

Soil Erosion Modeling & its Impact on Nutrient Dynamics at Watershed Scale

(TDP : 2005-09 & 2010-2013)

Objectives:

- Understanding Soil Erosion Process in Hilly Watershed
- Soil erosion modeling using Process based model – WEPP (Water Erosion Prediction Project)
- Modeling Sediment & Soil Nutrient (C and N) Loss due to Soil Erosion: SWAT & APEX Models

Central Govt. envisages **Soil & Water Conservation Planning** for enhancing Agriculture Production & improving soil quality through IWMP (Integrated Watershed Management Programme).

(a). Field Instruments

- (i). Portable suspended solid analyser
- (iii). Current meter
- (iv). Sediment sampler / Theta probe

(b). Laboratory facilities

- (i). Portable spectrometer
- (ii). CHN Analyser

Developed Instrumented Watershed Field Observatory

- 50 Km. from Dehradun (Lesser Himalaya)

Watershed : a natural hydrologic unit where run-off from catchment area is drained to a outlet point.

