

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 describes an attempt by the authors to stabilize weak saline and non-saline soils with soil and cement mixtures, with a view to reinforcing the weak soils. The authors concluded that the introduction of the additives is especially suitable for treating soft soil contaminated with salinity and also leads to the hardness and load-bearing capacity of the soft ground increasing significantly. In addition, a reduction in the amount of cement required by as much as 30% was observed while ensuring uniaxial compressive strength compared to when using only cement.

The authors should, however, note the following:

1. The abstract can be better written to flow through What and Why (introduction), How (methodology), Results and Conclusion, and can be compact and make a better read.
2. What is the meaning of ECO-CSB or ECO-CSSB? This needs to be stated clearly and not just abbreviated in the abstract.
3. The authors need to provide appropriate citations where necessary, for example, in the opening statement: "Currently, various methods are employed to stabilize and treat weak soil in construction projects, including the use of sand piles, well points, drainage mats, reinforced concrete piles, and geotextiles" (references will be appropriate).
4. "The use of soil-cement mixtures through the jet grouting method has been proven to be both economically and technically effective in reinforcing road foundations and civil structures" (By who?).
5. The article needs to be rewritten as the authors have found it difficult to provide references in the body of the article. This is worrisome as the authors cannot claim proprietary rights to many of the statements made.
6. The methodology is poorly written and unwieldy. It does not show adequately what was done; instead, the authors embarked on literature presentation.
7. The results have not been properly discussed with appropriate citations.
8. The results can be better presented using pictorial options such as graphs.
9. The paper needs major revision.