

Business strategy for Agricultural cooperative “Berry Partner”

Bc. Olha Kondratiuk

Master's thesis
2021

 Tomas Bata University in Zlín
Faculty of Management and Economics

Document for registration DIPLOMA THESIS

Name and surname: **Bc. Olha Kondratiuk**
Personal number: **M190427**
Address: **Mykhayla Maksymovycha str 9-B, apt 191, Kyiv, 03022 Kyiv, Ukrajina**
Work topic: **Business strategy for Agricultural cooperative “Berry Partner”**
Work topic in English:
Supervisor: **prof. Ing. Boris Popesko, Ph.D.**
Department of Business Administration

Theses guidelines:

Introduction

Theoretical part

- Explore the theoretical background of business strategy and role of the agricultural market in UA economy

Practical part

- Analyze the fruit and berry market of Ukraine
- Analyze the Covid-19 implications on the fruit and berry market of Ukraine
- Develop a business strategy for AC “Berry Partner”
- Submit the project to risk and cost analysis

Conclusion

Recommended resources:

BLACKBURN, Robert A., Mark HART a Thomas WAINWRIGHT. Small business performance: Business, strategy and owner-manager characteristics. *Journal of Small Business and Enterprise Development*. Emerald Group Publishing Limited, 2013, **20**(1), 8 – 27. ISSN 1462-6004. Dostupné z: doi:10.1108/14626001311298394

ROBBINS, Peter a Colm O’GORMAN. Innovation processes: do they help or hinder new product development outcomes in Irish SMEs? *The Irish Journal of Management*. 2016, **35**(1), 88-103. Dostupné z: doi:10.1515/ijm-2016-0006

SOKIL, Oleh, Valeriy ZHUK a Laszlo VASA. Integral assessment of the sustainable development of agriculture in Ukraine. *Economic Annals-XXI*. 2018, **170**(3-4), 15-21. Dostupné z: doi:10.21003/ea.V170-03

DZOGBENUKU, Robert a Solomon KEELSON. Marketing and entrepreneurial success in emerging markets: the nexus. *Asia Pacific Journal of Innovation and Entrepreneurship*. Emerald Group Publishing Limited, 2019, **13**(2), 168-187. Dostupné z: doi:10.1108/apjie-12-2018-0072

GALPERINA, Liubov. Main Challenges of Agriculture of Ukraine in Globalization. *European Researcher*. Academic Publishing House Researcher, 2014, **87**(11-2), 1996-2004. ISSN 2219-8229. Dostupné z: doi:10.13187/er.2014.87.1996

Student’s signature:

Date:

Supervisor’s signature:

Date:

BACHELOR'S/MASTER'S THESIS AUTHOR STATEMENT

I hereby acknowledge that:

- Upon final submission of my Bachelor's/Master's Thesis, I agree with its publishing in accordance with Act No. 111/1998 Coll., on Higher Education Institutions and on Amendment and Supplements to Some Other Acts, (The Higher Education Act), without regard to the defence result;
- My Bachelor's/Master's Thesis will be released in electronic form in the university information system, accessible for reading only; and one printed copy of the Bachelor's/Master's Thesis will be stored on electronic media in the Reference Library of the Faculty of Management and Economics of Tomas Bata University in Zlín;
- To my Bachelor's/Master's Thesis fully applies Act No. 121/2000 Coll., on Copyright, Rights Related to Copyright and on the Amendment of Certain Laws (Copyright Act) as subsequently amended, esp. Section 35 Para 3;
- In accordance with Section 60 Para 1 of the Copyright Act, TBU in Zlín is entitled to enter into a licence agreement about the use of the Thesis to the extent defined in Section 12 Para 4 of the Copyright Act;
- In accordance with Section 60 Para 2 and 3, I can use my Bachelor/Master's Thesis, or render the licence to its use, only with the prior expressed written agreement of TBU in Zlín, which is in such case entitled to require from me appropriate financial compensation to cover the cost of creating the Bachelor/Master's Thesis (up to the total sum);
- If the software provided by TBU or other entities was used only for study and research purposes (i.e. for non-commercial use) in the development of the Bachelor/Master's Thesis, it is not possible to use the Bachelor/Master's Thesis commercially;
- In the event that the Bachelor/Master's Thesis output encompasses any software product, source codes and/or files of which the project consists of are considered part of the Thesis. Failure to submit this part of the Thesis may result in an unsuccessful defence of the Thesis.

I herewith declare that:

- I have created this Bachelor/Master's Thesis on my own and cited all used sources. In case the results are published, I shall be cited as author.
- The contents of the Bachelor/Master's Thesis handed over are identical with the electronic version entered in the IS/STAG.

Zlín , August 18th 2021

.....
signature

Name and surname: Olha Kondratiuk

ABSTRAKT

Zemědělský sektor Ukrajiny se významně podílí na tvorbě HDP, trhu práce a exportní bilanci. V posledních letech čelily malé a střední zemědělské podniky dalším obtížím v důsledku nepředvídatelných abnormálních klimatických podmínek, omezení na trhu práce a destabilizovaných dodavatelských kanálů.

Teoretická část poskytuje základní informace o sestavování strategií, analýze a rozhodování. Analytická část práce se zaměřuje na podrobnou analýzu zemědělského trhu Ukrajiny a nastiňuje potenciální příležitosti růstu pro vybrané malé a střední podniky. Analýza poskytuje informace o hlavních distribučních kanálech, klíčových mezinárodních partnerech a potenciálních rizicích a příležitostech pro zemědělský sektor v segmentu ovoce a bobulovin. Praktická část poskytuje vyváženou strategii pro malý a střední podnik působící v segmentu ovoce a bobulovin na základě výsledků analýzy a nastiňuje hlavní směry, na které by se měl podnik zaměřit, aby dosáhl většího podílu na trhu a expandoval na nové trhy.

Klíčová slova: strategie, analýza trhu, zemědělství, malý a střední podnik, tvorba strategie, ekologická produkce, pronikání na trh.

ABSTRACT

The agricultural sector of Ukraine makes up for a significant size of the GDP contributions, labor market, and export balance. In the last years, agricultural SMEs have faced additional hardships due to unpredictable abnormal weather conditions, restrictions on the labor market, and destabilized supply channels.

The theoretical part provides background information on strategy compilation, analysis, and decision making. The analysis part of the thesis focuses on the detailed analysis of the agricultural market of Ukraine and outlines the potential growth opportunities for the chosen SME. The analysis provides information on main distribution channels, key international partners, and potential risks and opportunities for the agricultural sector in the fruit and berry segment. The practical part provides a balanced strategy for the SME with operations in the fruit and berry segment based on the results of the analysis and outlines key directions the enterprise should focus on to achieve a bigger market share and expand to new markets.

Keywords: strategy, market analysis, agriculture, SME, strategy formation, organic production, market penetration.

ACKNOWLEDGEMENTS

I would first like to thank my thesis advisor prof. Ing. Boris Popesko, Ph.D. for his support and guidance during the preparation of the Master's thesis. He consistently allowed this paper to be my own work but steered me in the right direction whenever he thought I needed it. I also express my sincere gratitude to the professors and faculty advisors at the Faculty of Management and Economics for consistent and valuable guidance throughout the 2 years of my academic studies.

Most importantly I want to thank my family for supporting and encouraging me throughout many important life decisions. I want to express gratitude to my mother, Marta Yatsenko, and grandmothers, Olha Yatsenko & Lyudmyla Kondratyuk, who have poured their heart out to make me the best person I am today.

A heartfelt thank you goes to my sisters Lyubov and Viktoria, who have always encouraged me to reach for the stars and helped do so. To my UTB friends, Aitolkyn, Berna, Islam, My, Olga and Sofia, thank you for the wonderful two years and memories!

I hereby declare that the print version of my Bachelor's/Master's thesis and the electronic version of my thesis deposited in the IS/STAG system are identical.

CONTENTS

INTRODUCTION	9
OBJECTIVES AND METHODS OF MASTER THESIS	10
I THEORY	11
1. STRATEGIC MANAGEMENT AS A CONCEPT.....	12
1.1 STRATEGIC PLANNING AS A MANAGERIAL FUNCTION	13
1.2 LITERATURE REVIEW ON THE DEFINITION OF STRATEGY	13
1.3. KERNEL OF A GOOD STRATEGY	15
2. THEORETICAL FRAMEWORK FOR BUSINESS STRATEGY.....	17
2.1 DEFINITION AND CLASSIFICATIONS OF STRATEGIC MANAGEMENT.....	17
2.2 MAIN FACTORS IN DEFINING STRATEGY FOR THE DEVELOPMENT OF THE ENTERPRISE	22
2.2.1 PROCESS OF STRATEGY DEVELOPMENT	25
2.2.2 ANALYTICAL METHODS FOR STRATEGY DEVELOPMENT AND ASSESSMENT	26
2.3 CRISIS MANAGEMENT AND PLANNING UNDER UNCERTAINTY IN UA	28
II ANALYSIS	32
3. ROLE OF AGRICULTURE IN UKRAINIAN ECONOMY.....	33
3.1 UKRAINIAN RANKING IN THE GLOBAL ECONOMY	33
3.2 CHALLENGES AND OPPORTUNITIES FOR UKRAINIAN AGRICULTURE	35
3.3 GOVERNMENT SUPPORT PROGRAMS	36
4. ANALYSIS OF THE FRUIT AND BERRY MARKET OF UKRAINE.....	41
4.1 OVERVIEW OF THE FRUIT AND BERRY MARKET OF UKRAINE	41
4.2 OVERVIEW OF FRUIT AND BERRY PRODUCTION OF UKRAINE	42
4.2.1 SEASONALITY ECONOMETRICS MODEL ON THE PRODUCTION VOLUMES OF FRUITS AND BERRIES CALCULATED ON THE DATA FROM 2017-2020	44
5. ANALYSIS OF THE FRUIT AND BERRY EU MARKET POTENTIAL FOR UKRAINIAN PRODUCERS.....	48
5.1 THE EUROPEAN UNION–UKRAINE ASSOCIATION AGREEMENT.....	48
5.1.1 EU REGULATION IN AGRICULTURE.....	48
5.2 EU MARKET ANALYSIS.....	50
5.2.1 FRESH BERRIES MARKET SEGMENT	50
5.2.2 FROZEN BERRIES.....	55
5.2.3 KEY FOOD INDUSTRY SEGMENTS	56
6. ANALYSIS OF THE COVID-19 IMPLICATIONS ON FRUIT AND BERRY MARKET OF UKRAINE.....	59
6.1 ANALYSIS OF EXTERNAL AND INTERNAL FACTORS	59
6.1.1 THE IMPACT OF WEATHER CONDITIONS ON THE UA MARKET IN 2019/20 SEASON	60

6.1.2	THE IMPACT OF COVID-19 ON THE SALE OF FRUITS AND BERRIES IN UKRAINE	61
6.2	THREATS AND OPPORTUNITIES FOR UKRAINIAN FRUIT AND BERRY ENTERPRISES	64
7.	ANALYSIS OF AC “BERRY PARTNER”	69
7.1	OVERVIEW OF AC “BERRY PARTNER”	69
7.1.1	PRODUCTS AND SPECIALIZATION	69
7.1.2	FINANCIAL PERFORMANCE.....	71
7.1.3	STRUCTURE AND WORKFORCE OVERVIEW.....	72
7.2	ASSESSMENT OF INTERNAL AND EXTERNAL FACTORS INFLUENCING THE DEVELOPMENT OF COMPETITIVE STRATEGY	76
7.2.1	SWOT ANALYSIS	76
7.2.2	BENCHMARKING.....	79
7.2.3	KERNELS TO CONSIDER IN STRATEGY FORMATION	80
8.	BUSINESS STRATEGY FOR AC “BERRY PARTNER”	82
8.1	STRATEGIC DIRECTIONS FOR AC “BERRY PARTNER”.....	82
8.1.1	KERNEL I: CULTIVATION OF NEW CROPS.....	82
8.1.2	KERNEL II: EXPANSION INTO THE ORGANIC FRUIT AND BERRY MARKET.....	83
8.1.3	KERNEL III: BETTER MARKETING COMMUNICATION.....	84
8.1.4	KERNEL IV: ORGANIC CERTIFICATION AND EXPORT	86
8.1.5	KERNEL VI: DISTRIBUTION CHANNELS	89
8.1.6	KERNEL VII: IMPLEMENTATION OF EFFICIENT AGRICULTURAL TECHNOLOGIES	92
8.1.7	KERNEL VIII: TRAINING AND PROFESSIONAL DEVELOPMENT OF PERSONNEL.....	93
9.	RISK AND COST ANALYSIS OF THE BUSINESS STRATEGY	95
9.1	TIME FRAME ANALYSIS.....	95
9.2	COST ANALYSIS	97
9.2.1	COST ANALYSIS OF ORGANIC BLUEBERRY PRODUCTION	97
9.3	RISK ANALYSIS	101
9.3.1	RISK MITIGATION MEASURES FOR THE SEASON 2022.....	102
9.3.2	SOCIOLOGICAL RISKS.....	103
	CONCLUSION	104
	BIBLIOGRAPHY	105
	LIST OF ABBREVIATIONS	107
	LIST OF FIGURES.....	108
	LIST OF TABLES	109
	APPENDIX P I. BENCHMARKING.....	110

INTRODUCTION

Agriculture is a strategically important industry of the Ukrainian national economy because it provides Ukraine with food independence and employs a significant part of the rural population. The gross domestic product in the agricultural sector of the economy at the end of 2020 amounted to UAH 388.7 million, or 9,5% of the national GDP. (SSCU, 2020) However, it is not the optimal result as the economic potential of the agricultural sector of Ukraine is not fully used.

Ukraine has the largest agricultural land area in Europe with approximately 41 mln. acres of land with 32.5 mln. acres used for crops. Fertile soils and temperate climate give Ukrainian producers strong competitive advantages. In addition, Ukrainian agricultural holdings have higher efficiency than international ones due to low production costs (cheap labor and low land rent rates), fertile soils, and relatively high yields.

There are many untapped opportunities for Ukrainian agricultural enterprises to earn higher profits and take leading position among the international competitors. One of the hidden gems is the fruit and berry market which is growing due to the wellness industry valued \$4.2 trillion industry in 2019. In addition, COVID-19 pandemic draws even more attention to personal health and promotes the consumption of plant-based organic products.

The fruit and berry advantage are that it's ready-to-eat and popular. The main disadvantages are the short shelf life and perishable nature of the product. The main challenges for Ukrainian fruit and berry producers lay in processing and distribution, ever-changing government legislation and taxation, Covid-19 pandemic, lack of strategic planning.

The thesis provides a data-driven and up-to-date analysis of the fruit and berry market of Ukraine to draft an effective strategy for AC "Berry Partner". The thesis is relevant to all enterprises in the fruit and berry market of Ukraine.

OBJECTIVES AND METHODS OF MASTER THESIS

The objective of the thesis is twofold: a practical one is to draft a strategic plan for agricultural cooperative “Berry Partner” and a theoretical one - to research strategic management sources and provide comprehensive relevant and up-to-date analysis of the current state of Ukrainian fruit and berry market.

The theoretical part was compiled by the method of collection and analysis of primary and secondary sources. The analytical part uses a combination of database analysis (tabular research), qualitative and quantitative research. The part of the analysis is based on analyzing the answers of Ukrainian enterprises that have main operations in growing, processing, selling and trading fresh fruits and berries. The enterprises are categorized as follows - the 80 farmers, 20 processors and 10 combined farmers and processors.

Quantitative research is used for the following parts of market research:

- collection of data on changes in the cost, sales and sales channels of Ukrainian producers and processors of fruits and berries due to the COVID-19 crisis;
- collection of data on changes in yields due to weather conditions to separate the impact of weather disasters from the effect of COVID-19.

Qualitative research is used for the following parts of market research:

- assessment of changes in the world market of fruits and berries;
- assessment of the challenges faced by Ukrainian producers and processors (all types) in domestic and international markets;
- assessing the support of Ukrainian producers and processors to minimize the impact of the COVID-19 crisis on their business.

In the practical part, the situation analysis was performed with the help of market analysis, benchmarking, SWOT analysis, risk matrix compilation. Based on the situation analysis results, a project was designed that was subjected to time, cost, and risk analysis. The starting point for decision-making was collecting information through internal company data, analysis of statistical output from the web and company accounting.

I. THEORY

1 STRATEGIC MANAGEMENT AS A CONCEPT

In general terms, most experts understand strategic management as the long-term development, management, and organization of the company aimed at success. Unlike tactics, strategy looks far ahead, determines the directions, and sets priorities. Strategic planning and management are goal-oriented, focused, and relevant. It is the best when strategic management drives the corporate mission and philosophy. Thus, strategic management is a forward-thinking perspective plan and execution for further development. Strategic management adds value and substance to any organization.

The oft-cited quote from Lewis Carroll's "Alice in Wonderland" says: "If you don't know where you're going, it does not matter what road you take." The quote implies that one should know the destination point to avoid aimless wandering. That's why strategy considers the long-term vision of potential prospects, budget allocation, implementation, value, and finally, desired results.

Strategic leaders need to have a broad and long-term vision of potential prospects. But they must also understand that they are responsible, firstly, for planning the allocation of funds in the way most beneficial for implementing the strategy and, secondly, for building management, adding significant value to the results obtained by the organization.

Strategic management is carried in the context of the organization's mission. Its fundamental task is to ensure the connection of the mission with the organization's main goals in a changing economic environment. Strategic management concerns both goals and means of achieving them.

The essence of goals defines the general outlines of the organization's future as for the means - shows how this goal should be achieved. Thus, strategic management is forecast management associated with developing and conceptualizing ideas about where the organization is heading. Strategic management should be combined with the practice of current management. It is always important to remember that strategy is a means to create added value.

Experts unilaterally confirm that corporate planning at the level of the corporation, branches, groups, units is a must. It is viewed as a primary management function. General corporate planning evolved in three stages:

- Chaotic planning or no-planning;

- Rigid strategic planning;
- Agile strategic planning.

The main disadvantage of the first two types of planning is its "closed system" approach that hardly interacts with the external environment. Often in such cases, figures, standards, and methods are also rigid. Only adaptive planning can bring flexibility and sustainability.

1.1 Strategic planning as a managerial function

Strategic planning is one of the main functions of strategic management. The decisions must regard prognosis, resources, external environment, structures, obstacles, and accelerators. In the best-case scenario, strategy guides management decisions, organizational functions, motivation and control, human resources.

Strategic planning ensures the effectiveness and development of the enterprise with respect to changes in the environments, which represent potential market changes, threats and opportunities, force majors, trends, impacts, competition.

In theory, strategic planning differs in contrast to long-term extrapolation planning. In long-term extrapolation, the forecast is developed by each active service, which is aimed at its interests. Strategic planning is based on a fundamentally new approach to forecasting the environment: strategic economic zones (SEZ) and strategic business centers (SBC). SEZs are separate segments of the external environment or market-product segments to which the firm has or wants to gain access. Per the SEZ, the company assigns production units responsible for the development strategy of the SEZ. Strategic planning employs a comprehensive analysis of the external environment and internal capabilities. Also, it requires a multi-variant strategy with options and provisions, alternatives, and backups.

1.2 Literature review on the definition of strategy

The term "strategy" has interesting etymology and was adopted by economics from military terminology. The word "strategy" comes from Greek "στρατηγία stratēgia", defined as "art of troop leader; office of general, command, general". (Cambridge English Dictionary) As a final product, strategy is represented as a paper or digital document listing measures for strategic planning.

As we know it, the business strategy transcended the battlefield and adapted to the more peaceful realities of capitalism, free market, and competition. Everybody in the free market employs its energy, resources, strength to achieve the desired result.

Alfred D. Chandler Jr. has defined the term as “the determination of the enterprise's basic long-term goals and objectives, and the adoption of courses of action and the allocation of resources for carrying out these goals.” in his book „Strategy and Structure“. (Chandler, 2013) The definitions of strategy in the context of application to business activity vary from author to author, but all come together around a concept that it's a “pattern in the stream of decisions” (Mintzberg, 1965) and “... that characterizes the match an organization achieves with its environment... and that is determinant for the attainment of its goals”. (Hofer, 1978)

Some academics, like Ansoff have avoided the definition of a strategy altogether since its definition often remains implicit and open to interpretation. (Ansoff, 1985)

Even though many theoreticians avoid the definition of a strategy because of its ambiguity and openness to interpretation, Michael Porter defines it as means for striving in competitive environment. (Porter, 1980) He developed three frameworks of successful general strategies based on cost reduction, differentiation, and niche approach.

The first strategic framework is based on the cost. It recommends reducing operational costs compared to competitors but keep high quality and service as competitive advantage.

The second strategic framework lays in creativity and recognition so the company can set higher prices for the unique characteristics of the new product.

The third framework is focused on niche: the company must identify a specific segment or niche (a customer group, a product line, a geographic market, and in the chosen segment) and to become the leader.

Porter states that companies must choose one framework for implementation and take it as “strategic and forward” to outperform competitors. All three frameworks require a preliminary analysis and assessment of current state and a realistic understanding of the situation on the market.

The first strategic group, referred to as overall cost leadership, recommends focusing on setting low costs relative to competitors, but without neglecting the quality, service, and other components of competitive advantage.

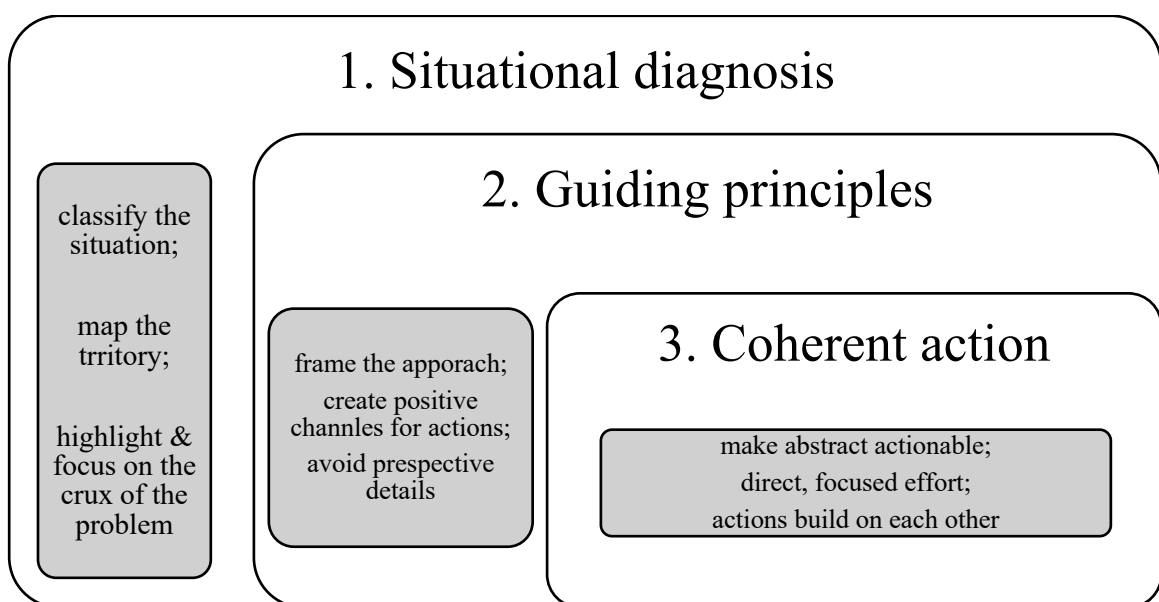
Richard P. Rumelt gives one of the best definitions of the term strategy in his book “Good Strategy/Bad Strategy.” His approach is that a strategy is “a coherent set of analyses, concepts, policies, arguments, and actions that respond to a high-stakes challenge”.(Rumelt, 2019) He argues against the trend of ‘inspirational management’ and setting of vague goals by the organizations' executives, as it provides a vague sense of the organization's direction and no specific useful tools or means of achieving success. He says it is imperative to build precise components of a good strategy. He also warns that large companies with complex organizational structure tend to spread their resources thin, rather than concentrate them and “to placate and pay off internal and external interests”.

1.3 Kernel of a good strategy

As a rule, experts view strategy as a complex of components centered around a basic underlying structure which Rumelt calls a *kernel*. He argues that a coherent strategy can be built on statements, ideas, and actions. In his view, a kernel of strategy consists of a diagnosis, a policy, and actions.

A diagnosis is a general, yet true-to-reality assessment of the challenge that identifies the course of action. Second, the policy determines how to deal with the obstacles defined. The third component is practical: a plan of coordinated coherent actions designed for policy implementation.

Figure 1. The structure of the kernel



Source: own processing Rumelt, 2019

The Figure 1 visualizes the components of a coherent strategy according to Richard P. Rumelt. The 3 components are intertwined and comprehensive. A realistic diagnosis deals with the current while defining the challenge.

It is important to answer a question “What’s happening here?”. Auditing and assessment set a basis for further critical elements. Then, the policy can be formulated on the diagnosis to deal with the defined challenge. The purpose of the policy is to channel actions in a particular direction.

The policy defines the intent, decisions, focus in a particular direction, without identifying the means. The last is done in the third element. Coherent actions reflecting the guiding policy and the diagnosis must be comprehensive and tied together. The actions must fall into a connected system of tasks.

2 THEORETICAL FRAMEWORK FOR BUSINESS STRATEGY

2.1 Definition and classifications of strategic management

Strategic management is an umbrella term often used in practical and theoretical works. In general, it means “the ongoing planning, monitoring, analysis and assessment of all necessities an organization needs to meet its goals and objectives.” (Ansoff, 1985)

For the comprehensive analysis, it is necessary to consider most common, practice-tested, and widely recognized business development strategies in the literature, which are called basis or referenced and are presented in the Table 1. They reflect the approaches to the growth of the enterprise and are associated with a change in the condition of one or more elements:

- a. product;
- b. market;
- c. industry;
- d. position;
- e. technology.

Table 1. Basic strategies of enterprise development

Strategies	Product	Market	Implementation
Concentrated growth strategy			
Market penetration	Existing	New	Strong and aggressive marketing campaigns on target markets
Market strengthening/ reinforcement	Existing	Existing	Resegmenting and repositioning
Market development	Existing	New	Collaboration and entry to new marketplaces
Product development	New	Existing	Innovation and R&D
Integrated growth strategy			
Conglomerate integration	Existing	Existing + New	A merger between companies with completely unrelated business

Concentric merger	Existing	Existing	A merger between firms in different yet adjacent industries
Vertical integration	Existing	Existing	Integration with suppliers
Horizontal integration	Existing	Existing	Integration with competing business
Diversified growth strategy			
Concentric diversification	New	Existing	Extension of the old production line to a new product
Horizontal diversification	New	Existing	Development of new technology at old production for a new product
Conglomerate diversification	New	New	New technologies on the new production for a new product and new market
Retrenchment strategies			
Liquidation	Existing	Existing	Permanent shut down of business and sale of all assets
Turnaround	Existing	Existing	Identification of a cost—trenching process and return to the previous business model
Divestment	Existing	Existing	Elimination of a business unit through sale, close or spin-off
Self-funding	Existing	Existing	Cut in the inventory and stock, sale of residual non-essential equipment and assets

Source: self-processing Lukshinov

As table shows each element can be existing or new. For example, regarding a product, a company can continue to manufacture the same product or switch to a new one. In reference to market and industry, the company may sell its products on the acquired market or develop enter a new niche or market.

The expansion strategies are based on growth and imply expansion of product and/or market. The intensification strategies improve position, recourse allocation, operational costs.

The expansion strategies for concentrated growth include:

2. market reinforcement. It requires extensive marketing, horizontal integration, control over its competitors;
3. market penetration. It means creative entrance to a niche market, quick break-even, aggressive marketing;
4. market expansion. It means search for new markets;
5. product development. It means production of a new product for a market.

However, integrated growth strategies are associated with the expansion of enterprises by adding new structures. In the case when the company has a leading market position and doesn't have the free resources or flexibility to implement concentrated growth strategies, it can implement integrated growth strategies, which do not contradict its long-term goals and still expand its operations on new markets or increase the share on the existing ones. Enterprises can increase its integrated growth by acquiring property or expansion from within. In both cases, the status and share of the enterprise within the industry changes.

The two main types of integrated growth strategies are:

1. The reverse vertical integration strategy is aimed at the growth of the enterprise as a result of the acquisition or strengthening control over suppliers. The company can either create subsidiaries that act as suppliers or join companies that already carry out deliveries. The implementation of the reverse vertical integration strategy can give the company very favorable results related to the fact that dependence on fluctuations in component prices and supplier requests will decrease. Moreover, supply as a cost center for an enterprise can turn into a revenue center.
2. The strategy of direct vertical integration is expressed by the growth of the enterprise through the acquisition or strengthening of control over the structures between the enterprise and the end user, namely, distribution and sales systems. This type of integration is extremely profitable if intermediary services are expanding with a high-quality level of performance.

Strategy requires assessment of the market and company:

- Saturated or reduced market;
- Need for cash flows, profitability of investing;

- Synergies potential of equipment, components, raw materials, etc;
- Legislation and antitrust regulation;
- Tax expenses and optimization;
- Access to world markets;
- Qualified and trained employees.

The diversified growth strategy is implemented when the company cannot continue to develop in this market with this product within this industry. It is necessary to formulate the main factors that determine the choice of a strategy for diversified growth:

- markets are in a saturation or reduction in demand for a product.
- business requires significant cash flows;
- new business synergies built on effective use of equipment, components, raw materials;
- antitrust regulation does not allow to further expand the business within the industry;
- reduction of tax expenses;
- facilitating access to world markets;
- attracting new qualified employees or engaging the potential of existing managers.

One of the main strategies for diversified growth is the strategy of diversification. There are several types of diversification: centered, horizontal, supplementary, conglomerate.

The centered diversification is based on the search and use of additional opportunities to produce new products. It means that the existing production remains the center of the business, and the new one is added into a specialized distribution system. Horizontal diversification strategy allows growth based on new products and new technology: the company focuses on the production of technologically unrelated products but use the existing capabilities of supply chain. Supplementary strategy requires the realistic assessment of the competence in the production of a new product. The strategy of conglomerate diversification is based expansion of new products for new markets. It is one of the most ambitious strategies for implementation since its success depends on many factors including investments, personnel skills, market, access to finance, international regulations, resources, etc.

Unlike growth strategies, retrenchment strategies are used to purposefully curtail production. There are four types of business reduction strategies: liquidation, divestment, cost reduction.

The strategy of liquidation is a marginal case of the reduction strategy, carried out when the company cannot conduct further business.

The strategy of divestment of the enterprise is that the company closes or sells one of its business units in order to make a long-term change in the boundaries of doing business. Often this strategy is implemented when it is necessary to get funds for the development of more promising or start a new business that more meet the long-term goals of the enterprise.

Cost reduction strategy involves finding opportunities and taking appropriate measures to reduce costs which increased due to a new way of performing operations. It is focused on eliminating small sources of costs, and its implementation has the nature of temporary or short-term measures. It involves reduction of production costs, increasing productivity, cutting staff, shut down of non-profitable production.

Cost-reduction strategy abandons the long-term goals in favor of profit maximization in the short term. It can be applied to a declining business that cannot be profitable sold but can be "harvested." It involves reduced procurement costs, lay-offs, sales of an existing products without production.

In real practice, an enterprise can simultaneously implement several strategies. This is especially common in large-industry companies. The company can carry out a certain sequence in the implementation of strategies presented in the figure below.

Fast market growth			
Weak competitive position	II Quadrant:	I Quadrant:	Strong competitive position
	Concentration Horizontal integration or merger Divestment of a part or whole Liquidation of the company	Concentration Vertical integration Central diversification;	
	III Quadrant:	IV Quadrant:	
	Cost cutting Diversification strategy Divestment of a part or whole. Liquidation	Central diversification. Conglomerate diversification Joint venture in new area	
Slow market growth			

Figure 2. Basic strategies. Source: Krysanov & Udova, 2019

2.2 Main factors in defining strategy for the development of the enterprise

The choice of the strategy depends on realistic analysis considering the goals of the organization, the state of the market and the position of the organization, the competitors' strategies, the potential of the organization, the product and its features, the competitive advantages, market attractiveness, the stage of PLC, production and sales costs etc. It is important to pay special attention to the goals and financial resources of the organization, the level of risk, the interests of senior management, experience in implementing previous strategies, the time factor. (Lyukshinov, 2000)

The goals determine the choice of strategy. For example, if an organization is not interested in growth of operations and market share, the intensive growth strategy should not be selected.

The risk is an important factor for every company. It is considered as presented in Table. 2

Table 2. Level of risk and cost in different strategies

Type of product	Market	Strategy	Chance of success	Cost
Obtained	Obtained	Intense market penetration	50	100
Obtained	New	Market expansion	20	800
New	Obtained	Product improvement	33	400
New	New	Diversification	5	1200-1600

Source: Lyukshinov, 2000

Analysis of indicative data shows the penetration strategy into the market has the least risk. The probability of success is 50% and the costs are minimal. However, this strategy does not promise a steady profit.

A diversification strategy involves the most risks. With it only in one of the twenty companies will achieve significant commercial success. The high risk is due high costs, its application in extraordinary circumstances or plans to increase sales of products. (p.125, Lyukshinov, 2000)

Data in Table 2 estimates the levels of risk for strategies. Risk management helps to ensure achievement of the goals since it provides realistic views on the market and specific products.

Volume of required financial resources is closely related to the level of risk. Any abrupt changes, such as entering new markets, developing a new product, or moving to a new industry, requires high financial budgets. Companies with financial resources or easy access to them are in a much more favorable position than those with limited financial resources.

The role of senior management is imperative in the drafting and implementing the strategic plans. Even well-formulated strategies remain valid for 15-20 years and then call for review.

Revision of the strategy can be prompted by change in the leadership; interference of third parties (bank, tax authority, antimonopoly committee, etc.); merger or breakthrough.

After conducting a fundamental study of the management style of top managers, G. Mintzberg and named three main methods: entrepreneurial, adaptation, and planned. (Mintzberg & McHugh, 1985)

Entrepreneurial method is formed by one strong personality. The senior manager defines opportunities and sees problems as secondary. He is interested in directions of strategic development and growth. An example of such approach is Microsoft because it reflects the vision of its founder B. Gates.

Adaptation method is characterized by timely solution of problems, rather than the search for new opportunities. It results in a fragmentary strategy, slow step-by-step movement, routine strategy. It is typical for large corporations with a heavy inertia.

Planned method is not based on creativity. It involves search for existing but untapped opportunities and resources. It uses comprehensive analysis for the development of a strategy.

The size matters and affects the choice of strategy. Small companies should minimize the severity of competition with large organizations and rely on its flexibility. It is difficult for large companies to be agile.

The matrix “Product – Form” is presented below.

Forms of existence of a small organization	Sovereignty	Copycat strategy	Optimal size strategy
	Symbiosis	Strategy for using advantages of a bigger organization	Participation in the production of a bigger organization
		Similar to the large organization product	Original
Small organization product			

Figure 3. Matrix “product – form”. Source: self-processing Lukshinov

In today’s market any successful original product may be copied. It becomes a basis for copycat strategy. A brand and its copy (a fake) compete on the market. The counterfeit product price is much lower than the original product. Its quality is much lower. However, it is illegal in most countries to produce and sell counterfeit goods.

The best solution for small companies is cooperation. Franchising is a great example of such cooperation. It is a system of contractual relations, according to which a large organization undertakes to provide small own goods, provide advertising services and short-term loans on preferential terms, lease its equipment. Franchising is commonly used in retail, service, etc.

2.2.1 Process of strategy development

The drafting of the company's strategy is carried out in several stages:

Stage 1 – identification of the mission of the enterprise. The mission of the enterprise is to understand the general global goal (cause, motive) of the creation and operation of the enterprise (from the point of view of its owners).

Stage 2 – assessment of the state of the external environment and the degree of its impact on the activities of the enterprise.

Stage 3 – assessment of the strengths and weaknesses of the enterprise (analysis of the efficiency of economic activity, assessment of the competitiveness of the enterprise, determination of competitive status).

Stage 4 – formation of a system of strategic goals for the development of the enterprise.

The process of setting goals consists of two interrelated stages:

- qualitative definition of goals (for example, increasing the market share, achieving a sufficient increase in profits to finance the activities of the enterprise or entering new areas);
- clarification, coordination, specifying and quantitative determination of the goals in the form of a system of the most important indicators of economic activity that the company seeks to achieve in a certain period.

Stage 5 – identification of strategic alternatives for the development of the enterprise and their assessment. The assessment of the developed strategic alternatives and the choice of the most appropriate for implementation is carried out according to the following main parameters:

6. consistency of the strategy with the external environment;
7. internal balance of the strategy;
8. implementation of the strategy taking into account the existing resource potential of the enterprise;

9. acceptability of the level of risks associated with the implementation of the strategy;
10. effectiveness of the strategy. (Pierce & Harvey, 1990)

Stage 6 includes:

- implementation of measures aimed at implementing the developed strategy for the development of the enterprise:
- development of a system of providing (functional) strategies.
- formation of the company's policy in defining areas of activity;
- development of tactical plans for economic and financial activities.

Stage 7 includes:

- monitoring the progress of the strategy implementation, assessing the need to adjust it.

All stages in the process are interrelated and consequential.

2.2.2 Analytical methods for strategy development and assessment

Market analysis is aimed to assess the current situation on the chosen segment, where enterprise chooses to make generate revenue, describe the key figures, players, trends and potential growth opportunities, as well as predict on where the segment might transform and migrate their operation in the future - new market opportunities.

Market research is a way to get an overview of customers' wants, needs and preferences, but it can also include a view of how they act in the market. Investigations can be used to determine how the product can be marketed. Peter Drucker believed «There will always, one can assume, be need for some selling. But the aim of marketing is to make selling superfluous. The aim of marketing is to know and understand the customer so well that the product or service fits him and sells itself. Ideally, marketing should result in a customer who is ready to buy. All that should be needed then is to make the product or service available...», in simpler words - market research is the essence of marketing (Drucker, 1974).

There are two main types of market research: primary research, which is divided into quantitative and qualitative, and secondary research.

Factors that can be seen through market research include:

2.2.2.1 Market information.

Through market information one can find out the prices of different goods on the market, as well as the situation with supply and offers. Also, market researchers help their clients to understand social, technical and legal aspects of the market. (Ruiz 2013)

2.2.2.2 Market segmentation

Market segmentation is the subdivision of a market or population into subgroups with similar motivations. It is widely used for segmentation into geographic, personality, demographic and technological differences, use of differences in different products, psychographic differences and gender differences.

2.2.2.3 Market trends

Market trends, that is, upward or downward movement on the market during a certain period of time. Determination of the market size can be complicated if innovation is planned (especially when forming a new market), because then it is necessary to determine its size from the number of potential customers or segments of consumers. (Ilar, 2000)

2.2.2.4 Benchmarking

The benchmarking analysis focuses on detailed overview of the main companies on the market and compares them based on key market indicators, which are chosen by the reviewer. The companies are compared based on:

- performance indicators: revenue, turnover, profit, range of product line;
- customer engagement indicators: social media coverage, social media engagement, brand recognition;
- operational indicators: management flexibility, implementation of innovation, R&D investments, risk-management techniques etc.

2.2.2.5 SWOT analysis

SWOT analysis is performed by analyzing the strength, weaknesses, opportunities and threats of the chosen enterprise, market or business unit, moreover one defined segment of operation, which is needed to be assessed for further development and better decision making for application of strategic steps. SWOT is used not only at the stage of creation of the company, but often throughout the life of the company. SWOT-analysis is also

performed for competitors in order to understand how to develop marketing and product mixes.

2.2.2.6 Risk matrix

The risk matrix is necessary for detailed overview of the most-likely threats, which may occur on the market and influence the enterprises operation, decrease the customer base, lower turnover and lose revenue. The risks are assessed based on the probability of their occurrence and the impact they will cause on the enterprise. The highest attention should be paid to the risks in category with highest possibility and impact and vice-versa.

2.2.2.7 Break-even point

Break-even point calculation is performed to assess the financial relevance and indicate the period/volume of production at which the total costs are equal to the revenue generated by the sales of the equal volume. This calculated figure is called BEP point and each marginal unit will generate the profit for the enterprise, given that the cost sectors will not change.

Another factor that can be measured is the efficiency of marketing. This includes, client analysis choice modeling, analysis of competitors. product research, advertising survey, marketing mix modeling, modeling test marketing, risk analysis.

2.3 Crisis management and planning under uncertainty in Ukraine

Uncertainty and crisis are inseparable parts of business. According financial glossary, “An economic crisis is a situation in which a country’s economy deteriorates significantly. In most cases, a financial crisis is the cause of an economic crisis.

During the crisis, GDP is typically declining, liquidity dries up, and property and stock market prices plummet. It is an economic downturn that gets worse and worse.” Some severe and unpredictable crises events are called black swans. A black swan is an extremely rare event with severe consequences. It cannot be predicted beforehand, though after the fact, many falsely claim it should have been predictable.

Under market conditions, economic security of all business entities and other activities becomes very important. Economic security of the enterprise is a state of corporate resources and entrepreneurial opportunities, which guarantees their most effective use for stable

functioning and dynamic scientific, technical, and social development, prevention of internal and external negative impacts (threats). (Avanesova & Chuprin, 2017)

Anti-crisis management needs managers with special training and a certain set of personal qualities. Arbitration managers are prepared to work in extreme conditions of crisis, bankruptcy and sanitation of enterprises. The level of economic security of the company depends on how effectively its management and specialists (managers) will be able to avoid possible threats and eliminate the harmful consequences of certain negative components of the external and internal environment.

In the context of the systemic crisis in Ukraine, almost 80 % of enterprises are unprofitable or work on the verge of break-even. One of the ways of survival and further development of such enterprises, as evidenced by world experience, is their reform and restructuring. As the visualization of the current economic situation in Ukraine, the figure below presents data on the change of financial results of medium and large enterprises as of 2018 to 2020 3rd Quarter.

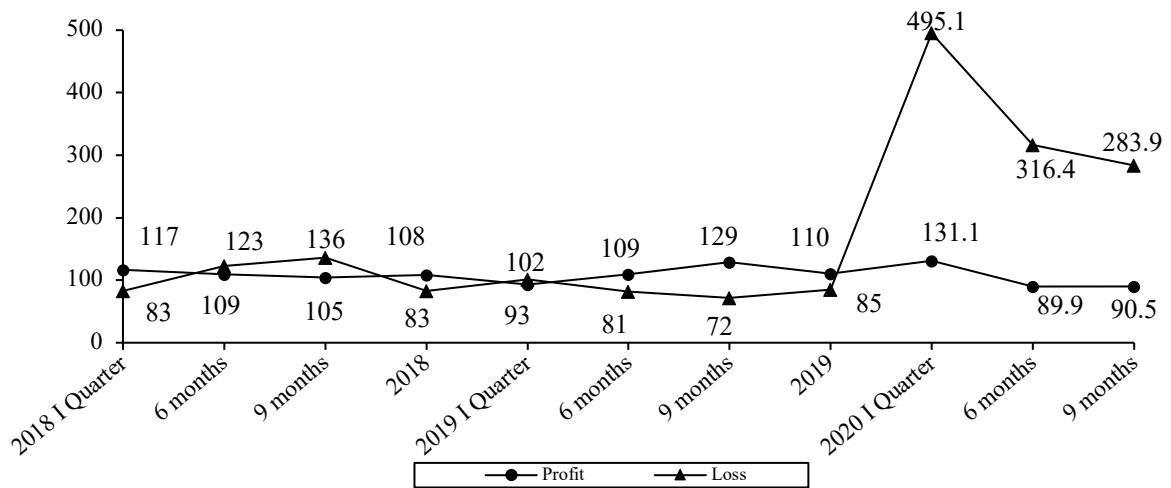


Figure 4. Growth (decrease) of profit and loss (% to the corresponding period of the previous year) Source: State Statistics Service of Ukraine, 2020

The figure illustrates Ukrainian economy vulnerability to the worldwide trends and restrictions. Though the national lockdown was not implemented in Ukraine, the closure of borders & foreign markets caused losses of Ukrainian enterprises in the 1st quarter of 2020.

For any enterprise, anti-crisis policy is imperative, because it requires a comprehensive analysis its activities to add flexibility. The main goal of the anti-crisis management of the

enterprise is to guarantee its stable and most effective functioning and high development potential in the future.

The situation with Ukrainian enterprises is in five alternatives:

Strategy 1. No reform, "business as usual", "do not break what is working";

Strategy 2: A short-term program to increase profits with reduction in costs;

Strategy 3: Overall quality management, prepare for ISO 9000 certification;

Strategy 4: Redesign and reengineering of business processes;

Strategy 5: Shut down the business.

The most popular anti-crisis approach in many Ukrainian enterprises consist of three phases:

Phase I - minimization of costs,

Phase II - productivity control,

Phase III - reengineering.

Management usually focusses on one phase and forgets about quality control, cost optimization, the agile and flexible structure enterprise.

Transformation includes the following stages:

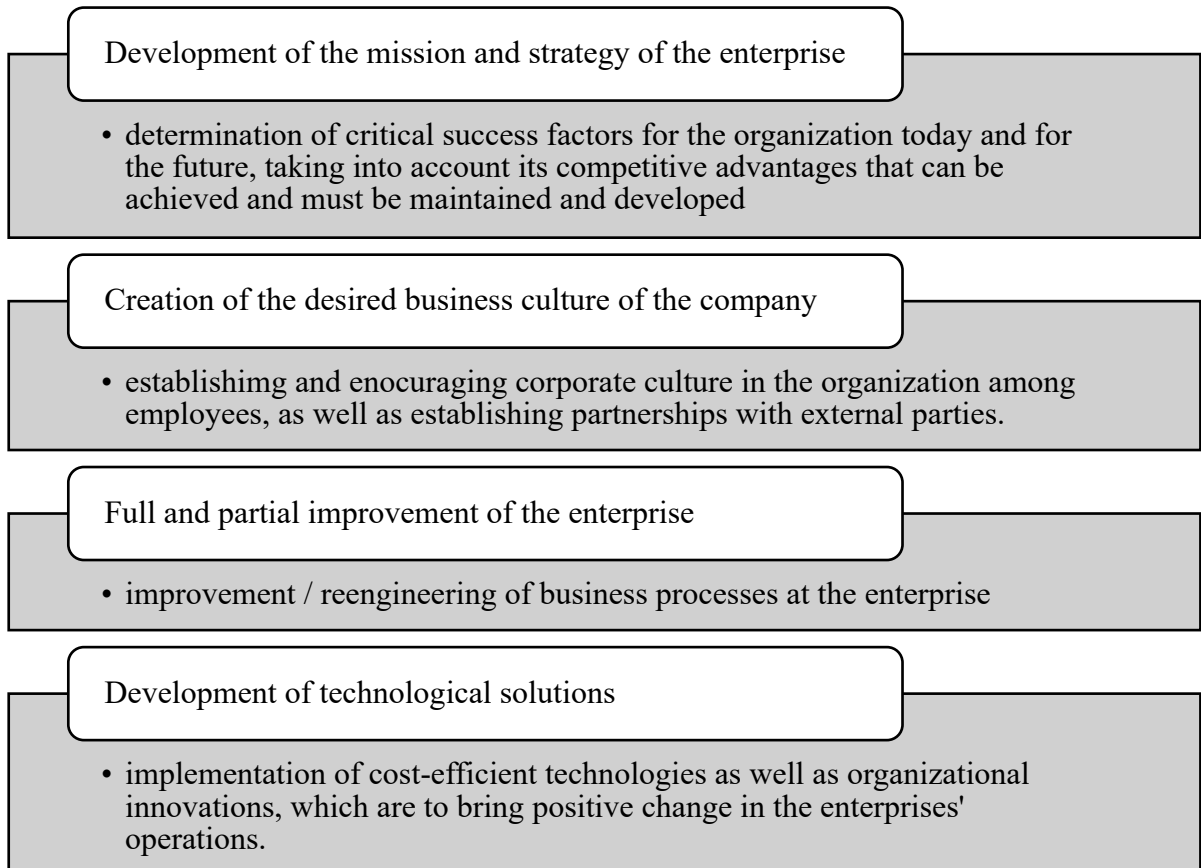


Figure 5. Basic stages of the enterprises' transformation process. Source: Tregear, 2016

The following table illustrates the differences between general and process engineering principles. The analysis compares the two methods based on the following factors: leadership, nature of change, target activity, structure, starting point, resources, focus and execution.

Table 3. Comparison of anti-crisis approaches

Indicator	General QM	BPR
Leadership	Bottom up	Top down
Nature of change	Growing	Radical
Target activity	Loss	Non-value-added activity
Structure	Within the existing structure	Change of structure, subordination of business process
Start point	Existing system	“Clean sheet”
Resources	Existing resources	Fewer resources
Focus	Quality and statistics	Time of the process cycle and all processes
Execution	Slow and steady	Creating a prototype of a cross-process business model focused on the market and rapid implementation

Source: Tregear, 2016

In the context of Ukraine, the development of market relations predetermines conditions for specific operation and the level of uncertainty and risk. The economic situation is unstable and forces commercial structures to systematically analyze, monitor and diagnose the political and economic situation to adapt the strategy and operation in the market.

II. ANALYSIS

3 ROLE OF AGRICULTURE IN UKRAINIAN ECONOMY

Ukraine is called a breadbasket of Europe because it has a strong and profitable agricultural sector. Agricultural exports are key for the Ukrainian economy, a major source for state budget. Experts state that “agrobusiness is the locomotive of the Ukrainian economy”. Ukraine has more 25% of the world's black soils known for high fertility levels. Ukraine is a leader in growing cereals and fodder crops, including wheat, corn, barley, sunflower, sugar beet, tobacco, legumes, fruits and vegetables. According to the State Statistics Service, the average grain yield in 2019 increased by 2.2 centners per hectare. If in 2018 it was equal to 47.4 kg / ha, then in 2019 it reached 49.1 kg / ha. Significantly increased yield and some other crops: winter wheat - 41.7 kg / ha, barley - 34.8 kg / ha, corn - 71.4 kg / ha, buckwheat - 13.3 kg / ha, millet - 18.1c / ha, sunflower - 25.1 kg / ha, soybean - 23.5 kg/ha. (SSCU,2019)

3.1 Ukrainian ranking in the global economy

Ukrainian agriculture plays a huge role in the national export structure. As of the end of 2019, the agricultural sector brought almost 40% of foreign exchange revenues to the country, demonstrating stability over the past three years. In January 2020, agricultural products worth \$ 1.98 billion were delivered to foreign markets, which is 14% more than in the same period of 2019, as reported by the Ministry of Economic Development, Trade and Agriculture. According to the Ministry, the share of agricultural products in the total exports of Ukraine rounds up to 48%. The main share of agricultural exports are grain and oilseeds (48% and 23%, respectively)

Deputy Minister of Economy Taras Vysotsky stated that despite the constant and steady sale of popular cultures, the Ministry for Development of Economy, Trade and Agriculture of Ukraine is encouraging and aiding the enterprises to gradually increase the supply of finished, niche and organic products, as it will bring additional benefits and revenues to the national economy, rather than raw materials and products. The key countries that imported Ukrainian agricultural products the most during the reporting period included China (10.2%), Egypt (10.1%), Spain (8.0%), the Netherlands (8.0%) and Turkey (6.6%).

According to the to the results of 2019 published by State Statistics Service of Ukraine, Ukraine exported agri-food products (groups 1-24 of UCT ZED, as well as casein, albumin, skins, fur, wool, etc.) in the amount of USD 22.4 billion, beating the record figure in 2018 of USD 18.8 billion. Thus, Ukraine for the second year in a row updated the historical record

of agricultural exports. According to scientists of the Institute of Agrarian Economics, the decisive for the total growth of exports of agricultural products last year was an increase in supply to all three key regions - Asia, the European Union and Africa. At the same time, the volume of deliveries to them of domestic agri-food also reached the maximum indicators during the independence of Ukraine.

In 2019, Asia strengthened its position as the main importer of domestic agricultural products, for the second year in a row, purchasing a record number of Ukrainian agricultural products. The value of domestic exports to the countries of this region increased last year to USD 9.4 billion. This was 17.5% higher than the record supply figure for this region of USD 8.0 billion, established in 2018. The share of Asian countries amounted to 42.2% of the total Ukrainian agricultural exports last year.

The import to the EU member increased to USD 7.5 billion, exceeding the record in 2018 of USD 6.3 billion by more than 19%. The volume of deliveries to African countries in 2019 increased by 43% against 2018 and amounted to USD 3.3 billion, providing this region with a share of 14.9% of Ukrainian agricultural exports. Deliveries of domestic agri-food to the CIS countries remained at the level of 2018 and amounted to USD 1.5 billion. the United States, providing the region with a share of 6.5% in Ukrainian agri-food exports. In general, these four regions purchase more than 97% of agricultural products of Ukrainian production.

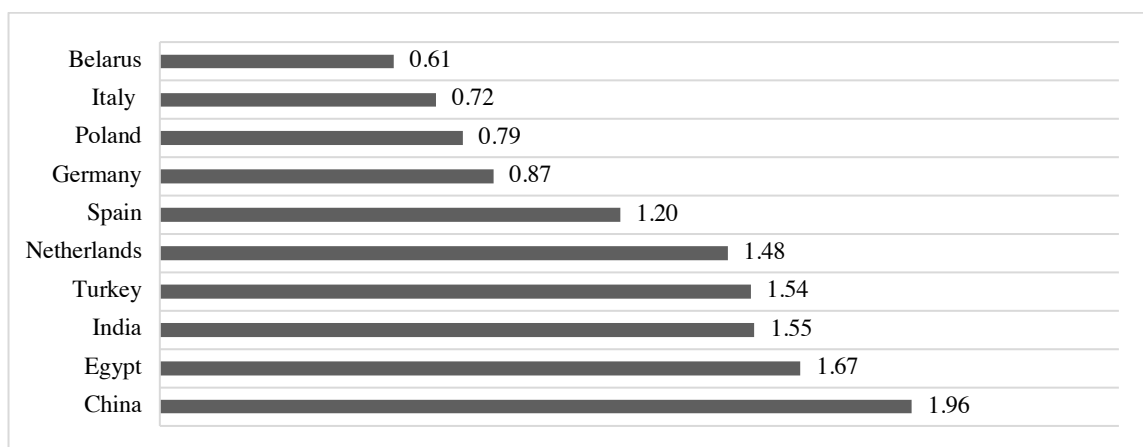


Figure 6. Export turnover of Ukrainian agriculture products to chosen countries in 2019, USD billion. Source: FAOStat, 2020

Pushing India into third place, which held the first place in the ranking for three consecutive years, China won the top 10 largest importers of Ukrainian agricultural products in 2019. The value of deliveries of domestic agricultural products to this country amounted to USD

1955 million last year. At the same time, China's share in domestic exports of agri-food was 8.7% last year.

The main consumers of domestic agricultural products also became Egypt (USD 1674 million), (USD 1,547 million), Turkey (USD 1,544 million), the Netherlands (USD 1,476 million), Spain (USD 1,199 million), Germany (USD 871 million), Poland (USD 785 million), Italy (USD 716 million) and Belarus (USD 605 million). Moreover, China, Egypt and Turkey increased the volume of purchases of Ukrainian agri-food by more than one and a half times compared to 2018. Over the past year, these ten countries have generated more than 55% of foreign exchange earnings for domestic agri-food exporters.

The key products of domestic agricultural exports have traditionally been cereals, various oilseeds, oilseeds, residues, and wastes, as well as meat products, which account for about 85% of its value.

3.2 Challenges and opportunities for Ukrainian agriculture

According to the UN and IPCC, the main threat to world agriculture in the future is global warming and draughts. The 2018 report “Global Warming” states that by 2040-50 years average temperatures increase, precipitation decrease, extreme weather events. (IPCC Report, 2018) It predicts increased damage caused by pests and diseases on world crop production and animal husbandry. However, according to the report the negative impact will be uneven in the world. In southern, low-latitude countries, the changes will be very negative, which will affect their decrease in the yield of agricultural crops. Climate change will cause food security problems in many countries. However, warming will have a positive effect on the growing season in countries located in high latitudes. Numerous forecasts indicate that it will have negative consequences for India, sub-Saharan Africa and South Asia. However, global warming will mainly have a beneficial effect on North America, some areas of South America (for example, Chile), Eastern Europe (for example, Ukraine) and Central Asia. The concentration of international agricultural markets is growing – in the context of climate change, the main volume of exports will account for a smaller number of regions.

Therefore, Ukraine in the future can and should significantly increase the volume of food exports to world markets. Analysts' forecasts suggest a decrease in agricultural production in the world and increased prices for agricultural products that in 2040-2050.

Due to climate change, the status quo in agriculture of different regions and countries will change with winners and losers. In an optimistic scenario, Ukraine is likely to benefit from global warming because Ukrainian agricultural exports will be in demand for countries negatively affected by global warming.

Therefore, Ukrainian agriculture must use a chance of becoming a leading exporter. It can be done with increased production volumes, reduce costs, incentives for agricultural companies and family farms, innovative methods, and advanced R&D.

The annual internal return on investments in R&D in the field of agriculture is 20-35% in the leading agricultural countries. The positive impact of such investments on the cost of agricultural products, determined by the ratio of costs and income, is approximately 6-12% (depending on the country).

One of the priority areas of the medium-term program of the government should be the creation of conditions for investments in R&D in agriculture in Ukraine. Perhaps it is necessary to provide appropriate tax benefits to stimulate investments of agricultural companies in R&D.

There are many examples in history when too much reliance on agriculture leads to problems. Suffice it to mention the famine in Ireland (1845-1849), associated with crop failure, or the stagnation of the modern economy of Argentina, which did not pay attention to other sectors of the economy. These examples are enough to understand all the risks of too much focus on agriculture.

3.3 Government support programs

Ukrainian government should introduce incentives and support system for the agricultural sector because it is the main driver of the country's economy and welfare of the population. Unfortunately, over the past few years, such support programs have begun to decline or highly corrupted.

In recent years, in Ukraine there are successful agricultural clusters (e.g. in L'viv region). Cluster is an enterprise engaged in production, processing, sale of agricultural products and machinery. In general, clusters are a voluntary association of enterprises, on an industry-territorial basis. Enterprises work closely with scientific institutions and local authorities to increase the competitiveness of their products and economic growth of the region. (Krysanov & Udova, 2019) The cluster composition includes basic production; suppliers of special

equipment, raw materials, services, technologies; universities, standardization centers, trade associations providing specialized training, research, technical support; local authorities and government officials in the region.

There is also, a governmental Unified Comprehensive Strategy for the Development of Agriculture and Rural Areas for 2015-2020 aimed at increasing the efficiency of production and ensuring profits for agricultural producers. On paper, it includes reforms that agricultural producers, agricultural business and rural population. It promises a stable and transparent legal system aimed at improving the business climate, combating corruption, and stimulating investments in the modernization of the agricultural sector of the economy. It also provides the basis for the institutional reform necessary for effective control and implementation of these measures. (MAPF, 2014)

The Strategy proposes to strengthen agricultural enterprises and increase exports, to ensure a uniform distribution of existing benefits, to preserve natural resources and the environment. To support small and medium-sized businesses, farming and cooperatives, funds are allocated, the amount of these revenues is indicated in Table. 4.

Table 4. Support for small and medium-sized businesses, farming, and cooperatives

Type of support	Year	
	2020	2021
Fund supporting bilateral cooperation, UAH	226 563	76 122
Financial support for agricultural producers, UAH	4 500 000	4 000 000
Organization and regulation of activities of the Agrarian Fund, UAH	148 490	173 750
Scientific and scientific-technical activity development fund, UAH	71 290	69 805

Source: MAPF 2021

According to the data presented in Table 4, in 2020 the national budget allocated more funds for agricultural sector than in 2021. The reduction is due to increased expenses for healthcare system (Covid-19). The allocations for international cooperation, international forums, conferences, exhibitions fell by 3 times.

Access to credit has been an issue for small farmers even before the pandemic. Banks are unwilling to lend to small enterprise due to imperfection of the regulatory framework. It

prevents the successful development of the agricultural sector in Ukraine. Thus, it is necessary to review and form a legal framework that would protect the interests of agricultural producers.

In early 2017, a new system of support for agriculture was introduced when a simplified system of taxation was abolished. The new system reduced support for livestock and pig producers, poultry producers. Support for grains and oilseeds was canceled. However, these losses were partially offset by more efficient export VAT refunds for these crops. Because of elimination of subsidies, the growth is expected to slow in the long run.

Unfortunately, the absence of sustainable state policy leads to slow growth rate in the agricultural sector and even bankruptcies. There are other negative factors: poorly developed infrastructure, unstable political and economic situation, equipment depreciation, unstable and unpredictable fuel prices, imperfect regulatory and legislative framework, outdated production technology, non-compliance with crop rotation and seeding by plants that deplete the land and impair soil quality.

Despite the harsh market conditions and insufficient government support, Ukrainian agriculture provides more than 50% of the population consumption. It is one of the leaders among the sectors of the economy in the commodity export structure (second place).

Also, for many years agricultural sector has had a positive foreign trade balance. To further elaborate on the point of profitability of the agricultural sector of Ukrainian economy, the analysis split it into two distinct parts: livestock and horticulture. The extracted data regarding profitability of agricultural production is provided in Figure 7.

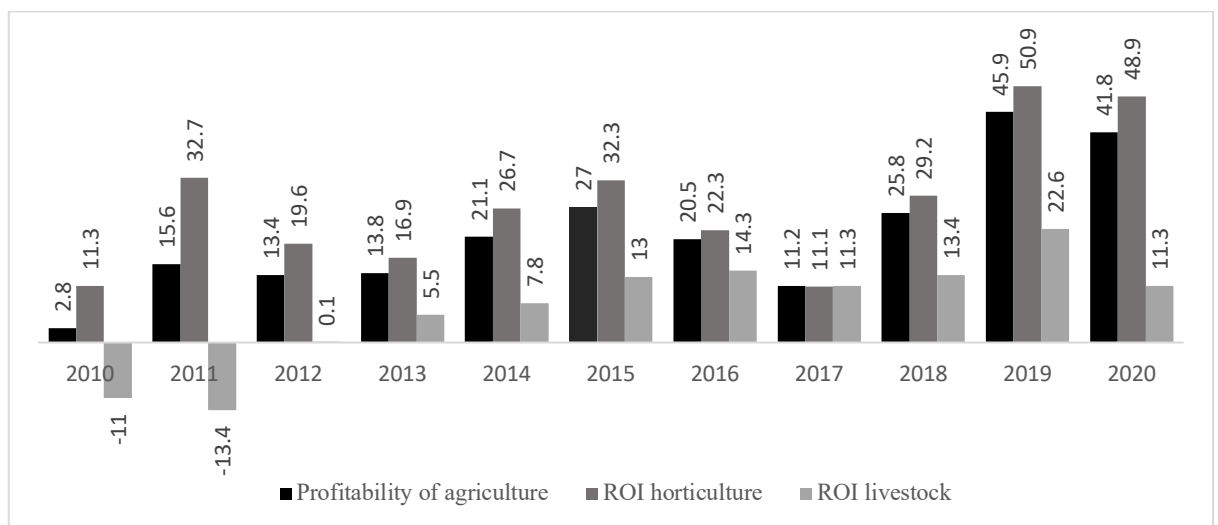


Figure 7. Profitability of manufacturing agricultural products, % Source: SSCU 2021

The profitability of Ukrainian agricultural products is positive and growing with exception livestock products. Its profitability decreased in 2020 because of high logistics prices.

For the stable functioning and development of agriculture, it is necessary to make changes in pricing policy. Comparative characteristics of average prices for the sale of agricultural products as of January 1, 2019 and January 1, 2020 are presented in Table. 5.

Table 5. Comparative prices on selected agricultural products in Ukraine

The product (UAH/ tonn)	Year		Change	
	2019	2020	Absolute +/-	%
Cereals and legumes	3590.1	5512,7	+1922,7	+53%
Oilseeds crops	8107,1	9767,2	+1660,2	+20,5
Potato crops	3936,8	3742,4	-194,4	-4,9
Fruit and berry crops	6480,4	5365,3	-1115,1	-17,2
Farm animals (in live weight)	22715,5	24178,8	+1463,3	+6,4

Source: SSCU & MAPF 2021

The prices for cereals and legumes have increased significantly – by 53%. Growth during the reporting period was due to the active demand of export-oriented companies. Prices for agricultural animals and oilseeds increased by 6.4% and 20.5%, respectively. Prices for products such as potatoes and fruit and berry crops decreased by 4.9% and 17.2%, respectively.

A significant proportion of agricultural products in Ukraine are produced by small farms. In the structure of domestic agriculture, they produce 52.2% of gross agricultural products. Most incomes of small farms (93%) are ensured by the sale of crop production. Prior to 2019, the biggest problem of such small enterprises and farms was access to land, because the legislation regulating the land market did not exist and there was no possibility to purchase additional farming land. In fact, there was only a moratorium on the sale of land and the "black" land market.

In 2020, the government proposed the Law "On Amendments to Certain Legislative Acts of Ukraine on the Conditions of Circulation of Agricultural Land" № 552-IX, which was approved by the Verkhovna Rada on March 31, 2020 after long disputes and edits. The law will enable the realization of citizens' constitutional rights to dispose of their property freely

and create transparent conditions for the acquisition of agricultural land by Ukrainian citizens, commented the head of the state after signing the Law.

The second big problem for small farms is access to finance. The willingness of banks to lend to small enterprises is limited. This is a problem not only in Ukraine, it is a problem faced by small farms in many countries. Also, a big problem in agriculture is the imperfection of the regulatory framework, which prevents the successful development and functioning of the agricultural sector in Ukraine, so it must be reviewed and formed a legal framework that would protect the interests of agricultural producers.

Main strategic directions of agricultural development in Ukraine should be: improvement of the regulatory and legislative framework that would ensure the stable development of agriculture; production of organic, safe and environmentally friendly agricultural products; setting market prices for products that will ensure the profitability of its production for the bulk of manufacturers; implementation of innovations; involvement of young people in agriculture; ensuring decent wages in agriculture, etc.

4 ANALYSIS OF THE FRUIT AND BERRY MARKET OF UKRAINE

The following part of the thesis focuses on the research and analysis of the current state of Ukrainian fruit and berry market. The market is analyzed and described using most recent data from international and national statistical offices and enterprise reports of the fruit and berry sector. The market is assessed based on its profitability metrics, volume production and seasonality nature of the production and supply.

4.1 Overview of the fruit and berry market of Ukraine

According to FAOStat, the global production of fruits and berries has been growing steadily over the past decade. During this period, it increased immediately by 18%. Thus, if in 2009 the world production of fruits and berries amounted to 721 million tons, then in 2019 the total gross harvest amounted to 883 million metric tons. At the same time, 65% of the total are mainly apples, bananas and watermelon. (FAOStat 2020)

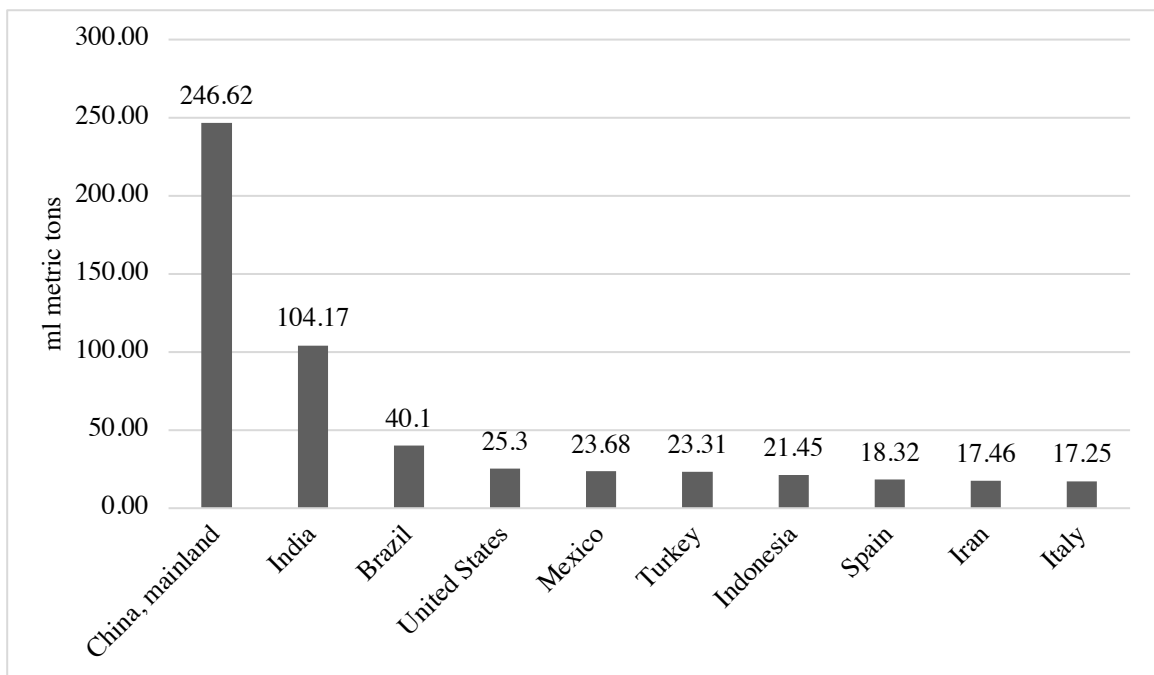


Figure 8. Top-10 nations-producers of fruits and berries in 2019, ml metric tons.

Source. own processing of FAOStat 2020

The leader in terms of fruit and berries production is China: in 2019. It accounted for about 28% of the world harvest of fruit and berry products.

Next biggest producers of fruits and berries in the world are the India, Brazil, and United States, with 11%, 4,5% and 2% of the world harvest respectively. Also, the TOP-10 producers include Mexico, Turkey, Indonesia, Spain, Iran and Italy, which cumulatively occupy 13% of the total production.

Over the past 10 years, the most active growth in fruit and berries production is demonstrated by Poland, Uzbekistan and Ukraine, which over the specified period increased the gross collection of these products by 3, 2.3 and 1.8 times, respectively.

4.2 Overview of fruit and berry production of Ukraine

Commercial fruit and berry production in Ukraine are on the rise. In 2019 - 198 thousand hectares were occupied under fruit and berry crops. (SSCU, 2020)

Table 6. Comparative prices on fruit and berry products in Ukraine in Jan 1, 2019 & 2020

The product (UAH/ ton)	Year		Change	
	2019	2020	Absolute +/-	%
Fruit and berry crops	6480,4	5365,3	-1115,1	-17,2

The Table 6 considers the prices for fruit and berry products and demonstrates that they decreased by 17.2% since 2019.

According to the State Statistics Service in Ukraine, the area under such crops is rapidly decreasing. For comparison, in the period from 2010 to 2019, planting areas under fruit and berry plantations decreased by 16%: from 236 thousand hectares up to 198 thousand hectares. However, the volume of production of fruit and berry products gradually increases due to intensification of production. The Figure 9. demonstrates the dynamics of fruit and berry plantation areas.

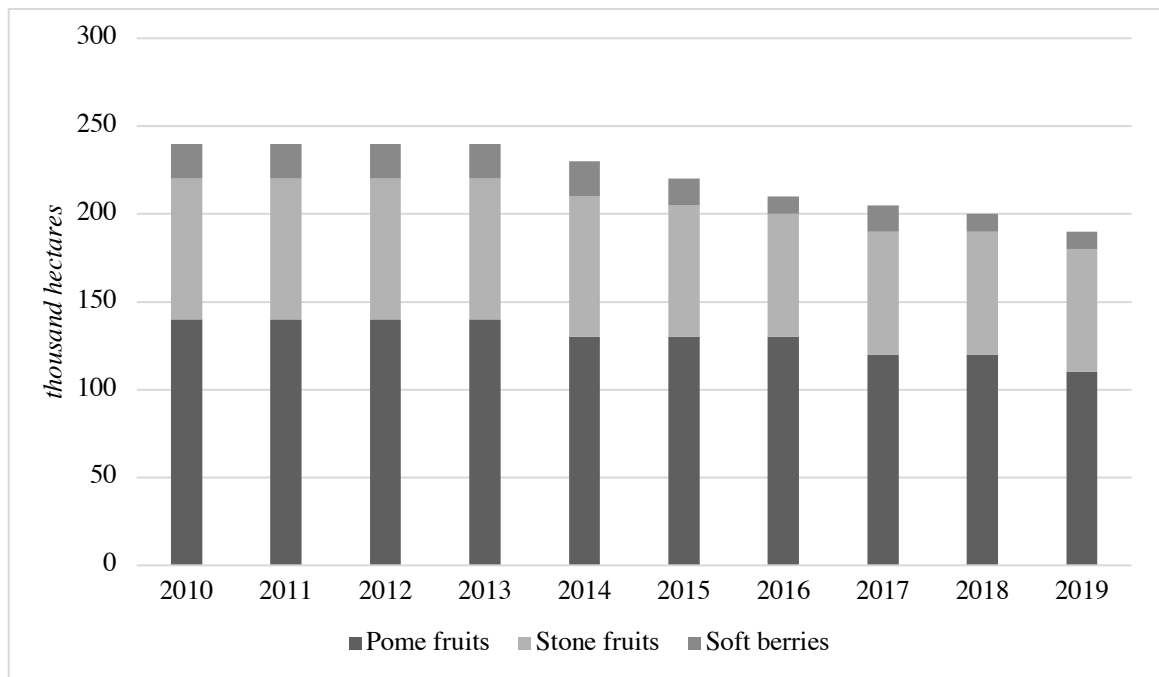


Figure 9. Dynamics of fruits and berries plantation areas in Ukraine in 2010-2019
Source: own processing of SSCU 2020

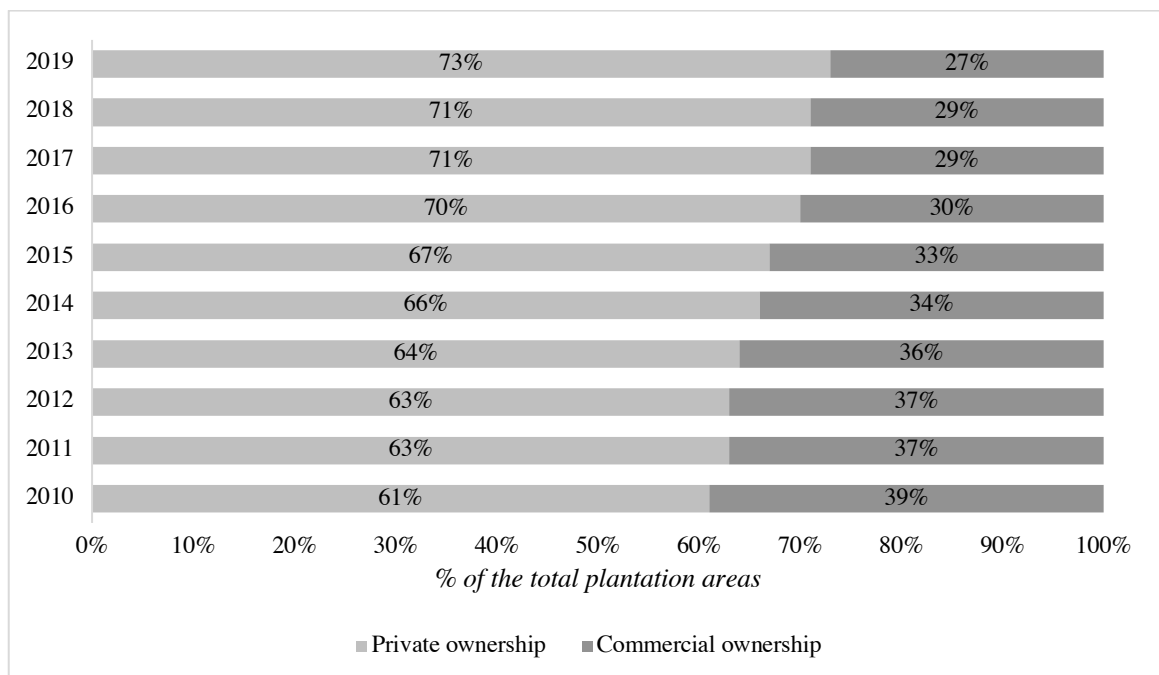


Figure 10. Structure of fruits and berries plantation in Ukraine in 2010-2019 (by types of ownership) Source: own processing of SSCU 2020

The situation in the fruit and berry sector remain the same for the past 10 years with minor changes. The main market share belongs to the apples. In 2010, apples accounted for about 59%, then in 2019 – to 56%.

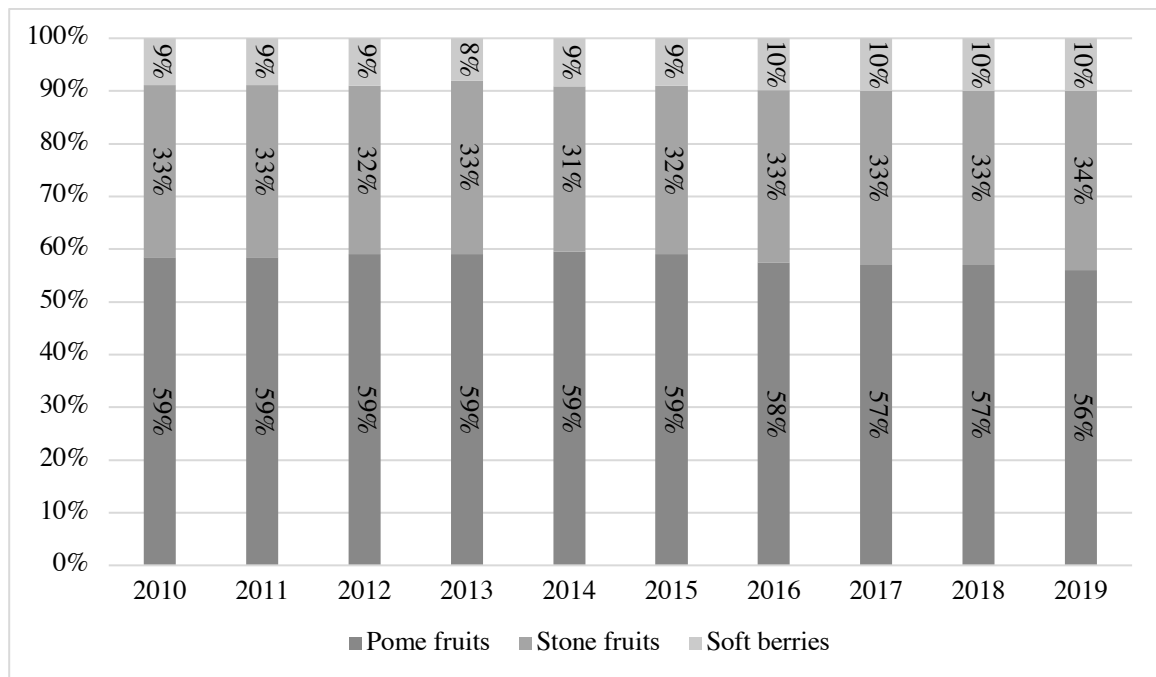


Figure 11. Structure of plantation of fruits and berries in Ukraine in 2010-2019 (by types of crops) Source: own processing of SSCU 2019.

The fruit and berry segment dropped in 2014, when due to military conflict with Russia, the export was banned. It meant the Ukrainian producers had to reorient to EU and domestic market. Ukrainian enterprises are not fully ready to operate in European conditions since they lack practical tools like pricing policy, effective methods of stimulation, a positive image, etc.

4.2.1 Seasonality econometrics model on the production volumes of fruits and berries calculated on the data from 2017-2020

The market of fruits and berries is highly seasonal and volatile. The cultivating and planting season begin in early March and April with harvesting in June, July, and August. Highest prices fall on the winter months and the last quarter of the year. The seasonality econometrics is demonstrated in the graph below based on the data from National Ukrainian statistical office on the quarterly volume of fruits and berries sold by Ukrainian enterprises in 2017-2020 years.

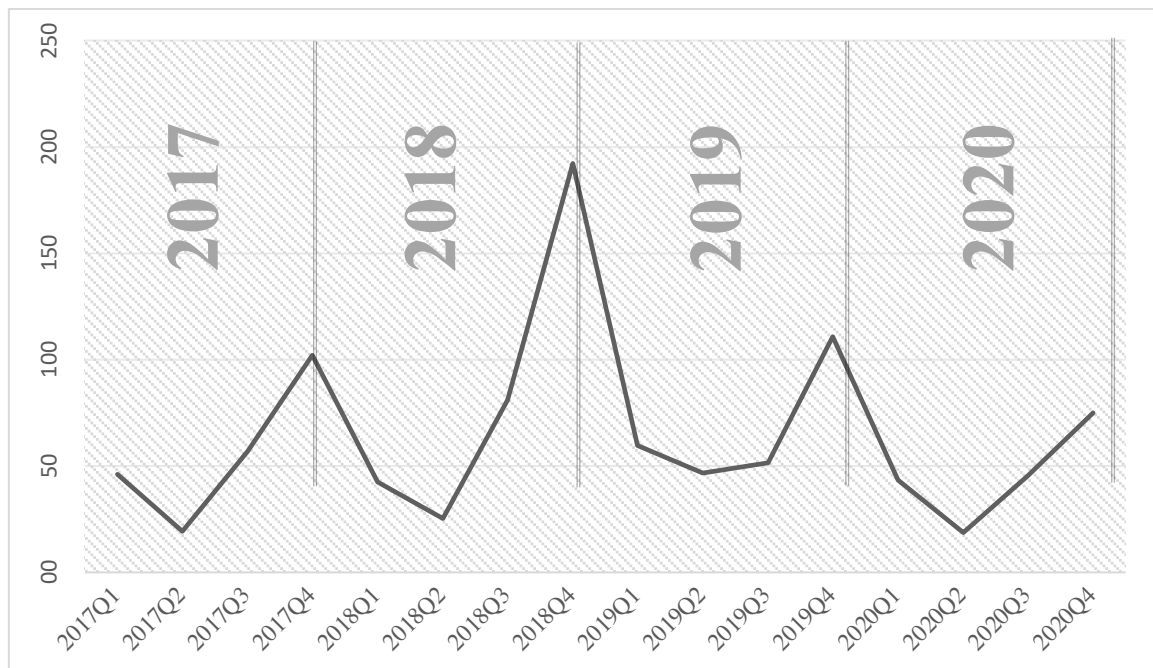


Figure 12. Volume of fruits and berries products sold by Ukrainian agriculture enterprises quarterly in tones, 2017-2020 Source: own processing of SSCU 2020.

The graph demonstrates a clear peak in the last quarter of each year, which falls on the post-harvesting season. The companies sell their products on the national and international markets. 2018 peak productivity was due the favorable weather without frosts in spring and enough rain and sun days. The 2020 turnover is lower because winter and spring sudden frosts. The figures for 2020 are the same as in 2017 but the trading regulations changed due to lockdowns in the second half of the year. The post-July sale season was difficult due to social distance restriction complicated harvesting and sales logistics.

The proposed econometrics model suitable to describe the nature of agricultural turnover dynamics in Ukraine is Additive with the Proportional Seasonal Variations:

$$Model y_{ij} = a_0 + a_1 * (i - \bar{i}) * (1 + c_j) + u_{ij}$$

where:

a_i - estimated mean for the month i

$i - \bar{i}$ – centered variable

$1+c_j$ – seasonality index

u_{ij} – residual, error

Table 7. The yearly trend of turnover of agricultural products in 2017-2020

Indicator	2017	2018	2019	2020	a_1
T_i	71,0	66,0	61,1	56,1	63,6

The seasonal indexes have been calculated previously and are shown in the table below.

Indicator	Q1	Q2	Q3	Q4
$1+c_i$	0,745909421	0,427287077	0,927237959	1,899565543

A seasonal index is a way of measuring the seasonal variation -- that is, to measure the change that is due to seasonal changes in demand -- of a variable, typically sales.

The last season – Q4 has an index > 1 , which shows seasonal growth, but indexes for the previous the seasons are < 1 , which represent negative seasonality. The seasonal index of the Q1 indicates that the seasonality change in this quarter composes 75% of the yearly trend – 71 tons, meaning that on average in Q1 the sold volume of fruits and berries is 33% less of the yearly trend. The seasonal indexes of Q2 and Q3 indicate the same tendency of influence to decrease the sold volume of fruits and berries by enterprises to the yearly trend by 58% and 8 % correspondingly. As mentioned previously the effect of the seasonal index of the Q4 is positive, more precisely it indicated the increase in the sold volume by 90%. Meaning that in the last quarter the seasonal effect causes the highest growth and almost doubles the yearly trend value, which equals to 56,1 tons.

Seasonal variations repeat annually with certain regularity. In the first three quarters seasonal effect is negative and in the fourth it's positive, so agriculture companies are making their sales in the last quarter, more than in the previous quarters. This is also caused by the availability of the products, since in the Q2 -from June to September it's a harvesting season for fruits and berries and even Q3 for apples and other late-cultures. So, most of the sales fall into the Q4 when there is a need to sell harvested products.

The model demonstrates the seasonal peaks of the volume sold by enterprises and it is relevant to compare it to the Agricultural Volume Production model, which provides insights into the seasonality of production of the whole agricultural sector.

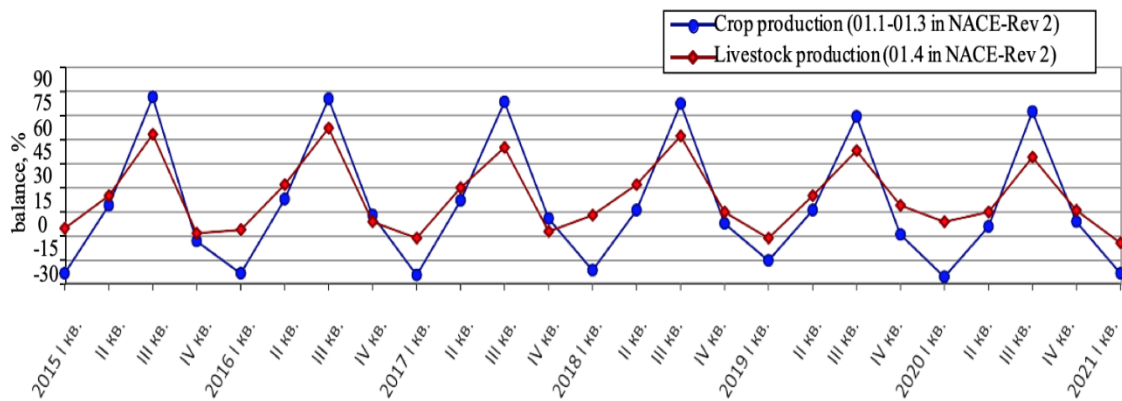


Figure 13. Changes in production volumes of agricultural products, quarterly
Source: SSCU 2021

The seasonality of production is illustrated in the graph, highlighting the peak in Q3. The Q4 is the time to sell the gathered production while the products are fresh and the demand is high during the winter season, while the consumers need fresh and healthy product the most.

There is a distinct seasonality trend in the number of employees, which engage in the work in the agricultural enterprises, which is displayed in the figure below.

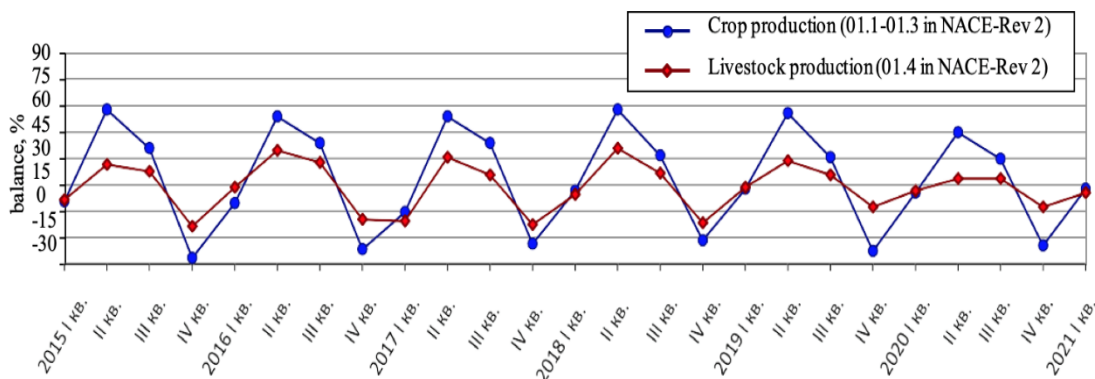


Figure 14. Changes in number of employees in agricultural enterprises, quarterly
Source: SSCU 2021

The highest demand for labor resources falls on the second quarter to plant and cultivate crops. Most of the seasonal workers are hired locally or contacted from previous years. The manual work provides additional income for the rural population.

5 ANALYSIS OF THE FRUIT AND BERRY EU MARKET POTENTIAL FOR UKRAINIAN PRODUCERS

This part of the thesis explains the basics of Association Agreement between the European Union and the European Atomic Energy Community and their member states, of the one part, and Ukraine, of the other part and EU policies regarding agriculture. As well as analyze the potential segments of EU market in the berry and fruit industry.

5.1 The European Union–Ukraine Association Agreement

Ukraine has set a course for European integration. It is a key objective of the 2013-2014 Revolution of Independence. The Ukrainian government declared the prospect of EU membership as the strategic orientation of Ukraine's aspirations for transformation and the key goal for which the reforms were carried out.

In 2014, Ukraine signed **the European Union–Ukraine Association Agreement** (*full name: Association Agreement between the European Union and the European Atomic Energy Community and their member states, of the one part, and Ukraine, of the other part*). (Association Agreement, 2014) The agreement on the association between Ukraine and the European Union is the result of the gradual evolution of relations on Ukraine's independence, which began back in 1997.

The association agreement is aimed at deepening political and economic relations between Ukraine and the EU through the creation of an expanded institutional mechanism and the consolidation of new provisions for the convergence of legislation. European Council President Herman Van Rompuy described the agreement between Ukraine and the European Union as one of the most "detailed agreements on cooperation that the European Union has ever concluded. The scope of the agreement is 486 articles with 44 appendices, protocols and a joint declaration. The official text is approximately 2,000 pages long.

5.1.1 EU regulation in agriculture

The largest part of Ukraine's obligations under the Association Agreement is related to the adoption of EU regulatory norms in the agricultural sector. They relate to standards and requirements for the safety of agricultural products and agricultural production for people, animals and plants. They can be grouped into three blocks:

Technical requirements are requirements for product safety, technical standardization, packaging and labeling of products.

Sanitary and phytosanitary requirements relate to the safety of food and feed, protection of health and safety of people, animals, plants.

Environmental requirements – requirements and regulations for imports of fertilizers, plant protection products, endangered animal species, agricultural waste to the EU territory.

The EU market has clear conditions and rules for the import of agri-food products regarding:

- general food legislation;
- registration of suppliers of products from the country of origin of the goods;
- food hygiene, especially animal origin;
- microbiological criteria;
- residues of pesticides, veterinary drugs and pollutants in food;
- genetically modified products;
- mineral waters, cocoa, fast-frozen food, baby food;
- materials intended for contact with food;
- labeling, raw materials, feed.

Phytosanitary certificate issued by the competent authority of the exporting country must be presented for the import of products of plant origin into the territory of the European Union. At the checkpoint the procedures of phytosanitary control must be carried out. In addition, specific marketing conditions are imposed on plants and planting material.

Ukraine is in the process of unifying national norms to the EU requirements. In 2019, new compliance requirements and rules were introduced to provide. It also defined the system of liability and penalties for non-compliance with the requirements for safety and quality of food products.

Changes in regulatory rules for national producers:

1) Agri-food companies must implement food safety management systems based on the principles of the Hazard Analysis and Critical Control Point (HACCP) system. This system identifies, evaluates and monitors the risk factors that are critical for the safety of food products.

- 2) Each market where agro-foods are traded must have a veterinary and sanitary expertise laboratory, which can be both public and private.
- 3) A clearly defined list of objects of sanitary activities, which are subject to state registration. These are new food products, food additives, flavorings, enzymes, supplementary materials, natural mineral water. State registration without cost.
- 4) Households are required to label their products with the national mark of conformity and/or undergo compliance assessment procedures.

5.2 EU market analysis

The following analysis focuses on segmenting the EU fruit and berry market into most promising target markets and evaluating the competitive climate, customer requirement and relevant market trends of the chosen segment.

5.2.1 Fresh berries market segment

Most imported fresh berries are regularly sold in the retail segment through supermarkets, hypermarkets, discounters, independent food stores and specialized fruit and vegetable stores. Imported berries are also used in the segment of HORECA and public catering. The processing industry purchases and contracts frozen berries.

Berry market in Ukraine is polarized with low and high-value segments. Public markets and food outlets are still popular in Ukraine, but their importance diminishes due to the busy lifestyle and sanitary regulations during the COVID-19 pandemic.

The European requirements are challenging with 40 control points proof-of-demand documents. However, some requirements are not important for specialty stores and street market vendors.

Ukrainian fruit and berry producers are not ready to comply with the following European regulations:

- GLOBAL G.A.P. certification;
- Certification according the GFSI;
- Code of Conduct (provided with the contract);
- Compliance with quality assurance requirements;
- Laboratory analysis of pesticide residues;

- Social responsibility certificates (GRASP, SMETA SEDEX, etc);
- TESCO NURTURE.

In Europe, fruit and berry distributors some of them have created a long-term special supply line for specific chains. For example, the British importer Prima Fruit is one of the partners supplying berries to Waitrose). German discounters Lidl and ALDI regularly hold tenders to select suppliers.

In the case of berries with higher livability (wild strawberries or blueberries) many importers buy only bulk packaging to increase their profits by adding the price for their own re-packaging. This is often done by leading Dutch and German importers. However, in Great Britain and the Middle of Europe a lot of importers buy berries, packed in residual waste container. Therefore, it should be considered as a possibility of investing in packaging and sorting equipment, in order to be able to supply products directly to the retail trade. Additional revenues of up to 1 euro per kg can be obtained by exporting bottles of orange peel in 125g bottles.

For packaging blueberries are commonly used corrugated cardboard boxes with overall dimensions of 400 * 300 * 110 mm and a capacity of berries 3 kg but can also be used other variants of packaging. Boxes are placed on the euro pallets, one-euro pallet, as a rule, hold 160 crates, or 480 kg net weight. A bulk pack of gardening land plants can hold 5 kg. Raspberries, oleaginous and other berries are often packed indirectly in a single package. If the berries are packaged separately for retail sales, the size of the package varies depending on the type of berries. The importer will give exact specifications and instructions on packaging and labeling. The primary packaging is that which is placed on the product itself. As a rule, berries are packaged in small plastic containers and bags, which are packed in film (primary packaging). The primary packaging is placed in a group of secondary packaging, which protects the product and its primary packaging during transport (eg box, tray). Tertiary packaging - transport, which is removed by the operator of distribution network before placing in the sales area (pallet of wood, zipped cardboard boxes, packing page, surface coating).

The most popular containers are:

Blueberry - 12 x 125 g. Other variants are 8 x 125 g, 10 x 125 g, 8 x 250 g, 4 x 500 g, 6 x 500 g, 15 x 500 g and 8 x 625 g. There is a tendency to increase the size of open containers;

Raspberries - 12 x 125 gr. Other variants are seldom used due to the low quality of the berries;

Garden berry – many options are available. As a rule, during the European midseason the sizes are smaller, they reach their maximum at the beginning of the summer months. The most common parameters: 8 x 250 g, 10 x 250 g, 12 x 400 g, 8 x 500 g, 10 x 500 g and 1 kg.



Figure 15. Example of packaging of fresh berries – blueberries

5.2.1.1 Competitors in the market of fresh berries

The main suppliers of fresh berries to Europe are represented on Figure 16. The diagram shows the physical volume of exports (tons), where wild berry amounts to over 60% of the total volume of supply. Thus, the garden berry determines the ranking of suppliers. In addition, the Netherlands and Germany are mostly transit countries (re-exporters), and their own production is much lower than the volume of trade.

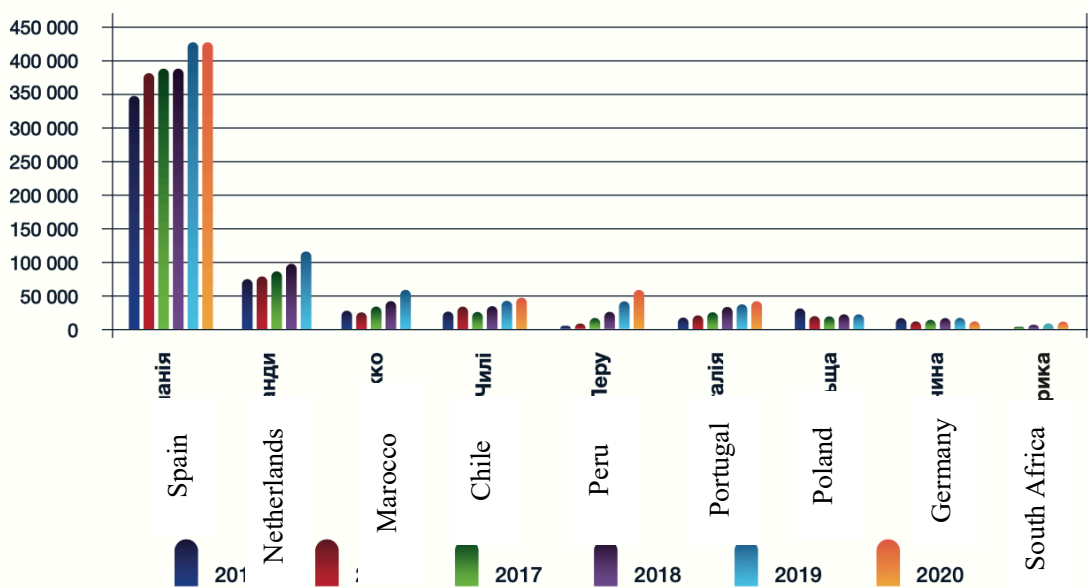


Figure 16. Main countries-suppliers of fresh berries to EU, tons. Source: Trade map 2020

Figure 17 shows the data re-exports. It contains data on all commodities and suppliers.

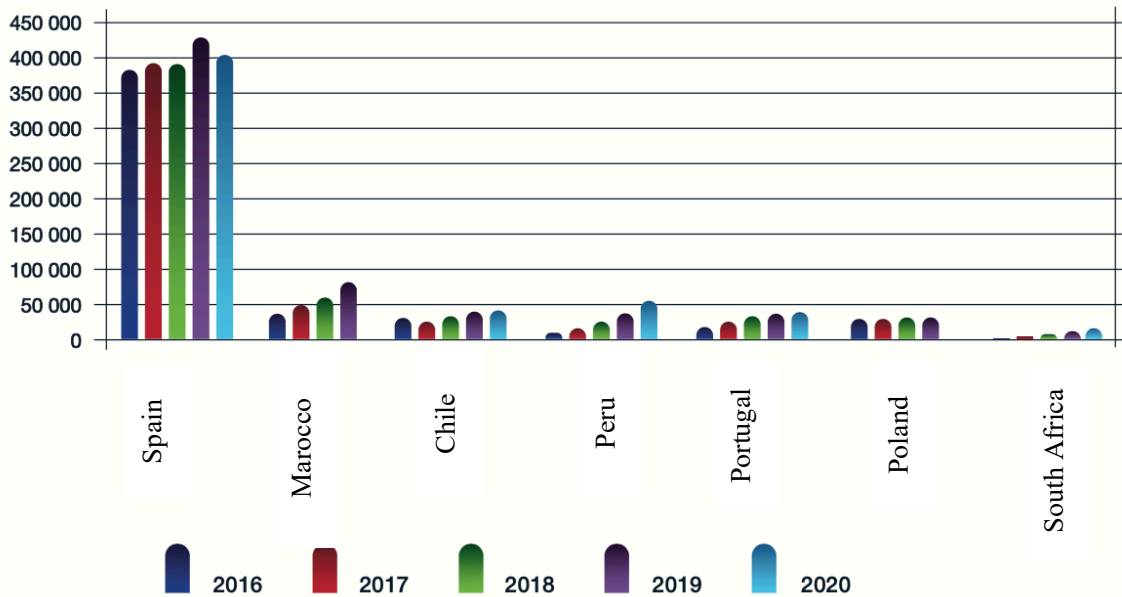


Figure 17. Main countries-suppliers of fresh berries to Europe without taking into account re-export, tons. Source: Trade map 2020

5.2.1.2 Competitors in the fresh market of blueberries

Let’s consider a detailed examination of competitors for Ukrainian exporters of blueberry. It should be noted the competition is not high due to varied supply seasonality. In terms of physical volume, the leading supplier of fresh blueberry to Europe is Spain (72 thousand tons in 2020). Then come Peru (36 thousand tons) and Chile (32 thousand tons).

Since the Ukrainian supply window is behind the zone for the leading suppliers (Table 8), these three countries are not direct competitors for Ukraine. Although there is a small overcapacity in December (Spain, Portugal, Serbia and Romania) and in November (Peru), the main Ukrainian volumes are exported in June and August. Therefore, the main competitor of the Ukrainian export is Poland.

Table 8. Seasons of leading suppliers of fresh blueberry to Europe
Source: own processing

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Chile	█	█	█									
Morocco				█	█							
Spain				█	█	█						
Serbia						█						
Portugal						█	█					
Poland							█	█	█			
Ukraine							█	█				
Africa										█	█	
Peru									█	█	█	█

A significant amount of blueberry, which Poland imports from Ukraine, is packaged and further exported to Western Europe. Therefore, by focusing on end markets, instead of using Poland as a mediating country, Ukraine can increase its competitiveness on the European market.

Production of Polish blueberry is constantly growing, and exports have already reached 20 thousand tons. Currently, Poland is the second largest producer of blueberry in the EU after Spain. Polish suppliers have already established long-term relations with many European distributors and have formed a good reputation. Thanks to the support of the Ministry of Agriculture, Polish producers have become competitive and offer their products at a lower price than most other suppliers (Spain, Peru, Portugal).

Many producers in Poland are united into cooperatives, the largest of which is the Polish berry cooperative with joint production on an area of over 400 hectares. The largest single producer is Polana, which operates three farms with a total area of 346 hectares, of which 105 hectares are fully fruit bearing. Polana is a foreign investment and belongs to the British group Winterwood Farms. The lack of manpower to harvest crops is the main reason for Polish producers, so they are recruiting berry pickers from neighboring countries, including Ukraine.

In addition, the season in Poland is inter-imposed, which makes Polish suppliers more competitive in terms of price. In order to increase profits, leading Polish producers invested in modern packaging and sorting equipment. Unfortunately, many Ukrainian producers do not have such equipment and thus export blueberry to Poland at a lower price.

5.2.1.3 Competitors in the fresh market of raspberries and wild strawberries

Currently, Portugal and Spain are the two main suppliers of fresh raspberries to Europe. Thanks to their climatic advantages, they can offer raspberries much earlier than they are grown in Central and Western Europe. Portugal has a particularly strong proposition. Practically, the season of supply from Portugal remains throughout the year without interruption, although the volume in winter months (October - February) is quite small. The data on other berries is presented below in Table 9 and 10.

The demand for strawberries is met by the domestic European production. The main producers are Great Britain, the Netherlands. The strawberry cultivation and packaging is organized with the use of tunnel systems. Spain is the leading European producer and

exporter. Imports are relatively small. In winter small volumes of raspberries are imported from Mexico. In addition to raspberries, Mexico also exports fresh blackberry to Europe.

Table 9. Seasons of leading suppliers of fresh raspberry to EU

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Morocco												
Spain												
Portugal												
Netherlands												

Source: own processing

Table 10. Seasons of leading suppliers of fresh garden strawberry to EU

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Egypt												
Morocco												
Spain												
Other EU countries												

Source: own processing

Spanish and German prices are close or average lower than the prices of Western European suppliers. The highest prices are announced by Belgian and Dutch producers during the local season. Export prices depend on packing and season. For example, in the middle of last season export prices of Spain were 1.5-2.0 euro / kg. At the beginning of the Spanish season export prices for tunnel production berries were 3 or more euros/kg.

5.2.2 Frozen berries

The food industry is the largest consumer of frozen berries in Europe, followed by the retail trade and public catering sector. Although exact data is unavailable, our rough estimates suggest that the food industry accounts for approximately 70% of the European frozen berry market. Most frozen berries are used in the production of jams and fruit spreads. General requirements for safety of food products have already been considered in the sections above. The main innovation in comparison with fresh berries is the fact that certification GLOBAL G.A.P. is not often a requirement.

The requirements for the industrial packaging are very similar. The most widespread types of export packaging for frozen berries are polyethylene bags, cardboard boxes lined with polyethylene foil. As a rule, IQF frozen berries of the first class are packed in smaller packages, while frozen berries of the second class, crisps or frozen blocks are packed in

larger ones. Cartons are generally smaller (sometimes 10-15 kg), while bags are larger (sometimes up to 25 kg).

Cardboard boxes are packed on European pallets (80x120 cm) and protected with polyene foil. The cardboard must be sufficiently strong to keep its shape under the pallet carriage during continuous storage. The cardboard boxes are sealed with tape.



Figure 18. Example of packaging of frozen sorted berries

5.2.3 Key Food industry segments

This section briefly summarizes the main European segments of fruit and berry products classified into five key groups: jams and fruit spreads, dairy industry and freezing production, drinks and juices, public catering segment and frozen retail segment.

5.2.3.1 Production of jams and fruit spreads

Producers of jams and fruit spreads are among the largest consumers of frozen dried fruit and berries. Frozen berries account for 40-50% of the final product volume in the production of jams. About 100 thousand tons of frozen fruit and about 25 thousand tons of frozen raspberries are used in Europe to produce jams and fruit spreads.

The portion of fruit in jams is increasing as producers add labels "low sugar content" or "high fruit content." Most European producers stop producing jams with added flour due to consumer dissatisfaction.

The most European producers of jams are Germany, followed by France and Great Britain, while French companies dominate in the production of raspberry jams. Jam producers also import frozen raspberry puree for the production of jams without seeds.

5.2.3.2 Bakery and confectionery products

The bakery and confectionery industry use frozen berries for cakes, tartlets, and other desserts. Cake and dessert producers use IQF frozen berries without any additional

processing. The high quality of frozen fruits is an important criterion. Most enterprises of the bakery and confectionery industry are not direct importers of frozen berries. However, their suppliers are specialized companies that use frozen berries as food ingredients for glazing, production of fillings and similar products.

5.2.3.3 Dairy industry and freezing production

Dairy industry enterprises use frozen berries mainly for fruit yoghurts and frozen dairy products. They use frozen berries in the form of fruit extracts. The general requirements are the same as for the other industries, with the difference that the dairy industry may require lower levels of microbiological contamination.

5.2.3.4 Drinks and juices

The beverage industry uses frozen berries for the production of juices and smoothies. Industrial smoothie producers use frozen fruit and berry purees which are mixed with banana puree for thick consistency and other fruit and vegetable juices to achieve specific savory qualities. The Brix value, the intensity of the color and the flavor are the most important considerations for the quality of the drink.

The suppliers are not a specific segment, but the largest channel of supply for the enterprises of the food industry. Enterprises should try to directly contact specialized suppliers of ingredients. The largest companies supplying ingredients and using frozen berries are often present as exhibitors at leading trade fairs, a detailed description of which is given in Section 6.1. of this guide.

5.2.3.5 Public Catering Segment

Food segment of HoReCa (hotels, restaurants and public eating places), which uses frozen berries for making cakes, smoothies, frappes, sorbets and similar products, as a rule, is supplied by specialized importing companies (wholesalers). Some public catering companies specialize in supplying frozen fruit bags for smoothie bars and restaurants such as Projuice (Great Britain), Smoothie Solutions (Spain) or Juice Factory (Austria). Catering product manufacturers are trying to find other handy solutions for restaurants and bakery enterprises. The picture below shows a solution created by the Belgian company Dirafrost:

IQF frozen raspberries with frozen puree as the basis. This product is used for the production of tartlets.



Figure 19. IQF frozen raspberries by Dirafrost. Source: Dirafrost corporate webpage

The requirements of the food service segment are like the requirements of the processing industry in general. The main advantage of supplying this segment is that purchasers do not always insist on certification, and regular laboratory tests will often be sufficient to demonstrate the safety compliance of food products. Nevertheless, due to the high competition, buyers would like to turn to the supplier, which has a certificate of safety of food products. The main disadvantage is that it is very difficult to supply products directly to the enterprises in this segment, because they often buy berries in smaller quantities. The segment of food products often requires specific packaging of frozen berries in 1-5 kg, which differs from the requirements for loose and open packaging.

5.2.3.6 Frozen retail segment

European retailers prefer purchase from the intermediaries. The most European retailers have already created a network of centralized or regional suppliers and packers of frozen berries. These suppliers pack and label frozen berries with labels according to the instructions specified by the seller. Retailers, as a rule, like to buy the entire assortment of frozen fruits from one supplier.

The leading companies in the retail trade are Schwartz Gruppe (Lidl and Kaufland brands), Carrefour, TESCO, Aldi, Edeka, Leclerc, Metro Group, Rewe Group, Auchan, Intermarche and Ahold (Delhaize, Albert Heijn and a few other brands). In addition, there are several retail chains in Europe that specialize in supplying frozen products, such as Iceland (Great Britain) or Picard Surgelés (France).

Frozen IQF berries are almost the only type demanded by retailers. Frozen berry packaging can vary widely depending on customer demand (bags or boxes). The current trend is to replace plastic with eco-friendly materials. In some cases, the retailer can specify the package design and provide his own materials.

6 ANALYSIS OF THE COVID-19 IMPLICATIONS ON FRUIT AND BERRY MARKET OF UKRAINE

The global crisis caused by the COVID-19 pandemic has brought significant changes in the global economy and trade, including the fruit and berries sector: economic problems, the temporary closure or reduction of some sales channels (HoReCa, small shops, wholesale markets, etc.), reduced demand from end consumers, interruptions or changes in supply chains, cancellation of trips due to quarantine, additional requirements and costs for food safety, etc. The data used is extracted from the questionnaire of Ukrainian enterprises that have main operations in growing, processing, selling and/or trading fresh fruits and berries.

6.1 Analysis of external and internal factors of 2019/20 season

The most drastic factor, which affected the worldwide market in the year of 2020 is the worldwide Covid-19 pandemic. Before paying attention to fruit and berry, let us first consider how it affected food security in general. After all, fruit and berry products are not considered essential goods and the trends in the consumption of such products directly depend on the general situation in the food market.

As a result of the COVID-19 pandemic, the world entered the economic crisis causing significant decrease in the solvency of consumers. As a result, consumers were forced to review their expenses and either partially or completely abandon essential goods, which also include fruits and berries.

In addition, due to significant problems with logistics, the supply of fruit and berry products in many markets has decreased significantly and caused an increase in prices. The consumption of fruit and berry products has decreased.

On the operational side, many fruit and berry producers experience economic problems and a limited amount of labor under quarantine restrictions. Not all farmers carried out gardens in a timely manner, which in a heap with the weather factor adversely affected both the quantity and quality of the crop.

As for foreign trade, there were no special changes in this segment. Countries preferred not to take any restrictive measures both in relation to exports and imports of fruit and berry products, since such actions could adversely affect both food security and the economic situation in the segment. However, the time for logistics has increased due to additional

checks at the border. In addition, buyers began to require more documents and certificates of conformity to ensure the safety of end consumers.

Fruit and berry exhibition industry moved to the new online format. Most exhibitions, conferences, and meetings in B2B format have been switched to online format. Digitalization was a forced step, because due to the introduction of quarantine measures, many events came under a ban. In addition, there were logistical problems, as at the peak of the corona crisis, several countries completely stopped air and rail services. Moreover, the borders of many countries for foreigners are still closed.

Thus, perhaps the only positive point in the current situation can be considered precisely the transition of market players to a new level of negotiations and greater representation of such companies in the worldwide network.

6.1.1 The impact of weather conditions on the UA market in 2019/20 season

Production of fruits and berry is sensitive to climate change. It should be noted that if 5-10 years ago the main threat to the future harvest were mostly winter and spring frosts, then in the last few years weather conditions during the summer pose no less threat.

Mild winter and, as a result, the minimum number of days with sub-zero indicators of average daily temperature led to the fact that plantings could not normally switch to a state of rest for the winter period. In addition, due to the abnormally warm winter, the movement of juices began in the first decade of February. As a result, if the February frosts caused more significant damage than even in the coldest years. The first to sound the alarm were the manufacturers of stone fruit cultures, because of nature of apricots, peaches and cherries that first begin to bloom.

Another negative consequence of winter 2019/20 can be considered insufficient amount of moisture in the soil due to, again, mild and warm winter and minimal amount of snow, which also affected the growing season in the first half of the season. In addition, usually winter frosts partially saved gardens and berries from the spring invasion of pests. However, this year manufacturers were forced to start carrying out insecticidal treatments earlier than traditional deadlines and generally slightly increase the number of treatments.

Another problem for Ukrainian producers of fruits and berries are frosts in late March-early April, when a wave of lower temperature indicators covered almost all regions of the country, and night temperatures decreased to -12..-10 C in the western and -6..-4C in the

eastern and southern regions. In addition, this weather lasted for several days, which further complicated the situation. As a result, blueberries, early and middle varieties of stone fruits were significantly affected. According to various estimates of manufacturers, the loss of blueberry in some farms reached 40-50%, and in the early varieties of stone fruits - up to 90%. However, at the end of April, at least in the producers of grain and some types of berry crops, weather conditions did not cause concern, and estimates of the future harvest were optimistic.

During the second half of spring and early summer, one of the biggest problems of fruit producers are both low temperature indicators and rainy weather, which not only adversely affected pollination and maturation, but also contributed to the spread of bacteriosis. In addition, hail loss is a factor. Drought and high temperature indicators are traditionally marked the end of summer.

Therefore, analyzing the weather conditions, it can be concluded that this year, first of all, they have negatively affected the situation on the Ukrainian market and export opportunities due to the limited supply of products of appropriate quality. At the same time, despite the rather high prices, the consumption of fruits and berries inside the country has slightly increased this year. The largest increase in consumption was recorded in the blueberries segment.

6.1.2 The impact of COVID-19 on the sale of fruits and berries in Ukraine

COVID-19 forced consumers to reconsider their expenses while small farmers lost access to retail markets. The further analysis focuses on the detail overview of what changes have occurred in each of the markets, and how Covid-19 affected it.

6.1.2.1 *National market*

Apple producers experienced the first impact of the pandemic on the rate of sales in the second half of the 2019/20 season, when all wholesale and food markets – the main sales channels of medium and small producers – were closed as quarantine measures in March. Probably, in this case, wholesale companies and large retail chains could act as an alternative. However, the situation in this case was complicated by the absence of large volumes of products and requirements for both quality and conditions of payment and

delivery. The detailed overview of the main channels the fruit and berry producers worked with in years 2018-2020 is presented in the Figure 20.

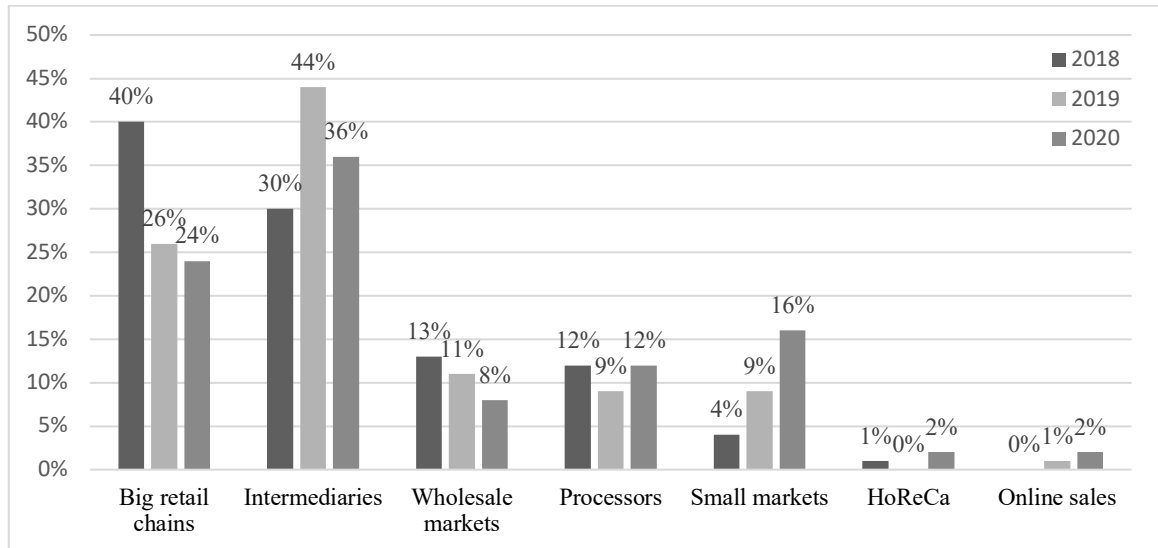


Figure 20. Distribution of the main sales channels on the domestic market of Ukraine in 2018-2020. Source: own processing of the questionnaire results

At the same time, manufacturers stated that 2020 was very difficult in retail segment. First, the requirements for product quality were increased. strengthened. Secondly, the competition was quite tough. Farmer's markets being closed, and as a result, retail channels were dictating pricing and payment terms. Therefore, it is not surprising that fruit and berries producers tried to find better alternatives.

However, the part of processed fruit and berries has increased. Producers of berries took steps into processing because frozen berries can be sold all year round. There are two approaches: raw or frozen fruit and berry sales.

The share of small retail chains and small stores is expected to increase. The growing interest in such stores is understandable since they usually work in a "near home" format. At a time when the whole country was quarantined at home, and public transport was stopped, such shops and shops were in the greatest demand among consumers. In addition, it was easier to engage with new providers on the retail distribution network.

The positive impact of quarantine measures was also recorded in the online sales segment, since this method is safer for end consumers and has caused more interest on their part compared to previous years. However, this procurement format was most popular during the period of stricter quarantine, when there were restrictions both on movement and in terms of places where fruit and berry products could be purchased.

HoReCa is the most complex and non-stationary market. Difficult – because for the most part, even in the presence of a distribution network, products are purchased in small volumes, and quality requirements are usually quite high.

6.1.2.2 Foreign market

Due to Covid-19 pandemic it became more difficult for Ukrainian producers to enter European markets. Previously, producers preferred to negotiate mainly during face-to-face meetings, however this year they were forced to go online. Moreover, if in the previous year's several contracts were concluded during international exhibitions, such events were either canceled altogether or also switched to the online format.

Online format is becoming more popular however the disadvantages of cooperation in this format was inability to demonstrate product samples. In general, the negotiations face to face are more effective than in the online format. Therefore, if there were almost no problems with regular buyers, then the situation with new contracts this year is more complicated than in previous years, and in general the number of new contracts was noticeably lower. In addition, logistics has significantly complicated in 2020 due to queues at the border and additional checks, the time and transportation.

As for sales channels, in 2020 the share of large supermarket chains decreased due to stricter requirements for products. It is worth noting that according to manufacturers, this year, in general, sanitary, and epidemiological requirements have become more stringent as a result of quarantine measures.

As for the geography of exports, the situation is the same - the main consumer of most Ukrainian fruit and berry is still Belarus. However, exports to the EU countries were no less active. Among the target markets are Poland, the United Kingdom, Germany, the Netherlands, and the UAE which is the undisputed leader and hub in the Asian market segment.

Nevertheless, the problems with exports in 2020 are associated not so much with the pandemic, but rather with the lack of supply of products of the high quality. In addition, some manufacturers refused exports due to the fact that they were quite satisfied with the price situation in the domestic market and they considered it inappropriate for to have export deliveries, since such sales require a more complex approach to the sale process of and are quite risky during the quarantine period. As shown by 2020, any sales channel can become

ineffective if the occurrence of non-standard situation in the state. A good example is the current closure of the wholesale markets, and strict requirements for the operation of small retail chains and stores. That is why it is necessary to keep track and cooperate with as many possible sales channels as possible.

6.2 Threats and opportunities for Ukrainian fruit and berry enterprises

The Ukrainian fruit and berry producers should focus more on domestic market. The largest threat to the development of fruit and berry segment in the domestic market of Ukraine is a declining purchasing power of the population. Fruits and berries are not products of the first necessity. However, it can be corrected by more active stimulation of consumption.

Blueberry consumption is an example of successful marketing. Despite its high price, blueberry consumption in Ukraine increased by at least 25% due to marketing as an outstanding source of vitamins and minerals.

The issue of accessibility of qualified workforce is becoming more relevant each year, mainly connected with the migration in the previous years of manpower abroad. In 2020 the main problem occurred at the beginning of the planting season, when the government limited the number of employees allowed to work at the same time. It is because of these risks the number of those who plan to automate part of the production processes has increased. Devaluation of the national currency on the background of the global economic crisis due to the pandemic could lead to a significant increase in the cost of production of fruits and berries. In addition, this could lead to a significant increase in cheaper imports, which is detrimental to the sales volumes of local products. Another unpredictable threat is the climatic change which can cause damage to agricultural sector.

The closure of the borders and the ban on export to the main consumer countries of Ukrainian products is also a threat. However, it is not highly probable: as of now there are no restrictions (except quotas).

Currently the possibility of face-to-face B2B meetings is limited, and that is why Ukrainian producers should look for maximum number of opportunities to present their companies online:

- Participation in international exhibitions, even if they are held online;
- Promotion of their own website to international partners (bilingual websites);
- Active social media presence;

- Participation in B2B meetings and business missions aimed at promotion of Ukrainian products on foreign markets.

As the year 2020 showed, the domestic market of Ukraine at least in the first half of the season was not prepared for the fact that one of the main sales channels - the food markets - was closed and inaccessible. Producers, especially of apples, were forced to look for an alternative and were quite successful. The farmers should keep in mind and evaluate their business model on how well it fits with the proposed business possibilities, which have become essential in the current state of the market:

- Diversification of sales channels - the domestic market is not limited to only large retail chains and wholesale markets.
- Online trading has not yet been so reliable. As the current year showed, especially for the small manufacturers, this very option of implementing their products has become in some ways a "royal circle" because it turned out to be one of the easiest ways to reach the consumer. So next year small and medium enterprises should also pay attention to this retail channel.
- Promotion on the Internet through corporate webpages and social networks. Prohibition of many professional events to some extent endangered the establishment of new agreements not only between manufacturers and potential buyers, but also with the suppliers of materials and equipment, because such negotiations were mostly carried out offline in person. This year alone, the extensive presence of the company on the web became a major benefit and improved its chances to find partners and conclude new contracts.
- Own processing and push marketing of certain fruits and berries. Own processing can not only expand the assortment, but also in the future to carry out the sales throughout the year, not just for a few months (as in the case of berries and bone fruits). As for popularization of consumption - as was said before, this year's real breakthrough is the growth of consumption of blueberry on the domestic market by 20-25%. Producers themselves attributed this tendency to the fact that during the season various media constantly spread information about the importance of consuming this berry and its positive properties.
- Protected soil - specially equipped cultivation facilities, as well as insulated soil, in which vegetable crops are grown in conditions of artificial microclimate, - includes

two possibilities at once. Firstly, growing fruits and berries in this way allows to start the season much earlier than most manufacturers, and therefore get higher prices at the beginning of the season. Secondly, reducing the risks from the negative effects of climate change.

On the one hand, the most attractive market for the export of fresh Ukrainian products, remains Russia which is one of the world's largest consumers, and the internal production, even with import substitution, cannot fully cover the existing demand. On the other hand, it is not politically justified. There is a military conflict in the Eastern Ukraine and Russian hostility. Currently, Belarus is an alternative. It is in TOP-5 customers of almost all fruit and berry products. Demand from Belarus remains quite high over the past few years. In addition, product requirements are lower than those of EU and Asian countries. No less important is the convenient logistics and almost the absence of a language barrier. This country is likely to remain among the leaders in 2020 -2021.

Promising players in 2020-2021 are the Netherlands and U.A.E as hubs for re-export to and Asian markets. It should be noted the Netherlands has the greatest demand for fresh berries, in particular blueberries. Poland remains promising in terms of export of berries. However, this country is mostly exporting fruit and berry products for further processing. Therefore, this sales channel in the first place means lower prices, but also lower quality requirements.

In addition, it is worth paying attention to countries such as Germany and the United Kingdom, where consumption and solvency of consumers is much higher than in other European countries. Ukrainian fruit and berries producers already have experience in exporting to these markets and during the survey also named these countries as one of the most priority.

Austria and Sweden remain the largest consumers of the industrial apple, which is not surprising, since these countries are quite large players in the apple concentrate market. In addition, the representative offices of Austrian and Swedish processing companies work quite successfully on the Ukrainian market and act as key players both in Ukraine and on the international arena.

Poland is also the main buyer of frozen berries from Ukraine. The country imports Ukrainian products, mostly for further processing, or to compensate for the lack of products of their own production (as in the case of raspberry in 2016-2017). Therefore, next season it will remain the flagship among importing countries in this category.

For those producers specializing in freezing wild plants, except Poland, businesses should pay attention to countries such as Germany and the Netherlands. In recent years Germany has shown an increase in consumption of the frozen wild berries. In addition, it acts as the main importer of products from Poland, and since Ukrainian refiners already have experience in supplying to this country, there is a high possibility to increase supply to the German market. As for the Netherlands, as in the case of fresh products, this country acts rather as an intermediary, not the end user. There are no significant changes in the foreign market of apple concentrate in the 2020/21 season. Most of the export supplies will fall to the EU countries, namely Poland, Great Britain, Netherlands, and Germany.

German Market

Germany is the largest European importer of fresh berries in Europe, although close to 25% of total imports come through intermediaries, mainly from the Netherlands. Moreover, some Dutch traders have subsidiaries in Germany for direct supply to this market. Over the past few years Germany has increased the share of direct imports from the main sources of supply. More and more German traders are supplying berries to other countries, especially to Austria, although an important part of the imported volumes is sold locally.

Spain is the leading supplier to Germany, followed by the Netherlands (as a transit country) and Morocco. During the Ukrainian season the largest amount (17 thousand tons) of fresh berries is imported from Poland. Germany is a very concentrated market. This means that the 4 leading importing companies realize over 70% of the total imports of Germany. In the last year the total sales of fresh berries in Germany amounted to about 2 billion euros.

Potential partners and leading German importers are Herbert Widmann (leading supplier of blueberry), Frutania, Nordgemuese Krogmann (a company with great packing capacity, it also cooperates with other importers), Diplanya, Fruchthansa and others. One of the leading fresh fruit companies in the world, Dole, has a European presence in Germany.

Great Britain market

Great Britain is the second largest European importer of fresh berries in Europe. This is a particularly attractive market for blueberry, as consumption of berries in Great Britain is the largest in Europe. The specialty of British companies specializing in fresh berries is a very high interest in the development of their own production in the supplying countries. Most imported berries are sold at a local level with a relatively low share of reexports.

Although the requirements of British buyers are higher than in other European countries, it is more likely that the berries will be shipped to this market in end-of-line packaging. This gives the possibility to get higher profit, but on the other hand it can be a difficult task, because buyers are looking for convenient packaging with adhesive closure (topseal), which has a limited offer in Ukraine. There are more than 30 importers of fresh berries in Great Britain- Berry World (leading supplier to Great Britain with subsidiaries in 7 different countries), Berry Gardens (together with the previous company hunting - 50% of the market), Angus Soft Fruit, Direct Produce Supplies, S&A Produce, Soloberry, Total World Fresh LTD (part of the well-known Irish group Total Produce) and a few others.

Netherlands market

The number of importers of fresh berries in the Netherlands - the largest in Europe, nearly 40 companies are direct importers. A large number of Dutch importers sell berries to other markets in Europe. In addition, a number of local producers import berries to supplement their own offer. In addition to jams that are on sale, Dutch producers have domestic production. Most of the Dutch traders are very active, constantly looking for new opportunities for development.

Potential Dutch importers of organic berries are ASF Holland (partner company Total Produce), Aartsen, Special Fruit, Yex (known as Fruit World until 2020), Nature's Pride, Jaguar and many others.

7 ANALYSIS OF AC “BERRY PARTNER”

7.1 Overview of AC “Berry Partner”

AC "Berry Partner" is in the Sumy region of Ukraine. This enterprise began its activity in 1999 by renting land in the village of Nyzy for growing berries and technical crops. Now, AC “Berry Partner” carries out activities for the cultivation of berries and fruits.

There is an international trunk highway to the north and south of the district.



Figure 21. Map of strategic roads of Ukraine – marked blue

7.1.1 Products and specialization

The specialization of the enterprise is determined by the main commodity sectors and products that provide the greatest revenue from sales and thus ensure the sustainable competitiveness of the enterprise. So, the main indicator characterizing the specialization of the enterprise is the structure of commodity products.

Table 11 considers the areas of specialization of the enterprise, based on the structure of commodity products.

Table 11. AC “Berry Partner” product structure in 2018-2020

Type of products	2018		2019		2020		Average	
	UAH thous.	fraction, %	UAH thous.	fraction, %	UAH thous.	fraction, %	UAH thous.	fraction %
Ground berry including	2600,7	29,64	1143,3	8,30	13126,4	41,67	5623,47	31,21
<i>bilberry</i>	1637,8	18,67	662,7	4,81	3892,8	12,36	2064,43	11,46
<i>strawberry</i>	640,0	7,29	105,6	0,77	7547,4	23,96	2764,33	15,34
<i>blueberry</i>	320,4	3,65	374,8	2,72	1217,3	3,86	637,5	3,54
<i>blackberry</i>	2,5	0,03	0,2	0,00	468,9	1,49	157,2	0,87
Grapes	72,7	0,83	1135,8	8,24	862,6	2,74	690,37	3,83
Woodland strawberries	-	-	1601,8	11,62	1799,9	5,71	1133,9	6,29
Other	102,5	1,17	70,1	0,51	96,1	0,31	89,57	0,50
Overall soft berries	2775,9	31,64	3951,0	28,67	15885,0	50,43	7537,3	41,83
Apples	1501,6	17,11	2077,6	15,08	3072,2	9,75	2217,13	12,30
Plums	1723,1	19,64	3947,4	28,64	5416,1	17,19	3695,53	20,51
Pears	2689,2	30,65	3704,9	26,88	3070,0	9,75	3154,7	17,51
Other	57,50	0,66	69,0	0,50	3779,3	12,0	1301,93	7,23
Overall Pome fruits	5971,4	68,05	9798,9	71,10	15337,6	48,69	10369,3	57,55
Services	27,20	0,31	31,0	0,22	279,4	0,88	112,53	0,62
Total	8774,5	100	13780,9	100	31502,0	100	18019,1	100,00

Source: own processing of internal reports of AC „Berry Partner

The AC “Berry partner” production is almost evenly divided between cultivation of soft berries (50,43% in total production) and pome fruits (48,69%) in 2020. The enterprise greatly increased production in 2020 compared to 2019, the production of berries increased by 11,4 times compared to 2019, and the production of pome fruits grew by 4 times relative to the compared period. This increase had mainly to do with the acquiring of regional producer and its assets in 2018/2019 timeframe. It allowed AC “Berry Partner” to increase its production volumes, due to bigger planting areas and additional plantations. The biggest

products in volumes are blueberries and plums, which account to 38% and 17% respectively in the overall production of the enterprise.

The analysis of the activities of AC "Berry Partner" indicated that the most specific weight in the structure of marketable products are plums (20.51%); pears (17.51%); strawberries (15.34%). The dynamics of the main types of products shows the fluctuating character of production. There is a tendency to increase the volume of stone fruits - there was an increase in production of soft berries in 2020 compared to 2018.

7.1.2 Financial performance

The main purpose of creating and running of any business entity, regardless of the type of its activity or form of ownership, is to obtain the final financial result, that is, profit. Financial result is one of the most important economic indicators, which summarizes all the results of economic activity and provides a comprehensive assessment of the effectiveness of enterprise's operations.

The financial results of AC 'Berry Partner' are presented in Table 12.

Table 12. Financial statement of AC "Berry partner" 2018-2020

	2018	2019	2020	Delta factor 2020 to 2018
Revenue	8 936	13 901	31569	3,5
Cost of goods sold	9 754	13 587	24 999	2,5
Net				
Profit		314	6 570	+ 7388
Loss	818			UAH

Source: own processing of internal reports of AC "Berry Partner"

The analysis of the financial statement showed that the cost of sales tends to increase, - 2.5 times, while in the reporting year the cost was higher than income and this led to a loss of 818 thousand UAH, this phenomenon is negative for the company. We can note a positive trend to increase profits since 2018. These figures indicate an increase in profit by 21 times - 6 256 UAH in the reporting year compared to 2018. This phenomenon is the result of significant sales of fruit products.

7.1.3 Structure and workforce overview

In the enterprise, the control apparatus is built by vertical hierarchical scheme with minimal flexibility. The director is the head of management. He oversees the accounting department, economic department, production department of crop production, and the heads of functional departments (accounting, economic, production) provide functional assistance to the performers of works. Organizational and managerial structure of the enterprise is rather outdated as demonstrated by Figures 22 and 23. Elements of the structure are individual workers, departments and other links of the control apparatus, and the relations between them are maintained due to connections, which is usually divided into horizontal and vertical. Organizational and management structures are listed below.

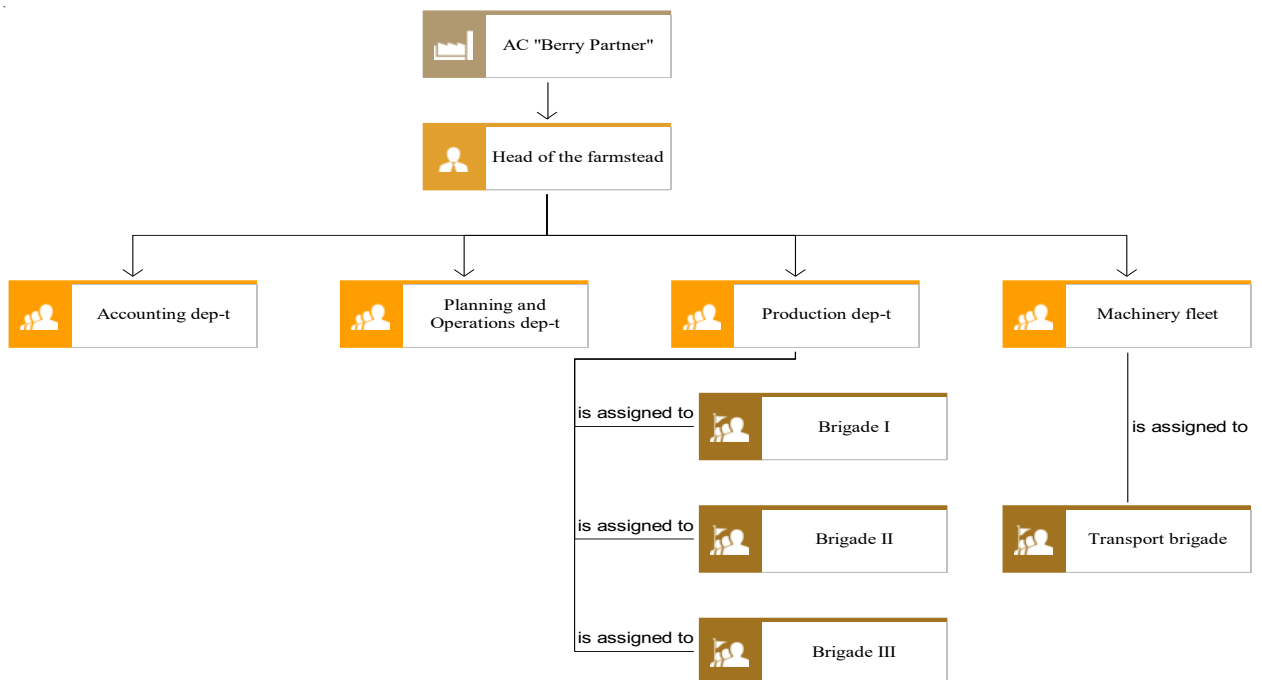


Figure 22. Organizational structure of AC "Berry Partner". Source: Own processing

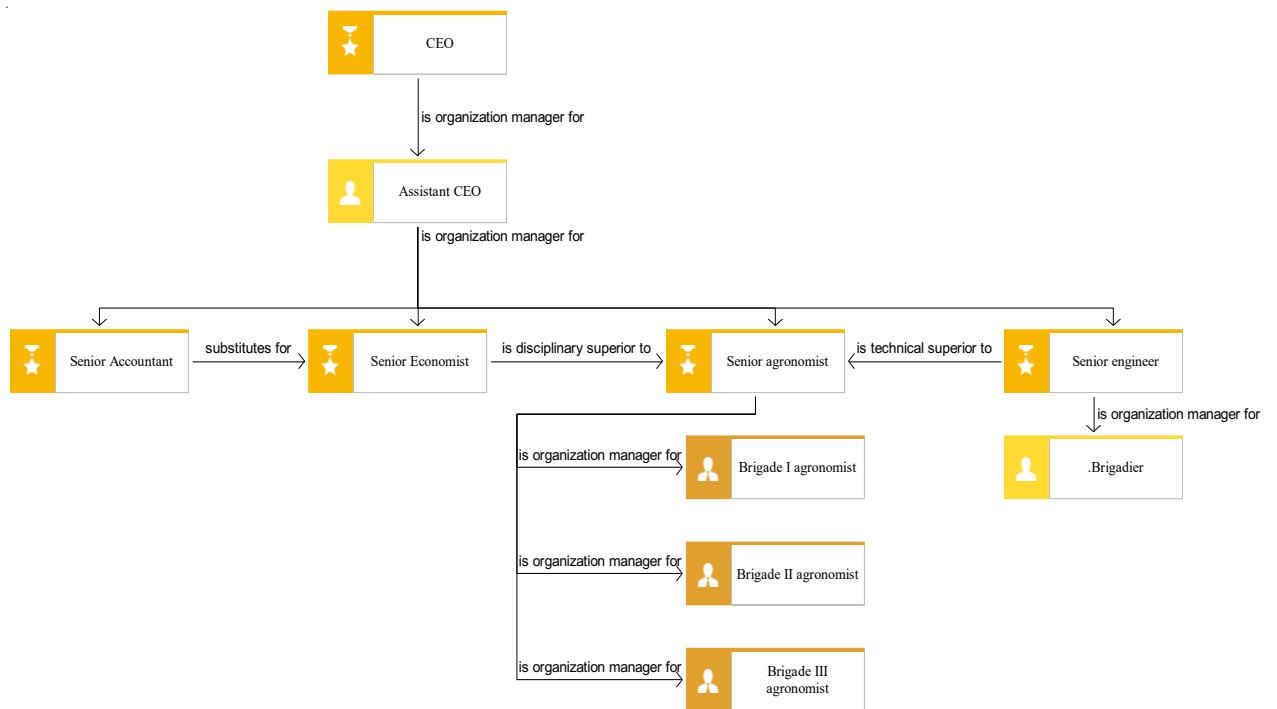


Figure 23. Managerial structure of AC “Berry Partner”. Source: Own processing

The main feature of the linear-functional organizational structure is the presence of exclusively linear relationships. The advantages of this type of structure are:

1. clarity and simplicity of interaction;
2. reliable control and discipline;
3. efficiency of making and implementing management decisions;
4. cost-effectiveness under the conditions of small size of the organization.

The disadvantages of this type of organizational structure are:

1. the need for managers of universal qualification;
2. limiting the initiative of lower-level employees;
3. overload of senior management;
4. the possibility of an unjustified increase in the management apparatus.

The use of such an organizational management structure is most appropriate in the conditions of mass production with a sustainable range of products, minor evolutionary changes in the technology of production of products, which can be said about AC “Berry Partner”.

7.1.3.1 Workforce potential

The basis of any company are employees. Human resources are valuable, thus investing in people is profitable. Many organizations, looking to emphasize their weight and scope of activity, forget about human resource potential and talk more about the size of their production capacity, production or sales volume, financial potential.

The data in the table 13 presents data necessary to determine the indicators of the use of working potential.

Table 13. Dynamics of the number of workers and the effectiveness of their use

Indicator	2018	2019	2020	Delta factor 2020 to 2018, %
The average number of employees, including:	96	93	74	77,08
In soft berries	36	30	23	63,89
In pome fruits	60	63	51	85,00
Days worked by the employee on average on the farm, incl:	245	245	230	93,88
In soft berries	92	79	72	78,26
In pome fruits	153	166	158	103,27
Coefficient of use of available working hours	0,97	0,97	0,92	94,85
Gross product produced per 1 employee, thousands UAH	49,75	50,84	81,14	163,10
In soft berries	18,66	16,40	25,22	135,18
In pome fruits	31,09	34,44	55,92	179,85

Source: own processing of internal reports of AC "Berry Partner"

The analysis of the presented data demonstrates that the number of employees at the enterprise from 2018 to 2020 tends to decrease, the number of annual employees decreased by 22 people. It should be noted that the labor activity of production staff is declining. This is due to the reduction in hours worked. In turn, this affects the reduction of the utilization rate of the annual working time fund by 5.15%.

Analysis of labor productivity reveals its fluctuating nature, which can be explained by a decrease in the number of days worked. The following conditions are necessary for the consolidation of the labor force at the enterprise: a full social package; high wages; career opportunities; provision of housing by the company for those employees who need it; decent and safe working conditions, etc.

The threats to human resources are aging and reduction of the total rural population; gradual decrease in the quantity and quality of labor resources; instability of legislation in the field of state regulation of sectoral development and in the field of taxation, etc.

7.1.3.2 Land use potential

As for the financial performance of the enterprise, the analysis of data showed that the cost of sales tends to increase, it increased 2.5 times, while in the reporting year the cost was higher than income and this led to a loss of 818 thousand UAH, this phenomenon is negative for the company. It can be noted as a positive trend to increase profits since 2014. These tables show an increase in profit by 21 times in the reporting year compared to 2014. This phenomenon is the result of significant sales of fruit products.

Land is another important and irreplaceable asset in the production of agricultural products. The composition and structure of land resources is analyzed using the data in table 14.

Table 14. Composition and structure of land use

Land type	2018			2019			2020			Delta	
	Area, ha	Fraction, %	Including rented, ha	Area, ha	Fraction, %	Including rented, ha	Area, ha	Fraction, %	Including rented, ha	Area, ha	Fraction, %
Total agricultural land, including:	1565	100,0	1565	1565	100,0	1565	1778	100,0	1778	213	13,6
fields	1270	81,2	1270	1270	81,2	1270	1169	65,7	1169	-101	-8,0
gardens	240	15,3	240	240	15,3	240	350	19,7	350	110	45,8

The analysis of the data in table 14 reveals the total area of agricultural land in the reporting year increased by 13.6% (213 hectares), this was due to the lease of additional land, while the area of arable land decreased by 8% (101 ha.). The level of plowing in the reporting year is 65.7%, which indicates the optimal use of land resources.

7.2 Assessment of internal and external factors influencing the development of competitive strategy AC “Berry Partner”

The analysis is necessary for determining the strategical direction and/or perspective market niches. For the further drafting of competitive strategy of AC “Berry partner” SWOT analysis, compilation of Risk matrixes, and benchmarking were conducted.

7.2.1 SWOT analysis

SWOT analysis is a simple and an effective tool to perform an analysis and assess company’s current state and growth-possibilities.

The Risk matrixes in Table 15 and 16 asses the probability of a certain events happening and the potential influence on the enterprise. The axes of the matrix are Probability and Influence, which range in 3 scales: High, medium, and low. The tables 15 and 16 are composed of the matrix of probabilities / influences, in one of which position identified internal factors that have a positive impact on the enterprise (opportunities), in the other – external factors that have a negative effect on the enterprise (threats).

Table 15. Risk Matrix – threats of external environment

Influence	High	1. The emergence of substitution goods 2. The emergence of new firms on the market 3. Increased competition	Product supply failures	Unfavorable economic situation in Ukraine
	Medium	1. The appearance of a fundamentally new product 2. Fluctuations in exchange rates 3. Change in purchasing preferences	Passing of stricter legislation	1. Reducing the standard of living of the population 2. Increase in taxes and duties
	Low	Deterioration of the political situation	Increase in inflation rates	Change in price levels
		Low	Medium	High
			Probability	

Source: own processing

Table 16. Risk Matrix – opportunities of external environment

Influence	High	1.Tax and duties cuts 2.The emergence of new manufacturers	1.Improvement of production technology 2.Lower prices for raw materials and finished products	1. Not fully satisfied demand for products 2.Steady demand for products 3.Introduction to new market segments
	Medium	Shift in consumer preferences	Bankruptcy and termination of manufacturers, processors	1.Free entry to the market 2.Improvement of management
	Low	State support of enterprises	Lack of foreign competitors	Unsuccessful strategy of competitors
		Low	Medium	High

Probability

Source: own processing

After analysis of the internal and external environment of the enterprise, the weaknesses of the enterprise were identified – insufficient level of implementation of innovative technologies of agriculture, lack of own website in the network, low level of development of e-commerce products, lack of own access to the international market for export of crop production, etc.

Among the opportunities provided by the external micro- and macro-factors, and can be used by AC „Berry Partner“ to strengthen its competitive positions, the following can be noted: the presence in the field of highly qualified personnel (graduates of SNAU); tendency to increase the volume of exports of production – blueberry and strawberry; availability, development and possibility to use the experience of other enterprises in the introduction of innovative and resource-saving technologies; information and consulting centers have been established and operate in Sumy region to improve the skills of management workers; opportunities for distance education to improve the skills of managers, etc.

Among the threats, the most dangerous are: deformations in the structure of the rural population (aging and reducing the total number of rural population); gradual decrease in the number and quality of labor resources; instability of legislation in the field of state regulation of sectoral development and in the field of taxation, etc.

Table 17. SWOT Analysis Matrix

Factors		The degree of implementation of technological innovations in production	Economic efficiency of activity	Compliance with the requirements of the law and regulatory restrictions	Environmental problems and factors	Trends in the development of society and rural community
Internal environment	Strength	Digitalized bookkeeping process, via specialized accounting programs	Stable economic indicators of the development of crop production.	The company is based on a legal basis and operates according to compliance with law.	Good geographical location. Availability of high-quality land resources.	Possibility to direct funds for the social development of the village
	Weaknesses	Insufficient level of implementation innovative technologies of agriculture.	The Cash Flows are very dependent of timeframes and have seasonal characteristics.	Absence of own lawyer or legal advisor	Reduced humus soil content due to non-compliance balance of crop cultivation	Gradual decrease in the number and quality of labor resources
External environment	Opportunities	Availability and possibility to use the experience of other MHP Group enterprises in introduction of innovative and resource-saving technologies	Possibility of attracting financial resources for the introduction of new technologies (leasing, loans, etc.). Lease form of land resources use	Possibility to influence the development of regional agriculture sector development programs on the district level	The territory of the region is in a soil area suitable for growing organic products	Availability of highly qualified personnel in the field (graduates of SNAU)
	Threats	High cost of necessary equipment for the introduction of new technologies. Implementation of new technologies by competitors	Instability of financial and economic situation in the country. Prolongation of the global economic slowdown.	Instability of legislation in sphere of state regulation of sectoral development and in the field of taxation	Insufficient state attention to soil condition research	Deformations in structure of rural population. Decrease in the number of rural population and age structural relations

Source: own processing

7.2.2 Benchmarking

The benchmarking is necessary to evaluate the position of the enterprise among its competitors and find the sectors in which it is a leader and those, in which it should consider improving to reach a better market position among other companies. The companies for benchmarking were chosen based on the size, turnover and product portfolio from the national database and the reporting documents of Ukrainian Berries Association. The names of the enterprises are to remain uncovered, as they have not approved of publication of sensitive information regarding their turnover numbers and financial performance.

AC Berry Partner the formation of competitive policy should be focused on maintaining the development of competitive advantages, maintaining a highly competitive position, forming a competition strategy, and increasing the level of competitiveness of the enterprise.

The benchmarking factors are evaluated on the scale on 0 to 5, where 0 is the worst and 5 is the best metrics. Quantitative metrics were calculated proportionally to the AC “Berry Partner” indicators and qualitative metrics were evaluated accordingly to expert opinion of the author.

Table 18. Benchmarking

Competitor	Product types	Product portfolio	Process used	organic	Annual volume – 2019, tons	Sales channels	website	Certification	Products types	Brands	General Assessment
AC Berry Partner	5	4	3	1	2	3	1	1	2	1	2,3
Ent. 1	2	3	1	5	2	2	5	3	3	1	2,7
Ent. 2	2	2	5	5	1	3	5	2	3	5	3,3
Ent. 3	1	2	3	1	4	2	5	1	3	5	2,7
Ent. 4	4	3	2	1	4	2	5	1	3	5	3
Ent. 5	3	5	5	5	1	5	5	3	3	1	3,6
Ent. 6	3	2	3	1	1	1	5	3	1	5	2,5
Ent. 7	4	3	5	1	4	2	5	2	1	5	3,2
Ent. 8	3	2	2	5	1	2	1	1	3	1	2,1
Ent. 9	2	2	3	5	2	4	5	2	3	1	2,9
Ent. 10	2	2	4	5	1	4	5	1	5	5	3,4
Ent. 11	2	5	4	1	5	2	5	2	3	1	3
Ent. 12	3	1	5	1	4	3	5	2	3	5	3,2
Ent. 13	1	1	3	1	1	1	1	1	1	1	1,2
Ent. 14	4	2	5	5	3	2	1	2	3	5	3,2

Source: own processing of questionnaire results.

AC “Berry Partner” compared to other competitors scores in the 2,3 rank. The weakest points according to the presented factors are the absence of functioning website and necessary certifications. They are required for expanding operations on the local market and as well as expanding into the international.

The best assessed competitor is enterprise 5, which specializes in the production of frozen berries, vegetables and fruits for the European market. The company grows on its own fields (449 hectares) strawberries, sour cherries, raspberries, blackberries, black currants, and vegetables. The most innovative competitors are enterprises 2,5,7 and 12 – they implement the most processed during cultivation and processing of the products.

AC “Berry Partner” ranks high on diversified product portfolio. It should consider entering the e-commerce field.

The AC “Berry Partner’s” competitive advantage can be achieved by offering consumers of this segment products which differ and distinguish the company from competitors (establishing the brand, implementing new cultivation technologies) and are also more fully satisfying to the requirements of buyers of the target group (receiving additional certification, implementing better quality management techniques, establishing direct communication channels with the customers) . Considering the chosen road of achieving a competitive advantage, it is necessary to plan a focused differentiation strategy. This strategy is attractive for AC “Berry Partner” because the company has potential to engage sufficiently qualified personnel and enough resources for successful work in agriculture.

7.2.3 Kernels to consider in strategy formation

There are three kernels to define main directions for “Berry Partner”: introduction of technologies; organization of cultivation of new crops; strengthening export potential; HR training and professional development.

The strategic goal is to enter neighboring regional markets. For it, the prioritize should be given to Sumy and neighboring big towns markets.

The threat to the operation of the company include restrictive policies of state authorities, increase in fees, an increase in taxes, increased regulation of the level of prices for products, the forced sale of products for social facilities at low prices. The strategy should consider the risks and uncertainties of conducting business in Ukraine.

The enterprise's location in the Sumy region is one of the competitive advantages of the AC "Berry Partner". According to the annual statistical reports from National statistics office of Ukraine, the Sumy region has produced higher number of agricultural products in 2020 compared to the previous year, even though on the national level the production decreased.

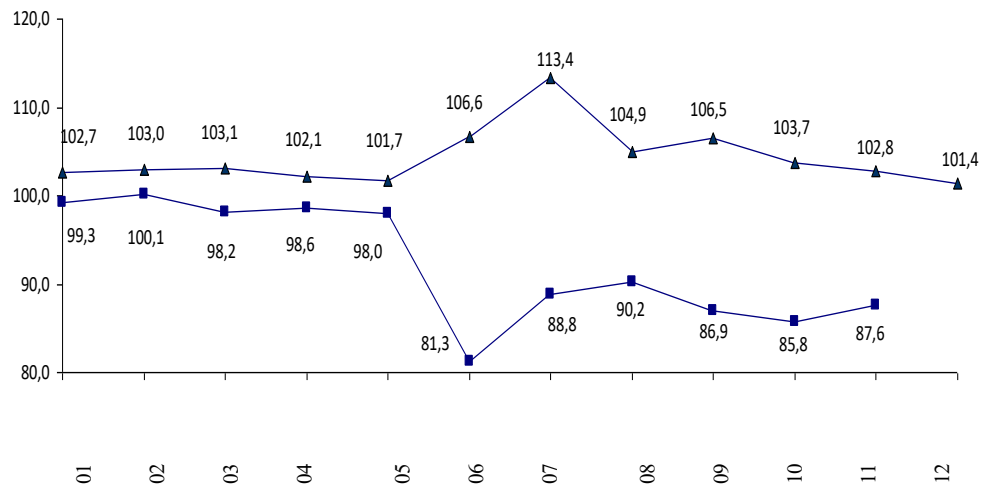


Figure 24. Indexes of agricultural products (in % to the corresponding period of the previous year, increasing total) Source: SSCU 2020.

In January-November 2020 agricultural products index compared to January-November 2019 was 87.6%. The national crop production sector has decreased by 14,8% compared to figures in 2019, where the livestock production only fell by 2,5%. Sumy region have the leading indicators of production among enterprises and community farms, amounting to 103,6% compared to 2019. The enterprises in the region have succeeded and outperformed the crop production by 5,3%, and the community farms almost hit break-even, coming in at 99,9% compared to the previous year's production values.

8 BUSINESS STRATEGY FOR AC “BERRY PARTNER”

8.1 Strategic directions for AC “Berry Partner”

Analysis of the internal and external factors of AC “Berry Partner” revealed the following weak points: insufficient introduction of innovative agricultural technologies, lack of own website, low level of e-commerce development, lack of own access to the international market for exports and others. Thus, the main strategy should be directed at solving or mitigating the problems as mentioned earlier.

The opportunities lay in expansion. Although, as it was mentioned before, AC “Berry Partner” should to strengthen its competitive position in the central region of Ukraine, the enterprise management should also train and hire qualified personnel (graduates of SNAU); increase the volume of exports of berries and fruit; innovative and resource-saving technologies.

As a result of the previous analysis of the agricultural state of Ukraine and the status of the enterprise AC “Berry Partner”, the main priority directions of the company were determined:

- introduction of highly efficient technologies;
- organization of cultivation of new crops taking into account the demand for them;
- strengthening export potential;
- training and professional development of production personnel.

The goal of the organization was set to enter regional and international markets, as a first milestone is to establish leading position in the Sumy market in the chosen segment and then spread the operations to the neighboring regions and potential partner-countries.

8.1.1 Kernel I: Cultivation of new crops

AC “Berry Partner” is engaged in the cultivation of berry and fruits. The analysis of the experience of developed countries proves that the growth of fruit and berry production is possible due to further intensification. According to the forecast of the GB research center (Great Britain, 2018) the increase in crop yield depends on introduction of new varieties (8.6 kg / ha), fertilizers (15 kg / ha), reduction of harvest losses), protection against weeds (17.5

kg/ha), diseases (16.5 kg / ha) and pests (6 kg / ha). The data of the best farms confirms these forecasts.

Strategic goal for AC “Berry Partner” is to increase production and improve product quality. It can be achieved by optimizing amounts of organic and mineral fertilizers, expanding crops of high-yielding varieties and hybrids, introducing complex mechanization, innovative processes, and intensive and resource-saving technologies. However, research practices in crop production show that it is not enough to grow a good crop - it is very important to collect and save it from losses. And this depends on a reasonable choice of harvesting method - single-phase (direct combining) or two-phase.

AC “Berry Partner” should consider intensive development of agriculture (complex mechanization, introduction of optimum doses of mineral fertilizers, herbicides, introduction of high-yielding grades, use of high-quality seeds, etc.) intensive technology of crop production is formed. The economic efficiency of intensive technologies is determined by comparing additional production costs and additional products and is characterized by an increase in the payback of additional costs in grain production.

Thus, the two priorities are to increase yields and reduce the cost. However, the cost reduction should be cautious because internal and external factors are closely interrelated and their impact on the cost level is often intertwined.

8.1.2 Kernel II: Expansion into the organic fruit and berry market

The ecological level of consciousness of consumers is growing and there is a growing demand for organic products. It would be a strategic mistake for AC “Berry Partner” to miss out on a promising market. According to Swiss experts, the market for organic products and organic business globally is about \$ 90 billion. (FAOStat 2020) More than 2 million people are engaged in ecological production in the world farms. Organic products are also called organically clean. Today, they are very popular among those who care about their health, the environment's ecological state, and, most importantly, quality food on their table.

Considering the close geographical location to the EU, the export orientation of the market is especially attractive, after all, the European Union is the world’s second largest market for organic products, which is also developing rapidly. The organic market occupies, according to expert insights data, from 1 to 2%. In developed countries, this figure reaches 13%.

Countries like Holland in the future plan to be completely organic. In Ukraine, the organic market is small and narrow, but it is developing extremely rapidly.

In organics, the whole process is certified at every stage. AC “Berry Partner” will have to apply for a specific certification, as only those who have received an organic certificate can sell on the market.

Meanwhile, AC “Berry partner” should apply for Ukrainian intermediary certificate, which means that the farmer will receive an organic certificate in a year or two. Only certification for the land, the crop will receive the status of certified.

Growing organic berries and fruits has certain characteristics and requirements: cultivation of special fields certified for planting selected biological products - the soil on which the enterprise plans to grow berries or fruit has to be monitored for three years by experts for the presence of fertilizers or chemicals. The right to grow environmentally friendly products is obtained by the manufacturer only after at least five years of strict control.

In AC “Berry partner” case, the garden will be laid in the first year of the project, and it begins to bear fruit in first years. Therefore, the first years of growing a garden without the addition of chemical fertilizers will allow finally free the selected area for the garden from former chemical fertilizers, if any.

In this case, the enterprise emphasizes that fruits are grown in conditions close to organic. Ideally, it is suggested to choose a garden layout territory located under meadows, not agricultural land. In meadows, the land can be considered organic from the first year using. In this case, the conditions for growing fruit immediately become organic (not close to them).

8.1.3 Kernel III: Better Marketing communication

AC “Berry partner” is missing effective marketing tools. There is no answer to the question on the part of the buyer: where, what, and how to buy? The marketing plan should cover the question “does this mean that organic fruits are better, safer, and more nutritious?” It aims at solving the dilemma “Organic or non-organic.” Some customer education projects should be implemented to encourage the decision to buy organic fruits.

AC “Berry Partner” should consider the following factors in the Kernel three:

Nutrition. Most of the research in organic products proves their superiority over conventional ones. First, they do not contain as many hazardous pesticides and chemicals. Conventional fruits have a total residue of more than 20 types of pesticides. Secondly, they contain much more vitamins, minerals, and fiber, and retain their nutritional properties longer. Third, organic fruits taste much better!

Quality and appearance. The difference is in the methods of cultivation and processing. By buying organic fruits, the consumer supports natural methods of land use, thanks to which the soil is not polluted, and the necessary layer is not destroyed, in contrast to the use of intensive technologies. Not synthetic pesticides and herbicides that kill are also used microbes and leave toxic substances in food as well disrupt the natural ecosystem.

Pesticide content. When conventional farmers spray pesticides, their residues accumulate in the final product. That's why it's worth buying organic fruits to reduce the effects of these substances on the body. Unfortunately, it is not known for sure what effect pesticides have on the human organism - a total of more than 1,000 active pesticides are registered in thousands of products sold on the market. Customers are exposed to the risk of serious diseases prostate, colon, breast cancer, Parkinson's disease, when consuming fruits with pesticide content.

Environmental Protection. Because organic cultivation does not use various chemically synthesized hazardous and toxic substances, organic fruits contribute to the preservation and environmental protection: reduce soil and water pollution.

Cost. Organic products have a higher price than conventional ones. The increase in prices is due to more expensive methods of rural management economy, strict conditions of inspection and certification of products, high labor intensity, which means better quality and safety of products food. The main message is that all the above is done to protect and ensure customers' health, by providing the best possible fruit and berry quality.

Taste. Taste and natural aroma are additional advantages of organic fruits grown on "living" land. The taste is the result of a combination of many different molecules. Healthy, "living" land provides more and more a rich combination of molecules involved in the formation of a taste of a certain product. Not surprisingly, the chefs of high-class and prestigious restaurants all over the world use only organic for cooking.

In conclusion, the main advantages of buying and consuming organic fruits and berries will be communicated on the packaging, on the company's website portal, social media and conference materials.

The reasons why customers need to buy organic fruits and berries:

- Organic fruits and berries are grown with strict organic standards
- Organic fruits and berries have an unsurpassed natural aroma and taste
- Organic fruits and berries are safer for health
- Organic fruits and berries restore soil fertility
- Organic production works in harmony with nature
- Organic production is trying to preserve biodiversity
- Organic production cares about the health of the population

This segment of the business strategy focuses on solving the following tasks of meeting the needs of the market in organic fruit; creating new sources of income in the implementation of organic products; providing production capacity for production and employment.

The main purpose of AC "Berry Partner" is the implementation of production activities that involve making a profit on the basis of investment capital and meeting the socio-economic needs of participants, accelerating the formation and expansion of regional, national and international markets of organic fruit growing enterprises.

8.1.4 Kernel IV: Organic certification and export

The goal of obtaining organic certification required taking the following steps:

Step 1. In implementing organic production regulations.

It is common practice to employ agronomists/consultants who are experts in organic production to implement best practices and provide guidance to prepare producers and exporters for certification of organic products. AC "Berry Partner" will expand its expert base by hiring external consultants. It should be noted that the same company cannot provide consulting and certification services at the same time, as it is considered a conflict of interest.

Step 2: Submission of an application for certification.

As AC “Berry Partner” ensures and provides sufficient quality management and determines that their production and processing are ready for organic certification, they will apply to an EU recognized control body established by EU regulation No.1235/2008 and pay a certification fee. Currently (as of February 2021) in Ukraine approved more than 20 bodies of international certification, including one Ukrainian company (“Organic Standard”).

Step 3: Inspection.

At this stage, the inspector checks whether the organization’s product management plan meets reality and identifies any problems. After evaluating the report, the inspection body decides whether a certificate can be issued or whether certain deficiencies should be corrected first.

Scope 4: Certification.

As soon as the inspection body confirms that the organic product management plan is valid, a certificate of organic production is issued. After verification by an accredited certifier it is permitted to apply the EU organic logo on your products together with the logo AC “Berry Partner”. Together with the logo, the enterprise will include the number of the certificate. The certificate of organic production is valid for one year from the date of its issue.

Step 5. Issuance of Export Certificate.

Each batch of organic products will be accompanied by an export certificate from a return certification body electronically through a central platform called TRACES. European importers also have to apply for the import of organic products from exporting countries that are developing. For this application form, it is necessary to specify the information about the company, the name of the certification body, and the date of the last inspection. The importer should submit a third-party confirmation stating that the certification body complies with the requirements of ISO 65 / EN 45011.

Apart from international certification procedures, the enterprise should consider developing its own code of conduct for internal and external affairs, as well as public coverage on the corporate website.

8.1.4.1 Kernel IV: Target customer segment

For AC “Berry Partner” there are all activities related to the organization of production, cultivation, and sale of organic fruits and berries. The demand for organic fruits is growing,

and the targeted consumers have high purchasing power. The targeted customers are consumers 25-49 years old because of the better financial situation of this age group and greater awareness of a healthy lifestyle. There is a problem with the cost of organic products in Ukraine since it is about 40% higher than traditional (for comparison, in the USA and Germany – by 10-15%). (FAOStat, 2020)

The survey also showed that most Ukrainians have a positive attitude about organic products and are ready to buy them under the following conditions:

- the quality is ensured and controlled by the state;
- availability of a full range of products in the trade network;
- a profit margin for organic products in the amount of 10-20% relative to traditional products.

The problems of the fruit market are that there are imported fruits on the market that are not adapted to the national consumer, little known to local population, not tested in national conditions, which are trying to displace the domestic fruits. Therefore, AC “Berry Partner” and other domestic enterprises have to compete in a difficult environment.

8.1.4.2 Kernel V: Improved Social Media Presence

AC “Berry partner” is not present on social media when it should be, as it is looking to expand to other regions and potentially to foreign markets as well. In the beginning, AC “Berry Partner” should create a basic landing page to be visible on the Internet. The landing page will include a short overview of the enterprise and its CEO, main products and services, contact information and a message for action to reach out. Landing page languages should be English and Ukrainian.

Later, depending on the performance of the landing page, the need for a fully functional website will be considered and assessed. As most of the strategic paths of the enterprise will come to implementation and it will be possible to assess their successes and scope of the market to penetrate – the website will reflect and communicate the information on various tabs and pages.

The social media platforms which the enterprise should consider entering are Facebook, LinkedIn, and Instagram.

Facebook is a great addition to the landing page, as it will allow us to further find additional information about AC “Berry Partner” and keep track of recent events, which will be posted to the main page.

LinkedIn will be beneficial in connecting to experts, specialists, and potential customers. Instagram is an experimental platform for AC “Berry Partner” and can be considered as one of the projects for internship programs to experiment and consider how useful it is in building customer connection. Agricultural enterprises are not as entertaining online as other viral channels and brands. However, AC “Berry partner” specialization in fruits and berries is an interesting side to explore. There is a long range for marketing campaigns, informative posts, and overall interactive content that should start to be produced at the same time as self-branded products are being developed.

8.1.5 Kernel VI: Distribution channels

AC” Berry Partner” has convenient location near the strategic distribution channels (farmers markets of the city, cannery “Sandora”, confectionery shops) and should exploit it to the fullest.

The current distributor link for AC “Berry Partner” are resellers on the farmers' markets. It is an easy channel to mediate the risks of the potential demand and sell products in large quantities. The disadvantage is that because of bulk purchasing – the prices are set lower than on the retail market. The Farmers' markets are not keen on branding and customers mainly care for the quality and origin of the fruits – meaning in their perception if the region is popular in production of certain products and if there are additional pesticides needed to grow and cultivate it.

8.1.5.1 *Export potential*

The Free Trade Area is the most ambitious bilateral agreement ever concluded by the European Union, especially given the depth of convergence of the institutional environment and the legal commitment to modernize Ukraine’s economy. Apart from the political aspects, the purpose of the Association Agreement between Ukraine and the European Union is aimed at expanded and comprehensive economic cooperation within the standards of functioning in the markets of the European Community member states. In particular, it is expected that in the long run, the economic effect of the gradual implementation of the agreement will ensure the growth of Ukraine’s GDP by at least half a percent, as well as an

overall increase in welfare of citizens by 1.2% annually. From January 1, 2016, the agricultural sector of Ukraine has reached a qualitatively new stage of development. Dozens of Ukrainian companies continue to export products to the EU.

Exports require additional financial resources and can change the structure of financial flows: Certification, an increase in the marketing budget, international travel, an increase in accounts receivable due to the interruption of payments, the need for more working capital, an increase in the share of costs for logistics and sales in the company's budget, etc. Export orientation is long-time planning and is the key step in the AC Berry Partner strategy, based on the successful implementation of all previous components. The export orientation requires qualified personnel with a free command of foreign languages, knowledge, and experience in international trade in the chosen sector, which will be discussed in further subchapters.

Assessment of current quality management and the need to modernize and retool production through customer demand for new products or through the requirements of a certain type of certification should be considered.

AC Berry Partner needs new partners both for direct implementation of export-import operations and for general provision of effective foreign economic activities - foreign brokers, international lawyers, transport companies, consultants, certification organizations, laboratories, etc. This will be established through participation in international and local trade exhibitions, networking and further investigation into international cooperation.

The export market of AC "Berry Partner" is not developed, and currently, it does not have any connections to foreign distributors or producers. The enterprise doesn't have any Sales department and trained sales representative or market communication manager. The function of these departments is performed by Planning and Operations department in hand with the CEO. The setback from entering international markets is also characterized by the employees' lack of foreign language skills. It is beneficial to consider entering into partnerships with CIS countries. The main consumer of Ukrainian cherries remains Belarus. As of 2019, the share of the specified country in the total export volume amounted to 85%, after the start of political conflict, this number declined to 74%, which is still significantly high.

AC “Berry Partner” should consider partnership in the Ukrainian Berries Association (<https://www.facebook.com/uaberries/>) to network, to receive statistical news and digests, reports.

The Association is a representative for foreign demand market players, as many enterprises chose it as a point of entry and communication on behalf of the Ukrainian market. The need for partnership is based on the notion that AC “Berry partner” doesn’t have its brand reputation and is competing on the basis of quality, price, and logistics.

Product Packaging

The enterprise should consider starting independent production of packaged berries and, with time, invest in juices and conservation. This will bring additional economic effects, as the cost of such products will not be included in the transportation costs for transportation of raw materials to the cannery since the products are manufactured in place. Production of branded products will increase the company's market share and put out its brand on the market for end customers. The start of the marketing campaign and introduction of branded products is a long-term task to build meaningful and personal connections to the customers and create an association between AC “Berry Partner” as a family-friendly domestic supplier of vitamins and health. In engaging in the production of processed fruits and berry products, AC “Berry Partner” will be producing a value-added product, which is beneficial to the enterprise itself and to the regional and national economy.

Berries require a phytosanitary certificate for export to the EU, but it is not required for processed products such as berry/fruit puree or juices. In Ukraine, the phytosanitary certificate is issued by the state phytosanitary inspector. The service is provided by a number of departments of the State Service of Ukraine on food safety and the protection of consumers. To obtain the sanitary certificate AC “Berry Partner” needs a document, which confirms the registration in the State Food Service, the supply contract with specifications and a sample of the goods for testing.

Primary responsibility for food safety of imported berries lies on importers. So, it must be certain that the products meet all legal requirements of the exporting region, as well as the specific requirements of buyers. Sometimes the samples of goods can be checked by the customs authorities. However, most of the requests come from importers, who may sometimes ask for documentary results of laboratory tests for the presence of various contaminants.

It is important to understand that European food safety legislation regulates the levels of many products, but there is no legal obligation to conduct laboratory tests before export. The only exception is official border controls, which are often carried out for certain products from countries for which violations are repeatedly detected.

8.1.6 Kernel VII: Implementation of efficient agricultural technologies

Automation inevitably appears where large volumes are performed or inevitable stereotypical actions. One of the most attractive technologies for the agricultural market is UAV implementation. Before starting any work in the field, it is necessary to study the state of the earth. Ideally, not only visually, but also to make agrochemical analysis of the soil quality of each field. At what distance to do these samples – it is decided individually for each site. If earlier it was necessary to drive through each field by car with high cross-country, today at least quad bikes or even ATVs are used for this. The use of robots allows one to speed up such operations and reduce costs. (Weiss, Jacob, Duveiller, 2020)

As a result of such operation, there are additional benefits:

- less load on the ground;
- fuel economy;
- acceleration of obtaining sample results;
- increasing the competitiveness of the enterprise.

Automation in this area reduces the costs of the enterprise to survey its arable land and accelerates them. Also, it requires the emergence of new personnel - operators of such equipment.

The use of UAVs to control the processing of land can save a lot of money by reducing the cost of monitoring the work carried out. AC “Berry Partner” has extensive crop fields and cannot risk that in the case of order to process 200 hectares of land, 200 hectares will be processed on paper, and in reality, only 50 hectares were properly assessed. To prevent abuse in this case, one drone will be enough, which will fly around this entire territory in a day and record the state of the earth in the video. After the work, it will fly again and record another video. Even the mere fact of having such a check will force any performer to treat his duties more carefully.

Another area of UAV use today is an assessment of the state of green plant mass and the introduction of plant-protecting tools. Low weight, maneuverability, and high speed make UAVs very convenient not only for monitoring but also for the introduction of Plant

protection technologies (Yinka-Banjo & Ajayi, 2019). Unlike the aircraft, the drone allows one to process the entire territory of the field without skipping.

SME farmers must consider their strength – the ability to quickly respond to changes in market demand. Of course, precision farming technologies will equally help any manufacturer, making its products cheaper. But small farms will quickly release berries or fruits to the market. The topic of berries should be interesting, also because the EU market has no restrictions on the import of berries today. For Ukrainian farmers, there is an excellent reason to think about which berry crops to prefer, in the fact that there is such a powerful market “in the neighborhood” as Europe.

8.1.7 Kernel VIII: Training and professional development of personnel

As the AC “Berry Partner” plans to expand its operations to international markets in the long run, it is imperative to prepare beforehand. The HR department can provide language courses and business trainings on sales and negotiations to the employees who are interested and ambitious to broaden their responsibilities in the company to proceed further in the career development.

Another valuable resource for AC “Berry partner” is attracting recent graduates and final-year students of top regional universities for internships and trainee programs. The proposed trainee program is based on the flexible and ongoing change of departments for graduates, depending on their area of interest and specialization.

The internship program lasts from 2 weeks to 4 weeks, depending on the required scope of work by the university, and is available from March to May. The program can be general for the whole enterprise or cover only a specific specialization: accounting, logistics, sales, engineering, and production. The chosen managers would have to complete pre-training seminars regarding the mentorship of the chosen graduates, who would join the enterprise for the internship program. The main task of the pre-internship period is to define the key responsibilities of the department, assess the most important tasks and links, which connect it to other sectors, and communicate the internal structure and organization in the scope of the internship timeframe.

The traineeship program will focus on preparing graduates for full-time employment at the enterprise with the fast-track development into the managerial position of a certain production brigade. The traineeship program will be available from July-August and will

have an indefinite period until the graduate finishes their obligations and will cover all necessary departments and passes HR assessment. The traineeship will fall on the harvesting and sales period right after the graduate's study. The traineeship will be paid according to the starting salary of the production brigade worker and will be evaluated before transfer to the managerial position. The traineeship will have an application procedure – theoretical knowledge testing, math and logic reasoning assessment and personal assessment interview with HR and brigade managers.

The comprehensive implementation of the internal and external programs will cover the ongoing assessment and communication with the interns, trainees, the university student coordinators, as well as the enterprise's employees based on different departments and seniority levels.

Table 19. Planned educational activities of AC “Berry Partner”

Training	Target group	Period	Goal
Internship	Final-year students of regional universities	March - May	Provide prof. training to students and motivate to join AC “Berry Partner” after graduation
Traineeship	Graduates of regional universities	July- until full employment	Employ qualified and innovative professionals in managerial positions
Internal increase of qualification	Execution tier employees	On-demand quarterly	Broaden the employee's skills to further advance in the org structure and get certification
Requalification	Managerial tier employees	On-demand yearly	To encourage flexibility and open structure of the enterprise and allow employees to find their interest and area of expertise.

Source: own processing

Professional training for the employees is inevitable as it provides clear understanding of business processes and strategical direction, eliminates problems in the field of marketing, inexperience of managers, lack of caution, and management competence. As a result, there are miscalculations in the work with customers, the use of unreasonably expensive technologies, tools, and objects of labor.

9 RISK AND COST ANALYSIS OF THE BUSINESS STRATEGY

The following part of the strategy formation focuses on assessment of the proposed strategic components by the time, cost, and risk factors.

9.1 Time frame analysis

The following table outlines planned actions for the enterprise to take, as of execution of the proposed strategy. The timeframes are proposed based on previous seasons and initial planning of all key actions. Even though the possibility of risk and uncertainty is present – AC “Berry Partner” is advised to follow the sequence of actions according to the table 20.

Table 20. Initial planned timeframes for the proposed strategy for season 2022

Action	Initial planning
Host 1-2-1 with interested employees regarding the training programs	October - December
Assign responsible employees for upcoming student internship programs	November
Send a newsletter to SNU about the possibility to take in first interns	November
Set a planned internship program in accordance with SNAU representatives	November-January
Assign responsible employees for the short-term internship program	November
Hire external consultant regarding organic certification procedure	January
Prepare product management plan prior to the inspection	prior to inspection
Preparation of documentation and financial allocation	January 2022
Analysis and negotiation with agro-tech companies	January – February 2022
Apply for Organic certification and set a date of inspection visit	January
Design and planning of website and media coverage	February
Implement purchased UAVs on the land and start the soil quality analysis	February - March
Negotiations with IT outsource regarding website creation	March
contract conclusion and assisting on creation of social media platforms	March - as negotiated
Provide trainings in IT and social platform analytics	January - April
Add Google and Yandex analytics to active social media pages	May-June (as of finished website and social media platforms)
Purchase UAVs for 2022 season	March (contracts with suppliers)
Employ students for the March internship	March - 2 weeks

Set responsible for student assessment to write student reviews for the final assessment	March – prior to internship start
planning and design for organic packaging	January-March
Soil cultivation	march+
Conclude contracts with local distribution chains for organic blueberry sales	April-June
Plant blueberry bushes on the chosen land for organic production	April
Host the organic certification committee and submit all necessary checks	As concluded with the committee
Launch traineeships newsletter on website and university emails	April-June
Set up an email for resumes for traineeship	April - June
Organize the onboarding plan for the traineeship	May
Onboard graduates from SNAU for traineeship program	June
Cultivate the crops and plants for season 2022	March - regularly
Start of harvest season for 2022	June-October
Harvest organic blueberry for processing	June/July - August (Depending on the weather conditions in Q2)
Allocate packaging with designed logos	as of processing the products (Depending on the certification organic or ordinary)
Pack blueberries and ship them to local distribution chains/supermarkets	as of processing orders and packaged products
Asses the success of traineeship program and candidate potential	August-September (depending on the start date and specialization)
pack and ship ordinary products according to previous season	June-December
Assess the available product for internal and export distribution	September – December (repeat assessment annually)
Reach out to international buyers through expos, and association with Ukrainian Berries Association	November-December
Establish potential partnerships with buyers for season 2023	July-December
Apply for the export certificate	depending on the results of season 2022 and networking potential
Host meeting with key employees regarding: 1. the success of season 2022: successful practices, point to improve; 2. requalification and increase in qualification	October - December
Create and send out a letter with assessment of success season 2022	As of conclusion of meetings with employees and final deals, but no later than February 1.

9.2 Cost analysis

The main cost centers of the proposed strategy are presented in the table below. The proposed sums have been concluded based on the interview with the AC “Berry Partner” CEO and analysis of the market prices on chosen operations.

Table 21. Total planed costs for proposed strategy

Cost sector	%	Costs, UAH
Soil quality management expertise	9%	20 000
Investment into organic production	23%	51 980
Establishment	59%	30 880
Sprout investment (112)	11%	5 600
Estimated overhead expenses	30%	15 500
Production and promotion costs	42%	94 588
Pest-control	2%	2 000
Labor expenses	62%	59 000
Marketing	19%	18 000
Processing & logistics	11%	10 588
Promotion	5%	5 000
Training budget 2022	13%	30 000
SEO budget	9%	20 000
Student Programs investment	4%	10 000
Total costs	100%	226 568

Source: own processing

The investment into organic production takes up the biggest part of the planned investment sum. This is related to high costs in requalification of employees, preparation of soil, costs related to certifications and berry cultivation. The chosen berry for organic production is blueberry cultures due to the growing demand on the market and high yields in the niche of organic production.

9.2.1 Cost analysis of organic blueberry production

The initial investment into organic production of organic blueberry is set at 115 000 UAH, which will be invested into the necessary high-quality cultivation products, as well as for the most part into certification, packaging, processing, and distribution. The main cost centers are presented in the table 22, where the investment is distributed according to the necessary

cost sectors. The proposed are the minimal costs necessary for production and distribution on the wholesale market to resellers, processors, and other value-added partners.

Table 22. Estimated costs of cultivation of organic blueberries

Cost sector	Cost, UAH	%
Investment in products	5 600,00	9%
Establishment	30 880,00	51%
UAVs	4 000,00	13%
Certification	26 880,00	87%
Marketing	8 000,00	26%
Processing & logistics	8 000,00	13%
Estimated overheads	15 500,00	26%
Total	59 980,00 UAH	100%

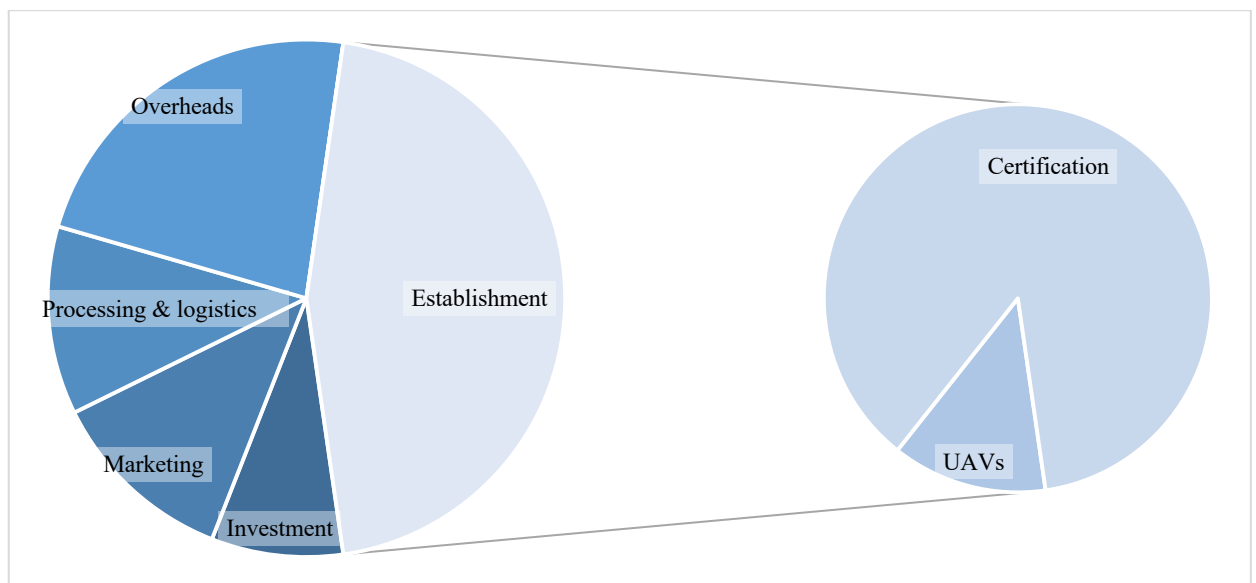


Figure 25. Costs of organic blueberry in five cost centers, %

Certification is the highest cost center of the blueberry production, as it's a big investment into future revenues. AC “Berry Partner” will be in close cooperation with local government and sanitary authorities in the process of cultivation of organic blueberries.

9.2.1.1 BEP calculation

Break-even point calculation for wholesale production are presented in the table below.

Table 23. BEP calculations for wholesale blueberry production

Cost sector	Sum	Currency
Fixed costs	51 980	UAH
Variable costs	63 000	UAH
VC/kg	80,36	UAH/kg
Price/kg	80,64	UAH/kg
Break-even point	183767,68	kg
Break-even point	51797,67	UAH

The wholesale production of organic blueberries is relevant only for the first year has low yields and a long payback period. Therefore AC “Berry Partner” is advised to consider becoming a VA distributor. For the season 2022 it is advised to sell packaged organic blueberry, as to establish the production system and ensure proper Quality management. Then as the result of successful implementation and available investment funds, AC “Berry Partner” is advised to produced value-added products like jams, puree, and juices.

9.2.1.2 Value-added blueberry processing

As part of the proposed strategy, AC “Berry Partner” is advised to launch its own product line as to achieve higher profit margins, due to significantly higher product prices on the end market for consumers. The packaged-products have higher variable costs due to the need in additional packaging, labor, promotion, and logistics. The variable and fixed costs for production of packaged organic blueberries are presented in the table below.

Table 24. Estimated costs of cultivation and VA processing of organic blueberries

Fixed cost	51 980	UAH
Establishment	30 880	UAH
cost direct product	5 600	UAH
Overheads	15 500	UAH
Variable cost	94 588	UAH
Pest-control	2 000	UAH
Labor	59 000	UAH
Marketing	18 000	UAH
Processing & logistics	10 588	UAH
Promotion	5 000	UAH
VC/kg	120,65	UAH/kg
Price/kg	260	UAH/kg
BEP	373	kg
BEP	24 120,31	UAH

AC “Berry Partner” plans to reach break-even on the blueberry production in the first season in the moderate scenario if the season will be mild and the average produced berries will amount to 786kg – 7kg/blueberry bush. It is safe to assume unpredicted costs and consider reaching the profitability on the investment in the season of 2023. The risk analysis is presented in the following chapter.

9.2.1.3 Calculations of BEP with pessimistic scenario

The harsh unpredictable weather conditions like cold springs, or late frosts - tend to result in high harvest losses, Season 2021 as mentioned in the analysis before has presented the same harsh weather conditions for crop cultivation and left farmers worried about the following years as the climate change is affecting the agriculture like never before.

The comprehensive risk and cost analysis are best performed for both realistic and pessimistic scenario. The loss rate is set at 40%, which was the highest average among farmers in season 2021.

Table 25. Estimated costs of cultivation and VA processing of organic blueberries (with 60% harvest)

Cost sector	Sum	Measurement
Fixed cost	51 980	UAH
Establishment	30 880	UAH
cost direct product	5 600	UAH
Overheads	15 500	UAH
Variable cost	94 352, 80	UAH
Pest-control	2 000	UAH
Labour	59 000	UAH
Marketing	18 000	UAH
Processing & logistics	10 352,80	UAH
Promotion	5 000	UAH
VC/kg	200,57	UAH/kg
Harvest at 60% = 470,4 kg		
Price/kg	260	UAH/kg
BEP	875	kg
	(BEP reach in season 2)	
BEP	40 100,31	UAH
Increased price due to high demand on the market		
Price/kg	300	UAH/kg
BEP	523	kg
	(BEP in season 2 (t =1.11))	
BEP	34 753,82	UAH

The pessimistic scenario with losses at 40% of the harvest brings the BEP to the second season, which is unfavorable for the enterprise in this operational year, but the highest costs are due to the certification process and will pay off in the following years. The price necessary to reach BEP in season 2022 is 312 UAH/kg.

9.3 Risk analysis

The main risk for agricultural businesses is from unpredictable weather conditions. Even though the lower supply tends to bring higher prices on the market, the consumers' perception of the product or the high price might discourage them to buy the product, which puts additional stress and promotion expenses on the producer. The matrix and table below cover key possible risks which AC “Berry partner” may face in season 2022 and the following mitigation on how best to minimize their impact on the AC “Berry Partner”.

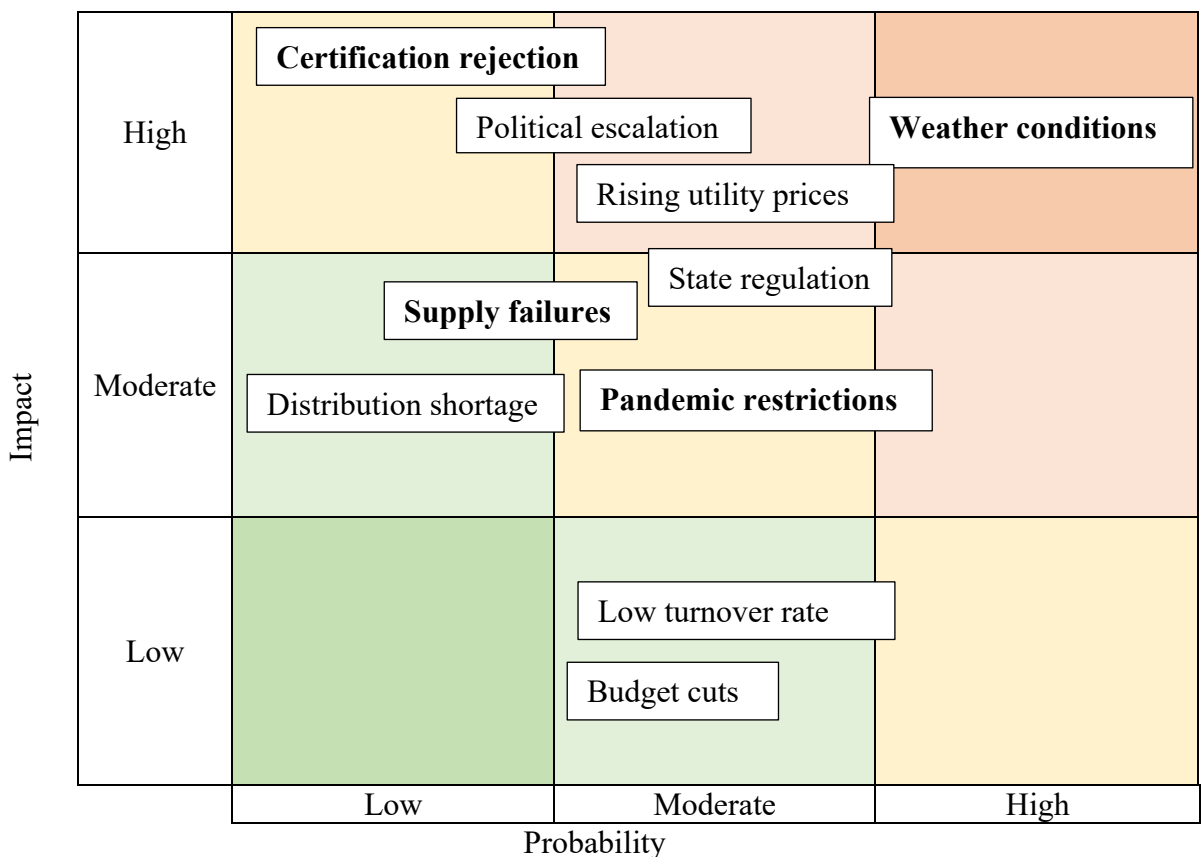


Figure 26. Risk matrix for season 2022

9.3.1 Risk mitigation measures for the season 2022

Table 26. Assessment of risks on production

Risk	Probability	Impact	Mitigation
Unfavorable weather conditions in season 2022	High	High	Prepare employees for damage control
State regulation of entrepreneurial activity	Moderate	high	keep up with all legislative regulation
Political escalation in the eastern Ukraine	Moderate	high	CSR: don't encourage and support destabilizing movements or political programs
Increase in pandemic restrictions: online work, logistical delays, financial problems	Moderate	Moderate	Participate in online events, regularly test and encourage employees to get vaccines
Rising utility prices due to EU new contracts (Nord Stream II)	Moderate	High	Keep track of accounting and consider energy-saving alternatives in the long run
Lack of budget for requalification	Low	Moderate	1-to-1 follow up interview and assessment due to relevance for the enterprise strategy.
Low turnover rate from universities due to online studies	Moderate	Low	Pushback the internship programs for the next season
Rejected the certification	Low	High	Perform analysis and QM, reapply for next season 2023
Lack of distributors on the available market	Low	Moderate	Apply for the export certificate and extend operation to international markets in following seasons
Product supply failures	Moderate	High	Keep track of logistics partners and split payments for outsource

9.3.2 Sociological risks

The Ukrainian berries and fruit producers have indirect competitors on the local market, where many consumers own their own gardens and cultivate the desired products themselves ensuring their quality and origin. Over the last 20 years, as Ukraine is becoming more urbanized and many people leave rural areas and move to bigger cities in search of careers and more conveniences. The private farming and crop cultivation are left to older generations or entrepreneurial farmers, who are taking this chance to buy out or rent unoccupied land. This has been a beneficial trend for the local farmers since many consumers will turn to the market to buy the necessary goods and it's only a matter of competitive advantages to win them over from the present competitors.

The Covid-19 lockdown has slowed down the migration of consumers to the bigger industrial cities and made some reconsider living in the overpopulated and polluted places. With the switch to home-office, some jobs have proved to be effective without attending the office. There have been trends of people leaving the cities and moving back to the smaller, greener villages in search for social distancing, easier access to necessities and better ecological conditions. The migration has led to spike in people cultivating their own products, which is not only limited to rural citizens, but also those with any access to land. Many consumers have turned to "crisis gardening" as a response to the market conditions during covid-19, when the supermarkets were overcrowded, and people were stocking up in panic.

Access to agricultural labor has also shortened as a response to the pandemic. The risk of not having enough seasonal workers will lead to loss in the production volume, which will reflect in the higher market prices for consumers.

Another risk is the danger and uncertainty when dealing with logistics sector – the supply chain can experience disruptions as truck drivers or dock workers may be forced to quarantine which will cause the delays and disruption in the transportation timeframes. Finally, time factor is very important during production and distribution of products from agricultural sector, due to their perishability.

The Food and Agriculture Organization (FAO) suggests specific strategies, partly based on the FAO's previous experience with food-related crises like Ebola in 2014 and the global food crisis in 2008: expanding emergency food assistance programs and providing immediate assistance to smallholders by focusing on logistics and boosting e-commerce.

CONCLUSION

The thesis proposes a strategy for AC “Berry Partner” based on a detailed and comprehensive analysis of the food and berry market of Ukraine. The thesis drafts eight strategic kernels, marking recommended measures for AC “Berry Partner” to implement in the upcoming season.

The analysis showed there are several untapped growth points for AC “Berry Partner”. The main focus is to build a qualified and ambitious workforce, who will work and be interested in the enterprise's successes. In addition, ongoing voluntary assessments and employee increase in qualification courses will improve the qualifications, and the regional internship and traineeship programs for the graduates of local universities and technical colleges will benefit the community, as well as raise the recognizability and reputation of AC “Berry Partner” in the region.

The strategic decision to broaden operations to value-added processing, more precisely – selling packages berries under own company name, will also improve the brand awareness and set the base for further production of jams and fruit purees in the future. In addition, AC “Berry Partner” is advised to take on digital marketing. Apart from creating a corporate web - page, also engage with potential customers and employees on key social media platforms – Facebook, LinkedIn, Instagram. Marketing campaign on Facebook and Instagram will focus on the enterprise’s new business unit – production of organic berries. The process is both time-consuming and requires an investment into acquiring certification and cultivating the land and crops according to the regulations and establishing a Quality management system in order to track and improve in the process. The land cultivation investment also includes purchase of the UAVs for the efficient surveying of arable land and regular checks on the plant protection solutions as part of the new Quality management system.

The proposed strategy is relevant for all Ukrainian producers in the segment of fruit and berry production. It can be implemented separately depending on the financial possibilities and general operational flexibility of the enterprise. However, the strategy is best executed as one unit to build the strong foundation for all operation, ensure the necessary support from all departments involved in generating revenue for the enterprise, and minimize the risks that may occur in implementing the proposed process strategy.

BIBLIOGRAPHY

National Accounts of Ukraine: Gross domestic product in actual prices in 2020 [online]. Ukraine: State Statistics Service of Ukraine, 2021 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

Strategy [online]. Great Britain: Cambridge English Dictionary, - [cit. 2021-8-6]. Dostupné z: <https://dictionary.cambridge.org/dictionary/english/strategy>

CHANDLER, Alfred D. *Strategy and Structure: chapters in the history of the industrial enterprise*. 2. England: Martino Publishing, 2013. ISBN 9781614275084.

MINTZBERG, Henry & Alexandra MCHUGH. Strategy Formation in an Adhocracy. *Administrative Science Quarterly*. 1985, **30**(2), 160-197. Dostupné z: doi:2393104

HOFER, Charles a Dan SCHENDEL. *Strategy formulation: analytical concepts*. 2, 25. St. Paul: West Pub. Co., 1978. ISBN 9780829902136.

ANSOFF, Igor. *Corporate Strategy*. Extended. New York: McGraw-Hill, 1985. ISBN 9780140091120.

PORTER, Michael. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. 1. New York: Free Press, 1980. ISBN 9780029253601.

RUMELT, Richard. *Good Strategy/Bad Strategy: The Difference and Why It Matters*. 1. New York: Crown Publishing Group, 2019. ISBN 9780307886231.

PEARCE II, John a James HARVEY. Concentrated Growth Strategies. *The Executive*. Academy of Management, 1990, **4**(1), 61-68. Dostupné z: doi:4164933

LYUKSHINOV, Alexey. *Strategic management*. 1. Kyiv: Unity, 2000. ISBN 5238001789.

DRUCKER, Peter F. (1974). *Management: Tasks, Responsibilities, Practices*. Australia: Harper & Row. c. 64–65. ISBN 0-06-011092-9.

DIAZ RUIZ, C. A. (2013). Assembling Market Representations. *Marketing Theory* 13 (3): 245–261. doi:10.1177/1470593113487744.

National Accounts of Ukraine: Financial performance of agricultural SME: profit and loss [online]. Kyiv: State Statistics Service of Ukraine, 2021 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

TREGGAR, Roger. *Reimagining Management: Putting Process at the Center of Business Management*. 1. R.T.: New York, 2016. ISBN 9781366442840.

National Accounts of Ukraine: Production yield of Ukrainian SMEs in 2018-2020 [online]. Ukraine: State Statistics Service of Ukraine, 2020 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

National Accounts of Ukraine: Export/Import balance of Ukraine 2019 [online]. Ukraine: State Statistics Service of Ukraine, 2020 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

IPCC Report: Global Warming of 1.5 °C. *The Intergovernmental Panel on Climate Change* [online]. IPCC, 2020, 1(1), - [cit. 2021-8-6]. Dostupné z: <https://www.ipcc.ch/sr15/>

KRYSANOV, Dmytro a Liza UDOVA. *Clusterization of economic activity and service as a tool for the old development of rural territories*. 1. Odessa: S.UA, 2019. ISBN 5238766789.

Unified Comprehensive Strategy for the Development of Agriculture and Rural Areas for 2015-2020 [online]. Ministry of Agrarian Policy and Food of Ukraine [cit. 2021-8-6]. Dostupné z: <http://www.minagro.gov.ua>

National Accounts of Ukraine: Comparative prices on selected agricultural products in Ukraine 2019 - 2020 [online]. Ukraine: State Statistics Service of Ukraine, 2020 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

President signed the law on the circulation of agricultural land. *Official website of the President of Ukraine* [online]. 28 April 2020, [cit. 2021-8-6]. Dostupné z: <https://www.president.gov.ua/en/news/prezident-pidpisav-zakon-shodo-obigu-zemel-silskogospodarsko-60901>

Global production of fruits and berries 2015-2020 [online] The Food and Agriculture Organization of the United Nations, 2021 [cit. 2021-8-6]. Dostupné z: <http://www.fao.org/faostat>

National Accounts of Ukraine: Comparative prices on fruit and berry products in Ukraine 2019 - 2021 [online]. Ukraine: State Statistics Service of Ukraine, 2021 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

WEISS Marie, JACOB Frédéric, DUVEILLER G. Remote sensing for agricultural applications: A metareview. *Remote Sensing of Environment*, Elsevier, 2020, 236, 19 p. ff10.1016/j.rse.2019.111402ff. fhal02627117

YINKA-BANJO, Chika a Olasupo AJAYI. "Sky-farmers: Applications of unmanned aerial vehicles (UAV) in agriculture" *Unmanned Aerial Vehicles*. IntechOpen, 2019, 1(1), 23-48.

National Accounts of Ukraine: Plantation of fruits and berries in Ukraine in 2010-2019 [online]. Ukraine: State Statistics Service of Ukraine, 2020 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

ASSOCIATION AGREEMENT: between the European Union and its Member States, of the one part, and Ukraine, of the other part. In: . Official Journal of the European Union, 2014, I, Official EN Journal of the European Union. Dostupné také z: https://trade.ec.europa.eu/doclib/docs/2016/november/tradoc_155103.pdf

National Accounts of Ukraine: Changes in production volumes of agricultural products, quarterly 2015-2021 [online]. Ukraine: State Statistics Service of Ukraine, 2021 [cit. 2021-8-6]. Dostupné z: <http://www.ukrstat.gov.ua/>

Coronavirus 2019(COVID-19).Addressing the Impacts of COVID-19 in Food Crises. Available online: <http://www.fao.org/emergencies/appeals/detail/en/c/1270012/fbdfb>.

LIST OF ABBREVIATIONS

AC	agricultural cooperative
SEZ	strategic economic zones
SBC	strategic business centers
BPR	business process reengineering
R&D	research and development
UAV	Unmanned Aerial Vehicles
MAPF	Ministry of Agrarian Policy and Food
SSCU	State Statistical Committee of Ukraine
FAOStat	Statistics of the Food and Agriculture Organization of the United Nations
UA/UKR	Ukraine

LIST OF FIGURES

Figure 1. The structure of the kernel.....	15
Figure 2. Basic strategies	22
Figure 3. Matrix “product – form”.....	24
Figure 4. Growth (decrease) of profit and loss	29
Figure 5. Basic stages of the enterprises’ transformation process.....	31
Figure 6. Export turnover of UA agriculture products to chosen countries in 2019	34
Figure 7. Profitability of manufacturing agricultural products, %	38
Figure 8. Top-10 nations-producers of fruits and berries in 2019, ml metric tons.....	41
Figure 9. Dynamics of fruits and berries plantation areas in Ukraine in 2010-19.....	43
Figure 10. Structure of fruits and berries plantation in Ukraine in 2010-19(by ownership).....	43
Figure 11. Structure of plantation of fruits and berries in Ukraine in 2010-19 (by crops) .	44
Figure 12. Volume of products sold by UA agriculture enterprises quarterly, 2017-20	45
Figure 13. Changes in production volumes of agricultural products, quarterly	47
Figure 14. Changes in number of employees in agricultural enterprises, quarterly	47
Figure 15. Example of packaging of fresh berries – blueberries	52
Figure 16. Main countries-suppliers of fresh berries to EU, tons.....	52
Figure 17. Main countries-suppliers of fresh berries to Europe w/o re-export, tons.....	53
Figure 18. Example of packaging of frozen sorted berries.....	56
Figure 19. IQF frozen raspberries by Dirafrost.	58
Figure 20. Distribution of the sales channels on the UA domestic market in 2018-20	62
Figure 21. Map of strategic roads of Ukraine – marked blue	69
Figure 22. Organizational structure of AC “Berry Partner”	72
Figure 23. Managerial structure of AC “Berry Partner”.....	73
Figure 24. Indexes of agricultural products	81
Figure 25. Costs of organic blueberry in five cost centers, %.....	98
Figure 26. Risk matrix for season 2022.....	101

LIST OF TABLES

Table 1. Basic strategies of enterprise development.....	17
Table 2. Level of risk and cost in different strategies.....	23
Table 3. Comparison of anti-crisis approaches.....	31
Table 4. Support for small and medium-sized businesses, farming, and cooperatives	37
Table 5. Comparative prices on selected agricultural products in Ukraine.....	39
Table 6. Comparative prices on fruit and berry products in Ukraine in Jan 1, 2019-20	42
Table 7. The yearly trend of turnover of agricultural products in 2017-2020.....	45
Table 8. Seasons of leading suppliers of fresh blueberry to Europe.....	53
Table 9. Seasons of leading suppliers of fresh raspberry to EU.....	55
Table 10. Seasons of leading suppliers of fresh garden strawberry to EU.....	55
Table 11. AC “Berry Partner” product structure in 2018-2020.....	70
Table 12. Financial statement of AC “Berry partner” 2018-2020.....	71
Table 13. Dynamics of the number of workers and the effectiveness of their use.....	74
Table 14. Composition and structure of land use	75
Table 15. Risk Matrix – threats of external environment.....	76
Table 16. Risk Matrix – opportunities of external environment.....	77
Table 17. SWOT Analysis Matrix	78
Table 18. Benchmarking.....	79
Table 19. Planned educational activities of AC “Berry Partner”	94
Table 20. Initial planned timeframes for the proposed strategy for season 2022.....	95
Table 21. Total planned costs for proposed strategy	97
Table 22. Estimated costs of cultivation of organic blueberries.....	98
Table 23. BEP calculations for wholesale blueberry production.....	99
Table 24. Estimated costs of cultivation and VA processing of organic blueberries	99
Table 25. Estimated costs of cultivation and VA processing of organic blueberries	100
Table 26. Assessment of risks on production	102

APPENDIX P I. BENCHMARKING

Competitor	Product	Process used	Annual volume	Sales channels	W E B	O R G	Certification	Product	Brands
Ent 1.	Varieties of Strawberry raspberry sea buckthorn	Static frozen	200	Market Distributors, processing enterprises	+	+	Organic HACCP BioSuisse	Fresh Semi processed	-
Ent 2.	Raspberry, Strawberry, Red currants (organic grains, cereals, vegetables)	sorting washing cooling shock- freezing packing freeze-drying	60	intermediary companies on local market, distributors, processing enterprises, e- commerce	+	+	Organic, NOP	Fresh Semi processed	Ahimsa
Ent 3.	Strawberry (Honeoye Zenga-zengana Alba Malvina Salsa Kleri)	cooling sorting packing	1586	market, distributors, processing enterprises	+	-	HACCP	Fresh Semi processed	Stepka
Ent 4.	Strawberry, Raspberry Sour cherry, Blackberry Plum +bell pepper, broccoli, Brussel sprouts	fast-freezing (IQF) packing	2000	Producers of dairy, jams, marmalades, pastry, HoReCa	+	-	HACCP	Fresh Semi processed	High berry TM
Ent 5.	Blueberry Raspberry Strawberry = organic vegetables	fresh product sorting freezing sublimation concentrate packing	150	production of yoghurts, children's food, confectionery, juices, jams, smoothies, further proceeding (sublimation), use in cereals and muesli etc	+	+	Organic HACCP ISO 22000	Fresh Semi processed	-
Ent 6.	Raspberry, Black currants, Sour cherry, Red currants, Vegetables	fast freezing sorting packing	143	Fresh market	+	-	HACCP, ISO 22000, FSSC 22000	Semi processed	Artika TM

Ent 7.	Raspberry, Cherry Black currants, Apricot Strawberry, Plum	fruit and berry fillings: with pieces, gel, puree, poppy fillings	2 480	confectionery products, bakery products	+	-	HACCP, ISO 22000	Semi processed	Golden Mile trade house OPTIM
Ent 8.	Strawberry Raspberry, Blackberry +	Frozen freeze-drying	200	fresh market, processing enterprises	-	+	Organic	Semi processed	-
Ent 9.	Strawberry Raspberry	Cooling, Sorting, packing	250	fresh market, raw material for freezing, for manufacture of dairy products, children's nutrition, processing enterprises, distributors, intermediary companies	+	+	Organic HACCP	Fresh Semi processed	-
Fnt 10.	Cornel, cereals, legumes	freezing drying puree processing packing	198	local FMCG markets internet marketplaces distributors general public	+	+	Organic	Fresh/ Semi processed Processed berries	Famberry
Ent 11.	Cherry, Apples hazelnut	cooling RGM sorting packaging	5210	Food service, retail, HoReCa	+	-	HACCP, Global Gap	Fresh Semi processed	-
Ent 12.	Strawberry Raspberry Black currants cranberries	fruits preparation for B2B purees jams syrups toppings	1500	bakery products HoReCa dairy industry retailing	+	-	ISO 22000, ISO 9000	Semi processed Processed berries	Emmi TM
Ent 13.	Blackberry	cooling sorting packing	80	Fresh market	-	-	Global G.A.P.	Fresh berries	-
Ent 14.	Blueberry, Rosehip Raspberry, Elderberry Strawberry, Lingoberry	RGM drying sorting cooling packing	1290	Food service, retail, HoReCa	-	+	Organic	Fresh Semi processed	-