

1017. **Grewal, S.S., Juneja, M.L. and Singh, Kehar. 1982.** Soil water expense and water use efficiency of wheat in a system of supplemental irrigation through rainwater harvesting in foothills of northern India. *Indian J. Soil Conserv.* 10(1):43-55.

Water use efficiency and potential of raising wheat yield with limited supplemental irrigation was studied in a water harvesting project at Sukhomajri near Kalka in the State of Haryana on a sandy loam soil from 1977-1979. Total water expense of wheat was 51.1, 51.7 and 37.4 cm under two; 42.1, 45.3 and 20.9 cm under one; 29.9, 39.4 and 8.4 cm under no irrigation treatments and corresponding water use efficiency varied from 8.4 to 9.0, 6.4 to 7.4 and 4.5 to 5.5 kg/hamm of water respectively. Wheat yield increased from 16 to 31 and 43 during 1977-78, from 19 to 34 and 46 during 1978-79 and from 4 to 13 and 33 q/ha in 1979-80 under two and one irrigation treatments over control which showed a very high potential of raising wheat yield through limited supplemental irrigation.