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**Annotasiya.** Ushbu maqolada cho‘l va adir yaylovlarining, Qorako‘l yaylovlarining mahsuldorligini oshirish, adirda kuzgi-qishki yaylovlarni yaratish haqida so‘z boradi.

**Kalit so‘zlar:** Chorvachilik, qorako‘l, yaylov, cho‘l, adirlar, tabiat, kuzgi-qishki yaylovlar, yaylovlar mahsuldorligi.

**IMPROVING THE PRODUCTIVITY OF DESERT AND ADIR PASTURES**

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**Annotation.** This article discusses the issues of increasing the productivity of desert and adyr pastures, Karakol pastures, and the creation of autumn-winter pastures on the hills.

**Key words:** Livestock, astrakhan, pasture, desert, hills, nature, autumn-winter pastures, pasture productivity.

## **ПОВЫШЕНИЕ ПРОДУКТИВНОСТИ ПУСТЫННЫХ И АДЫРНЫХ ПАСЬБИЩ**

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**Аннотация.** В данной статье рассматриваются вопросы повышения продуктивности пустынных и адырных пастбищ, каракольских пастбищ, создания осенне-зимних пастбищ на холмах.

**Ключевые слова:** Животноводство, каракуль, пастбище, пустыня, холмы, природа, осенне-зимние пастбища, пастбищная продуктивность.

One of the most important and significant areas of our livestock is karakul, which is adapted to year-round use of desert and hilly pastures.

The characteristic features of karakul pastures are that their food reserves are very low (1.5-3.6 ts / ha per hectare) and in terms of use are mainly seasonal, highly variable by years and seasons, and water sources (wells, pipes, boreholes, etc.). k) is directly related to the supply.

The pastures used in karakul farming are not evenly distributed across the provinces. In this regard, Navoi region and the Republic of Karakalpakstan occupy the highest position. Farms in Bukhara and Kashkadarya regions also have 2.6 and 1.5 million hectares of pastures, respectively.

The available pastures and hayfields in the country are located in 4 natural areas (desert, hills, mountains, pastures): in the desert region their share is 78.1 hills -15.2, in the mountains -4.5 and in pastures -2.2%.

If we look at the current state of pastures, it is clear that about 40% of the lands used for karakul farming are in crisis to varying degrees. In particular, in Navoi region - 43.8%, in the Republic of Karakalpakstan - 43.4%, Bukhara - 37.6%, in Samarkand, Kashkadarya and Jizzakh regions - 23.4-25.4%.

As a result of the pasture crisis, their forage yields have also declined significantly over the last 10 years, from 2.4 centners per hectare to 1.8 centners per hectare, or 21%.

The decline in productivity across the regions is as follows: Karakalpakstan - 27, Bukhara - 18.5, Jizzakh - 16.9, Navoi - 26.5, Samarkand - 11.0, Kashkadarya - 6.2, Surkhandarya - 17.4%.

The factors causing the crisis are also, of course, diverse: including their total number of more than 45, 87% of which are directly related to human activities; the remaining 13% are natural processes. In particular, the highest crisis (about 44%) is due to changes in plant cover; the rest (56%) are due to accumulative factors, including deflation (sand migration) -12%, salinity -9%, water erosion-6%, man-made and other factors 31%.

Every 10 years, pasture productivity indicators change as follows: 3 years - yield; 4 years - medium yield; and 3 years - low yield year. Also, pasture yield and forage nutrient content vary not only over the years but also throughout the seasons.

It is obvious that improving the condition of pastures is a very important issue.

Surface improvement of karakul pastures means the application of a system of methods aimed at improving the water-physical properties of the soil in areas where there are seed reserves of useful plants that are not well developed or insufficiently developed in the vegetation, but have not lost their viability, with almost no damage to their natural vegetation.

The advantage of superficial improvement from the economic point of view is that it is cheaper and the implementation does not require complex tools and mechanisms.

Although the system of surface improvement of pastures consists of a relatively large number of measures, in arid regions only a few of them, namely, improvement of water, air regime (storm, disco), nutrition (local, application of mineral fertilizers), weed control, without tillage only measures such as seeding can be effective.

When applying surface improvement measures in desert areas, good results are obtained if first the loss of foreign, inedible plant species is followed by storming, sowing of seeds of nutritious plants and feeding measures when possible.

Currently, the most effective way to improve the condition of karakul pastures is to radically improve them.

In the case of radical improvement of pastures, the soil in the crisis area is treated in the form of zones (strips) and pasture agrophytocenoses (crops) are established. Establishment of agrophytocenoses allows to perform 3 types of tasks simultaneously:

-pasture productivity increases;

- food quality improves;
- The gross species and quantity of plants in the vegetation cover increases sharply.

The following system of effective measures has been developed to radically improve the condition of pastures in desert areas:

- establishment of autumn-winter pastures on hills;
- construction of reserves;
- Establishment of pasture agrophytocenoses that allow the use of pastures in different seasons.

The essence and necessity of establishing autumn-winter pastures in the hills is that the adyr pastures are relatively high-yielding, in most cases, composed of more nutritious species, but due to the lack or lack of shrubs and semi-shrubs, the autumn-winter months create many difficulties in grazing.

In order to overcome this shortcoming of the Adir pastures, first of all, the wells near the settlements, which are in crisis, ie, the vegetation is dominated by weeds such as fungus, white currant, isfent, and most of them are semi-shrub species. The essence of the construction of reservoirs in the desert areas is that they reduce the rate of strong winds typical of the desert, ensure the accumulation of snow in the winter and allow for longer storage of moisture reserves in the soil. As a result of improved growth and development conditions of pasture plants, their productivity will increase by 1.5-2 times.

Black saxaul itself is also a satisfactory food for sheep and camels during the autumn-winter months.

It is advisable to build enclosures in favorable soil-climatic conditions, on pastures where large shrubs do not grow.

For such purposes, light mechanically composed gray, brown-gray, sandy loam, slightly saline pasture areas are selected.

The importance of creating pasture agrophytocenoses that allow the use of pastures in different seasons is that pasture agrophytocenoses consisting of a mixture of different life forms (shrubs, semi-shrubs, transitional species) are created, taking into account the characteristics of each desert.

The first advantage of new crop fields is that they are multi-tiered (layered) and can be used in almost any season of the year, so they can be used in the required season of the year; Even in years of inclement weather, hay yields remain relatively stable.

Shrubs, semi-shrubs, seed mixtures of different proportions of herbaceous species are used in the construction of pasture agrophytocenoses specific to each ecological condition. Most importantly, due to the presence in the agrophytocenoses of plants that can be eaten in spring, summer, autumn and winter, it is possible to use them in one of these seasons.

A new technology developed in recent years and used in the field - a method of increasing the productivity of pastures on the basis of nature protection - is based on the preservation of certain parts of natural vegetation without damage.

Due to the sharp reduction in fuel and labor costs, labor costs, and narrow areas, soil erosion is prevented even if the weather is unfavorable and crops are not developed satisfactorily, and the growth of growing plants near the regions improves.

Special multi-purpose units AS-2 and AS-4 were created in collaboration with the team of the Bishkek Institute of Technology to implement environmental protection technology. The APP-2.8 unit, developed by the team of the Uzbek Institute of Agricultural Mechanization, is also designed to increase the productivity of desert pastures in this way.

In order to create autumn-winter pastures on the hills, the crisis pastures are selected and processed regionally.

For example, the width of cultivated and sown areas should not exceed 12 m in sparse grasslands and 24 m in densely vegetated areas.

At the same latitudes (12-24m) natural pasture areas are left uncultivated.

The best time to cultivate and sow pastures is autumn-winter (November-February).

In the conditions of the hills (Koshrabat, Jam, Kattakurgan, Nurata, Nishan, Dehkanabad, etc.) semi-shrubs such as chagan, izen, teresken, kuyruvuk, wormwood; Pasture agrophytocenoses (crops) consisting of transitional species such as cotton, male grass, chitir, konurbosh are established.

In this case, the share of semi-shrubs is 65-70%, and the share of deciduous species -35-30%.

To produce a sufficient amount of grass, the following sowing rates are recommended: izen-3-4, sorghum-8-10, tailed -5-6, teresken -10-12, wormwood - 0.5-1.0, male grass - 2-3, cotton -3-4 kg / ha.

When the seed mixture is sown using SST-3, SZT-3,6 seeders or other modern aggregates, full germination is ensured, labor productivity increases sharply.

Technology of construction of enclosures. As we have noted, the establishment of reservoirs in desert areas slows down the wind speed of strong desert winds; ensuring longer accumulation of moisture in the soil, ensuring the accumulation of snow in the winter.

As a result of improved growth conditions of pasture plants, their productivity will increase by 1.5-2 times. Black saxaul itself is also a good fodder for sheep and camels during the autumn-winter months.

Gray, brown-gray, sandy-loam, low-salinity pastures are selected for the establishment of reserves in the pastures of the Karakol areas, which are in crisis in favorable soil conditions and do not grow large shrubs.

The enclosures are located in the form of main and auxiliary zones. The main areas are exposed to the winds, the auxiliary areas are placed on it in 900 cases.

Areas with a total width of no more than 25m will not be plowed en masse, but will be cultivated from 5 locations in the area of 2.8m each, leaving 2.5-3m wide natural pastures uncultivated between them. Thus, the total area of the treated area does not exceed 56%.

The best time to sow seeds is December-January. Optimal seed consumption rate - 4-5 kg per hectare of seeds with 100% economic viability.

Black saxaul seeds germinate well when buried in the soil to a depth of 1-2 cm.

Technology of pasture agrophytocenoses. Another effective way to improve pasture productivity is to establish pasture agrophytocenoses (crops) consisting of high-yielding and various life forms (shrubs, semi-shrubs, transitional species) for year-round use.

The essence of the establishment of pasture agrophytocenoses is that the productivity of pastures will increase to 10-12 quintals per hectare, and it will be possible to use it in the necessary season of the year.

A mixture of sugarcane, camphor, izen, teresken, and male grass is used in the construction of pastures used in spring and summer.

In order to create pastures for use in the required season of the year, it is advisable to use a mixture of shrubs and semi-shrub species.

For such purposes, a mixture of black saxaul, izen, tail, pigeon, bell, atriplex, annual saline is used.

Pasture areas to be improved will be plowed to a width of 12-24 m, leaving uncultivated areas at that width.

Tillage is carried out at a depth of 18-22 cm in autumn and winter.



It is inevitable that the work carried out in accordance with the necessary agro-technical terms and the proposed system of measures will yield appropriate results.

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