Post -Adoption Behavior of Farmers for Soil and Water Conservation Technologies –A Case of Ravine Watershed in Southeastern Rajasthan

Ashok Kumar[1], Shakir Ali[2], Kuldeep Kumar[3] and R.K. Singh[4]

1,2,3 & 4. Principal Scientist (Ag.Economics), Principal Scientist (LWME), Scientist (agronomy) and Principal Scientist (soil) & Head, Indian Institute of Soil and Water Conservation, Research Centre, Kota, Rajasthan

Corresponding author e-mail: adagar3@gmail.com

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ABSTRACT

The study examined the post-adoption behavior of beneficiary farmers who have adopted different soil and water conservation technologies in Badakhera, a typical rainfed ravine watershed developed by Indian Institute of soil and water conservation during 1997-2003 in Bundi District of Rajasthan. The results revealed 68 per cent of the farmers adopted land levelling followed by summer ploughing (64%), bunding technology (60%), and masonry check dams (60%). Intercropping was only the crop based technology which was discontinued completely (100%) by farmers at the time of the study. Reduction in soil loss & runoff, conserving soil moisture and better application of water in fields were some of the reasons for continuing adoption of various technologies as perceived by the selected farmers. The results further indicate that 64.7 per cent and 100per cent of sample farmers adopted land levelling and gully plug technology with a technological gap. The values for a set of behavioral indices such as Technology Continue-Adoption Index (TCAI), Discontinuance Technology Index (DTI), *Technological Gap Index (TGI) and* Technology Diffusion Index (TDI) *was worked out for Badakhera watershed sample households and found 86.44, 13.56, 7.70 and 82.59 per cent respectively. Farm size, mechanical power, farm implements, scientific orientation, innovativeness, and risk were identified as factors which determine the extent of adoption of soil and water conservation technologies. The study suggested that any technological intervention for soil and water conservation in an area ought, to begin with, understanding farmer specific characteristics and behaviour. Over and above, developmental agencies should encourage location specific cost-effective technologies which required low investment and efforts for higher adoption in view of farmer's poor socio-economic status and uncertain returns from rain-fed agriculture in ravine areas.*

Key words: *Water conservation; Technologies; Summer ploughing; Adoption; Diffusion; Attitude; Index;*