

Evaluation of Rotational system of Irrigation Vis-à-Vis Flood Irrigation in Rice (*Oryza sativa L.*) at Mudimanikyam Major of Nagarjuna Sagar Project Left Canal of Nalgonda District, Andhra Pradesh

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ABSTRACT

Onfarm demonstrations on rotational system of irrigation were studied in the farmers field pertaining to rice at upper reach of mudimanikyam major of Nagarjuna Sagar Project left canal of Nalgonda district of Andhra Pradesh during *kharif* & *rabi* seasons, 2008- 09. The upper reach farmers followed the rotational system of irrigation both in *kharif* and *rabi* seasons. The rotational system of irrigation registered 5.1% higher yield (5945 kg ha⁻¹) with 34% saving in water (952 mm) than the traditional system of flood irrigation (5650 kg ha⁻¹ and 1450 mm) during *kharif* 2008 season. Where as in *rabi* rotational system of irrigation registered 4.5% higher yield (6270 kg ha⁻¹) with 28% saving in water (1042 mm) than the traditional system of flood irrigation (6000 kg ha⁻¹ and 1450 mm). Total system economics for both *kharif* and *rabi* seasons, rotational system of irrigation earned Rs 64,600 net returns and 1.12 rupee benefit per rupee investment where as in traditional system of flood irrigation, the net returns and BC ratio were Rs 57500 and 1.02.

Key words : Flood irrigation, Rotational system of irrigation, Upper reach, Water saving.