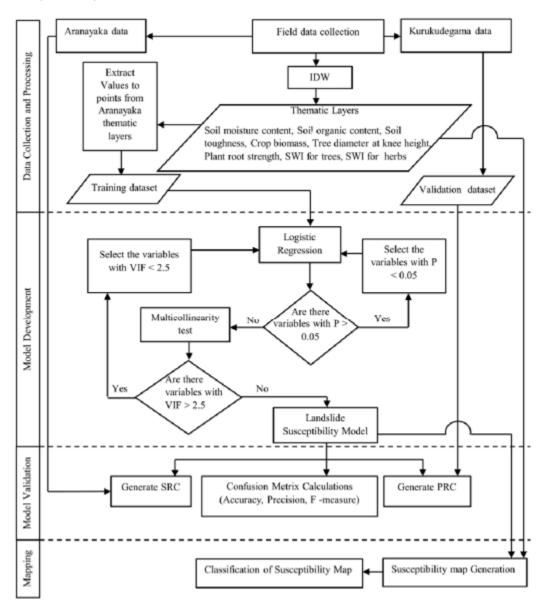
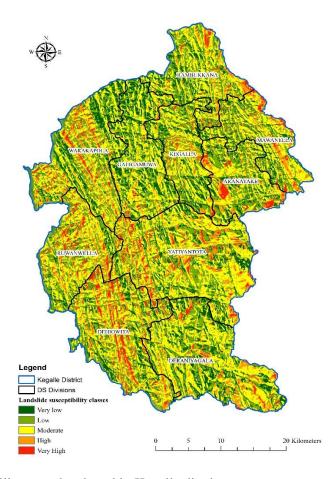
## Advances in remote sensing, geographical information systems and their engineering applications

Key Researcher (s): Eng. Himasha Abeysiriwardana, Prof. Ayantha Gomes, Prof. Shiromi Karunaratne, Eng. Vindhya Basnayake

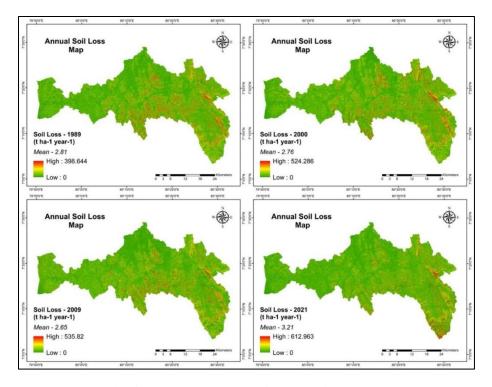


Methodology flow chart of Aranayake landslide mapping

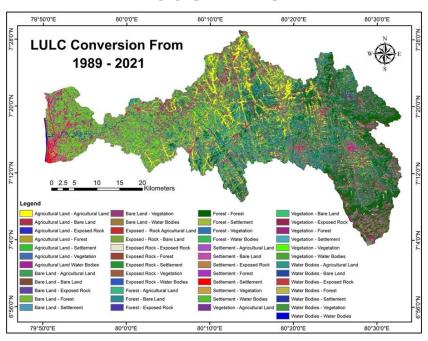


## Landslide susceptibility map developed in Kegalle district

• Department has been using remote sensing and GIS tools in studying wide range of aspects such as natural hazards, hazards mapping (e.g. landslides susceptibility), ground water pollution, flood risk, river morphological processes etc. Some of the works are carried out in collaboration with Institute of Mountain Hazards and Environment, Chinese Academy of Sciences.



Annual soil loss maps prepared for the period 1989 - 2021



LULC change between 1989 and 2021

• Remotely sensed satellite data (Landsat imagery) and GIS mapping tools are being used to analyze the impact of landuse/ land cover (LULC) change on the soil erosion hazard in the Maha Oya River Basin was carried out and is expanding the same approach to other (selected) major basins.