

PRINCIPLES OF IMAGE EROSION MANAGEMENT OF NAMANGAN ADYRS OF UZBEKISTAN

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Annotation:

Namangan adyrs are located in the northeastern parts of Namangan region. It is known that the principles gully erosion management. a) rational and effective use of land and water resources as well. To carry out timely economic activities, agro-forestry-water reclamation measures, having studied manifestation of the ravine and its density, density and frequency accepted scientifically based measures.

Keywords: Degree of damage, gradation, thickness, density, area, dammed weakly, average strongly, very strongly, agro-forestry drainage.

We know that the main criterion in the fight against gully erosion is a one-time implementation of anti-gully measures along the entire runoff-forming surface, i.e. completeness in the implementation of organizational and economic, forest - argo - irrigation and drainage measures [1.9].

In the ravine of the dangerous territories of the Namangan adyrs from organizational and economic measures in practice of the agro-industrial complex, we have introduced a complex of soil protection systems agriculture: two-time annual accounting and assessment of eroded lands on farms, districts and the application of administrative and legal liability to offenders; certification, licensing and certification of land plots of legal and physical persons; implementation of land use schemes and projects according to our recommendations (Nigmatov, Dadahodjaev et al., 1994), as well as developments by the Uzgiprzema Institute, the identification

of gully lands by category and priority of development, as well as by stages of indigenous reclamation [2.10].

The assessment of the area affected by gully erosion (gully infestation) is determined by their total length (density), number of ravine peaks (density), average distance between ravines (frequency) and percentage of area directly occupied ravines (Table 1).

Table 1 Grouping of ravines according to the degree of affected area

№	Degree of damage territory with ravines	Density km/km ²	Density units/km ²	Frequency m	Square, %
1	Almost no gully	Less than 0.1	Less than 0.1	More 1000	Less than 0.5
2	Weakly for the ravine	0,11-0,30	0,11-0,60	1000-501	0,51-3,00
3	Behind the ravine	0,31-1,00	0,61-1,50	500-201	3,01-10,0
4	Average per ravine	1,01-3,00	1,51-5,00	200-201	10,01-20,0
5	Strongly for the ravine	3,01-5,00	5,01-10,0	100-51	20,01-30,0
6	Very much for the ravine	5.01 or more	10.01 or more	Less than 51	30.01 and more

According to the intensity of linear growth of ravine peaks, they can be divided into the following classification ranks: minimum – less than 0.1; weak – 0.11-0.5; average – 0.51-2.0; strong – 2.01-5.0; very strong – 5.01-10.0; catastrophic – more than 10.0 m/year.

The most important criterion for assessing gully erosion is determining the territory by categories of ravine land hazards, which should form the basis of design, are contrary erosion activities. Ravine danger of land is an area where a combination of natural conditions creates a danger of development of gully erosion during economic use. The main source causing soil erosion is concentrated water flow from precipitation runoff and irrigation. All other natural factors are a hazard to one degree or another associated with their eroding power.

The table below shows the general characteristics of the location of the ravines of the Namangan adyrs [3.11].



Table 2

№	Density pcs/sq.km.	Square		Density sq/km	Square		Frequency, m	Degree of contamination
		Thousand. Ga.	%		Thousand. Ga.	%		
1	Less than 0.1	9,5	8,3	Less than 0.1	9,4	8,2	More 1000	Not ravaged
2	0,11-0,60	17,7	15,5	0,11-0,30	16,5	14,5	1000-501	Weakly ravaged
3	0,61-1,5	12,9	11,3	0,31-1,0	8,6	7,6	500-201	gully
4	1,51-5,0	21,8	19,1	1,01-3,0	22,1	19,4	200-101	Medium gully
5	5,01-10,0	17,9	15,7	3,01-5,0	20,5	17,9	100-51	Heavily ravaged
6	More 10,01	34,2	30,1	More 5,01	36,9	32,4	Less than 51	Very much gully

On the ravine lands of the Adyrs, the most accessible and no less effective against ravine The measure was an agro-reclamation technique [4]. Route - field studies have shown that With the introduction of soil conservation agriculture, the ravage of the territory sharply decreases. So, for example, the agricultural company "Bobir" sequential strip placement of crops on rainfed land, even when the terrain slope is more than 15 degrees, the gully dissection drops to 0.1 sq/km. Width the strip did not exceed Yum, where the sequence of crop placement was built according to the following scheme: winter wheat - perennial grass - annual grass where perennials are grown grasses should be located at the foot of the slope. On irrigated lands the safest against ravine agrotechnical measures in farms in the Fergana section Muchum village council of Chartak district planted root spraying perennial plantings and drip irrigation. The slightly gully slopes of the adyrs are occupied by perennial grasses and continuous crops of grain [5].

The development of ravines in the initial stages largely depends on the armoring role of vegetation, which is determined by the amount of ground mass and roots. These indicators in natural landscapes are determined by the biological type of vegetation, and for the cultural agricultural background. But the soil-protective role of plants under conditions of natural moisture cannot be established regardless of taking into account the periods of vegetation development and the occurrence of erosion-hazardous precipitation. Soil protective capacity in our case is calculated by dividing the projective coverage for a maximum 20-minute rainfall erosion index.

According to the degree of manifestation and ravine danger of the territory, depending on the anthropogenic factor categories of agricultural land can be arranged in the following sequence (in descending order) newly irrigated lands of gently sloping plains, foothills, adyrs and high river terraces - old irrigated lands in the same conditions relief - rainfed lands of low mountains, middle mountains and



adyrs - year-round pastures middle mountains - seasonal highland pastures. The same sequence by type of crop: row crops – irrigated perennial crops – annual grain crops continuously sown – perennial plantings rainfed grain continuous sowing - perennial plantings rainfed annual grasses are perennial grasses.

Forest reclamation measures to combat gully erosion were studied on reptiles adyrs of Chartak district of Namangan region according to methodological instructions and recommendations developed by the Institute of Soil Science and Agrochemistry of the State Committee "Ergeodez cadastre" of the Republic of Uzbekistan. Most anti-gully effect had irrigation and drainage techniques: terracing on slopes with a terrain slope of 15 degrees, watering along the smallest slope with preliminary moistening of the soil to the main glaze.

Multivariate statistical analysis of quantitative indicators of ravine factors education at 563 key sites scattered throughout Uzbekistan and processed using a computer program, showed a close correlative relationship with the type of relief.

List of Used Literature

1. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Научные основы борьбы с овражной эрозией наманганских адыров // Сборник статей Международной научно-практической конференции. – 2016. – №. 2. – С. 16.
2. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Типизация рельефа для оценки оврагоопасности территории Узбекистана // Science Time. – 2018. – №. 4 (52). – С. 92-94.
3. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Оценка пораженности территории овражной эрозией и интенсивности роста оврагов Наманганских Адыров // Science time. – 2018. – №. 4 (52). – С. 95-99.
4. Нигматов А., Любимов Б., Дадаходжаев А. Рекомендации по оценке картирования и восстановлению овражных и техногенно нагруженных земель // Ташкент. ИП А Ан. Уз. – 1994.
5. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Оценка оврагов опасных территорий северо-восточной части ферганской долины (наманганских адыров) // Science Time. – 2020. – №. 12 (84). – С. 45-49.
6. Дадахожаев А., Мамаджонов М. М., Хайдаров Ш. Э. Методы засыпки и планировка оврагов в коренной мелиорации заовраженных земель // Science Time. – 2017. – №. 6 (42). – С. 93-96.



7.Юлдашев, Ж., Каюмов, Д., & Жураев, У. (2021). Олий таълим муассасаси профессор ўқитувчисининг маъруза ўтиш услуги ва ўзини тутиши. *Экономика и социум*, (1-2 (80)), 813-817.

8.Юлдашев, Ж., Каюмов, Д., & Жураев, У. (2021). Ўқув жараёни илмий асосда ташкил этишда талабаларнинг мустақил таълимини ривожлантиришнинг услубий асослари. *Экономика и социум*, (1-2 (80)), 802-806.

9.Anvarzhon, D., & Abdukhalikovich, X. M. (2023). DEVELOPMENT OF RAVAGED LAND PLOTS, TAKING INTO ACCOUNT SOIL AND WATER CONSERVATION AGRICULTURE (NAMANGAN ADYRS). *Journal of new century innovations*, 38(2), 109-112.

10.Дадаходжаев, А., Хамракулов, М., & Жўраев, У. (2022, September). ЭКОЛОГИК ТОЗА МАҲСУЛОТ ЕТИШТИРИШДА ЎСИМЛИКЛАРНИ ТУПРОҚ ВА ОЗУҚА ТАЛАБЛАРИНИ БОШҚАРИШ. In *INTERNATIONAL CONFERENCE DEDICATED TO THE ROLE AND IMPORTANCE OF INNOVATIVE EDUCATION IN THE 21ST CENTURY* (Vol. 1, No. 3, pp. 80-83).

11.Дадахўжаев, А., & Жўраев, У. И. Ў. (2022). Повышение плодородия засоленных почв в сельском хозяйстве наманганских адыров, размещением на основе севооборотов. *Механика и технология*, (Спец выпуск 1), 118-122.

12.Muhammadali, R. A., Juraev, U. I. U., & Nurekeshev, S. S. O. (2021). Influence of seasonal mud of the Narin river for the coagulation process. *ASIAN JOURNAL OF MULTIDIMENSIONAL RESEARCH*, 10(5), 69-72.

13.Дедабоева, М. Н. (2022, October). МИКРОЎФИТЛАРНИ ИШЛАБ ЧИҚАРИШ ВА УЛАРДАН ФОЙДАЛАНИШ ТАЛАБИ ВА КЎЛАМИ. In *E Conference Zone* (pp. 63-67).

14.Abduq'aniyeva, Z., Mamurov, B., & Dadaboyeva, M. (2023). BIOGOMUS VA BIOGOMUSDAN QISHLOQ XO'JALIGIDA FOYDALANISH. *Молодые ученые*, 1(5), 81-84.

15.Zokirov, M., Mamurov, B., & Dedaboyeva, M. (2023). KALIYLI O'G'ITLAR VA ULARNI QO'LLANILISHI. *Молодые ученые*, 1(7), 35-37.

16.Zokirov, M., Mamurov, B., & Dedaboyeva, M. (2023). SPIRT OLISHNING AN'ANAVIY VA ZAMONAVIY TEXNOLOGIYALARI. *Бюллетень педагогов нового Узбекистана*, 1(4 Part 2), 38-42.