

159. **Juyal, G.P. and Singh, Ranvir. 1988.** Optimal utilization of irrigation water in Bhaintan watershed, Tehri Garhwal. Proc. Second IWRS Symp. on "Water Conservation for National Development", Bhopal, Dec. 11-12, 1988: 23-30.

Crop planning models were tried in Bhaintan watershed (Tehri-Garhwal Himalayas) with a view to maximise the net returns from crops for optimising the available land and water resources. The optimal plan with improved crop yields in improved cropping pattern gave maximum returns (142% more than the existing crop plan) and utilized the minimum quantity of irrigation water while at the same time satisfying the minimum foodgrain requirement of the people. Vegetable crops gave higher returns per unit of irrigation water utilized as compared to cereal crops.