

## **Working Projects of Disturbed Land Recovery - As a Method of Land Protection**

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**Abstract:** This article informs the needs of recultivations disturbed lands and the role of planner operating projects for their realization.

**Keywords:** disturbed lands, recultivation, agriculture, land use, ecological requirements, land survey measurements.

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## **Introduction**

The main reasons for the increase in the number of damaged lands over the last 20 years are the failure to perform the recultivation work on the damaged lands as a result of the development of industry, the subsistence level of the population, the extraction of natural resources from the depths of the earth, that is, users of the land, the construction of In order to return the damaged lands for use in the sectors of the national economy and to end their negative impact on the environment, recultivization works are carried out on these lands [1]. Recultivization work in the allocation of land for objects whose activities lead to the disruption of land, should be designed as an integral part of the technological process.

**Research methodology.** Recultivation of lands can be carried out for use in various industries and purposes, mainly in agriculture. The methods of using recultivated land will depend on the natural and technical conditions in which they are located, economic and social needs and economic viability [2]. The purpose of this working project is to restore the damaged lands in the nature of the mining of minerals. It is carried out in the completed part of the research object "Okhangaron" farm "Kushbulak" field in the Okhangaron district, the Karakhtoy lime field and the excavation work in the "Western" Supes field.

Recultivation is carried out in two stages. At the stage of technical rectification, it is envisaged to carry out activities on the preparation of the land for use by the subsequent land user after the extraction of the vacant land for its main purpose [3]. The purpose of biological recultivation is to restore the plant, soil layers of the affected area [4].

The Working Project on the recultivation of damaged lands was developed in accordance with the norms and rules of the movement. The "Kushbulak" area is located on the side of the Karakhtoy lime mining field, and it is a natural continuation of this deposit to the North. From the "Kushbulak" area to the north, the "Western" Supes deposit is located. From this area, 3km to the East is the settlement "Karakhtoy", while 2,5 km to the North-East is the settlement "mullberry". The release of the mining site is flat plain, some areas intersect with relatively deep meridial directional shadows. The will be around absolute mark variability of the plot is 817-694m.

The climate of the region in which the mining is located is a sharply contentious climate [5]. The daily change in air temperature reaches 22C°. The most dry months here are July and August, and the highest temperature in these months reaches +41C°. The lowest temperature is -18,8C° in january. The freezing of the Earth begins from October to November, the depth of freezing is not so deep. And the amount of annual precipitation is 478 mm.organizes, the main part of which falls on the autumn winter season. The main part of the wind blows in the direction of the North East at a speed of 2,3 4,8 m/c. The geological conditions of the area are characterized by the fact that the groundwater does not go up at all. As a result of the mining work carried out in the "Kushbulak" career, it was found out that the depth of the groundwater in the south-west part is at a depth of 8 m from the surface of the earth. The average annual amplitude of groundwater in this area is 3,8 meters. From the administrative point of view, mining belongs to the Okhangaron District of the Tashkent region and is 75 km in the south-east direction compared to the city of Tashkent. It is 3,5 kilometers in the north-eastern direction from the city of Okhangaron. Mining is connected by road with the ringleader railway station.

**Engineering and geological conditions:**from the geological point of view, the mine is connected to the III terrace of the Angren River and the middle-level research field of the

Tashkent complex, which is part of the II terrace of the Shavazsoy River.

Some areas consisting of flat plains with lots of “Kushbulak” and “Western” are cut with relatively thickets (6-12 m) of Meridian-oriented shadows. The upper part of the mine has 30 degrees of low slope, depending on the valley of the Angren River from the Chatqal rocks. By geological structure, a lot consists of less clay with a solid structure, some areas of which have low-lime fasteners with a cut, layers of Mother-of-Pearl consisting of tiny stones.

Loosy clay in the deposits is covered with a soil-grassy layer with a thickness of 0,1 m in most places, many of its areas have fine-grained stones. In its entire mass, clay by composition enters mainly heavy, finely dispersed clay.

**Direction of recultivation:** taking into account the engineering-geological structure of the “Western” and “Kushbulak” areas, as well as their location in the lower reaches of the left bank of the Shavazsoy River. It is bordered by a concreted channel on the north side. Climatic factors are a long warm period and do not last much longer.

In the remote north-west area, it was found that the groundwater was at a depth of 8m above the ground. In this plot, it is planned to complete the region of the beach. From the highway it is planned to come here from the road encircled by gravel. 30cm thick sand is poured into the region of the beach.

**Project recommendations:** career areas with a total area of 86,05 hectares will be recultivated. The main project solutions for the technical stage of career Land recultivation - lash include the development of full-fledged activities on all land plots in advance until the end of processing.

Preparation for the recultivation of the ground is carried out on previously worked surfaces. In this completed by filling the divided career diapers with soil up to the draft otmetka and building the stepped terraces. Later on these recultivated plots, work is carried out to cover and level the fertile soil layer.

The work on filling the bottom of the careers is carried out to 75,7 in the land area. This work is carried out on the account of the rocks coming out of the “Kushbulak” career. The volume of soil that can be brought to the In this 2329548m<sup>3</sup> at a distance of 600m, including landfill 172100 m<sup>3</sup>. After the career floor is filled, terraces with stairs are installed on the square to 10,35. Terrace these are devices that consist of 8 yards from 3m. His model forty is presented in the”regulations on mining by the time of completion of the work on Recultivation. As the calculation of the volume of soil to be cut shows, the size of the cut-off was 259472 m<sup>3</sup>, and the volume of the high-rise was 342300 m<sup>3</sup>, the construction of the terrace was carried out on the basis of the cross-profile (forties, fragments). Insufficient soil volume 82828 m<sup>3</sup>. It is brought from an acceptable rock height of 600 m away. Then leveling works are performed. After leveling work, spread the soil to a thickness of 20cm (fertile layer with a volume of 172100 m<sup>3</sup>) is kept in the pot.

It is planned to perform the work of rectification on a parallel basis with the use of the “Kushbulak” career. This makes this work worthwhile, providing additional engineering communications (Highway, communication network, etc.) loses the need to build.

The settlement “Karakhtoy” is located at a distance of 3,0 km to the east of the recultivated area. The area where the mining is located is characterized by its highly developed economy, because here has large mountain mining and processing combos, such as the Angren coal basin, the Almalyk mountain metallurgy combine, the Okhangaron cement plant. All industrial facilities

and population Punk are fully gasified. The area is provided by Angren Hidro Power Station with electricity. The industrial district of Olmalik Ohangaron is provided for the account of the Okhangaron river with drinking water. The technical economic indicators of the Working Project of the recultivated territory are presented in Table 2 in the jacket.

**Table 1**
**Schedule of works on recultivation**

| No | Works   | Unit of measurement | Quantity |
|----|---|---------------------|----------|
| 1. | Field   | Hectars             | 86,05    |
| 2. | Soil layer processing   | M <sup>3</sup>      | 23295448 |
| 3. | To fill the quarry with soils with loamy and sand-clay rocks (600m distance attending: including: |                     |          |
|    | a) to the bottom of the career  | M <sup>3</sup>      | 2416920  |
|    | b) build a terrace  | M <sup>3</sup>      | 2074620  |
| 4. | Construction of the terrace:  | M <sup>3</sup>      | 342300   |
|    | cutting expenses  | M <sup>3</sup>      | 259472   |
| 5. | filling volume  | M <sup>3</sup>      | 342300   |
| 6. | Bringing fertile soil to have a 20 centimeter layer   | M <sup>3</sup>      | 172100   |
| 7. | Sand h=30cm   | M <sup>2</sup>      | 4077     |
|    | Sand-gravel mixture h=25cm  | M <sup>2</sup>      | 191      |

**Table 2**
**Technical economic indicators**

| No | Indicators   | Unit of measurement | Quantity      |
|----|--|---------------------|---------------|
| 1. | Construction installation works including construction estimate cost | Thousand sum        | 26 109 100,58 |
| 2. | Construction period  | Month               | 18            |
| 3. | The area to be technically rectified                                 | Hectars             | 86,05         |
| 4. | The area to be biologically rectified                                | Hectars             | 86,05         |
| 5. | The value of 1 hectare of land                                       | Thousand sum        | 303 417,8     |

As can be seen from the table above, the volume of work on the recultivated plot amounted to 26 109 100,58 thousand sum. These works were developed taking into account construction standards, deadlines and environmental requirements, and the following requirements were used.

**Conclusion.** Damaged land loses its economic value or sharply decreases its value. They are a source of soil, water, air pollution in the army territories, which worsens the living conditions of the population. The return of these lands to their use in various areas of the national economy and to reduce their impact on the environment has shown the need to carry out the work on the restoration of the damaged lands within the framework of the land allocation project.

On the basis of the above-done working project, it can be noted that under the conditions of granting the allocated land plots for the extraction of fossil assets, the following measures are

required to be taken into account in full, to protect nature and the environment, to ensure the priority of agricultural land, to protect the land from erosion, salinity, flooding, , taking into account the interests of land owners, it is necessary to see the issue of limiting the rights of the land user in case of necessity. It is can be achieved only then that effective use of land and their protection.

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