

# Scientific and Methodological Basis of Use of Methods of Economic Analysis to Increase the Efficiency of Agriculture

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**Annotation:** This article describes the scientific and methodological basis for the use of methods of economic analysis in improving the efficiency of agriculture. The article describes the practical application of the methods of economic analysis in agriculture on the basis of the requirements of modern economics and the practical aspects of the analysis of statistical reporting indicators on the basis of modern methods.

**Keywords:** agriculture, efficiency, economic analysis, method, method, report, horizontal, vertical, trend, coefficient, indicator.

**Introduction:** The role and importance of economic analysis in the agricultural sector in the process of further development and liberalization of the economy of our country is great. This is due to the fact that the assessment of the level of production efficiency, taking into account the specifics of the industry, identifying factors affecting it and calculating their impact, finding untapped opportunities and ways to overcome existing problems in the industry are carried out with the help of economic analysis. “Analysis - from the Greek “divide”; “dismember”. Analysis is understood as a way of cognition of objects and phenomena of the environment, based on the dismemberment of the whole, into its component parts and their study in interconnection and interdependence. Economic analysis in the broad sense of the word covers the entire economy - from the world economy to individual links of the global economy, it is an integral part in all economic sciences - from economic theory to specific economic sciences” [1].

It will also be possible to implement the most effective management methods based on the results of economic analysis. In particular, as noted by the President Sh.M.Mirziyoyev, “... the most important task is to reform the management system of the agricultural sector, the introduction of advanced technologies for the rational use of land and water resources, ensuring food security” [2].

Proper use of scientific and methodological bases of economic analysis in solving these priorities and their level at the level of modern economic requirements improvement is a topical issue. It is expedient to introduce new techniques and technologies, create innovative products, expand structural changes in order to increase efficiency through radical improvement of the agricultural management system and the formation of a qualitatively new structure. This is because these processes are important factors in ensuring efficiency in the network and require constant analysis of the impact of their dependence on the performance of the operating entities. After all, not only economic factors, but also natural phenomena have a strong influence on the effective management of the activities of entities operating in the agricultural sector in the cause-and-effect relationships,

ranging from simple to complex, from bottom to top, from quantity to quality.

**Main part:** In accordance with the requirements of consistent reforms in our country, the main task of the agricultural sector is to improve the satisfaction of the growing needs of the population in food products, industrial raw materials. Our research also shows that the successful development of many industries, the growth of national income, the increase in the material well-being of the people are directly related to the increase in the production of quality products in agriculture.

Therefore, it is recommended to use analytical methods on a scientific basis in order to search for untapped domestic opportunities in agriculture and to take full advantage of the opportunities of economic analysis in their effective implementation.

The definition of the method of economic analysis has been given by many economists, in particular, Osmolovsky VV, Bakanov MI, Sheremet AD, Vakhobov AV, Ibragimov AT, Ishankulov NF, Pardaev In all the definitions given in the theoretical sources [3,4,5,6] created by M.Q.s, a general similarity is observed. Based on the definitions given in these sources, we can conclude that the method of economic analysis is a systematic, comprehensive study, measurement and generalization of the rates of change, their causes, the interrelationships between them by processing the system of indicators reflected in economic information sources using special methods.

We also recommend taking into account the following specific features of the analysis when using the methods of economic analysis in agricultural practice:

- The analysis examines not only change and development, but also its cause-and-effect relationships. It is therefore important to pay attention to the identification of indicators and the units that affect their change;
- it is possible to predict not only the results of the analyzed indicators in the cause-and-effect relationship, but also their future prospects. In this case for future predictions

it is recommended to check the scientific validity of the plans;

- The analysis clearly shows the interaction and interdependence of the studied indicators. Hence, an important feature of the method of economic analysis is that the specific economic indicator under study is not analyzed separately from other factors, and their interdependence must always be taken into account.

Our research shows that in the agricultural sector, mainly generalized indicators are conducted in the statistical departments of the region using traditional methods of economic analysis (comparison, averages, index, absolute and relative indicators). As a result, the economic analysis of each entity operating in the industry does not meet the requirements of today's modern economy. The effectiveness of agro-clusters organized in the industry directly depends on the volume of agricultural production, costs and quality. Therefore, we consider it expedient to establish economic analysis centers in each agro-cluster, and recommend the use of the following methods of economic analysis, which are widely used in international practice, in particular in the industrial, commodity exchanges and financial markets of our national economy:

- method of reading reports;
- horizontal analysis method;
- method of vertical analysis;
- trend analysis method;
- method of financial ratios.

This is due to the fact that these methods are easy to apply in practice, based on open reporting indicators, performed in computer programs and have a high ability to analyze the results.

The method of reading reports allows to analyze the indicators expressed in the reports on the basis of vivid imagination, logical thinking and practical stages of economic analysis. In this method, it is possible to make a comparative comparison of changes in reporting indicators over several periods.

The horizontal analysis method allows to identify and evaluate the absolute and relative changes of the actual

indicators expressed in the reports in relation to the basic (basic) indicator (plan, last year, average, advanced farms).

The method of vertical analysis allows to study the composition and structure of indicators, which allows to study in depth one or more indicators. When using this method in practice, the amount (value) of the selected indicators is calculated by determining its weight relative to the amount (value) of the total indicator, and the results are summarized analytically.

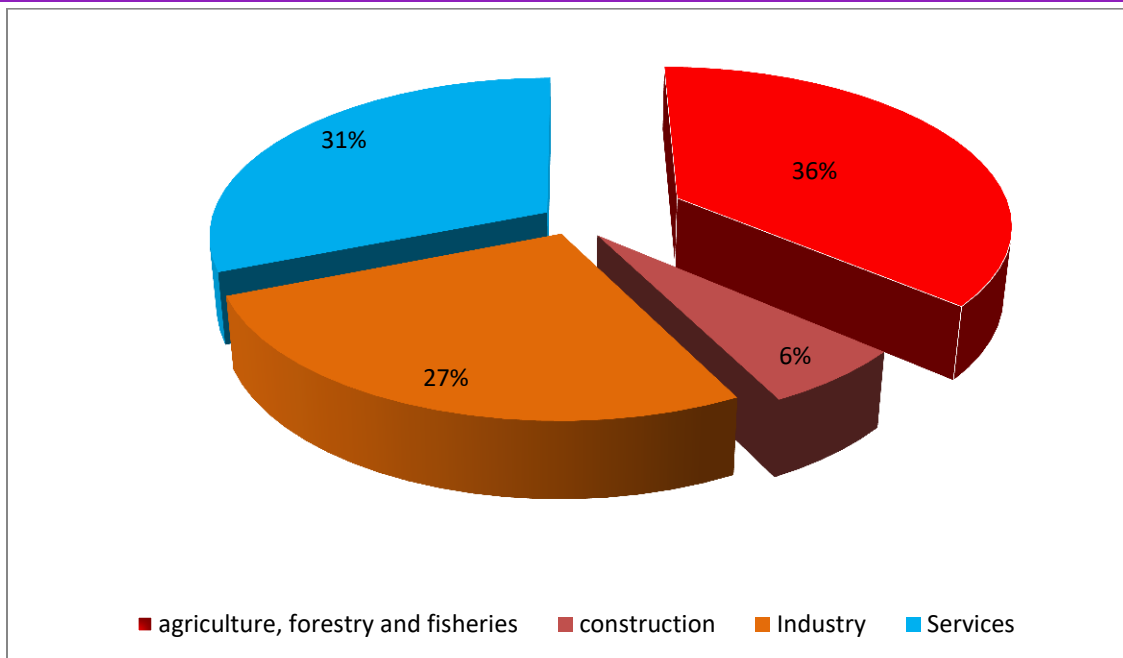
The trend analysis method allows a series of indicators of several years to be determined in absolute and relative changes and to be expressed in simple graphs and diagrams by comparing the following two years in a row with the selected base year.

The method of financial ratios allows you to assess the change in financial statements in ratios, and the use of this method requires attention to the criteria set for each ratio.

Below we present some of the results of our analysis of the main economic indicators of Kashkadarya region in 2019 using the methods recommended above.

It is known that the growth rate of GRP in the region is directly affected by growth rates in all sectors. In particular, when analyzing the data of the regional statistical bulletin using the method of reading economic analysis reports [7], the growth figures observed in 2019 in key sectors of the regional economy served as a key factor in GRP growth. In particular, agriculture, forestry and fisheries - 101.6% (share in GRP - 36.4%), construction - 110.2

% (6.1%), services - 106.7% (26.5%). In terms of growth of the industrial sector, however, there was a decrease and amounted to 94.4% (31.0% of GRP), and these figures can be positively assessed. However, using the vertical analysis method of the report, the share of the agricultural sector in the structure of GRP in the study of the share of the sector was 36.4% (Figure 1) and its economic growth rate was 101.6% in the study period.



**Figure 1. Analysis of the contribution of industries to the growth of GDP in Kashkadarya region in 2019**

According to preliminary data, the total volume of agricultural, forestry and fishery products (services) in the agricultural sector of Kashkadarya region in January-December 2019 amounted to 20417.1 billion soums, or a growth rate of 101.5% compared to the corresponding period of 2018, including agriculture and Livestock and services in these areas - 20044.8 billion soums (101.5%), hunting - 0.2 billion soums (102.5%), forestry in agriculture - 314.2 billion soums (103.2%), in fisheries - 58.9 billion soums (101.3%). These economic indicators were influenced by objective reasons such as natural disasters in the reporting year, the lack of water during the growing season, the level of salinity of agricultural lands. However, the analysis of the report indicators shows that the agricultural sector of the region has untapped internal opportunities to increase production and improve quality. In particular, the volume of forestry products in the region in 2019 will reach 314.2 billion soums, which is 103.2% more than in 2018, while the volume of production in fisheries amounted to 58.9 bln.

soums, which is 101.3% compared to 2018, and these results can be positively assessed. Because these indicators justify the structural changes in the agriculture of Kashkadarya region, and it can be seen in the distribution of agricultural products produced in the region by category of farms (Figure 2). The results of the vertical analysis show that a positive change is also observed in the forms of organization of production in the region. In particular, 73.5% of the subjects of production in the sector are dehqan farms (personal assistants of the population), the increase in employment, based on the increase in family incomes, the share of farms is 24.6%, which indicates that the share of farmland is growing, and the share of agro-clusters in the region's agriculture is growing.

The fact that the smallest share, ie 1.9%, falls on the share of organizations engaged in agricultural activities, indicates the liberalization of production in the sector. (as a percentage of total volume)

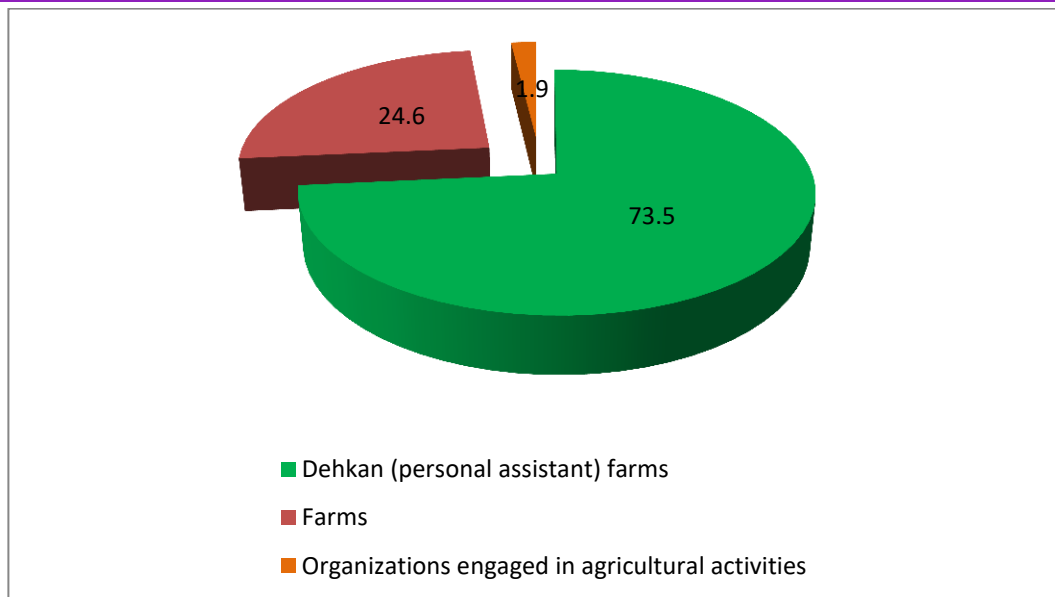


Figure 2. Analysis of the distribution of agricultural products produced in Kashkadarya region in 2019 by economic categories [7].

**Conclusion:** In conclusion, based on the results of the economic analysis, we make the following general recommendations and recommendations for agriculture in the region: improvement of reclamation of arable lands, clearing of open ditches and drainage collectors to reduce soil salinity, use of crop rotation, high productivity and creation of varieties suitable for the climate of the region and continuous selection work, strict adherence to the terms of cultivation of crops during the growing season, use of economical, modern methods of irrigation, drastic reduction of unproductive costs in the network, use of permanent workers to increase labor productivity. It is advisable to establish analytical centers and conduct regular analysis of accounting and reporting indicators.

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