Topic: Soil Stabilization and Civil Engineering

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Date: Wednesday 7 November 2007.

ABSTRACT

Soil is an important construction material in civil engineering; projects are built on soil and with soil and yet an average civil engineer knows little about the soil. The presentation was aimed at enabling collaboration with soil physicists to achieve efficient and cost effective soil stabilization in civil engineering.

The various soil stabilization methods employed in civil engineering were reviewed. These methods over the years have been effectively used to upgrade marginal soils and make them perform better as road materials. The common methods are, bitumen stabilization, lime stabilization and cement stabilization.

However, there is the need to discover other methods for soil stabilization in the developing countries with a view to discovering readily available local materials that will reduce construction cost and yet achieve desired performance. Some of these methods were developed using palm kernel shells, corn curb ash, forage ash and egg shell powder.

The results showed that they have the potentials of modifying soil properties to satisfy stabilization requirements.