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## **ANALYSIS OF HYDRIC EROSION PRODUCED BY THE SIRET RIVER, ROMANIA DURING 1989 - 2008**

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### **Abstract**

The objective of this article is to study the evolution of soil erosion produced by the Siret River during 1989 – 2008. The hydro-physical and mechanic action of the river flow manifests by freeze, thaw, erosion, transportation, and alluvial deposit processes. The researched section was delimited in a sector of Siret River bed, where the exploitation of mineral aggregates is carried out on large areas. The influences and effects of deficient exploitation of mineral aggregates have a direct impact on the evolution forms of Siret River. The analysis is important because of the very frequently loss of agricultural lands by river erosion in the researched sector. Siret water catchment area, by its position and by the dimensions of the drainage network, represents a highly varied area from the geological and morphological point of view. The section Săucești – Tamași is situated in the north-eastern region of the Bacău County, Romania. The studied area has 1577.28 ha. After the comparative analysis of the new topographic plan with the old soil map, soil losses were identified. The result was a total examined area of 369.46 hectares, representing 23.42% of the total researched section. For the delimited soil units, according to the homogeneity of areas, guiding requirements must be established, having as objective the amelioration of the arable lands and grasslands.

*Key words:* flood, soil erosion, soil map, topographic map

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