2.   Sikka, A.K. 1989. Estimation of rainfall deficit and surplus probabilities for water management and crop planning. *IE(I) Journal-AG*, 70:10-13.

The paper presents and discusses the methodology of estimation of weekly rainfall at various probability levels to determine rainfall deficit and surplus probabilities for planning crop and water management practices and evaluating drought proneness of the area to plan irrigation and water management schemes. The rainfall data of 76 years (1901-1976) of Midnapore, West Bengal have been analysed for estimating the probability of rainfall at 60, 70, 75, 80 and 90% levels using Weibull formula. Rainfall deficit/surplus for different weeks has been computed by comparing expected rainfall and normal potential evapotranspiration values for respective periods. The application of weekly data for drought analysis indicates that the area is prone to drought having a frequency of drought occurrence as 30-25%. Analysis of weekly rainfall data appears to be more useful for planning crop and water management practices both in irrigated and unirrigated areas.