

FORMATION OF AN EXPORT STRATEGY FOR THE DEVELOPMENT OF BEEKEEPING INDUSTRY IN UKRAINE

Alla Chmil

National University of life and environmental sciences of Ukraine

Global Economics Department

Office 301, Educational building № 10, 11 Heroyiv Oborony street,

Kyiv, Ukraine

e-mail: Alla.chmil@ukr.net

Abstract

The current state and problems of the development of the beekeeping market in the field of the globalization of agro-food markets are investigated in the article. The domestic and foreign markets of beekeeping products, main commodity producers and production volumes in the industry are analyzed. It is established the achievement of success on a current globalized competitive economy is possible. For this purpose Ukraine needs to meet the following certain conditions: saving of ecologically friendly and qualitative parameters of beekeeping production, effective organization of agribusiness and the use of modern marketing tools. This will improve the competitive position on the global market. For now, the best strategy for domestic commodity producers is the protection of acquired positions but in the long term perspective it is necessary to gradually move to the strategy of the growth. In order to achieve the set goals, the destructive influence of macro-environment factors which determine the limited capacity of the domestic market of beekeeping and the inability in certain conditions to have a full-fledged export-oriented orientation of the industry was outlined. The main directions of building an effective export strategy of the beekeeping industry of Ukraine and solving existing problems which inhibit this process are found and proposed.

Keywords: *Beekeeping, family households, profitability, productivity, export strategy*

JEL classification: *C59, D10, F60, Q17*

1 Introduction

With the revitalization of globalization and integration processes, international trade is becoming increasingly important as a component of the country's economic development. The experience of structural adjustment of the economy in the context of expanding world exports confirms the importance of forming an effective export-oriented strategy. The diversity of the resource base, preconditions, means, methods and tools of trade policy of countries, as well as national features exacerbates the need for a comprehensive analysis of the signs of their importance for economic development. The effectiveness of the strategy is determined by the trade structure which is formed under the influence of economic, technological, political, geographical and national factors, domestic and foreign markets, preservation of national identity. Agricultural trends are influenced by the globalization of food markets which is a specific feature of the current and future development of the agro-food market in Ukraine.

Under these conditions, the problem of forming the competitive advantages of agrarian enterprises and the development of competitive relationship in the context of European integration perspectives and strengthening of Ukraine's integration becomes relevant. The consequence of fierce competition in the global dimension is the optimal allocation of resources, the identification of the most promising business entities, their effective functioning and the satisfaction of consumer demand. Domestic consumer market of agricultural products and raw materials in general and beekeeping in particular is actively developed and presented in a wide range. Ukraine traditionally is one of the main producers of honey and can realize its national competitive advantage including the production of beekeeping.

However, in order for Ukraine to have a positive effect and comparative advantages have a long term nature, it is necessary to have an effective market economy and its functioning requires the formation of a proper market environment without it a civilized market is impossible and agrarian in the first place. These provisions cause scientific interest and specify the choice of research direction.

The purpose of the study is theoretical and methodological and practical validation of scientific principles of formation and development of the domestic market of beekeeping, validation of priority directions of realization of industry potential taking into account the globalization of agro-food markets. The object of the research is the procedure of formation and development of the domestic market of beekeeping in the field of global challenges.

The subject of the study is a set of theoretical, methodological and practical aspects of the formation of the domestic market of beekeeping products and the

development of a mechanism for implementation of the industry potential in the field of globalization.

2 Data and Methods

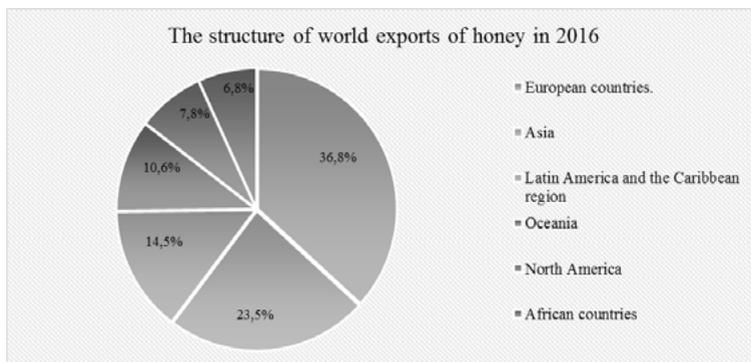
The methodological support of the research is based on the principle of the unity of theory and practice and of the system and synergistic approach which considers the development of industries of agricultural sector from the viewpoint of a holistic paradigm and in the context of the concept of its multifunctional development while taking into account the close interconnection of economic-organizational, socio-political, environmental and natural factors and priorities. The main issues of the development of the beekeeping industry which are considered from the viewpoint of the integrity and continuity of the object, subject and environment, objectives, methods and means of management are identified by this approach.

Data sources for the honey production are mainly compiled from two sources: Food and Agriculture Organization of the United Nations and State Statistics Service of Ukraine.

3 Results and Discussion

Ukraine is the center of beekeeping, because it has good natural and climatic conditions, a large number of honey plant, ethnic bee bears and, above all, the relationship of beekeepers to bees as a “cult”. These factors predetermine obtaining of high-quality beekeeping products such as: honey, pollen, propolis, beeswax, royal jelly and others. In general, the beekeeping industry provides a raw material about 40 industries in Ukraine. The production of Ukrainian beekeeping is highly valued in the world markets because it has very high quality and low prices and conform the standards compared to other producers. In recent years, Ukraine has considerably expanded its sales profile and increased exports to the European Union by 7 times. The largest producers of honey are China, Argentina, Turkey, Ukraine and the United States. Only the following countries are provided by beekeeping products of their own production: China, Canada, Ukraine, Russia and Poland. In 2016, the largest share of global exports of honey was in European countries. It is 36.8% which is 825.3 million dollars. The share of Asian exporters is 23.5%, followed by Latin America and the Caribbean region - 14.5%, Oceania - 10.6%, North America - 7.8%. African countries have 6.8% of the volume.

Figure 1 The structure of world export of honey in 2016



Source: Development of the author.

In total in 2016, world export of honey was 2.2 billion dollars. Below is given 15 leading honey exporters:

1. China: 276.6 million USA dollars (12.3% of total export of natural honey).
2. New Zealand: 206.7 million USA dollars (9.2%)
3. Argentina: 168.9 million dollars (7.5%)
4. Germany: \$ 144.9 million dollars (6.5%)
5. Sierra Leone: 142.4 million dollars (6.4%)
6. Spain: 109 million dollars (4.9%)
7. Ukraine: 108.2 million dollars (4.8%)
8. Mexico: 93.7 million dollars (4.2%)
9. Brazil: 92 million dollars (4.1%)
10. Vietnam: 75.9 million dollars (3.4%)
11. Hungary: 74.2 million dollars (3.3%)
12. Belgium: 72.4 million dollars (3.2%)
13. India: 70.8 million dollars (3.2%)
14. Canada: 54.4 million dollars. US (2.4%)
15. Romania: 41.5 million dollars. USA (1.9%)

The listed 15 countries are 3/4 (77.2%) of all natural honey export during 2016 (by the cost).

Among them, the largest increase in the structure of export in comparison with 2012 has the following countries: Ukraine (by 247.9%), New Zealand (by 98.9%), Brazil (by 75.8%), Spain (by 36.5%), Belgium (by 32.1%) and Vietnam (by 30.6%).

Three countries have a decrease in export of natural honey: Canada (-26.4%), Argentina (-21.4%) and Mexico (-7.7%).

Functioning of national markets occurs in conditions of liberalization of international relationship. It requires an accelerated formation of a fully-fledged national agricultural market capable of providing the balancing supply and demand, increasing the profitability of enterprises and paying capacity of consumers and accelerating the development of rural areas. The procedure of forming a national agrarian market is at the stage of formation and therefore only partially ensures the implementation of the functions and tasks assigned to it. Market failures should be neutralized by measures of state economic and social policy [9].

Competition in the market of beekeeping is intense so business entities are not able to affect significantly at the price level. By qualitative criterion, the structure of the market of domestic beekeeping products is bipolarized due to a small number of intermediaries between producers and consumers. By type, it is polypolic due to the large number of small suppliers and buyers. According to marketing characteristics, it should be attributed to the “buyer’s market” where the determining influence belongs to consumers because their low purchasing capacity, the rapid crystallization of most types of honey and the loss by other beekeeping products of consumer properties forces producers to actively do agribusiness. One of the necessary conditions for the integration of agro-food markets into the global economic system is the ability to adapt to the international competition which will ensure long term sustainable development for business entities and for the state. The application of the interdisciplinary approach to the study of the specificity and features of the functioning of the global market for beekeeping products allows to formulate the author’s definition of this concept as a complementary international system of institutions which operate in the fields of production, services, distribution, exchange, maintenance, use, regulation, consumption in accordance with the laws of the commodity production, money circulation and social development.

According to the State Statistics Committee of Ukraine, about 2.5 million bee families are in all categories of farms (Table 1) [7].

Table 1 Dynamics of the number of bee families in Ukraine in 2012-2017

Indexes	2012	2013	2014	2015	2016	2017	Deviation -%
The presence of bee families in agricultural enterprises, thousands of families	83,9	77,4	71,0	59,0	49,9	47,1	-43,9
Specificweight, %	2,9	2,6	2,4	2,2	1,9	1,9	-
Availability of bee families in farms, thousands of families	2807,0	2858,1	2914,8	2640,6	2540,1	2440,0	-13,1
Specificweight, %	97,1	97,4	97,6	97,8	98,1	98,1	-
Total	2890,9	2935,5	2985,8	2699,6	2590,0	2487,1	-14,0

Source: Calculated according to the State Statistics Committee of Ukraine [7].

Analyzing statistical data, it can be seen that in agricultural enterprises there is a significant decrease in the number of bee families -43.9%, in farms also there is a decrease in the number of families by 13%. These negative trends are explained due to the constant poisoning of bees with pesticides or they have chemical toxicosis.

In most cases, poisoning of bees is due to the late warning of beekeepers about the time, place and nature of chemical treatments, violation of the rules of pesticide use, the deliberately use of hazardous pesticides for bees, airborne debris and spraying. According to Article 37 of the Law of Ukraine "On Beekeeping", natural and legal entities who use plant protection products for treating honey plants must not later than three days before the processing notify the beekeepers whose apiary are located on distance up to ten kilometers from the treated area. In this case, the date of treatment, the name of the drug, the degree and duration of drug toxicity is reported. To combat pests, the range and volume of the use of insecticides are increased. In order to prevent the problem of the destruction of bees, it is necessary to use low-toxic insecticides for them and to choose the correct time and period of treatment of the field. Analysis of statistical data on the development of the domestic industry of beekeeping during the reporting period shows that the number of bee families in all categories of farms is decreased by 14%, from 2890.9 thousand to 2487,1 thousand of bee families.

Table 2 Dynamics of honey production in 2012-2016

Indexes	2012	2013	2014	2015	2016	Deviation 2016/2012 -/+
Production of honey in agricultural enterprises	1417	1323	982	918	901	36,41
Specificweight , %	2,02	1,79	1,48	1,44	1,52	-
Production of honey in farms	68717	72390	65539	62697	58393	15,02
Specificweight , %	97,98	98,21	98,52	98,56	98,48	-
Total	70134	73713	66521	63615	59294	15,46

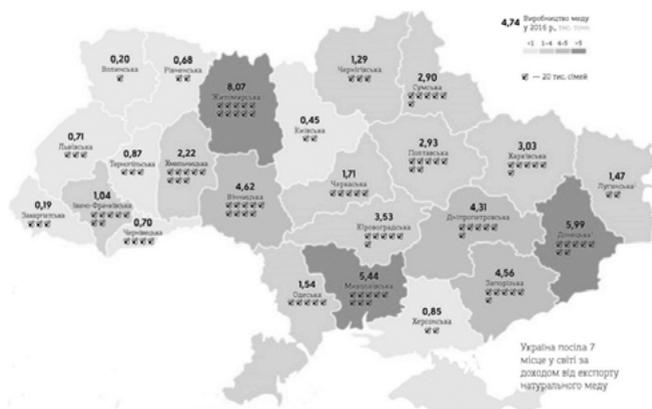
Source: Calculated according to the State Statistics Committee of Ukraine [7].

The lack of a well-organized market for beekeeping products and sufficient legal provision leads to a fall in production level and a reduction in bee families. Such a dynamics has a negative effect not only on the level of production of honey and the export of bee products but also on agriculture as a whole. Because the main bee economic function is pollination of entomophile plants (80% of all agriculture products). In Ukraine, bees are used a fairly small number of farms for deliberately pollination due to insufficient state regulation. After pollination sunflower, fruit berries, vegetables, buckwheat, oilseed and other crops by bees, the level of their yield increases about by 25 -50% [6]. Exactly the income from pollinating agricultural plants by bees creates an additional value of the industry which is significantly exceeds the cost of providing apiaries. However, in all developed countries pollination of entomophile cultures is the main source of income for farmers and the income from the sale of beekeeping products is only 10%.

In geographical terms, the largest number of bee families in all categories of farms is concentrated in Zhytomyr, Mykolaiv and Vinnytsa regions (Figure 2). Production of honey significantly depends on the number of bee families but natural and climatic factors also impact on the production of honey. Ukrainian farms have favorable natural and climatic conditions for the development of beekeeping. The largest sources of honey harvest are agricultural crops, as well as natural honey fields - forests, plantations of gullies and beams, forest belts, meadows and pastures. Beekeeping is located uneven across the country depending on the availability of honey resources and the need for bee families to pollinate agricultural entomophilic crops, gardens and berries., 7 bee families per 100 hectares of agricultural crops in average are placed in the forest-steppe zone, in the Steppe - 6, in Polesie - 5, and in the Carpathians - 4 bee families. The highest concentration

of bee families in the forest-steppe and steppe farms [11]. The main producer of natural honey in Ukraine is the farms which is almost 98.5% in 2016 although their products, as a rule, do not get into an organized market or get into it in small volumes. The specific weight of agricultural enterprises in the production of honey over against decreased by 1.5% over the investigation period. The analysis of the dynamics of production of honey in all categories of farms in the regions of Ukraine shows that the five largest producers of honey include Donetsk - 5.99 thousand tons or 15% of the total amount of honey produced, Mykolaiv - 5.44 thousand tons, Zhytomyr - 8,07 thousand tons

Figure 2 Production of natural honey in Ukraine in 2016



Source: Baker Tilly Ukraine/ Info graphic report.

Diagnostics of the environment indicates the destructive impact of macro factors which determine the limited capacity of the domestic market of beekeeping products and the inability under these conditions to have an export-oriented industry orientation. The domestic market of beekeeping products is saturated exactly in the state which it has. The industry of beekeeping and the market in the country are characterized by disorganization which leads to the containment of the industry development and its low efficiency. Promotion of the effective market development of the beekeeping products should be based on structural transformations in the agrarian sector with the simultaneous state support of the industry. Current trends of development and the results of the prediction give base for asserting that the beekeeping industry will gradually develop further by farms. Beekeeping must be developed in accordance with modern agriculture trends on the innovation and industry basis. It is necessary to carry out complex and structural

reforms and to give the industry a priority status. Consequently, it is now feasible to increase the export potential of beekeeping industry with the simultaneous geographical diversification of the markets. It is possible to succeed in a modern globalized competitive economy of Ukraine by preservation of ecologically safe and qualitative parameters of beekeeping products, effective organization of agri-business and the use of modern marketing tools that will improve the competitive position in the world market. For now, the best strategy for domestic commodity producers is the protection of acquired positions but in the long term perspective it is necessary to gradually move to the growth strategy.

4 Conclusion

Globalization of agro-food markets exacerbates competition at all hierarchical levels prompting economic entities to adapt to the conditions of the environment as much as possible and hold competitive positions on the domestic and foreign markets. Under conditions of globalization, all sectors of national economies become interdependent and complementary and the place and role of the state in the world economy are determined by the number of export industries and the volume and value of environment friendly standardized products. The priority task of the state is the formation and support of strategic export-producing industries capable of creating global products. In Ukraine, beekeeping industry can be considered as such taking into account the following arguments: a) the state is one of the four largest producers of honey in terms of gross production and the level of consumption of this product; b) the products are recognized on the world market for qualitative and taste characteristics; c) There is a high global demand for natural honey and other beekeeping products; d) the niche in foreign markets in the corresponding segment is relatively free; e) the world market of beekeeping products is developing dynamically.

The beekeeping industry of Ukraine is a strategic by the volume of production and the level of actual comparative advantages in foreign trade. However, there are a number of issues in the development of competition in beekeepers which simultaneously manifest themselves at the international and national levels. The main issues are small-scale production, inefficient sales system, a small number of product sales channels, lack of marketing and technology, lack of integration processes, imperfect market infrastructure. Activity in the field of beekeeping as a type of agribusiness is determined by instability, riskiness and does not guarantee profits for extended reproduction. The destructive influence of macro factors also determines the limited capacity of the domestic beekeeping market and constrains the export-oriented vector of development of the industry.

Under these conditions, further research will focus on theoretical and practical justification of the directions of capitalization, formation of market infrastructure of the industry, improvement of the system of state regulation and support of business entities, increase of competitiveness of products and industry. The strategic purpose of the industry development should be the achievement of sustainable and highly effective agricultural production of beekeeping products to meet the needs of the domestic and foreign markets in the corresponding products.

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