## Delineation of potential landslide zones, Limbe Subdivision,

## BUH WUNG GASTON

GIS/RS DEPARTMENT, LIMBE BOTANIC GARDEN, P.O BOX 437 LIMBE, email: buhgaston@yahoo.com, Tel: +2377458353, CAMEROON

Most geologic hazards in Cameroon are linked to the existence of the Cameroon Volcanic Line (CVL), a 1600km long chain of Cenozoic-Present volcanoes that traverses the country in a SW-NE direction from the Gulf of Guinea island of Annobon across Cameroon to eastern Nigeria.

Limbe subdivision is located between latitude 3° 90 and 4° 05N and longitude 9° 29 and  $9^{\circ}$  06E in the southwestern part of Cameroon. Over the years, this region has been experiencing persistent landslides and floods with the worst being the June 2001 floods and landslides incidence that took away the lives of some 30 persons, rendered over 2000 others homeless, destroyed properties and social amenities such as roads. telephone lines worth millions of francs cfa. Geospatial tools were employed in the execution of this project for data collection and analysis. Extensive use was made of existing feature datasets considering their source, quality, and date of publication. Use was made of Landsat 7 ETM+ satellite imagery. They were used for categorizing, interpreting and digitizing features. Over 30 landslide scarps (landslide swarm) were identified and occur on the western side of the range of hills bordering Limbe to the east and northeast. Local seismicity for the period preceding the 1999 Mount Cameroon eruption averaged  $\sim 15$  events /month. This increased from > 15 events in March 26<sup>th</sup> to over 200 events on the 27<sup>th</sup> and 28 of March 1999. This increased from >15 events in March  $26^{th}$  to over 200 events on the  $27^{th}$  and 28 of March 1999. An intensity VI earthquake on March 28th was felt over a 100km radius around the mountain and destroyed houses in Buea and environs including the town of Limbe. Periodic eruption of mount Cameroon over the years has an impact on the local population and specially resulting to loose soil which eventually trigger landslides during intensive rainfalls.