



OPTIMUM ECONOMIC USE OF AVAILABLE RESOURCES IN THE WESTERN DESERT IN EGYPT ACCORDING TO THE PROJECT OF ONE AND HALF MILLION ACRES IN FARAFRA OASIS CASE STUDY

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ABSTRACT

The cropping pattern considers how to use the available agriculture resources from land, water, farmers, capital and information technology. Thus the main objective of this study determines the optimum cropping pattern that will maximize net return and maximize net return of irrigation water. To achieve the main objective of this study the method of Goal programming has used. The results of research shown that: The available area

was about 14.63 million Fadden has been fully used, The model maximize the total net return of the current crop in A.R.E. it estimated from 68.51 to 69.17 billion pound annually which increase about 0.66 billion pound which represent 1% from the current crops. While the total quantity of requirement water decrease from 61.19 to 58.95 billion cubic meter, which decrease about 2.24 billion cubic meter which represent 3.66% of the current quantity of water. While the net return irrigation water for crops increasing from 1.12 to 1.17 pound /cubic meter which increase about 0.054 pound /cubic meter that represent 4.83% of the current net return irrigation water