MONITORING OF VEGETATION OF NATURAL PASTURES IN NAVOI REGION

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ABSTRACT: In the article, practical suggestions are given regarding the advantages of monitoring the vegetation of natural pastures in the Navoi region by the method of selecting monitoring points.

KEYWORDS: Natural pasture vegetation, monitoring point, monitoring site, transect, mowing site, bush model record card, pasture group.

INTRODUCTION

The Central Asian region is considered one of the most vulnerable regions to the impacts associated with significant climate change currently observed, as well as to the long-term effects of climate change. Also, grasslands of Central Asia are very vulnerable to climate change. Due to the adverse effects of climate change on pastures, the level of food supply for livestock in agriculture is significantly reduced.

Desert grasslands have low productivity, based on dry matter

Does not exceed 1.5-3.0 ts/ha. In addition, the productivity of desert pastures is directly related to weather conditions, so productivity varies dramatically between years and seasons. In many years, the amount of precipitation per hectare of desert pastures increases up to twice as compared to the average year, and in arid lands it decreases to 1-0.5 ts/ha. The amount of protein in the feed will decrease from 20% to 5%, and the amount of protein will decrease from 13% to 4%. In our republic, extensive scientific researches are being conducted to determine the current state of desert pasture plants, prevent degradation processes, increase their productivity, protect pastures and increase the efficiency of their use, and certain results are being achieved. Therefore, in the further development of agriculture in the Navoi region, conducting monitoring studies in desert pastures, in particular, collecting information about quantitative and qualitative data on natural pastures, assessing and forecasting their condition, identifying and eliminating negative processes, the condition of natural pasture plants, and using natural pastures it is important to conduct regular observations on the resulting changes.

RESEARCH METHODOLOGY

Our government is taking a number of measures to effectively use pastures and protect them. In particular, the Land Code of the Republic of Uzbekistan, Laws of the Republic of Uzbekistan "On Pastures" and "On State Land Cadastre", Decree of the President of the Republic of Uzbekistan No. PD-6061 of September 7, 2020, Decision No. PD-5006 of February 24, 2021, Ministers No. 496

of the Court dated December 23, 2000 "On approval of the regulation on land monitoring in the Republic of Uzbekistan". No. 737 of September 24, 2019 "On improving the state monitoring system of the natural environment in the Republic of Uzbekistan". and in the decisions No. 22 of January 14, 2022 "On the implementation of monitoring work on agricultural lands, approval of regulatory legal documents regulating land protection and land development activities", the tasks aimed at monitoring the plants of natural pastures have been determined.

At the same time, the lack of improvement of the current system in the effective use of natural pastures creates a number of problems in the field of monitoring the condition of natural pasture plants and the use of natural pastures.

ANALYSIS AND RESULTS

To collect information about the quantitative and qualitative data of natural pastures, to assess and forecast their condition, to identify and eliminate negative processes, to monitor the condition of natural pasture plants, the changes that occur as a result of the use of natural pastures, by the method of selecting monitoring points has a number of advantages.

Monitoring point means the areas selected for monitoring of pasture plants of a certain size. When carrying out the monitoring of natural pasture plants by the method of selection of monitoring points, with the establishment of a monitoring system aimed at identifying and eliminating negative processes in determining the condition of pasture plants, changes resulting from the use of pastures, collecting data on the quantity and quality of pastures, evaluating and analyzing their condition it is distinguished by the fact that it saves the time required for conducting monitoring, as well as leads to a decrease in expenses related to conducting monitoring.

From this point of view, the selection of monitoring points in the organization of monitoring of plants of natural pastures in the Republic of Uzbekistan is of great practical importance in monitoring the condition of pastures and in effective use and protection of pastures.

In particular, in 2022-2023, together with the members of the Working Group established on the basis of the relevant order of the governor of Navoi region, the experts of the state scientific and planning institute "Uzdaverloyiha" will monitor the vegetation of natural pastures in the area of 6,720,652 hectares (excluding the pastures of farms of the Forestry Agency) in Navoi region. was carried out. A total of 126 monitoring points and 630 monitoring sites were designated for monitoring in the region.

Based on the natural conditions of the monitoring points, one monitoring point was established for every 10,000 hectares and 50,000-100,000 hectares (12 of each up to 100 hectares, 114 of each of 400 hectares). Field work was carried out in the spring (from April 3) and autumn (from September 18) seasons of 2023.

Distribution of groups, types, types and types of natural pastures, degree of coverage, degradation, productivity (biomass) based on dry mass was studied at each monitoring point in the cross-section of the territories.

In 126 monitoring points in the Navoi region, it was found that the yield (biomass) of pastures on the basis of dry mass of 46,800 hectares of pasture land was 2.26 t/ha (2.7 t/ha in 2022), i.e. 0.44 t/ha less than in 2022. . Vegetation coverage was found to be 58% in 2023 (62.3% in 2022), i.e. 4.3% less than in 2022.

For example, in monitoring point 112 (size 400 hectares) in Saribel massif, Konimekh district, semi-shrubs:

Juzgun 46,600 in 2023 (48,000 in 2022), that is, 1,400 less than in 2022;

saxophone 51,400 in 2023 (52,000 in 2022), i.e. 600 less;

syngren 126,000 (128,000 in 2022), i.e. decreased by 2,000.

Also, a decrease in natural pasture plants such as ilok, konkirbosh, yaltirbosh, chuchmoma, incense, selenium, partak, uchma, burgan, ebelek and rang was observed.

The main reason for the decrease in the number and productivity of plants is that the maximum average annual amplitude of air temperature in 2023 has increased to +44-46° C. This indicator was +42-44°C in the corresponding period of 2022, which means that the dynamics of temperature change over the past years has increased by +2°C. In winter, the weather is unstable, cloudy, rainy, and characterized by rapid changes in temperature and humidity. Also, according to the data obtained from Buzaubay, Oqbaytal, Uchquduq weather stations, Khatirchi and Navbahor agroposts, the average amount of precipitation was 108 mm in 2023 and 203 mm in 2022, i.e. 95 mm less than in 2022.

CONCLUSION

Based on the above and based on the research of the current state of natural pasture plants in the country, it is necessary to note that a new system for monitoring natural pasture plants is required to be developed.

In the course of monitoring natural pasture plants - for the pastures of the desert region of Navoi region - it is proposed to establish one monitoring point for every 50,000-100,000 hectares and make the size 2,000x2,000 meters.

Determination of productivity is carried out by the method of transect and mowing fields. The following crop parameters are studied and determined at the observation monitoring points:

a) the percentage of the total biomass of plants and its parts gnawed by livestock;

b) the percentage of plants that are harmful, poisonous and cannot be eaten by livestock in the total plant biomass;

c) dynamics of fodder weight by seasons (wet and dry mass drying and weighing).

g) to determine the impact of the natural environment and to forecast the quality and quantity of natural pastures in one or another region of the republic, as well as clarifying the processes related to the change in the state of natural nutritious grass cover (changes in the composition, structure, productivity, quality and nutrition of plants);

Suggestions and recommendations: It is necessary to consider measures to enrich pasture plants and replace them with plants that are more productive in terms of nutrients, such as izen, teresken, konkirbosh, yaltyrbosh, shuvok. Because the introduction of the depth of underground

water and planting of drought-resistant productive plants in the pastures allows to increase the productivity of the pastures and increase them up to 2 times. For this purpose, the following suggestions and recommendations are made:

- in order to further increase the food supply, establish 2-3 hectare seed plots (plantations) surrounded by wire fences at a distance of 1-2 km from settlements in desert areas;

-planting of cultivated seeds in degraded (crisis) areas;

-in order to prevent irregular overgrazing of livestock in a certain part of the pastures, to introduce a system of alternating feeding and to establish constant control over it;

- in order to ensure the natural reproduction of the plant species growing in the existing pastures, for the complete ripening of the seeds of the plants, the establishment of one 4x4-meter fenced area with the help of wood, wire or bushes per hectare;

- to carry out large-scale explanatory work to the population so that the population does not use trees, shrubs and semi-shrubs for fuel and other purposes.

REFERENCES

1. Constitution of the Republic of Uzbekistan.
2. Land Code of the Republic of Uzbekistan.
3. Law of the Republic of Uzbekistan "On Pasture".
4. Law of the Republic of Uzbekistan "On State Land Cadastre".
5. Decree of the President of the Republic of Uzbekistan dated September 7, 2020 No. PD-6061.
6. Decision PQ-5006 of the President of the Republic of Uzbekistan dated February 24, 2021.
7. Decision No. 496 of the Cabinet of Ministers of the Republic of Uzbekistan dated December 23, 2000 "On approval of the regulation on land monitoring in the Republic of Uzbekistan".
8. Year 2019 of the Cabinet of Ministers of the Republic of Uzbekistan, Resolution No. 737 of September 24 "On improving the system of state monitoring of the natural environment in the Republic of Uzbekistan".
9. Decision No. 22 of the Cabinet of Ministers of the Republic of Uzbekistan dated January 14, 2022 "On the approval of normative legal documents regulating the implementation of monitoring works on agricultural lands, land protection and land formation activities".
10. Manual "On the implementation of monitoring of plants of natural pastures" developed by the state scientific-project institute "Uzdaverloyiha".