

**NOTE**

**SOIL WATER REGIME AND WATER  
CONSERVATION EFFICIENCY IN A  
NON-IRRIGATED SEMI-ARID ENVIRONMENT**

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**ABSTRACT**

Soil water content at different soil depths over time, was studied in a non-irrigated, semi-arid environment. The research was carried out for two consecutive years with below- and above-average annual rainfall, beginning in October 1996 and ending in October 1998, under cultivated and fallow conditions. For the below-average rainfall season, soil moisture content at various depths fluctuated during rainy period but returned to the initial levels by the end of the season. For the season with above-average rainfall, the final soil moisture content showed a slight increase over that at the year's beginning. Also, agricultural effective rainfall was investigated as a function of individual rainfall events for every month of the rainy season. The results showed good correlations for November through January, but weak correlations for February through April due to increased temperature and higher evaporation rates. Fallow efficiencies in rain water conservation were calculated as 4.4 and 16.2% for the below and the above

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