

## 3<sup>rd</sup> International Conference on Hydrology & Meteorology September 15-16, 2014 Hyderabad International Convention Centre, India

## Study of runoff characteristics of a micro watershed in Sundarban, West Bengal

Smita Kujur and P B Chakraborty Bidhan Chandra Krishi Viswavidyalaya Regional Research Station (CSZ), India

Weekly rainfall data for the period from 1990-2005 was used to estimate weekly runoff of a micro watershed in Canning- I Block of Sundarban, using curve number method. The relationship between weekly runoff and rainfall for 23-45 weeks were analyzed and found significantly linear. Further analysis revealed the similar trend at 5.88, 17.64, 47.05, 76.47 and 88.23 per cent levels of probability. However the best fit linear regression equations were emerged to predict runoff successfully from weekly total rainfall and most of the equations were found to explain more than 90% of the variables. Ultimately a nomograph has been developed to predict weekly runoff for Sundarban delta.

## Biography

Smita Kujur completed her MSc (Ag) Soil and Water conservation BCKV, Mohanpur, West Bengal, India. Currently, she is working as Extension Inspector in Coffee Board in India.

smita\_kujur@yahoo.co.in