PERSPECTIVE DIRECTIONS OF RESOURCE POTENTIAL OF AGRICULTURAL PRODUCTION

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Abstract

The article explores the perspective directions for harnessing the resource potential of agricultural production, focusing on the Aragatsotn region. It emphasizes the significance of industrial development alongside specialization and distribution to enhance agricultural productivity. The study reveals the low production levels in rural economies within the Republic, particularly in the Ararat region, attributing their inefficiency to limited production size and resources. The article underscores the challenge of organizing and optimizing the fragmented agricultural production potential to enhance efficiency.

Keywords: resource potential; agricultural production; intensive road-crossing field; scientific organization; profit. *JEL Codes:* Q 10, Q 13

Introduction

The successful enhancement of production efficiency and regulation of food products in the Republic and the Aragatsotn region is influenced by various factors. Previous investigations by Makhmudyan (2007, 2008a, 2008b) have identified the intensive road-crossing field as a crucial aspect for achieving stable and balanced development. This field represents one of the activities with long-term development potential, offering the opportunity to improve living conditions for the population, boost tourism, and overcome economic obstacles and other negative manifestations (Prokopenko & Omelyanenko, 2013; Shcherbachenko et al., 2021; Shvets et al., 2023).

In this article, the author aims to address fundamental challenges for effectively implementing intensive agricultural production in the Aragatsotn region, as proposed by Makhmudyan (2007). Specifically, these challenges involve:

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1. Maximizing the utilization of production potential, including the land fund, agricultural machinery, and irrigation systems.

2. Implementing efficient strategies for the distribution and allocation of work tasks.

By tackling these issues, we seek to promote the effective and sustainable development of agricultural production in the Aragatsotn region.

Results of Research

In the process of intensifying agricultural production, optimizing land use efficiency is of paramount importance. The relative weight of utilized lands in the entire region and the proportion of cultivated land (including valuable land and residential buildings) in the usable land significantly affect agricultural outcomes (Ghazaryan & Ghazaryan, 2005).

Water resources in the Republic and the region are severely limited, posing a primary challenge for effective agricultural utilization. Implementing technical and scientificallydriven measures is critical to improving productivity per unit of land. The region also requires improvement in the management of stony soils through the construction of irrigation systems and land use facilities. Implementing such improvements can facilitate the intensification of land use in the region.

The main challenges concerning land use include (Ghazaryan & Ghazaryan, 1997): Maximizing the restoration and full utilization of arable land.

Expanding crop planting areas and determining their technologically and organizationally justified structure based on market demand.

Regulating the use of natural resources and improving their efficiency.

The development and active operation of the land market can further enhance the efficiency of agricultural land utilization (Belgoum & Benessalah, 2023; Tóth, 2016). In particular, to activate the land market in the Aragatsotn region, developing small and medium enterprises and fostering cooperation within rural communities are deemed essential (Ghukasyan, 1999).

Adopting new agricultural technologies is a crucial requirement for the scientific organization of intensive agricultural industry development. Strengthening the national infrastructure and improving service tools necessitate appropriate investments and extensive capital inputs (Gouda et al., 2016; Kharchenko & Kharchenko, 2018; Krasnorutskyi & Rudenko, 2016).

The privatization process resulted in the division of the new agricultural sector in the Aragatsotn region, with a portion falling under the management of small farms (Ghazaryan, 2003). Presently, the development of information technology infrastructure aligns with the requirements and possibilities of these economies. Energy production in buildings with

limited equipment capacity is a prominent consideration, ensuring information adaptation to the prevailing conditions (Ghazaryan & Ghazaryan, 2005).

Within the framework of a market economy, the introduction and continuous improvement of scientific and technological advancements are pivotal. An allencompassing production intensification project is significant in enhancing the efficiency of the agricultural industry. Research indicates that focused problem-solving approaches yield more effective protection measures.

Modernizing the irrigation system is crucial in increasing agricultural industry efficiency in the Republic and the region. As part of the comprehensive development program for public health improvement, specific measures are planned in the region. Their successful implementation is vital, given the significant reliance on irrigated areas for mixed horticultural production (Ghazaryan, 1998).

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The implementation of the following key activities, as proposed by Makhmudyan (2008a), is essential:

- Improving the technical condition and management structure of irrigation systems.
- Transitioning from mechanical irrigation to a gravity system, reducing energy expenses and expanding information systems.
- Constructing small and medium regulation reservoirs to enable self-gravity irrigation on additional land plots.
- Repairing intra-community and inter-community irrigation networks to reduce water losses and improve supply.

The development and implementation of state policies by the government of the Republic of Armenia, considering the current state of the agricultural and technical sector and external influences, serve as the basis for these reforms (Petsanova, 2022; Pittman et al., 2011). Table 1 outlines the primary goal of agricultural production development in the Aragatsotn region.

While agricultural sector stabilization and growth trends are observed in individual communities during the implementation of reforms (Ghazaryan, 2003), challenges stemming from privatization, de-nationalization, and insufficient organization persist. Difficulties related to product sales and other factors hinder the achievement of satisfactory

results in effectively utilizing productive resources in rural areas and ensuring the supply and services of agricultural production.

Specialization before agrarian reform	vegetable growing, viticulture, fruit growing
	dairy cattle breeding, sheep breeding
Specialization currently	dairy cattle breeding, potato farming fruit growing, grain production
Perspective directions of specialization	dairy cattle breeding, fruit growing, potato
	farming, sheep breeding

Table no. 1 – The proposed ways of specialization of agriculture in the region of Aragatsotn for the period of 2012-2015

Source: built by author based on (Makhmudyan, 2008b)

In one of his scientific works, Doctor of Science and Professor E.S. Ghazaryan highlighted the non-intensification approach as a protective measure for domestic food production in the Republic and the Aragatsotn region. The program implementation follows a specific method (Ghazaryan & Ghazaryan, 2005).

The formation of agricultural production in the region requires adapting to new conditions and achieving improvements at a higher level. It involves conducting research, developing specialization and technology, enhancing practices in operation, handling, and processing, and improving and deepening existing structures. The goal is to establish a comprehensive framework encompassing art, education, and advancements to enhance the overall efficiency and productivity of agricultural production in the region.

Conclusions and Recommendations

The current conditions and the existing circumstances have underscored the pressing need to expand and increase productivity in agricultural production. The importance of further development and growth in this sector cannot be overstated. Enhancing agricultural productivity is essential for meeting the increasing demand for food and holds significant economic and social implications.

In the context of the Aragatsotn region, particular attention should be given to the processing of food products. The findings indicate that formulating practical marketing applications, informed by insights gained through village surveys, can significantly contribute to the growth and success of agricultural production. Understanding consumer preferences, identifying market opportunities, and aligning production with market demand is vital for sustainable market success.

To build upon these conclusions, it is crucial to implement recommendations to drive further the progress and efficiency of agricultural production in the region. By promoting research and development, strengthening marketing strategies, fostering collaboration, improving infrastructure and resource accessibility, enhancing agricultural education and extension services, and ensuring government support and policies, the agricultural sector in the Aragatsotn region can realize its full potential.

Farmers and agricultural stakeholders can unlock new opportunities, optimize productivity, improve product quality, and meet local and global market demands through these measures. Moreover, these efforts can contribute to the socio-economic development of rural communities, creating employment opportunities, improving livelihoods, and fostering sustainable agricultural practices.

It is imperative that all stakeholders, including farmers, researchers, policymakers, and the private sector, collaborate closely and align their efforts to implement these recommendations effectively. With a shared commitment to advancing agricultural production, the Aragatsotn region can overcome challenges, harness its agricultural potential, and contribute to food security, economic growth, and overall development.

The current circumstances and the prevailing situation have emphasized the urgency of expanding and enhancing productivity in agricultural production. When considering the future processing of food products in the Aragatsotn region, it is essential to highlight the valuable insights gained from conducting village surveys and engaging in marketing strategies. These initiatives contribute to increasing production and ultimately lead to market success.

Based on these observations, several recommendations can be made to improve agricultural production in the region further:

- 1. Encourage and support research and development: Continued investment in research and development activities will lead to the discovery of innovative techniques, technologies, and practices that can enhance productivity, quality, and sustainability in agricultural production.
- 2. Strengthen marketing and market-oriented approach: Formulating effective marketing strategies that consider consumer preferences, market trends, and the competitive landscape is crucial. It will help create value-added products, identify niche markets, and establish strong market connections, increasing sales and profitability.

- 3. Promote collaboration and knowledge sharing: Encourage collaboration among farmers, agricultural organizations, research institutions, and government agencies. Facilitate the exchange of knowledge, best practices, and information on advancements in agricultural production techniques. It can be achieved through workshops, training programs, farmer field schools, and online platforms.
- 4. Improve infrastructure and resource access: Enhance rural infrastructure, such as irrigation systems, transportation networks, and storage facilities, to support efficient and timely delivery of agricultural inputs and products. Improve access to credit, technology, and necessary resources for farmers to invest in their operations and adopt modern agricultural practices.
- 5. Foster agricultural education and extension services: Strengthen agricultural education and extension services to provide farmers with the necessary knowledge and skills to adopt sustainable farming practices, modern technologies, and effective management strategies. It will empower farmers to make informed decisions, improve productivity, and adapt to changing market demands.
- 6. Enhance government support and policies: Governments should create an enabling environment for agricultural production by implementing supportive policies, providing financial incentives, and establishing regulations that promote sustainable and inclusive agriculture. It includes ensuring fair market conditions, addressing land tenure issues, and supporting small-scale farmers and rural communities.

By implementing these recommendations, the agricultural sector in the Aragatsotn region can further expand its productivity, improve the quality of food products, enhance market competitiveness, and contribute to the overall development and well-being of rural economies and communities.

REFERENCES

- Belgoum F., Benessalah N. (2023). Start-Up And Patent Degrees Initiative in Algeria: Supporting Business Innovation and Creation Among University Students. *Economics and management*, 10 (1), 21-30. DOI: 10.37708/ep.swu.v11i1.2
- Ghazaryan E. (1998). Scientific and technical policy and the problems of the development of the country. Monograph: Yerevan, "Mkhitar Gosh".
- Ghazaryan E. (2003). The role and place of the agrarian economy of the Republic of Armenia in the development of the market economy. Yerevan, "Hayagitak".

- Ghazaryan S. G., Ghazaryan E. S. (1997). Prospects for the development of agricultural holdings and formation of agricultural holdings in RA. *Economics*, 11-12, 629-635.
- Ghazaryan S. G., Ghazaryan E. S. (2005). Current issues of agrarian science. *Agroscience*, 5-6, 55-61.
- Ghukasyan R. (1999). The modern center of agriculture of Gegharkunik region RA. Proceedings of the scientific-production conference on the topic of "Fundamentals of agricultural production in Gegharkunik region" (series 3rd), Yerevan, 3-7.
- Gouda, S., Kerry, R.G., Das, G., Paramithiotis, S., Shin, H.-S., Patra, J.K. (2016). Revitalization of plant growth promoting rhizobacteria for sustainable development in agriculture. *Microbiological Research*, 206, 131-140.
- Kharchenko, V., Kharchenko, H. (2018). Modelling Of Investment Support of Use of Resource Potential of Agricultural Enterprises. International Scientific Conference on Economic Sciences for Agribusiness and Rural Economy. Proceedings of the 2018 International Scientific Conference - Economic Sciences for Agribusiness and Rural Economy, No. 1, pp. 321-326.
- Krasnorutskyi, O.O., Rudenko, S.V (2016). Methodological foundations of economic estimation of agricultural enterprises production capacity. Scientific bulletin of polissia (2), 140-145.
- Makhmudyan R. J. (2007). The state of food security and its problems in Aragatsotn region. *Agroscience*, 3-4 (82), 108-110.
- Makhmudyan R. J. (2008a). Possibilities of providing the population with self-produced food in Aragatsotn. *Agroscience*, 7-8, (73), 317-322.
- Makhmudyan R. J. (2008b). Employment and monetary income of the population in Aragatsotn region. *Information technologies and management*, 3, 226-238.
- Petsanova, V. (2022). Assessment of the level of conflict in the regional directorate "Agriculture" Blagoevgrad. *Economics and management*, 19 (2), 12-20. DOI: 10.37708/em.swu.v19i2.2
- Pittman, J.K., Dean, A.P., Osundeko, O. (2011). The potential of sustainable algal biofuel production using wastewater resources. *Bioresource Technology*. 102 (1), 17-25.
- Prokopenko, O.V., Omelyanenko, V.A. (2013). Leasing as an instrument for innovative development of agricultural enterprises. *Marketing and Management of Innovations*, (2), 150– 158.
- Shcherbachenko V., Zakharkina L., Zakharkin O., Basantsov I. (2021). Green tourism as innovative direction of households' activities in rural areas // E3S Web Conf. Volume 234. The International Conference on Innovation, Modern Applied Science & Environmental Studies (ICIES2020). DOI: <u>https://doi.org/10.1051/e3sconf/202123400005</u>

- Shvets, N., Shevtsova, H., Pidorycheva, I., Prokopenko, O., Maslosh, O. (2023). Sustainable development of agriculture based on the smart specialization approach: cases of the central and eastern European countries. *Agricultural and Resource Economics*, 9(1), 250–272. <u>https://doi.org/10.51599/are.2023.09.01.12</u>.
- Tóth, G., Hermann, T., Da Silva, M.R., Montanarella, L. (2016). Heavy metals in agricultural soils of the European Union with implications for food safety. *Environment International*, 88, pp. 299-309.