

## Development of Agrologistics Based on the Principles of Marketing Logistics

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### ABSTRACT

*Today, in the context of the development of market relations in Uzbekistan, profound structural changes are taking place in the agricultural sector. Agrologistics is developing on the basis of foreign experience. In particular, agro-logistics centers are being created in a number of regions of the country. Marketing and logistics are equally important in the development of agricultural logistics. Therefore, in this article, the author focuses on the development of agricultural logistics based on the principles of marketing logistics. The article discusses the infrastructure of agricultural logistics, the system of agricultural logistics. He promoted the marketing logistics model in the agrological system.*

**KEYWORDS:** *agrologistics, agrologistics system, agrologistics center, wholesale distribution center, marketing logistics, supply chains, quality management.*

### Introduction

In the Republic of Uzbekistan, large-scale reforms are being carried out in the field of growing, processing and further increasing the export of agricultural products. Among the topical issues are the processing of agricultural products, their standardization and the development of consulting, marketing services in the field of agribusiness, the organization of an intensive agro-industrial system based on research, the introduction of modern technologies in agriculture.

Therefore, in the Republic of Uzbekistan, a system of modern agro-logistics complexes and centers is rapidly being built, which provide services for the collection, transportation, storage, processing, packaging, delivery of agricultural products to the domestic and foreign markets. Agro-logistics centers will have modern warehouses, including freezers and temperature-controlled warehouses for optimal and long-term storage of perishable agricultural products, a transport fleet, calibration, packaging and labeling in accordance with national and international standards to increase the competitiveness of products and export potential. The study of trading houses, dealer activities, market conditions for the organization of product sales is carried out through marketing logistics.

The concept of marketing logistics is considered as an effective organization of the movement of agricultural products and a marketing management system in order to achieve sustainable competitive advantages, improve the quality of service and optimize costs. The implementation of the conceptual rules of marketing logistics will increase profitability by coordinating the actions of the participants in the chain "growing-processing-storage-supply-consumption" of agricultural products, creating added value and optimizing supply costs.

Marketing logistics serves as an important tool in the development of agrologistics in the regions of the country. Therefore, the issue of developing agrologistics based on the principles of marketing

logistics was brought up.

### **Analysis of the Relevant Literature**

An analysis of the relevant literature shows that extensive research has been conducted on the methodological basis of marketing and logistics development in the agricultural sector. In particular, supply chain management, marketing, finance issues in the agro-industrial complex were discussed by Van der Vorst, J.G.A.J., C. Da Silva and J.H. Studied by Trienekens (2007) [7]. Issues of improving logistics capacity under quality control in the supply chain of agricultural products have been studied by Van der Vorst, J. G. A. J., Van Kooten, O. and Luning, P. (2011) [8].

Research on green logistics has been conducted by Dekker, R., Bloemhof, J. and Mallidis, I. (2012) [6]. It is noteworthy that the issues of sustainable development of agrolistics in developing countries have been studied by Van der Vorst, J. G. A. J., & Snels, J. (2014) [10].

Scientists and experts from the CIS countries have also conducted significant research on the organization of the distribution of agricultural products. In their research, Belarusian experts Z.M.Ilina and others have studied the theoretical, methodological and practical aspects of marketing and sales in the field of agricultural products and their processing [2].

While focusing on marketing and logistics, NV Afanaseva (2008) studied marketing as a market-oriented concept, while logistics as a flow-oriented management [1].

Gadjinskiy A.M. (2009) argue that in the current context, it is not possible to move forward on the basis of marketing alone. Success in business can be achieved by meeting the demand identified by marketing in a timely manner through fast and accurate delivery [3].

Golikov E.A. (2007) noted in their research that marketing and logistics are combined to deliver the required amount of goods from producers at the right place at the right time [4]. Mixaylova O.I. There is a direct link between marketing and logistics through "product", "location", and "price (cost)" [5].

The above research shows that the use of "marketing logistics" in the development of agrolistics in Uzbekistan is a topical issue.

### **Research methodology**

At present, the processes of marketing and logistics integration, which form the interaction of two concepts of leadership, are becoming more relevant for developed market relations. Monographic observation, abstract-logical thinking, scientific observation, synthesis, induction and deduction methods were used to cover the use of marketing logistics in the development of agrolistics.

### **Analysis and Results**

Today, the volume of cultivation and processing of agricultural products in Uzbekistan is growing rapidly. Despite the pandemic situation in 2020, the volume of agricultural production in Uzbekistan has maintained a growing trend. The growth rate of agricultural production in 2020 compared to 2019 increased by 102.8%. In other words, agricultural products amounted to 249754.5 billion sum<sup>1</sup>.

A number of practical measures are being taken in Uzbekistan to increase the volume of agricultural production and further increase their exports. Analysis of the experience of developed countries in the cultivation, storage, processing and export of agricultural products, especially fruits and vegetables, shows that this is done through the development of cooperatives and clusters of producers of these products.

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<sup>1</sup> Data of the State Statistics Committee of the Republic of Uzbekistan

In recent years, as a result of the establishment of intensive gardens and greenhouses in Uzbekistan, the volume of fruit and vegetable production is growing. The volume and composition of livestock products are also changing. There is an increase in the volume of agricultural production, but there are a number of problems in organizing their sales. Problems with the agricultural distribution system are especially acute.

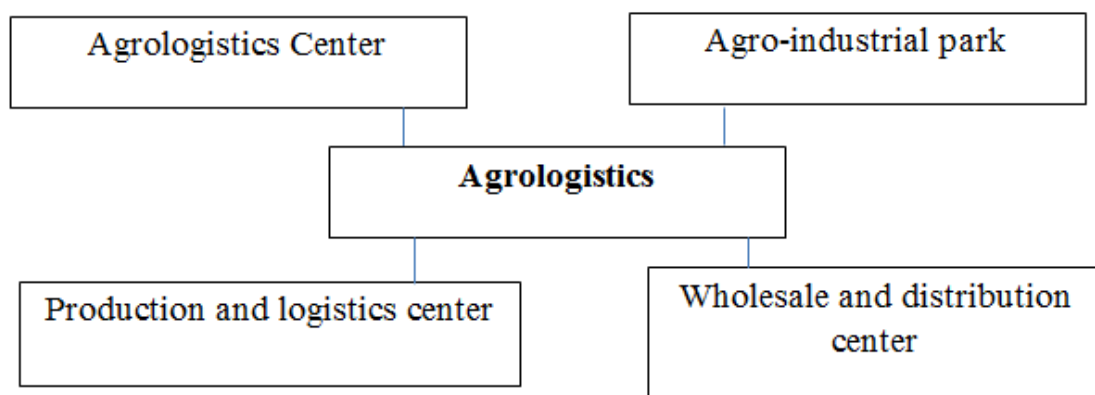
There are a number of disruptions in the agricultural distribution system. The following are the main reasons for this:

- agricultural producers do not study the needs of the market (product range, range, demand, market capacity, stock standards);
- there is no wholesale infrastructure that meets modern requirements for agricultural producers;
- ineffectiveness of the quality control system in the sale of agricultural products;
- high level of product destruction, low level of marketability;
- difficulties in accessing the sales market for farmers, small and medium-sized agricultural producers;
- 60-80 percent of the value of agricultural products falls on the wholesale link. This is 1.5-2 times more than in developed European and Asian countries, where agricultural production and trade are developed.

Due to these problems in the system of distribution of agricultural products, special attention is paid to the rapid development of agro-logistics complex in Uzbekistan. Agrologistics - combines the activities of market entities engaged in the cultivation, storage, processing, packaging, loading, transportation, organization of wholesale trade and delivery to the final consumer of agricultural products.

Development of agrologistics will increase the efficiency of management of all processes in the Republic of Uzbekistan from storage, transportation and delivery of agricultural products to the final consumer. Agrologistics integrates agricultural market participants with all other areas through marketing and logistics: planning, sales, cost control, storage and transportation of finished products and materials, as well as information on the delivery of goods from the place of production to the consumer.

The development of agrologistics is directly related to infrastructure. Agrologistics infrastructure consists of complex objects. The agro-logistics infrastructure will include an agro-logistics center, an agro-industrial park, a production-logistics center and a wholesale-distribution center. (1<sup>st</sup> figure).

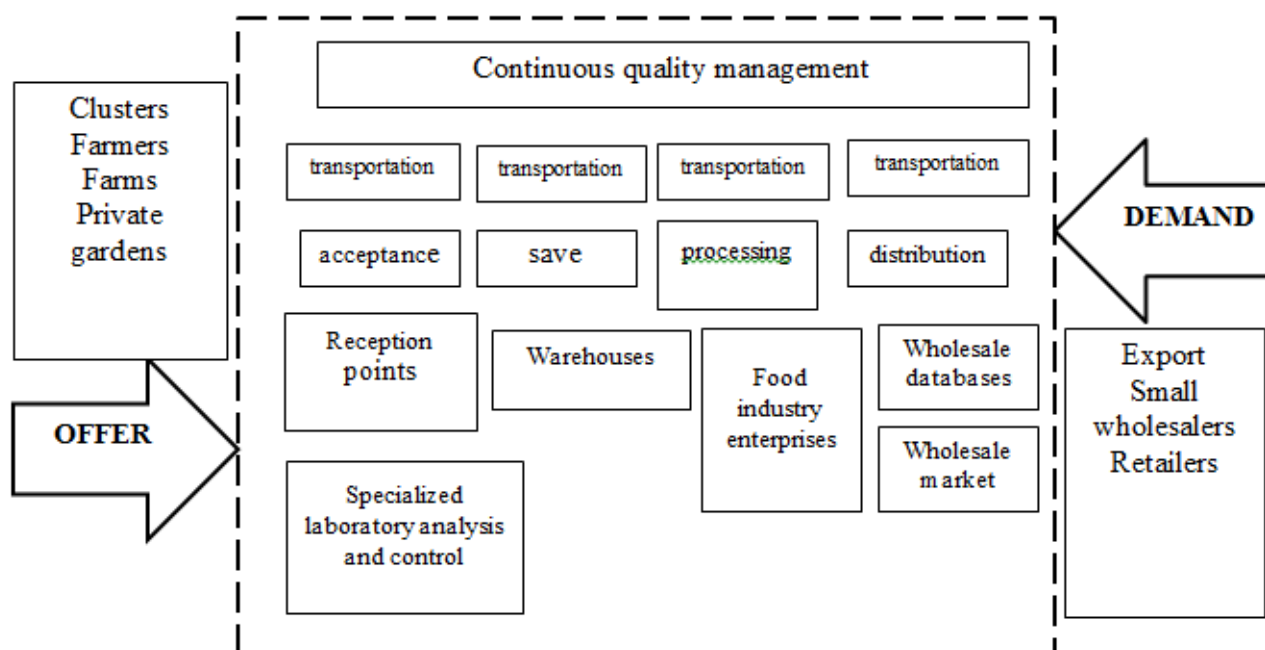


**Figure 1. Complex objects in agro-logistics infrastructure**

Agrologistics - includes the system of cultivation, collection, storage, processing of agricultural products, delivery to retail stores through the system of wholesale redistribution, as well as to the final consumer.

Agrologistics infrastructure allows the study of real and potential demand. Marketing, trade and logistics play a key role in the agrologistics infrastructure. Agrologistics is a set of operations for the management of the supply chain of agricultural products and raw materials in the framework of marketing and logistics functions.

The role of marketing and logistics in the development of agrologistics can also be seen in the expanded agrologistics system (Figure 2). Supply is formed directly on the basis of demand in the consumer market. In this case, the study of end consumers and the preparation of products based on their demand is carried out on the basis of marketing tools. Manufactured products (packaged, branded, brand, range, price calculated) are delivered on time to the right place on the basis of logistics principles.



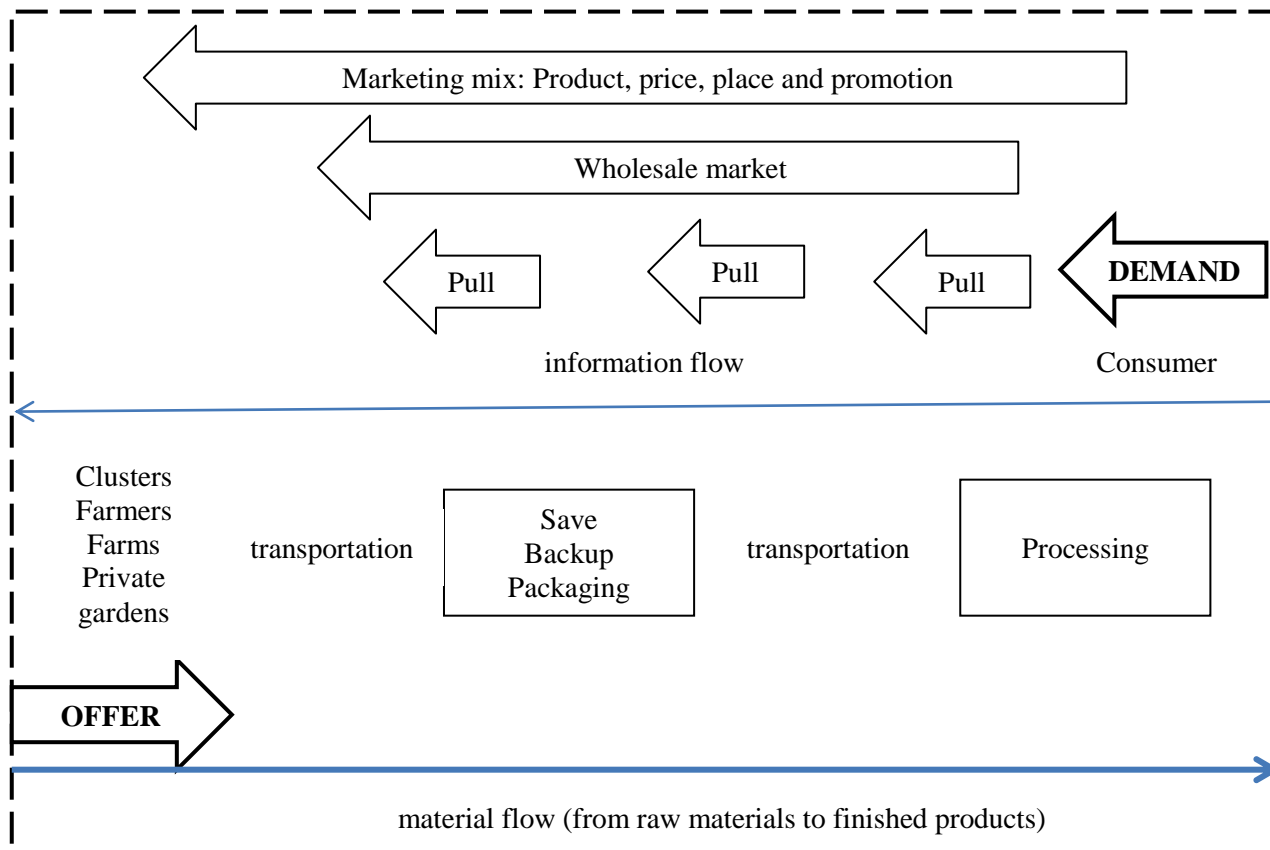
**Figure 2. Agrological system**

Any economic activity is ultimately aimed at maximizing profits by meeting consumer demand. In particular, agrologistics achieves the end result through a high level of customer service, production of agricultural products in accordance with consumer requirements, efficient delivery of finished goods. In this case, the cost and resources should be kept to a minimum.

Marketing and logistics functions are important in agrologistics. This can also be seen in Figures 1 and 2 above. Marketing and logistics together ensure the achievement of the goals set in the agrologistics system. Marketing activities are aimed at identifying consumer demand and offering it the goods it needs. Logistics, on the other hand, involves delivering existing goods on time, in the required quantity and place, and providing a high level of customer service. The evolution of logistics and marketing development has led to the merging of their functions and the consequent emergence of marketing logistics.

Marketing logistics is based on a combination of marketing and logistics ideas. Marketing logistics in the agrological system is aimed at forming a portfolio of orders, planning production assortment based on it, determining the optimal technology of product movement, creating standards for product quality and packaging, eliminating time losses in delivery, efficient use of material and labor resources.

The author has developed a model of development of the agrologistic system based on the principles of marketing logistics as follows (Figure 3).



**Figure 3. A “simple” model of marketing logistics in the agrologistics system.**

The idea of marketing logistics requires significant changes in the agrologistics system. If in traditional marketing logistics functions and systems need to be clearly defined, in marketing logistics the main focus shifts from functions to processes. There will also be a shift from “push” strategies to “pull” strategies.

### Conclusions and Suggestions

Marketing logistics affects the development of the agricultural market. Because marketing logistics provides a high level of supply of goods in the development of agrologistics.

In order to develop agrologistics based on the principles of marketing logistics, it is expedient to do the following:

1. To develop marketing logistics in agrology, it is necessary to establish an integrated business cooperation in the chain "grower-storage-processing-distribution-consumer".
2. Focus on designing the optimal system of product movement in market-oriented supply and distribution chains in the development of business process model of marketing logistics in agrology.

3. The development of marketing logistics in agrology provides the formation of a system of value creation for the consumer by coordinating the functions of the participants of the distribution channels, ensuring the satisfaction of consumer needs through high quality service. Ultimately, the profitability of marketing activities is increased by optimizing the costs of the system of movement of goods.
4. Creating a system based on the coordination of functional elements in the design of business process model of marketing logistics in agrology, ie functional elements of marketing (market research, assortment policy, pricing strategies, shifts, sales promotion) and functional elements of logistics (order management, transport, warehouse, inventory management) reach.

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