

EVALUATION OF WATER HARVESTING STRUCTURE FOR PROTECTIVE IRRIGATION TO KHARIF PADDY IN EASTERN VIDARBHA ZONE OF MAHARASHTRA

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ABSTRACT : An experiment was conducted during June 1999 to March 2002 on an evaluation of dugout type farm pond at Ranwadi Microwatershed, Zonal Agril. Research Station, Sindewahi, Dist. Chandrapur (M.S.). A monoculture paddy crop was saved by harvesting excess runoff in the month of July and August and depositing it in the farm pond and recycling it to provide protective irrigation to 'Kharif' paddy during water stress period. Dugout type farm pond as a water harvesting structure-having capacity of 245 m^3 was constructed in Ranwadi Microwatershed. Water harvesting structure of size $36 \text{ m} \times 10 \text{ m} \times 0.75 \text{ m}$, costing to Rs.9800/- provides one protective irrigation of 8.9 cm depth for 2750 m^2 area during water stress period to save the yield of 'Kharif' paddy crop up to 30 per cent.

Key Words : Harvesting of runoff, farm pond, protective irrigation, paddy.