

SECONDARY IRRIGATION INFRASTRUCTURE IN ROMANIA: INFLUENCE OF THE WATER USER'S ASSOCIATIONS MODERNIZATION ON THE PERFORMANCE OF THEIR MEMBER FARMS

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Abstract

In this paper the authors undertook an analysis of the Water User's Associations influence on the performance of their members and on the agricultural sector. The existing crop irrigation infrastructure was built during the communist period, before 1989. It was divided, since it's been built, into primary and secondary infrastructure. After 1989, the secondary infrastructure, usually built and located in key spots, in the proximity of water sources and farms, was assigned to these units for maintenance and modernization. Water User's Associations are non-profit economic units that can be established by a minimum of ten members, agricultural units, and can benefit for receiving such an infrastructure located in their proximity. Since Romania joined the E.U., some financial incentives have been developed with the purpose of modernization of the primary and secondary irrigation infrastructure. Thus, the secondary infrastructure can benefit from up to 1,000,000 Euro, with an intensity of 100% non-reimbursable for the modernization of its entire serving area. In this paper the authors analyze the effectiveness of such an investment, a specific investment amounting to 999,933 Euro. It will be shown how by carrying out the investment and modernizing the infrastructure, an annual saving of 6,621,000 cubic meters of water will be achieved, as well as an annual saving of at least 463,200 lei. As will be shown, the largest impact consists in the sufficient irrigation of the crops that leads to yields up to 4 times higher per ha. The authors determined numerous indicators from the studies that are presented in the paper.

Key words: irrigation, crops, European incentives