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
**Soil Erosion Risk Assessment of the Gölbaşı Environmental Protection Area
and Its Vicinity Using the CORINE Model**

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Abstract: The main objective of this study was to determine the soil erosion risk in Gölbaşı Environmental Protection Area and its vicinity using the CORINE model. The model consists of 6 steps, each of which using different overlaying combinations of soil texture, depth, stoniness, climatic data, land use and land cover information. In the first step, soil texture, depth and stoniness layers were extracted from a 1:25,000 scaled digital soil map and overlaid to form a soil erodibility map. Secondly Fournier and Bagnouls-Gaussens aridity indexes calculated from the climatic data were used to form the erosivity layer of the study area. The next step consisted of obtaining slope angle classes from digital elevation model of the study area. As the fourth step the land cover layer was prepared from the land use map considering the density of the plant cover. Then the potential soil erosion risk layer was produced by overlapping soil erodibility, erosivity and slope layers. For the final step, the land cover and potential soil erosion risk layers were combined to form the actual soil erosion risk map. The results showed that 72.9% of the study area had low, 23.8% of the area had moderate and a small part of the study area (1.0%) had high soil erosion risk. In addition, the study showed that the geographic information system (GIS) technique has an important role in the prediction of soil erosion risk studies.

Key Words: CORINE erosion model, soil map, geographic information system

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