

48. **Nema, J.P. and Satyanarayana, T. 1980.** Hydraulic performance of sharp crested rectangular weirs under different approach channel conditions. Abst. 28, National Symp. on "Soil Conservation and Water Management in 1980's", CSWCRTI, Dehradun, March 12-13, 1980: 18.

An attempt was made to find out the effect of upstream channel geometry on hydraulic performance of rectangular sharp weirs. The results showed that head over the weir with narrower approach channel is lower than that with the border approach channel for the same discharge passing through the weir. Isolvels near the crest showed that the velocity was more at crest than at surface of water while at a section 4 cm upstream, the velocity at water surface was more than at the crest elevation. Weir coefficient was found to be constant for b/B ratios upto 0.35 in all cases and then to decrease as b/B ratio increases beyond 0.35 for approach heights. However, the ratio of the areas of cross sections of weir and channel was found to be directly related with the weir coefficient, C .