

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

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Potential competing interests: No potential competing interests to declare.

The paper presents a comprehensive study on enhancing soil stabilization in soft soils through the addition of sand to soil-cement piles. The authors propose a novel approach by adding sand and ECO-CSB or ECO-CSSB additives to the soil-cement mixture to increase the hardness and load-bearing capacity of the soft ground. This method is particularly useful for treating soft soil contaminated with salinity.

Strengths:

1. The paper provides a detailed explanation of the process of soil stabilization using a soil-cement mixture, which is widely applied in many countries, especially in areas with weak soil. This makes the paper highly informative for readers interested in this topic.
2. The authors have conducted experiments and provided results to support their claims. This lends credibility to the study and demonstrates the effectiveness of the proposed method.
3. The paper discusses the challenges and limitations of the current methods and proposes solutions to overcome them. This shows a forward-thinking approach and could be beneficial for future research.

Limitations:

1. The paper does not discuss the potential environmental impacts of using ECO-CSB or ECO-CSSB additives. As these are supplementary materials, it is important to consider their environmental footprint.
2. The paper could have benefitted from a comparison with other soil stabilization methods. This would allow readers to better understand the advantages of the proposed method over others.
3. The paper does not provide information on the long-term effects of the proposed method on the soil. Long-term studies are crucial to validate the sustainability of soil stabilization methods.

Overall, the paper is well-written and presents a promising method for enhancing soil stabilization. However, it could be improved by addressing the above limitations.

