

- 1036. Mittal, S.P. and Samra, J.S. 1997.** Rainwater harvesting for sustainable development in Shiwalik foothills of Northern India. 8th Internl. Conf. on "Rainwater Catchment Systems", April 21-25, 1997, Tehran, Session 4-Rainwater Harvesting and Watershed Management, Part 4.

The paper highlights the achievements of a development programme conducted in the Shiwalik hill region of northern India. Among various alternative strategies being developed for rehabilitation and sustainable development of the region, rainwater harvesting from hilly catchments by constructing small earthen dams, have proved to be most promising. This has opened up new vistas of development for the mutual benefit of the people and the hilly catchments. Harvested rainwater when provided for supplemental irrigation to farmers' fields, increased yield of wheat from 0.8 to 4.35, chickpea from 0.84 to 1.2 and mustard from 0.3 to 0.7 t/ha. The most spectacular aspect of these programmes is the community participation in protecting the hilly catchments against grazing and illicit cutting of vegetation. Consequently, the grass yield from hilly catchments has gone up from 0.1 to

2.5 t/ha. The number of trees has increased from 72 to 872 per ha in the catchment. A village based organization called "Hill Resource Management Society" has been constituted in project villages to manage the common property resources like rainwater and grass. This is called as "social fencing". Such programmes have been replicated over 170 locations in three northern states of India.