

1009. **Chittaranjan, S. and Rama Mohan Rao, M.S. 1986.** Runoff harvesting and recycling in Vertisols for increasing crop production. In: Soil Conservation in India, Eds. R.K.Gupta and M.L.Khybri, IAS&WC, Dehradun: 183-191.

Studies conducted in black soil areas suggest that runoff water could be safely collected into dug out ponds exploiting natural depressions and waterways. One pond, 3 to 5 m deep with a storage capacity of 0.3 to 0.5 ha.m (average cost Rs. 10,000/-) is recommended for

every 10 to 15 ha catchment. Gauging studies revealed that 80% of the catchment area could be brought under supplemental irrigation of 5 cm depth water being applied at moisture stress. Such a practice resulted in 30 to 300% increase in yields depending upon crop and seasonal conditions, maximum response being in sorghum.