

## **Investigating the Contribution of Road Construction on Soil Erosion, a Case Study of Engcobo Local Municipality, Chris Hani District, South Africa**

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**Abstract :** Soil erosion along the roads and/or road riparian areas has become a norm in the Eastern Cape. Soil erosion refers to the detachment and transportation of soil from one area (onsite) to another (offsite). This displacement or removal of soil can be caused by water, air and sometimes gravity. This will focus on accelerated soil erosion which is the result of human interference with the environment. Engcobo local municipality falls within the Eastern Cape Province in the eastern side of CHRIS HANI District municipality. The focus road is R61 protruding from the Engcobo town outskirts along the Nyanga SSS on the way to Umtata although it will cover few Kilometers away from Engcobo. This research aims at looking at the contribution made by road construction to soil erosion. Steps to achieve the result will involve revisiting the phases of road construction through unstructured interviews, identifying the types of soil erosion evident in the area by doing a checklist, checking the material, utensils and equipment used for road construction and the contribution of road construction through stratified random sampling checking the soil color and texture. This research will use a pragmatic approach which combines related methods and consider the flaws of each method so as to ensure validity, precision and accuracy. Both qualitative and quantitative methods will be used. Statistical methods and GIS analysis will be used to analyze the collected data.

**Keywords :** soil erosion, road riparian, accelerated soil erosion, road construction, sampling, universal soil loss model, GIS analysis, focus groups, qualitative, quantitative method, research, checklist questionnaires, unstructured interviews, pragmatic approach

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