



Evaluation of Agricultural Water Management in Water – Starved Konya Basin, Turkey

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Abstract: In this study, water resources uses and irrigation water management were evaluated for Konya closed Basin Agriculture. The basin is fourth biggest water basin of Turkey. In this respect, general characteristics of basin, water resources and their allocation in agriculture, irrigation areas, crop pattern in irrigated lands and crop water requirements with irrigation organizations were described first and then analyzed with detail. The data about water resources of basin and their allocation amount in agriculture, irrigation areas opened with plan and irrigation organizations were obtained from General Directorate of State Hydraulic Works and General Directorate of Rural Services. The records about irrigation land sizes opened by uncontrolled and crop pattern were taken from General Directorate of State Hydraulic Works as well as Turkish Statistical Institute. The results of study showed that water resources have been used inefficient and irrigation water management is poor. The basin has 11% of total arable land potential of Turkey and all can be irrigated. However, basin has only 2.5% of available water potential of Turkey. Farmers tend to intensive uses of water resources so 1.5 billion m³ over water extraction is present from unregistered wells. By considering water use in the exception of allocated amount and irrigation areas opened without plan, it can be estimated that about 612,000 hectares lands have opened for irrigation. On the other hand, allocated water potential is not enough to meet all irrigation water requirement of current crop pattern. Thus, water resources uses and their management are very poor. To irrigate the whole areas opened to irrigation by allocated water amount and some regulations preventing over extraction of water resources are necessarily prerequisites.

Key Words: *Agricultural water management, Crop pattern, Irrigation water requirement, Irrigation organizations, Konya basin*

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