

# Economical evaluation of water conservation measures and water management practices adopted by ground water used farmers in micro watershed of Karnataka

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■ **ABSTRACT** : The groundwater is a highly scarce resource in Karnataka state and is also depleting fast. It is one of the major factors of production in the agrarian economy of the state. The groundwater draft in the state is more than its recharge, particularly in the arid and semiarid regions and has caused deepening of groundwater table. The watershed management approach is considered as a sound approach for achieving better agricultural development as forges soil and water conservation practices, so that we can achieve sustainable crop production. Present study was conducted in the Gamanagatti (1002 ha) micro watershed which is located at a distance of 12 Km from Hubli city of Karnataka state. The individual farmer adopted different package of conservation practice on their own depending upon the requirement and availability of resources. Soil and water conservation is a long range benefit programme and the immediate returns on the investments are never spectacular. The evaluation of water conservation methods are being carried out in terms of physical, social and economic aspects. For the purpose of economic evaluation, the most widely used technique is benefit-cost analysis (BCA). Apart from BCA, other criteria such as internal rate of return (IRR), net present value (NPV) and pay back period were also used.

■ **KEY WORDS** : Bore well, Drip irrigation, Ground water, Watershed management, Benefit cost ratio

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