

AN ECONOMIC INSTRUMENT FOR IMPROVEMENT OF EXPLOITATION OF NATURAL RESOURCES

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ABSTRACT

A cost structure is proposed for improving the exploitation of natural resources featuring reduction at the source of the residuals from traditional mining on a national and global scale. The methodology involves business administration and economics theory and employs the previously introduced equality principle and the Efficient Use of Resources for Optimal Production Economy (EUROPE) model which here are used to allocate shadow costs to residuals which gives economic incentives to reduce the wastes at the source. A case study exemplifies the practical application of the proposed theory in the Swedish context. It is concluded that the presented methodology is useful for increasing the cost-effectiveness of the traditional exploitation of natural resources. The equity of the distribution of such facilities is improved on all administrative levels. The methods are suitable information support tools for decision-making in the management of natural resources with emphasis on the economy of residuals from all the mining and excavation. The profitability, the technology used and the environmental conditions can simultaneously be improved for a certain nation as well as for the whole globe by implementation of the current findings. A single monetary key factor enables continuous reviewing, monitoring and evaluation of the mining of different natural resources.