



Theoretical and methodological aspects of the economic geographical study of agriculture and the use of land and water resources

Faizullaev Maqsud
Abdullaevich

Karshi State University, Associate Professor of Geography
Department, PhD.

ABSTRACT

Geographical study of agriculture, land and water resources and zoning problems are the methodological basis of any geographical research. In this respect, agrogeographical zoning is the territorial structure and specialization of agriculture. This article is devoted to the analysis of methods and stages of agricultural and land-water resources research.

Keywords:

Agriculture, zoning, territorial organization, agrogeography, natural-historical zoning, natural factor, land, water, specialization.

Introduction: Assessment of the productivity of land-water resource use in agriculture is carried out on the basis of specific principles based on today's demand. It is necessary to assess the effectiveness of the use of land and water resources through economic-ecological criteria in the conditions of market economy, where irrigated farming is carried out, especially in the conditions where special funds are spent on irrigation (for irrigation with the help of pumps).

The objective: It consists in researching the methods and stages of effective use of land and water resources in revealing the economic geographical factors of agricultural development.

The hypothesis: To achieve this goal, the following tasks were defined in the research work:

- clarification of research methods used in scientific research of agriculture, land and water resources;

- Study of natural-historical zoning works carried out in Central Asia and Uzbekistan;

- research of the influence of economic geographical factors in agrogeographical study of regions.

The main part. In the study of agriculture, traditional calculated methods for geography are used. For example, any geographical research must necessarily be conducted on the basis of a historical (retrospective) approach. This method, in particular, gives good results for the analysis and assessment of the development and territorial organization of agriculture as a result of the development of desert areas, the previous and current state of the desert environment. The land development period is divided into certain stages. The most important thing is that each stage of the historical period must differ from other stages in terms of the scale of development, purpose, construction of irrigation infrastructure, settlement and migration of the population. In particular, the development of Mirzachol, Karshi and Surkhan-Sherabad deserts was carried out in the stages

of expansion of cotton fields based on the development of agriculture, construction of irrigation facilities serving to supply the region with water resources, organization of socio-economic infrastructures [2, 6].

At the same time, the development of agriculture, the use of land and water resources is compared with the work done in the republic and neighboring regions (countries), and this represents the essence of the geographical comparison method [8, 11]. In this regard, it is important to study the experiences of the development of our own Mirzachol desert, the Vakhsh Valley of Tajikistan, and the Tajan-Murgob oasis of Turkmenistan, and on this basis, the specific geographical aspects of the development of the Karshi and Surkhan-Sherabad deserts are determined.

By mapping and analyzing data on the use of land and water resources in agriculture, it is possible to provide a sufficiently evidential visual description of the object under study. With their help, it is possible to collect and systematize information about existing agriculture by recording it on a map in a fixed territorial section, which, in turn, allows any description of agriculture to be compared with the natural conditions in the appropriate part of the territory, to compare the definition of agriculture with the types of natural environment. creates [1, 4, 5].

In particular, in the desert regions of Uzbekistan, agricultural sectors - cotton growing, grain growing, vegetable growing, policing, viticulture, horticulture, along with the main specialized branches of animal husbandry are formed. When drawing up large-scale series maps designed for intensive development of agriculture on the basis of effective use of land and water resources, the main attention should be paid to specific regional features of this field.

Determining the natural-agrarian potential of the territories is also important in agrogeographic research. It is known that natural conditions and resources have a limiting effect on the development and location of agriculture. Some of these factors (water, physical and chemical properties of the soil) can be controlled or changed by anthropogenic means, while others (climate, topography)

cannot be controlled. Also, the lack of a certain resource, not a shortage, but an excess, a high concentration (water, heat) also sometimes limits the development and settlement of agriculture. The reason is that favorable conditions for a certain branch of agriculture are naturally unfavorable for other branches, for example, favorable conditions for pastoralism or dry farming are clearly unsuitable for irrigated farming. Therefore, the assessment of natural-agrarian potential is considered a difficult and complex issue, and it is necessary to develop assessment indicators and methodology separately for each territorial object and agricultural network. Yu.I.Ahmadaliev carried out this the natural-agrarian potential assessment on the example of Fergana Valley. Such evaluation works can be used in the assessment of the natural-agrarian potential of land and water resources for the agricultural sectors of Southern Uzbekistan [1, 9, 10].

Of course, a characteristic aspect of any geographical research is the use of the regionalization method. In particular, the economic zoning of regions, taking into account aspects of the use of land and water resources in agriculture, is of practical importance. The most ancient direction of such zoning is related to the settlement of agriculture. Because the features of territorial organization of agriculture, i.e. its areality (fieldness) are clearly visible compared to other sectors of the macroeconomics. Therefore, the history of regional economy, economic geography is largely related to the history of regionalization and settlement of agriculture [3, 12, 13].

The use of land and water resources in our republic has been planned for more than 50 years, with a specific goal in mind, the location and specialization of agricultural sectors was more influenced by the state's policy in the agrarian sphere than by the processes specific to the region. In this regard, A. N. Rakitnikov emphasized the issues of zoning, which are of fundamental importance for economic geography in the development of agriculture and territorial organization in the conditions of the former Union [3]. At this point, it is worth noting that in Uzbekistan, scientific work in this

regard began with the placement and zoning of this network (V.M. Chetirkin, K.N. Bedrintsev, N.G. Tsapenko, Z.M. Akramov, K.I. Lapkin, Q.N. Abirgulov, R.A. Hodiev and others).

In the analysis and research of the economic region and its material basis - territorial production complexes, it is preferable to use the idea of energy production cycles of N.N. Kolosovsky [2]. With its help, it is possible to draw a conclusion about the completeness of the cycles in rayon production, the weakness of which technological chain (stage) or its absence. The obtained results allow modernization and forecasting of the regional economy. From this point of view, the hydromelioration agro-industrial cycle formed in the regions of Uzbekistan is analyzed.

Similarly, it is useful to use the SWOT-analysis method to determine the competitiveness of the designated regions, their comparative advantage (strength). In this, the strong, weak (weak), opportunities and threats aspects of the regions are compared and their prospects are determined on this basis. It should be recognized that by solving the weak side or "costly" factors (problems) according to Heckscher and Olins, their weakness can be eliminated or transferred to strong (positive) sides [8, 9, 10].

The method of statistics helps to develop skills about the most common indicators: growth, increase, percentage, per thousand, index, coefficient, grouping, etc. Also, this method is useful in determining indicators such as various tables, graphs or drawings, population density, demographic capacity, average distance. In this regard, statistics are used together with mathematical methods, therefore, this method is sometimes called the mathematical-statistical method. The statistical method includes complex and responsible processes such as collecting all data from various sources, summarizing them, processing and analyzing them. In particular, it is of great importance to create statistical tables, graphs and diagrams at a readable level with a concise and rich content [3, 7].

The significance of the questionnaire and sociological research method is incomparable in the research and true evaluation of the living

conditions and lifestyle of the population, the real situation of providing various services to it, social and environmental problems. To do this, first the goals and tasks of the work are clearly defined, and then a well-thought-out questionnaire or questionnaire is drawn up. The series of questions should not be too short or too complicated, but should be understandable for those who answer them (respondents). At the same time, it is useful in processing the questionnaires that the response of the respondents to the given questions should be as simple, concise and clear as possible. Naturally, when studying the given problem, it is not possible to ask everyone (if the researched object is a majority) and fill out the answer sheet. Therefore, it is enough to ask a certain part of the population: one-third, one-third, one-fourth, one-fifth, one-tenth, and finally one-twenty. However, the percentage of the respondents, their answers must correspond to the correct assessment of the general and "average" state of the researched phenomenon [7, 11].

A relatively easy and simple method of extrapolation is used to forecast events and realities. In this method, the future, the perspective ("perspective") is derived from the past (retrospective) and the present situation. In this context, it is also referred to as a genetic, historical method. In the extrapolation method, it is assumed that the situation and process of the recent past will be preserved in the future. In this case, it is desirable that the period of the future, that is, the prediction (prognosis), corresponds as much as possible to the period of the past. Periodic indicators of the past and the future are derived from the nature of the phenomenon being studied, its cycle of regeneration. For example, if geographic forecasts are made by extrapolation for a period of 15-20 years, their reality and validity will be much higher [3, 7, 11].

Conclusion. Agriculture as the main historical source or root of economic (social) geography has its own characteristics of development and territorial organization. The seasonality of this field, the forms of social organization of production in agriculture - specific aspects of

incorporation, specialization, cooperation and combination, especially the forms of territorial organization related to its incorporation determine the theoretical and methodological aspects of studying this field. In this regard, especially complex (complex) and systematic (systemic) approaches have a great role. The development and territorial organization of agricultural industries, the study of the factors affecting it, first of all, requires a complex and systematic approach.

It is known that land is the natural basis of all wealth, socio-economic development of any country or region. But not only the land, but its upper fertile layer, or rather the soil, is of great importance for the settlement of the population and the development of economic sectors. It is the soil, along with water (moisture), that acts as an important agro-climatic resource. The availability of water reserves provides an opportunity for the development of irrigated agriculture in areas with fertile soil.

References:

1. Ахмадалиев Ю.И. Ер ресурсларидан фойдаланиш геоэкологияси. – Т: Fan va texnologiya, 2014. – 340 б.
2. Колосовский Н.Н. Избранные труды. – Смоленск: Ойкумена, 2006. – 336 с.
3. Ракитников А.Н. Избранные труды – Под ред. В.Г.Крючкова. – Смоленск: Ойкумена, 2003. – 472 с.
4. Салиев А.А., Файзуллаев М.А. Социально-экономическое развитие Республики Узбекистан за годы независимости. – Социально-экономическая география: Вестник ассоциации Российских географов-обществоведов. №2. Ростов-на-Дону, 2013. – 131-143 с.
5. Салиев А.А., Файзуллаев М.А. Формирование природно-хозяйственных систем Каршинской степи. – Проблемы освоение пустынь. №1-2. Ашхабад, 2010 г. – 10-13 с.
6. Саушкин Ю.Г. Географическое мышление. – Смоленск: Ойкумена, 2011. – 218 с.
7. Солиев А. Иқтисодий география:

- назария, методика ва амалиёт. – Тошкент: Камалак, 2013. – 184 б.
8. Солиев А. Ўзбекистон иқтисодий ва ижтимоий географияси. – Т.: Университет, 2014. – 404 б.
 9. Файзуллаев М.А. Историко-географические аспекты освоения новых земель сельскохозяйственного назначения (на примере Узбекистана). - Электронное научно-практическое периодическое издание. Экономика и социум. №3 (94), 2022. – 908-914 с.
 10. Файзуллаев М.А. Қишлоқ хўжалигини иқтисодий географик жиҳатдан районлаштириш масалалари.- Central asian research journal for interdisciplinary studies (carjis). Volume 2 | issue 1 | 2022. – P. 328-333
 11. Хрушев Н.Т. Избранные труды. – Смоленск: Ойкумена, 2001. – 320 с.
 12. Navotova D.I. Theoretical and methodological aspects of resources of land resources in agriculture. - Academia: An International Multidisciplinary Research Journal. November, 2022. – P. 40-44
 13. Faizullaev M.A. Characteristics of agriculture in Uzbekistan in the years of independence. - European science review. №3-4. Austriya, 2015. – P. 67-69