

Enhancing the Future Growth and Boosting Efficiency of Agricultural Service Centers

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ABSTRACT

This study primarily aims to formulate scientific principles for enhancing the quality and broadening the reach of agricultural advisory services. It also seeks to provide practical recommendations and methodologies for evaluating the efficiency of regional agricultural advisory services. The research focuses on the processes involved in establishing, evolving, and operating the agricultural consulting system for producers in the agricultural sector.

Keywords. Innovation, development, regional agro-industrial complex, agro consulting services , techno park, agricultural services.

INTRODUCTION

Achieving a highly efficient, competitive and socially oriented domestic agro-industrial complex requires targeted, systematic efforts to enhance the competitiveness of agricultural products. This involves the technical and technological modernization of production processes and the improvement of the quality of the resource potential utilized in agriculture. The most expedient and impactful method to impart new knowledge, skills, and modern management practices to agricultural producers is through the collaboration of business entities with agricultural consulting services. The demand for agro advisory services in the agro-industrial complex arises from the overall low level of education in rural areas, insufficient qualified personnel capable of mastering modern technologies, and limited access to information resources in remote rural areas.

Assessing the functioning of agro advisory services reveals that they do not fully meet the needs and contemporary challenges of a complex agro-industrial complex. Agro consulting centers, departments, and services in various regions operate without proper methodological and personnel support, lacking clearly defined conceptual tasks and priorities. The role of an agro consultant remains undefined, and a mechanism for developing paid services is absent. There are no established price lists for information and consulting services for agricultural producers and the rural population. Furthermore, an organizational and economic mechanism for the interaction of agricultural consulting services with state authorities in the agro-industrial complex is lacking. Comprehensive methods for evaluating the effectiveness of information and consulting services are also missing. This situation underscores the significance of the chosen scientific research topic in addressing the development of agricultural services within the agricultural sector of the economy.

MATERIALS AND METHODS

The scientific research is grounded in the methodological and theoretical principles of modern economic theory, employing a systematic approach to explore socio-economic phenomena and processes in both national and foreign economies. It draws on the insights of prominent domestic and foreign economists who have illuminated the patterns of consumer market development. Additionally, the study incorporates the principles outlined in the laws of the Republic of Uzbekistan, as well as the decrees of the President of the Republic of Uzbekistan and other relevant government and regulatory documents.

The empirical foundation of the research is built upon materials sourced from foreign (American, German, and English), national, and local statistics published in the press. Throughout the research process, a diverse set of methods and techniques of economic analysis were applied. These include systemic and level approaches, progression from abstract to concrete, the integration of logical and historical perspectives, statistical groupings, economic and statistical calculations, comparisons, and economic and mathematical modeling. Depending on the nature of the tasks at hand, program-target, sociological, and expert methods were utilized at various stages of the research.

RESULTS AND DISCUSSION

In recent years, efforts have been made to enhance the efficiency of research activities and widespread adoption of advanced technologies and scientific advancements in agriculture. Initiatives have been taken to organize services that

facilitate knowledge dissemination and the integration of innovations in the agricultural sector.

Ongoing reforms in the field of science have led to the consistent introduction of new plant varieties tailored to soil and climatic conditions, enabling the production of export-oriented products. Resource-saving intensive agricultural technologies for plant care and product growth have also been implemented.

Significant changes have occurred in the agricultural sector, including the elimination of the state order for agricultural product cultivation, the introduction of market principles, and the implementation of new financing mechanisms. Modern farming forms such as clusters and cooperation have been established, and efforts are underway to create a value chain by expanding the storage, processing, and logistics systems for agricultural products.

Despite these positive developments, the lack of systematic organization for strategic research and forecasting in the agro-industrial complex has hindered the creation of an integral system for determining development priorities. This underscores the need for deep integration of education, science, innovation, and production in agriculture, as well as the establishment of effective management links within this system.

The Concept of Priority Development for the knowledge and innovation system in agriculture from 2021-2025 aims to address these challenges. The primary objectives of this Concept focus on further integrating education, science, innovation, and production. It emphasizes the formation and application of new knowledge, the implementation of resource-saving innovative technologies, the incorporation of achievements from foreign and domestic science, the training of specialists with modern knowledge and qualifications, and the development of a comprehensive system for providing agricultural services. The Concept prioritizes the following key areas.

The transformation of the agricultural education system to align with evolving labor market conditions is a key focus for improvement. Simultaneously, there is a commitment to advancing scientific and innovative activities within institutions in the agro-industrial complex. Additionally, there is an emphasis on expanding the network providing agricultural services to entities engaged in the production, storage, and processing of agricultural products through an information and consulting system.

Uzbekistan has experienced notable progress in its Global Hunger Index (GHI) ranking, securing the 30th position among over 100 countries in 2020—a significant leap of 20 places compared to 2017 when it was ranked 50th. Agriculture plays a pivotal role in the Uzbek economy, constituting approximately 28.5% of the GDP and employing over 4.2 million people, representing over 30% of the total employment in the country. While cotton and grain have historically been the main agricultural crops, the recent elimination of quotas and price controls in 2020-2021 has spurred diversification, leading to the phased cultivation of other crops, fruits, and vegetables.

Uzbekistan is actively pursuing dynamic economic reforms, particularly in the agri-food sector, creating substantial opportunities for its expansion and diversification. Despite the challenges posed by the pandemic, Uzbekistan, alongside two other countries in the Europe and Central Asia (ECA) region, achieved positive economic growth in 2020. The government anticipates that ongoing reforms will enhance agricultural productivity through the adoption of new technologies, including resource-saving ones. There are also plans to further develop processing and packaging capabilities to increase the value of both domestic and export products. The country aims to strengthen its textile sector and enhance the overall value chain.

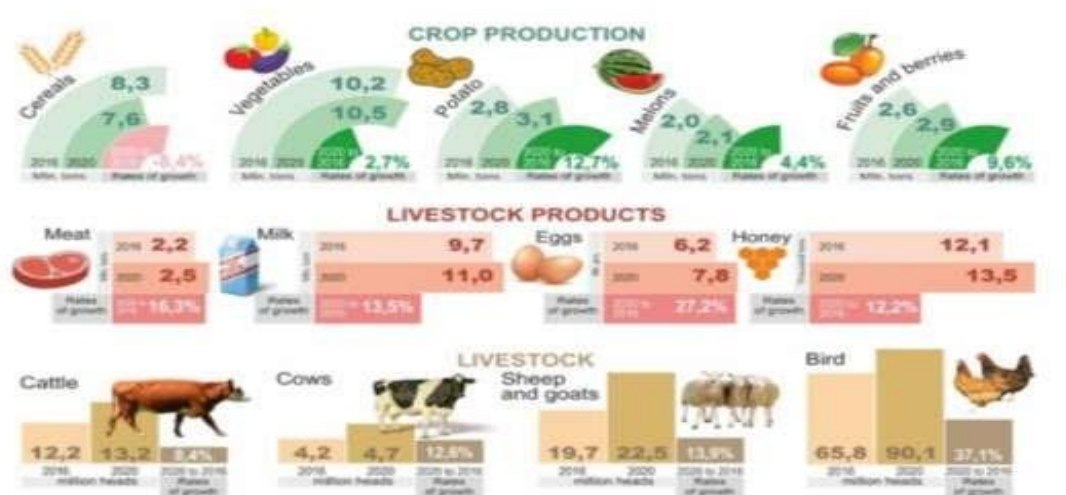
In accordance with the “Strategy for the Development of Agriculture of the Republic of Uzbekistan for 2020-2030”, nine areas are priority.

- Ensuring food security of the population. In a short period of time, the “malnutrition index” in Uzbekistan has dropped unprecedentedly from 15% to 2.4%, becoming one of the best results in the region.
- Improving the agribusiness environment and creating value chains.
- Decreased state participation in the industry and increased investment attractiveness.
- Ensuring the rational use of natural resources and environmental protection.
- Development of modern public administration systems.
- Diversification of public spending to support the sector.
- Development of the system of agricultural science, education, information and consulting services.
- Development of rural territories.
- Development of a transparent system of sectoral statistics.

Currently, efforts are in progress to establish a modern and flexible Agricultural Knowledge and Innovation System

(AKIS), complemented by multifunctional centers spanning all regions of the republic. These extension centers serve as hubs where agricultural producers can access a range of services, utilize mobile laboratories, and participate in educational events. Furthermore, both local and international producers of goods and services for agriculture have the opportunity to showcase their products firsthand and offer advice to their target audience.

The AKIS infrastructure includes demonstration and experimental fields, providing spaces for research, testing, and the demonstration of various agricultural technologies. Looking ahead to 2022-2026, plans are underway to establish centers in all regions and significant districts, delivering over 100 agricultural services to further enhance the agricultural landscape.



Infographics 1. Reforms in the agricultural sector in 2017-2020

The education and development of scientific and expert potential in agriculture are evolving with the introduction of new training formats, including online education. The branches of the Tashkent State Agrarian Institute in various regions are being transformed into separate institutions, expanding both the areas for training and the theoretical and practical bases.

A significant focus is placed on the digitalization of agriculture, with the widespread implementation of technologies aimed at the rational use of water and land resources under the Smart Agriculture program. Various incentives, subsidies, and loans are provided to support these initiatives. An example of this is the cultivation of rice, a moisture-loving crop, which is projected to be grown using the seedling method on all repeated fields by 2026. Experimental initiatives such as sprinkler and drip irrigation, as well as machine planting of rice seedlings, have been introduced since this year.

The development and revitalization of lands that have been withdrawn from agricultural circulation are also prioritized. Improving the quality of agricultural land is achieved primarily through the adoption of new, resource-saving technologies that enhance soil fertility and productivity. The target for 2026 includes bringing approximately 900 thousand hectares of agricultural land into circulation, with 1.2 million hectares incorporating water-saving technologies, including 445 thousand hectares utilizing drip irrigation.

In the period of 2022-2026, there are plans to increase yield in cotton cultivation and cereal production. Despite a reduction in the overall sown areas, the focus on improving productivity is expected to lead to a more efficient and sustainable agricultural sector.

CONCLUSION

The completed dissertation research unmistakably reveals a notable increase in the consumer base for agro services, driven by the uncertainty and complexity inherent in the agribusiness environment. In this scenario, consulting activities stand out for their emphasis on ongoing interaction, going beyond mere one-time provision of informational services. The focus is on aligning these services with the entrepreneurial partners' aspirations to enhance the competitiveness of both agricultural products and the services offered by agricultural consultants.

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