



Ways to Effectively Use the Fruit and Vegetable Cluster to Replenish the Food Market of Uzbekistan

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Abstract: This scientific article identifies ways to increase economic efficiency and existing problems in the development of the food market of Uzbekistan by creating a cluster of fruit and vegetable crops to fill the food market of Uzbekistan, and also developed proposals and recommendations on ways to eliminate them.

Key words: food market, fruit growing, cluster system, agriculture, cost-effective technologies, economic efficiency, management efficiency, localization of production, financial resources, labor resources, labor force.

Introduction. In replenishing the food market in our country, more than 70 percent of economic entities directly or indirectly participate in the creation of the final product in fruit and vegetable clusters, which cover the processes of cultivation, transportation, storage and sale of agricultural products. This composition of fruit and vegetable clusters includes industries that are technologically and economically interconnected and that are directly involved in the process, from the production of agricultural products to delivery to the final consumer. The relationship between the industries involved in this process forms the structure of fruit and vegetable clusters. This structure shows us which network has which share and to what extent they pay attention to which of them in the development processes.

The management of the agricultural market and socio-economic processes taking place in the agricultural sectors require the rational use of resources for scientific and theoretical justification and management of agriculture and the introduction of cost-effective technologies, as well as the implementation of phased reforms in all sectors of production. The transition of the new Uzbekistan to an innovative economy is due to the fact that fruit and vegetable clusters have complex and self-sufficient characteristics compared to other aspects, taking into account these aspects when increasing its economic efficiency, we need to develop cluster management and organizational and economic aspects. It should be noted that as a result of measures implemented in recent years, clusters of fruit and vegetable crops are moving towards intensive development. Therefore, it is important to modernize fruit and vegetable clusters, ensure the effectiveness of measures to attract foreign investment, as well as technical and technological re-equipment of production. In the production of fruits and vegetables, a large number of factors affect the productivity of production.

These include the provision of high-performance resource-saving technologies, the material and technical base, the fact that production processes are established on the basis of intensive and innovative technologies, the degree to which production processes are carried out in a scientifically sound manner, the provision of qualified personnel with modern knowledge and skills, how widely modern management and marketing methods are introduced into economic relations and

management, as well as other factors. Thus, the consolidation into a single system of factors affecting the productivity of production in fruit and vegetable production allows you to really assess the effectiveness. In our opinion, when filling the food market, it is necessary for fruit and vegetable clusters to cooperate in an innovative environment, to be inextricably linked with each industry, to be guaranteed for the emergence of modern clusters.

Analysis of thematic literature. The implementation of rapid economic reforms in fruit and vegetable clusters serves to meet the demand of the population for fruits and vegetables, the development of industry and increase their efficiency. As a result of a radical change in the legal framework of farms, the privatization of state-owned enterprises operating in the old way, the foundation is being laid for the creation of competitive fruit and vegetable clusters that meet the requirements of market relations.

The cluster concept was first introduced by M. Porter, he presented the cluster with its essence of a “diamond of national competitive advantages” over industry and companies. With a number of familiar concepts representing the cluster, namely: “... the following concepts are combined with geographically adjacent interconnected companies and related organizations working in the same field and generally active and complementary groups.” [1]

“An agro cluster is a geographically delimited structure, oriented in an innovative way to proportionality, organized on the basis of industrial and agricultural production, the purpose of which is to ensure competitiveness and increase productivity in the food sector of the territory.” [2]

A.S.Xuxrin, on the other hand, characterizes clusters as a self-organizing structure a meaningful integrative structure resulting from self-organization. [3] Not every integrated structure can also be a cluster. In order to be a cluster, the processes of preparation of manufactured products must be sequentially located productions.

O.A.Anichkina characterizes clusters as an assumption based on the principle of trust between participants, and believes that various controversial issues are resolved from a judicial point of view. [4]

G.B. Kleiner's scientific research highlights the concept of a cluster and its development as follows: “... clusters are a group of organizations (infrastructure, research institutes, higher educational institutions and the same) that are connected by territorial proximity and functional dependence in the field of production and sale of products or in the use of resources.” [5]

Another scientist S.A.Ernst believes that an agro-industrial cluster is a regional, innovation-oriented integrated structure of agro-industrial and agricultural production.[6] In his opinion, the main purpose of this structure is to create a basis for increasing the productivity of the territory in the field of food production and further increasing the advantages of competitiveness.

Scientists of the CIS countries have conducted a number of scientific studies on the organization of fruit and vegetable clusters and the improvement of their management system. In particular, S.V. Keleynikova showed in her research work that producers, suppliers, sound infrastructure, research institutes and consumers are interconnected when managing vegetable clusters. [7]

V.N. And Ivanov, in their research work, developed trends to improve the performance of the enterprise, aimed at improving the efficiency of management of food industry enterprises. [8]

V.V.Paltsev his research work, he developed a methodology for choosing clusters in his direction. In this case, it was shown that clusters, in addition to choosing the right direction when organizing their activities, should determine their main priorities and be evaluated on an industrial scale. [9]

The composition of fruit and vegetable clusters is a complex structure, the organization and management of which is carried out with some difficulty. Therefore, we believe that it is advisable for the state to directly participate in the organization, management of clusters, organization of career tasks and their support.

Research methodology. The article widely uses the methods of scientific study of the cluster system of the food market of our country, comparative comparison, study and economic comparison and

analysis of statistical data, logical thinking, scientific abstraction, analysis and synthesis, induction and deduction.

Analysis and results. The peculiarities of fruit and vegetable production processes when replenishing the food market also require a special approach to evaluating performance indicators. The fact that the final economic results of fruit and vegetable production are determined once after harvesting from each crop creates relativity in assessing the effectiveness of clusters. Because, despite the effective use of existing machinery and equipment in each agrotechnical process, the final financial result when selling products under the influence of various factors is unlikely to be at a low level. In such a situation, the possibility of a truthful assessment of the effectiveness of the use of existing technical and technological potential is reduced.

In many cases, the purchase prices for fruits and vegetables are set in the interests of processing enterprises and procurement organizations, which are considered the only dominant consumers in the market of agricultural products. Manufacturers are faced with a state of delayed payments for the delivered goods. This has a negative impact on farm incomes.

Among the important tasks in the systematic organization and management of fruit and vegetable clusters when replenishing the food market, it is possible to achieve effective management of them as an organizational and economic structure by introducing: the organization of productive seed farms; increasing the volume of fruit and vegetable cultivation and adjusting the assortment to consumer demand; ensuring the organization of the cost of fruit and vegetable products based on modern management methods and principles; the use of effective forms of organization of production and labor in the fruit and vegetable cluster. At the same time, special attention is paid to improving the methods of work, organization and maintenance of workplaces, improvement of working conditions, normalization of work performed.

To solve the problem, it will be necessary to carry out a number of organizational, socio-economic measures, including regulation of economic relations in clusters and management improvement. This process can be carried out in several directions. For example, in the regions of the republic, given the climatic conditions suitable for growing fruits and vegetables, it is necessary to place clusters in accordance with their purpose and develop the processes of their specialization.

In addition to eliminating existing problems, the attention of our government to the field of fruit and vegetable production sets the main goal of introducing new intensive technologies, rational use of existing resources.

The role of natural resources in the management of the food market under the cluster method is separately determined. On the other hand, labor, material equipment, financial resources are the main link in management activities. (figure 1)

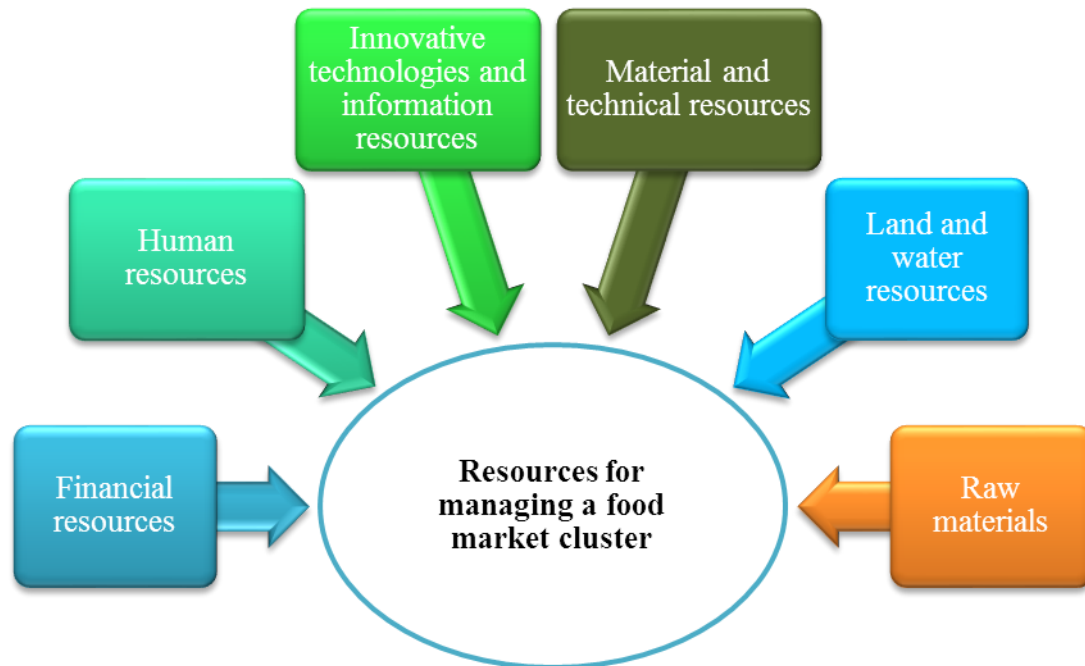


Figure 1. Resources for managing a food market cluster

We have outlined the main directions of the network, taking into account the main aspects of these areas, including;

In the economic sphere: widespread introduction of modern management methods and digital marketing in the network; availability of long-term strategic plans and forecast indicators; direct attraction of foreign investment; application of credit, tax, insurance system based on criteria of economic categories; attraction of qualified employees and high stimulation of their development; introduction of cooperative and cluster relations based on mutual economic, etc. d.

In the social sphere: ensuring the organization and development of complexes in the modern direction defined in the development strategy of the new Uzbekistan; increasing the staff of the system with qualified, modern, high-potential knowledge and skills and linking them to the directions of the industry; widespread introduction of economic management methods. modern management based on foreign models; ensuring direct participation of local authorities;

In the field of maintenance: the formation of a material and technical base capable of meeting international standards; the introduction of water-saving technologies (drip, rain, underground); the penetration of new technologies in the field, a high level of updating existing equipment and equipment; the introduction of modern logistics zones and storage of innovations; effective use of existing land and other resources, etc. d.

In the field of education: the widespread introduction of innovative technologies in the selection and pharmacology of fruit and vegetable crops; the introduction of elements of "smart agriculture" in production processes; the introduction of a robotic system based on innovative technologies; the introduction of a geoenvironmental system for determining the composition of soil, water, air, and a high level of evaluation of methodological indicators; the widespread introduction of diversification, etc. d.

In addition, it is necessary to use a system of indicators based on a separate approach for each industry in assessing its economic efficiency, since fruit and vegetable clusters consist of inextricably linked links, such as production, storage, processing and sale of products.

Studies have shown that when filling the food market, management should also be guided, taking into account important factors for improving economic performance and efficiency of fruit and vegetable clusters.

In this case, all costs are taken into account on the basis of clusters and economic efficiency increases.

In our research work, the productivity indicators of fruit and vegetable products can be calculated using the following formulas. (Table 1)

Table 1. The system of organizational and economic indicators of the fruit and vegetable cluster for filling the food market and ways to identify them.

| № | Indicator name | Calculation methods |
|----|---|--|
| 1. | Economic efficiency of Clusters (K_s) | $K_s = (S/J_x) * 100$ <i>S – net revenue from the sale of products in clusters (thousand sum); J_x – total cluster costs (thousand sum).</i> |
| 2. | Efficiency of using innovative technologies in clusters (K_{in}) | $K_{in} = (I_1 - I_2) / S_i$ <i>$I_1 - I_2$ – implemented innovation and costs of preparation for implementation (thousand sum); S_i – The amount spent on innovative technologies (thousand sum).</i> |
| 3. | Efficiency of growing organic products in clusters (K_{os}) | $K_{os} = (O_{r,d} - O_{r,x}) - (A_{u,d} - A_{u,x})$ <i>$O_{r,d}$ – Income from growing organic products; $O_{r,x}$ – The cost of growing organic products (thousand sum); $A_{u,d}$ – Income from growing products in the traditional way (thousand sum); $A_{u,x}$ – Income from growing products in the traditional way (thousand sum).</i> |
| 4. | Efficiency of attracting investments (K_{in}) | $K_{in} = I_k / K_s$ <i>I_k – The included investments represent the average annual cost of funds (thousand sum).</i> |
| 5. | Efficiency of labor productivity in clusters (K_{mu}) | $K_{mu} = K_s / M_u$ <i>M_u – the average annual number of people employed on farms in clusters.</i> |
| 6. | Efficiency of own funds of fruit and vegetable clusters ($K_{o'z}$) | $K_{o'z} = K_s / O'm$ <i>$O'm$ – the average annual value of its own funds (thousand sum.)</i> |

The economic efficiency of fruit and vegetable production is determined by the following indicators.

- ✓ Performance up to cn/hect;
- ✓ The cost of production of 1 ton of products, sum;
- ✓ Gross profit or income from the harvest from 1 hectare, the amount;
- ✓ Gross income or profit from production costs in the amount of 1 sum, the amount of;
- ✓ Gross income or profit per 1 person per hour, amount;
- ✓ The output of gross income in monetary terms at current prices per 1 hectare, the amount of;
- ✓ Labor productivity (production per 1 person/hour, on average for one year of work);
- ✓ Profitability of production, %.

Full accounting of each cost in the cultivation of fruit and vegetable products has a positive effect on the activity of clusters.

The system of indicators reflecting the effectiveness of clusters to combat fruit sabotage includes six indicators, if they are summarized in accordance with the data of the table under consideration. The advantage of the indicator system is that it comprehensively covers all aspects of the analyzed category or processes and fully expresses its content.

To calculate the amount of rent charged from leased equipment, technologies and services: to determine the average price of fruit and vegetable products on the consumer market last year by territory (region), based on the data of leased equipment and technologies and the area of the land fund (in hectares); the average number of products received by the tenant from one hectare in the previous year; established organizations (state statistics organizations, antimonopoly authorities and business support organizations, etc.).

$$K_{ih} = T * I_{o'} * M_u * I_s / 100$$

In this:

K_{ih} -cluster rental;

T - is the average productivity of one unit of equipment;

$I_{o'}$ - average rental price;

M_u -total serviced area;

I_s - the rate of calculation of rent, as a percentage.

The novelty of the capacity of leased equipment, taken into account separately, also affects the quality of the service provided, which should also be taken into account separately.

Conclusion. The implementation of integration in the form of clusters in agriculture when replenishing the food market has a huge impact on the level of socio-economic development of our country. As a result of the formation of such structures, answers to many economic and social problems are found. In particular, the sale of agricultural products, the possession of new modern high-performance agricultural machinery, the use of modern technologies in the processing and storage processes, the reduction of unemployment in rural areas, the increase in real incomes of the population and the improvement of the standard of living of the population as a whole have been implemented.

Effective implementation of such tasks in front of fruit and vegetable clusters in the future requires a large amount of funds. To do this, it is necessary to increase the scale of attracting foreign investment to them in order to further improve the production of export-oriented agricultural products, processing, finished products that can fully meet international standards in our country. Thanks to the attraction of foreign investments, new modern equipment, equipment and technologies for processing fruit and vegetable products will arrive in the countryside, which will lay the foundation for the creation of many processing and manufacturing enterprises. This, in turn, creates the possibility of new employment of temporarily unemployed workers, the production of fresh, high-quality, competitive, modern products that meet the requirements of the fruit and vegetable industry.

In this case, the activity of fruit and vegetable clusters is fully covered, since this comes from the effectiveness of their activities. Because whatever is involved in the activities of this sphere, everything has efficiency.

Increasing the competitiveness of products created for consumption in fruit and vegetable clusters when filling the food market also requires the implementation of a number of measures. Therefore, in the process of harvesting and picking fruit and vegetable products, when sorting them, it is advisable to take into account the following important product indicators that directly affect the market assessment of the product and the formation of consumer demand:

- the appearance of fruit and vegetable products, the shape corresponding to the types of products, color, degree of ripeness, complications from mechanical influences from the outside;

- great attention should be paid to ensuring that the sizes of fruit and vegetable products are the same. Observations show that the heterogeneity of the product still largely depends on whether fruit and vegetable products are sorted by the same size, and not by large-sized;
- the suitability of fruit and vegetable products for consumption also depends on their chemical composition. Therefore, when minor deviations from the norm are observed during regular studies of the chemical composition of fruits and vegetables, preventive measures should be taken immediately. It should also take into account the specific taste, smell, appearance and other similar indicators of fruits and vegetables.

The necessary conditions for increasing the production of fruit and vegetable products and increasing the economic efficiency of the company "hoda", which attracted innovative technologies for this, make it possible to increase the volume of cultivation on the basis of timely implementation of various agrotechnical measures. At the same time, it is possible to determine the economic efficiency of the proposed measures.

Today, many clusters have also introduced the service sector into their activities and operate on a rental basis. In order to achieve efficiency in this process, it is also necessary to pay special attention to ensuring that tenants are provided with sufficient financial resources.

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