

# State of Modern Use on Forms of Ownership of Lands of Daghlig Shirvan Cadastral District.

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**Abstract.** Based on the information of the state real estate cadaster, the bodies that register and register spatial objects (property, natural resources, territorial zones) coordinate their activities in terms of information and technological interaction. Thus, a unified information space is formed about the land and related objects. Cadastral division is understood as the administrative division of the territory of the Republic of Azerbaijan for the purposes of numbering land plots and closely related real estate objects.

In order to assign cadastral numbers to real estate objects, the cadastral registration authority carries out the cadastral division of the territory of the Republic of Azerbaijan into cadastral districts, cadastral districts and cadastral quarters (hereinafter also referred to as cadastral division units). When establishing or changing the cadastral division units of the territory of the Republic of Azerbaijan, the relevant information is entered into the state real estate cadastre on the basis of legal acts of the cadastral registration authority.

**Keywords.** land, buildings, efficiency, categories, design, State-owned land

## Introduction.

The relevance of the legal, socio-economic and environmental processes taking place on earth determines the formation of the scientific foundations of the changes taking place in this area and the trends of their development. The scientific analysis of the current socio-economic and ecological state of land resources, which are an invaluable national treasure, and the collected data on the state of land use at the present stage is of great importance. In this regard, the research conducted in the direction of qualitative assessment of the lands of the Gorno-Shirvan cadastral district by ownership forms is of great scientific and practical importance. The Gorno-Shirvan cadastral district is located on the southeastern slope of the Greater Caucasus. Altitude indicators range from 200 m to 1800 m. The Gorno-Shirvan cadastral district borders on the west with the Gabala district, in the north with the high-altitude zone of the Ismailli and Shamakhi districts, in the east with the Khyzinsky, in the southeast with the Gobustan, in the south with the Absheron, Agsun and Goychay districts. The location of individual sections of the studied territory at different heights above sea level has led to a change in natural factors here -climatic relief, soil, vegetation, obeying the law of vertical zonation.

## Relief and geomorphology

The relief of the Gorno-Shirvan cadastral region has a very complex structure, characterized by a variety of relief forms: steep slopes, flat areas, etc. Deep gorges and valleys are more pronounced on the southeastern slope of the

Greater Caucasus. The forest cover of the territories with the sharpest slope was disrupted, and the erosion processes here became even more intense. The Shamakhi plateau is located on the watershed of the Pirsagatchai and Gozluchaya rivers.

### **Geological structure and soil-forming rocks**

The geological structure of the southeastern slope of the Greater Caucasus has been thoroughly studied and sufficiently covered in literature sources. According to the geological structure and properties of the soil-forming rocks, the southeastern slope of the Greater Caucasus differs from other regions of the Greater Caucasus. Here, the young wrinkling of the earth's crust is replaced by deeper wrinkling. Rocks of the Jurassic, Cretaceous and Tertiary periods are mainly distributed in the territory. These rocks consist of layered layers of sand, clay, slate, lime, tufogen. The rocks of the Cretaceous period are characterized by sandy-clay calcareous deposits, which harden, spreading in the southern and eastern parts of the territory. Clay shales of the Upper Jurassic are common in the Ismaili district. On the territory of the Shamakhi district, deposits of carbonate clays of the Paleogene period and marl rocks of the Cretaceous period of sufficient thickness were formed on rocks of this type. The sharp folds of the geological structure of the area and its partial organization of brittle rocks made it vulnerable to erosion processes and floods.

### **Climate**

The climate of the Gorno-Shirvan cadastral region is characterized by a moderately warm climate with relatively dry summers, rainy autumns and moderately cold winters. E.M.Shikhlinisky [1,14], A.A.Madatzade [12,17] attributed the Ismaili and Shamakhi forestry areas to the moderately humid climate of the Greater Caucasus.

In the Mountainous Shirvan region, solar energy and heat fall most in the foothills, amounting to 2200-2500 hours of solar energy, and in the mid-mountain zone - 1900-2200 hours. 10°C high active temperatures in the region amounted to 3000-3800°C [1,7,6]. The windiest days are observed in August, with the wind direction being northwesterly. The thickness of the snow cover does not exceed 20 cm. The first snow cover is observed no earlier than the end of November, snowmelt occurs at the beginning of March. Early frosts are observed on November 22, and the last frosts are on April 18.

The average monthly air temperature in the winter months in Agsu is 1.90 C, in Ismayilli - 0.70 C. In the south-east of the region, the temperature rises again to 4.00C [11]. The average annual precipitation is 503 mm in Goychai, 510 mm in Agsu, 591 mm in Shamakhi and 809 mm in Ismayilli, of which 181 mm falls during the cold period (I-II, XI-XII months), 727 mm - during the warm period (IV-X months). It is characterized by the presence of two maxima (May and September) and two minima (January, August) in the annual precipitation distribution. Despite the sufficient amount of annual precipitation, the cases of drought observed from July to August put a strain on the moisture balance. Only in the mountainous part of the Ismayilli district, the amount of precipitation in the warm season is slightly higher (424 mm).

### **Hydrography**

The Goychai, Sulutchai, Julanchai, Akhakhchai, Girdymanchai and Pirsagatchai basins are located on the territory of the Gorno-Shirvan cadastral district (Table 1). All rivers flow from north to south, originating from the main dividing range [14,18]. The main source of food for the rivers flowing through the territory is rainwater. Maximum-minimum runoff levels fluctuate according to annual precipitation fluctuations.

**Tab 1 The hydrographic state of the rivers flowing through the territory of the Gorno-Shirvan cadastral region [5]**

The name of the rivers	The mouth	Length	Flow rate	The width of the deposit, m	Depth of the deposit, m
Geycay	Kura	30	4,2	30	0,8
Sulutchay	Agsuchay	12	4,6	10	0,5

Gulyanchay	Akhahchay	16	4,8	10	0,6
Akhahchay	Ayrichay	28	4,6	15	0,5
Qirdamanchay	Kura	24	4,4	40	0,8
Ayrichay	Geychay	15	4,8	10	0,4

### Vegetation

The territories included in the Gorno-Shirvan cadastral district are distinguished by the richness of flora, diversity of vegetation and originality. The vegetation of the territory was studied by A.A.Grossheim [9], L.I.Prilipko [14], M.Y.Khalilov [12] and others. The vegetation of the Gorno-Shirvan cadastral region is diverse according to the laws of vertical zonation. Mesophilic and xerophilic vegetation is developed in the mid-mountain zone of the territory on mountain-forest brown and mountain-forest brown soils, steppe vegetation on steppe mountain-forest soils of the low mountains and dry steppe vegetation on mountain-gray-brown soils.

**The purpose of the study.** To carry out a forest and agricultural grouping of the lands of the Gorno-Shirvan cadastral district on the basis of an open bonus scale and make a bonus cartogram; to find a correlation between indicators of soil fertility and productivity of plant formations.

**Practical significance.** Materials on the qualitative assessment of the lands of the Gorno-Shirvan cadastral district, as well as on the current state of land use, a bonus cartogram, the main and final bonus scales, scales of general and individual economic assessment can be used as a basis for the correct and effective use of land resources, solving problems of conservation and restoration of soil fertility.

### Result of investigation..

#### State-owned land

State ownership includes lands on which state authorities and state facilities are located, lands of summer and winter pastures, livestock camps and migration routes, lands of the forest fund, lands of the water fund include lands located within the boundaries of the division of the internal waters of the republic and the Caspian Sea belonging to the Republic of Azerbaijan, as well as lands located under water protection zones and coastal strips, lands for nature protection, nature reserves, recreational, resort, historical and cultural purposes, These also include lands of legally protected territories where economic activity is prohibited [15].

In addition, the lands of state ownership include the lands of state research and educational institutions, their experimental bases, machine testing stations, the state variety testing service, seed farms, breeding farms, as well as the lands of state enterprises, institutions and organizations that are in constant use or designed for the construction of state facilities, and the lands of the state reserve the foundation. 39.7% of the land owned by the state (1 million 954 thousand hectares) is agricultural land. Of the remaining areas, 21% (1 million 34 thousand 906 hectares) is forest, 39.3% (1 million 930 thousand 534 hectares) is other land.

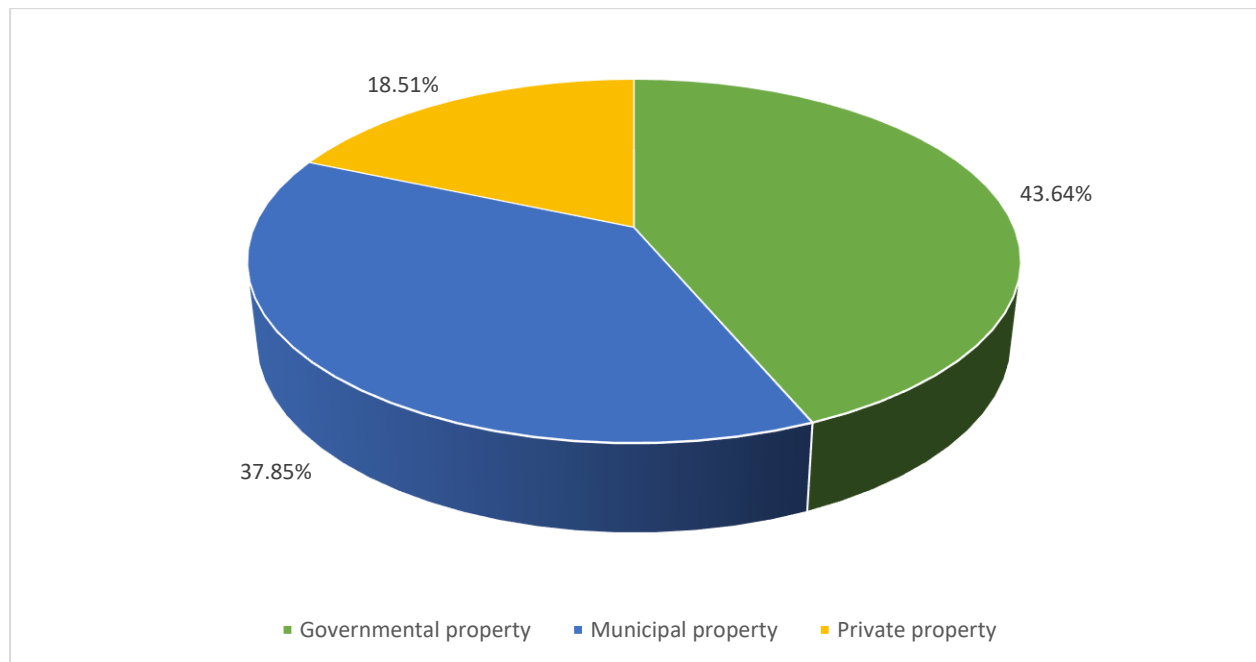
In general, 16.3% of cultivated and peaceful lands (317.7 thousand hectares), 3.2% of perennial plantations (62.5 thousand hectares), 1.5% of hayfields (29 thousand hectares) are in state ownership in the republic. The basis of the lands of the state fund are summer and winter pastures, the total area of which is 1534088 hectares, which is 59.6% of the total area of pastures and pastures of the country. 13.8% (197,300 ha) of the total amount of irrigated land in the republic are state-owned, of which 65.5% (127,300 ha) are cultivated and peaceful lands. The soils of perennial plantations cover 23.4% of the irrigated areas. Only a small part of the state-owned winter pasture lands is irrigated - 14,200 hectares (7.3%).

The regions with the highest concentration of state lands are Aran (19.8%) and Upper Karabakh (16%). The smallest number of state-owned land plots is preserved in Nakhchivan region, where 33.2% (178,800 hectares) of the unified land fund is state-owned.

Along with the lands that are in municipal and private ownership in the country, the lands that are in state ownership are widely used by the population in agriculture. Currently, 195,3264 hectares of state-owned land have been transferred for use and lease to the population of the country. This means that each resident of the country additionally uses 0.34 hectares of agricultural land.

The total land fund of the Gorno-Shirvan cadastral district is 412,290 hectares. Currently, 43.64% (179940 ha) of the cadastral district's land fund has been transferred to the state, 37.85% (156035 ha) to the municipal, 18.51% (76315 ha) to private ownership (as the 1<sup>st</sup> of January, 2010) (Figure 4.1).

56.2 thousand hectares or 31.22% of the lands owned by the state in the Gorno-Shirvan cadastral area are suitable for agriculture and are currently fully used and leased by individuals and legal entities. The main part of the land owned by the state consists of pastures, pastures and lands of the forest fund (Table 2).



**Figure 1. Distribution of the general land fund of the Gorno-Shirvan cadastral district by type of ownership:**

1. State property; 2. Municipal property; 3. Private property

As can be seen from the diagram, summer and winter pasture lands and pastures account for 29.24% (52,624 ha) of the total land resources owned by the state. The largest number of pastures and pastures is located on the territory of the Shamakhi district: 32,100 ha. 1.6% (2,940 ha) of the agricultural land in the region is used for crops and peaceful use. The main part of the cultivated and peaceful lands is preserved on the territory of the Shamakhi district - 1749 hectares, the smallest - on the territory of the Ismaili district - 108 hectares.

**Table 2 The state and use of state-owned lands in the Gorno-Shirvan cadastral district**

The name of the districts	Total area, ha	Sowing	Perennial plantings	Haymaking	Pastures	Household plots	The amount of agricultural land	Forests	Other area
Shamaha	67758	1749	19	36	32100	-	33904	11447	22197
Ismayilli	88518	108	461	66	8363	-	8998	66799	12721

Agsu	13223	638	16	1	5888	-	6543	3108	3572
Geychay	10441	445	28	-	6273	-	6746	210	3695
TOTAL	179940	2940	524	103	52624	-	56191	81564	42185

Since perennial plantations and hayfields have been mostly privatized, very little has been preserved in state ownership - 0.29% (524 ha) of perennial plantations and 103 ha of hayfields. As can be seen from table 2, in the Agsu district, only 1 hectare of hayfields is in state ownership, and hayfields are not found in the Goychay district. On the territory of the cadastral district, the largest number of perennial plantations is located on the territory of the Ismailli district -461 hectares, which is 88% of their total number.

The forest lands of the cadastral area cover 45.3% or 81.5 thousand hectares of land of the general state fund. The lands of the forest fund are distributed mainly on the territory of Ismailly-66.8 thousand hectares and Shamakhi-11.4 thousand hectares of districts. Other land plots not used in agriculture account for 42,185 hectares (22.45%) of the total state fund of the region. Some of the lands that are of little use and unsuitable for agriculture included in this group have the opportunity to be involved in agricultural turnover by significantly improving them in the future.

Each family that has received a land share in the region has the right to use an average of 1.75 hectares of state-owned land. The largest amount of land in state ownership is allocated on the territory of Ismailly - 49.1% (88.5 thousand hectares) and Shamakhi - 37.7% (67.8 thousand hectares) of districts. In the fund of lands owned by the state of the Gorno-Shirvan region, there are natural complexes of the region - the Pirguli and Ismailli reserves with an area of 7.3 thousand hectares, created with the aim of preserving flora and fauna, and the Ismailli reserve with an area of 34.4 thousand hectares.

#### Land in municipal ownership

2051378 hectares (23.7%) of the unified land fund of the republic have been transferred to municipal ownership. Municipal property includes public lands (lands under urban, settlement, rural settlements, streets, roads, parks, stadiums, lands on which land management forest belts are located, objects and structures of local importance of general use, pasture lands used for livestock of the population), lands used by individuals and legal entities, and lands of the reserve fund (lands allocated for long-term development, municipal lands on which the right of use and lease by legal entities and individuals has been terminated) [22].

The share of land in municipal ownership accounts for 94,300 hectares (8.2%) of cultivated and peaceful lands, 5,000 hectares (0.4%) of perennial plantations, 3,300 hectares (0.3%) of hayfields, 12,400 hectares (1.1%) of farmland suitable for agriculture. In terms of specific gravity, the near-rural pasture lands are equal to most of the municipal land resources, that is, 90% (1039,516 hectares). And this makes up 40.4% of the total area of pastures and pastures of the republic.

Since agricultural lands in the republic, which are in state and municipal ownership, are fully involved in agricultural turnover, suitable land resources have been exhausted in the regions. In the future, the expansion of agricultural land in the regions is possible only by involving in the turnover of unsuitable and conditionally unsuitable lands through their radical improvement. Currently, 24.3% of the land resources suitable for agriculture in the republic are municipal lands.

The indicators vary by region. 801 municipalities operating in the Aran region, which has the widest territorial coverage, currently own 559,100 hectares (27.3%) of land. The municipalities of the Aran district, in comparison with the neighboring Ganja-Kazakh district, have more than 3.1 times more cultivated land, more than 2 times more perennial plantations, more than 50 times more homestead plots suitable for agriculture.

The scarcity of land resources in the republic is observed in the southern region, characterized by the largest rural population. In Lankaran, this figure is equal to 121400 hectares or 5.5% of the national lands of the municipal

fund. Currently, each family that has received a land share on average by region has the right to use a land plot of 1.31 hectares in addition to suitable municipal land.

37.85% or 156035 hectares of the unified land fund of the Nagorny-Shirvan cadastral district is owned by 201 municipal bodies operating here. Of the lands in municipal ownership, 81.4% (127 thousand hectares) are agricultural land [19,21]. The largest amount of agricultural land in the territory of the Shemakha district is allocated to municipal ownership - 40.5 thousand hectares.

It can be seen from the diagram below that the main land resources of municipal ownership are rural pastures: 122 thousand hectares or 78.17% of these lands are provided to the population for indefinite lease without payment of grazing fees. The lands used for pastures and pastures were transferred to municipal ownership in the territory of the Shemakha district - 38.7 thousand hectares, the least in the territory of the Goychay district -17.5 thousand hectares (table 3).

**Table 3 The condition and use of land owned by the municipality in the Gorno-Shirvan cadastral district**

The name of the districts	Total area, ha	Sowing	Perennial plantings	Haymaking	Pastures	Household plots	The amount of agricultural land	Forests	Other area
Shamaha	42696	1492	-	12	38667	360	40531	-	2165
Ismayilli	47565	1267	-	2	34743	-	36012	-	11553
Agsu	42264	729	26	426	31100	158	32439	-	9825
Geychay	23510	300	-	-	17468	304	18072	-	5438
TOTAL	156035	3788	26	440	121978	822	127054	-	28981

Of the lands in municipal ownership, 2.43% or 3788 hectares are used for crops and peaceful, 26 hectares for perennial plantations. The main part of the cultivated and peaceful lands in municipal ownership is located on the territory of the Shamakhi and Ismaili districts: 1,492 and 1,267 hectares, respectively. Perennial plantings, which are at the disposal of the municipality, are found only on the territory of the Agsu district.

There are very few hayfields in municipal ownership -440 hectares (0.28%). The main part of haymaking is located on the territory of the Agsu district -96.8% (426 hectares).

In the Shamakhi district, 12 hectares have been allocated for haymaking, in the Ismaili district - only 2 hectares, no haymaking has been allocated to the municipal property of the Goychay district. Municipalities do not own forest lands, 822 hectares (0.53%) of land suitable for agriculture are allocated for household plots. Most of the household plots have been allocated to municipal ownership on the territory of Shamakhi-360 hectares and Goychay-304 hectares of districts, household plots on the territory of Ismayilli district have not been transferred to municipal ownership, as they have been completely privatized.

The maximum number of land plots in municipal ownership is allocated in the Ismaili district - 30.5%. Each family that has received a land share in the district uses suitable land plots of municipal ownership with an area of 3.27 hectares. Here, the area of lands unsuitable for agriculture and conditionally unusable -28.9 thousand hectares (18.57%), transferred to municipal ownership, was leased to local residents on preferential terms, sold to individuals and legal entities.



**Conclusion.**

On the basis of an open bonus scale, a forest and agro-industrial grouping of the lands of the Nagorny - Shirvan cadastral district was carried out and the average points of bonus and area were determined by groups: Group I – 86 points, area - 18147.22 hectares (4.4%); group II – 67 points, 155657.98 hectares (37.75%); group III – 51 points, 179,287. 45 ha (43.49%); Group IV – 39 points, 38343.45 ha (9.3%); Group V-20 points, 20,854.56 ha (5.06%).

It has been established that on steppe mountain-brown and mountain gray-brown (chestnut) soils distributed in the territory of the Gorno-Shirvan cadastral region, there is a close correlation ( $R=0.96\pm0.02$ ) between the humus content (%) and the productivity of plant formations developed on it (c/ha), and the equations are found linear regression.

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