

ground water recharge have also been elaborated.

- 995. Rama Mohan Rao, M.S., Chandrappa, M. and Adhikari, R.N. 1994.** Ground water yield from catchments as influenced by conservation measures in the semi-arid tract of south India. Proc. Internl. Conf. on "Future Ground Water Resources at Risk", Helsinki, Finland, 13-16 June, 1994: 63-76.

A study was conducted at Chinnatekur (Kurnool district) in peninsular India in a predominantly agriculture watershed treated with soil and water conservation measures, such as, diversion drains/bunds and staggered contour trenches in the non-arable land; graded bunds and stone checks in the arable land; and rockfill dam, nala bunds and archweir across gullies. The hydrological analysis revealed that the ground water was increased due to high infiltration of rain water and enhanced opportunity time. Consequently, the water level in the open wells increased by 0.5 to 1.0 m depth thereby the area irrigated by the wells by 36.8 per cent when compared to preproject period which in turn improved the crop yields by 70%. The hypsometric analysis indicated that water surface levels do not follow the trend of land surface levels due to the nature of underground geological formations. The results of detailed water balance analysis and potential zones for ground water