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THE PROCESS OF GRADUAL DIVERSIFICATION IN REGIONAL AGRICULTURAL SYSTEMS

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Abstract

This article examines the issues of supplying the domestic market of Uzbekistan with high-quality food products by increasing production volumes, as well as strengthening the country's export potential. In addition, special attention is paid to the specialization of regions in fruit and vegetable production and to the integration of producers into fruit and vegetable clusters and cooperatives.

Keywords: Food industry, agriculture, diversification, clustering, modernization.

Introduction

In recent years, Uzbekistan has significantly expanded cultivated areas in order to increase food production, ensure the supply of high-quality products to the domestic market, and strengthen the country's export potential. At the same time, practical measures have been undertaken to specialize districts in fruit and vegetable production and to integrate producers into fruit and vegetable clusters and cooperatives.

As a result, 55 districts across the country were initially specialized in fruit and vegetable cultivation. However, despite the efforts made in this direction, an effective system for fully utilizing the existing potential of the regions has not yet been completely established [1].

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A review of the literature on the topic indicates that, at present, nearly 50 percent of the total cultivated land is allocated to highly productive major grain crops. This situation has led to the dominance of a grain-based agricultural system, resulting in a relatively low level of diversification. Although this pattern has been gradually changing, the area under non-food crops has doubled since the 1960s and has now reached half the area devoted to food crops [2].

The experience of various developing countries confirms that diversification plays a significant role in promoting agricultural development and sustainability [3], [4], [5], [6]. However, some researchers view this issue from a different perspective, regarding diversification as a livelihood-based strategy within farming systems[7]. Therefore, it is important to study in depth the impact of diversification on production and productivity, as the relationship between them is not always positive [8].

Research Methodology

This study applied a comprehensive methodological approach to ensure a scientifically grounded analysis of the gradual diversification of regional agricultural systems. The research employed methods such as economic analysis and synthesis, induction and deduction, comparative analysis, a systems approach, and statistical techniques. In addition, official statistical data, government programs, regulatory and legal documents, and relevant academic studies were examined in order to identify the specific characteristics of the territorial development of agricultural sectors. The analysis focused on production volume, the structure of product types, export potential, and the efficiency of resource use across regions.

To evaluate the socio-economic effectiveness of the diversification process, the dynamics of key economic indicators were examined, while the role of clustering and cooperation mechanisms in promoting regional agricultural development was

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also analyzed. On the basis of the findings, scientific conclusions and practical recommendations were formulated.

Results and Discussion

The specialization of regions demonstrates that this is an effective way to produce competitive agricultural products that meet the demands of global markets. The Food and Agriculture Organization of the United Nations (FAO) emphasizes the need to make agricultural systems more sustainable and integrated at both regional and global levels.

The FAO Regional Conference for Europe is open to all member states in Europe and Central Asia. Uzbekistan's territory, stretching from Namangan to Karakalpakstan and from Tashkent region to Termez on the border with Afghanistan, is vast and diverse, and its food systems also differ significantly across regions. Even before the COVID-19 pandemic, the sustainability of agri-food systems was already a matter of concern. This was associated with rising obesity rates among the population (approximately 23 percent of adults in Europe and 18 percent in Central Asia), the growing prevalence of non-communicable diseases, and, in some countries, increasing levels of undernourishment and micronutrient deficiencies.

The pandemic had a serious impact on nutritional conditions worldwide. Although there was no large-scale food shortage, economic decline and job losses significantly limited people's ability to maintain healthy diets.

Despite the pandemic and quarantine restrictions, regional food supply chains continued to function due to the efforts of farmers. In Europe and Central Asia, many farmers and livestock producers reported covering production costs from their own resources, while 85 percent indicated that their survival depended on government support.

From this perspective, appropriate policies and public-private partnership programs are necessary to meet the needs of food producers and to strengthen the

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resilience of agri-food systems. Today, food security, biodiversity conservation, and digital innovation are among the most pressing issues at the regional level. Digital technologies such as satellite imagery, remote sensors, mobile applications, and blockchain solutions are creating new opportunities for small farmers and consumers. These technologies help improve market connectivity, reduce food losses, manage water resources more effectively, and combat pests and diseases.

The Food and Agriculture Organization of the United Nations (FAO) possesses extensive knowledge and experience in supporting sustainable development worldwide. In 2019, before the pandemic, nearly 690 million people around the world suffered from hunger. According to FAO's latest estimates, this number could increase by an additional 132 million people due to the pandemic. Today, approximately 4.5 billion people depend on agricultural systems to support themselves and their families.

The pandemic clearly demonstrated the importance of the central principle of the 2030 Agenda for Sustainable Development: leaving no one behind. Governments, international organizations, the private sector, civil society, academia, and other stakeholders must work together to address these challenges.

Strong partnerships form the foundation of FAO's initiatives. Through its new partnership strategy with the private sector, FAO aims to support innovation, stimulate investment, mobilize scientific capacity, and monitor progress toward the Sustainable Development Goals. FAO also cooperates with parliaments to improve the legal framework and participate in resource allocation processes.

Before the pandemic, FAO launched the **Hand-in-Hand Initiative**. This initiative is aimed at bringing together donor and recipient countries in pursuit of innovation, investment, institutional transformation, and sustainable rural development. At present, 29 countries are participating in this initiative.

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Table 1. Stages of agricultural system diversification

No.	Name of Measure	Note
1	Sustainable Development Goal	Eradicating all forms of poverty worldwide
2	Zero Hunger	Ending hunger, ensuring food security and nutritious diets, and promoting sustainable agricultural development
3	Health and Well-being	Ensuring healthy lives and well-being for the entire population
4	Climate Change Adaptation	Taking urgent action to combat climate change and its consequences
5	Responsible Consumption and Production	Transitioning to sustainable consumption and production patterns
6	Partnership for Sustainable Development	Promoting international cooperation for sustainable development

In response to the COVID-19 pandemic, the Food and Agriculture Organization of the United Nations (FAO) developed a comprehensive and integrated COVID-19 Response and Recovery Programme aimed at generating impact at the global, regional, and national levels. This programme is aligned with the United Nations' "Build for Change" approach and seeks, in close cooperation with various stakeholders, to mitigate direct socio-economic impacts and strengthen the long-term resilience of food systems and livelihoods.

If we are to recover more rapidly after the COVID-19 pandemic and achieve the Sustainable Development Goals, we must preserve biodiversity, advance food production, and implement the necessary changes in our relationship with nature. The Food and Agriculture Organization of the United Nations (FAO) remains firmly committed to preserving food value chains and emphasizes that the crisis can only be overcome if countries cooperate and maintain free trade. Many countries in the region are working to improve their agricultural and food trade policies.

Achieving these goals requires great responsibility and further reinforces the commitment to providing everyone with nutritious food and completely

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eliminating hunger. The Food and Agriculture Organization of the United Nations (FAO) represents an important step toward fulfilling this commitment. New ideas imply stronger partnerships and new ways of working toward shared goals in production, nutrition, the environment, and life as a whole.

Table 2. Main indicators of the feasibility study for “agricultural diversification and modernization”¹.

No.	Projects	Unit of Measurement	Total	Andijan	Namangan	Fergana
Component I: Financing Agricultural Diversification						
1.	Intensive orchards	hectares	1,050	338	347	365
2.	Greenhouses	hectares	41	10	13	18
3.	Refrigerated storage facilities	tons	24,500	8,000	10,000	6,500
4.	Processing capacity	tons	27,000	9,000	9,000	9,000
5.	Livestock development	head of cattle	3,820	1,290	1,270	1,260
Component II: Modernization of Irrigation Systems						
6.	Irrigation canals	km	50	15	15	20
7.	Irrigation wells	units	15	5	5	5
8.	Electric pump canals	units	15	5	5	5
9.	Electric pump canals	units	15	5	5	5
10.	Agrometeorological stations	units	3	1	1	1
11.	Vertical well systems	units	36	12	12	12
Component III: Development of Knowledge, Innovation, and Agro-Service Systems in Agriculture						
12.	Training of entrepreneurs	number of entrepreneurs	1 000	330	340	330
13.	Introduction of organic and Global GAP standards (annually)	number of enterprises	15	5	5	5
14.	Demonstration fields	hectares	15	5	5	5
15.	Veterinary clinics (including mobile clinics)	units	4	1	2	1

¹ Compiled by the author based on Resolution No. PQ-4830 of the President of the Republic of Uzbekistan dated September 15, 2020, “On Additional Measures for the Implementation of the Project ‘Agricultural Diversification and Modernization’ with the Participation of the International Fund for Agricultural Development.”

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In conclusion, the following measures are considered advisable in the process of agricultural diversification and modernization in Uzbekistan:

- supporting the diversification of activities in order to strengthen cooperation among agricultural producers;
- promoting the development of small businesses in the agricultural sector;
- providing guarantees and compensations for regional fruit and vegetable clusters and cooperatives;
- establishing food industry clusters on the basis of regional agro-service centers and supporting their operation.

References

1. Resolution of the President of the Republic of Uzbekistan PQ-4709 of May 1, 2020 "On additional measures to specialize the territory of the Republic in the cultivation of agricultural products."
2. Vyas, V.S. (1996) Diversification in agriculture: Concept, rationale and approaches. *Indian Journal of Agricultural Economics*, 51(4): 636-643.
3. Petit, M., and Barghouti, S. (1992) Diversification: challenges and opportunities. *Trends in Agricultural Diversification: Regional Perspectives*. World Bank Technical Paper (180).
4. Pingali, P.L., and Rosegrant, M.W. (1995) Agricultural commercialization and diversification: Processes and policies. *Food Policy*, 20(3): 171-185.
5. Birthal, P. S., Roy, D., and Negi, D. S. (2015) Assessing the impact of crop diversification on farm poverty in India. *World Development*, 72: 70-92
6. Birthal, P.S., Joshi, P.K. and Gulati, A. (2007) Vertical coordination in high-value food commodities: Implications for smallholders. In : *Agricultural Diversification and Smallholders in South Asia*, Eds : P.K. Joshi, Ashok Gulati and Ralph Cummings (Jr). Academic Foundation, New Delhi



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<https://eurekaoa.com/index.php/6>

7. Singh, N.P., Kumar, R. and Singh, R.P. (2006) Diversification of Indian agriculture: Composition, determinants and trade implications. *Agricultural Economics Research Review*, 19: 23-26.
8. Hardaker, J.B. (1997) *Guidelines for the Integration of Sustainable Agriculture and Rural Development into Agricultural Policies* (No. 4). Food and Agriculture Organization, Rome.