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Abstracts



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GEOECOLOGICAL FUNCTIONS AND ECOLOGICAL VALUE OF ROSIA MONTANA BASIN, RUMANIA

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Rosia Montana is located in the central region of the Transylvanian Mountains, Rumania. It occupies an area of 23 km². The basin attracted the attention of not only geographers.

- a „gold rush” began in the area in the beginning on the 20th century
- human activity has changed the long term natural equilibrium
- the area has turned out to be one of the richest gold resource of Europe in recent months.

This study uses currently available information to analyze the changes in the ecological value of the Rosia Montana Basin. Economically the landscape bears direct (hard) and indirect (soft) values. „Hard” values are measurable, they can be expressed numerically based on geological data (e. g. the values of direct economical profit). „Soft” landscape values include more subjective features such as nature preservation, recreational or aesthetic values.

During surveys we conduct supervised sampling. Sample locations and the corresponding data are integrated into geographical information system (GIS) as thematic maps. After – with respect to geological, elevation and flow characteristics – geostatistically processing the area we attempt to show some interpolated maps and to unveil their interaction with other landscape factors (such as elevation, surface type, human influences and their changes) using GIS functions. The complete GIS database enables modeling from several aspects. The method described can be utilized in any area with similar amount of collected information in augmenting the whole decision process.