

AGRICULTURAL UNIVERSITY OF PLOVDIV
FACULTY OF ECONOMICS

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**MARKETING STRATEGY FOR MANAGING THE PRODUCTION AND SALE OF
HONEY**

ABSTRACT

for awarding the educational and scientific degree of "doctor"
scientific specialty "Organization and Management"

Scientific supervisor:
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The dissertation consists of 124 pages, of which 120 pages are an exposition, 13 tables and 26 figures. 80 literary sources are used.

The dissertation work has been discussed and directed for defense by the Department of Management and Marketing at the Agricultural University - Plovdiv.

The defense of the dissertation will take place onyear athours in hall of the Agricultural University of Plovdiv.

The materials for the defense are available to those interested in the library of the University of Plovdiv.

I. GENERAL CHARACTERISTICS OF THE DISSERTATION

1. Topic relevance

Dynamic structural changes are taking place in Bulgarian agriculture, accelerated mainly under the influence of the Common Agricultural Policy (CAP) of the EU. In honey production, Bulgaria has competitive advantages that must be utilized in order for our country to establish itself as a net exporter and for Bulgarian honey to be a competitive product on the market. Bulgarian agricultural honey producers operate in a highly competitive environment and face numerous market problems, the solution of which will determine their opportunities for establishing themselves on the market.

2. Purpose and objectives of the dissertation

The purpose of this dissertation is to establish the influence of strategic marketing in managing the production and sale of honey.

In order to achieve the set goal, the following tasks will be solved:

1. The place and importance of the marketing approach in the management of business organizations will be clarified.
2. The essence of strategic marketing will be clarified and its importance for managing the production and sale of honey will be justified.
3. A methodology will be developed to study the impact of strategic marketing on the production and sale of honey.
4. The factors determining the production activity of the studied sites and its results will be determined.
5. Recommendations will be made to improve farm management based on strategic marketing.
6. A marketing strategy model for the production and sale of honey will be developed.

3. Subject and object of the dissertation work

The object of the scientific research are farms producing honey in Southern Bulgaria.

The subject of the scientific research is the management activities in planning, implementation and control of the business activities of agricultural holdings.

4. Thesis of the dissertation

Main research thesis: Strategic marketing in modern market conditions impacts the organization and production of honey for the establishment of agricultural holdings engaged in the production and sale of honey.

5. Leading subtheses in the study

Leading subtheses in the study are:

- Strategic marketing is a management process. The implementation of this process requires taking into account the behavior of all market entities.
- The implementation of management activities is determined to the greatest extent by the organizational form of the agricultural holding.
- The income of honey producers is determined to the highest extent by the demand for production.
- There is market potential for offering Bulgarian honey on the national market.
- Implementing strategic marketing to improve the financial performance and market positions of honey producers requires structuring activities.

6. Research methods

When conducting the study, the systematic approach, retrospective analysis, situational analysis, comparative analysis, statistical methods, diagnostic analysis, prognostic analysis, etc. were applied.

7. Work structure

The dissertation consists of an introduction, an exposition in three sections, a conclusion, and a list of references – a total of 124 standard typewritten pages.

In accordance with the main tasks set in the research, the presentation in the dissertation is developed according to the following structure:

Introduction

CHAPTER ONE THEORETICAL FOUNDATIONS OF MARKETING STRATEGIES IN AGRIBUSINESS

- 1.1 Essence and characteristics of marketing strategy**
- 1.2 Peculiarities of marketing in agricultural production**
- 1.3 Basic models for managing the production and sale of products in the agricultural sector**
- 1.4 Specifics of the honey and bee products market**
- 1.5 Research methodology**

Conclusions from Chapter One

CHAPTER TWO ANALYSIS OF THE STATUS OF COPPER PRODUCTION AND SALES

- 2.1 Market environment overview: trends, challenges and opportunities**
- 2.2 Analysis of honey production processes (internal factors)**
- 2.3 Analysis of honey sales and distribution channels**
- 2.4 SWOT analysis of existing honey marketing practices**

CHAPTER THREE DEVELOPMENT OF A MARKETING STRATEGY FOR MANAGING THE PRODUCTION AND SALE OF HONEY

- 3.1 Development of a marketing mix for honey**
- 3.2 Priority strategic directions**
- 3.3 Risk assessment and sustainability of the strategy**

CONCLUSION

LITERATURE

APPLICATIONS

Chapter One Theoretical Foundations of Marketing Strategies in Agribusiness

1.1 Essence and characteristics of marketing strategy

Every business is created to achieve certain goals and needs to be managed in order to achieve them. Business management is a purposeful process of planning, organizing, directing and controlling the resources of an organization (people, capital, technology, information) in order to achieve certain goals - usually related to profit, sustainability and development. According to Peter Drucker: Management is "working through other people" to achieve results by using available resources effectively. The main functions in management are: planning, organizing, motivating (leadership) and controlling.

Planning → Organizing → Leading → Controlling → (back to Planning)

In small businesses, management is often combined with operational activities — the owner is also the manager. This process includes decision-making, coordination of activities, optimization of production and sales operations, as well as adaptation to changes in the external environment.

In the economic literature, numerous definitions of the concept of marketing strategy are given. According to Philip Kotler: "Marketing strategy describes the logic by which the company seeks to create value for customers and achieve competitive advantage. It includes the selection of target markets, positioning, and the development of the marketing mix." According to J. S. Lamben: "Marketing strategy is the process of creating an offer that best meets the expectations of a specific market segment in order to achieve sustainable competitive advantage."

Our understanding of marketing strategy is that it represents a long-term plan of action that determines how an organization will reach its target markets and achieve its marketing objectives through optimal use of marketing resources and tools.

Marketing strategy is a systematic and long-term plan of action through which an organization directs its efforts towards selected target markets in order to create value for customers and achieve sustainable competitive advantage. It combines analysis of the external and internal environment, formulation of strategic objectives, selection of market segments, positioning of the product and development of a comprehensive marketing mix (product, price, distribution, promotion).

In the agricultural sector, the marketing strategy takes into account specific factors such as seasonality, dependence on natural conditions, regional characteristics, and increased requirements for quality and naturalness of products.

A properly constructed marketing strategy not only coordinates production and sales processes, but also helps build trust among consumers, optimize costs, and ensure sustainable business development in a dynamic market environment.

Strategic marketing is a system of long-term management actions aimed at ensuring a sustainable orientation of the organization to the market and building competitive advantages. Its essence is determined by the need to coordinate the company's resource potential, technological capabilities and the external market environment so as to achieve sustainable results.

Marketing as a scientific discipline arose in response to the need to manage exchange processes. In the face of increasing competition, technological change, and a dynamic market environment, it is becoming obvious that companies cannot rely solely on natural market interest. They must have a detailed understanding of customer needs, attitudes, and behavior, develop competitive products, and build relationships with value chain participants.

While operational marketing focuses on short-term solutions – for example, implementing a promotional campaign, adjusting a price, or changing packaging – strategic marketing requires formulating a vision for development, outlining market goals, structuring market behavior, and integrating all elements of the marketing system into a single strategic framework.

Strategic marketing is a fundamental element of strategic management. It provides the information, analytical and conceptual basis for strategic decisions. In traditional management models, marketing is considered a separate function, but in the modern understanding it is an integrated management philosophy.

An organization that implements strategic marketing is characterized by the following:

- systemic nature of decisions;
- orientation towards long-term market trends;
- active scanning of the external environment (competitors, regulations, demographics, technologies);
- focus on creating value for the customer;
- coordination between production, finance, logistics, sales and innovation;
- aligning resources with target markets.

The marketing function also has a significant role as an intermediary between production and the market. In honey production, this is especially important because the presence of natural limitations and the specific characteristics of the product require a high degree of planning and adaptability.

Modern trends in strategic marketing

➤ **Digital positioning**

Beekeeping is traditionally an offline sector, but digitalization creates new opportunities:

- online stores;
- sites with production history;
- QR codes for traceability;
- virtual farmers markets.

➤ **Personalization**

Consumers are looking for products that meet their individual preferences. This leads to:

- personalized packaging;
- gift sets;
- limited editions;
- products with a regional character.

➤ **Sustainable marketing**

It focuses on environmental friendliness, biodiversity, and social responsibility. This is especially appropriate for honey, which consumers perceive as a symbol of purity.

1.2 Peculiarities of marketing in agricultural production

Marketing in agricultural production is a specific area of marketing theory and practice, in which the general principles of market orientation are refracted through the peculiarities of agricultural goods, the biological nature of production, the high degree of uncertainty and the strong role of state regulation. Unlike most industrial products, agricultural goods are characterized by limited control over the production process, significant seasonal fluctuations and often a lower degree of differentiation. This places specific requirements on marketing decisions and determines the need to develop specialized theoretical and methodological approaches.

Marketing analysis in the agricultural sector cannot be limited solely to the “enterprise – market” relationship. It must also take into account the specifics of the agrarian structure, the natural resource potential, the environmental constraints, the social role of agriculture and the influence of the Common Agricultural Policy (CAP) of the European Union. Beekeeping, as a specific subsystem in agriculture, concentrates all the main characteristics of agricultural marketing – strong dependence on the natural environment, a significant social function (pollination), a relatively limited scale of farms and a dominant presence of small producers.

Economic and organizational features of the agricultural sector

The agricultural sector is distinguished by several fundamental features that have a direct impact on marketing:

- land as a basic and non-reproducible production factor;
- a biological production cycle that cannot be accelerated without consequences on quality;
- seasonality in production and often relative uniformity of consumption;
- dispersed production structure – numerous small and medium-sized farms;
- lower elasticity of demand for many products (especially staple foods);
- strong state intervention through subsidies, regulations and interventions.

Beekeeping fits into this model, but it also has its own specific features:

- high share of underemployed and hobby beekeepers;
- large variability in yields depending on climate and pasture;
- strong importance of environmental factors and pollution;
- significant demands on the knowledge and skills of the farmer.

These characteristics make marketing in beekeeping complex and sensitive to the external environment. Producers must balance the pursuit of maximizing yield, respecting natural constraints, and adapting to market signals.

Table 1 Main features of agricultural marketing

Feature	Manifestation	Meaning
Biological cycles	Yield depends on nature	Uncertainty, risk
Seasonality	Short production period	Sales distribution
Fragmented production	Many small producers	Low market power
Regulations	Strict standards	Certification, traceability
Environmental factors	Pestils, climate	Variable output

Biological and natural constraints and their impact on marketing

The organic nature of agricultural products means that the production result is not entirely under the control of the farm. In beekeeping, the key factors are:

- the phenology of honey plants;
- weather conditions during the nectar secretion period;
- the health status of the bee colonies;
- the presence of competing nectar sources;
- the degree of pollution and presence of pesticides.

These factors are largely uncontrollable and create significant uncertainty. From a marketing perspective, this leads to:

- instability of supply in terms of volume;
- possibility of significant fluctuation in quality between years;
- risk of inability to fulfill long-term contracts;
- difficulties in planning volumes and pricing policy.

This is why strategic honey marketing must include elements of risk management - diversification of markets and channels, creation of reserves, flexible contracts, participation in cooperative structures.

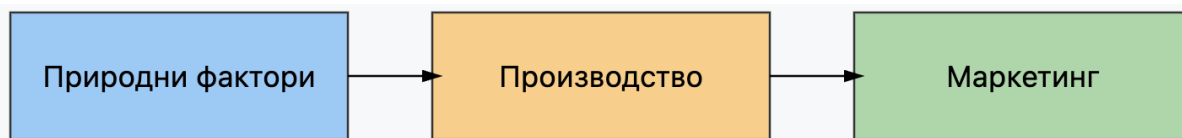


Figure1 INFLUENCE OF NATURAL FACTORS

Seasonality, supply and price dynamics

Seasonality is a structural characteristic of agricultural production. Production is concentrated in relatively narrow time intervals, while consumption is spread out over time. In the case of honey, production is mainly realized within the active beekeeping season, but the product – unlike many other agricultural goods – allows for long-term storage.

Economic theory shows that for seasonal goods with storage capacity, producers have the theoretical ability to “spread” supply over time. From a marketing perspective, this means:

- not to sell the entire harvest immediately after honey extraction, when purchase prices are often the lowest;
- to analyze the average annual price dynamics and look for periods of higher demand (e.g. autumn-winter period);
- to use different channels at different times – e.g. larger quantities to resellers immediately after harvest and a gradual increase in the share of direct sales to end consumers throughout the year.

Seasonality also influences communication policy. In certain periods (winter, periods of increased morbidity, flu waves) consumers are more receptive to messages about the beneficial qualities of honey, which can be used when planning advertising and information campaigns.

Regulatory and standard environment of agricultural markets

Agricultural markets are subject to significant state and supranational regulation. Within the EU, a complex of regulations and directives is in force, which define:

- sanitary and hygienic requirements;
- labelling and traceability rules;
- quality standards;
- conditions for granting subsidies;
- competition and state aid rules.

In the honey sector, the requirements regarding:

- maximum permissible water content;
- indicators of enzyme activity (diastase number);
- permissible levels of hydroxymethylfurfural;
- absence of antibiotics and other unregulated substances;
- correct designation of origin.

These requirements have a double meaning from a marketing perspective. On the one hand, they increase the costs of control, certification and laboratory analysis. On the other hand, they create an opportunity to position the product in higher price segments by emphasizing compliance with standards and quality advantages.

For beekeeping farms, the strategic question is how much to invest in control and certification systems (e.g. organic certification), how to communicate these efforts to consumers, and how to benefit from access to more demanding but also more profitable markets.

Table2 Factors affecting honey quality

Category	Examples	Marketing importance
Natural	Pasture, climate	Annual variations

Category	Examples	Marketing importance
Biological	Bee health	Quality control
Technological	Extraction, straining, storage	Premium positioning
Regulatory	HMF, diastase, certificates	Trust and premium price

1.3 Basic models for managing the production and sale of products in the agricultural sector

Managing production and sales in beekeeping requires an integrated approach that combines knowledge from strategic marketing, agricultural economics, organizational management and logistics. Due to the complexity of the sector – biological dynamics, seasonality, regulations, competition and fragmented markets – management models must be systematic, adaptive and sustainable.

The models discussed in this section provide a theoretical framework for analyzing production processes and marketing. They include both classical economic models and modern strategic concepts applicable to the production and sale of honey.

Production models and their application in beekeeping

Production models describe the relationship between inputs and outputs. In agricultural products, this relationship is influenced by biological cycles and natural factors, which makes production modeling more complex.

Research shows that for most beekeeping farms:

- under 30 bee colonies → low economy of scale;
- 30–100 colonies → optimal efficiency;
- over 150 colonies → need for mechanization and logistical solutions.

Strategic marketing interacts with production models because demand determines the optimal production volume.

Lean production models in beekeeping

The Lean concept (originally developed at Toyota) is increasingly being applied in the agricultural sector. It aims to:

- minimizing losses;
- standardization of processes;
- optimal use of labor;
- quality improvement.

In honey, the Lean approach includes:

- optimization of routes and interventions in the apiary;
- minimizing food and preparation costs;
- standardization of extraction and processing;
- improving packaging efficiency.

Lean models are used to reduce costs and increase competitiveness.

Table3 Comparison of honey production models

Model	Advantages	Disadvantages
Cobb–Douglas	Factor analysis, forecasting	Missing natural parameters
Lean	Reduces costs, increases efficiency	Need for standardization
Traditional	Low investment	Low efficiency

Logistic models in honey management

Logistics models describe the movement of a product from its extraction to the end customer. In the case of honey, logistics is a strategic link between production and sale.

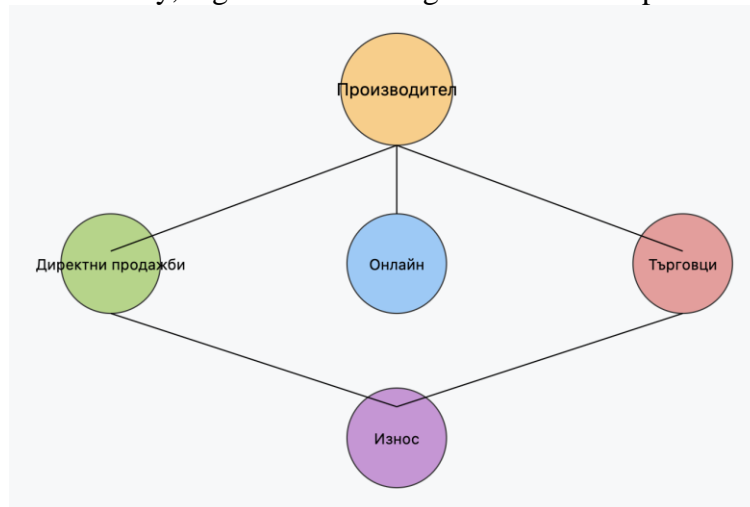


Figure2 Mosaic of conversion channels (network graphic)

Material Flow Model

In the classic logistics model, we track the flows:

1. Extraction →
2. Processing →
3. Straining →
4. Storage →
5. Packaging →
6. Distribution →
7. User.

Each stage requires:

– specific conditions; – costs; – quality control; – documentation and tracking.

Marketing and logistics are integrated through:

– selection of packaging type; – inventory management; – selection of channels; – management of delivery times.

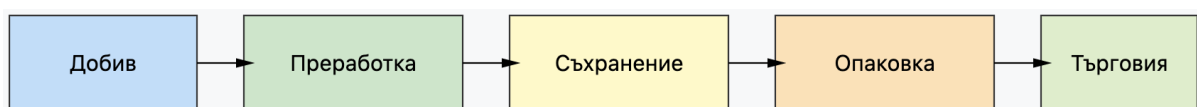


Figure3 MATERIAL FLOWS IN HONEY

Short supply chain model

The European Union actively promotes **short chains** (short supply chains), where the number of intermediaries is minimal.

Examples:

– direct sales from the farm; – farmers' markets; – online stores; – home deliveries; – subscription boxes.

Advantages:

– higher profit for the manufacturer; – greater control over quality; – building brand loyalty; – transparency and trust.

Disadvantages:

– need for marketing skills; – logistics and supplies; – lower sales volume.

Long Supply Chains Model

This includes:

- resellers; – processors; – exporters; – retail chains.
- Advantages:– guaranteed redemption;– large volumes.
- Disadvantages: – low purchase price;
- lack of brand; – lack of control over positioning.

Table4 Supply Chain Comparison

Chain type	Advantages	Disadvantages
Short	High profit, brand, transparency	Required skills, logistics
Long	Guaranteed buyback, large volumes	Low price, no brand

3.3. Marketing models applicable to honey

STP model (Segmentation – Targeting – Positioning)

In honey, STP is the most commonly used strategic model.

Segmentation:

- organic consumers; – parents with children; – customers interested in medicinal properties;
- gourmet segments; – tourists; – price-oriented customers.

Selecting target segments:

Often, manufacturers choose 1–2 segments that they can serve sustainably.

Positioning:

- “Pure natural honey”– “Organic honey from a mountain region”– “Regional honey with traditions”– “Manov honey – a natural immunostimulant”

The model allows for a clear definition of the communication strategy.

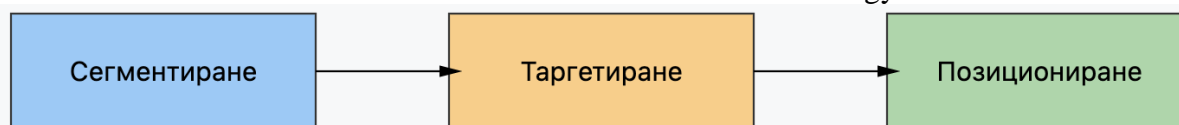


Figure4 STP HONEY MODEL

1.4 Specifics of the honey and bee products market

The honey market is a unique system in which natural, economic, social, regulatory and cultural factors interact. Honey is a product that is simultaneously agricultural, nutritional, functional and culturally marked. Its value is not determined solely by the cost of production, but also by:

- consumer perceptions of naturalness, purity and authenticity;
- regional characteristics of origin;
- traditions related to the use of honey;
- organic certification and sustainable methods;
- trust in manufacturers;
- regulatory quality standards.

Researching the honey market requires an integrated approach that includes an analysis of global dynamics, the specifics of the European market and the specific structure of the sector in Bulgaria. This section presents key characteristics and trends that are important for the strategic positioning of producers.

Table5Market characteristics

Market	Features	Trends
World	Cheap imports, fakes	Growth of the premium segment
European	Copper deficiency	Organic, regional brands

Market	Features	Trends
Bulgarian	High quality, low prices	Direct sales are growing

World copper market – structure, trends and geopolitical factors

The global honey market is characterized by growing demand, the growing importance of organic products and strong competition between producers from different regions. According to FAO data, in recent decades global honey production has been increasing gradually, but with large regional differences.

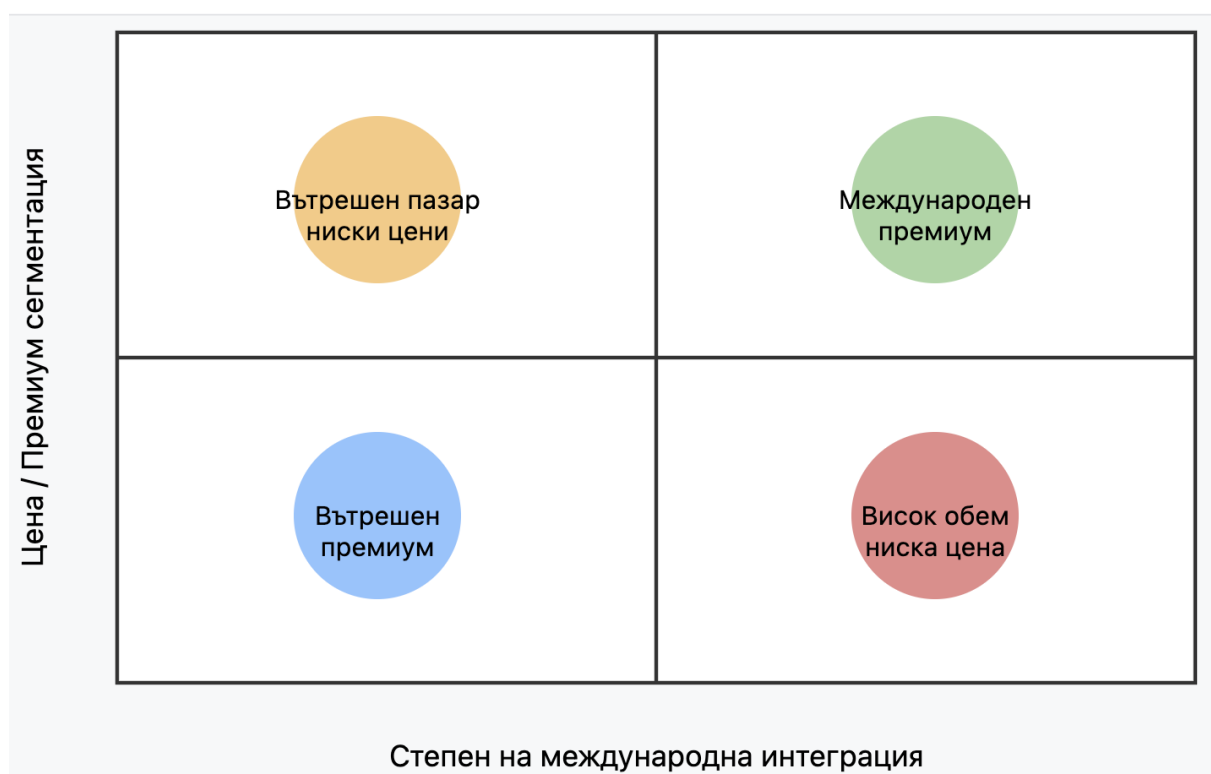


Figure5 Map of honey markets: Domestic ↔ International

Geographical distribution of production

The largest producers in the world are:

1. **China**– a dominant producer, whose share often exceeds 25% of global production.
2. **Turkey**– known for its high-quality mountain and honeydew honey.
3. **Argentina**– main exporter to Europe and the USA.
4. **Iran, Ukraine, Mexico, Russia, Ethiopia** – significant regional producers.
5. **EU countries**– Germany, Spain, Hungary, Greece, Bulgaria.

The large differences in climate, biological resources and production structure affect honey types, quality and price levels.

Global demand dynamics

Several sustainable trends are observed:

- growing demand for premium honey (mango, acacia, organic);
- increasing consumption in Asia and the Middle East;

- increased demand due to the use of honey in pharmaceutical and functional foods;
- interest in “superfoods” and natural products.

Consumers around the world are willing to pay a higher price for honey with guaranteed origin, laboratory-proven quality, and organic certification.

The problem with counterfeit honey

The FAO and the EU warn that around 20–30% of honey on the global market is potentially contaminated or adulterated. This creates strategic challenges but also opportunities to distinguish producers who demonstrate transparency and quality.

International trade and price trends

Global honey prices depend on:

- production in the main producing countries;
- the level of counterfeiting;
- quality standards for imports;
- the exchange rate of the main currencies;
- global inflation and transportation costs.

Distinguishing feature:

- cheap honey from Asia (especially China) exerts strong price pressure on producers from Europe and South America;
- premium and organic honey maintains stable high prices.

European honey market – regulations, competition and consumer trends

The European Union is the largest importer of honey in the world because its leadership in consumption is not covered by domestic production.

Production and consumption in the EU

The structure is as follows:

- domestic production covers about 60–65% of consumption;
- the remaining 35–40% are imports, mainly from China, Ukraine, Argentina;
- the largest producers in the EU are Spain, Germany, Hungary, Greece.

There is a constant shortage of honey on the European market, which creates a good opportunity for the sale of quality products, including Bulgarian ones.

Regulatory environment in the EU

EU regulations are some of the strictest in the world. The main requirements are set out in:

- Directive 2001/110/EC on honey;
- Regulation 852/2004 on food hygiene;
- Regulation 853/2004 on animal products;
- Regulation (EU) 1169/2011 on information to consumers;
- Organic Production Regulation (EU) 2018/848).

This includes requirements for:

- minimal diastase activity;
- maximum HMF content;
- absence of antibiotics;
- accurate information about the origin;
- prohibition of heat treatment leading to loss of enzymes;
- correct labelling (e.g. “EU/non-EU honey blends”).

These regulations protect consumers, but place higher requirements and costs on small producers.

Market trends in the EU

The main trends are:

- growing demand for organic honey;

- interest in regional products;
- premiumization of the market;
- increased sensitivity to quality;
- digitalization and online commerce.

In the EU, consumers are willing to pay significantly more for "pure", "organic" or "regional" honey, which puts Bulgarian producers in an advantageous position.

1.5 Research methodology

Period of implementation

The survey was conducted in the period: February 2023 - May 2024, which allows for analysis of two consecutive production seasons.

Collection method

The survey was distributed online via:

- social networks,
- professional beekeeping groups,
- platforms of beekeeping organizations.

Sample

A total of 78 beekeepers from different regions of the country participated, including:

- **small farms (< 50 families) – 47%**
- **medium (50–150 families) – 38%**
- **professional (> 150 families) – 15%**

This distribution represents a realistic picture of the sector.

Conclusions from Chapter One

The theoretical study of strategic marketing in the production and sale of honey allows for the formulation of several fundamental conclusions that outline the framework for the development of the analytical and applied parts of the dissertation. They summarize the key theoretical propositions, identify the specific characteristics of agricultural marketing and outline the factors determining the competitiveness of beekeeping farms in the modern economic environment.

First, strategic marketing is established as a fundamental management concept that integrates production, marketing, logistics and organizational decisions into a single system. It provides a methodological basis for defining a vision, mission and strategic goals, while providing tools for analyzing the external environment, selecting market segments, positioning and managing the marketing mix. Unlike operational marketing, strategic marketing has a long-term horizon and is aimed at sustainable development, competitive advantages and effective adaptation to the dynamic market environment.

Second, the analysis showed that the specificities of agricultural production — the biological nature of the production, the dependence on climatic conditions, seasonality, the presence of natural constraints and a high level of uncertainty — have a decisive influence on marketing decisions. Beekeeping is a sector in which this dependence is particularly strong: yields vary significantly between years, the quality of honey is a function of ecological and botanical conditions, and the resilience of bee colonies depends on multiple natural factors. This means that strategic planning in beekeeping must be flexible, adaptive and integrated with risk management mechanisms.

Third, marketing in the agricultural sector is characterized by a strong influence of state policy and supranational regulations. The European Union applies some of the strictest standards regarding the quality, safety and traceability of honey. Compliance with these standards is not only a regulatory requirement, but also a strategic positioning tool. Organic certification, regional designations, laboratory analyses and transparency of the production process not only guarantee access to EU markets, but also increase consumer confidence and allow premium pricing.

Fourth, the honey market is highly fragmented and characterized by multiple, often contradictory trends. On the one hand, global demand is growing, especially in the premium segment. There is growing interest in organic products, functional foods and natural remedies. On the other hand, the market is under pressure from cheap imported products and widespread counterfeit honey. This creates serious challenges for producers, who need to prove their quality and invest in reputation, traceability and certification.

Fifth, the Bulgarian honey market is characterized by the simultaneous presence of strong competitive advantages and systemic constraints. Among the advantages are the richness of bee pastures, the high quality of honey, the diversity of varietal and herbal honeys, as well as good conditions for organic production. The constraints are related to the high degree of fragmentation of production, the low degree of cooperation, dependence on resellers, weak digitalization, limited branding and the low level of marketing competence among most producers. This necessitates the development of marketing strategies that build on the advantages and compensate for structural weaknesses.

Sixth, the analysis shows that differentiation is a key strategic direction for beekeeping. It can be achieved through quality, origin, organic certifications, specialized varieties, packaging and branding. Premium segments provide significant opportunities for increasing revenues, but require high standards, constant control, transparency and active marketing positioning.

Seventh, trends in consumer behavior show a growing sensitivity to environmental friendliness, purity and authenticity. Consumers are more informed, more demanding and

more inclined to compare different offers. For them, not only taste and price are important, but also the history of the product, its origin, the method of production and the transparency of the supply chain. This requires producers to build trust through digital communication, traceability, educational marketing and an active presence in channels that allow direct contact with the customer.

Eighth, the comprehensive study of the theory shows that a successful honey marketing strategy cannot be based solely on the traditional 4P model. It is necessary to integrate modern concepts such as value chain, quality management (HACCP, ISO 22000), Lean production models, digital marketing, risk management, sustainable production and socio-ethical marketing. Only in this way can sustainability and competitiveness be achieved in a dynamic and highly globalized market.

Ninth, the strategic analysis clearly shows that beekeeping in Bulgaria has potential for development through the transition to short supply chains, digitalization, regional branding and cooperation. These areas not only increase added value, but also reduce dependence on buyers and provide the opportunity for greater control over pricing and marketing positioning.

In conclusion, the theoretical and methodological analysis of strategic marketing in the production and sale of honey shows that the sector requires specific approaches based on integrated management of production, quality and market realization. These theoretical foundations serve as a basis for the development of the analytical framework in Chapter Two, including the study of production processes, sales channels and market positioning of honey. They also justify the need to develop an applied marketing strategy in Chapter Three, which should be adequate to the real conditions of the market and the resource capabilities of beekeeping farms.

Chapter Two Analysis of the Status of Copper Production and Sales

2.1 Market environment overview: trends, challenges and opportunities

Over the past two decades, the sector has developed dynamically, but unevenly. On the one hand, we observe increased interest in beekeeping, including from people who are not traditional agricultural producers. On the other hand, economic challenges, climate change and market fluctuations create tension and uncertainty. This requires a deeper analysis of the organizational and economic characteristics of the sector, which are the basis of its competitiveness and sustainability.

The main problem arising from the structure of the sector is the lack of economies of scale. Small farms cannot invest in technology, achieve optimal production costs or allocate funds for marketing. Thus, the sector remains dependent on intermediaries, and beekeepers receive a minimal share of the final value of the product. This is the basis of the need for cooperation and the establishment of beekeeping organizations with a real market function.

Table 6 Structure of beekeeping farms in Bulgaria (survey, 2023–2024)

Farm category	Number of families	Share of respondents (%)	Characteristics
Small farms	< 50	46%	Traditional model, low mechanization
Medium farms	50–150	41%	Partial modernization, potential for rework
Large farms	> 150	13%	High efficiency, equipment, export

The regional distribution of beekeeping in Bulgaria is closely related to the natural conditions, the availability of honey plants, the climatic features and the traditions of the local population. Northeastern Bulgaria and part of North Central Bulgaria are known for their rich acacia pasture, which provides some of the most valuable varieties of honey in our country. The southern regions are highly diverse from a botanical point of view and provide excellent conditions for herbal, meadow and honeysuckle honey.

Regional differences are not only a production characteristic, but also a marketing resource. For example:

- **Acacia honey** is positioned as a premium product due to its light, smooth texture and resistance to crystallization.
- **The manna honey from Strandzha** has a protected geographical indication and is among the most valuable Bulgarian products on the international market.
- **Mountain honey** is perceived as an "artisanal" product, often associated with pure nature and traditional production.
- **Herbal honey** has a wide audience, including consumers looking for functional foods.

These specificities provide an opportunity for the development of regional brands, modern communication through "origin" and the creation of unique product positioning.

In Bulgaria, there is a cyclical nature, which is the result of natural, economic and technological factors. In years with a favorable climate and suitable pasture, high yields are achieved, which, however, can lead to a temporary decrease in purchase prices due to oversupply. In unfavorable years, yields drop dramatically, which increases prices but reduces beekeepers' incomes.

This cyclical pattern creates serious challenges for marketing planning:

- Stable production cannot be guaranteed.
- Markets, especially international ones, require constant quantities.
- Producers cannot predict their income.
- Investment decisions are being delayed.

This puts producers in a vulnerable position and reinforces the need for:

- diversification of products (pollen, bee bread, propolis);
- development of premium segments;
- stockpiling and strategic storage;
- better risk management.

Figure6 Average honey yields (kg/family, 2020–2024)

Year	Average yield
2020	18.9 kg
2021	17.5 kg
2022	19.3 kg
2023	16.4 kg
2024	18.8 kg

Economic profitability – detailed analysis

The profitability of beekeeping farms is strongly linked to the sales channel. Producers who rely solely on buyers receive between 30% and 50% of the final potential income. With direct sales, income increases 2–3 times, but this requires communication, branding, packaging and logistics skills.

Main expense items:

- feeding and nourishing the bees;
- wax bases;
- transport;
- packaging;
- certifications;

Costs are relatively constant, while yields are highly variable. This makes profitability unstable. From a marketing perspective, this means that the path to sustainability is through added value, not volume.

Socio-demographic profile – key aspects

The aging of the sector is a structural problem. The average age of beekeepers is significantly higher than that of other agricultural producers. Young people find it difficult to enter the sector due to the need for initial investments, limited knowledge and lack of guaranteed income.

A positive trend is the influx of urban beekeepers and people oriented towards an eco- and organic lifestyle. This group has greater marketing potential because they are inclined to use digital channels, build brands, and actively communicate with customers.

2.2 Analysis of honey production processes (internal factors)

Beekeeping production processes are a complex of biological, technological and managerial activities that are highly dependent on natural conditions and the competence of the beekeeper. They include the organization of bee colonies, grazing management, seasonal activities, technological operations for honey extraction and subsequent processing. Unlike most agricultural production, beekeeping is characterized by a high degree of uncertainty, which arises from climate change, the condition of honey plants, the risk of diseases and other environmental factors. The analysis of production processes is key to the formation of a marketing strategy, since the quality, quantity and characteristics of honey are a direct result of the production model.

Biological foundations of beekeeping production

The production is based on the biological cycles of the honey bee (*Apis mellifera*). The bee colony is a superorganism that functions through complex mechanisms of organization and communication. Honey production is a natural result of the vital activity of bees, which collect nectar and transform it through enzymatic processes. From the point of view of production and marketing management, this process has the following key characteristics:

1. **Bees cannot be completely controlled.**– they react extremely sensitively to climate change.
2. **Productivity depends on the strength of the family**– strong families produce greater yields.
3. **Honey is the result of the interaction between bees and the environment.**, which means that the producer must manage not only the hives, but also the grazing.
4. **Different pastures yield different types of honey**, which has enormous marketing significance.

These biological features require high competence and constant monitoring.

Organization of the production cycle

The production cycle encompasses activities from early spring to late autumn, divided into the following key phases:

Spring period – building the strength of the family

In the spring, the beekeeper must provide the necessary conditions for the rapid development of bee colonies, including:

- stimulating nutrition;
- replacing old tiles;
- expansion of the socket;
- preventing swarming.

This is a critical period because the strength of the family determines yields throughout the year.

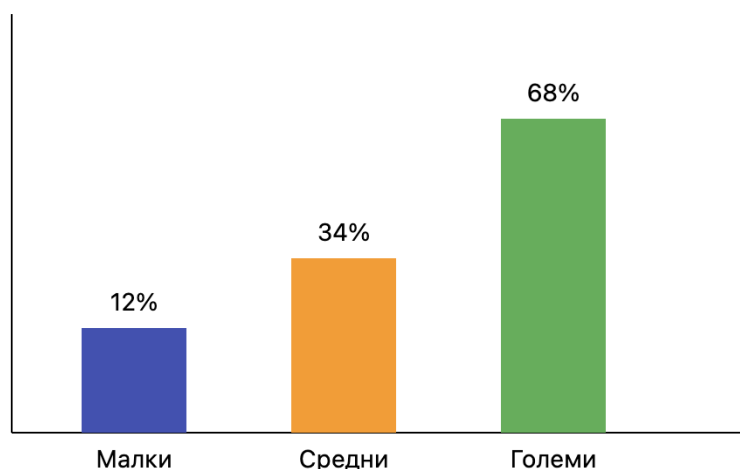
Summer period – main yield

The summer season is key for production. Bees collect nectar from linden, acacia, sunflower, lavender and various wild plants. The beekeeper must:

- controls the availability of pasture;
- moves the hives when necessary (mobile beekeeping);
- carries out timely honey extraction;
- tracks diseases and stress factors.

Moving apiaries, if done correctly, can double yields, but requires equipment, transportation, and good logistics.

Подвижно пчеларство по мащаб на стопанството



Autumn – preparation for wintering

Includes:

- treatment against varroaosis;
- nourishment;
- providing food for the winter;
- narrowing of the socket.

Effective preparation reduces winter mortality, which in some years reaches 10–30%.

Season	Main activities	Objectives of the activities
Spring	Spring inspection, stimulating feeding, replacement of old pits, expansion	Building strong families before the main events
Summer	Swarm control, mobile beekeeping, honey extraction, disease surveillance	Maximizing yield and maintaining health
Autumn	Varroaosis treatment, feeding, nest narrowing, winter preparation	Reduction of winter mortality and stability of the family.

Technological stages of honey extraction and processing

The next key element of the production process is the technological processing of honey. It includes:

1. **Removing pits**– requires attention so as not to disrupt the structure of the bee colony.
2. **Printing**– by knives or machine; affects the purity of the honey.
3. **Centrifugation**– one of the most important stages. Improper centrifugation can lead to impurities and mechanical particles.
4. **Straining**– wax particles and impurities are removed.
5. **Precipitation**– the honey is left in containers to remove the air.
6. **Filling and packaging**– this is where the added value is largely determined.

Many Bulgarian beekeepers still use manual or semi-automatic methods, which does not allow for standardization, but is sometimes perceived by the market as "traditional production".

Factors affecting honey quality

The quality of honey is determined by multiple factors:

- type of pasture and botanical origin;
- climatic conditions;
- condition of the bee colony;

- mining technology;
- storage conditions;
- presence of impurities or residues of veterinary preparations.

From a marketing perspective, quality has a direct impact on:

- the price;
- positioning;
- consumer confidence;
- the possibility of export;
- certification (including organic).

The problems with counterfeit honey on international markets place Bulgarian producers in a special situation: the quality in our country is high, but the sector suffers from an overall low image at the global level due to unfair competition from cheap Asian honeys.

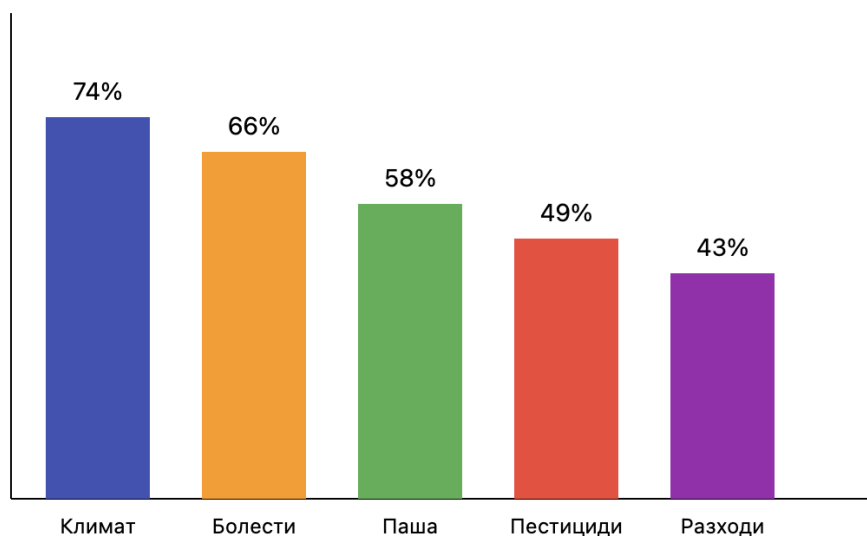
Main risks in production

Among the key risks are:

- climatic anomalies (late frosts, prolonged droughts);
- pesticide poisoning;
- diseases (especially varroaosis);
- loss of pasture due to deforestation or intensive agriculture;
- competition between apiaries in overpopulated areas.

Each of these risks can reduce yields by 30–80%, making risk management an integral part of production strategy.

Основни производствени проблеми (дял от пчеларите)



Role of technological innovation

Modern trends in beekeeping include:

- digital monitoring systems;
- automatic hive removal;
- humidity and temperature sensors;
- GPS for mobile apiary management;
- automated centrifuges;
- product traceability systems.

These technologies allow:

- increasing productivity;
- cost reduction;

- better quality control;
- creating consumer trust through transparency.

Honey production processes are complex, multi-layered and dependent on a wide range of biological, natural and technological factors. From a strategic marketing perspective, production is not just a means of extraction, but is part of the overall value chain that determines the product profile, its positioning and competitiveness.

2.3 Analysis of honey sales and distribution channels

Honey sales channels are a key element of the economic activity of beekeepers and are decisive for profitability, market positioning and opportunities for sustainable development. Unlike industrial production, where channels are clearly structured and standardized, beekeeping in Bulgaria is characterized by a variety of sales forms, varying degrees of organization and significant price variations. This diversity stems from both the structure of the sector itself and consumer behavior, the characteristics of the local market and the state of international trade.

One of the main problems in the distribution channel is that beekeeping is a “small unit production” and lacks strong vertical integration. Most producers sell relatively small quantities, often unsorted and without professional packaging, which forces them to rely on intermediaries or to realize low prices. The difference between the wholesale selling price and the final consumer price is huge – in some cases reaching 300–400%, which highlights the need for strategic management decisions and effective distribution channels.

Table: Sales Channel Shares

Conversion channel	Share of respondents who use it (%)
Sale to buyers	67
Direct sales to familiar and local customers	58
Farmers markets	34
Online sales	22
Sales to small stores	19
Export through an intermediary	11
Self-export	3

Sale through buyers and processors

Traditionally, the most common sales channel in Bulgaria is the sale of honey to buyers, who in turn resell it to processors, retail chains or exporters. This model has deep historical roots, determined by the small scale of apiaries and the weak marketing orientation of producers.

Main features:

- the purchase prices are the lowest on the market;
- the manufacturer does not control the packaging, branding or positioning;
- there is no direct connection with the user;
- there is no incentive to produce high-quality or varietal honey;
- Buyers usually mix different batches.

Many beekeepers accept this model as inevitable because:

- numerous bureaucratic requirements;
- lack of sales skills;
- limited amounts of honey;
- the convenience and speed of the transaction.

Economic weakness: When selling through buyers, producers often receive prices that barely cover cost, especially in years with low yields.

Sales at farmers markets and local events

Farmers' markets have developed as a significant sales channel in recent years. They offer:

- possibility of contact with end users;
- higher prices (up to 2–3 times higher than purchase prices);

- building brand and trust;
- opportunity for tastings;
- a chance to educate consumers about quality and origin.

However, farmers markets require:

- time;
- communication skills;
- production preparation;
- participation in exhibitions;
- consistency in supply.

For many small producers, this is the main channel for sustainable income.

Direct sales from the farm

Direct sales ("from the apiary") have become the preferred model for beekeepers with good local contacts or located in tourist regions. Advantages:

- highest profit per unit;
- high trust – “from the manufacturer”;
- opportunity for demonstration of processes;
- building long-lasting relationships with customers.

This model often uses authenticity marketing, where the beekeeper's history, the location of the apiary, and the traditional approach create emotional value for the consumer.

The limitation of this model is its local nature – few farms can rely entirely on it for large quantities of production.

Sales through retail chains

Retail chains represent an attractive but difficult channel of entry. Main advantages:

- large market volume;
- brand visibility;
- possibility of selling premium packaging;
- creating regular flows of customers.

Main limitations:

- complex requirements for standards and traceability;
- marketing and promotional fees;
- need for constant quantities;
- competition from imported and cheap honeys;
- risk of a price war.

Therefore, this channel is primarily available for:

- cooperatives;
- associations;
- large beekeeping farms;
- processors.

Online commerce (websites, social networks, platforms)

Online sales channels are becoming increasingly important for the sector. Beekeepers use:

- own e-shops;
- social networks (Facebook, Instagram, TikTok);
- marketplaces (Etsy, OLX, Amazon - upon export);
- platforms for farm products.

Advantages:

- access to new audiences;
- opportunity to tell the product's story;
- personal contact with customers through chats and comments;
- possibility of subscription deliveries;
- low entry barriers.

Online sales very often increase the price the producer receives because consumers are willing to pay more for local, authentic, and verified honey.

Disadvantages:

- need for digital skills;
- packaging and shipping costs;

- dependence on reputation, comments and ratings;
- competition with many alternative products.

However, this channel is the fastest growing in Bulgaria.

Export sales

Bulgarian honey is well received in international markets, especially in:

- Germany;
- France;
- Italy;
- the Scandinavian countries;
- The Middle East;
- Japan (niches).

However, exports are dominated by large buyers and processors. Small beekeepers rarely have the opportunity to export independently, unless they specialize in the organic or premium segment.

Export problems:

- strong price fluctuations on international markets;
- competition from cheap Asian honey;
- high costs of certification;
- need for constant quantities.

Despite the obstacles, exports remain strategically important because they bring in foreign exchange and provide opportunities for the development of the premium segment.

Table: Channel evaluation by three criteria

Channel	Profitability	Stability	Development potential
Redeemer	2.1	4.3	1.9
Direct sales	4.4	3.2	4.1
Farmers markets	4.2	3.0	4.3
Online sales	4.0	2.7	4.6
Small shops	3.3	3.7	3.2
Export (through an intermediary)	3.6	3.9	3.4

Beekeepers who manage to combine multiple channels – e.g. farmers market, online store, and limited deliveries to stores – achieve the highest economic stability.

2.4 SWOT analysis of existing honey marketing practices

SWOT analysis is a key analytical tool for systematizing the internal and external factors that influence the development of the beekeeping sector in Bulgaria. It brings together the strengths and weaknesses of production, as well as the external opportunities and threats formed by the market, regulatory and environmental environment.

The purpose of this analysis is to identify the main structural parameters that determine the competitive position of the sector and to outline the strategic directions that should be developed in Chapter Three. The SWOT analysis is based on a synthesis of theoretical conclusions, empirical data from the two survey studies and the latest market and regulatory trends for the period 2023–2024.

SWOT-анализ на пчеларския сектор



The analysis of production, cost structure, sales channels and consumer trends outlines a complex set of problems that limit the development of beekeeping in Bulgaria. These problems are systemic in nature and manifest themselves simultaneously in the biological, economic and market cycle of the product. The sector is in an environment of high uncertainty resulting from climate change, economic fluctuations, competition from imported products and the structural weakness of the beekeeping industry.

This section summarizes the key challenges identified in the previous sections of the chapter and groups them into logically interrelated categories. This summary serves as a starting point for developing the marketing strategy in Chapter Three.

Групиране на основните проблеми в пчеларството



High dependence on weather conditions

Honey production is highly sensitive to temperature amplitudes, precipitation patterns and grazing duration. In 2023–2024, adverse climatic events such as late spring cold snaps, extreme summer heat and prolonged precipitation were observed. These factors lead to:

- reduction of yields;
- occurrence of stress reactions in bee colonies;
- limiting grazing during key periods.

Insufficient technological capacity

Many Bulgarian farms do not have modern equipment for honey extraction, processing and storage. The consequences include:

- lower production efficiency;
- more difficult to maintain standardized quality;
- limited possibility of certification;
- difficulties in reaching premium markets.

Fragmentation of production

A large part of the farms are small-scale. This leads to:

- lack of economies of scale;
- higher cost per unit of production;
- inability to invest in equipment;
- dependence on seasonal and unstable income.

High cost and inconsistent yields

The costs of feeding, chemicals, fuels and equipment increase after 2022, increasing the cost of production. Combined with the fluctuating yields, this makes profitability unpredictable.

Limited financial sustainability

Small farms often depend on external income or subsidies. In a weak season, beekeepers have difficulty covering their costs. The lack of long-term contracts with traders also reduces financial stability.

Insufficient use of financial instruments

Many beekeepers do not use:

- credit products,
- modernization programs,
- cooperative financial services.

This limits the possibility of investment.

Problems related to the realization of the production

Domination of the Redeemers

About two-thirds of beekeepers sell the bulk of their production to buyers, which leads to:

- low selling price;
- lack of control over branding and packaging;
- limited added value;
- strong dependence on external intermediaries.

Limited marketing skills

Many manufacturers do not have:

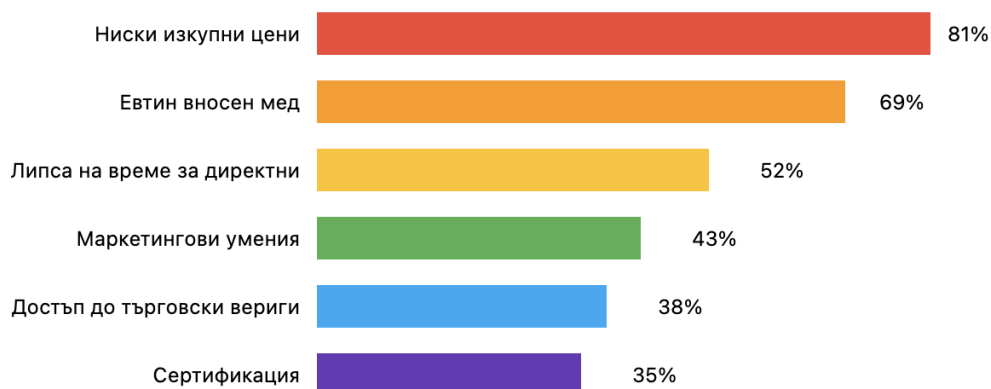
- branding skills;
- digital competencies;
- positioning strategies;
- experience in direct sales.

This leads to low competitiveness in the domestic market.

Low consumer trust

The numerous cases of counterfeit honey undermine trust in the sector, forcing beekeepers to invest effort in convincing consumers, which is resource-intensive.

Основни бариери при реализацията (% от пчеларите)



The summary of the problems in the production and sale of honey shows that the sector operates in conditions of high complexity and multi-layered difficulties. The main challenges are related to:

- production uncertainty;
- limited modernization;
- lack of market orientation;
- difficult access to high value-added channels;
- competition from cheap imports;
- insufficient organizational support.

These problems require a systematic and strategic approach that integrates the production, economic and marketing aspects of beekeeping. In this context, Chapter Three proposes strategic solutions to increase the competitiveness of the sector, improve the marketing orientation and strengthen the sustainable development of beekeeping farms.

Chapter Three Development of a marketing strategy for managing the production and sale of honey

3.1 Development of a marketing mix for honey

The development of a marketing strategy for the management of honey production and sales in Bulgaria requires an integrated approach that combines the specifics of the agricultural sector, the biological limitations of beekeeping activity and the dynamics of the national and international honey market. The strategic process is based on the understanding that beekeeping is a sector with a specific structure, a high degree of resource dependence, strong seasonality and significant variations in yields, which makes it particularly sensitive to changes in the external environment. Therefore, the marketing strategy cannot be considered as a static document, but as a dynamic management framework that orients the economy towards sustainable growth and competitiveness.

The conceptual framing of the strategy is based on three key theoretical pillars:

Strategic marketing, which determines the long-term orientation of the economy towards markets, segments and consumers;

Value chain management, through which production, processing, packaging and sales are viewed as linked elements creating differentiated value;

Agricultural strategic management, which considers biological cycles, climate risks and production constraints as strategic factors rather than operational difficulties.

The framework thus formulated allows for the creation of a strategy that is both adaptive, market-oriented and subject to the principles of sustainable development.

The conclusions from the second chapter clearly show that the beekeeping sector in Bulgaria is characterized by the following structural features, which directly reflect on the formulation of the strategy:

- strong fragmentation and dominance of small farms;
- limited resource availability and low level of technology;
- lack of vertical integration and dependence on buyers;
- significant differences between regions in terms of types of pasture and types of production;
- growing consumer interest in organic, varietal and regional products;
- increased competition from imported, low-quality honeys;
- potential of online channels to expand market access;
- insufficient use of branding and marketing communication tools.

These characteristics form the constraints and opportunities that should be taken into account when developing strategic decisions.

A strategy that does not take into account production uncertainty, market fragmentation and the lack of market organization would be incomplete and difficult to implement. Therefore, this chapter creates a strategic framework that follows the logic: analysis → objectives → positioning → strategies → implementation → monitoring.

Basic principles of strategic planning in beekeeping

The formation of a marketing strategy in beekeeping is based on several basic principles that arise from both theoretical concepts and empirical data obtained from survey studies:

1. Principle of sustainability Honey production is a long-term process, dependent on the state of the environment and biodiversity. Therefore, any marketing strategy must include environmental standards, organic certification, transparency of origin and sustainable practices.

2. Value-added principle Profitability in the sector increases not through volume, but by increasing the value of the product: variety lines, premium packaging, branding, direct sales.

3. Principle of differentiation Honey is a product with the same basic functionality, but a high potential for differentiation in:

- origin,
- variety,
- organic quality,
- manufacturer's history,
- packaging method,
- additional characteristics (propolis, pollen).

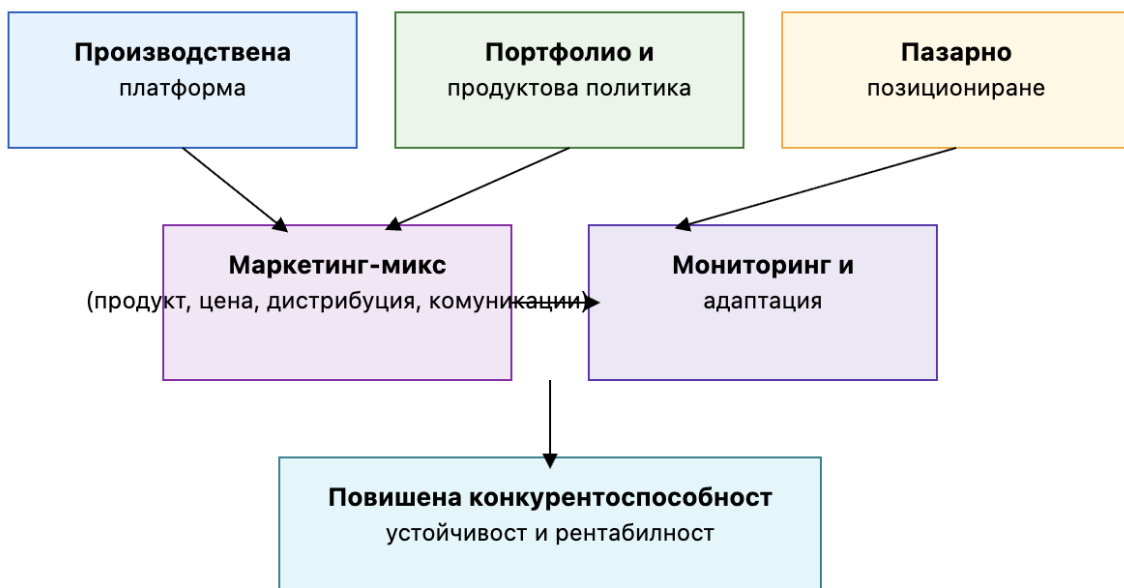
1. **Principle of market orientation** The manufacturer must adapt to:

- consumer behavior,
- trends towards organic and local products,
- expectations for transparency and traceability,
- the dominant sales channels.

2. **Principle of integrated communication** Regardless of scale, every manufacturer must build a consistent presence across communication channels to achieve trust and recognition.

Conceptual model of strategy

Концептуален модел на маркетинговата стратегия



3.2 Priority strategic directions

The strategic priorities outline the key areas where the beekeeping industry should focus its efforts to increase competitiveness, sustainability and profitability. They represent a synthesis of the analysis from the previous chapters and define the specific management axes along which the marketing strategy should be developed.

The directions outlined are consistent with both the specifics of the beekeeping sector in Bulgaria, as well as with international market trends, consumer behavior and environmental challenges. The proposed structure unites production, market, technological and

communication aspects, which ensures a comprehensive and integrated approach to strategic development.

Table: Priority strategic directions and expected effects

Strategic direction	Basic actions	Expected effect
Modernization of the production process	Equipment, monitoring, standardization	Increased yields, higher quality
Development of premium and varietal product lines	Varieties, organic certification, limited editions	Higher margins, entry into premium segment
Expanding conversion channels	Direct, online, farmers markets, stores	Diversifying risk, higher sales
Building a brand identity	Logo, labels, storytelling, social media	Increased recognition and trust
Digitalization and innovation	Online platforms, monitoring, automation	Reduced costs, better management
Cooperation and organizational development	Associations, cooperatives, common processing centers	Economies of scale, stronger market position

Strengthening the production base and improving quality

The first priority area concerns improving production infrastructure, stabilizing yields and ensuring sustainable quality. This includes:

- **equipment modernization** through semi-automatic or automatic centrifuges, controlled storage rooms, precise hygrometer and temperature instruments;
- **introduction of a permanent monitoring system** for bee colonies – weighing scales, humidity and temperature sensors, mobile diagnostic applications;
- **separate collection of varietal honeys**, which provides higher value and better positioning opportunity;
- **building standardized extraction and processing processes** which lead to minimizing the risks of contamination or improper storage;
- **increasing the number of strong families**, which is a key factor for profitability.

Strengthening the production base is not just a technical act, but a strategic prerequisite for entering higher-value segments.

Development of premium and varietal product lines

Market trends clearly show that the premium segment is growing faster than the mass market. Bulgarian honey has natural characteristics that make it competitive in this segment. That is why the second strategic direction is aimed at:

- **development of clearly defined varietal honeys** – acacia, linden, mandarin, herbal;
- **creating limited editions**, based on a specific pasture or unique region;
- **positioning of organic certified products** as high-value propositions;
- **differentiation through functional additives** – propolis, bee pollen, nuts;
- **development of gift formats** (gift boxes, tasting sets).

The premium product line allows for significantly higher margins and resilience to price fluctuations.

Expansion and optimization of conversion channels

Based on the analysis in Chapter 2, it is clear that distribution is one of the weakest links in the sector. Therefore, the third priority area is related to building an effective and multi-level distribution system.

Strategic actions include:

- **increasing the share of direct sales** – the most profitable channel;

- **online sales development** through its own website, social networks and farm platforms;
- **participation in farmers' markets** to build trust and recognition;
- **long-term partnerships with small shops and organic traders**;
- **cooperation to reach retail chains**– for small or medium-sized farms;
- **preparation for export** through quality unification and certification.

Effective distribution guarantees not only higher revenues, but also a more stable presence in the market.

Building and developing brand identity

In today's marketplace, the brand is no less important than the product itself. In the honey sector, where trust and origin are dominant factors, building a brand is of strategic importance.

The main directions include:

- **creating a visual identity**, including logo, color system, typography;
- **formulating a brand story**, based on region, traditions and sustainable production;
- **consistency in communication materials**, labels, packaging;
- **active presence on social networks**, based on storytelling;
- **introduction of brand guarantee**, such as certificates or quality declarations.

A developed brand increases consumer loyalty and enables long-term positioning in the premium segment.

Digitalization and innovation in management

Digital technologies provide new tools for managing production, communication and sales. Therefore, digitalization is a strategic direction in its own right.

Key activities include:

- **implementation of hive monitoring systems** allowing early detection of problems;
- **using digital diaries** for farm management;
- **creating online ordering platforms**;
- **use of analytical tools** to forecast sales and customer behavior;
- **process automation**, including centrifugation and filling.

Digitalization reduces costs, optimizes labor, and improves the quality of management.

3.3 Risk assessment and sustainability of the strategy

Risk assessment and management are an essential component of the strategic management of beekeeping farms. Beekeeping is a sector with a high degree of uncertainty, determined by the interaction between biological, climatic, economic and market factors. This sensitivity necessitates the development of a reliable system for identifying, assessing, monitoring and managing risks.

The strategic sustainability of production and the successful sale of honey depend on the farm's ability to predict adverse events and take adequate preventive and corrective actions. In this regard, risk management is not a one-time process, but a continuous management function that should be integrated into the overall strategy.

Identification of the main risks in beekeeping

Based on the analysis in Chapter 2 and good practices in the sector, the main risk groups can be structured as follows:

1. Biological risks

They arise from the condition of bee colonies and include:

diseases such as varroaosis, nosematosis, American foulbrood;
high winter mortality;
swarming and loss of strength of bees;

developmental disorders in the mother.

Biological risks can lead to serious declines in yields and quality of produce.

2. Environmental and climate risks

Climatic conditions are the main factor affecting yields. Key risks include:

prolonged droughts;

heavy rains during grazing;

late frosts;

high temperature amplitudes;

loss of pasture due to intensive farming.

This group of risks is difficult to predict and requires adaptive management.

3. Risks associated with the use of pesticides

Bee poisoning from agricultural chemicals is one of the most dangerous and common risks. It can lead to:

mass mortality of bee colonies;

contamination of honey;

loss of market positions.

4. Economic risks

They are related to:

volatility of purchase prices;

increase in production costs;

demand volatility;

competition from low-quality imported honey.

5. Market and communication risks

They include:

loss of trust from consumers;

negative media publications regarding the quality of honey;

counterfeit products that undermine the image of the sector.

6. Organizational risks

They arise from:

lack of skilled labor;

poor planning;

inefficient allocation of resources;

insufficient digitalization.

Risk assessment – probability and impact matrix

The identified risks must be assessed according to two main criteria:

frequency – how often the risk may occur;

impact – what damage it can cause on production and sales.

A typical risk assessment matrix in beekeeping might look like this:

Probability categories

Low – unlikely to happen;

Medium – possible, but not annually;

High – likely to occur every year.

Impact categories

Low – minimal losses or temporary problem;

Medium – significant impact on yields or costs;

High – critical impact on the economy.

Combined assessment

High probability + high impact → critical risk

Medium probability + high impact → strategic risk

High probability + low impact → operational risk

Low probability + low impact → acceptable risk

Examples:

Varroaosis → high probability / high impact

Rainy weather during linden grazing → medium probability / high impact

Volatile prices → high probability / medium impact

Pesticide poisoning → low probability / high impact

As a result of the implementation of the marketing strategy, the beekeeping farm is expected to achieve significant improvements in production results, profitability and market positions. Through an integrated approach - based on quality, differentiation, brand communication, digitalization and sustainable practices - the farm can build a long-term competitive profile and become a stable participant in the national and international market.

Conclusion

This dissertation aims to explore the theoretical, analytical and applied aspects of marketing strategy in the management of honey production and sales, covering the key characteristics of the beekeeping sector in Bulgaria, its economic trends, organizational features and strategic prospects. By systematizing the scientific statements of strategic marketing, through an in-depth analysis of production processes, cost structure, market channels and real difficulties of beekeepers, the dissertation offers a comprehensive approach to optimizing the production and market development of beekeeping farms.

The first chapter examined the theoretical and methodological foundations of strategic marketing, defining its essence, goals, functions and applicability in the agricultural sector. It was shown that strategic marketing in beekeeping should be considered not only as a tool for market implementation, but also as an integrated management concept that encompasses the processes of planning, segmentation, positioning, product differentiation and building long-term competitive advantages.

In the second chapter, an in-depth organizational and economic analysis of the state of the beekeeping sector in Bulgaria was carried out. The analysis included the structure of farms, regional differences, yield dynamics, production costs, profitability of different sales models and the characteristics of consumer demand. The results of two survey studies were included, which outline the real problems and attitudes of producers regarding the production and marketing of honey. It was found that the key challenges include high production costs, dependence on intermediaries, seasonal instability, lack of brand identity, low level of digitalization and limited added value.

In the third chapter, an integrated marketing strategy for the production and sale of honey was developed. The strategy includes the formulation of strategic, tactical and operational objectives; segmentation and positioning models; product, pricing, distribution and communication strategies; as well as mechanisms for implementation, risk management and monitoring. Specific solutions were proposed for optimizing the production process, developing premium and regional product lines, expanding sales channels, digital positioning and building brand identity. The presented strategic framework shows how beekeeping can achieve higher efficiency, greater sustainability and better market realization through an integrated marketing approach.

The main conclusions that emerge from the research conducted are the following:

1. Beekeeping in Bulgaria has significant development potential, but this potential is only partially realized due to structural, organizational and marketing deficits.
2. Honey production is biologically and climatically dependent, making strategic planning a necessary condition for sustainable development.
3. The most significant opportunities for increasing profitability are associated with adding value through varietal honey, organic certification, premium products and direct sales.
4. The marketing strategy should be integrated with the production logic, linking the quality, origin and authenticity of the product with a clear market positioning.
5. Digitalization is becoming a key factor in reaching new customers, building trust, and expanding market presence.
6. For beekeeping farms, the most sustainable model is to combine several sales channels, reducing dependence on buyers.
7. Cooperation and vertical integration could lead to lower costs, better organization, and a stronger market presence.

The proposed marketing strategy is a practical tool for beekeeping farms that can be adapted to different scales and regional specificities. It provides a systematic approach to solving production and market challenges, combining the scientific principles of strategic marketing with the concrete realities of the Bulgarian beekeeping sector.

III. REFERENCE ON CONTRIBUTIONS

The dissertation "Marketing Strategy for Managing Production and Sale of Honey" contains the following more significant contributing ideas and solutions for the theory and practice of corporate management:

1. A comprehensive methodology has been developed to establish the impact of marketing strategy on wine production and trade.
2. Existing marketing strategies and approaches in theory and practice have been adapted and successfully applied in the study of a specific agricultural sector, the production of wine and grapes.
3. Proposals have been made to improve the information and documentary basis for managing information flows for the needs of strategic analysis.
4. A model for formulating, implementing and controlling a marketing strategy has been developed and applied to a specific winery.

IV. LIST OF PUBLICATIONS ON THE TOPIC

1. **Kurdov, D.**, Marketing management of production. Theoretical aspects and determinants Journal of Bio-based Marketing. 2025, No. 2
2. **Kurdov, D.**,Market factors for beekeeping development. Journal of Bio-based Marketing. 2026, No. 1
3. **Kurdov, D.**,Management model for developing a marketing strategy. Journal of Bio-based Marketing. 2026, No. 1