Landslides Spatial Data Base

**Validation Sample**

**Topographical Factors**

(Elevation, Slope, Aspects, Planar/Profile curvature, Surface roughness (*radar*))

**Hydrological Factors**

(Distance to water bodies, TWI, Rainfall)

**Soil Factors**

(Surface soil moisture, Soil moisture index (*radar*))

**Land Cover Factors**

(Land use/ Forest biomass (*radar*))

**Geological Factors**

(Geology, Lineament)

Digital Data

(1:10000)

Landslide Failure map

Other

(Geology, Rainfall)

Radar Images

(Sentinel-1, TerraSAR-X)

Optical Images

(Landsat-8, Sentinel-2)

Aerial Photographs

Available Data

DEM

Landslide Prediction Analysis

(With & Without RIF)

Bivariate Statistical Analysis

(InfoVal method)

Multivariate Statistical Analysis

(AHP)

**Training Sample**

Landslide Susceptibility Analysis & Results Validation

Compare the performance of RIF for Landslide susceptibility analysis in bivariate & multivariate nature