Innovative: International Multi-disciplinary Journal of Applied Technology (ISSN 2995-486X) VOLUME 02 ISSUE 06, 2024

Measures for the Protection and Rational Use of Degraded Land

Nuriddinov Otabek Khurramovich

nuriddinovotabek92@gmail.com

Abstract:

The article analyzes the problems of rational organization of the use of agricultural land in conditions of ecological instability, increasing the efficiency of its use, maintaining, increasing the fertility of irrigated soils and their rational use, introduction of resurstejamkor technologies in the fight against secondary salinization processes.

Keywords: Land Fund, rural area, degradation, soil cover, salinity, erosion, desertification, Oasis, fertility, crop rotation, Reclamation, humus.

Relevance of the problem. In the following years, a number of measures were implemented in the organization of rational and effective use of land in our Republic, ensuring impressive control and in the complex regulation of relations in the field of land resources, Geodesy, cartography and state cadastre. Within the framework of the program of measures for systematic accounting and use of Land Resources, Regulation of State cadastres, improvement of the cartographic fund of the Republic of Uzbekistan, a system of continuous monitoring on the observance of land legislation was developed and introduced, gross misappropriation of real estate objects was organized, the organization of the National geoaxborotation system of the Republic of Uzbekistan

At the same time, the analysis of the state of land use shows that the work of ensuring regular state control over the use of land, the introduction of modern technologies, as well as systematized accounting of land resources are not becoming effective enough. The material and technical base of the network does not meet the requirements of today in the timely and high-quality implementation of the tasks assigned to the field, the rapid and effective implementation of scientific research work. The number of employees in force, especially in the lower tier, does not make it possible to control the use of land resources and maintain their full accounting.

There is insufficient attention to establishing close ties with leading foreign organizations of the industry, in-depth study and application of Advanced International experience, and the organization of professional internships and professional development. In order to strengthen control over the protection and rational use of land, improve the activities of Geodesy and cartography, radically increase the efficiency of the activities of the state committee of land resources, Geodesy, cartography and state cadastre of the Republic of Uzbekistan:

The Ministry of Economy of the Republic of Uzbekistan, Ministry of Agriculture and Water Management, Ministry of Finance and State Committee on Land Resources, Geodesy, cartography and state cadastre: to introduce the post of deputy chairman of the State Committee on Land Resources, Geodesy, cartography and state cadastre, which is responsible for organizing and coordinating the activities of the state cadastre,;

100% of fines imposed under the administrative responsibility code of the Republic of Uzbekistan for land resources, Geodesy, cartography and state cadastre state committee bodies using land without a farm or rendering them unusable, arbitrary deviations from land development projects within the farm, violation of state land cadastre rules, destruction or damage of border and restriction marks; 10% of fines levied on the right of citizens to property on housing for timely nonformalization in the bodies carrying out the state registration of rights to Real Estate;100% of the funds (after the calculation of taxes) that fall due to a 25% increase in prices set for public services for the technical correspondence and registration of cadastral documents;

In the following years, the Republic implemented a number of measures aimed at organizing rational and effective use of land, ensuring impressive control and comprehensive regulation of relations in the areas of land resources, Geodesy, cartography and state cadastre. Irrigated land of extremely urgent importance for our republic is 4.3 million hectares, or 9.6% of the total area of the country, in which more than 95% of all agricultural products are grown.

Within the framework of the program measures, a system of continuous monitoring of compliance with land legislation has been developed in the field of systematic accounting of land resources and control of land use, real estate facilities, regulation of land relations in the field of cartographic fund improvement, work is underway to establish a national geoexborotation system of the Republic of Uzbekistan aimed at.

At the same time, the analyzes carried out indicate the following:

insufficient systematic work is not carried out in conjunction with self-governing bodies and other organizations for the timely prevention of rational land use in places;

regular monitoring of the use of land in rural settlements and neighborhoods, especially in remote areas, has not been carried out sufficiently;

the number of employees available makes it impossible to control the use of land resources and fully carry out their accounting. The above shortcomings make it impossible to ensure reasonable and targeted use of land, as well as full-fledged impressive control over compliance with legislation on the network.

Also, in 2017-2021, the program of measures to effectively organize the activities of the state committee of land resources, Geodesy, cartography and state cadastre of the Republic of Uzbekistan, introduce advanced scientific and technical achievements in the field, update the material and technical base, attract international grants to the network was approved.

In order to strengthen the material and technical base of the committee and its territorial units, it is established to provide district (city) land resources and state cadastre departments with service cars, modern measuring instruments for on-site specialists, service rooms. In order to carry out such basic tasks as ensuring the rational use of land resources and the control of compliance with legislation, the committee and its territorial bodies are exempt from paying the state duty on claims made to the courts within their competence.

The soil is an upper porous layer of Earth with a biogenic structure, which plays an important role in the course of life processes in nature, in ensuring the exchange of substances in the biosphere. Under the influence of moisture, heat and microorganisms, organic matter is constantly decomposed and synthesized in the soil. Organic matter in plant and animal remains mixed into the soil decomposes with the help of microorganisms-that is, rot. These formed lizards, on the other hand, pass along with mineral compounds in the soil to the plant's body, in which they enter into a reciprocal reaction, forming new organic matter. It uses organic matter as human and animal feed. In the future, they will return to the soil again with plant, human and animal remains and again undergo a decomposition process. On this basis, organic and mineral substances circulate in a closed loop in the "soil-plant-animal-soil" system. This, in turn, naturally underlies the preservation of soil fertility. Soil is a complex structured derivative of nature, consisting of solid, liquid, gaseous and living components. The solid part of the soil is composed mainly of mineral and organic matter and solid particles, which make up a certain part of the total mass of the soil. The rest of it is made up of water, air and living organisms that occupy the spaces between the particles. The ratio of these components determines the fertility of the soil. The fertility of the soil largely depends on the amount of Macroelements in it, that is, humus, which forms the basis of mineral substances found in it as a compound – aluminum, iron, potassium, magnesium, calcium, phosphorus, sulfur, silicon, as well as microelements and organic matter.

The importance of living beings in the soil was mentioned above. Among these animals there are especially many microorganisms, which are located in the spaces between the soil particles. Notable Uzbek scientist M.V. According to mukhamedzhonov, the number of micro-organisms in 1 hectare of fertile soil is 3-3.5 billion, and in 1 hectare of soil half a meter thick, their mass reaches 8-12 tons. During the year, the generation of these microorganisms alternates up to 18-27 times. Russian scientist V.A. Cowda estimates that the annual sum of the biomass of microorganisms in the soil is equal to the photomass of the plant grown in that area, while in some fertile lands it is even 1.5-2 times more. In black soils and other fertile land soils, the annual sum of biomass of microorganisms reaches 20-50 tons per hectare. Thus, all its components are involved in ensuring the fertility of the soil. That is why it can be safely said-that the soil, together with these components of itself, is a source of organic life, and at the same time it itself is also a derivative of organic life, consequently they are constantly in interaction with each other. In fact, the plant grows and develops by absorbing nutrients and water in the soil. Animals feed on plants. As a result, the consumed nutrients return to the soil again and break down in it and again turn into minerals that the plant absorbs. Thus, the soil is one of the important rings of the so-called" Life " chain. It is also a necessary factor for plants, so for animals and, ultimately, for Man.

Another importance of soil for humans and animals is that trace elements contained in soil are also found in living organisms. The current vaccine has been found to contain about 60 chemicals in plant and animal organisms. These chemicals pass through the soil to the human body with food as biomicroelements. All 24 different trace elements found in human blood and 30 different trace elements in breast milk are essential substances for humans, and a lack of one or another element in the soil leads to their deficiency in food and, therefore, in the human body. Under the influence of this, the metabolism in the body is disrupted, a person can develop various diseases.

During the analysis of the land use issue, another situation is also visible, according to which there is no possibility of expanding the areas of land to be farmed. For example, according to YUNEP, the appropriation of new land by 2000 amounted to 3.2 billion in total expropriated land area. if the hectares are reached, the land to be farmed will be practically doubled per capita than in 1975. This is because as the population increases, much land erodes and goes out of business, while a portion of land is spent on seeing cities and industrial communication. According to a prediction by American expert Brown (1978), between 1975 and 2000, the population of the city of the Earth approximately doubled to 3 billion, it exceeds, accordingly, an additional 63 million to urban planning, hectares of land goes. Under the influence of human economic activity, the quality of the soil is disrupted, and the yield decreases. In its development history, the society has raised Rs. of land about an acre was decommissioned.

The impact of water and wind alone, sandblasting and salinization results in an annual total of 6-7 million tons on Earth. hectares of land are leaving the farm turnover. This situation ha already worried specialists. Because the decrease in its area goes thousands of times faster than the formation of the soil. For example, 10 cm. it takes 1400-1700 years for thick soil to form. Soil of such thickness can be decommissioned as early as 20-30 years of water erosion. Sometimes only one flood is sufficient for this process.

In general, the condition of the soil will depend on how much influence we have on it. In its agricultural activities, a person grows a crop in the soil and harvests it. This means-it takes organic matter grown in the soil and impoverishes it. At the same time, it converts the soil, applies crop rotation and other agrotechnical measures and, on this basis, enriches the soil and restores its fertility. Failure to perform such activities on time, with only the benefit of the day, can accelerate soil erosion, its failure due to salinity and waterlogging. Such bitter lessons are also found in Uzbek agriculture. Currently, the total area of the Republic is 44.9 million. ha, of which 28.1 Mt. hectares are farmed. The area of irrigated crops is 4.2 million, makes up a hectare. In previous years, the Republic was at the height of the development of steppe zones, the expansion of farming by opening new lands. During the period 1975-1985, 1 mln. hectares of new land were appropriated. The work had even gone so far as to be a slogan, "Hunter's good Lion otar, young man's Good Earth hungry". But the work did not pay off its expectations. The reason was that the attention to agricultural agrotechnics was not enough, the technology of crop rotation was replaced by the sole power of cotton.

The cards have grown larger than normal, the ixotazors have decreased, the melioration work has subsided. The resulting soil erosion, salinity, and waterlogging accelerated, the agricultural consumption of river water increased, the Aral Sea came to the brink of disaster, from which the spreading salt sand precipitated into the soil of surrounding areas. Thus, as a result of these mistakes made, 90-95% of the area of Karakalpakstan, Bukhara and Syrdarya regions was salted. Of the 270,000 hectares of irrigated land in the Bukhara region alone, 53,000 hectares were wind-eroded. Much of the area of the Fergana Valley and Tashkent region, located in the regions of the Highlands, was eroded by water. Currently, the Republican livestock industry is also severely affected by the misuse of land resources. 22 million, which is being used as pasture for livestock. 6 million hectares, hectares are subject to wind erosion and 3 million, hectares have been eroded by water.

Literature used

- 1. Xurramovich, N. O. (2021). Modern Improved Geodesical, Geoformatical and Cartographic Methods in Creation of the Atlas of Cultural Heritage Monuments in Bukhara Region. Барқарорлик ва Етакчи Тадқиқотлар онлайн илмий журнали, 1(1), 43-47.
- 2. Xurramovich, N. O. (2021). Reconstruction of Damaged Land in Farmers and Agricultural Farms. Барқарорлик ва Етакчи Тадқиқотлар онлайн илмий журнали, 1(1), 48-53.
- 3. Imomov, S., Nuriddinov, K., & Nuriddinov, O. (2021). Thermal regime for convective drying products. In E3S Web of Conferences (Vol. 264, p. 04055). EDP Sciences.
- 4. Otabek Xurramovich Nuriddinov, Kurbon Hafiz O'G'Li Jurayev, & Xonnazar Zokir O'G'Li Qo'Ziyev (2022). Increasing the biological activity of salinated soils of Bukhara region with the help of various fertilizers. Science and Education, 3 (11
- 5. Nuriddinov Otabek Xurramovich, Hamroyeva Zarina Bekmurodovna, & Ochilova Zuhira Abror qizi. (2022). The Place and Role of Ecology in Geographic Information Systems. Texas

- Journal of*Multidisciplinary* Studies, 14, 51–54. Retrieved from https://zienjournals.com/index.php/tjm/article/view/2699
- 6. Nuriddinov Otabek Xurramovich, Hamroyeva Zarina Bekmurodovna, Ochilova Zuhira Abror Qizi, & Qoziyev Xonnazar Zoyir ogli. (2022). Increasing the Biological Activity of Salinated Soils of Bukhara Region With the Help of Various Fertilizers. Texas Journal of Agriculture Biological 23-26. Retrieved Sciences, 10, https://www.zienjournals.com/index.php/tjabs/article/view/2694
- 7. Nuriddinov Otabek Xurramovich, Hamroyeva Zarina Bekmurodovna, Ochilova Zuhira Abror qizi, & Qo'ziyev Xonnazar Zoyir o'g'li. (2022). The Main Problems of Ensuring the Implementation of the Uniform State Policy Directed to the Wise Use of Earth Resources and Their Protection. Zien Journal of Social Sciences and Humanities, 14, 31–34. Retrieved from https://www.zienjournals.com/index.php/zjssh/article/view/2707
- 8. Tuxtayeva, X. T., Egamova, D. A., & Hamroyeva, B. Z. (2022). The Potential of Ecotourism in the Economic and Social Development of Bukhara Region. Zien Journal of Social Sciences and Humanities, 8, 155-158.
- 9. Karimov, E. K., Bobozhonov, S. U., Mukhammadov, K. M., & Akhtamov, S. (2021, June). POSITION AND EFFECTIVE USE OF LAND FOR AGRICULTURE OF THE REPUBLIC OF UZBEKISTAN. In E-Conference Globe (pp. 50-53).
- 10. Karimov, E., Abdualiyeva, Sh. (2021, April). THE IMPORTANCE OF THE ECOLOGICAL SITUATION IN THE USE OF LAND RESOURCES. In E-Conference Globe (pp. 35-37).
- 11. Egamova Dilchehra Adizovna, Bobojonov Said Utkirovich, & Mukhamadov Kamariddin Mukhtarovich. (2021). IMPROVEMENT OF SOIL RECLAMATION (ON THE EXAMPLE OF BUKHARA REGION). Euro-Asia Conferences, 5(1), 285–286.
- 12. Egamova, D. A., Azimova, S. J., Muxamadov, Q. M., & Bobojonov, S. (2021). LABOR RELATIONS ON THE FARM. Актуальные научные исследования в современном мире, (6-2), 23-26.
- 13. Rahimberdievich, A. S., & Akhrorov, A. K. (2022). Contamination of Irrigated Soils with Toxic Substances and Protection of Them. International Journal of Human Computing Studies, 4(4), 66-70.
- 14. Rahimberdievich, A. S., & Akhrorov, A. K. (2022). Contamination of Irrigated Soils with Toxic Substances and Protection of Them. International Journal of Human Computing Studies, 4(4), 66-70.
- 15. Shuhrat Bafoyevich, A. (2022). DEVELOPMENT OF WAYS TO INCREASE THE EFFICIENCY OF THE USE OF FARM LAND. INNOVATIVE DEVELOPMENTS AND IN EDUCATION, RESEARCH 1(11),93–96. Retrieved from http://interonconf.org/index.php/idre/article/view/280
- 16. Shukhrat Bafoyevich Adizov. (2022). SOCIO-ECONOMIC ASPECTS OF LAND USE IN FARMING. INNOVATIVE DEVELOPMENTS AND RESEARCH IN EDUCATION, 1(8), 60-70.
- 17. Adizov Shuhrat Bafoyevich. (2022, July 16). FERMER XO'JALIGI YER MAYDONLARI O'LCHAMLARINI MAOBULLASHTIRISH USLUBIYATINI TAKOMILLASHTIRISH. https://doi.org/10.5281/zenodo.6845959
- 18. Adizovna, E. D., & Nematovich, S. J. (2022). ADVANTAGES OF USING INNOVATIVE TECHNOLOGIES IN GROUND MONITORING. Finland International Scientific Journal of Education, Social Science & Humanities, 10(11), 1-4.

- 19. Rustamov, M., Bobomirzayev, P., & Fayzimurodov, J. (2022). KUZGI YUMSHOQ BUGDOYNING "JASMINA" NAVI DON HOSILDORLIGIGA EKISH MEYORLARNING TA" SIRI. *Academic research in educational sciences*, (Conference), 258-263.
- 20. Bobomirzaev, P. X. (2017). Influence of sowing dates on wheat growth and development in the south of the republic. *Agro Ilm. Tashkent*, 2, 46.
- 21. Bobomirzaev, P., Khalilov, N., & Rakhimov, A. (2017). PHOTOSYNTHETIC ACTIVITY DURUM WHEAT DEPENDING ON TIME AND NORMS OF SEEDING SOUTH UZBEKISTAN. *РЕДАКЦИОННЫЙ СОВЕТ*, 1, 201718.
- 22. Халилов, Н. Х., & Бобомирзаев, П. Х. (2014). Ўзбекистонда буғдой селекцияси, уруғчилиги ва етиштириш технологияси (Монография). *Самарқанд: Зарафшон нашриети*.