ICES 2024

TITLE OF PROJECT: "Experimental Study Of Different Soil In Maharashtra And their Stabilization With Natural Resourses"

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ABSTRACT :
This research paper primarily focuses on the comprehensive characterization of diverse soil types across various regions of Maharashtra, emphasizing their distinct properties such as texture, composition, and moisture content. Through foundational analyses, insights into the distinct challenges posed by each soil type were obtained. The study delves into the exploration of Maharashtra's diverse soils, aiming to investigate their properties and associated challenges while utilizing natural resources. The ultimate goal is to develop efficient stabilization methods tailored to these soils. The abstract underscores an experimental approach and the sustainable utilization of local materials to enhance soil stability, thereby contributing to eco-friendly construction practices in the region. Diverse soil samples were collected from different regions: black cotton soil from Pandharpur (Solapur), sandy soil from Alibag (Raigad), laterite soil from Mahad (Raigad), and a combination of laterite and black cotton soil from Pune. Comprehensive soil testing was conducted to discern the requirements for stabilization. The research findings confirmed significant diversity in soil compositions across Maharashtra's regions, highlighting the necessity for region-specific stabilization approaches. The study identified specific natural resources within Maharashtra that effectively contribute to soil stabilization. Moreover, this research aims to promote the utilization of local resources, advocating for the use of locally available natural resources for stabilization, which could lead to substantial economic benefits.

KEYWORDS: **: Soil Stabilization, Properties of soil, Natural Resources.**

CATEGORY: **Geotechnical Engineering**