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## OPTIMUM CROPPING STRUCTURE OF DAKAHLIA GOVERNORATE [91]

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## ABSTRACT

It is the correct cropping structure that achieves the compatibility between more than one goal to reach the most efficient cropping structure in achieving and rationalizing water consumption and low use in the context of a set of constraints and determinants of productivity. In order to increase farm income and provide a large amount of irrigation water to benefit from the surplus In horizontal expansion. The model of the analysis of the agricultural structure in Dakahlia governorate included 18 crops through five different models. The first model (alternative) achieved this total yield of 6.780 billion pounds, more than the equivalent of 116 million pounds. Of the proposed model is less than its equivalent in the prevailing crop structure of 81 million  $m^3$  as a result of the increase in the area of some of the crops grown from their counterparts in the dominant structure. In accordance with Ministerial Decision No. 28 of 2018 issued by the Minister of Irrigation published in Al-Ahram newspaper on 8/3/2018, the year 142 - No. 47939, reducing the area of rice in Dakahlia governorate by 45%, four other models were reached.

**Keywords:** Cropping structure, Horizontal expansion, Linear programming, Dakahlia Governorate

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