

## **Models of Planning and Optimization Cropping Plan of The Agricultural Exploitation of Farms in Romania\***

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### **Abstract**

The purpose of this paper is to promote the setting up of farms whose size allow the practice of a viable, sustainable agriculture, capable to apply the newest technologies and lead to profit and efficiency, to the economical and organizational consolidation. The risk is a very important variable in the simulation behaviour farms. This paper aims to build programming models to simulate the behaviour of agricultural farms, that must be calibrate by the culture plan of the year basis or as the average over several years by the agricultural holding. Economic rationale behind this requirement is that in this way the model adequately represents the environment in which the decision maker agricultural structure shall base its decision. As a consequence, the resizing of the agricultural holdings, the partnership between the producers, the integration of the agricultural production, the rural development, the consumers' constant request for agricultural and food products, the decrease of the deficit of the commercial balance for the agricultural products, the increase of the population's life standard, the safety of the food, all these are goals that have to be under the continuous attention of the authorities at central and local level.

**Keywords:** Models of planning, optimization, economic, agricultural holdings, production, simulation, decision