

# Understanding Soil Erosion Process in Hilly Watershed

Soil erosion removes surface soil layer containing large amount of nutrients reduced soil productivity and crop production.

Process based model :

**Water Erosion Prediction Project ( WEPP)**

Used to simulate **daily, monthly or annually** from single or multiple rainfall events.

**Factors governing soil erosion**

- **Rainfall Energy (R),**
- **Topography,**
- **Soil & Land use / Land Cover,**

**Data used :** CartoDEM, LISS IV (Year 2009)

**Thematic maps :** Soil, LULC and DEM

**Field data collected:** Soil samples, soil hydraulic properties, crop type, duration, management practices, terrain slope

**Model calibrated :** field measured values

**Validation :** Daily runoff measurements, erosion /sediment loss & past erosion features.

