/CO ₂	Thousand tonnes	67,3/ 1461,7	1	-	

II. Impact indicators

Indica- tor index	Indicator.	Unit of measureme nt	Values for 2021	Values for 2020	+/- 2021/ 2020	Notes.
I.01	Agricultural entrepreneurial	Million UAH	-	253 353,0	-	
	income			340 277,0	-	
I.02	Factor income in agriculture	Million UAH	-			
I.03	Total factor productivity in	index	-	107,7	-	
	agriculture					
I.04	Volatility of commodity prices	Coefficient	-	-		
	in Ukraine		4,9	12,7		
I.05	Dynamics of consumer food	Coefficient	,	,	-	
	prices		19 962,0	15 681,0		
I.06	Trade balance of agricultural	Million USD	,	,	-	
	products		67,3/1461,	_		
I.07	Emissions from agriculture	Thousand	7	_	-	
I.08	Water quality	tonnes	_		_	
I.09	Soil organic matter in arable	Assessment		3,16		
T 40	land	%	3,16	54,1	_	
I.10	Employment rate in rural	%	53,6	43,9	-0,5	
	areas	Coefficient		•	-0,5	
I.11	Degree of rural poverty	UAH	41,4	(2019p)	-	
I.12	Rural GDP per capita	individual	-	9449,0	-	

III. Output indicators

Performance indicators - Direct payments

Indica- tor index	Indicator.	Unit of measurement	Values for 2021	Values for 2020	+/- 2021/ 2020	Notes
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Basic payı	ment scheme per unit area					
O.01_DP		Units				
	Number of farmers		1474	178		
	(agricultural enterprises)					
	Number of hectares		-	-		
O.02_DP		Thousand ha				
Permanen	t pastures					
O.03_DP	Number of farmers with	Units	-	-		
	permanent pastures					
	Number of hectares covered		5250,3	5250,3		
O.04_DP	by permanent pastures	Thousand ha				
	declared by farmers					
	Number of farmers who		-	-		
	have permanent pastures in					
	identified environmentally					
O.05_DP	sensitive areas	Units	_	_		
	Number of hectares covered					
	by environmentally sensitive					
	permanent pastures					
O.06_DP	declared by these farmers					
	Number of hectares		_	_		
	designated as		_	_		
	environmentally sensitive	Thousand ha				
	permanent grassland (total)					
0.07.00						
O.07_DP						
		Thousand ha				
		THOUSAND NA				
Ecological	70ne					
Equivalen						
Lquivaich	Number of farmers applying					
O.08_DP	equivalent measures					
3.00_5	(certification schemes or	Units	_	_		
	agri-environmental and	33				
	climate measures)					
	Number of hectares					
O.09_DP	declared by farmers					
	implementing equivalent	Thousand ha				
	measures (certification		-	_		
	schemes or agri-					
	environmental and climate					
	measures)					
L	<u>'</u>	l			l .	1

Payment t	Payment to young farmers							
O.10_DP	Number of farmers	Units	-	-				
O.11_DP	Number of hectares	Thousand ha	-	-				
Smallhold	er farmers' scheme							
O.12_DP	Number of farmers	Units	127	176				
O.13_DP	Number of hectares	Thousand ha	-	-				
Payment f	for areas with natural restrictio	ns						
O.14_DP	Number of farmers	Units	-	-				
O.15_DP	Number of hectares	Thousand ha	-	-				
National p	National programmes for niche crops							
O.16_DP	Number of farmers	Units	-	-				
O.17_DP	Number of hectares	Thousand ha	-	-				

Performance indicators - Market performance

Indica-tor index	Indicator.	Unit of measurement	Values for 2021	Values for 2020	+/- 2021 / 2020	Notes.
Public inter	vention					
O.18_MP	Volume	Thousand ha	-	-		
O.19_MP	Duration.	Months	-	_		
Private sto	rage					
O.20_MP	Volume	Thousand ha	-	-		
O.21_MP	Duration.	Months	-	-		
Export refu	ınds					
O.22_MP	Volume of exported products with export refunds Producer organisations	Million UAH	-	-		
O.23_MP	% of products supplied to the market by producer organisations and associations of producer organisations	%	-	-		
School scho	emes					
O.24_MP	Number of final beneficiaries of the school milk programme	Individuals.	-	-		
O.25_MP	Number of final beneficiaries of the school fruit programme	Individuals	-	-		

Wine sector						
O.26_MP	Number of hectares of new		2,0	2,0		
	grape plantations	Thousand ha	2,0	2,0		
O.27_MP	Number of hectares of					
	restructured vineyards	Thousand ha	-	-		
O.28_MP	Number of promotion					
	projects in the wine sector	Units	-	-		
O.29_MP	Number of investment and					
	innovation projects	Units	-	-		

Performance indicators - Horizontal aspects

Indica-tor index	Indicator.	Unit of measurement	Values for 2021.	Values for 2020.	+/- 202 1/ 202 0	Notes.	
Quality pol	icy						
O.30_HI	Geographical Indications in the wine sector	Units	6	6			
O.31_HI	Number of new protected appellations of origin, protected geographical indications and traditional features guaranteed by industry	Units	3	4			
Organic far	rming						
O.32_HI	Number of hectares (total and under conversion)	Thousand ha	422 299,0	462 225,0			
O.33_HI	Number of certified registered organic operators	Individuals	418	419			
Promotion	policy						
O.34_HI	Number of programmes (in Ukraine and abroad)	Units	-	-			
O.35_HI	Number of new organisations offering	Units	-	-			
Farm advis	Farm advisory system (agricultural enterprises)						
O.36_HI	Number of farmers consulted	Individuals.	-	43			

Results indicators - Rural development

Indica-tor index	Indicator.	Unit of measurement	Values for 2021.	Values for 2020.	+/- 202 1/ 202 0	Notes.
0.01_RD	Total government spending. All measures	Million UAH	-	45,1		
0.02_RD	Total investments	Million UAH	-	-		
O.03_RD	Number of supported actions/operations	Units	-	-		
O.04_RD	Number of farms/beneficiaries supported	Units	-	-		
0.05_RD	Total area (ha)	Thousand ha	-	-		
O.06_RD	Supported physical area (ha)	Thousand ha	-	-		
O.07_ RD	Number of contracts supported	Units	1	1		
O.08_ RD	Number of livestock units supported	Heads	ı	ı		
O.09_ RD	Number of enterprises participating in supported schemes	Units	ı	ı		
O.10_ RD	Number of farmers receiving payments	Individuals	1	ı		
0.11_ RD	Number of days of training provided	Days	-	-		
O.12_ RD	Number of training participants	Individuals.	-	-		
0.13_ RD	Number of trained advisers	Individuals.	-	30		
O.14_ RD	Population benefiting from improved services/infrastructure (IT or other)	Million people	-	-		

IV. Result indicators

Outcome indicators

Indica-tor index	Indicator.	Unit of measurement	Values for 2021.	Values for 2020.	+/- 202 1/ 202 0	Notes.
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R.01_RI	Share of direct support in agricultural income	%	≤ 1	≤ 1	
R.02_RI	Variability of farm income	Coefficient	-	-	
	- By type of farm	Coefficient	-	-	
	- By economic size	Coefficient	-	-	
R.03_RI	Value added for primary producers in the food chain	Million UAH	-	-	
R.04_RI	Exports of agricultural products to the EU	%	28	26	
	- Share of Ukraine's agricultural exports in global exports	%	-	-	
	- Share of final products in Ukraine's agricultural exports	%	8	7	
R.05_RI	State intervention: % of the volume of products purchased from intervention warehouses in total Ukrainian production	%	-	-	
R.06_RI	Private warehouses: % of production in private warehouses of total production in Ukraine	%	-	-	
R.07_ RI	Export refunds: % of the volume of products exported with export refunds, as a percentage of total Ukrainian production	%	-	-	
R.08_RI	Commodity prices in Ukraine compared to world prices (breakdown by product)	UAH/c, t, I	-	-	
R.09_RI	Cost of production under Ukrainian quality schemes compared to the total cost of agricultural and food production	Million UAH	-	-	
R.10_RI	The importance of organic farming		-	-	
	- Share of organic areas in the total agricultural area	%	1	1	
	- Share of organic livestock in the total livestock population	%	-	-	

R.11_RI	Diversity of cultures		-	-	
	- on the farm (number of				
	farms by number of crops	%	-	-	
	and size)				
	- in the region	%	ı	ı	
R.12_RI	Share of pastures in total	%	-	-	
R.13_RI	Share of environmentally				
	oriented territory (EOT) in		-	-	
	agricultural land	%			
R.14_RI	Share of area under	%			
	greenery		-	-	
R.15_RI	Net greenhouse gas				
	emissions from agricultural	Kg/ha	-	-	
	soils				
R.16_RI	Structural diversity		-	-	
	- in absolute terms	Units	-	-	
	- in relative terms	Coefficient	-	-	

Rural development result and additional result indicators

Indica-tor index	Indicator.	Unit of measurement	Values for 2021.	Values for 2020.	+/- 2021 / 2020	Notes.
R.01_RD	Percentage of agricultural enterprises with a business development plan/investment for young farmers	%	-	-		
R.02_ RD	Percentage of agricultural enterprises supported to participate in quality schemes, local markets and short supply chains	%	-	-		
R.03_ RD	Percentage of irrigated land that is converted to more efficient irrigation systems	%	1	-		
P.04_ RD	Improving the efficiency of water use in agriculture in projects	%	-	-		
R.05_ RD	Improving energy efficiency in agriculture and food processing in projects	%	-	-		

R.06_ RD	Renewable energy generated by supported projects	kWh	-	-	
P.07_ RD	Percentage of livestock units interested in investing in livestock management to reduce GHG and/or ammonia emissions	%	-	-	
R.08_ RD	Reduced methane and nitrous oxide emissions	Kg/ha	-	-	
R.09_ RD	Reduced ammonia emissions	Kg/ha	-	-	
R.10_ RD	Jobs created in supported projects	Units	-	-	
R.11_ RD	Percentage of rural population covered by local development strategies	%	-	-	
R.12_ RD	Percentage of rural population benefiting from improved services/infrastructure	%	-	-	
R.13_ RD	Jobs created in supported projects (Leader)	Units	-	-	
R.14_ RD	Percentage of rural population benefiting from new or improved services/infrastructure (information and communication technologies - ICT)	%	-	-	

Analysis and evaluation of agricultural policy (support for producers, trade policy, rural development)

One of the most specific comprehensive strategic documents adopted by the Ministry of Agrarian Policy and Food of Ukraine for implementation and measured by certain indicators is the "Work Plan of the Ministry of Agrarian Policy and Food of Ukraine for 2021" (Order of the Ministry of Agrarian Policy and Food of Ukraine No. 250 dated October, 06, 2021). This document largely defines a set of measures to regulate and manage the agroindustrial complex, which, together with measures and decisions not included in this plan, formed the agrarian policy implemented in 2021. Obviously, the achievement of all strategic goals and objectives was not 100%, and this was expected, but it is important to

comprehensively assess the effectiveness and efficiency of agricultural policy using, where possible, generally accepted international methodologies and evaluation indicators. The four groups of indicators envisaged by the EU CAP Evaluation Methodology are listed above. In addition to these indicators, we will provide several references to the OECD Agricultural Policy Assessment Report 2021 in Ukraine in the formulation of the strategy assessment. From the tables, we can see a number of indicators without actual data, which is caused by the lack of monitoring and statistical data that would allow them to be calculated. This is due to the mismatch in the structure and approaches to strategic planning in the EU and Ukraine. Understanding this, we nevertheless retain these indicators in the adapted Methodology for assessing the effectiveness and efficiency of agricultural policy in Ukraine, given the official status of Ukraine as an EU candidate and Ukraine's European integration course.

The 2021 Plan has the following structure:

Strategic objective 1: Food security

Objective 1. Developing farms and entrepreneurship in rural areas

Objective 2. Implementation of the state policy in the field of education, science, and professional training of personnel for agricultural production

Objective 3. Stimulation of the development of livestock production

Objective 4. Ensuring the development of livestock breeding

Objective 5. Ensuring food security

Objective 6. State support for potato producers

Objective 7. Development of new plant varieties adapted to the country's natural and climatic conditions (units)

Objective 8. State support for agricultural producers through the allocation of budget subsidies per unit of cultivated land

Objective 9. State support for agricultural producers through compensation for losses from damage to crops as a result of man-made and natural disasters

Objective 10. Creation of legislative conditions to stimulate the development of horticulture, viticulture and hop production

Task 11. Declaration of financial instruments for state support of the horticulture, viticulture and hop industry to ensure food security of the state

Task 12. Analysis and forecasting of agricultural development

Strategic objective 2. Creation of conditions for water protection from pollution caused by nitrates from agricultural sources

Task 1. Developing and approving the Order of the Ministry of Agrarian Policy "On Approval of the Rules for Ensuring Soil Fertility and Use of Certain Agrochemicals"

Strategic objective 3: Financial sustainability of agricultural producers

Objective 1. Stimulating agricultural producers to improve their engineering and technical support

Objective 2. Stimulating agricultural producers to

Insurance of agricultural products

Objective 3. Increasing access to bank loans for agricultural businesses

Objective 4. Ensuring stable budget financing

Strategic objective 4: Restored and modernised land reclamation systems

Objective 1. Improvement of the efficiency of management and use of reclamation systems

Objective 2. Provision of financial support to agricultural producers engaged in agricultural activities on reclaimed land

Strategic objective 5. Digitalisation and automation of interaction between the state and agricultural sector entities

Objective 1. Establishment of two-level digitalisation of the crop, livestock and engineering sectors at the level of the state and business entities through the creation and

implementation of a single communication platform for the agricultural market - the DAR digital system

Task 2. Implementation of the eFish electronic fisheries management system

Strategic objective 6. Land reform

Objective 1. Ensuring organisational and legal prerequisites for free access of all land market participants to information on land relations

Objective 2. Ensuring the maintenance of the State Land Cadastre, filling it with complete and reliable data

Objective 3. Improvement of the organisational and legal framework for land management, land conservation, soil protection and restoration of soil fertility, optimisation of the State Land Management Documentation Fund

Objective 4. Ensuring the functioning of the national geospatial data infrastructure, implement a set of measures for demarcation and delimitation of the state border

Objective 5. Regulation of the procedure for the establishment and operation of self-regulatory organisations in the field of land management, surveying and mapping, establishment of rules and procedure for providing guarantees of protection of the rights of documentation customers

Objective 6. Exercising state control over land use and protection

Strategic objective 7. Ensuring sustainable use and restoration of water bioresources

Objective 1. Streamlining the organisation of commercial fishing and rational use of aquatic bioresources

Objective 2: Implementation of Ukraine's international treaties on fisheries

Strategic objective 8. Streamlining the functions of the StateGeoCadastre, which is directed and coordinated by the Ministry of Agrarian Policy, related to the State Land Cadastre, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1051 of 17 October 2012 (as amended)

Task 1. Approval of Amendments to the Procedure for Administration of the State Land Cadastre, approved by the Order of the Ministry of Agrarian Policy and Food of Ukraine No. 836 dated 27 December 2012, registered with the Ministry of Justice of Ukraine on 22 January 2013 under No. 153/22685 (as amended)

Strategic objective 9. Optimisation of the process of submitting statistical reporting forms by business entities as part of the digital transformation of the agricultural sector

Task 1. Establishing an interagency working group under the Ministry of Agrarian Policy and Food of Ukraine to optimise statistical reporting forms in the agricultural sector

Strategic objective 10. Implementation of a unified policy and sustainable development of digital transformations and digitalisation in the areas related to powers of the Ministry of Agrarian Policy

Task 1. Ensuring proper cybersecurity and information protection work by the structural units of the Ministry of Agrarian Policy and Food of Ukraine, enterprises, institutions, organisations under the Ministry's management, central executive authorities whose activities are directed and coordinated by the Minister of Agrarian Policy and Food of Ukraine, their territorial bodies, enterprises, institutions, organisations under the management of central executive authorities whose activities are directed and coordinated by the MAPFU.

The agro-industrial complex and rural areas and their development are areas with specific operating conditions that require a more detailed consideration of the problems of state intervention in socio-economic processes. The effectiveness and efficiency of state regulation of economic policy in the agricultural sector is achieved not only by increasing agricultural production, but also by stable development of rural areas, high level of agricultural market infrastructure development, search for new markets and sales channels, formation of a competitive environment for the agri-food sector in the domestic market and influence on world prices.

Institutional transformations in the agricultural governance system have become an important factor influencing the effectiveness of agricultural policy in Ukraine. The re-es-

tablishment of a separate agency for the implementation of agricultural policy, the Ministry of Agrarian Policy and Food, in 2021 was undoubtedly a positive step towards the formation of an effective system for regulating agricultural relations in Ukraine.

In 2021, agriculture saw an increase in production (the production index was 14.4% compared to 10.1% in 2020), driven by a significant increase in crop production. The harvest of grains and oilseeds, despite difficult weather conditions during the growing season, ripening and harvesting, was a record for the entire period of statistical observations (the crop production index increased significantly by 19.9% compared to a drop of 12.1% in 2020). Grain harvest increased by 32.5% year-on-year (to a record 89 million tonnes) and sunflower harvest by 25% (to a record 16.4 million tonnes). The situation in livestock farming remained challenging due to a significant increase in production costs of livestock products amid rising feed costs and intense competition in the domestic market with foreign counterparts, particularly in dairy products.

Based on European experience, one of the most effective financial and economic instruments of state regulation of the agricultural sector is state support for agricultural producers. The areas of state support for the agro-industrial complex in 2021 included cheaper loans for agro-industrial development, support for the development of livestock and agricultural processing, compensation for the cost of Ukrainian-made agricultural machinery, etc. (see Support of the Ministry of Agrarian Policy and Food of Ukraine for 2021). The Ministry of Agrarian Policy has added organic production, potato development and niche crops to the new areas of state support. At the same time, it should be noted that there are negative trends in state regulation in the area of support for agricultural producers, as the demand for such support far exceeds the budgeted funds and actual budget expenditures in 2021 and previous years. At the same time, there was also an incomplete utilisation of even the small funds allocated in the budget for certain programmes and areas.

The development of state support for young farmers should be recognised as a promising area of state regulation. The most important and effective tool for supporting agriculture is the reduction in the cost of loans, i.e. the implementation of the programmes "Financial Support to Agriculture through Concessional Loans" and "Affordable Loans 5-7-9%". In 2021, the loan portfolio of farmers became the largest in the history of the agricultural

sector in Ukraine, although it is still orders of magnitude lower than the same indicator of lending in developed Western countries, such as the United States and the EU. The "Affordable Loans 5-7-9%" programme provides partial compensation of the interest rate on loans with a mechanism of partial loan guarantees to address the lack of collateral and insufficient credit history to cover regular business expenses that do not depend on changes in production. A weakness of this programme was the accessibility of micro and small agricultural producers (with an area of up to 100 hectares), which was not formally enshrined in the law.

In the OECD report on Ukraine, state support to agricultural producers, measured by the producer support estimate (PSE), is lower than in EU countries. The instability of this indicator has been noted in recent years due to fluctuations in market price support (MPS). It is worth noting the OECD's conclusion that PSE has stabilised somewhat in recent years, averaging 1.7% of gross farm receipts in 2019-21.

In recent years, average farmgate prices in Ukraine have been below international reference price levels, with MPS being negative, but with significant fluctuations depending on the commodity and time period. To some extent, this characterises the effectiveness of agricultural trade policy - the ability to stabilise producer prices. Thanks to tariff protection, domestic prices for meat products and sugar were above international reference levels, while prices for most cereals and milk were generally below world market levels. Certain commodities such as sugar, rye, and pork meat are the most supported, while some non-export-oriented cereals such as oats, millet, peas, and to a lesser extent milk and sunflower seeds are implicitly taxed.

One of the indicators of the OECD methodology is the General Services Support Estimate (GSSE), which characterises government support for infrastructure enterprises that provide services to agricultural producers. In contrast to the fluctuations in recent years in the PSE and CSE indicators of this methodology, the indicator of support for the agricultural infrastructure sector, which reflects the amount of annual gross budget transfers in cash to organisations providing services to agricultural production, is quite stable for Ukraine. An analysis of the structure of the GSSE indicator for Ukraine in comparison with other countries has shown that in Ukraine, the largest share of GSSE is occupied by support for the knowledge and innovation system in the agricultural sector. It is important

to note the significant share of budget expenditures on inspection, supervision and control in agriculture, which is much higher than in EU countries, which is typical for post-Soviet economies, where state control costs are significant in all sectors of the economy. Unfortunately, the share of infrastructure development, marketing and promotion of the domestic agricultural sector lags far behind the similar indicators of Western countries.

Budget support for producers, largely in the form of tax benefits and production support through short-term loans and fixed capital accumulation, accounts for less than 1% of gross revenues of agricultural enterprises, but has contributed to positive overall support for producers in recent years, including 2021. In total, in 2021, support was provided under the following programmes: livestock development and agricultural processing (UAH 1.6 billion); farming development (UAH 120.8 million); compensation for the cost of machinery (UAH 991.4 million); compensation for the interest rate on loans (UAH 1.2 billion).UAH 512 million); development of horticulture, viticulture and hop growing (UAH 512 million); compensation for lost crops (UAH 108 million); development of niche crops (UAH 50 million); development of potato growing (UAH 53 million); development of irrigation (UAH 16.7 million); compensation of unified social tax for farmers and employees and their families (UAH 0.6 million).

In 2021, 11,257 entities of all sizes and all organisational and legal forms, including individuals and legal entities, received funds under all programmes and areas. The largest programme in terms of budgetary resources was the State Support for Livestock Development and Agricultural Products Processing programme, which amounted to UAH 1609,572,928. The most popular programme among farmers in terms of the number of participants was the programme "Partial compensation of the cost of machinery and equipment of domestic production" - 5,533 recipients, as well as "Financial support for measures in the agricultural sector by reducing the cost of loans" - 4,434 recipients. In 2021, the total share of producers involved in support programmes was only 24%, which is higher than in previous years, due to the restriction on receiving budget funds per beneficiary under all programmes, including related parties, in the amount of UAH 60 million. The leader in terms of funds received was the capital Kyiv region with a total portfolio under all programmes of UAH 1081.0 million. Farmers in the mountainous regions of Chernivtsi, Zakarpattia and Ivano-Frankivsk received the least amount of money.

Agrarians in a number of regions used only 1 to 3 programmes out of the entire range of programmes (there are 11 of them)!

One of the important factors influencing agricultural policy in 2021, and the adequacy of the response to it, was the spread of the COVID-19 pandemic in 2020, which affected the development of global economic processes. In response to the most acute challenge of our time, the government has approved the State Programme for Economic Stimulation to overcome the negative consequences caused by restrictive measures to prevent the occurrence and spread of acute respiratory disease COVID-19 caused by the SARSCoV-2 coronavirus for 2020-2022.

The Programme declared measures to develop the agricultural sector in crisis conditions: ensuring broad access to financial resources for agricultural producers, ensuring uninterrupted sales of products, developing transparency in land relations and timely provision of administrative services.

One of the steps in the system of state regulation of the functioning of business entities in agriculture in 2021 was the implementation of the Resolution of the Cabinet of Ministers of Ukraine "On Measures to Stabilise Prices for Goods of Significant Social Significance, Anti-Epidemic Goods" No. 341 adopted in April 2020, which introduced state price regulation by declaring changes in retail prices for certain goods, including granulated sugar, certain categories of milk, eggs, poultry, butter and others. We hope that these are necessary steps that should be avoided as the impact of negative factors such as the pandemic or military operations eases. Measures were taken to promote the production and marketing of potatoes and vegetable products within the framework of the Concept of the State Target Programme for the Development of Industrial Potato Growing for the period up to 2025 No. 1345-p dated 21 October 2020 and the Concept of the State Target Programme for the Development of Vegetable Growing for the period up to 2025 No. 1333-p dated 21 October 2020, approved by the government.

As part of its agricultural policy, the NBU has implemented a number of measures to create conditions for the production, circulation and consumption of safe and high-quality food products that do not pose a threat to the life and health of consumers:

- The Procedure and Special Requirements for Labelling Food Products, which require the indication of the country of origin or place of origin, developed the following;
- measures to be taken immediately in case food and/or feed directly or through the environment pose a threat to human and/or animal health;
- requirements for food packaging and any materials that come into contact with food have been defined by bringing them in line with EU legislation;
- the Draft Law of Ukraine "On State Regulation of Genetic Engineering Activities and State Control over the Circulation of Genetically Modified Organisms and Genetically Modified Products to Ensure Food Security";
- the draft Law of Ukraine "On Amendments to Certain Laws of Ukraine on Food Products and Other Objects of Sanitary Measures" was developed to implement the EU trade quality standards for agricultural products and food products into national legislation in order to avoid technical barriers to trade, as well as to create a national system of geographical indications and other quality schemes for agricultural products and food products, the draft Law of Ukraine "On Peculiarities of Legal Protection of 9 specifications for the future geographical indications of Ukraine were created (SHABAG, FRUMUSHYK VALLEY, FRUMUSHYK LAMB, YALPUG, PRIDUNAYA BESSARABIA, ZAKARPATSKYI HONEY, ZAKARPATSKE WINE, KHERSONSKYI WATERMELON, ASHA-ABAG);
- EU standards in the field of animal health and welfare, as well as in the production,
 circulation and use of veterinary drugs were implemented;
- requirements for the welfare of farm animals during their keeping were introduced, including fattening and care, which will promote the practice of humane treatment of animals, improve their conditions of detention, preserve animal health and significantly reduce the risk of injury and suffering.

Measures were taken to stimulate organic production and circulation of products:

Legislative regulation of organic production, circulation and labelling of organic products in Ukraine was ensured, which complies with the requirements of EU law:

all 12 bylaws were adopted in pursuance of the Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labelling of Organic Products"; the legislative regulation of organic production, circulation and labelling of organic products in Ukraine was ensured in line with EU law:

all 12 bylaws were adopted to implement the Law of Ukraine "On Basic Principles and Requirements for Organic Production, Circulation and Labelling of Organic Products";

A legislative basis for providing state support to organic producers has been created.

At the end of 2016, the Cabinet of Ministers of Ukraine adopted the National Concept for the Implementation of the State Policy on Climate Change until 2030. In late 2017, the Cabinet of Ministers approved the Action Plan for the implementation of this Concept, and in July 2018, it approved the Strategy for a "carbon-free development" of Ukraine until 2050 (SLCD). The SLCD defines a coordinated approach by various stakeholders and provides a national vision for reconciling economic growth and social development with reduced greenhouse gas emissions. The goal of the strategy is to move towards a carbonneutral country by 2060, as set out in the National Economic Strategy 2030, approved by the Cabinet of Ministers in March 2021. The Strategy contains a separate section on the State Policy in the Agricultural Sector on Environmental Protection and Natural Resource Management in Agriculture, which aims to approximate and harmonise national legislation and policies with the EU Green Deal, introduce a national report on greenhouse gas emissions in agriculture, and introduce economic incentives for sustainable land use and soil fertility. The Law "On Principles of Monitoring, Reporting and Verification of Greenhouse Gas Emissions" will be applied from January 2021, reflecting Ukraine's obligations under international agreements, including the UN Framework Convention on Climate Change and the 2015 Paris Agreement. Ukraine's legislation on greenhouse gas emissions monitoring will be harmonised with EU legislation in line with the EU-Ukraine Association Agreement. Following the adoption of this law, the Ministry of Environmental Protection and Natural Resources (MENR) approved the Procedure for Maintaining the Unified Register of Monitoring, Reporting and Verification of Greenhouse Gas Emissions in June 2021.

According to the World Bank, Ukraine should be classified as a lower middle-income country. Among the main contextual features is a relatively large area of fertile land, which contributes to the development of diversified agriculture as the main sector of the economy compared to other countries. Ukraine's agriculture accounts for about 10% of GDP and about 16% of employment. Agri-food exports account for about 45% of

Ukraine's total exports. Almost 80% of agricultural land is arable, with the rest being hayfields, pastures and perennial plantations. In recent years, households have produced about 40% of crop production and 55% of livestock production in Ukraine. Rural households often focus their production on self-sufficiency, and part of their output is included in value chains, both domestically and for export. The corporate sector of agricultural production provides much of the remaining agricultural output, which is largely oriented towards foreign markets. Over the past five years, 2016-2021, the economy has grown steadily at 2.4% to 3.5% per annum, and inflation has declined after several economically difficult years (2012-2015) when GDP fell by almost 19% and inflation rose to 50%. In 2020, due to the COVID-19 pandemic and related economic turmoil, real GDP declined by 4% and inflation fell to less than 3%. The unemployment rate remained guite high at 9.5% in 2021. Ukraine is one of the world's leading producers of agricultural products, in particular grain (wheat, barley, corn) and vegetable oil (rapeseed and sunflower). Exports of agricultural products have been growing quite rapidly since 2000, with a slight slowdown in 2013-2015. In the structure of Ukraine's agri-food exports, a significant share is made up of raw materials and processed products for industry. Imports are more differentiated, with primary and processed products for final consumption accounting for about 70% of agri-food imports. This may create a balance of payments imbalance, but the agricultural balance of payments has always been positive.

It is worth noting that both agricultural production and factor productivity in the agricultural sector grew at rates significantly higher than the global average, by 2.8% and 5.6% per year, respectively, between 2012 and 2021. The share of agriculture in the country's energy consumption and greenhouse gas emissions has increased over the past two decades. In contrast, the average nitrogen balance has declined since 2000 and remains well below the European average.

An important component of agricultural policy is the policy of sustainable rural development. The analysis of this area has some specificity due to the institutional ambiguity of the state institution called to develop and implement a unified rural development policy. Some strategic decisions are made by the Ministry of Agrarian Policy (which did not exist until 2021), others by the Ministry of Community Development (which at the time of this report was merged with the Ministry of Infrastructure). Even today, we can still engage in a discussion about the centre for rural development strategy, or the appropriateness

of this issue within the framework of agricultural policy... Despite this, we still have a number of strategic documents on the regulation of rural development. Let us focus on a few: "The State Strategy for Regional Development for 2021-2027. Resolution of the Cabinet of Ministers of Ukraine of 5 August 2020 No. 695, "On Approval of the Concept of Rural Development". Order of the Cabinet of Ministers of Ukraine of 23 September 2015, No. 995-p, "On Approval of the Action Plan for the Implementation of the Concept of Rural Development". Order of the Cabinet of Ministers of Ukraine of 19 July 2017, No. 489-p.

In 2020-2021, as part of the implementation of the provisions of these documents, central executive authorities and local authorities and local self-government bodies took measures aimed at:

improvement of the quality of life of the rural population;

protection and conservation of natural resources in rural areas;

diversification and development of the rural economy;

improvement of the system of rural management;

provision of information and advice to people and businesses in rural areas.

For example, the Law of Ukraine "On the State Budget of Ukraine for 2020" allocated UAH 39.1 million to MinRegion, as the central executive body responsible for, among other things, the overall coordination of rural development, at the expense of a special fund, of which UAH 32.7 million was used to provide state support for improving housing conditions in rural areas.

In order to develop the network of healthcare facilities and improve healthcare services in rural areas, the Cabinet of Ministers of Ukraine adopted Resolution No. 983 dated December, 06, 2017 (as amended) approving the Procedure and Conditions for Providing Subventions from the State Budget to Local Budgets for Measures Aimed at Developing the Healthcare System in Rural Areas.

In most regions of the country, public roads, streets and communal roads are systematically inspected to include them in the list of road repair facilities of priority importance and subject to repair.

In order to improve the efficiency of cultural management at the local level, prevent unjustified reduction of the basic network of cultural institutions, destruction of cultural heritage sites and deterioration of the quality of cultural services provided to the population, the Ministry of Culture and Information Policy of Ukraine has developed a draft resolution of the Cabinet of Ministers of Ukraine "On Approval of Minimum State Social Standards for Providing Citizens with Cultural Services". The draft act proposes to approve minimum standards for the provision of cultural services to citizens, which define a basic set of cultural services, criteria and indicators for the implementation of these standards, as well as requirements for the premises and equipment of cultural institutions providing basic cultural services, including the organisation of networks of clubs, libraries, art schools, and cinema networks.

To improve the situation with the generation, accumulation, collection, storage and disposal of waste, which is characterised by the further development of environmental threats, the Ministry of Environment implemented a set of measures to reform the waste management system in 2021 and in previous years.

The Verkhovna Rada of Ukraine adopted in the first reading the Law of Ukraine "On Waste Management", reg. No. 2207-1 of June, 04, 2020.

With regard to the creation of new territories and objects of the nature reserve fund and the expansion of existing ones, the number of territories and objects of the nature reserve fund (hereinafter referred to as the NRF) of national and local importance increased by 119 units (currently 8,631 NRF units) with an area of 26 thousand hectares (currently 4.44 million hectares on land and 0.4 million hectares at sea) or 0.03% of the territory of Ukraine (6.8% in total). In particular, territories and objects of the nature reserve fund of national importance were created, including the Royal Beskydy National Nature Park (Lviv region).

In order to restore certain species of flora and fauna and their habitats, the Ministry of Ecology and Natural Resources approved the Action Plan for the Conservation of Sturgeon (Acipenseridae) in Ukraine for 2021-2030 by Order No. 391 dated 28 December 2020. The results of the flora and fauna inventory indicate that, on average, the flora of the NRF institution consists of 1195 species, including 721 species of higher plants, 45 species of flora are listed in the Red Book of Ukraine; the fauna of the NRF institution includes

an average of 1121 species, including 48 species of mammals and 180 species of birds, 76 species of fauna.

The State Strategy for Regional Development for 2021-2027 envisages a number of tasks in the area of "Development of Engineering Infrastructure", in particular, to expand the practice of public-private partnerships to attract investment in the technical re-equipment (modernisation) of the engineering infrastructure of housing and communal services (including the introduction of modern technologies and equipment in the areas of water supply, sewage, heat supply, and solid waste management).

To prevent and reduce the discharge of contaminated substances into surface and groundwater in the regions, the Group built and reconstructed sewage treatment plants and developed design and estimate documentation for the construction of treatment plants using the latest technologies and equipment in rural areas.

The Ministry of Economy, together with the European Commission's project "Support for the Development of the Geographical Indications System in Ukraine", has been working on pilot projects to diversify and develop the rural economy and promote green and rural tourism in rural areas producing products with special geographical indications:

"The Taste of Prykarpattia Road";

"The Road of Wine and Taste of Transcarpathia";

"The Road of Wine and Taste of Ukrainian Bessarabia".

The majority of the population in rural areas is engaged in agriculture, and more than 90% of them are small producers, farmers and rural households. That is why the Government of Ukraine considers the policy of supporting the development of small businesses in rural areas to be a component of the rural development policy. Comprehensive support of agricultural producers remains a priority for the state. The support includes a number of programmes and areas, some of which focus on small producers.

In order to meet the needs of farmers in obtaining information on state support programmes, quality consultations, in particular on agricultural production technologies, the formation of value chains, the creation and operation of family farms and agricultural cooperatives, the areas of use of budget funds provided for in the state budget under the

programme "Financial support for agricultural producers" in the direction of financial support for the development of farms include In 2020, under this budget programme, 43 farms received advisory services from advisory services of Vinnytsia, Dnipro, Kirovohrad, Poltava, Ternopil and Kharkiv regions for a total amount of UAH 286.6 thousand.

Conclusions

Based on the analysis of the overall economic and social situation of the Ukrainian agricultural sector, as well as the system of special indicators, a set of measures over the recent period, including 2021, which we will classify as agricultural policy, including support for agricultural production, agricultural trade and rural development, ensured the overall economic growth of the agro-industrial complex. This became the basis for the formation of social and environmental added value, which together increases the sociocultural added value of Ukraine and the Ukrainian peasant on the world stage. In particular, this included:

- efforts and movement towards improving fair land relations;
- development of a modern understanding of agricultural production based on the principles of sustainability;
- ensuring food security through a stable supply of quality food with an increasing level of safety and quality;
- improving the system of informing Ukrainians about food as part of consumer protection;
- making efforts to strengthen environmental protection, embracing the principles of the recycling economy and the Green Deal strategy.

At the same time, Ukraine's agricultural policy should become systematic, based on the principles of policy-making inherent in the European Union, given the European integration course and the status of an EU candidate. At the same time, it should retain its subjectivity and confirm its place and importance in global agricultural markets. This is possible if the current legislation of Ukraine is harmonised with the EU legislation, the principles of policy development and implementation are converged, and common European values are adopted.

Agricultural policy should ensure a higher level of sustainability of the agricultural sector, especially in the context of the European Green Deal and the farm-to-table strategy. It should be based on the standard of living of the peasant and the conditions for realising the economic goals of agricultural producers.

The policy should be harmoniously integrated into Ukraine's national economic and sustainable development policies. This will strengthen the support and promotion of environmental goals, and facilitate progress towards more ambitious climate, information, technology and social goals.

Ukraine's agro-industrial complex needs to review and reform its overall strategy system, which will allow it to assert its subjectivity and technologise more ambitious global goals.

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