AGRICULTURAL UNIVERSITY - PLOVDIV
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КИМЕТЕ ГАШИ БРАЙШОРИ

AGROMANAGEMENT AS A FACTOR FOR THE DEVELOPMENT OF AGRICULTURE IN KOSOVO

(АГРОМЕНИДЖМЪНТЪТ КАТО ФАКТОР ЗА РАЗВИТИЕТО НА СЕЛСКОТО СТОПАНСТВО В КОСОВО)

Author's summery

dissertation for awarding the educational and scientific degree "doctor"at

scientific speciality "Organization and management"

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I. GENERAL DESCRIPTION OF THE DISSERATTION

In 2020, agriculture in the Republic of Kosovo played a significant role in the food industry, contributing around 7.4% to the total GDP. The competitiveness of this sector is crucial for the economic sustainability of family farms (OPG). The average cultivated land in 2019 was 3.5 hectares, with profit units reaching 3 LU per farm. Research indicates that farm management significantly influences business success, with quality management identified as the most crucial success factor.

Problem of the Research:

The research addresses the critical issue of understanding the management practices and challenges faced by family farms in Kosovo, particularly in the context of an aging population and socio-economic constraints. With the historical influence of a former economic system and current expectations for state intervention, there exists a need to examine the perspectives and propensities of family farms towards effective management. The overarching problem lies in evaluating the factors influencing the success and competitiveness of family farms, with a specific focus on their attitudes towards problem-solving, the role of state bodies, and the significance of management practices.

Objective of the Research:

The primary objective is to comprehensively explore the role of agromanagement in shaping the development of agriculture in Kosovo. This involves delving into the historical and contemporary economic thought influencing agricultural policies, understanding the key functions and challenges of agriculture, and evaluating the role of management in enhancing productivity and competitiveness. Additionally, the research aims to identify and analyze the contemporary trends in agriculture, examining the impact of conventional and sustainable practices, bioeconomy, genetically modified organisms, and digitalization on precision agriculture. The specific goal is to assess the characteristics and importance of management in agriculture, exploring its conceptualization, classification, and strategic significance, with a particular focus on family farms in Kosovo. The research also seeks to investigate innovative business models in agriculture, considering the post-COVID-19 landscape, market trends, and the evolving nature of agriculture as a profession in Kosovo. Finally, the objective is to provide an in-depth analysis of the agricultural landscape in the Republic of Kosovo, examining the characteristics of agriculture, utilization of agricultural land, pricing dynamics, and the decisive role of management in steering the sector's development.

Hypothetical framework

In this part of the research of the doctoral dissertation, the main and special hypotheses will be elaborated, which will be covered in the further research.

Hypothesis: Effective agromanagement is pivotal for enhancing the competitiveness and sustainability of agriculture in Kosovo, with innovative business models and strategic management playing crucial roles in adapting to contemporary challenges and opportunities. The study hypothesizes that a nuanced understanding of historical economic thought, contemporary trends, and the unique characteristics of management in Kosovo will provide actionable insights for the development of the agricultural sector in the Republic of Kosovo.

Special Hypotheses:

1. *Management Propensity of Family Farms:* It is hypothesized that family farms in Kosovo, despite the challenging socio-economic conditions and an aging population, display a varying degree of management propensity. The study aims to identify factors influencing

the willingness of family farms to actively engage in management processes for enhanced productivity.

2. *State Intervention Expectations:* Given the historical context and socio-economic challenges, it is hypothesized that a substantial number of Kosovo farmers expect a more active role from state bodies in the agricultural sector. This hypothesis seeks to explore the perceived role and expectations of farmers regarding state interventions, drawing parallels with the former economic system.
3. *Farmers' Problem-Solving Propensity:* The research assumes that farmers exceeding the average production levels in Kosovo agriculture exhibit a higher propensity for problem-solving. The study seeks to quantify and analyze their approach to addressing challenges, providing insights into their adaptive capacity and resilience.
4. *Success Factors Ranking:* It is hypothesized that successful family farms in Kosovo prioritize certain factors over others. The research aims to rank these success factors based on farmers' perspectives, providing valuable insights into the key elements contributing to the prosperity of family farms in Kosovo.
5. *Management as a Competitive Tool:* The study assumes that farmers in more developed European countries attribute greater importance to effective management as a means of competitiveness compared to their counterparts in Kosovo. The research aims to validate this hypothesis by assessing the perceived role of management in enhancing competitiveness within the agricultural sector.
6. *Quality Management and Business Success:* The central hypothesis of the research posits that quality management is the most influential factor in determining the success of family farms in Kosovo. The study seeks to confirm this assumption by investigating the correlation between the effectiveness of internal management practices and overall business success.
7. *Role of Farmers in Management:* It is hypothesized that the internal nature of family farm management in Kosovo places a significant responsibility on the farmers themselves. The research aims to explore the autonomy, decision-making, and negotiation skills of farmers, considering them as pivotal elements for increasing competitiveness.
8. *Managerial Skills Enhancement:* Building on the assumption that managerial skills directly impact competitiveness, the study hypothesizes that an improvement in farmers' knowledge, rational decision-making, and negotiation skills will enhance the overall competitiveness of family farms and contribute to the advancement of Kosovo's agriculture.
9. *Education and Innovative Agriculture:* It is hypothesized that education plays a crucial role in fostering innovation in agriculture. The study aims to explore the correlation between educational levels among farmers and their readiness to adopt innovative practices, considering education as a prerequisite for the future of agriculture in Kosovo.
10. *Management's Influence on Sustainable Agriculture:* The hypothesis asserts that effective agromanagement is inherently linked to the sustainability of agriculture in Kosovo. The research aims to validate this hypothesis by examining the role of management practices in promoting sustainable farming methods and environmental stewardship within the agricultural landscape of Kosovo.

Researh Methods

In the analysis, research and realization of this doctoral dissertation, the following scientific methods will be applied:

• data collection methods,
• analytical and comparative research method,
• inductive and deductive method of locking,
• classification method,
• method of abstraction, concretization and generalization,
• description method,
• methodology for modeling systems,
• system approach.

The structure of the dissertation

INTRODUCTION

I. THEORETICAL-METHODOLOGICAL APPROACH TO AGRICULTURE

1.1. A Brief Overview of Economic Thought on Agriculture and Agrarian Policy
1.2. Defining Agriculture and Its Basic Functions
1.3. The Role of Agriculture in Economic Development
1.4. Horizontal and Vertical Integrations in Agriculture
1.5. Key Factors for Increasing Agricultural Productivity and Competitiveness
1.6. The Importance of Foreign Trade in the Agricultural and Agri-Food Sector
1.6. Certification and standardization as key determinants of the quality of agricultural products

II. CONTEMPORARY TRENDS FOR AGRICULTURAL DEVELOPMENT

2.1. Conventional Agriculture
2.2. Green Economy and Sustainable Agricultural Development
2.3. Bioeconomy and Circular Agriculture Model
2.4. Genetically Modified Organisms (GMOs) in Agriculture
2.5. Digitalization in Agriculture - Precision Agriculture

III. CHARACTERISTICS OF MANAGEMENT

3.1. Management as a Process
3.2. Management as a System of People
3.3. Managerial Skills
3.4. Criteria for Managerial Performance

IV. AGRICULTURAL MANAGEMENT

4.1. The Concept and Importance of Management in Agriculture
4.2. Strategic Management and Agricultural Development
4.3. Human Resources Management in Agriculture
4.4. Innovation Management in Agriculture
4.5. Financial Management in Agriculture

V. BUSINESS MODEL INNOVATION IN AGRICULTURE

5.1. Types of Business Model Innovations
5.1.1. Blue Ocean Strategy
5.1.2. Business Model Canvas (BMC
5.1.3. WOIS (World Opening Innovation Strategy
5.2. Business Models After the Covid-19 Pandemic
5.3. Trends in the Organization of Agricultural Product Markets
5.4. Modern Agricultural Management
5.5. Education as a Prerequisite for Innovative Agriculture
5.6. Agriculture as a Future Profession

I. THEORETICAL-METHODOLOGICAL APPROACH TO AGRICULTURE

Agriculture, defined as the systematic cultivation of useful plants through human activity, stands as the oldest human endeavor on Earth and remains a fundamental basis for the existence of a significant portion of the global population. Despite diverse perspectives and approaches to its challenges, the importance of agriculture in the economic development of every nation is universally acknowledged. Reflecting on the fact that the role of agriculture in economic and civilizational development has been treated differently over more than four millennia, it is considered a sufficiently extensive period for a comprehensive review of the history of contradictory approaches to this economically vital activity for human survival.

In essence, today there is a broader approach to understanding agriculture, encompassing not only primary agricultural production and processing but also what is now referred to as agribusiness. This represents a complex system based on numerous interconnections and mutual relationships among industrial sectors producing exclusively for agriculture, sectors processing agricultural products, tourism, trade, craftsmanship, and services related to agriculture.

Agriculture, in the process of its own transformation, has come a long way. It is challenging today to imagine the distance from primitive, then somewhat more advanced traditional agriculture to the modern agriculture we refer to today. This transformation of agriculture over the centuries proceeded with small and inconspicuous steps, so that its contemporaries hardly noticed significant changes in the development of agriculture. However, the transformation of agriculture has become highly dynamic in the last decades of the 20th century. This dynamic transformation is driven by progress and the possibility of applying modern technology in agro-economics as a whole.

The main functions of agriculture can be grouped into three categories: environmental protection, economic functions, and social functions (Food and Agriculture Organisation of the United Nations and the Secretariat of the Convention on Biological Diversity,1998):

Environmental Function. Agriculture can have positive or negative (harmful) effects on the environment. Agriculture should help optimize relationships with the biological and physical properties of the natural environment. It can mitigate the consequences of climate change, maintain biodiversity, contribute to water quality and availability, and reduce pollution. Encouraging the development of sustainable agriculture, promoting the development of small farms through sustainable intensification of agricultural activities, transitioning to ecological production, and developing biodiversity are essential. Increasing soil fertility, pollination, pest control, and preserving water resources are also crucial. Additionally, there is a need to strengthen agriculture and reduce its dependence on fossil fuels.

Economic Function. Agriculture serves as the foundation for the overall economic growth, even in highly industrialized countries. Evaluating the various economic functions requires assessing short-term, medium-term, and long-term benefits. Primary agricultural products, including food for humans and animals, raw materials for energy (e.g., co-generation of thermal and electrical energy), biogas, medicines, and other clothing or industrial purposes, contribute significantly to the economy. Agriculture remains a crucial pillar for maintaining and growing the entire economy, even in highly industrialized societies with a small agricultural sector. Investments related to diversifying production can generate economic development effects for agriculture. The sector requires inputs such as labor, various services, and financial capital, while providing products and services as outputs, creating multiple links with other sectors. Economic effects can be assessed using national accounting systems and other available economic data.

Social Function. Maintaining rural communities is fundamental for agro-ecology and improving the quality of life (and ensuring survival) for rural populations, especially young people,

women, the elderly, and other marginalized groups. Economic and social development in the rural sector is crucial for increasing food security. Poverty, hunger, and malnutrition are major reasons for rapid migration from rural to urban areas in developing countries. Rural areas often lack technical and financial resources and appropriate educational infrastructure. Limited opportunities for additional income, inadequate cultivation of crops, insufficient maintenance of production systems, and restricted access to public services contribute to the challenges in these regions. The three functions of agriculture are strongly interconnected. For example, agricultural production is a significant source of income for the national economy and its population. Environmental protection functions can also become a substantial income source through branding and creating comparative advantages to achieve higher prices. Increased productivity in agriculture, higher wages, and diversification of agricultural production lead to increased employment in agriculture, reducing unemployment. The relative importance of these functions depends on strategic choices at the local and national levels, and their impact should be evaluated over longer time periods.

The agricultural sector faces a range of modern challenges, such as the potential use of biotechnology and renewable energy, globalization processes, vertical integration, and changes in development policy. Structural changes in agriculture are a very important challenge. Traditionally, structural changes relate to the farm structure. However, modern trends in the agri-food sector indicate that it is not just about changing the structure of the farming sector but the entire value chain in agribusiness. From an orientation dominated by family-owned, small, relatively independent economic entities, there is a shift toward alignment in the production and distribution value chain (Balmann et al., 2006). There is a need for the development of an institutional and broader framework that will provide a stimulating regulatory environment for horizontal and vertical coordination in food supply chains, for incentives related to the protection of natural resources and environmental conservation, farmer education, food security, etc. (Smith & Siciliano, 2015).

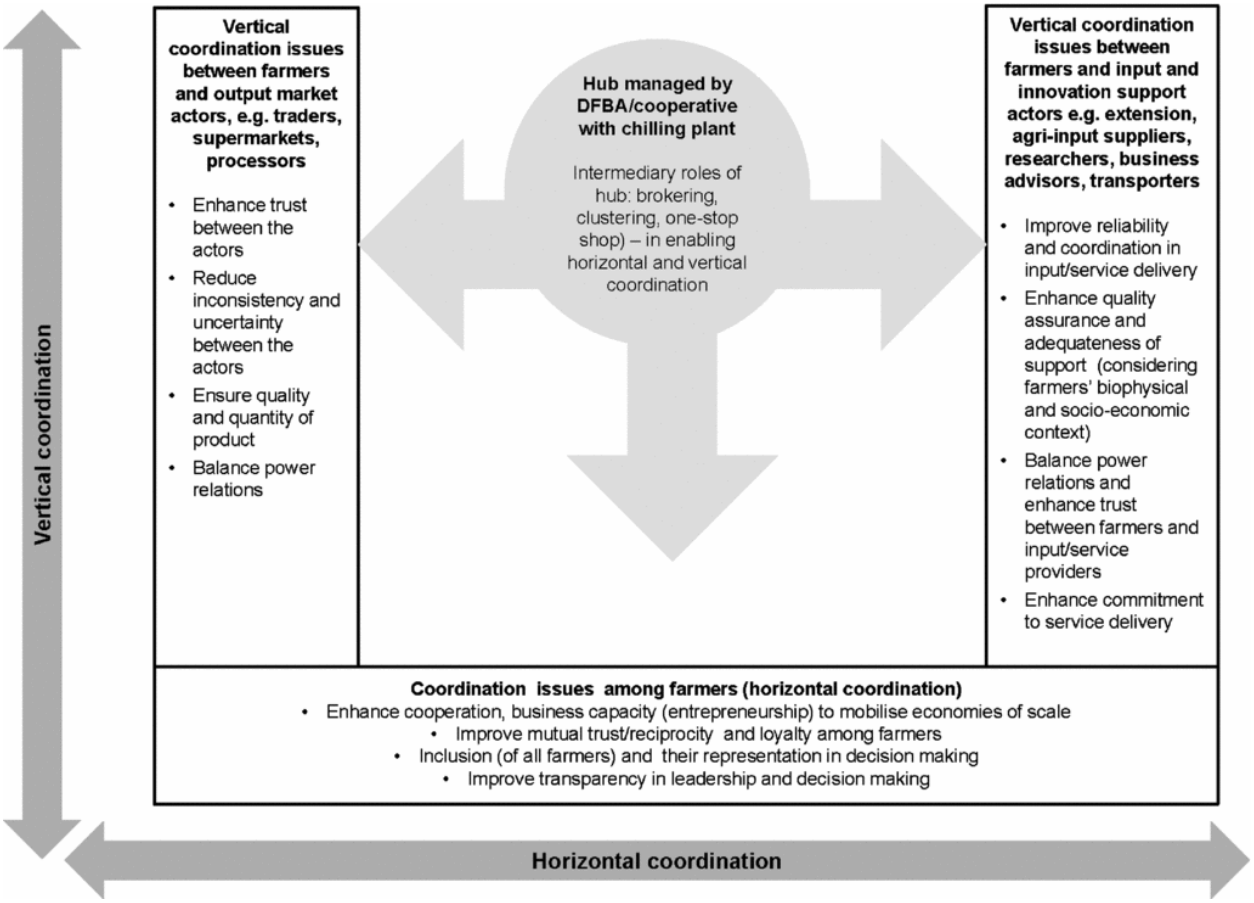
In recent decades, concerns about food quality and intense competition have compelled many companies to increase coordination along production chains. Horizontal relationships refer to interactions among actors participating in the same supply chain for the exchange of experiences, information, knowledge, resources, and other benefits. In food chains, horizontal relationships are supported by organizations such as farmers' associations, cooperatives, non-governmental organizations, rural and advisory services (Martins et al., 2019).

Vertical integration, as well as contractual arrangements, are significant determinants of the innovative behavior of economic entities (Karantininis et al., 2010). There is an increasing role of vertical integration between the agricultural sector and other related sectors, as well as the possibility for farmers to increase their horizontal integration, affecting the competitiveness of the agri-food system, bargaining power along the value chain, efficiency, and better economic performance of the agricultural sector (Severini & Sorrentino, 2017).

In the agricultural and food sector of many developed countries, a trend towards vertical coordination is observed. Vertical coordination refers to the way in which products move through the supply chain, from producers to consumers. Greater vertical coordination has typically occurred in practice when the use of spot markets has declined, while agreements on production and marketing, franchising, strategic alliances, joint investments, and vertical integration have increased. Changes in consumer preferences, biotechnology, information technology, environmental pressures are some of the key driving forces of changes in vertical coordination. Technological changes and industrialization in agriculture have also been identified as significant influences on vertical coordination (Young & Hobbs, 2002).

The formation of clusters of producers and service providers has been facilitated through horizontal coordination (among smallholders) and vertical coordination (among property acquirers, value chain actors, and service providers). In addressing challenges that limit the integration of property acquirers into value chains, synergies of different types of horizontal and vertical coordination have emerged. This has been achieved through the simultaneous organization of agricultural clusters, input and service providers, and active facilitation of delivery, encouraging the alignment of demand with supply (Kilelu et al., 2016). Companies operating in the food value chain form alliances with horizontal and/or vertical partners to take collective action to overcome challenges throughout the chain or to leverage new opportunities arising from product or process innovations. Desired outcomes of collaborative actions would not be possible if these companies operated independently and individually (Fleming et al., 2018).

Picture 1 Horizontal and vertical coordination in agriculture.



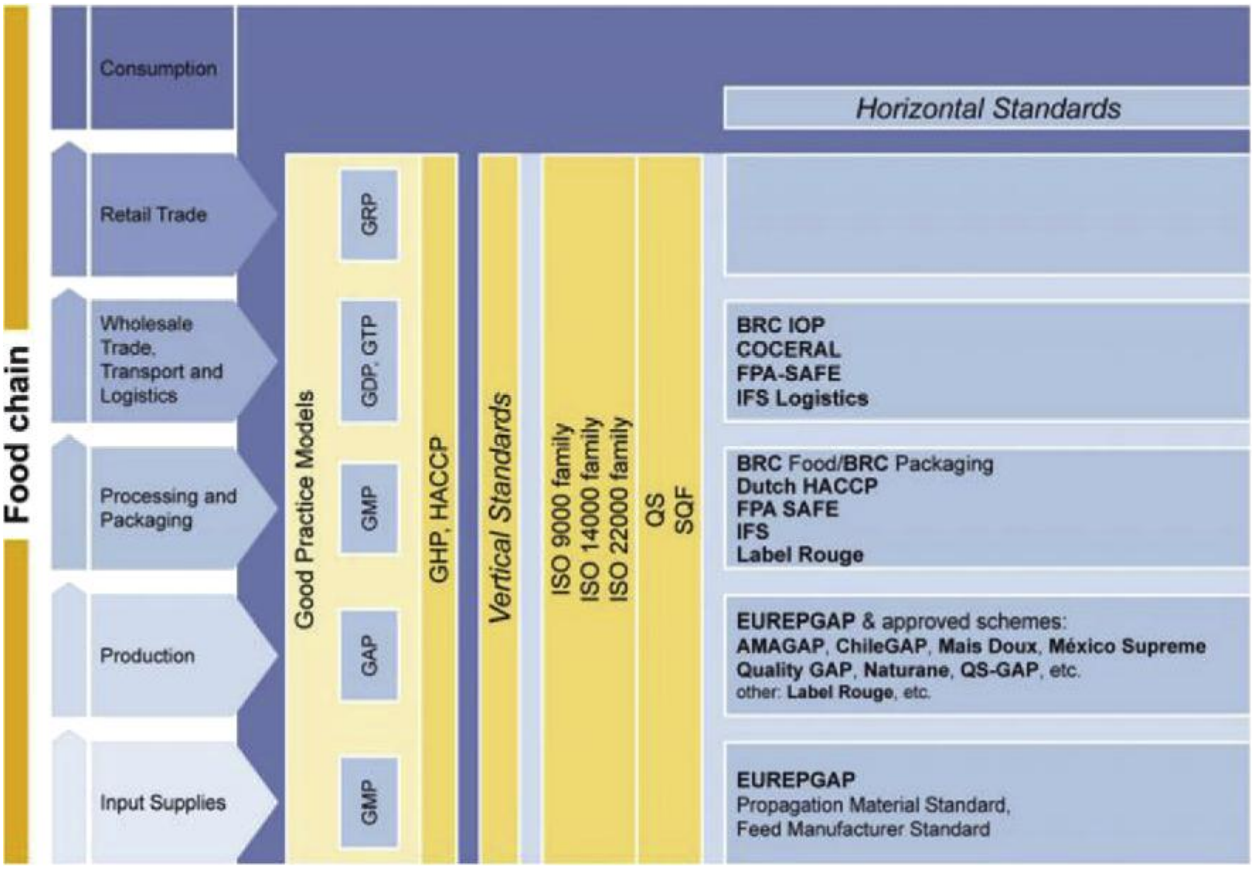
Source: Kilelu, C. W., Klerkx, L., & Leeuwis, C. (2016). Supporting Smallholder Commercialisation By Enhancing Integrated Coordination In Agrifood Value Chains: Experiences With Dairy Hubs In Kenya. *Experimental Agriculture*, 53 (02), 269–287. doi:10.1017/s0014479716000375.

The results of modern industrialization of the agri-food system are reflected in increased levels of concentration and vertical coordination in the agro-food system, with a focus on product

quality and differentiation. In this context, cooperatives require modeling of the entire supply chain in the agricultural sector (Fulton & Giannakas, 2013).

Modern consumers, especially in developed countries, have become more demanding in their food choices, leading to the differentiation of food products (Grunert, 2005). The broader public is interested and often critical of certain food production methods, both at the farm level and in processing. As a result, debates arise about the advantages and disadvantages of organic production, the use of genetically modified organisms (GMOs) in food production, etc.

Picture 2 Food Quality Standards



Source: Aung, M. M., & Chang, Y. S. (2014). Traceability in a food supply chain: Safety and quality perspectives. *Food Control*, 39, 172–184. doi:10.1016/j.foodcont.2013.11.007.

Various new standards are increasingly influencing the global agri-food system. Consumer concerns regarding food safety, quality, environmental and social issues in the production of agricultural and food products, and production processes have significantly contributed to the emergence of a wide range of standards. This process is intensified by globalization and new technologies, which also impact the global proliferation and increase in the number of standards. Food safety and quality standards depend on specific requirements directed toward consumer welfare (Swinnen & Vandemoortele, 2009). Naturally, besides consumer welfare, considerable attention is given to the profitability of businesses when introducing standards, which often favors

developed countries with greater financial strength, large companies, and markets of countries seeking to protect their producers and processors, and have the potential to implement it in practice.

The performance of the agri-food sector in developing countries on the supply side needs significant improvement to increase the likelihood of successfully meeting the standards of developed countries during export. To strengthen the supply side capacity, the agricultural sector in developing countries needs to be integrated into the quality system to fully ensure the quality of both primary and processed products. Improvements in the agricultural sector are linked to improving the quality of land and irrigation systems, as well as the ability to access raw materials, and more. The application of modern production technologies is crucial for improving quality in the agricultural sector. Modernizing the technology used in production leads to higher yields and better business results. To enhance the agri-food sector, governments of developing countries must work intensively to reduce distortions in the credit market and enable farmers and companies in the food industry to easily and successfully access credit. In addition to the availability of financial resources, achieving vertical integration, etc., is important (Jongwanich, 2009).

II. CONTEMPORARY TRENDS FOR AGRICULTURAL DEVELOPMENT

Conventional agriculture is explained as capital-intensive, highly mechanized farming with extensive use of artificial fertilizers, herbicides, and pesticides, coupled with intensive plant and livestock production. The practice of conventional agricultural production has increased food production, but it has also incurred certain costs, both economic and environmental in nature. The increased use of chemical substances in agriculture has raised significant concerns among consumers regarding food safety. However, conventional agricultural systems are still considered desirable for future productivity and profitability while simultaneously preserving natural resources, the environment, health, and human safety. A system that achieves these goals is referred to as sustainable agriculture (Comer et al., 1999), and unlike conventional agriculture, it heavily focuses on the ecological dimension of development.

Modern agriculture must adapt to climate change, including more extreme weather events. Often, two models of agriculture are cited in response to modern climate challenges: conventional and organic agriculture. Conventional agriculture is prevalent in high-income countries and various parts of the world. In Sub-Saharan Africa, for instance, conventional agriculture represents a subsistence-oriented farming type characterized by primitive tools, low use of mineral fertilizers, and pesticides. Yields are often very low. Organic agriculture, on the other hand, does not involve the use of synthetic fertilizers and pesticides, not due to poverty but based on the principles of health, environmental sustainability, and fairness.Conventional agriculture remains dominant today, efficient in food production but less so in environmental protection (Aune, 2012).

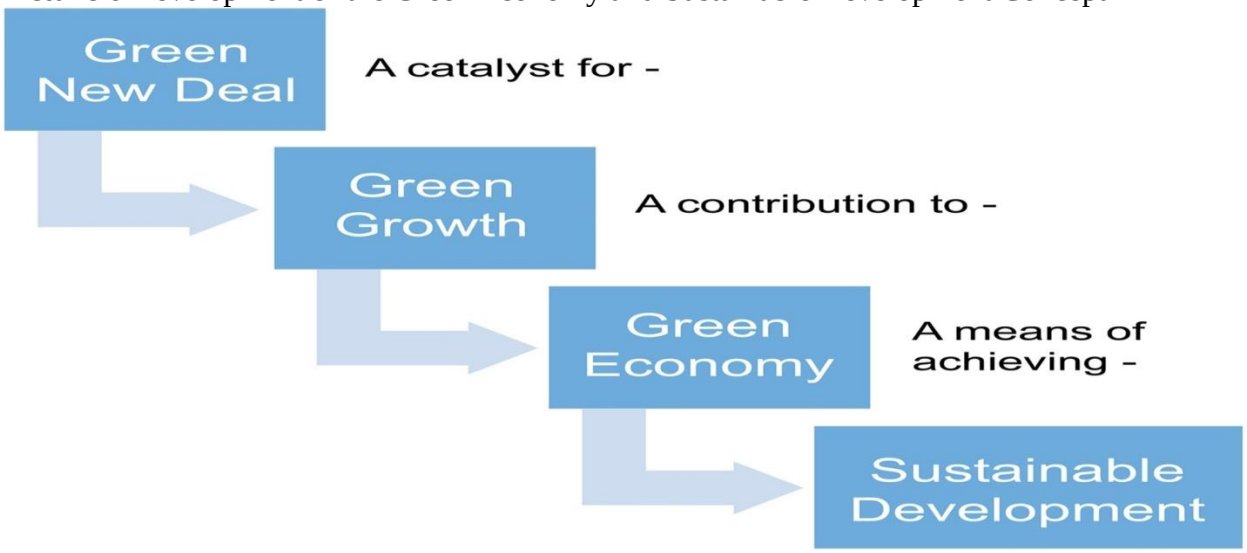
Sustainable agriculture today has very different interpretations in practice. For agronomists, it means maintaining the effects of the green revolution in terms of increased agricultural production, i.e., food production. For ecologists, it is a way to ensure a sufficient amount of food without degrading natural resources. For economists, it represents the long-term efficient use of resources, while for sociologists and anthropologists, it represents agriculture that preserves traditional values (Conway, 1993).

The United Nations Environment Programme (UNEP) played a crucial role in shaping and promoting the green economy as a driver of growth, job creation, and poverty eradication. UNEP emphasizes that the green economy results in improving human well-being and social equality while significantly reducing environmental risks and resource depletion (UNEP, 2011, p. 1). The

application of the concept of the green economy is described as a long-term strategy for national economies (Barbier, 2009), with the goal of economic development, poverty eradication, reducing carbon emissions, and halting ecosystem degradation.

The transition to a sustainable and green economy requires new patterns of restructuring production, consumption, and distribution, as well as finding alternatives for innovative development. The United Nations Conference on Sustainable Development (Rio+20) provided an opportunity to focus global attention on the triple dimensions of sustainable development. Within the framework of Rio+20, encompassing the green economy, sustainable development, and poverty eradication, the recognition of the social, economic, and ecological dimensions of sustainability has increased (Cook & Smith, 2012). Many international organizations, including the UN, encourage the green economy or green growth as a contemporary way to address environmental, economic, or financial crises (Bina, 2013)."

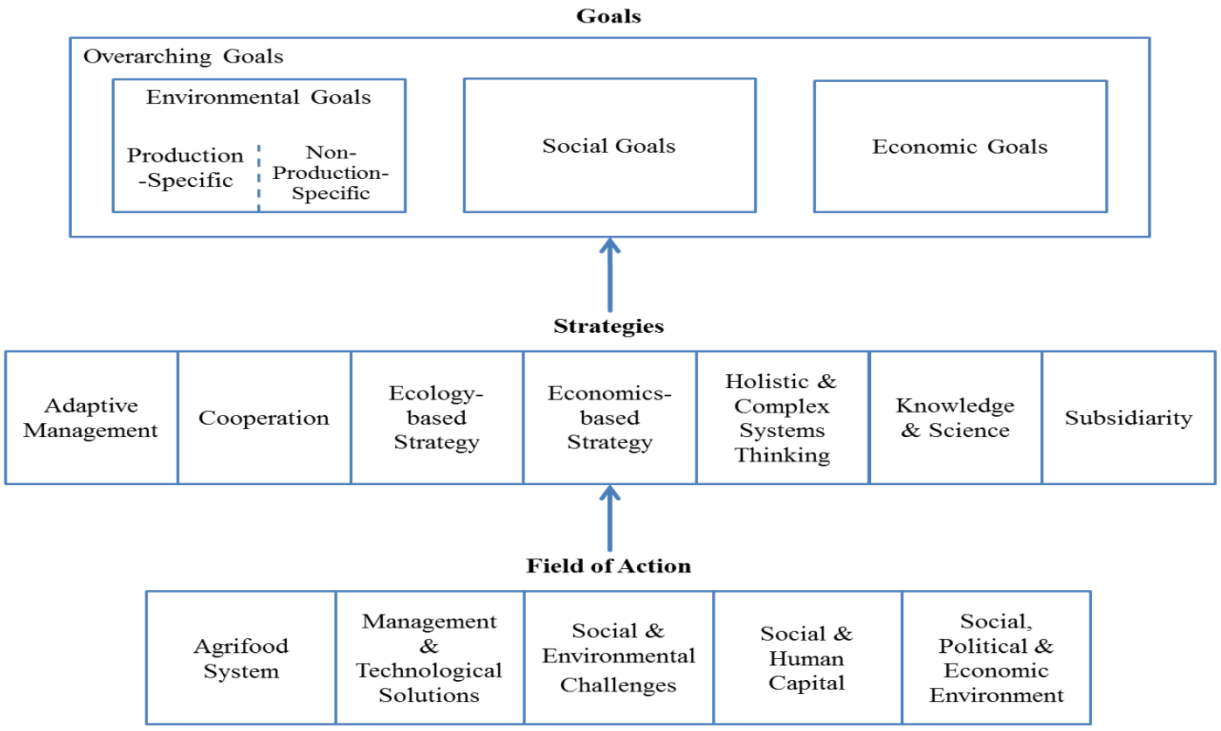
Picture 6 Development of the Green Economy and Sustainable Development Concept



The concepts of green growth and green economy are associated with expected changes in the eco-industry sector, environmental protection technologies, and resource conservation. The use of the term green growth has expanded and is now applied in many cases to the growth of the entire economy (Jänicke, 2012).

Sustainable agriculture involves a set of management strategies, many of which are crucial for addressing major social issues related to food quality and environmental protection (Francis et al., 1987). Some authors focus on the ability of agricultural systems to sustain long-term productivity (Ikerd, 1993), while others focus on the ability of agriculture to adapt to future changes (Gafsi et al., 2006). In general, all include the following dimensions in the concept of sustainable agriculture: ecological, economic, and social.

Picture 7 Goals, Strategies, and Areas of Action for Sustainable Agriculture



Sustainable agriculture is essentially an integrated system of plant and animal production practices that should, in the long term: (a) meet various needs for food and fibers; (b) improve environmental quality; (c) efficiently use non-renewable resources and farm resources integrating biological cycles; (d) maintain the economic viability of farms; and (e) enhance the quality of life for farmers and society as a whole. For a farm to be sustainable, it must produce appropriate quantities of high-quality food, protect its resources, and be environmentally secure and profitable. Instead of relying on off-farm inputs, such as fertilizers, a sustainable farm should rely as much as possible on natural processes and renewable sources within the farm itself. Sustainable agriculture should include management practices that must be adequately combined with natural processes to conserve resources, reduce waste and negative environmental impact, prevent numerous new problems, and promote the resilience of agroecosystems, self-regulation, and the sustainability of agricultural production (Velten et al., 2015, p. 7834).

Table 2 Major Differences between Sustainable Development and Circular Economy

Feature	Sustainability	Circular Economy
Origins of the term	Environmental movements, NGOs, non-profit and intergovernmental agencies, principles in silviculture and cooperative systems	Different schools of thought like cradle-to-cradle, regulatory implementation by governments, lobbying by NGOs like the EMF, inclusion in political agendas (e.g., European Horizon 2020)
Goals	Open-ended, multitude of goals depending on the considered agent and her interests	Closed loop, ideally eliminating all resource input into and leakage out of the system
Main motivation	Diffused and diverse reflexivity and adaptive past trajectories	Better use of resources, waste, leakage (from linear to circular)

What system is prioritised?	Triple bottom line (horizontal)	The economic system (hierarchical)
To whose benefit?	The environment, the economy, and society at large	Economic actors are at the core, benefitting the economy and the environment. Society benefits from environmental improvements and certain add-ons and assumptions, like more manual labour or fairer taxation
How did they institutionalise (wide diffusion)?	Providing vague framing that can be adapted to different contexts and aspirations	Emphasising economic and environmental benefits
Agency (Who influences? Who should influence?)	Diffused (priorities should be defined by all stakeholders)	Governments, companies, NGOs
Timeframe of changes	Open-ended, sustain current status "indefinitely"	Theoretical limits to optimisation and practical ones to implementation could set input and leakage thresholds for the successful conclusion of the implementation of a Circular Economy
Perceptions of responsibilities	Responsibilities are shared, but not clearly defined	Private business and regulators/policymakers
Commitments, goals, and interests behind the use of the term	Interest alignment between stakeholders, e.g., less waste is good for the environment, organisational profits, and consumer prices	Economic/financial advantages for companies, and less resource consumption and pollution for the environme

Source: Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*, 143, 757– 768. doi:10.1016/j.jclepro.2016.12.048.

Despite the trend of applying genetic engineering in agriculture to increase quantity, improve quality, and ensure the reliability of food supply, public and scientific concerns about ecological, health aspects, and safety of GM (Genetically Modified) crops and food have been raised since the inception of GMOs in many parts of the world. There are pronounced differences in viewpoints. On one hand, recombinant DNA technology is considered a powerful tool for increasing crop productivity and food quality, as well as for the production of vaccines, therapeutic drugs, etc. Supporters of GMOs emphasize that GMO production must be considered crucial for promoting sustainable agriculture, as it can reduce the negative impact of agriculture on the environment, decrease pesticide use, save fossil fuels, reduce CO2 emissions, and contribute to soil and moisture conservation. Supporters also believe that GMO crops are indispensable in addressing global issues of food and nutrition security in developing countries.

On the other hand, GMO opponents argue that the effects regarding negative impacts on the environment and human health are still largely unknown. They claim that GMO crops are obtained based on conventional seed, which could have an indirect effect on food security (Buiatti et al., 2012, p. 255). A significant number of studies showing negative effects of GM seeds on human health have even been discredited. However, even if GM seeds may indeed not harm human health, it is highly likely, as opponents of GMOs emphasize, that they will not improve human health or the quality of the environment. GM seeds, like other patented seeds, are protected by intellectual property laws. However, GM seeds are living organisms that can reproduce and spread with or without human intervention, considering that they can be transmitted by agents such as animals or wind. Although regulations require buffer zones to prevent unauthorized spread of GM

seeds, these regulations vary from country to country and do not guarantee that the seeds will not spread. Generally, the use of biotechnology is hindered by institutional regulatory mechanisms. Observed changes and problems require appropriate solutions, of social and legal nature (Robaey, 2016).

The GMO debate is characterized by polarity, especially regarding the future of agriculture and rural development, with a particular focus on rural social development and ecological sustainability. Sustainability is a concept interpreted in various ways, particularly in the GMO debate. The issue of sustainability in agriculture gained significance with industrialization and globalization, impacting the agri-food sector. This matter specifically focuses on environmental problems, such as natural resource degradation and pollution, as well as social issues, like the decline in the number of agricultural farms, loss of traditional values, and, to some extent, the independence of farmers. Concerns manifest differently in developed countries, where food quality, landscape preservation, and cultural heritage are priorities, compared to developing countries where concerns are higher regarding food security, poverty, rural depopulation, and the pronounced economic dependence on GMO seed producers (Russell, 2008).

III. CHARACTERISTICS OF MANAGEMENT

Management as a scientific discipline represents knowledge as a system of relationships between numerous managerial variables. Without knowledge of the scientific foundations of management, managerial practice is merely a series of trial and error in the management process and a waste of time. Management as a scientific discipline further evolves through the development of management practice. Educated and talented management is the most important prerequisite for the success of any endeavor, whether it involves temporary, project tasks, or companies with the goal of long-term sustainability. However, good managers are not easy to find. Therefore, good managers are considered capital more important than money.

The key concept associated with management and administration is organization. An organization can be any group of people united by a common purpose, where each member has a role. Thus, an organization represents a specific social association of individuals, such as families, clubs, political organizations, businesses, and even states. An organization is a group of people with different profiles who collectively work towards achieving one or a set of goals. For a business, these goals may include increasing sales, boosting profits, reducing costs, attracting new customer categories, and so on.

The foundational element of any organization is individuals, but it can also be teams or groups of people guided by specific norms or rules of conduct in their actions. Every organization is simultaneously a closed and open system that achieves its purpose based on purposeful activities of its members and interaction with the environment. A business, for example, creates value in the form of products and services for a target group of customers or users using its human, material, informational, and energy resources, as well as those obtained from the environment.

From this fact, it follows that it is important to manage resources and transformation processes within the company, especially human resources, as well as relationships with other entities and organizations outside the company that support the value creation process or benefit from it. These entities include customers, suppliers, creditors, the government, and the broader social community.

Today, almost no task can be accomplished without the participation or collaboration of multiple people. Therefore, the work of every group of people, or every organization, needs to be managed. This is the task and field of management. Management is a social discipline that studies

the behavior of organizations and their members to achieve a specific goal or set of goals. The task of management is to direct the efforts of all organization members within all systems and processes towards jointly defined goals. Management is considered by (Watson, 1994) as essentially a social and moral activity whose result, in terms of products and services, stems not only from a specific culture and organizational behavior patterns but also from developing relationships of trust and shared responsibility among organizational members.

Management as a process can be examined through the analysis of managerial functions, which include planning, organizing, managing human resources, leading, and controlling. These functions constitute a system or a cyclical process that continually repeats, always at a higher developmental level. Planning is the foundation of future work, determining the direction of future activities. Based on this, there may be a need to modify the organization, i.e., the organizational structure, in terms of redesigning business processes or better connecting them. The set goals may be the basis for managing human resources in terms of new hires, layoffs, investments in education, and the like. The interaction between internal and external environments involves designing an appropriate leadership style and motivational policies. Ultimately, plans form the basis for the implementation of the control process. Based on the results of the control process, new plans are defined, and the process starts again**.**

Picture 10 Cyclical Representation of Managerial Functions

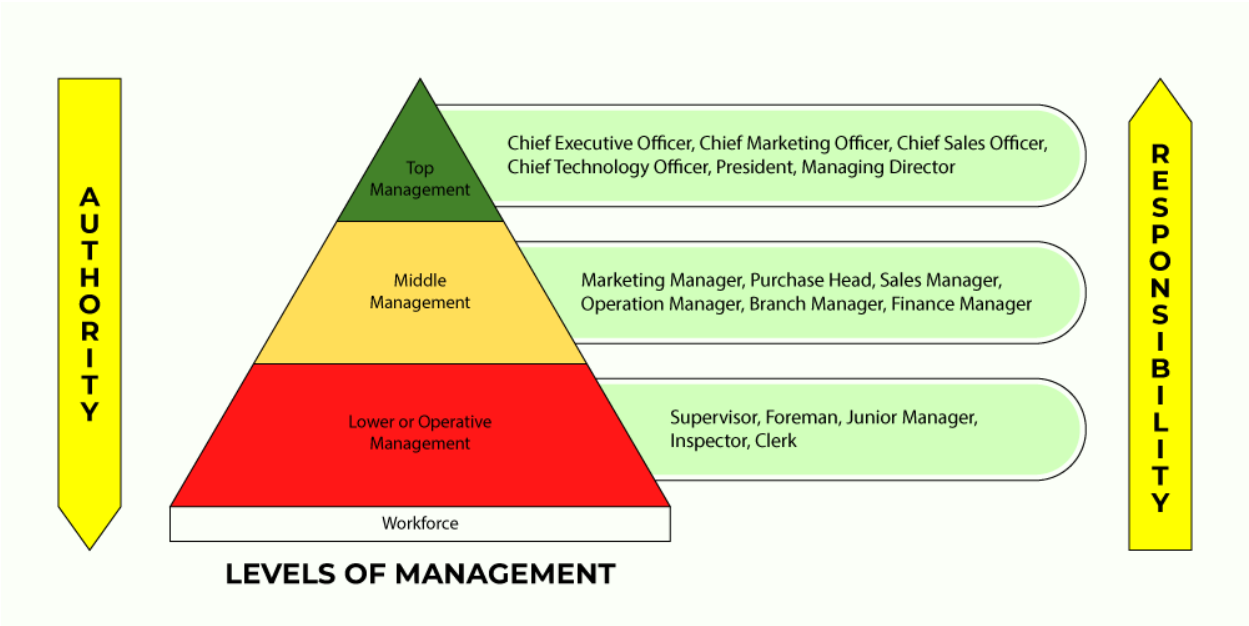
Management is also considered a system of individuals responsible for managing the company, organized hierarchically. Thus, a distinction is made between top, middle, and lower management (see Picture 11). The top management consists of one or more individuals who are responsible for the overall success of the business. In the case of large companies, top management typically includes the chief executive officer (CEO), chief operating officer (COO), chief financial officer (CFO), and in modern companies, the chief knowledge officer or chief information officer.

In American companies, there are also the president and vice president. They form the executive board, which is accountable to the supervisory board (in a two-tier corporate governance system) or the board of directors (in a one-tier corporate governance system).

The task of top management is to shape the global strategy and set long-term goals for the company based on defining its vision and mission. Top management also monitors the implementation (execution) of the strategy and the degree of goal achievement. It has a significant impact on shaping the organizational culture and entrepreneurial orientation of the company. Top management often includes the founders and owners of the company. As the company develops, their role may be fully or partially taken over by professional management. Founders establish the way of working and lay the foundations for the value system embedded in the organizational culture. Its determinants manifest over a long period.

Since top management makes strategically important decisions, its focus is more on the external than the internal environment. Scanning the external environment is the primary task of top management, allowing them to identify new developmental opportunities and find ways to overcome threats. By connecting factors from the external environment with the characteristics of the internal environment, top management makes decisions that impact the entire company. Therefore, it is important for them to apply systemic thinking in their work, considering a large number of factors and their current, future, and possible relationships and manifestations.

Picture 11 Hierarchical Structure of Management



The management process should be considered in relation to certain criteria or outcomes. The fundamental managerial criteria, or success factors, are productivity, efficiency, and effectiveness (Picture 14). These criteria, with the need for a certain level of adaptation, can be used to evaluate management, i.e., the work of any organization, whether profit or non-profit. These criteria should not be viewed hierarchically but as a system of success criteria. They are

further elaborated in terms of performance indicators that take into account various aspects of business that ultimately indicate the degree of success and diagnose problematic areas.

Picture 14 Managerial Success Criteria

Productivity refers to the quantity of a certain outcome (output) achieved considering the use of a specific amount of resources (input) over a certain period, assuming a certain level of quality. In creating an output, various inputs are often used. Therefore, productivity can be calculated concerning all factors (total factor productivity), where the monetary expression of the output (quantity multiplied by the unit price) is divided by the sum of the monetarily expressed input expenses (quantity of input used multiplied by the unit price). Productivity can be increased by increasing output while using the same amount of input, reducing the level of input with the same quantity of output, or simultaneously changing both variables by reducing the level of input and increasing the level of output.

The productivity of a process depends on various factors, with a key factor being the availability of appropriate knowledge and skills (Rupčić,2016). Therefore, it is necessary to determine the skills required for specific tasks and compare the type and level of required skills with those possessed by employees. If a mismatch is identified, it is necessary to invest in training and education.

Another essential factor in productivity is the availability of technological solutions. Work productivity can be significantly increased by improving capital equipment, investing in automation and mechanization processes. The technology factor also relates to the availability of suitable software solutions and applications that can be used in business operations, contributing to increased speed and quality of work. A conducive working environment is also an important factor. Despite the importance of these factors, the key factor that can lead to increased productivity is time, especially for small businesses experimenting with various solutions related to organization, value proposition to customers, and work methods.

Efficiency relates to achieving goals considering the cost of using resources in that process. Therefore, a production process can be considered most efficient if it results in products and services created at the lowest costs of labor and capital factors compared to competitors. It is essential to note that some production processes will not be efficient even if the cheapest factors necessary for a certain level of quality are procured if the result is a large amount of scrap. The process will not be efficient if human resources do not invest the maximum effort defined in the contract but take long breaks or frequently make mistakes.

Even if a production process is exceptionally efficient, a company can incur losses, or the organization can lose legitimacy. The reason is that the company does not satisfy market needs

with its value. Therefore, special attention should be given to the effectiveness criterion, which relates to goal realization, or the ability to market the newly created value. Even if a company creates products and services demanded by the market, it can be ineffective if it does not deliver them on time or if they do not meet quality criteria. Moreover, a company whose value creation process is currently efficient may not be so in the future. Therefore, maintaining effectiveness involves continuous improvement and innovation.

Peter Drucker vividly describes efficiency with the phrase "doing things right," and effectiveness with "doing the right things." From this simple definition, it can be concluded that the debate about which criterion is more important is irrelevant. Management can decide to minimize costs to maximize the company's profit, and consequently, managerial bonuses if they depend on profit levels according to the contract. However, this will result in saving on items crucial for the continuation of business, such as education and the development of human resources, market research, or research and development. Therefore, maximizing efficiency in the present can manifest as minimizing effectiveness in the future, jeopardizing the company's survival. It should be noted that modern technological solutions, especially information and communication technology tools like various applications and cloud platforms, can significantly improve productivity, efficiency, and effectiveness of company operations.

IV. AGRICULTURAL MANAGEMENT

Managing agricultural estates can be considered akin to managing business processes in other sectors of the economy. However, the fundamental difference lies in the daily responsibilities. Additionally, besides this distinction, there is evident variability in the type of production observed on agricultural estates. Managing various types of livestock farms differs from managing estates engaged in crop farming or viticulture, as well as in the size of agricultural holdings. In small farms, management typically involves a small number of workers, mainly the owners and their family members. In contrast, large farms employ newer agricultural machinery and a greater number of workers who are not members of the household.

Similar to general management processes, agricultural management involves planning, organizing, motivating, controlling, and analyzing, through good agricultural practices and sustainable agriculture. The ultimate goal is to achieve:

- Maximum profit,
- Improved production efficiency,
- Reduced production costs,
- Rational use of inputs in production (Zakić and Stojanović , 2008).

Based on the characteristics of decisions that agricultural producers/managers must make, the characteristics of agricultural managers are defined as follows:

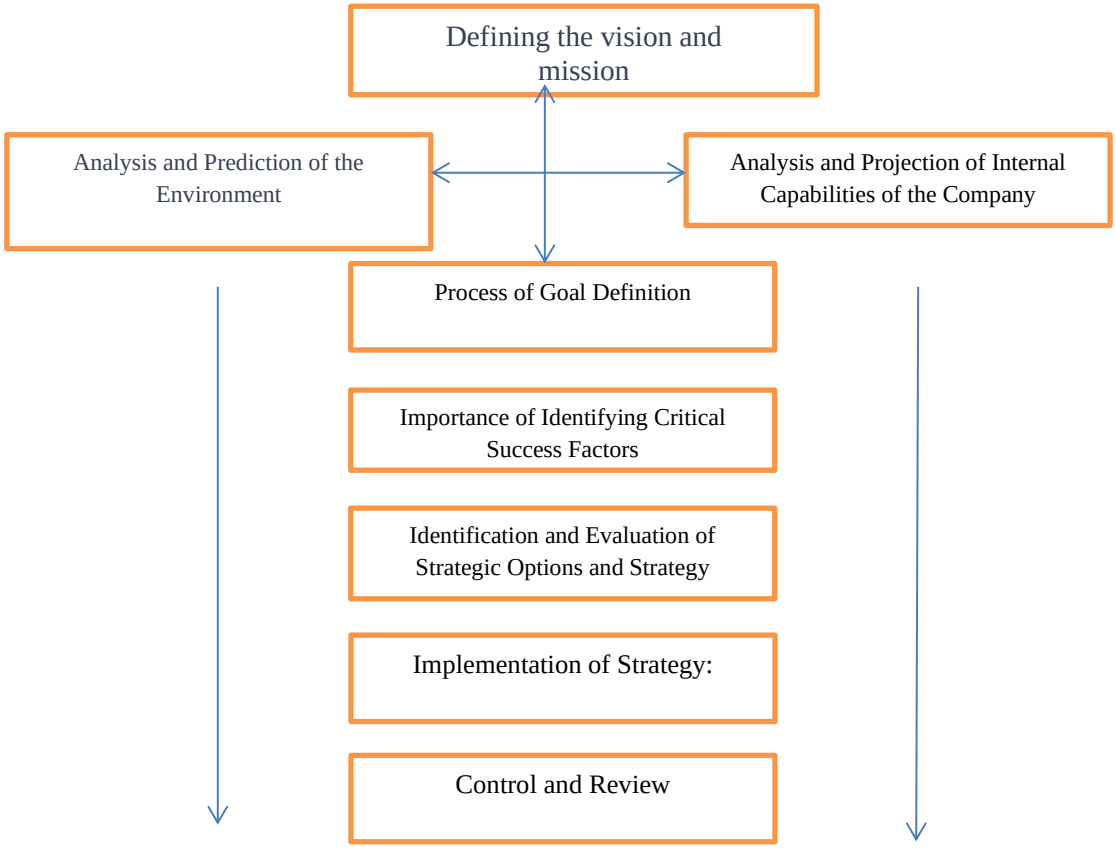
- Ability to organize and execute tasks and goals set in agreement with household members,
- Understanding of agrotechnological and economic aspects of production and sale of agricultural products,
- Ability to communicate with the environment to obtain quality information necessary for business,
- Making quality business decisions based on collected information

Strategic management represents a contemporary approach to enterprise management, involving a continuous process of adapting to a changing environment. In this process, the environment has a permanent impact on the enterprise, while the enterprise, in turn, influences the environment in which it exists and adapts. Business strategy encompasses determining various

paths (methods) to achieve the mission and goals of the enterprise. Therefore, strategy is both a science and an art of using methods to achieve objectives, representing the rational response of the enterprise to events in its business environment. It is oriented towards selecting areas of business activity and allocating resources to create and maintain a competitive advantage in the environment (Milisavljević, Todorović, 1991: 4-7).

Strategic management is a concept that includes strategic planning and action in situations where the environment changes rapidly, and resistance from the environment increases. In such cases, strategic management reduces the gap between the organization and the environment. Thus, strategic management is a continuous process involving strategic decisions and strategic behavior in decision implementation (Vojnović, 2014: 139).

Picture 17 Elements of the Strategic Management Process



Source: Todorović, Đuričin, Janošević, 1998: 148.

Strategic management is crucial for the long-term operation and planned management of the agricultural economy. It involves making business decisions that significantly impact the future operations of agricultural holdings. Decision-making in strategic management on agricultural estates is largely based on determining the production structure for the upcoming period. Unlike other economic sectors, changing the production structure in agriculture is not easy and quick, making the responsibility of agricultural management, the decision-makers, very significant.

Human Resource Management, or as it is referred to in domestic practice, is a part of organizational science that deals with the study of all aspects of employment within an organization. It represents a crucial business function involving activities such as planning, organizing, leading, and controlling human resources within an organization (Bogićević, 2004: 3).

Managing human resources is one of the essential functions of management in agricultural enterprises. The appropriate quality and quantity of human resources are identified as necessary factors in establishing, existing, and successfully developing activities (Grujić, Vojnović, Simić-Antonić, 2011: 488). The human factor, as a vital component of any production, has specific characteristics in agricultural organizations. Therefore, managing these resources is a highly complex management function, involving the selection of the number of employees with specific personal characteristics, qualifications, and experience, as well as effective management contributing to significant results through motivation and organization (Stefanović, Grujić, Vojnović, 2011: 48).

Considering that human resource management is not only a crucial business function but also a managerial function, all management levels - strategic, middle, and operational - are involved in it. When it comes to the content of human resource management functions, it encompasses a wide range of different yet interconnected activities focused on ensuring an adequate number and structure of employees, their knowledge, skills, interests, motivation, and behavior required to achieve the organization's current, developmental, and strategic goals.

Human resource management in agriculture involves working on the following activities (Birovljev, Tomić, 2009):

- Recruitment and selection of the workforce in line with the goals of agricultural enterprises,
- Continuous provision of the required workforce based on quantitative and qualitative criteria and seasonal needs,
- Continuous education of workers,
- Worker mobility in task execution, emphasizing creativity and rewards,
- Teamwork and increased productivity, emphasizing a creative atmosphere as a result of homogeneous work groups within agricultural enterprises.

V. BUSINESS MODEL INNOVATION IN AGRICULTURE

In economic literature, the concept of a business model is recognized but not extensively explored and defined. It holds great importance for entrepreneurs and managers as it allows them to easily convey and explain the complexity of their business to interested parties (Milovanović et al., 2016). There are several different business model innovations in the literature, and this work will present:

- Blue Ocean Strategy
- Business Model Canvas
- WOIS (Weighted Objectives Index System)

To explain the Blue Ocean Strategy, we must first understand the Red Ocean Strategy. The Red Ocean Strategy represents the known market space where all active industries operate. The boundaries of this space are precisely defined and accepted, and the rules of competitive behavior are well-known to everyone. Companies compete with their competitors to capture a larger share of the market for products and services. Given the intense competition in the market, the prospects for profit decrease. The competition is relentless, akin to a battlefield, hence the term "red ocean" (Krstić, 2016).

The goal of the Red Ocean Strategy is to outperform the competition in the existing market where demand is limited and saturated with similar value offerings. To increase market share and achieve profit, companies make incremental improvements, mostly based on market research, focused on existing consumers, and studying the competition and their best practices. Often, imitation of competitors occurs in the market (Vugrinec Hitrec, 2007).

Today's business in the global market is mainly focused on ways to outperform the competition in a known market, following the principles and logic of the Red Ocean Strategy. Existing literature predominantly describes methods for companies and organizations to overcome existing competition with the goal of achieving profit. Programs in universities and business schools also align with this mode of thinking and operating in the market (Vugrinec Hitrec, 2007).

The Blue Ocean Strategy is a new approach to business that diverges from conventional thinking about strategies and business management. It is based on discovering new untapped market space, creating demand, and thus obtaining an opportunity for highly profitable growth. The strategy begins with the assertion that for business success, the focus should shift from competition to value innovation, creating a new market space. The strategy seeks to understand what consumers and non-consumers have in common rather than what sets them apart. As the Blue Ocean Strategy is based on value innovations, which are harder to replicate, companies operating under this strategy can operate relatively peacefully for about a decade without facing threats from competitors (Vugrinec Hitrec, 2007). The Blue Ocean Strategy represents an unknown market space where all industries are active. There is no competition in the market because the rules of competitiveness have not been established, or the market does not yet exist. The term "blue ocean" is a metaphor for unexplored space. Creating a Blue Ocean Strategy is essentially about reducing costs while simultaneously increasing value for customers, resulting in increased value for both the company and its customers (Krstić et al., 2016).

Kim and Mauborgne, 2007 investigate the impact of the Blue Ocean Strategy based on the observation of 108 companies introducing new businesses. Of these, 86% introduced new businesses by expanding their product lines, involving improvements to existing products within an existing market (red ocean). They achieved only 62% of revenue and 38% of total profit. The remaining 14% of companies launched entirely new businesses and opened entirely new markets (blue ocean). They generated 38% of total revenue and 61% of total profit. The conclusion is that there is a difference in the implementation of these two strategies, and the Blue Ocean Strategy brings greater benefits (Kim and Mauborgne, 2007).

Research on major American commodity brands has shown that the main product and service categories of different brands are becoming increasingly similar. As a result, customers tend to choose and make purchases based on the criterion of price. Based on all the mentioned factors, Kim and Mauborgne (2007) conclude that with the disappearance of the business environment that gave rise to most 20th-century strategies and management approaches, managers should lean more towards conducting business according to the Blue Ocean Strategy. Companies don't need to constantly try to outperform the competition in a known industry but should create a new market space within their sector, thus achieving growth.

The management of agricultural farms is based on decisions regarding the utilization of resources with the aim of achieving profitability in business. Successful agricultural operations, like any other successful business, rely on effective management. Agricultural management encompasses defining economic and social goals, ensuring a continuous supply of resources, organizing them, and finding alternative business approaches (Hadelan and Franić, 2006).

In traditional agricultural production, decision-making is often based on the experiences of older farmers rather than modern business decision-making methods. The demands of modern agriculture are much higher than they were thirty years ago. Fierce competition in the market requires farmers to adopt new management approaches used by farmers in more developed economies. Today's farmers must pay more attention to business decision-making and the development of managerial skills than they needed to in the past (Hadelan and Franić, 2006).

Modern farmers encounter contemporary mechanization, adaptation to new cultivation methods, securing investment funds, choosing market alternatives, and facing greater business risks. These challenges can simultaneously be opportunities and new possibilities for modern farmers and their agricultural management (Hadelan and Franić, 2006).

Contemporary management of family farms, in conditions of increased competition, is significantly more dynamic and requires a wide range of knowledge and skills. This includes collecting and storing necessary data about production, diseases, and pests that could threaten operations. The use of modern technology is crucial to achieving higher yields and producing higher-quality goods. Familiarity with financial statements and key performance indicators (profitability, liquidity, and business activity) is also essential (Hadelan and Franić, 2006).

Financial management emerges as a crucial element in the management of agricultural farms because agriculture relies on external sources of financing. It is a fact that banks are generally hesitant to finance agricultural farms that cannot provide a financial overview of their operations and quality business plans demonstrating the creditworthiness of the agricultural enterprise. The management of agricultural farms requires knowledge and skills similar to those possessed by managers in non-agricultural companies (Hadelan and Franić, 2006).

Information literacy is becoming increasingly important, especially in large commercial farms, where computers are used to process and analyze financial data, communicate with specialized services, and handle financial obligations. Internet access allows for better and timely information and the ability to check and compare market prices. All these aspects indicate that agricultural policy should aim to develop managerial skills among farmers because effective management of agricultural farms is a factor that can impact competitiveness in the market (Hadelan and Franić, 2006).

Adequate knowledge management is necessary not only in large food production systems but also in smaller enterprises and agricultural farms that do not have a large market, economic power, and resources like "big" ones (Cvetković, 2009). Smaller economic entities must be cautious regarding the economic, ecological, and social safety of applying new knowledge in business practices. A creative approach requires adequate risk management, where traditional capabilities and orientations undergo certain changes and adaptations, emphasizing the learning component and acquiring new knowledge because it is associated with the ability to make the best use of available resources.

Picture 23 Key Characteristics of Traditional and Modern Agriculture

Traditional Agriculture	Modern Agriculture
• Family farms with a traditional focus • The primary production factor, along with family labor, is land • Production factors are passed on unchanged or with minimal modifications • Production structure is diversified, with a natural character • Human relationships are regulated by customs and tradition • Motivations: income and security for the family, food provision • Accumulation for non-agricultural sectors • Surplus labor release	• Different types of farms • The basic factors of production are land, modern machinery, and equipment • Connectivity of all segments of agribusiness, with the possibility of specialization within vertical integration • Primary agricultural production loses its independence • Adoption of new technologies • Motive: profit • Production of raw materials for the industry • Ensuring a market for industrial products • Participation in foreign trade
Traditionally oriented farmers	**Entrepreneurially oriented farmers**
• Smaller farms • Borrowing is very cautious • Greater stability in "difficult" times • Preference for ownership over leasing • Diversification in production - "mixed farming" • Less sensitive to market turbulence • Family farms • Loyalty to the local community and concern for natural resources, with lower profit	• Large farms • Borrowing is very common and extensive • Risk of over-indebtedness • Lease and ownership of land • Specialization and commercialization • High sensitivity to market turbulence • No insistence solely on family business • Lower level of loyalty to the local community, with an expressed desire for profit

Source: Stojanović, Ţ. (2017). *Ekonomika agrara*. Beograd: Univerzitet u Beogradu-Ekonomski fakultet.

VI. AGRICULTURAL LANDSCAPE AND MANAGEMENT IN THE REPUBLIC OF KOSOVO

Economic development trends in Kosovo have significantly impacted arable agricultural lands, leading to a notable conversion of such lands into construction areas. This has resulted in a continuous trend of farms undergoing fragmentation, ultimately reducing the average farm size. The dynamic change in land use, driven by factors like rural population growth, plays a pivotal role in shaping this trend.

The utilization of agricultural land in Kosovo is categorized into arable land, dedicated to crop cultivation, and meadows and pastures, utilized for livestock grazing. Data sourced from the Agricultural Households Survey reveals that the total utilized area of agricultural land remained consistent from 2017 to 2021, reaching 420,327 hectares in 2021, comparable to the area in 2020.

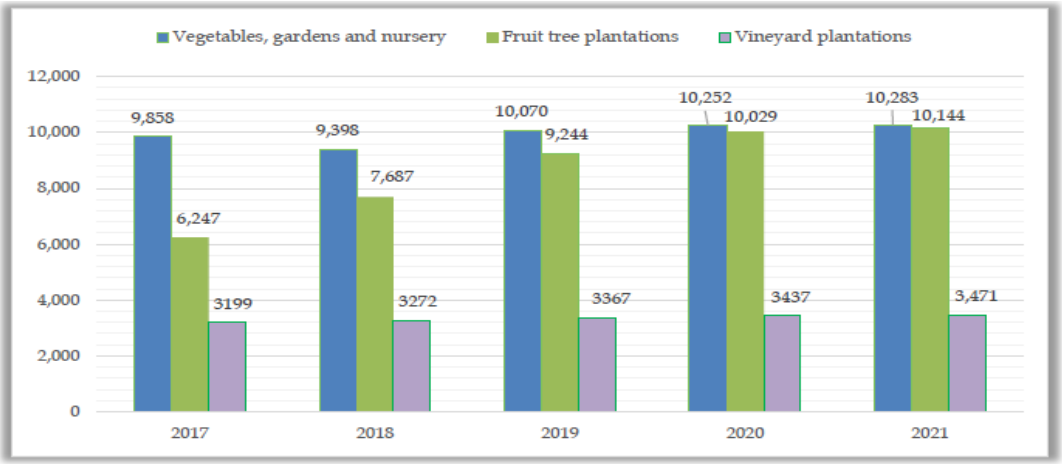
Table 4 Utilization of Agricultural Land by Categories, hectares

	2017	2018	2019	2020	2021	Difference 2021/2020 in %	Share in % 2021
Arable land – fields	186,954	188,359	188,365	188,372	188,375	0.0	44.8
- From which with vegetables in the open field (first crop)	8,033	7,818	8,319	8,435	8,491	0.7	
- From which with vegetables in greenhouses (first crop))	467	468	518	547	562	2.8	
Garden	1,199	1,003	1,122	1,133	1,089	-3.8	0.3
Fruit trees	6,247	7,687	9,244	10,029	10,144	1.1	2.4
Vineyards	3,199	3,272	3,367	3,437	3,471	1.0	0.8
Plant nursery	159	109	111	137	140	2.4	0.0
Meadows and pastures (including common land)	218,314	218,152	217,932	217,102	217,107	0.0	51.7
Total area of agricultural land in use	416,072	418,582	420,141	420,210	420,327	0.03	100.0

Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

In 2021, the area dedicated to open-field vegetables increased by 0.7%, and greenhouse vegetable cultivation increased by 2.8%, while gardens decreased by 1%. Fruit tree plantations and vineyards also showed increases of 1.1% and 1%, respectively.

Figure 2 Vegetables, gardens and nurseries, fruit tree plantations and vineyards

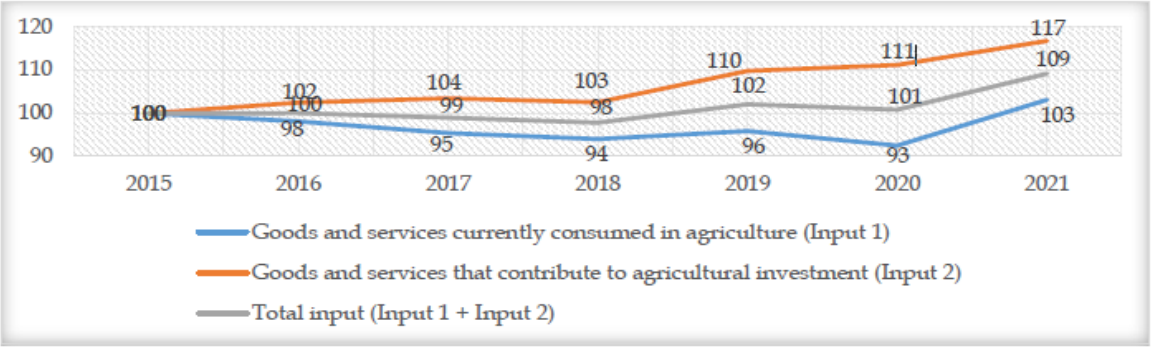


Source: KAS – Agricultural Households Survey ('17,'18,'19,'20,'21)

In conclusion, the utilization of agricultural land in Kosovo is a dynamic aspect that requires ongoing assessment, adaptive strategies, and collaborative efforts from stakeholders. By addressing challenges and capitalizing on positive trends, Kosovo can foster a resilient and thriving agricultural sector, contributing significantly to its economic development and sustainability goals.

Comparatively, the annual input index for Input 1 witnessed a notable increase of 11.5% in 2021 compared to the same period in 2020, while the index for Input 2 increased by 5.0%. The overall input price index (combining Input 1 and Input 2) in 2021 demonstrated an 8.3% increase compared to 2020.

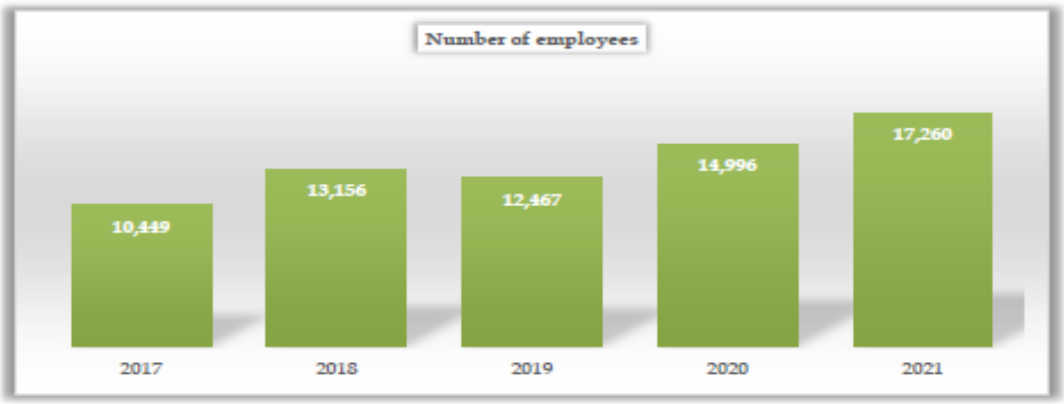
Figure 4 Annual price index of agricultural inputs 2015-2021, (2015=100)



Source: KAS - Input price index and prices in agriculture 2015-2021, prepared nga DEAAS-MAFRD

The number of employees in agricultural businesses in the period 2017-2021 has increased steadily. In 2020, the number of employees in agribusiness was a total of 14,996 employees or 15.1% lower compared to 2021, where the total number of employees was 17,260

Figure 8 Number of employees in agribusiness, 2017-2021



Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

In the realm of agricultural business activities in 2021, the most substantial turnover was recorded in the processing of food products, reaching €365.5 million. Following this, various other agro-industry activities, as detailed in the table, contributed to the overall turnover. The production of beverages accounted for a turnover of €150.9 million, with additional activities displaying their respective values in the provided table.

Table 10 Share of registered enterprises in agriculture, forestry and fishing activities, 2021

Activity	Turnover ('000 €)	Number of employees	Number of active businesses
Crop and animal products, hunting and related services	74,509	2,436	814
Forestry and wood cutting	6,626	134	46
Fishing and aquaculture	1,926	90	16
Processing of food products	365,463	9,219	1,419
Manufacture of beverages	150,871	2,333	95
Manufacture of leather and its products	7,958	442	40
Manufacture of wood and of wood products, except furniture	58,557	1,994	486
Manufacture of paper and paper products	33,487	612	103
Total	**699,399**	**17,260**	**3,019**

Source: KAS - Statistical Business Register, prepared by DEAAS-MAFRD

In the fiscal year 2021, certain agricultural activities in Kosovo reported comparatively lower turnovers. Specifically, the manufacturing of wood and wood products, excluding furniture, generated a turnover of €58.6 million. Similarly, the production of paper and paper products recorded a turnover of €33.5 million, while the production of leather and leather products amounted to €8.0 million. Forestry and wood cutting activities contributed to a turnover of €6.6 million. Notably, the economic activity of fishing and aquaculture registered a relatively modest turnover, totaling €1.9 million.

As Kosovo's agriculture becomes more intertwined with global markets, the importance of agro-management is amplified. Farm managers need to bridge the gap between traditional practices and industry standards, embracing technologies, financial literacy, and strategic planning.

As the agricultural landscape in Kosovo becomes more globally interconnected, the role of agro-management gains further prominence. Farm managers must navigate the evolving dynamics, bridging traditional practices with contemporary industry standards.

The multifaceted nature of agro-management involves not only overseeing day-to-day operations but also strategically positioning farms in a competitive market. The ability to adapt to technological advancements, embrace data-driven decision-making, and cultivate financial literacy becomes paramount.

With Kosovo's agriculture playing a role in the broader global market, farm managers act as key intermediaries. They are tasked with integrating global best practices into local operations, ensuring competitiveness, and fostering sustainability. The global context demands a nuanced understanding of international market trends, trade dynamics, and compliance with global standards.

Agro-management, therefore, becomes a catalyst for innovation. Farmers need to leverage technology not only for efficient production but also for market intelligence and reaching a wider consumer base. Digital tools, precision agriculture, and e-marketing strategies become integral components of successful agro-management in the contemporary context.

Moreover, the resilience of Kosovo's agriculture hinges on the ability of farm managers to navigate uncertainties. Climate change, market fluctuations, and evolving consumer preferences introduce complexities that require strategic foresight. Agro-management strategies must encompass risk mitigation, diversification, and sustainable practices to ensure long-term viability.

In conclusion, agro-management in Kosovo transcends its traditional role and emerges as a strategic driver of agricultural development. Farm managers, equipped with adaptability, technological acumen, and financial proficiency, steer the sector towards resilience, competitiveness, and prosperity. The future of agriculture in Kosovo is intricately linked to the strategic decisions made by those at the helm of agro-management.

VII. EMPIRICAL RESEARCH

This section intricately outlines the research framework, presenting key components such as the chosen research method, target sample, data collection techniques, variables under consideration, and the subsequent methods for analysis. The chapter serves as a roadmap, elucidating the approach taken to explore the identified variables, validate hypotheses, and derive meaningful insights from the collected data.

The research employed a survey methodology targeting 48 family farms. The sample, strategically chosen through deliberate selection, was deemed representative of the average agricultural situation, considering factors such as farm size, production intensity, and market orientation. The farms surveyed exhibit heterogeneity in their activities, with a focus on intensive cultivation, milk production, farming, and combined production. Geographically, the farms were randomly selected from regions including Gjakova, Peja, Prizren, and Pristina.

It is crucial to note that the structure of the surveyed farms reflects commercial production, involving the independent placement of goods in retail chains or through cooperative channels. This preliminary survey, while laying the foundation for more extensive analyses, is poised to provide valuable insights into the multifaceted landscape of family farming in Kosovo**.**

The survey's overarching objectives were:

1. Management Propensity of Family Farms:

- Assess the current management practices employed by family farms.
- Explore the frequency and depth of engagement in strategic planning and operational efficiency.
- Understand the farmers' perception of the influence of managerial skills on the overall success of their operations.

2. State Intervention Expectations:

- Investigate farmers' expectations and perceptions regarding state intervention in the agricultural sector.
- Examine the level of satisfaction or dissatisfaction with current government measures and programs.
- Gauge the farmers' views on the impact of external factors, such as government initiatives, on their business outcomes.

3. Farmers' Problem-Solving Propensity:

- Assess the problem-solving strategies employed by family farmers when faced with challenges.
- Examine the proactive or reactive nature of farmers in addressing obstacles within their farming operations.
- Identify the role of traditional methods and innovative approaches in problem-solving.

4. Success Factors Ranking:

- Rank and prioritize the factors perceived by farmers as critical to the success of their family farms.

- Understand the farmers' perspectives on market access, resource availability, and effective management practices.
- Uncover additional factors deemed significant by farmers through an open-ended question.

5. Management as a Competitive Tool:

- Investigate the perceived importance of effective management practices for competitiveness.
- Understand how farmers rank management practices in comparison to their counterparts in more developed European countries.
- Explore the correlation between managerial skills and the overall competitiveness of family farms.

6. Quality Management and Business Success:

- Assess the importance farmers attribute to certification and standardization in ensuring the quality of their agricultural products.
- Explore the farmers' belief in the critical role of quality management in the success and competitiveness of family farms.

7. Role of Farmers in Management:

- Examine the perceived role and influence of farmers in the economic and organizational aspects of their family farms.
- Understand farmers' motivations for engaging in agriculture and their impact on management decisions.

8. Managerial Skills Enhancement:

- Investigate farmers' perspectives on the correlation between their educational background and readiness to adopt innovative agricultural practices.
- Explore the farmers' belief in the contribution of enhanced managerial skills, knowledge, and decision-making abilities to the overall competitiveness of their family farms and Kosovo's agriculture.

9. Education and Innovative Agriculture:

- Examine the correlation between farmers' educational background and their openness to adopting innovative agricultural practices for the future.
- Understand the role of education in shaping farmers' attitudes towards technological advancements and innovative farming methods.

10. Management's Influence on Sustainable Agriculture: - Explore farmers' views on the influence of effective management practices in promoting sustainable agriculture. - Assess the farmers' commitment to sustainable farming methods and their perception of the role of management in achieving sustainability goals.

Summarized answers to the questions from the questionnaire:

Management Propensity of Family Farms:

The survey results suggest a diverse landscape of family farms in Kosovo, with a mix of small, medium, and large-scale operations. The majority of respondents have a moderate level of experience in farm management, and there's an equal distribution of involvement from individuals across various age groups.

State Intervention Expectations:

Farmers in Kosovo express varying expectations regarding state intervention. While a considerable number expect a moderate level of support, opinions diverge, indicating a complex

relationship with historical influences and current socio-economic conditions. The survey highlights the need for nuanced approaches to meet the diverse expectations of family farmers.

Farmers' Problem-Solving Propensity:

The survey reveals a positive trend in problem-solving approaches among family farmers in Kosovo. A significant majority proactively seeks solutions when facing challenges, showcasing resilience and adaptability. This aligns with the hypothesis that family farms exceeding the average production levels demonstrate a higher propensity for problem-solving.

Success Factors Ranking:

Farmers in Kosovo attribute success to a combination of factors, with effective management practices, market access, and resource availability being prominently acknowledged. The ranking suggests that a holistic approach, considering multiple elements, is crucial for the success of family farms in the region.

Management as a Competitive Tool:

The respondents highlight the importance of effective management as a means of competitiveness, with a majority recognizing its significance. This supports the hypothesis that family farmers in more developed European countries might attribute greater importance to management for maintaining competitiveness.

Quality Management and Business Success:

The survey underscores the strong belief among family farmers in Kosovo that quality management is a critical factor influencing success. This aligns with the central hypothesis that posits quality management as the most influential factor for family farm success in Kosovo.

Role of Farmers in Management:

The survey indicates that farmers recognize the significant responsibility placed on them for internal management. A majority acknowledges the influence of their knowledge, decision-making, and negotiation skills on the overall competitiveness of family farms and, by extension, Kosovo's agriculture.

Managerial Skills Enhancement:

The respondents express a positive correlation between enhancing managerial skills and increasing the competitiveness of family farms. This supports the hypothesis that improving knowledge, decision-making, and negotiation skills contributes significantly to the overall success of family farms in Kosovo.

Education and Innovative Agriculture:

Farmers in Kosovo perceive a positive correlation between educational background and the readiness to adopt innovative agricultural practices. This aligns with the hypothesis that education plays a crucial role in fostering innovation in agriculture.

Management's Influence on Sustainable Agriculture:

The survey results affirm the hypothesis that effective agromanagement is inherently linked to the sustainability of agriculture in Kosovo. Farmers recognize the role of management practices in promoting sustainable farming methods and environmental stewardship.

Continuing from the comprehensive insights gathered through the survey, it becomes evident that family farms in Kosovo operate within a diverse and dynamic environment. The responses underscore the intricate balance between traditional agricultural practices and the adoption of modern management strategies. Farmers exhibit resilience in problem-solving and a proactive approach, emphasizing their adaptability to challenges. The expectations from state intervention, intertwined with historical influences, reflect a nuanced relationship that demands careful consideration in future policy development.

The acknowledgement of the significance of quality management aligns with the broader narrative of family farms recognizing internal factors as pivotal contributors to overall success. This recognition extends to the perceived influence of managerial skills on competitiveness, underlining the pivotal role farmers play in steering the trajectory of their family farms.

Education emerges as a key factor influencing the adoption of innovative practices, affirming the importance of continuous learning in the rapidly evolving agricultural landscape. The positive correlation between educational background and innovation readiness signals a potential avenue for targeted interventions to enhance agricultural education.

The business model landscape in Kosovo's agriculture appears multifaceted, with an emphasis on effective management practices and market trends. The acknowledgement of the importance of business model innovations post-COVID-19 underscores the need for adaptive strategies in the face of evolving market dynamics.

In analyzing the agricultural landscape of Kosovo, the survey highlights challenges related to resource access and market uncertainties. These challenges, combined with the recognition of the decisive role of management, call for holistic approaches that consider not only internal farm practices but also external market forces and support systems.

In conclusion, the survey responses offer a rich tapestry of insights into the state of family farming in Kosovo, validating hypotheses, addressing the research problem, and contributing to the overarching objective of understanding the role of agromanagement in shaping the development of agriculture. The complexity and nuances revealed in these responses emphasize the need for tailored interventions, policy considerations, and continued research to propel the sustainable growth and competitiveness of family farms in Kosovo's agricultural sector.

CONCLUSION

At the heart of advancing agriculture in Kosovo lies the pivotal role of agro-management, serving as the linchpin for the development, sustainability, and competitiveness of family farms. Within the framework where family farms function as the foundational economic units, effective agro-management becomes instrumental in steering growth and ensuring viability within the sector.

A fundamental contribution of agro-management is its capacity to harmonize critical production factors—namely, land, labor, and capital. Through adept economic management, family farms can strategically optimize resource utilization, elevate productivity, and ultimately foster success. This strategic orientation aligns seamlessly with contemporary European agricultural practices, where family-organized production units play a central and dynamic role.

In the present landscape, management has evolved into the fourth indispensable production resource, highlighting its paramount importance in steering strategic decision-making processes. The dynamic nature of modern agriculture necessitates a shift towards informed managerial approaches, considering factors such as mechanization, evolving production volumes, adoption of innovative breeding procedures, securing investment funds, market selection, and managing heightened business risks.

Agro-management serves as a linchpin in addressing historical challenges ingrained in the agricultural sector of Kosovo. Issues like unresolved ownership relations, complexities related to agricultural land, and inefficiencies in incentive systems require strategic management interventions for effective resolution. By incorporating modern management instruments and decision-making procedures, family farms can navigate challenges adeptly and capitalize on opportunities for growth.

In the realm of financial management, the role of agro-management is paramount. Agriculture in Kosovo often relies on foreign funding sources, making financial acumen crucial. Despite challenges in credit accessibility, effective agro-management empowers farmers to present comprehensive financial reviews and quality business plans, bolstering their bargaining power and securing favorable credit terms.

The integration of technology in agro-management is indispensable. Modern farms in Kosovo leverage data collection, storage, and technology to enhance yields, improve product quality, and boost overall efficiency. Additionally, internet access provides real-time market information, enabling farmers to make well-informed decisions.

In conclusion, the trajectory of agriculture in Kosovo is intricately tied to the effective implementation of agro-management practices. As family farms adapt to dynamic conditions, agro-management emerges as the driving force, ensuring sustainable success, competitiveness, and resilience within the agricultural sector. Recognizing the paramount importance of agro-management is not only a strategic imperative but a transformative catalyst for the continued advancement of Kosovo's agriculture.

REFERENCE FOR CONTRIBUTION

The Phd thesis "AGROMANAGEMENT AS A FACTOR FOR THE DEVELOPMENT OF AGRICULTURE IN KOSOVO" contains the following core offering ideas and solutions for the theory and practice of management:

1. Defining Agriculture and Its Basic Functions.
2. The Role of Agriculture in Economic Development of Republic of Kosovo.
3. Key Factors for Increasing Agricultural Productivity and Competitiveness.
4. Identification and analyzing the contemporary trends in agriculture.
5. Examining the impact of conventional and sustainable practices.
6. Assessment of the characteristics and importance of management in agriculture, in Kosovo.

LIST OF PUBLICATIONS IN THE TOPIC

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