

WATER MANAGEMENT PLANNING ON SMALL FARMS—A CASE STUDY UNDER CANAL IRRIGATION SYSTEM IN EASTERN U.P., INDIA

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ABSTRACT : Water management decision plays an important role for agricultural productivity in water abundance canal water supply system. The study was undertaken in the six outlet commands from the villages in Kurebhar block of Sultanpur district of eastern Uttar Pradesh. Water management, as practiced at farmer's field at outlet level, was studied. The study suggested that water logging due to seepage is the main cause of rise of water table up to one meter depth on either side of canal affecting the prevailing cropping pattern in the area. The productivity is 15 to 35 per cent lower than the tail reaches of the outlet command. Hence, the water productivity can be increased to some extent by restoring to crop diversification to water loving crops. Water logged short duration high yielding varieties of paddy-lahi-wheat / potato / chickpea / pea-urd bean / moong bean / mentha cultivation must be followed to enhance the cropping intensity and water productivity of the region.

Key Words : Water use efficiency, cropping intensity, cropping pattern and farmer's decision.