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DEVELOPMENT OF RAVINE LANDS TAKING INTO ACCOUNT SOIL PROTECTION AGRICULTURE OF THE CHARTAK ADYRS

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Annotation:
Development of ravaged areas, taking into account soil conservation agriculture of Namangan adyrs on leveled surface of the ravine area new subtypes of technogenic soils are formed, represented by outcrops and mounds. Naked the area is characterized by dense structure and low filtration capacity. Bulk surface differs in subsidence and potential suffusion hazard, profile friability and significant water permeability.

Keywords: Namangan Adyr, soil conservation agriculture, ravaged areas, afforestation, water permeability, filtration, water conservation, sustainability, plowing, fertilizers, waterproof, erosion resistance, runoff, impervious area, erosion, assessment, criterion, categories.

Namangan Adyrs are located in the northeastern parts of the Namangan region. [1, p. 9]. Widespread anthropogenic land development in Uzbekistan in 1975-1980 influenced the activation processes of erosion and technogenic soil disturbance, which led to a reduction of more than 300 thousand hectares area of agricultural land and deterioration of the soil - ecological situation countries. The problem is aggravated by the fact that in the arid zone and mountainous region of the republic the use of traditional methods of reclamation and reclamation disturbed by ravines and technogenic human activity of soils. [2, p. 10].

An important criterion for assessing gully erosion is defining the territory by category ravine is a land hazard, which should form the basis for the design of anti-

erosion events. A ravine is a dangerous land - an area where a combination of natural conditions creates the danger of developing gully erosion during economic use. [3, p. 7]

Soil and water conservation agriculture on the area of the reclaimed surface should be a comprehensive combination of agro-forests and hydro-reclamation methods for protecting soils from erosion.

Soil conservation agriculture and afforestation. On the leveled surface of the ravine area, new subtypes of technogenic soils are formed, represented by outcrops and embankments. The exposed area is characterized by a dense structure and low filtration capacity. The bulk surface is characterized by task-specific nature and potential suffusion hazard, friability of the profile and significant water permeability. Therefore, one of the non-alternative methods of agricultural The use of ravine lands is the radical reclamation of ravines. She provides a set of reclamation techniques for the reconstruction of eroded lands with with the aim of creating a cultural background on them [4, p. 8].

In general, the entire leveled soil-substrate surface has low fertility and minimal erosion resistance. Therefore, in the development of ravines for agricultural use, there is a need to solve these inseparable tasks from each other: preventing the manifestation of erosion processes and intensive increasing the fertility of planned lands [5, p. 11].

Soil and water conservation agriculture on the area of the reclaimed surface should be complex, combining agro-forests and hydro-reclamation methods for protecting soils from erosion. According to the law of rectilinear movement of concentrated runoff of temporary water streams on heavily gully lands, the number of elongated ravines over time decreases to 9% [6, p. 12].

In the first year of development, double or triple doses are applied for fall plowing organic fertilizers against the background of mineral ones, at the rate adopted on the farm for the sown culture. The following are used in the form of organic components: semi-rotted manure (40–60 t/ha), hydrolyzed lignin (30–60 t/ha), recycled municipal waste (30–50 t/ha) or wastewater (60–90t/ha). Moreover, on the land plot, lower standards are applied organic components, and the depth of their plowing should not exceed 15 cm so that preserve the graft layer. In this case, the

optimal moisture content of wastewater sludge before the application should be 30–40%, since in this case it preserves water-resistant structural separately measuring 0.3–1.5 cm [7, p. 13].

After applying fertilizers, grains (winter barley) or annual fodder are sown herbs (shadbar, Sudanese grass, a mixture of rye and perk), soil cultivation and sowing of crops must be done at the smallest slope, 1–3 O . Horizontal (strictly transverse) a method of agricultural technology that is effective in preventive measures to combat ravine formation, is excluded, since complete retention of runoff in the bulk surface creates a danger of development subsidence-suffusion processes. To the ravine of the dangerous territories of the Namangan adyrs from organizational and economic measures in the practice of the agro-industrial complex, we were a complex of soil systems for conservation agriculture has been introduced: bi-annual recording and assessment eroded lands on farms [8, p. 14, 16].

Subsequently, alfalfa or perennial grasses are sown on the reclaimed surface. IN dry years and when sowing periods are prolonged, it is recommended to sow the field with alfalfa and corn. During the period of waxy ripeness, corn is harvested for silage, and alfalfa or grass left for three years. In the 4th year, reclaimed lands depending on the slope of the area can be used for row crops, orchards and vineyards. It must not be allowed that during the development period (3–4 years) on planned soil row crops or tree species were planted, since irrigation can lead to the development of suffusion phenomena and soil erosion, including secondary ravine education. Cutting furrows and irrigating crops during the development of the ravine area, as in the first year of reclamation, they are carried out along the smallest slopes. Watering is carried out in small streams (less than 0.1 l/s per furrow) and at a rate of 600–800 m3/ha. The length of the cut furrow should not exceed 70–80 m, otherwise the regulation of soil moisture will be difficult.

The specificity and labor intensity of reclamation methods for developing ravines requires a number of organizational and economic activities:

1. Creation of strict control (by choosing a responsible person for development blocks) over the progress implementation of agrotechnical measures, operation of hydraulic structures, survival rate of forest plantations, condition and elimination of negative phenomena.

2. Providing differentiated wages for employees participating in the development ravines and their reward based on the final result and, on the contrary, establishing the amount of the fine (in accordance with the Land Law) for misuse of land, failure to comply with mandatory measures to protect soils from degradation processes.

The probability of degradation of technogenic soils during radical reclamation of ravines with proper implementation of the above recommendations is less than 5% of the total development area. Ignoring at least one of these reclamation methods for developing ravines increases crop and soil losses up to 50–60% [9, p. 15].

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