

PRECISION IRRIGATION EFFICIENT TECHNOLOGIES PRACTICE IN LIBYA FROM THE WATER AND ENERGY POINT OF VIEW

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ABSTRACT

Precision irrigation is defined as a method of applying the right amount of irrigation/water as per the requirements of the individual plants with less impact on the environment. Accordingly, this task is performed by variable rate sprinklers in Libya with capability of position determination to apply water at variable rates at different locations in (Kufra area and Garaboulli).

The unstudied wide spread of agriculture projects depending on fossil groundwater has added to the water imbalance and to increase the salinity levels of the fossil groundwater resources of Libya. Due to increase in the irrigation practices, ground water salinity levels have led to soil salinization in many places over the years. As a result, the demand for irrigation water increased and crop yields decreased.

In spite of precision irrigation practiced to a certain limit in Libya, but it is still need to have a strategy managing the steps of application. National and international studies concerning evaluation of using precision irrigation, subjected to state of art reviews. Those studies evaluating Libya's agricultural irrigation practice, indicated that Libya is suffering from various problems in the issue of using irrigation systems.

KEYWORDS: *Precision Irrigation, Libya, Irrigation Efficiency, Water Demand, Irrigation System*

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