

# The Forecast of Quantity Characteristics of Soil Erosion Processes Running on the Vulnerability Slope existed in the River Gldaniskhevi Basin and Working out on Managing of Mechanisms for Eroded Sections<sup>1</sup>

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Soil erosion processes occurrent on the vulnerable slopes of the Gldaniskhevi river ravine are considered in the work. Namely, by means of approved empirical dependence, on Mamkoda adjoining vulnerable slopes, values of eroding coefficient, degree of damage and erosion numerical characteristics were determined.

In order to make the results more precise and to elaborate effective soil anti erosive geo mat (eroded sections control devices), field integrated polygon was arranged on Mamkoda settling adjoining vulnerable slope. There, at the same time, soil erosion dynamics study (control section) as well as the investigation on soil anti erosive effectivity and ability of bio diversity renewal of two different of each other geo mats (the worldwide approved geo mat “Jute Mat” and Georgian product geo mat “Luffaeromat”) were conducted.

On the base of research having been carried out on the polygon control section, it has been ascertained, that theoretical outcomes received on Mamkoda adjoining vulnerable slopes stand close to those of attained in field conditions, that stipulates reliability of data, gained as the result of researches fulfilled with the purpose to determine soil erosion intensity.

As for field researches fulfilled on the experimental sections of the integrated polygon, it was ascertained, that from the soil anti erodibility point of view as well as that of bio diversity renewal ability geo mat “Luffaeromat”, created by us, is more effective, than geo mat “Jute Mat”, that allows us to give recommendation for its implementation.

**Key words:** soil erosion, vulnerable slope, geo mat.

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