



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

www.ijemr.org

COPY RIGHT



ELSEVIER
SSRN

2021 IJEMR. Personal use of this material is permitted. Permission from IJEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJEMR Transactions, online available on 27th Feb 2021. Link

[:http://www.ijemr.org/downloads.php?vol=Volume-10&issue=ISSUE-02](http://www.ijemr.org/downloads.php?vol=Volume-10&issue=ISSUE-02)

DOI: 10.48047/IJEMR/V10/I02/17

Title **USE OF LAND RESOURCES FOR AGRICULTURE IN NAMANGAN REGION.**

Volume 10, Issue 02, Pages: 83-87.

Paper Authors

Bakhadir Asamovich Kamolov, Doniyor Ilkhomjonovich Isoqov



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

USE OF LAND RESOURCES FOR AGRICULTURE IN NAMANGAN REGION

Bakhadir Asamovich Kamolov: Professor of Ecology.,

Doniyor Ilkhomjonovich Isoqov: Doctoral student of the Department of Ecology
Namangan State University, Department of Ecology

Annotation: Assessment of the condition of saline areas in Namangan region, the purpose and use of agricultural areas of the region with major land resources.

Keywords: Land fund, resource, fertility, erosion, gray, typical, subtropical, reclamation, karst, salinity, soil, area.

Introduction

The Republic of Uzbekistan has large land resources. Article 55 of the Constitution of the Republic of Uzbekistan states: "Land, subsoil resources, water, flora and fauna and other natural resources are national wealth, they must be used rationally and are under state protection" [1]. Land is the basis of social wealth, the primary source of the existence and development of economic sectors.

Land is used as a means of production and as a latitude-operational basis in all sectors of the economy, social and other spheres of human activity. One of the important land categories is agricultural land, including irrigated land. The total land area of the Republic of Uzbekistan is 44892.4 thousand hectares. In terms of land area, Uzbekistan is larger than a number of countries in the world, including Japan, Norway, Finland, Italy, the United Kingdom, and is relatively equal to the land area of Sweden and Spain. The Republic of Uzbekistan is a landlocked country in the central part of Central Asia. The border of the republic is 1425 km from west to east and 930 km from north to south. The length of the state border with Afghanistan is 137 km, with Kazakhstan - 2203 km, with Kyrgyzstan - 1099 km, with Tajikistan -

1161 km, with Turkmenistan - 1621 km. The total is 6221 km [5].

Due to its natural and geographical conditions, Uzbekistan is one of the most favorable regions in Central Asia. The territory of the country includes a peculiar lowland and mountainous terrain. 18 lowlands of the territory of Uzbekistan are lowlands. The most important of these is the Turan Plain. To the east and northeast of the country are the Tien Shan and Pamir mountain ranges (the highest point of the country - 4643m). In the north of the central part of the region of Uzbekistan is one of the largest deserts in the world - Kyzylkum, in the west - the Karakum Desert. The climate of Uzbekistan is a rapidly changing continental climate. The largest rivers are the Syrdarya and Amudarya, with a length of 2137 km and 1437 km, respectively. The Republic of Uzbekistan has huge potential for industrial and mineral raw materials, unique agricultural raw materials, natural resources and developed infrastructure rich in large quantities of semi-finished products obtained during processing.

Uzbekistan is one of the countries in the world in terms of proven mineral resources; in terms of gold reserves - in 4th place, in terms of uranium reserves - in 7th place, in terms of molybdenum reserves - in

8th place, in terms of copper reserves - in 10th place, in terms of natural gas reserves - in 14th place [2]. According to the administrative-territorial structure of the Republic of Uzbekistan, it consists of the Autonomous Republic of Karakalpakstan, 12 regions and the city of Tashkent. Given the positive natural conditions of Uzbekistan - climate, soils, relief, irrigation water, minerals, it is impossible not to recognize the importance and usefulness of the country's land resources.

Climatic conditions, the nature of irrigation of agriculture have historically created good conditions in the republic for the development of processing of agricultural products. In the Republic of Uzbekistan, land is state property. It is granted to various legal entities and individuals on the basis of various rights (right of inheritance, permanent and temporary use, private, lease, etc.). The deepening of economic reforms also requires a radical reform of land relations.

Management of the use of the country's land fund is the rational organization of the use of land by the agencies established in accordance with the relevant legislation of the state and the establishment of state control over the use of land by public services. According to Article 8 of the Land Code of the Republic of Uzbekistan, adopted on April 30, 1998, the land fund in the Republic of Uzbekistan is divided into the following categories according to the main purpose of land use:

1) agricultural lands - lands allocated for agricultural needs or intended for this purpose. Agricultural lands are divided into irrigated and non-irrigated (lalmikor) lands, arable lands, hayfields, pastures, perennial fruit trees and vineyards;

2) lands of settlements (cities, settlements and rural settlements) - lands within the boundaries of cities and settlements, as well as rural settlements;

3) lands intended for industrial, transport, communications, defense and other purposes - lands allocated to legal entities for use for the specified purposes;

4) lands intended for nature protection, health, recreation purposes - lands occupied by specially protected natural areas, having natural healing factors, as well as lands used for public recreation and tourism;

5) lands of historical and cultural significance - lands where historical and cultural monuments are located;

6) forest fund lands - lands covered with forests, as well as lands allocated for forestry needs, even if they are not covered by forests;

7) lands of water fund - lands occupied by water bodies, water economy constructions and lands in the zone allocated along the banks of water bodies;

8) reserve lands [3].

Due to their main purpose, the lands allocated to various ministries, departments, legal entities and individuals in the manner prescribed by law constitute the use of land in the country. Areas of all types of land use, which are part of the single land fund of the country as an object of management, are constantly changing, depending on the socio-economic reasons for the development of society.

Indeed, these lands and land resources continue to be a pressing problem not only in Uzbekistan but also in Central Asia. Because we use land resources in the same way unless we use the land properly and wisely.

As a result of irrational use of land in the Republic of Uzbekistan, the problem of two main factors - salinization and desertification - is growing. This problem has a significant impact on all regions of the country. One example is the Namangan region.

Namangan region is located in the north-eastern part of the Fergana Valley, the region is surrounded by the Chatkal and Fergana mountains, so it is difficult for cold currents to enter here, the natural climate is very mild and suitable for growing grain and other crops. The coldest days in the region are 210-230 days. Snowy days do not exceed an average of 17-40 days a year.

The main industries in the region are cotton, cereals, followed by silkworms, horticulture, vegetables and livestock. The total sown area is 193091 thousand hectares, fertile lands account for 36.2% of the total agricultural turnover, lands with average fertility 51.0% and lands below average productivity 12.8%.

There are saline soils in the territory of Pop and Mingbulak districts, including 27 thousand hectares of strongly and moderately saline soils, which are washed annually with saline washes.

One of the main factors that reduce soil fertility is water and wind erosion. 27% of the region is prone to erosion, mainly in Kosonsoy, Chartak, Chust, Yangikurgan and Uychi districts. According to soil and climatic conditions, the territory of the region can be divided into two regions.

1. Northern Mountain- semi-desert subtropical region. This includes all districts except Mingbulak district.
2. Southern subtropical desert region. This includes Mingbulak district.

The northern foothills of the semi-desert subtropical region are located at an altitude of 600-1200 meters above sea level, with an average annual air temperature of 13.4-15.5 degrees. The sum of the useful temperatures is 2250-2700 degrees, the growth period is 2404-2442 degrees, the growth period is 195-225 days, the average annual rainfall is not the same everywhere. It is 182 mm in Namangan, 168 mm in Pop, 250 mm in Uchkurgan, 315 mm in Kosonsoy and 190 mm in Chust.

Precipitation in all districts occurs mainly in the winter and spring months.

The relative humidity is around 53-48 percent during the growing season. The region is dominated by hungry and meadow-gray soils and meadow-swampy, typical gray soils. In Uchkurgan district, light gray soils with heavy mechanical composition are common. 22% of the total irrigated area of the region is rocky lands of various levels. In Uychi and Namangan districts there are meadow gray and light gray soils with a fertile layer, as well as light gray soils close to the less fertile, gravelly layer. In such light-colored gray soils irrigated, water-soluble salts are not noticeable in the 0.5–0.6 m layer. The amount of salt increases significantly as it falls into the 1.5-2.2 meter layer.

Typical irrigated gray soils are found in Yangikurgan, Chartak, Kosonsoy and Chust districts. These soils are mostly unsalted, the amount of humus in the topsoil is 1.3-1.6%, nitrogen 0.09-0.15, phosphorus 0.19-0.22 and potassium 2.1-2.4%.

In typical gray soils, gravel is common in the lower layer of 0.5 m, so in such soils the crop requires a lot of water during the growing season. In addition,

water pumps are mainly used to irrigate these lands.

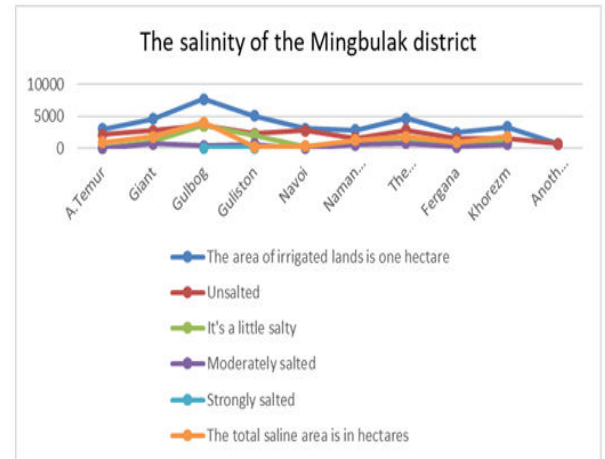
In the coastal areas of Uychi, Namangan, Naryn, Mingbulak, Pop and Uchkurgan districts of the region, mainly meadow soils are found. Meadow soils are also common in Yangikurgan district and have a moderate, heavy mechanical content, with a high humus content (1.8-2.5%). The desert subtropical region is located at an altitude of 200-300 meters above sea level, with an average air temperature of 14.5-16.0 degrees. The useful temperature range is 2700-3250 degrees in this region. The duration of the growing season is 230-240 days, the amount of precipitation does not exceed 140-161 mm. The region is mainly meadow, gray and gray brown soils.

Irrigated grassland soils are mainly located on the left bank of the Syrdarya and are saline to varying degrees. The water permeability of the soil in this area of Mingbulak and Pop districts is also poor due to groundwater leakage. As a result of excessive evaporation of groundwater, the accumulation of salts in the soil and groundwater is observed. Soil fertility in these areas is also affected by soil fertility. Groundwater levels are at a depth of 1-2 m (sometimes 2-3 m), and the soil requires constant saline washing [6].

The Southern subtropical desert region of Namangan region is Mingbulak district, which is one of the main and conspicuous areas of land resources of the region. Because Mingbulak district is one of the areas of Namangan region, which specializes mainly in agriculture (Pop and Mingbulak districts of Namangan region on soil salinity). Much of the area is saline, ranking second in Pop County in terms of strong salinity.

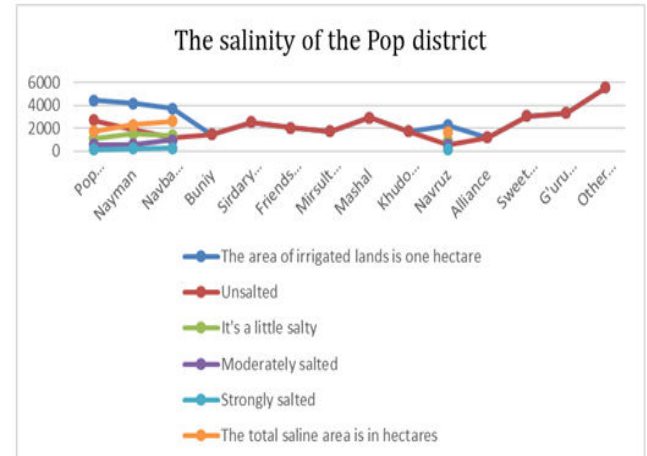
As of 01.09.2010 (Diagram 1) Mingbulak, (Diagram 2) Level of salinity of arable lands of Pop districts

Diagram 1



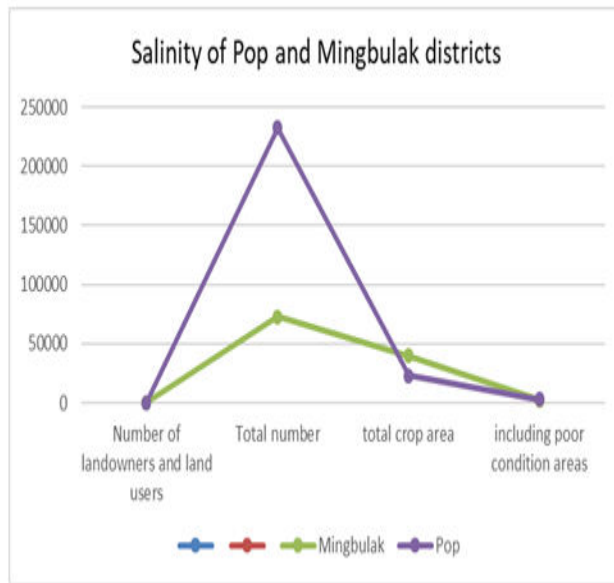
Note: Analyzed on the basis of data from the Department of Land Reclamation of Namangan region [4].

Diagram 2



Note: Analyzed on the basis of data from the Department of Land Reclamation of Namangan region [4].

Areas of the main saline Mingbulak and Pop districts
INFORMATION



Note: Analyzed on the basis of data from the Department of Land Reclamation of Namangan region [4].

As can be seen from the table above, the salinity levels in the soil have been distributed differently over 9 years. That is, the volume of weakly saline areas increases and the volume of strongly saline areas decreases. This is due to the fact that the result of the sharp decline in atmospheric precipitation in the Fergana Valley in recent years is closely related to the dynamics of soil moisture, groundwater and groundwater. But what if climate change is a reflection of the above natural processes? In this case, a natural man-made process occurs. That is, in

some areas of Namangan region (Pop, Mingbulak and Chust) the groundwater level rises, the dynamics of microelements appear, a karst phenomenon occurs. A karst phenomenon is a phenomenon that occurs as a result of the dissolution of rocks (limestone, dolomite, chalk, gypsum, salt) in water.

As a result, not only the agriculture of Namangan region, but also the agricultural sector of the Republic of Uzbekistan will suffer significantly.

References

1. The Constitution of the Republic of Uzbekistan. 1992.
2. Abulqosimov H.P., Hamraev O.Ya. State regulation of the economy. Study guide. Tashkent, Economics and Finance, 2014.
3. Land Code of the Republic of Uzbekistan. 1998.
4. Statistical data of the Ameliorative Expedition under the Naryn Syrdarya Irrigation Systems Basin Department. Namangan 2019 y.
5. www.farstat.uz.
6. https://agro.uz/uz/information/about_agriculture/435/5674/