



WAYS OF PROMOTING AND DEVELOPING AGRICULTURE IN MOUNTAIN AND MOUNTAIN REGIONS

Abdulkhaeva Gulshan Makhmudovna

Associate Professor of Tashkent State University of Economics. Tashkent, Uzbekistan.

ORCID - 0000-0003-0555-4531

ANNOTATION

The article describes an economic and statistical analysis and promising directions for providing domestic markets with high-quality and environmentally friendly products and increasing their export potential by increasing agricultural production in mountainous and foothill areas. Considerations are presented in support of the specialization of the cultivation of agricultural products in this territory. The author's scientific proposals and practical recommendations are also given regarding the ways of specialization and development of agriculture in mountainous and foothill areas.

KEY WORDS: agriculture, agricultural products, gross domestic product, gross regional product, farming, animal husbandry, specialization, investments, regional economy, economic and statistical analysis, agrarian reforms, socio-economic processes.

1. INTRODUCTION

In the agrarian environment of our republic, it is considered as an important task to support the specialization of regions for the cultivation of certain types of agricultural products, taking into account the natural climate and soil conditions, and a number of measures are being implemented to ensure its implementation [1].

Mountain and sub-mountain regions have almost all production possibilities for growing food products such as fruits, grapes, potatoes, vegetables, meat and meat, which can meet the demand of not only domestic but also foreign markets. One of the ways to activate these opportunities is to make the mountain and sub-mountain regions specialized in the cultivation of certain types of agricultural products by introducing a system of rational and balanced use of agricultural resources.

The purpose of this system is to provide our domestic markets with high-quality and environmentally friendly products by increasing the volume of food production in mountain and sub-mountain areas, and to increase their export potential.

The organizational structure of such a system consists of clusters, cooperatives, farmers and peasant farms specializing in the cultivation of fruit, including traditional and non-traditional tropical fruits, grapes, vegetables, cattle and sheep.

According to our research, mountain and sub-mountain agriculture of Curkhondarya region differs from other mountain and sub-mountain regions of our country in some aspects in terms of its distribution and productivity, the types of soil formed in the regions and zones of high altitudes showing high soil-geographical laws due to its geographical location and hydrometric regime. In the organization of the agricultural management system, the organizational-economic possibility and capacity of the forms of economic management, and the development of this or that sector, are different.

At the same time, it is an urgent and important issue to develop scientific proposals and practical recommendations on the ways of industrialization and development of agriculture in mountain and sub-



mountain regions, as well as a comprehensive statistical analysis of agricultural production processes in these regions, problems in the development of the agrarian sector in these regions and their solutions. .

2. PROBLEM STATEMENT

The retrospective analysis of the state of development of mountain and sub-mountain agriculture shows that most of the researches during the last half-century are devoted to agro-technological methods of agricultural crops grown in mountain and sub-mountain regions, and the methods of recurc and factor influencers used in this process, and the economic methods are very narrow and narrow in scope. illuminated. Such a situation can be observed in the researches focused on livestock breeds, in which the breed and its genetic fertility and breeding methods were studied, etc. Researches in another direction are devoted to the problems of recursion and recursion of the territory.

However, most of the research in the study of regions has been conducted in certain directions. In this process, hydrologists studied the formation and use of water resources in mountain and sub-mountain areas, geologists studied minerals, biologists studied the biodiversity and ecological status of the regions, metrology scientists studied temperature, rainfall and conditions related to these processes. Scientists-practitioners dealing with medicinal herbs and medicinal crops have geographically studied the landscapes of such herbs and crops, pastoralists the fertility level of pastures and the problems of increasing it, foresters the problems of forest reclamation and afforestation, representatives of the field of economic geography geographically studied the mountainous regions of Uzbekistan [2]. The commonality of this and other studies is that in all of them, the object of research is the mountain and sub-mountain region.

According to our research, not only our republic, but also the countries of the Commonwealth of Independent States have different views on mountain and sub-mountain regions in scientific and literary literature. A group of scientists of the republic, by zoning these areas, expressed their opinions on determining the conditions and resources of labor and the potential of agricultural production [3].

Another group of scientists believes that the division of mountain and sub-mountain areas into regions by height is necessary for the development of programs for the socio-economic development of regions, the mechanism of implementation of activities within the framework of the program is necessary for the operation of all economic units, including agricultural enterprises, regardless of the form of ownership. created the conditions and stated that the use of resources serves to increase camaraderie [4,5] others approved that it is important in increasing agricultural specialization and camaraderie [6].

G.E. Avakiyan, thinking about the mountainous regions, emphasized that the differences in the status, nature and conditions of agricultural production in the highlands and mountainous regions are important factors in the formation of the system of mountain and sub-mountainous agricultural production [7].

Also, there is no consensus on the definition of "agriculture of mountain and sub-mountain areas", its stability and structural value.

Macalan, Tajik scientist K.N. Fayzullaeva "When we say "mountain agriculture" or "mountain areas" (which differ from valley agriculture), which are considered a separate part of the national economy, we mean the development of "mountain farming" and "mountain cattle breeding" in difficult conditions. we understand various forms of economic activity organized at a high level by incon"[8], he says.

According to Mirzon Nekruz Mirzon, eca "sustainable development of mountain agriculture means stability in terms of financial and technological formation, increasing production, increasing productivity, as well as ensuring harmonious formation taking into account the availability of natural resources" [9].

P.G.Abdulmanapov and M.A.Galbatsdibirova studied the social and economic development of mountainous regions and the demographic processes in these regions and their unique dynamics[10].

Appreciating the scientific-theoretical and practical importance of these studies, we considered it permissible to emphasize the following: firstly, the above-mentioned scientists, taking into account the territorial classification



of mountains as high-altitude, mountainous, pact-mountainous and sub-mountainous, compared to the sea level, all socio-economic evaluated the processes as a condition for "mountainous regions"; secondly, their researches are focused on issues related to canoe farming in these regions and its impact on socio-economic aspects, and the agriculture of mountain areas and its role in the economy of the region have not been adequately studied; thirdly, as in many studies devoted to the problems of mountainous regions in our republic, these studies also did not study the form of agricultural management in mountainous regions and its capabilities, camaraderie and prospects.

3. THE METHOD OF THE RESEARCH

Methods such as scientific observation, summarizing indicators, statistical grouping, expert assessment, dynamic series, statistical tables and graphs, and questionnaires were widely used .

The database was used to describe the economic, financial, and production development of agriculture in mountain and sub-mountain regions, as well as the "scientifically and practically integrated levels of positive or negative impact on the scale of the network."

4. MATERIALS AND RESULTS

Mountain and sub-mountain agriculture of Curkhondarya region differs from other mountain and sub-mountain regions of our country in some respects in terms of soil types and its spread and fertility level formed in the altitude regions and zones showing strong soil-geographical regularities due to its geographical location and hydrometric regime. organization of the management system, the organizational-economic possibility and competence of the forms of economic management, and the development of this or that branch differ.

Therefore, in order to focus on the specialization and support of agriculture in mountain and sub-mountain areas, indicators such as soil composition and productivity, degree of degradation, rainfall and camera temperature collector are analyzed and compared, and they are updated accordingly .

According to the analysis, there are 12 types of soil types used in mountain and sub-mountain agriculture of Kurkhondarya region. 27.1% of them are light brown-meadow steppe and brown soils, 37.1% are typical gray and light gray soils.

In terms of soil composition, 66.4 percent of the land used in mountain and sub-mountain agriculture is heavy and medium sandy soil, the soil erosion index is only 0.15 (average erosion index - 0.06 and strong erosion index - 0.09). (tables 1 and 2).

Table 1.The mechanical composition of the soils of alluvial lands used in agriculture in mountain and sub-mountain areas, in percent of the total, 2022 years

Table with 6 columns: Areas, Broadcast lands, in percent, to a thousand, Heavy sand, Medium kumok, Light custard, Kumok. It contains data for various regions and provinces.

Note: the sum is expressed as a percentage of the total, and the denominator is thousand.



Table 2. The degree of erosion of the soils of the cultivated lands used in agriculture in mountain and sub-mountain areas is, 2022 years

| Areas | Irradiated lands, ha | Not washed | Under-washed | Medium washed | Strongly washed |
|-------------------------------|----------------------|------------|--------------|---------------|-----------------|
| until _ and he took it hududs | 100 | 77.0 | 6.7 | 6.4 | 9.1 |
| | 244,9 _ | 188,7 _ | 16.5 | 15.8 | 22.4 |
| Areas of elevation | 100 | 96.1 | 2.5 | 1.5 | - |
| | 73 , 0 | 70.2 | 1.6 | 1.1 | _ |
| Province according to total | 100 | 81.6 | 8 | 6.1 | 7.0 |
| | 317.9 | 259.4 | 25.4 | 1.9 | 22.4 |

Note: the sum is expressed as a percentage of the total, and the denominator is thousand.

Also, mountain brown and dark hairy, typical and light hairy gray soils (in pre-mountain and pre-mountain terrains) are distributed in mountain and sub-mountain agriculture of Curkhondarya region, the amount of humus in the upper horizon of the soil is 5-7% on the northern slopes, 2-3% on the southern slopes. It is explained by the fact that the soil has been washed away from carbonates.

One of the important criteria that should be taken into account in the development of mountain and sub-mountain agriculture is the salinity level of the cultivated lands.

Today, 81.4% of the arable land used for agriculture in the mountainous regions is not saline, this indicator is 43.2% in the mountainous regions, and only 13.2% in the plains (Table 3).

Table 3. The degree of salinity of the irrigated lands used in agriculture in mountain and sub-mountain regions, in percentage of the total, 2022 y.

| Areas | Broadcast lands, as a percentage of the total | Degree of salinity | | | |
|-------------|---|--------------------|----------------|----------|--------|
| | | Unsalted | You are strong | average, | Strong |
| Mountainous | 100 | 81.4 | 17.3 | 0.8 | 0.5 |
| Togoldi | 100 | 43.2 | 31.1 | 14.2 | 11.5 |
| Smoothness | 100 | 13.2 | 44.4 | 30.5 | 11.9 |
| By province | 100 | 73.0 | 21.1 | 4.2 | 1.7 |

That is, 46.0% of the irrigated land used in rural and mountainous agriculture is not saline. This is 48.5% of the total non-saline land in the region.

According to the analysis, during the last decades, the share of moderately and strongly saline lands shows a decreasing trend, both in absolute terms and in relative terms. Therefore, the above-mentioned situation and this situation should be taken into account in the development of mountain and sub-mountain agriculture.

One of the next important factors that should be taken into account in the development of mountain and sub-mountain agriculture is the relief of the agricultural area. Erosion, cel, ravine migration, wide and deep branching of riverbeds, as well as erosion of mountain rocks influence the formation of relief in mountain and sub-mountain areas. Taking into account the fact that there are tree groves, shrubs, semi-shrubs, ephemerals, ephemerides and large trees in the regions of the region, which are formed according to the height of the topography of the agricultural sector and areas - mountainous (hills), mountain and high mountain regions, fruit and horticulture and viticulture and pasture are used in these areas. in accordance with the development of animal husbandry and sheep breeding.

Mountain and mountain agriculture is characterized by small-scale plow farming and mountain irrigation, "terrace" ("terracnoe zemledelie") and dry farming, medicinal and medicinal horticulture, mountain horticulture, viticulture and viticulture, and the development of mountain and mountain pasture livestock.

Taking into account the conditions and opportunities created by our government at the national level regarding the use of pastures during the last 2-3 years, we believe that it is necessary to develop mountain and sub-



mountainous pasture livestock by introducing the "smart pasture" system and in the form of "pasture user cooperatives" management .

Research shows that global climate change and deterioration of the ecological situation have become a factor determining not only the stability of agricultural production, but also the future development trends of this field and its industries. Today, regional agriculture serves as both an acoc and a factor in determining the structure of the network and its diversification directions.

Global climate change, the weather and climate conditions observed today and expected in the future as a result of it, innovation and scientific achievements as well as economy and camaraderie provide a solution to the ultimate task of providing the population with food products and ensuring the food security of our country. In determining the ways of formation and development of networks, along with invective activity, a set of indicators such as the amount of precipitation in the area and the number of rainy days, humidity level, camera temperature collector and average temperature should serve as acoc.

In accordance with the unique natural and climatic conditions of the mountain and sub-mountainous regions, the main directions of agricultural development and its sustainable development are the cultivation of grain, potatoes, medicinal plants, non-traditional tropical fruits in horticulture, i.e. walnuts, almonds, which are in great demand for export. , picta, eca in animal husbandry, cattle breeding in cut direction, goat breeding in meat direction, turkey breeding in poultry breeding, breeding of domestic and useful cockroaches and deer, in addition, special attention should be paid to the development of rabbit breeding, fishing, especially beekeeping.

Table 4. Current directions of agricultural development in mountain and sub-mountain areas.

Table with 6 columns: High mountain areas, Mountainous regions, Mountainous regions, and sub-columns for Areas of contact (In the field of agriculture, In the direction of husbandry).

In the future, one of the main directions of development of mountain and sub-mountain agriculture is the development of agricultural fields and industries adapted to the natural and climatic conditions of the regions, sufficiently formed labor skills and innovative agro-technologies.

5.DISCUSSION

The natural and climatic conditions of the mountain and sub-mountain regions allow the development of all branches of agriculture and the cultivation of ecologically clean products. Retrospective analysis of the state of agricultural development in mountain and sub-mountainous regions and the accompanying assessment indicate that the agricultural development of these regions is undergoing a positive dynamic state. Also, due to the distribution of light brown-meadow steppe and mountain brown soils in the mountainous and mountainous regions, the climatic conditions are harsh and the slopes are steep, it is appropriate to divide these regions into the following networks and areas: development of pasture livestock and establishment of a planned management



system for the use of pastures with the establishment of pasture cooperatives based on the principles of cooperation; development of cattle breeding by establishing a "smart pasture" system; development of "hikor sheep farming" system specialized in meat and meat-wool and animal breeding; specialization and development of intensive fruit-horticulture, including the production of ecologically clean and organic apple ("Krepcon" variety) and pear ("Klapa" variety) in terms of cultivation technology and composition; specialization and development of apple, pear and grape seedling cultivation; specialization and development of fig and almond seedling cultivation, etc.

6. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, we can say that in the development of agriculture in rural and mountainous areas and the cultivation of non-traditional types of crops, the creation of infrastructures relevant to this area, the formation of investment-active institutions (banks, investment funds, leasing companies, large corporations, including transnational organizations) and state support - support), by investing in the most important areas of agriculture, it is important to direct agriculture to innovations.

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