

MARKET FACTORS FOR BEEKEEPING DEVELOPMENT

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ABSTRACT

Agriculture is the initial and most important link in the marketing chain of food production. Agricultural marketing refers to raw materials produced on farms and sold to food processing enterprises, and partly in fresh form, delivered to consumers, both through direct sales and through the use of intermediaries (retail or wholesale). At the same time, the marketing of agricultural products shows significant delays, which creates major problems compared to the marketing of other agribusiness sectors.

The aim of the article is to analyze the influence of strategic marketing activities on the market power of beekeeping farms in Bulgaria.

As a result of the statistical analysis, it was found that the market power of beekeeping farms is determined by the size of assets, equity, as well as the implementation of strategic marketing activities.

KEYWORDS: marketing strategy, marketing activities, market

ABSTRAKT

Die Landwirtschaft ist das erste und wichtigste Glied in der Vermarktungskette der Lebensmittelproduktion. Die Vermarktung landwirtschaftlicher Erzeugnisse bezieht sich auf Rohstoffe, die in landwirtschaftlichen Betrieben produziert und an Lebensmittelverarbeitungsunternehmen verkauft werden, sowie teilweise in frischer Form, die sowohl im Direktverkauf als auch über Zwischenhändler (Einzel- oder Großhandel) an Verbraucher geliefert werden. Gleichzeitig weist die Vermarktung landwirtschaftlicher Erzeugnisse erhebliche Verzögerungen auf, was im Vergleich zur Vermarktung anderer Agrarsektoren zu großen Problemen führt.

Ziel des Artikels ist es, den Einfluss strategischer Marketingaktivitäten auf die Marktmacht von Imkereibetrieben in Bulgarien zu analysieren.

Die statistische Analyse ergab, dass die Marktmacht von Imkereibetrieben durch die Größe des Vermögens, das Eigenkapital sowie die Umsetzung strategischer Marketingaktivitäten bestimmt wird.

STICHWORTE: Marketingstrategie, Marketingaktivitäten, Markt

Results and discussion

RÉSUMÉ

L'agriculture est le maillon initial et le plus important de la chaîne de commercialisation de la production alimentaire. La commercialisation agricole concerne les matières premières produites dans les exploitations agricoles et vendues aux entreprises de transformation alimentaire, ainsi qu'une partie des produits frais livrés aux consommateurs, tant par le biais de ventes directes que par l'intermédiaire de détaillants ou de grossistes. Dans le même temps, la commercialisation des produits agricoles accuse des retards importants, ce qui pose des problèmes majeurs par rapport à la commercialisation d'autres secteurs agroalimentaires.

L'objectif de cet article est d'analyser l'influence des activités de marketing stratégique sur le pouvoir de marché des exploitations apicoles en Bulgarie.

L'analyse statistique a permis de constater que le pouvoir de marché des exploitations apicoles est déterminé par la taille des actifs, les capitaux propres, ainsi que la mise en œuvre d'activités de marketing stratégique.

MOTS-CLÉS: stratégie marketing, activités marketing, marché

INTRODUCTION

Beekeeping plays a dual role in modern agricultural systems: not only does it contribute directly through honey and other hive-products, but it also underpins pollination services that sustain crop productivity and ecological health (Čavlin et al. 2023). In recent years, global and regional markets for apiculture products have exhibited considerable dynamism (Borisov, Radev and Dimitrova, 2014). Key drivers include rising consumer demand for natural sweeteners, growing interest in bee-derived wellness products, and increasing recognition of pollination as a vital ecosystem service (Persistence Market Research 2023; MarkWide Research 2024). However, this opportunity exists alongside significant constraints such as climate change, declining bee populations, market competition, regulatory complexity, and volatility of input costs (Straits Research 2024; Mykhailova & Hrytsenko 2018).

Within the beekeeping sector, the concept of “market factors” encompasses a wide range of elements: product demand and price structures; institutional and regulatory frameworks; technological adoption and access; supply chain and logistical capacities; and external risk factors (e.g., pests, environmental change, trade flows) (Muya et al. 2020; Karadaş & Birinci 2018). For instance, Mykhailova and Hrytsenko (2018) identify key determinants of the Ukrainian honey market as including producer qualifications, product quality and trust in producers, profitability of production, and geographic location—while also noting restraints such as low consumer solvency, inadequate research, and insufficient integration of market actors. At the same time, global market reports highlight that beekeepers who participate in value-added processing, traceability, and certification regimes can capture premium returns and increase competitiveness (MarkWide Research 2024; Persistence Market Research 2023).

In the context of agricultural development and rural livelihoods, beekeeping is often presented as a viable diversification strategy, especially for smallholders and vulnerable groups (Nikolov, Radev and Borisov, 2014). Nonetheless, whether this potential is realised depends critically on how market conditions permit or hinder beekeeping operations. For example, recent research in Kenya found that factors such as product market prices, substitute commodity prices, consumer income levels, beekeeper income and supportive government policy significantly influenced the adoption of modern beekeeping technologies among women’s groups (Muya et al. 2020). This demonstrates that market factors are not confined to sales of honey alone but extend to access to inputs, technology uptake, and institutional inclusion.

Given this backdrop, this research aims to analyze the influence of strategic marketing activities on the market power of beekeeping farms in Bulgaria.

RESULTS AND DISCUSSION

The main modern changes in the agricultural market and its environment are the result of trends in the world economy and phenomena in the agrarian market itself (Chotkowski, 2011); (Trendafilov, 2019); (Borisov and Radev, 2020) The important directions that determine the level of efficiency of this economic activity include: 1. Industrialization of agriculture in developed countries (agribusiness enterprises specializing in specific types of production) (Nikolov, Radev and Borisov, 2012); 2.

Liberalization of agricultural policy and trade (reduction of tariffs, direct subsidies and export support) (Kolaj, Borisov, Osmani, Arabska and Radev, 2021); 3. Deterioration of the economic condition of agriculture (weaker growth in prices of agricultural products compared to industrial goods) (Borisov and Miladinovski, 2022); 4. Change in the rules for subsidizing agriculture in developed countries (tendency to reduce the scope of financial support for the sector from the state budget) (Nikolov, Radev and Borisov, 2013); 5. Growing concentration on the part of recipients of agricultural products (transformation of processing enterprises into multinational corporations, increasing the positions of retail chains); 6. Increased interest in food produced using ecological and integrated methods (creation of markets for organic products and for products produced using integrated technologies).

From the point of view of marketing specificity, agricultural products can be divided into several groups (Chotkowski and Deluga, 2003): 1. Intended for processing in the food industry (industrial marketing); 2. Fresh fruits and vegetables aimed at consumption (marketing of consumer products); 3. Ecological products (marketing of ecological goods); 4. Products offered by agricultural holdings, including services in the field of agritourism (marketing of services).

Consumer demand for agricultural products (plant and animal) is relatively constant (Borisova, 2025). With the exception of fruits and vegetables, demand increases very little with income growth, and for some of them, such as cereals, it even decreases.

The low price elasticity of demand leads to particularly large fluctuations in market prices, and hence to fluctuations in the level of profitability of production. In view of the role of satisfying food needs, quality is of particular importance.

Agricultural production is carried out in specific economic entities - farms, diverse in terms of the scale of production, the technologies used, the management objectives (Borisov, Radev and Nikolov, 2019). The relatively small scale of production of the average agricultural producer leads to a weak market position, especially in the confrontation with purchasing and processing enterprises (Borisov and Radev, 2020). This subsequently worsens the income situation of agricultural holdings. Due to the need to have appropriate capital and knowledge, as well as due to the profitability of the costs incurred, the implementation of broader marketing activities requires the cooperation of producers. At the same time, the competitive pressure of agriculture in other EU countries creates the need for Bulgarian state policy to actively engage in the development of domestic agriculture (Borisov, Radev, Petrov, Kolaj and Arabska, 2023).

Creating a strategic marketing plan for business activities (including agriculture) consists of developing the goals of a given enterprise, identifying potential customer groups, determining the target market, and selecting a product and technology (Chotkowski, 2007); (Levitt, 2008); (Bashev, 2018) and (Borisova, 2025)

The basis for formulating strategic concepts is marketing analysis, which consists of studying the needs and preferences of buyers, market trends, and competition analysis.

The choice of production activities is among the main strategic decisions of economic entities in agriculture. Among potential production areas, those with the highest sales potential and those characterized by the highest level of profitability should be selected (Borisov, Radev, Nikolov and Boevski, 2020).

We distinguish two main strategic options aimed at increasing the efficiency of agricultural production. The first is the reduction of production and marketing costs per unit of output by increasing the scale and intensity of production. The second option is the development of agriculture according to a sustainable model. The essence of this model is aimed at the production of high-quality products, using

environmentally friendly technologies and complementing other economic and social activities in rural areas (Woś, 2004). An additional strategic option aimed at improving the economic situation of rural residents is the diversification of activities by undertaking non-agricultural business activities. This option is applicable to farms with a smaller area of arable land and economic potential, in which agricultural production does not provide income that allows the farmer's family to support themselves. These are areas that complement the agricultural production, such as preparation of products for sale and use, primary processing of agricultural products, and services in the field of agritourism.

The starting point for the application of marketing principles in agriculture is the change in the attitude of producers, i.e. the change in the so-called business philosophy (Kolaj, Borisov and Arabska, 2023). The necessary changes in the minds of farmers should be aimed at: 1. Focusing on the market and the needs of the buyer, and not on the product and technology; 2. Analysis of the profitability of production before the start of investments and production; 3. Only good quality products should be offered on the market; 4. The sources of market success should not be based on the available resources, product and labor, but on the factors of management, entrepreneurship, information and knowledge. In agriculture, in addition to biological and technological knowledge, economic knowledge, including marketing knowledge, is also necessary.

Operational marketing tools. Marketing tools (specific to agricultural production) that have an impact on the market include: 1. Product brand and quality (certificates and quality marks issued by government agencies, consumer organizations or producer organizations); 2. Effective pricing policy (participation of agricultural producers in price formation); 3. Distribution policy (participation of producers in market channels); 4. Active promotion of products (use of intensive and professional forms of promotion); 5. State policy (development of a long-term strategy for the development of agriculture on a national and regional scale); 6. Knowledge and information (support from science, improvement of market information systems); (after Chotkowski, 2011).

Assessment of the impact of strategic marketing activities on the market power of the enterprise. Each farm performs strategic marketing activities when serving the market. The main activities are presented in Table 1.

Table 1. Strategic marketing activities. Source: own interpretation.

Strategic marketing activities
Clear definition of mission of organization
Sharing the mission between employees in the organization
Market segmentation
Development of target groups
Development of marketing mix for every single target group
Establishment of marketing information system
Execution of audit of external business conditions
Defining marketing goals in written form
Commitment of market goals with output of strategic audit
Clearly defined marketing strategy
Using competitive advantage as a basic tool for development of marketing strategy
Coordination of marketing strategy with other functional strategies of organization
Financial cover of marketing strategy
Clearly distributed responsibilities between employees on execution of marketing strategy
Development of control system

When conducting the analysis, strategic marketing activities are defined as indicators-factors, and the achieved market share is a factor-result. The relationships in the statistical grouping are examined by applying χ^2 -analysis.

Impact of strategic marketing activities on market power. A statistical grouping was formed by changes in market share and implemented strategic marketing activities. The wine-growing enterprises were grouped into three groups (with a decreased market share; with a constant market share; with an increased market share). During the research period, it was found that 22 enterprises increased their market share, another 16 did not change, and 17 enterprises decreased their market share.

Through the obtained frequency distributions, applying the Chi-square method, those activities that have a non-random (objective) relationship with the indicator-result (market share) are revealed. The results of the Chi-square method are presented in Table 2. The results of the analysis are at a significance level of $\alpha = 0.05$.

Table 2. Statistical clusters according to achieved market share and accomplishment of marketing activities. Source: own interpretation.

Strategic marketing activities	Market share	Kramer's coefficient
Does the company have a marketing information system?	there is a connection / there is relevance	0.5465
Does the company do an external audit?	there is a connection / there is relevance	0.5465
Does the company clearly define the mission?	no connection / there is no relevance	–
Does the company make segmentation of the market?	there is a connection / there is relevance	0.6875
Do you know the specific features of each target group?	there is a connection / there is relevance	0.6072
Do you do a specific marketing mix for each target group?	there is a connection / there is relevance	0.6072
Do you have in written form the marketing goals?	there is a connection / there is relevance	0.4015
Does your company develop a strategic plan in written form?	there is a connection / there is relevance	0.1827
Does your company have a defined marketing strategy for achieving market goals?	there is a connection / there is relevance	0.4315
Does your company use competitive advantage as a basic tool for development of marketing strategy?	there is a connection / there is relevance	0.4233
Does your company coordinate the marketing strategy with other functional strategies?	there is a connection / there is relevance	0.4233
Does your company manage financial resources for execution of marketing strategy?	there is a connection / there is relevance	0.4233
Is it clear all responsibilities of everyone in the company according to execution of marketing strategy?	there is a connection / there is relevance	0.3645
Does your company have a control system which monitors the execution of marketing strategy?	there is a connection / there is relevance	0.6724

Based on the results of the statistical analysis, it is established that the implementation of strategic marketing activities, with the exception of one of them (a clearly defined mission), is related to the market share of the enterprise. The analysis confirms the research thesis that strategic marketing activities are a significant factor in market share management.

The strength of the established statistical dependencies was measured by the Cramer coefficient. The results obtained show that only in some of the strategic marketing activities (6 pcs.) the strength of the relationship is significant ($V^2 > 0.5$). These are building a system for controlling the marketing strategy; analysis of the external environment; market segmentation; developing a segment profile; developing a specific marketing mix for each target segment; availability of a system for controlling the implementation of a marketing strategy.

CONCLUSION

Marketing should be perceived as a part of the agrarian economy, which deals with the economy of demand and the stimulation of demand. The increase in competition in the agricultural products market, related to the functioning of Bulgarian agriculture in the single European market, creates the need to strengthen this type of analysis. Professional marketing should be a means of strengthening the economic power of agriculture and reducing the depreciation of its income through the market mechanism.

The forecast is that in the future, in order to maintain market positions in the industry, individual beekeeping farms will increasingly rely on the implementation of strategic marketing activities, and for this purpose all elements of the marketing mix will be taken into account. This will also require the allocation of more finances.

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