



BOOK OF ABSTRACTS

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ECONOMIC EFFECTS OF APPLYING FUTURE AGRICULTURAL PRODUCTION STRUCTURE MODEL (FAPSMS)

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***Corresponding author:** sustainable management; economic analysis; soil conservation; model of future production; soil erosion

Abstract

It is necessary to harmonize the needs of society in terms of agricultural production and land protection from various forms of degradation throughout sustainable land management. Various models of sustainable soil management are being applied with an aim to prevent the erosion destruction of the soil through adequate processing methods, with appropriate yields and positive economic effects of such production. Assessing the justification of investment in sustainable management of land resources is an important step in this process. Analysis of soil erosion risk was carried out in the suburban area of the morphological unit of the Barička river watershed, using the Revised Universal Soil Loss Equation (RUSLE) method, with the existing and projected structure of agricultural production according to the Future Agricultural Production Structure Model from the Aspect of Preserving Land Resources for Mountain Catchment Areas of Serbia (FAPSMS). The value of the existing and projected production structure from an economic aspect was also examined using dynamic economic methods such as Internal Rate of Return (IRR), Repayment of the Invested Funds (RIF), Cost-Benefit Ratio (CBR) and Net Present Value (NPV). In order to assess the risk and uncertainty of investments, a sensitive analysis of dynamic methods IRR and RIF was carried out. Economic indicators show that the investment is justified and that it is more sensitive to changes in income.