

## Adoption of Soil and Water Conservation Technologies

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This study was taken up with an objective to assess adoption behaviour of tribal farmers towards vegetative and mechanical soil and water conservation technologies. Study was conducted in Navamota watershed located in Khedbrahmma taluka of Sabarkantha district in Gujarat State during 1993. Survey of all 50 farm families living in watershed was carried out with the help of a structured schedule. Data were computed to find out adoption behaviour of tribal farmers in SWC practices. A three-point check-list was used to measure the adoption behaviour: Not

Aware, Aware but not Adopting, and Adopting. Percentage of farmers adopting various SWC practices is reported in Table 1 and Table 2.

The majority of farmers (90%) adopted contour farming practice. The second most popular vegetative soil and water conservation practice was intercropping adopted by 88 per cent of farmers. The other important vegetative practices were green manuring and summer ploughing. The least adopted vegetative soil and water conservation technologies were mulching, strip cropping, and grass waterway.

**Table 1 : Frequency distribution of vegetative SWC technologies adopted by farmers.**

Sl. No.	Technology	Adoption behaviour	
		Number of respondent	Percentage
1.	Contour farming	45	90
2.	Intercropping	44	88
3.	Cover cropping	3	6
4.	Green manuring	8	16
5.	Mulching	-	-
6.	Summer ploughing	8	16
7.	Multiple cropping	4	8
8.	Strip cropping .	-	-
9.	Grass waterway	1	2

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**Table 2 : Frequency distribution of mechanical SWC technologies adopted by farmers.**

Sl. No.	Technology	Adoption behaviour	
		Number of respondent	Percentage
1.	Marginal bunding	20	40
2.	Contour bunding	32	64
3.	Terracing	3	6
4.	Land levelling	5	10
5.	Peripheral bunding	-	-
6.	Checkdam	1	2
7.	Gully plug	-	-
8.	Spillway	-	-
9.	Dug out pond	-	-

Most important mechanical soil and water conservation practice adopted by rural tribal farmers was contour bunding adopted by 64 per cent of farmers. The another important technology was marginal bunding at 40 per cent of tribals. Ten per cent farmers also levelled their land for cultivation of agricultural crops. Other

technologies such as terracing and checkdam adopted only by 6 and 2 per cent farmers respectively. Other important technologies such as peripheral bunding, gully plug, spillway, and dug out pond were not adopted by any tribal farmers mainly because of high cost and unsuitability to the field conditions.