

# Water balance study in an agricultural watershed for evaluating ground water potential at Sindewahi

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■ **ABSTRACT** : Water balance study on Zonal Agricultural Research Station, Sindewahi, Distt.Chandrapur was conducted on 9 open wells during the rainfall 2005-06. During the year total rainfall received was only 1422 mm. The study indicated that the availability of total water balance during the year was about 964.94 mm (67.84 %) of the total rainfall. Out of the total rainfall 8per cent was surface runoff, about 18.67 per cent ground water recharge (Yg) and 37 per cent soil moisture storage. Maximum (75.45 ha-m) ground water storage was observed in the month of September followed by 63.45 ha-m in the month August and minimum (16.50 ha-m) in the month of June. The monthly ground water fluctuations were determined by considering the month of May as the driest season. The average ground water level was found higher 455 cm in the month of September and maximum seasonal fluctuation of ground water level was observed in well No. 2 i.e. 612 cm. The study indicated the annual status of ground water potential.

■ **KEY WORDS** : Precipitation, Water balance, Ground water potential, Specific gravity yield, Seasonal fluctuation

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