

ECOLOGIC-ECONOMIC EFFICIENCY BY NON-NUMERICAL MULTIPLE CRITERIA DECISION METHODS

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The qualitative evaluation of the implications of the environment in a project in a project is often very difficult. Also, it is often difficult to measure, evaluate or predict the impact of a project on the environment. As consequence, we are tempted to abandon the use of quantitative criteria referring to the environment, as in our previous research. Welfare is a complex concept, which should be taken into account from various points of view, according to the directions of the Declaration from Tokyo of the Brundtland Commission, 1987 February 27th (see Okita, 1992, pg. 165 – 169), but is difficult to quantify it. The range of applications, in which the qualitative valuation of environment goods allows numerical methods, is limited. As consequence, it is necessary to replace the numerical manner of thinking by a qualitative non-numerical approach. On another hand, the numerical approach is often artificial, since it tries to model some process implying a substantial amount of subjectivity. Therefore, it is necessary to elaborate non-numerical or partially numerical methods in order to cope with the subjectivity. In this paper we deal with two types of non-numeric approach of the decision making in the fields of ecologic-economic efficiency of the investment projects. We deal with the verbal analysis and the image analysis, applied in this direction. The example of the ecologic-economic and social impact of the sulphur mining in Călimani Mountains is treated as an example. The research resulting in this paper is part of the Research Project ID-1239/2007, funded by the Romanian Education and Research Ministry.

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