

126. **Yadav, R.C., Bhushan, L.S. and Murthy, J.S.R. 1994.** Process based model for sizing on gully control structures. Proc. Vol. I, 8th Intl. Soil Conservation Conference, Dec. 4-8, 1994, New Delhi, India (1997): 700-716.

The authors attempt to develop a process-based mathematical model for the prediction of gully head cut and associated land loss, and to determine the size of gully control structures for such sites. Theoretical analysis was carried out using continuity and momentum equations for unit width of channel for quas-steady state condition. Culman analysis has been carried out to assess the vertical sluffing of the sides of gully profile developed by earlier analysis. The theoretical profile compared well with the observed ones. An ameliorative means of innovative economical technology of prefabricated drop spillway has been presented in the paper.