

Review of: "Enhancing Soil Stabilization in Soft Soils Through The Addition of Sand to Soil-Cement Piles: a Comprehensive Study"

Ali Fourar

Potential competing interests: No potential competing interests to declare.

The shortcomings and potential inadequacies identified in this work, which could be addressed by the author, are summarized as follows:

- 1- Geographical scope limitation: Generalizing the method's effectiveness solely based on local studies in the Ben Tre province might not be representative of all soft soil conditions in other regions, thereby limiting the generalizability of the conclusions.
- 2- Lack of comparison: It could be beneficial to compare this method with other soil stabilization techniques to evaluate its relative effectiveness and cost-efficiency.
- 3- Long-term sustainability data: Experimental studies may lack long-term data on soil stabilization durability. It's crucial to understand how this method withstands environmental conditions and wear over time.
- 4- Environmental impact: The article doesn't seem to specifically address the potential environmental impact of adding these materials to the soil. Considerations regarding the environmental sustainability of sand and additive additions are important.
- 5- Results reproducibility: It would be essential to clarify if the results obtained in this study can be replicated under different conditions and by other researchers, enhancing the validity and reliability of the conclusions.
- 6- Costs and practical feasibility: The study doesn't discuss potential additional costs associated with adding sand and additives, nor the practical feasibility on a large scale of this method.

Lack of discussion on potential failures: It's important to also address cases where this method might not work or could yield unsatisfactory results.

7- Testing scope: The diversity of soils, environmental conditions, and applicable loads should be further explored to determine the limits of application of this method.

The author of this study, by considering these aspects, could strengthen the study and provide a more comprehensive view of the effectiveness, sustainability, and applicability of this soil stabilization method.

