

PROBLEMS AND PROSPECTS OF THE MARKET OF FODDERS FOR ANIMAL HUSBANDRY IN UKRAINE

Liudmyla HNATYSHYN¹, Oksana PROKOPYSHYN¹, Kateryna PYLYPENKO²

¹Lviv National Environmental University, Faculty of Management, Economics and Law, Department of Accounting and Taxation, 1, V. Velykoho Street., Dubliany, Lviv Region, 80381, Ukraine, Phones: +380673416399, +380972271208; E-mails: gnatluda@ukr.net, os378@ukr.net

²Poltava State Agrarian University, Faculty of Accounting and Finance, Department of Accounting and Economic Control, 1/3 H. Skovorody Street, Poltava, 36003, Ukraine, Phone: +380506913842; E-mail: pilipenko.katya@yahoo.com

Corresponding author: gnatluda@ukr.net

Abstract

The research is devoted to studying the problems of fodder production in Ukraine, which are caused by the mismatch between demand and supply, impact of the world grain prices on the pricing processes in fodder production, disparity of prices of agricultural and industrial products, weak innovative activity of enterprises engaged in fodder production, low purchasing capacity of agricultural enterprises and population. It is determined that the balance between demand, supply, competition, state regulation, level of infrastructure development positively influences development of commercial fodder production. The work identifies participants of the fodder market (producers, consumers, intermediaries) and their features. The research outlines the dynamics of fodder production and tendencies of relationship between the volume of fodder production and the stock of agricultural animals and poultry. The authors of the work composed a model of fodder market performance in Ukraine. It is noted that fodder market can be regulated by such instruments as marketing, institutional support, state support, cooperation and clusterization.

Key words: market, fodder, demand, supply, animal husbandry, fodder producers, fodder consumers.

INTRODUCTION

Effective development of animal husbandry, increase of agricultural animal productivity and reduction of animal product costs greatly depend on the science-based feeding because in the structure of material costs of agricultural enterprises, almost 22% is taken by fodder costs, whereas at the farms, the figure reaches 7% [1, p. 124; 5, p. 13]. Development of fodder production for agricultural animals in Ukraine happens in compliance with the global tendencies and requires close cooperation and radical steps concerning the fodder market deregulation. Nowadays, animal husbandry is developing in two sectors of agricultural commodity producers (corporate and individual). Therefore, the fodder market entities include all categories of agricultural enterprises, farms of population and enterprises, engaged in commercial production of feed for animal husbandry. Moreover, structural and industrial

distortions in the Ukrainian agrarian sector cause the highly competitive market environment, in which enterprises of animal husbandry and fodder enterprises are forced to build their effective business. Under such conditions, all entities of fodder market should develop approaches and apply principles, which would support the growing competitiveness, including at the foreign market.

Thus, considering the current problems of animal husbandry and commercial fodder production, which are related with the disparity of prices of agricultural and industrial products, low purchasing capacity of some agribusiness entities and population, poor investment activity of agricultural commodity producers, slow adaptation of agricultural enterprises to the conditions of the competitive environment performance, it is necessary to conduct more researches on fodder market, to study available mechanisms and instruments of formation of the fodder

base of agricultural commodity producers on the fundamentals of partnership relationship between the fodder market participants.

MATERIALS AND METHODS

A complex of methods of scientific knowledge has been applied to shape theoretical and applied aspects of the research on the fodder market development and its importance in formation of the resource supply for agricultural commodity producers of Ukraine. A system approach of research was used for decomposition of the fodder market, identification of the mechanisms of its elements interaction; methods of induction and deduction – for consolidation of the phenomena and processes, related with development of the domestic fodder market; abstract and logical – for identification of characteristics of the fodder market consumers; comparison – for determination of the tendencies of fodder production and stock of agricultural animals and poultry, bred by all categories of agricultural commodity producers in Ukraine; modeling – for shaping a scheme of the fodder market performance; graphical – for visual presentation of the research material; SWOT analysis – for identification of strengths and weaknesses, opportunities and threats at the fodder market in Ukraine. The information base of the research is made by the official data of the State Statistics Service of Ukraine; scientific works; Internet resources; personal studies of the authors.

RESULTS AND DISCUSSIONS

A priori, any economy can be effective if it performs in compliance with the market laws, involving competition, free flow of commodities and information, dominating economic freedom and equality of all business entities. Therefore, the issue of market as an economic category attracts attention of many Ukrainian researchers. In scientific works, the category of market is interpreted as a multi-aspect and multi-variant one. Dudar V.T. insists that market is an effective mechanism to satisfy demands of commodity producers

and requests of consumers, whereas its most important property is that it acts as a sensitive regulator and coordinator of the system of commercial efforts of entrepreneurs, focused on production and sale of competitive goods and services [2]. However, similar to all markets, the fodder market is influenced by different macro and micro economic factors. The main ones, which outline the prospects of commercial fodder production development include demand, supply, competition, state impact on the branch development, infrastructure [13, p. 13].

Definitely, the role of the state in the market relations regulation, including fodder one, is significant. Scientists identify gaps in the sphere, particularly they stress that the vectors of the state impact are mainly focused on development of unattainable projects of the market development, issues of registration and certification of fodder products and their components, whereas ignore regulatory mechanisms of recovery of the domestic demand for mixed fodder and stimulation of the export of grain processing products with high added value [9, p. 387-388; 10, p. 13]. Moreover, in no uncertain terms, development of fodder production is of crucial importance for recovery of animal husbandry as a branch, which is a key component of the economic independence and food safety of Ukraine [4, p. 287]. Therefore, scientists mention that a cluster system as a promising organizational structure among the directions of development of the Ukrainian commercial fodder production [6, p. 36].

The task of the research is to study the tendencies and main parameters of the fodder market in Ukraine, to identify a complex of problems of its development and to shape recommendations on application of the regulatory measures, focused on solution of the problems of the fodder market performance.

In economic sense, market is a specific sphere of goods and services exchange, an area of appearance and exercising of the relations, related with the process of purchase and sale of goods, their promotion from producers to consumers. Therefore, market can be

characterized as a mechanism of producers' and consumers' need satisfaction.

Adequate performance of fodder market is primarily determined by proportion of its elements, achievement of the appropriate balance, particularly of demand and supply. It results in creation of favorable conditions both for fodder producers and for consumers, i.e. farms of population and agricultural enterprises, engaged in animal husbandry. Supply at the fodder market is determined by the volume of forage grain and bulky feed; products of processing of mixed fodder, flour, sugar beet, oil and fat industries. That list is supplemented with the products of chemical industry, i.e. fodder additives. The fodder producers supply the amount and quality of fodder that is demanded by consumers. Demand for fodder is shaped under the impact of many factors, including price (demand price elasticity). The number of buyers at the market is also of great importance, as well as expected changes of prices; level of income of a definite category of consumers, which shapes the purchasing capacity of both agricultural commodity producers and farms of population, etc.

Therefore, the main constituents of the fodder market, similar to any other market, are demand and supply. Their variation causes changes both of the level of fodder production and consumption of it. Supply at the fodder market depends on a complex of factors and is

mainly made by domestic production and partial import. Demand for the products of commercial fodder production is made by some groups of consumers, which can be classified into groups according to the level of production organization and scales of activities. Producers of animal products create the largest group of the fodder market participants. In Ukraine, the group is divided into two subgroups. First, it is the main producers, which represent agricultural enterprises of different types and sizes including family farms. The second subgroup is represented by farms of population. Nowadays, there is also the third group of the fodder market participants that it is not well developed, but is rather dynamically developing, i.e. intermediaries. They perform different functions depending on the position, they take in the chain of fodder delivery from producers to consumers. A particular role is played by wholesale markets. Each of the mentioned groups has some specific characteristics of demand and opportunities of their sale (Figure 1). The researches, conducted by the authors of the article, confirm that development of the forage grain and mixed fodder market is influenced by all mentioned categories of consumers. In contrast, at the market of roughage and succulent feed, demand is determined only by farming enterprises and large animal complexes that belong to agroholdings.

Group of consumers	Demand characteristics	Ways of demand satisfaction
Farms of population	Low demand for forage grain and mixed fodders	Individual purchase of fodders in small amounts
Agricultural enterprises, farming enterprises, family farms	Demand for all kinds of fodder depends on the farm size in terms of land use, structure of lands	Purchase at agricultural stocks, markets of agricultural products Personal production Production in cooperatives
Large animal complexes in the structure of <u>agroholdings</u>	Permanent and high demand for all kinds of fodder	Purchase at the market Production at one of the vertical levels of <u>agroholdings</u>

Fig. 1. Characteristics of consumers at the fodder market

Source: composed by the authors.

Production of concentrated fodders, i.e. forage grain, mixed fodder, coarse meal, seed cake, is the most developed constituent of commercial fodder production in the world and in Ukraine. Depending on the direction of animal husbandry, agricultural enterprises are engaged in, they create demand for some kinds of fodder products. Therefore, producers of milk and cattle meat generate the demand for green and coarse fodder, as well as hayage silage and mixed fodder for cattle. However, they are less interested to but forage grain. Producers of pork prefer mixed fodder and premixes for pig farming. Producers of eggs and poultry mostly buy forage grain and mixed fodder for poultry. However, it is worth

noting that impact of all groups of consumer categories on the fodder market depends not on their quantity, but on the stock of agricultural animals and poultry they feed.

Intensive growth of the stock of pigs and poultry in 2012-2013 by all categories of agricultural producers (Figure 2) contributed to an active increase of the volume of fodder production in that period. Nowadays, fodder supply exceeds the demand at the free market. The main factor hindering development is the dynamics in animal husbandry, which is positive but still is not able to follow the rates, expected by investors, when they built new plants of fodder production for agricultural animals.

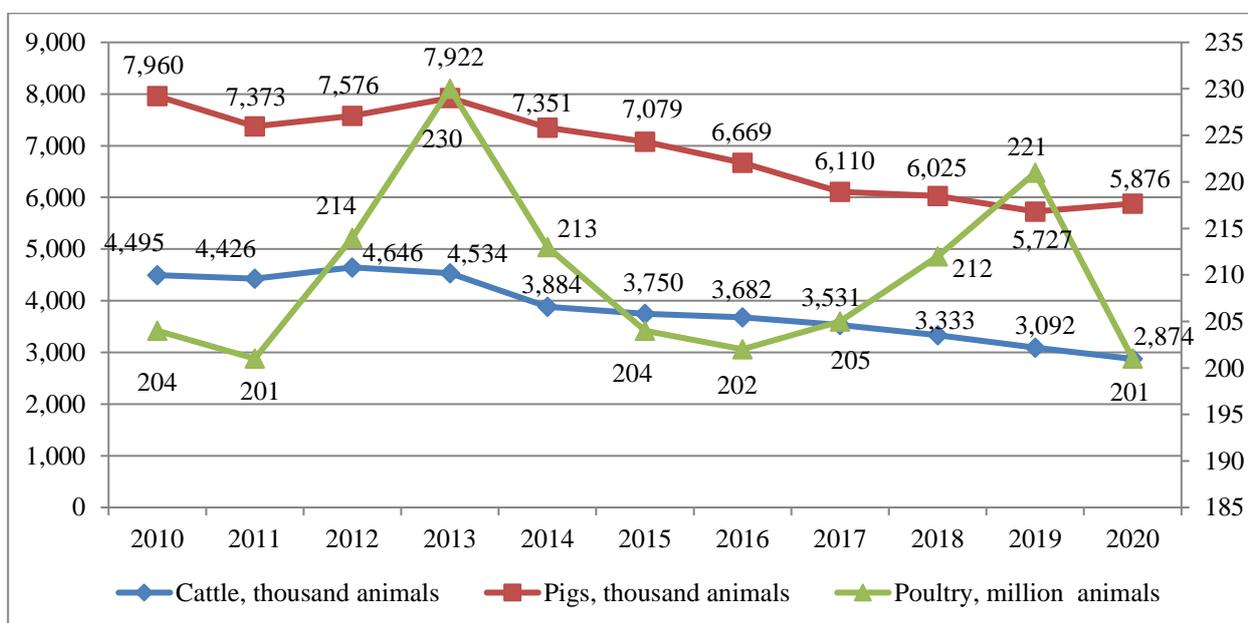


Fig. 2. Dynamics of the stock of agricultural animals and poultry, fed by all categories of agricultural commodity producers in Ukraine

Source: composed according to [1, p. 124]

In Ukraine, producers of fodder for animal husbandry are divided into two subgroups, namely enterprises, specialized in commercial production of fodder, and agroholdings, which have units of fodder production for agricultural animals in their organizational structure. Specialized enterprises of fodder production create a group of the fodder market participants. Fodders are produced both by small and large enterprises, which are based on different forms of ownership. Farms, which have no their production of mixed fodders, are forced to buy them at market

price. Deficit of current assets restricts opportunities of small farms to buy fodders. Therefore, farmers often use forage grain or simple mixtures of grain to feed animals. It causes reduction of the livestock productivity and fodder conversion and as a result, increase of production costs.

In Ukraine, the structure of mixed fodder production follows the trends of animal husbandry development. The most affordable products for population include chicken and eggs, because the effective demand of Ukrainians is currently not high enough to

buy beef and pork. Because of such economic situation, the chicken stock shows a changeable dynamic, whereas the stock of pigs and cattle is steadily decreasing. As a

result, outcome of mixed fodders for poultry increases, whereas production of fodders for pigs goes down (Table 1).

Table 1. Production of ready fodders for agricultural animals, thousand tons

Fodder kind	Year							2019 as compared to 2013, %
	2013	2014	2015	2016	2017	2018	2019	
Ready fodders (but for premixes) for pig feeding	1,789	1,391	1,402	1,210	1,226	1,232	1,236	69.1
Ready fodders (but for premixes) for cattle feeding	717	720	730	782	724	701	744	103.7
Ready fodders (but for premixes) for poultry feeding	4,235	3,937	3,895	3,899	4,091	4,534	4,322	102.1

Source: calculated according to [1, p. 64]

The stock of animals and poultry and the directions of animal husbandry development influence the volume of fodder production and its structure. According to the results of 2019, fodder production in Ukraine (but for premixes) accounted for 6.3 million tons. Such result is the lowest one for the last six years. In 2013, fodder production accounted for 6.7 million tons, whereas until 2019, it reduced by 6% or 402.7 thousand tons. It is worth noting that international production of fodders also reduced by 1.07% (up to 1.13 billion tons).

In 2013-2018, the volume of fodder production for poultry steadily increased. The growth happened along with the intensive development of commercial poultry husbandry and transition of small producers to advanced technologies in feeding: they started to use mixed fodders instead of unbalanced vegetable mixtures. However, in 2019, fall of fodder production was caused by reduction of demand for those products because of the radical reduction of the stock of poultry in that year, i.e. by 19.8 million animals as compared to 2018.

Agricultural products are used as raw materials for the further processing and production of fodders at specialized enterprises. Dynamics of the gross yield of cereals confirms the available powerful raw material base in Ukraine that is beneficial for the mixed fodder industry development. In 2020, the volume of grain production

increased by 65.3% as compared to 2010. In 2010-2020, among the forage grain crops, the best results were shown by the gross yield of corn – 2.5 times. According to the export demands, along with the permanent growth of corn production, one observes a tendency to reduction of production of other forage grain crops that is forced by fall of domestic consumption. Thus, in the studied period, production of spring wheat reduced by 2.6%, rye – by 1.7%. barley – by 10.0% [1, p. 79, 90].

Among the enterprises, specialized in commercial fodder production but are not in the structure of agroholdings, the leading position is taken by Yednist Group, which has seven production enterprises in its structure. The last plant of the group of companies started its operation in autumn 2014 with the production capacity of 180 thousand tons of mixed fodder annually. Another powerful player at the market is Kyiv-Atlantik Ukraine PJSC – 90 thousand tons of granular mixed fodder annually. In addition, there are other players at the market, like Tsekhav Korm LLC, AVA Group and others.

In the structure of mixed fodder production, the largest share is taken by the products for poultry (almost 56%) and pigs - 20%, 11% of fodders is produced for cattle and 12% - for other animals. Considering the fact that almost half of all fodders are sold for poultry, the market is very sensitive to the situation in the industry. Nowadays, it experiences some

deficit of growing birds because of shutdown of the enterprises in the east of Ukraine and logistic problems with the breeding poultry farms in the annexed Crimea. Some powerful producers of chicken eggs have radically reduced their stock of poultry due to such situation. Broiler direction performs only due to large operators, which have personal breeding herds [12, p. 13]. The branch of pig farming also experiences consolidation of the market that results in shutdown of small low-profitable farms and increased scales of pork production in the structure of large enterprises and agroholdings [3, p. 162].

Individual farms of population still are a promising and unfilled niche for fodder producers. Nowadays, they feed a lot of cattle, poultry and pigs using unbalanced diet. The negative factor, hindering development of that market is the low culture of mixed fodder use. Obtaining cereals as payment for their land and property shares, population feed poultry with the whole grain or meal the forage grain into the stock feed. Therefore, popularization of knowledge on composing diets for different groups of animals is the actual task to solve the problems of fodder production. It will contribute to an increased demand for the products of commercial fodder production. However, the authors of the research consider that it is rather risky for the entities of commercial fodder production to reckon only upon the market of the farms of population. Export of feed for agricultural animals is also limited. Currently, Ukraine exports fodders to Moldova, Georgia, Turkmenistan. Despite the competitiveness of fodders, European market is closed for Ukraine, because in the European countries with developed animal husbandry and poultry farming, there is a great number of local fodder producers. The developed infrastructure of modern foreign innovative productions secures high competitiveness of the products of fodder production. Therefore, at the foreign market, the competition is severe.

Nowadays, Ukrainian commercial fodder production is in stagnation. Besides the mentioned reasons, there are some other factors, which negatively influence the dynamic development of fodder market. In the

last 8 years, costs of fodders in Ukraine increased five times [8]. A rapid rise of prices of the purchased fodder due to the rise of prices for grain will definitely result in unprofitable animal husbandry. Rates of increase of the sale prices for animal products do not cover the inflation growth of costs for their production even at the enterprises with high indices of animal productivity. Under such conditions, without significant reduction of the purchasing prices of beef and pork, animal husbandry will make loss. However, the prices of poultry products are dependent on the purchasing capacity of population, which is still low.

Such situation causes much concern of the medium-size and small agricultural enterprises, i.e. producers of chicken meat and pork. The rise of prices of grain and fodder forces them reconsider their business strategies with the focus on reduction of livestock and poultry, or total shutdown of the direction. Thus, it produces the situation when some Ukrainian agricultural enterprises, engaged in crop production, get permanent profit from grain export, whereas others are ready to wound up their production. Increased prices of grain due to a high demand at the foreign market, including forage one, which is used for fodder production, significantly influence the price of meat, eggs and many other food products, because the costs of mixed fodder take 65-70% in the structure of costs of the poultry and pig farming products [7]. Under the high demand for grain abroad, the domestic supply is reduced that is another reason for increase of grain price. Therefore, uncontrolled export of corn and grain is an indirect reason of stagnation in commercial fodder production and loss making of animal husbandry. In such situation, participants of the domestic grain market create artificial scarcity. Thus, it results in increased prices for exporters, producers and consumers of fodders.

In such conditions, small and medium-size producers of chicken meat and pork can hardly compete either at foreign markets or even with large companies inside the country. Every year, the number of agricultural enterprises, engaged in pig farming, reduces

by 200-500 units. Small operators with the stock of less than 2 thousand animals leave the sector [3, p. 163]. It is primarily the agricultural enterprises, which run situational pig farming (e.g. waiting for favorable prices at the market), feel problems with current assets, do not invest in the measures on improvement of biosafety and efficiency of production and therefore, they are not competitive. Reduction of the industrial stock of pigs in the country may result in weaker supply of meat and higher prices, both purchasing and retail.

Nevertheless, due to a growth of personal herds as well as pig and poultry stock, almost all agrohholdings have recently increased fodder production. Among agrohholdings, the largest producers of mixed fodders in Ukraine are the enterprises, which belong to large animal husbandry complexes, particularly affiliate of Domestic complex of fodder production of Vinnytsia poultry plant LLC, Myronivskiy plant of cereals and mixed fodder production PJSC, APK-Invest PJSC, Yasensvit LLC. Agrohholdings mostly develop that direction to supply their personal production with fodders. A significant share of mixed fodders (above 60%) is produced by large market operators, i.e. vertically integrated enterprises, which have mixed fodder production in their structure, e.g. MKhP, Agromars Complex LLC, Agro-Oven Corporation, Agrarian Holding Avangard Group, Inter-Agrosystems Group, Dniprovskiy poultry complex [11]. Almost total volume of fodder products, they produce, is used to satisfy personal needs. Therefore, mixed fodder production in their structure is stable and planned, and its volume depends on the scale of production of animal and poultry products inside the agrohholding. The named companies possess large animal complexes, which need permanent and planned supply of fodders. It is economically beneficial to use mixed fodder of own production instead of buying them. It is particularly good for the enterprises with large volume of feed consumption. Moreover, use of own fodders provide guaranties of the raw material origin and quality of products.

The market of feed for agricultural animals is a local system of commodity-money relations, focused on production and sale of fodders for agricultural commodity producers to support reproduction of animal husbandry. However, one should remember that the fodder market covers the sphere of commodity exchange between agriculture and other entities of macro environment, i.e. enterprises, running commercial production of fodders. The local character of fodder market requires consideration of its regional features. It is primarily caused by geographic, climatic and economic peculiarities of different regions of Ukraine, in particular the regional character of animal husbandry and therefore, by the demand for certain kinds of fodders. The local nature of fodder production suggests the majority of produced fodders is consumed in the very region, where the corresponding infrastructure is created. Energy problems and significant transport costs contribute to some closeness of the regional fodder markets.

In the segment of mixed fodder and premix production, the majority of large producers is located in the Central Ukraine. Many of them are also placed in the Western Ukraine, but their share in total production is smaller. The main reason of such distribution is in traffic closeness to the largest animal breeding enterprises. The largest consumers of mixed fodders and premixes for pigs and cattle include enterprises and farms of the Western region. It can be explained by the geographic, climatic and industrial features, as in the Western Ukraine, industry is less developed.

Results of the conducted researches are shaped into a matrix of SWOT-analysis of the fodder market in Ukraine, demonstrating the market opportunities and threats, as well as strengths and weaknesses (Table 2). The matrix of SWOT-analysis shows that threats and weaknesses considerably exceed opportunities and strengths. To reduce the effect of threats and intensification of weaknesses of the further development of fodder market, agricultural enterprises should take more efforts to find reserves on reducing costs of the animal husbandry production due to cheaper feed diets, based on the use of by-products of processed corn, sunflower, rape,

brewing, flour milling and other food processing industries.

The most important property of the fodder market in Ukraine is that it is a sensitive regulator and coordinator of the system of

commercial efforts of both agroholdings and entities of commercial fodder production, focused on production and sale of competitive fodder products.

Table 2. SWOT-analysis of the fodder market in Ukraine

	Strengths	Weaknesses
Internal environment	<p>Available powerful raw material basis in Ukraine for development of the mixed fodder industry.</p> <p>Available own capacities for mixed fodder production due to such market entities as independent specialized mixed fodder enterprises; vertically integrated agroholdings; small and medium-size enterprises; feed preparation shops.</p> <p>Independent growing of fodder and grain crops by agricultural enterprises for the further processing and formation of cheap fodder supply.</p>	<p>Lack of fodder production cooperation in the environment of farming enterprises.</p> <p>Small agricultural enterprises and farms of population prefer using unbalanced fodder of personal production.</p> <p>Lack of the market of composed diets for animal husbandry.</p> <p>Reduction of the stock of animals and poultry.</p> <p>Concentration of fodder production in the vertically integrated agroholdings.</p> <p>Poor use of innovations in fodder production.</p> <p>Low competitiveness of fodder production.</p> <p>Circularity of the regional fodder markets and underdeveloped infrastructure.</p>
	Opportunities	Threats
External environment	<p>Maintenance of the current development tendencies at the market of mixed fodder and premixes in Ukraine in the medium-term prospect.</p> <p>Extension of the channels of meat and dairy product export.</p> <p>Growing demand for forage grain, products of soy bean processing, sunflower meal and mixed fodder at the global market.</p> <p>Development of the market of organic fodders.</p> <p>Growing demand for the products of commercial fodder production due to promotion of knowledge on the ways of animals and poultry feeding.</p> <p>Development of a chain of retail trade by specialized fodder producing enterprises and agroholdings.</p>	<p>Low purchasing capacity of farms of population and farming enterprises.</p> <p>Poor state support for animal husbandry enterprises and small fodder producers.</p> <p>Rise of the global grain prices and direct dependency of fodder costs on the world grain prices.</p> <p>Increased costs of energy sources.</p> <p>No arranged integration relations between fodder producers and agricultural enterprises.</p> <p>High competition at the foreign market and restrictions on fodder export.</p> <p>Uncontrolled export of forage cereals.</p>

Source: own concept.

The analysis provides a reliable consumer assessment of produced or supplied fodder. Therefore, effective performance of fodder market is possible under sufficient effective consumer demand and coordination of supply by applying such instruments of impact as marketing, institutional supply, state support, cooperation and clusterization (Figure 3).

Institutional supply should primarily contribute to creation of the appropriate conditions for development of a full-fledged infrastructure of the fodder market and availability of significant mechanisms to execute the antimonopoly laws in order to secure equal conditions for all fodder market entities to compete and influence pricing of

feed products. The mechanism of state support should maximum liquidate the effect of human factor in funds distribution.

Marketing information system of fodder production should be rearranged to satisfy demand of consumers under simultaneous effective activity of all structures of the fodder market and should be based on a deep analytical study of it. It should be characterized by availability of all necessary information on the fodder market with the following financial investments for its expansion. Cooperation and clusterization should be used as the additional instruments to increase efficiency of operation of all fodder market entities and to regulate

dependency between demand and supply. However, the best positions are taken by the enterprises of fodder production, which are able to rearrange their production depending on the customer needs and to produce a wide range of fodder with different receipts for different groups of animals and poultry. In the recent years, due to development of organic animal husbandry and increasing demand for organic products in Ukraine, the country experiences start of the market of organic fodder market. Transition to organic standards takes long time (minimum three planting seasons) and needs organic certification. Therefore, enterprises engaged in production of organic animal production use their own fodders, which are grown immediately at the farms, because they are absent at the market of Ukraine. Thus, Saryi Porytsk LLC company got the Organic Standard Certificate

for their animal production. Nowadays, the enterprise produces cheese and dairy products. It has partnership agreement with the Swiss Research Institute of Organic Agriculture (FiNL). For organic animal production, it is important to provide the appropriate feeding base, because fodders should be organic. They include corn starch, haylage from grasses and legumes, hay. The enterprise makes concentrated fodders of grain and legumes. It is forbidden for organic farms to buy fodders and feeding additives, which are not certified for organic animal production. Therefore, the winter diet mainly consists of hay, silage, haylage, concentrated fodders, whereas in summer – it is grazing and green mass. The share of costs for buying fodders in the total costs of organic milk production accounts for 48.7% and in the last three years it has increased by 33.8%.

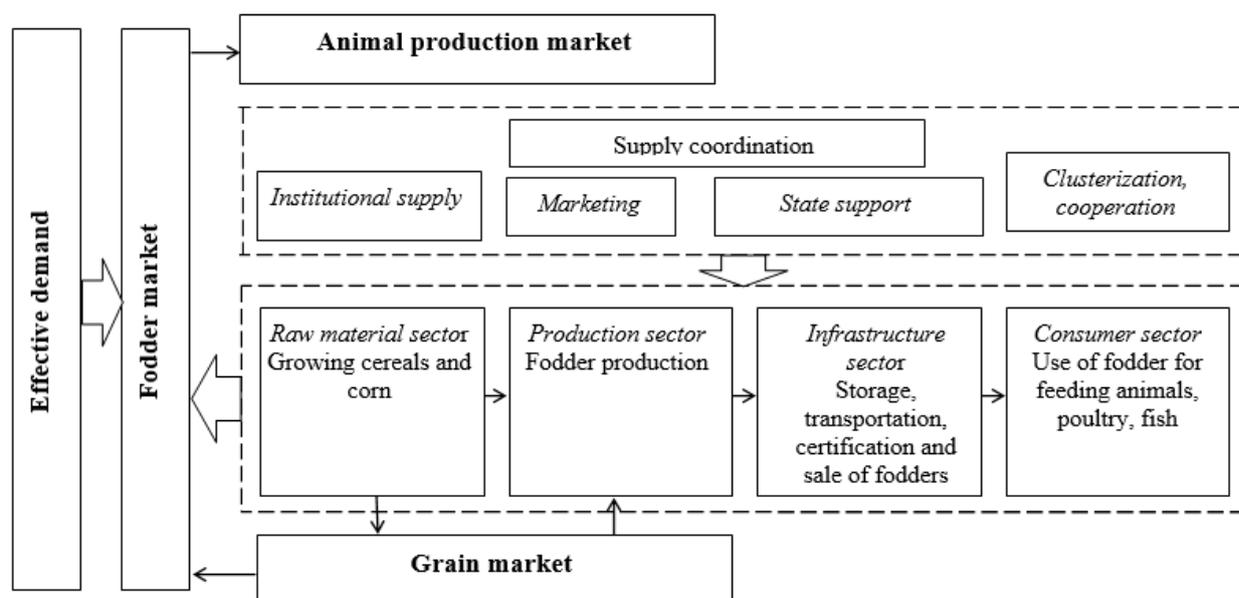


Fig. 3 Model of the fodder market performance in Ukraine
 Source: composed by the authors.

CONCLUSIONS

Fodder market reflects the tendencies in development of animal husbandry and poultry farming and it influences pricing in the industry.

In Ukraine, the modern fodder market is characterized by fluctuating dependency between demand and supply. A relative balance of them will primarily depend on the

general economic growth, rise of the level of effective consumer demand, active participation of market institutions and appropriate performance of the mechanisms of supply coordination. A regulated fodder market will effect reduction of the amplitude of changes of demand and supply dependencies, as well as stabilization of the stock of agricultural animals.

The focus on domestic demand and severe competition with agroholdings and local producers are the preconditions for inefficient use of the production potential of fodder market, reorientation and bankruptcy of specialized enterprises, reduction of tax revenues that does not meet the national interests and requires governmental regulation. The fodder market development is greatly influenced by direct (privileges for commercial producers of fodders, funding of equipment leasing for new fodder producing enterprises, etc.) and indirect impact of the state in the form of governmental support of animal husbandry. To cease the rise of fodder prices that happens due to the impact of the world grain prices, the government should introduce quoting of grain export.

Problems of fodder market are caused by application of inefficient technologies, obsolete machinery, significant losses of products and therefore, high costs of fodder production by feed preparation shops at agricultural enterprises. The deficit of land area for growing fodder crops, sometimes insignificant needs for fodders at agricultural enterprises, inexpediency of purchasing and servicing of expensive fodder-harvesting machinery and equipment for fodder production confirm consumers' interest in the fodder market development.

REFERENCES

- [1]Agriculture of Ukraine: Statistical yearbook for 2020, 2021, Kyiv: State Statistics Service of Ukraine.
- [2]Dudar, V.T., 2008, Establishment and development of the market of competitive agroindustrial products. Candidate of Sciences. Ternopil National Economic University.
- [3]Hnatyshyn, L.B., 2019, Tendencies of pig husbandry in the organizational structure of agrarian production. Market infrastructure, 2019, 33: 160-165.
- [4]Hrabchuk, I.F., Buhaichuk, V.V., 2017, Priority directions of fodder base development. Global and national problems of economics, 16: 287-290.
- [5]Ibatullin, M.I., 2017, Fodder supply as a basis of efficient pig husbandry in Ukraine. Economics and state, 10: 13-16.
- [6]Kropyvko, M.M., 2015, Development of fodder production at population's households. Economics of AIC, 2015, 11: 35-44.
- [7]Kurkul.com, 2020. Why fodder is getting more expensive and how to manage it?

kurkul.com/spetsproekty/918-chomu-dorojchayut-kormi-i-scho-z-tsim-roboti, (in Ukrainian). Accessed on 9 October 2021.

[8]Latifundist.com, 2021, Uncontrolled growth of prices for grain – the main problem of mixed fodder market. latifundist.com/interview/601-nekontrolovanij-rst-tsn-na-zerno--golovna-problema-rinku-kombkormv-maksim-nedashkvskij, (in Ukrainian). Accessed on 7 October 2021

[9]Lypchuk, V., Hnatyshyn, L., 2019, Competitive advantages of farming enterprises in Ukraine: a methodic approach to diagnostics of the added value of products. Management, Economic Engineering in Agriculture and Rural Development. 19(3): 387-392.

[10]Nikishyna, O., 2015. Domestic market of fodder products. Bulletin of KNTEU, 2, pp. 133-148.

[11]Pro-Consulting, 2019. Analysis of the mixed fodder and premix market in Ukraine: we feed what we eat. pro-consulting.ua/ua/pressroom/analiz-rynka-kombikormov-i-premiksov-ukrainy-cho-kushaem-to-i-kormim (in Ukrainian). Accessed on 10 October 2021.

[12]Prokopyshyn, O.S., 2019, Support for competitiveness of the products of domestic poultry enterprises. Bulletin of Sumy National Agrarian University: economics and management, 1: 11-15.

[13]Voronetska, I.S., Skrypchuk, N.A., Kravchuk, O.O., 2018, Prospects of development of commercial fodder production in Ukraine. Ahrosvit, 2018, 3: 12-18.