PROTECTION OF HILL LAKES THROUGH EROSION CONTROL WORKS

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ABSTRACT

Soil erosion has a great impact on reservoirs, owing to sedimentation and the degradation of water quality. There are made erosion and sediments effluence differentiation in a watershed with erosion control works and same watershed without erosion control works. The comparative analyze of these tow situation, with erosion control works and same watershed without erosion control works, set some conclusions:

The erosion is reduced under acceptable limits; a proper cultivation structure mixed with erosion crop system reduced erosion and sediment effluence; a good erosion control works capitalized efficiently rainfall; surface runoff are reduced; an adequate reclamation of outlet network reduces gully erosion; ensemble of land reclamation (cultivation structure, erosion crop system, erosion control works on outlet network) reduces erosion and sediment effluence with 23%.

RESULTS

In the vicinity of Culbul Vulturilor reservoir there is the watershed Cărjău a valley gully. From this watershed about 1472 hectares it was proposed to appropriate an erosion control works, with ought changing the land use (Table 1), through an adequate crops structure, between erosion control works and between control works on the outlet network for allowing the effect of these works on the sedimentation processes.

After reclamation, Crop structures - straw cereals 38%; cultivator plants 62%; non erosion measure - looser, split and strip farming. Table 1 shows the outlet network (Figs. 1, 2) from the upstream to downstream; first zone 7 working (earth dam 4.5 m in height, width about 100 m; earth dam 5.5 m in height, third zone without working).

CONCLUSIONS

- The comparative analyze of these tow situation, with erosion control works and same watershed without erosion control works, set some conclusions:

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