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## The Role of Fruit and Vegetable Clusters in the Development of Agricultural Sectors

**Yuldashev Giyos Turabekovich**

Assistant, Samarkand branch of Tashkent State University of Economics

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**Abstract:** *This article mentions the impact of fruit and vegetable clusters on agricultural sector development. Indicators of productivity and land area are evaluated in relation to regional fruit and vegetable cluster development. The indicators of the clusters of fruit and vegetable production, processing, storage, and sales that are active in the areas are examined. On the basis of the study that has been done, conclusions and suggestions are made.*

**Keywords:** *fruit and vegetable clusters, production, processing, storage.*

**Research methods.** The research uses methods such as economic analysis, statistical grouping, comparative and systematic analysis, monographic observation, recalculation and comparison, and representation in tables and diagrams.

Theoretical and methodological basis of the research. The dissertation includes laws of the Republic of Uzbekistan, decrees, resolutions and works of the President, Resolutions of the Cabinet of Ministers, Ministries of Agriculture and Water Resources, normative and guiding documents of the State Statistics Committee, as well as scientific works of domestic and foreign economists. recommendations are based on the methodological principles used in them.

**Research tasks. In order to achieve this goal, the following tasks have been identified:**

- Clarification of the theoretical and methodological basis for the rational placement and specialization of the regional model of effective agriculture;
- identification of trends in agricultural development in the region;
- to determine the characteristics of the location of agricultural production in the region and the level of specialization in accordance with the market model of management;
- Development of a model for rational location and optimization of specialization of agriculture in the region;
- Improving the system of specialization of rural areas under the principle of "one neighborhood - one product"

- Calculation and determination of the optimal structure of placement and specialization of agricultural production in the districts of Samarkand region on the basis of solving economic and mathematical problems;
- Substantiation of organizational and economic measures for the development of agriculture in Samarkand region and the development of recommendations for the transition to an effective system of network management.

**The scientific novelty** of his research is characterized by the formation of the problem of placing agriculture in the market model and optimizing specialization in the region, improving the "mahalla" system of regional specialization, diversification of agricultural production.

Fruit and vegetable development is regulated by fertilization, hormonal changes in the ovary, changes in gene expression, and biochemical changes that result in the distinctive fruit, which can differ in ontogeny, form, structure, and quality. Various ovarian organs give rise to different fruits. The thalamus of the flower gives rise to pome fruits like apple and pear. Drupes, such as cherries, peaches, plums, and apricots, grow into the fruit encapsulating a single seed from the ovary wall (mesocarp). Berry fruits containing seeds, like tomatoes and grapes, have the ovary wall grow into the fruit's flesh, and the seeds are enclosed in a jelly-like pectinaceous matrix.

Various categories have been used to group edible plants. Using various criteria, such as botanical, agronomic, culinary, and according to how they are managed after harvest, fruits and vegetables have also been categorized in a number of ways. The mature ovary of a plant, which houses its seeds, the covering tissue around the seeds, and any closely associated tissues produced from the floral parts, is referred to as fruit in botanical terminology. This fruit is a botanical that could or might not be edible. However, in the context of food, fruit is the edible portion of a plant that may include the seeds and the tissues that surround them. These tissues may be fleshy, as in the case of berries and cucurbits, or they may be dry, papery, leathery, or woody, as in the case of nuts and legumes. However, in the context of food, the term "vegetable" refers to any component of a plant that is edible, such as the root (in the case of a carrot), tuber (in the case of a potato), bulb (in the case of an onion), stem (in the case of celery), leaf (in the case of a spinach plant), flower bud (in the case of a globe artichoke), or fruit (cucumber, tomato). Fruit is regarded as a subset of vegetables in the latter scenario.

Land areas for independent fruit and vegetable clusters range from 256 to 1,806 hectares. For instance, the "Fayz Bashirbek Yuksalish" LLC (Kattakurgan district) has 256 hectares of land, "Bek Cluster" LLC JV (Mizaabad) has 551 hectares, "Ellikkala Sakhovati" LLC (Ellikkala) and "Vinium Asia" LLC (Parkent) clusters each have 1000 hectares, "Sag Agro" LLC (Gallaorol) has 1201, and Fruit and vegetable clusters make up 24.0% of the total autonomous cluster land area, which is 7309 hectares. One cluster typically has 664.5 hectares of land. In the places where autonomous fruit and vegetable clusters are located, 6-45% of the current fruit and vegetable lands are covered.

There are currently 47 clusters dedicated to fruit and vegetable production around the nation, each with 13.5 thousand hectares of land. The clusters have access to 15.9 thousand tons capacity refrigerated warehouses, 7810 tons sorting capacity, 800 tons calibration capacity, 4 modern laboratories, 119.8 thousand tons fruit and vegetable processing capacity, 23201 tons fruit and vegetable sorting and packing shops, 1046 permanent jobs, and 1,085 seasonal jobs.

As the President pointed out, 20 million seedlings must be grown and exported each year in order to support the growth of horticulture. Due to the great demand for apricot, cherry, peach, sorghum, industrial grape, pomegranate, walnut, and almond seedlings on the global market, planting must begin the next year.

For the rapid and innovative development of fruit and vegetable growing in Uzbekistan, the formation of fruit and vegetable clusters is introduced in two directions [1]: the first direction: a cluster of organization of production of fruit and vegetable products within the framework of a single or interrelated group of enterprises that independently implements the specified process from production to sale of fruit and vegetable products; the second direction: on the basis of guaranteed contracts between agricultural producers, processing enterprises, processors, exporters, who provide planting material, advance payments to agricultural producers for the organization of agricultural work, and purchase the products produced from them at agreed prices. Product cultivation. Cluster of organization of production of fruit and vegetable products forming a continuous chain according to the principle of "preparation - storage - processing - transportation - delivery to the market".

The responsibilities in the cluster include:

- intensive specialization in the production, handling, and distribution of fruit and vegetable goods;
- the development of novel, inventive techniques for producing fruit and vegetable products, including growing, receiving, cleaning, sorting, drying, and processing;
- effective and profitable use of allotted land areas, planting of high-quality, exportable fruit, grape, and vegetable crops in line with international standards, and progressive planting of such crops in place of unpromising and inefficient agricultural products;
- research of cutting-edge international experiences in fruit and vegetable farming, extensive application of them in local and regional contexts, and participation of foreign experts in the area;
- cultivation of agricultural goods geared toward export, growth of their selection and seed production in cluster regions, and collaboration with institutes of higher learning;
- the creation of a system that covers every step in the production of productive fruit, grape, and vegetable crops, as well as the introduction of cutting-edge, resource-saving technology into the processes of cultivating such goods;
- development of new, skilled positions

The majority of vegetable farmers plant a variety of crops, which increases complexity. These can occasionally share traits (e.g., all veggies that are leafy or transplants), but it is typical to encounter producers that produce a variety of crop varieties. This necessitates either a sizable collection of various equipment kinds or a heavy reliance on contractors. Either strategy affects whether integrating various pieces of equipment into a functional system that not only caters to the requirements of the various crops but also supports the production system's long-term sustainability is successful or not. The development of zerotill and controlled traffic farming (CTF), which have considerably increased industry productivity and environmental sustainability, has been made possible by the large-scale grain cropping systems in Australia, Canada, and other locations, despite the sluggish pace of change. A fundamental obstacle to the creation and implementation of comparable production methods in the vegetable sector is the variety of crops and automation.

According to us, the following factors can define the significance and position of fruit and vegetable clusters in the economy:

- avoids the destruction of farmed fruits and vegetables, which has significant economic advantages;
- enhances employment and maximizes societal problem-solving;
- as much financial support as feasible for agriculture;

- raises the population's level of living;
- releases agriculture from ancillary duties (such as storage and shipping);
- boosts the nation's export capacity;
- increases the availability of high-quality fruits and vegetables to the populace throughout the year;
- raises rural residents' skill levels;
- Assures the nation's quality of food security.

**Conclusion.** It is important to take into account the regional natural conditions, geographical characteristics, historically developed and effective economic management mechanisms, existing infrastructure, and historically developed productions in order to create a competitive and innovative economy in the regions of Uzbekistan. These factors form the foundation for the socioeconomic development of the regions.

Agricultural businesses that are a member of the fruit-vegetable cluster have developed competitive advantages, most notably increased flexibility and chances to react swiftly to market developments. Agricultural sector clustering enables increased capital and technology flow and direct investments, which brings new and innovative technologies, intellectual resources, and managerial skills to the area in addition to financial resources.

## References

1. Эшанкулов С., Урдушев Х. Мева-сабзавот кластерида узум ишлаб чиқариш ва сотишни оптималлаштириш масалалари // Тошкент давлат иқтисодиёт университетининг “Иқтисодиёт ва инновацион технологиялар” илмий электрон журнали. №2, май-июнь. 2019. Б. 1–17.
2. Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасида мева-сабзавотчиликни жадал ривожлантиришга доир қўшимча чора-тадбирлар тўғрисида” 2018 йил 29 мартдаги ПФ–5388-сон Фармони.
3. Mirziyoyev Sh.M. Video-vector meeting dedicated to the issues of further development and export of the fruit and vegetable network, ensuring the effective use of the population's farms. 05.11.2019. [www.xabar.uz](http://www.xabar.uz)
4. Data of the Ministry of Agriculture of Uzbekistan.
5. Data of the state tax office of the Republic of Uzbekistan.
6. Rakhmonberdievich, Y. O., & Razzokov, K. K. (2022). Scientific Methods of Optimization of Labor Safety in Economic Sectors. *European Journal of Life Safety and Stability* (2660-9630), 232-237.
7. Rakhmonberdievich, Y. O., & Razzokov, K. K. (2022). Scientific Methods of Analysis to Improve Occupational Safety by the Sanitary and Hygienic Condition of Industrial Premises. *European Journal of Life Safety and Stability* (2660-9630), 1-5.
8. Muawanah, F., Arianto, B., Astuti, D., & Razzokov, K. K. (2022). Direct Learning Model to Improve Students' Mathematics Learning Outcomes: A Classroom Action Research. *Bulletin of Science Education*, 2(1), 27-40.
9. Musaev, M. N. (2021). The relevance and role of teaching the subject "Occupational safety and health" in the undergraduate education system. *European Journal of Life Safety and Stability* (2660-9630), 2, 5-8.