USE OF ECONOMIC AND GEOGRAPHICAL METHODS OF AGRICULTURAL DEVELOPMENT

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Abstract

The article presents the views on the issues of the use of economic and geographical techniques in the large scale research of rural areas. The views of scientists of Western European countries on economic and geographical methods, issues related to the methodology of their use in the field of study, methods of geographic research are discussed and their types and specific examples of their use. At the same time, from the point of view of the system-structure, economic geography and the methodology of two different approaches in the development of the concept and strategy of socio-economic development of regions in the regional economy are also touched upon separately.

Key words: economic geographic methods, system, territory, nature and society, geography, environment, economic zoning, Statistics, Mathematics, extrapolation, SWOT-analysis.

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INTRODUCTION

While the agricultural sector is not serdaromad, first of all, if it satisfies the living exteriors of the population, and secondly, having spent less, the profitability of generating a multi-income is considered a high soca. In the "strategy of actions" of the president of our country, it is planned to give full access to the same for the development of Agriculture in the autumn:

- further strengthening the security of the country's food and agriculture sector, increasing the export potential;
- further optimization of crop areas, increasing the share of types of fodder crops in it;
- creation of new selection varieties of agricultural crops;
- promotion and development of farmer documentation, primarily multi-sectoral farmer documentation;
- effective use of dekdon farm facilities;
- development of modern infrastructure system for the processing, storage, transportation and sale of kishlok products, agrochemistry, financial and other;
- further improvement of land reclamation status of irrigated lands, introduction of modern water and resource-saving agrotechnologies;
- mitigation of the negative impact of global climate change on the development of personality cell is in the sentence kab [1].

It is worth noting that the experience of developed countries in this regard plays an important role in the development of the tarmac to analyze the chukur and to form a system of measures on this basis. For example, if we analyze the urn of ITT in the Japanese kishlok cell, we will witness that kiska has achieved great success in the term. In the 1970s, when the Japanese kupa faced a serious economic strain, attention was paid to the establishment of an independent flame between the experiences of scientific personnel who supply scientific and technical achievements for agriculture. In Japan, in the 21st century, on the basis of the development of biotechnologies of grief, the creation of a "locally viable system" of living organisms, the development of the kinetic abilities of living organisms, the effective use of living organisms, along with the protection of the environment, the

development of the forces of chicarianism and the production of cocktails maksida kishlok farm, the scientific and technical Council of the ministries of Fisheries and forestry established two new scientific research institutes "Institute for the study of Bioresources within the framework of the rural economy" and "Institute for environmental problems of the rural economy" for the implementation of the studies. They consist of work on the collection and storage of kinetic resources for their obligations, selection work on the basis of gene and feather amplification, work on methods of increasing the capacity of photosynthesis of plant organs, issues of Environmental Engineering and reproduction without chickenpox, work on biological measures to protect plants and animals from diseased ligaments, as well as on oil, energy [9].

METHODS

The efficient use of various techniques in the search for vokea-employees in nature and society, justification of their cones and conjunctions related to a particular environment is of great importance. Method-means means, like yul. When weighing up to the head, the method means a means, measures, which will be puddled to achieve this burnt Max. If you have a defined maxad strategy, the ways and means of achieving it (techniques) tactics are considered. F. Bacon, G. Leibniz, R. Dekart, I. Pavlov and other scientists expressed many opinions about the methods, their use. Included G. Leibniz believes that even of the most amazing discoveries in the world, there are important things - knowing these techniques, being able to use them effectively. Famous English scientist F. Bacon explained that the person who owns the method well, although he is disabled, reaches the address - before the goal-from the healthy person who is running [13, 22].

Methods can be attributed to all sciences, or to exactly one science. In geography, as in other sciences, it has its own methods, reflecting its internal characteristics, specific in the study of the environment. Geography, the methods available in the science of nature protection are divided into two large groups, mainly by the majority of scientists [3]. The first is a universal characterization; The second is private Geo-meaningful techniques (Figure 1).
MAIN PART

Basically, it is possible to add experts, questionnaires, sociological studies, energy production and resource cycles, economic zoning, Statistics, Mathematics, extrapolation, SWOT-analysis and others to the methods of serving economic and social geography. How important are the methods of study in geography professor. It can also be seen through the following conditional formulas used by A. Soliev [13]:

Natural geographic studies

\[ I_1 = (I_u + D_u) \times T_y \]

Social geographic studies

\[ I_2 = (I_u + S_m) \times T_y \]

\( I _1 \) - scientific research; \( I _u \) - scientific literature; \( D _u \) - field practice; \( S _m \) - statistical data; methods of \( T _y \) - study. In recent years, as in other sciences, great attention has been paid to small areas or large-scale research in geography.

The reason is that all the reforms, assignments are given from above, their execution is "inside", at the bottom is within reach. The degree of uniqueness of the studies, their practical significance is highly effective in determining the socio-economic development strategy of the regions, in particular, the application of appropriate techniques for the study of small regions [15]

RESULTS AND DISCUSSION

These methods include questionnaires, mapping, SWOT analysis, mathematical (mathematical statistics), modeling. The methods used above in rural areas are as follows: will be briefly discussed. In particular, it is important to study regional analysis with network structure from different sectoral systems to regional systems and vice versa in the use of a system-based approach in economic and social geography.

From the point of view of the system-based approach, two alternative approaches to the development of the concept and strategy of socio-economic development of regions in economic geography and regional economy are methodologically important. First, top down, in accordance with the system structure, the administrative economic district (province) of the main economic district of the republic - is represented by the ward assemblies - of rural (district) economic districts. In the second one, on the contrary. At the same time, a systematic - approach is implemented from the bottom up - coordinating these two approaches at each stage ensures the reality of different developments.

Typically, from top-down, the socioeconomic development strategy of the country implies an internal implementation, while the second approach takes into account the potential of each regional stage. It is well-known that any system is primarily of two types, branch and territorial.

In particular, the socio-economic study of the territorial system of the Lower Amudarya region, its primary components, the Republic of Karakalpakstan and Khozestan region, rural districts and cities of the second level, and the third level - rural citizens' gatherings. Any research object is first and foremost to him. It should be regarded as a separate system, being part of another system, depending on the purpose, and this is a critical issue [9]. Systems are made up of constituents or components, which in turn are elements. The elements are primary and cannot be divided according to the purpose of the study. In the present study, QAP serves as the primary element of the system. At the same time, the system-based method is complex, but its use is very effective. Such analysis is closely connected with the territorial organization of the economy and its branches. Therefore, it is also necessary in the development of regional policy of the country [14].

Methods used. Complex approach is one of the most important, traditional methodological aspects of geography. Complexity requires a comprehensive, approachable approach to the subject of research. Any phenomenon belongs to the well-known geographical scientists LS Berg and VV Dokchaev. Soliev AS also considers this approach to be one of the methodological implications of geography [14].

A Humboldt (the founder of the concept of natural geography) argued that the phenomena in nature and society are linked to natural and economic factors, their full, holistic thinking, and adherence to general geographical laws will lead to the excellence of knowledge and science. Any event or event is usually represented as a territorial set. Consequently, regional complexes should be interpreted on the basis of a comprehensive approach and within the goals set. Complex approach is close to the idea of system-content. However, it is important to look at the issue in the first place, and the second is to systematically approach, i.e., a systematic approach from a managerial point of view. The complex approach has a more "horizontal" appearance, and the system also includes internal and external contacts, and a vertical, that is, "verticality" [6].

A comprehensive and systematic approach is closely linked to mapping, and their generalization enables research to be positive and visual. The card is a small model of the object being studied and, at the same time, a research tool. In this method, "all primary event information is firstly reflected, summarized, and summarized, and then used to draw conclusions, conclusions and practices" (Nazarov M. 1997).

In particular, it is preferable to describe social objects on a map of small territories. Reflections on schools, medical fields,
USE OF ECONOMIC AND GEOGRAPHICAL METHODS OF AGRICULTURAL DEVELOPMENT

The questionnaire method is used primarily to assess living conditions and livelihoods, demographic and infrastructure availability, and to assess the environmental and nosogeo geographic situation, in general, when the statistics are difficult to obtain or in the real situation. Such a method is particularly important when examining the demographic situation in the regions, whether the population is vulnerable to migration, or when it comes to family planning [5].

In the 21st century, the modeling method has a special role in the formation and development of many disciplines.

“Model” - from Latin (modulus) means measurements, samples, norms. This means that modeling can generate measurements, patterns or projections of events, events, and processes. The model is developed in a variety of ways, ranging from simple mathematical formulas to mathematical models that serve as the form of an object (model model), layout, information communication - information model and just economic and social geography.

Mathematical and statistical method of economic and social geography. Statistical data is the raw material for future work. Only by careful study and processing can it be possible to identify and prove the laws, laws, and consequences of events. In economic and social geographical studies, the mathematical and statistical method works well with the calculation of various special coefficients or indices.

Typically, the Spivak coefficient is used to study the correlation between two events or events (double correlations):

\[
Q_r = 1 - \frac{6 \sum (x - y)^2}{N(N^2 - 1)} \quad \text{or} \quad Q_r = 1 - \frac{6 \sum (d^2)}{N(N^2 - 1)}; \quad [1; 5]
\]

where \(Q_r\) is the correlation coefficient, \(d^2\) is the squared difference, and \(N\) is the total number of elements.

Example 1. Using the above formula, it is possible to determine whether there is a correlation between the level of urbanization and birth rates in rural areas of the Lower Amudarya economic district. The situation is as follows:

\[
Q_r = 1 - \frac{6 \sum (d^2)}{N(N^2 - 1)} = 1 - \frac{6 \times 230}{24 \times 24^2 - 1} = 1 - \frac{13980}{24 \times 575} = 1 - \frac{13980}{13824} = -0.01
\]

Hence, there is no significant relationship between urbanization and fertility in this region. However, the experience of different countries of the world shows that in highly urbanized regions the birth rate usually declines. It should be noted that the interdependence between urbanization and the regeneration of the population is not clearly observed in other regions of the country, which means that the process of urbanization has not really reached the top.

Example 2. Finding the correlation between the composition and density of land resources in the regions (regions) of Uzbekistan (Table 1).

The table is based on data from the Statistical Committee of the Republic of Uzbekistan. Finding the relationship between irrigated agriculture and population density:

| Table 1. Correlation between land resource composition and population density in regions of Uzbekistan |
|-----------------------------------------------|
| Regions                      | Uranium in the Republic | Difference | \(d^2\) |
|-------------------------------|--------------------------|------------|--------|
| The Republic of Karakalpakstan | 12                      | 12         | -1     |
| Provinces                     |                           |            |        |
| Andijan                      | 2                        | 1          | 1      |
| Bukhara                      | 11                       | 11         | 0      |
| Jizzakh                      | 10                       | 10         | 0      |
| Kashkadarya                  | 8                        | 9          | -1     |
| Navoi                        | 13                       | 13         | 0      |
| Namangan                     | 5                        | 3          | 2      |
| Samarkand                    | 7                        | 5          | 2      |
| Surkhandarya                 | 9                        | 8          | 1      |
| Syrdarya river               | 1                        | 6          | -5     |
| Tashkent                     | 6                        | 7          | -1     |
| Fergana                      | 3                        | 2          | 1      |
| Khorezm                      | 4                        | 4          | 0      |
| Total:                       | -                        | -          | 0      |

The table is based on data from the Statistical Committee of the Republic of Uzbekistan. Finding the relationship between irrigated agriculture and population density:

\[
Q_y = 1 - \frac{228}{13(13^2 - 1)} = 1 - \frac{228}{2184} = 1 - 0.10 = -0.90
\]

**CONCLUSIONS**

Consequently, the correlation between the share of irrigated land and the population density in the land fund is strong across the regions. The study of sub-regions also requires identification of specialized district networks. In this the formula can be used:

\[
C = \frac{T}{T_2} \times \frac{H}{H_2} = \frac{T \times H_2}{H \times T_2}
\]

C-index of specialization, \(T\) - number of industrial workers in the district studied population, \(H_2\) - regional population.

Specific scientific literature uses indexing methods to determine the degree of specialization, the coefficients of localization, demographic and market specifications [Regional. economics 1998, 104].

The coefficient of localization is defined as follows:

\[
K_r = \frac{T \times S_r \times M}{S_r \times S_m}
\]

\(T_r\) - District Industrial Network; \(M\) - regional industrial sector, \(S_r\) - regional industry, \(S_m\) - regional industry.
Coefficient of industrial production per capita:

\[ K_d = \frac{T_m \times 100 \div A_m \times 100}{T_r \times A_r} \]

\[ T_r, A_r - \text{the number of products of the regional and district branches of the regional branch}, \]

\[ T_m, A_m - \text{the number of districts and regional branches}. \]

With the help of this formula, the coefficient of industrial production of the Shovot district was calculated and obtained the corresponding curvature.

\[ K_d = \frac{T_m \times 100 \div A_m \times 100}{T_r \times A_r} = \frac{94.3 \times 100}{151.1} \div 100 = \frac{1025.1 \times 100}{1683.7} = 624 \times 100 \div 100 = 608.8 \times 100 \div 1.02 \]

In the Khorezm region, the production coefficient of industrial madsuloti per capita in 2015 year was 0.30 (in the District of Khonka - 1.37; in Bogotda - 1.03; in Yangiakr - 0.85; in Yangiazar - 0.76; in Hazorasp - 0.63; in Kushkupir - 0.53; in Khvida - 0.03). This means that the districts of fakat Khonka and Bogot stand above the regional middle level; the lowest index belongs to Khiva.

Market specialization level of industrial sectors [V.V.Kistanov, 1968.]: \( S_i \) = \( g ; \) here is the market specialization level of \( S_i \) - industrial sectors, the share of ut-district or region in the country of the constructed sector (%) , the share of \( R_i \) - district or region in the country's total industrial sector (%).

When assessing the location of service providers, it is required to determine their service level.

\[ R_i = \sqrt{S_i} \]

\( i \)-Service Area; service area (area) of \( S_i \) - i type institutions; number of service facilities of n - i type. In general, the special formulas presented above, mathematical methods provide for a thorough analysis of the socio-economic development of small areas-rural areas, creating convenience in assessing the real situation.

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