



SOIL EROSION MODELLING PROJECT

WHAT DID WE DO?

In 2010, the African Conservation Trust received funding from the National Lotteries Distribution Trust Fund (now the National Lotteries Commission) to implement soil erosion rehabilitation in the Upper uThukela catchment area. The project employed local teams to rehabilitate gullies using manual techniques such as stone packing and planting vetiver grass to stabilise the soil. The project was a great success, but there is still a huge amount of rehabilitation work required.

In 2013, the NLDTF provided funding for the University of KwaZulu-Natal Foundation Trust and ACT to implement a project to create a soil erosion model for the Drakensberg. The resulting model shows areas that are likely to be affected by soil erosion so that pre-emptive action can be taken. A model of the carbon load in the soil will also be developed which will benefit local communities through a proposed payment for environmental services.

WHY IS IT IMPORTANT?

Soil erosion is one of the main problems affecting land resources throughout South Africa. This is especially evident in Ukhahlamba Drakensberg Park and buffer zone areas, where poor agricultural practices and overgrazing have resulted in massive losses of topsoil, the creation of huge dongas, and a loss of income earning potential to the local people.

The region is highly sensitive, both environmentally and agriculturally. It forms part of the Thukela catchment area, responsible for supplying water to Gauteng and KwaZulu-Natal. The vast amounts of silt that get washed into the uThukela River catchment reduces the capacity of the storage reservoirs, is expensive to remove, and increases suspended sediment concentrations in streams, which damages ecosystem health.

Visit the National Lotteries [website](#) to find out about other projects supported by the NLC