

Review of: "A Study on Alternative Low-Emission Sustainable Soil Stabilization Techniques in General and Combat Military Operations"

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The article provides a concise overview of the possibilities of three soil stabilization methods with applications in defence infrastructure. However, to enhance clarity and usefulness, it would be beneficial for the description of each method to include their practical limitations. For instance, it is not mentioned that geopolymers require specific temperatures to achieve optimal mechanical properties, and that results may be limited at ambient temperature. Geopolymers require mixing with sodium hydroxide, which can be corrosive and necessitates careful handling for safety during the mixing process. Implementing these safety measures on-site can be challenging, particularly in remote areas far from cities or locations with easy commercial access. Regarding biopolymers, it is noted that they can be applied as a slurry, although the example provided of a slope treated with geopolymer (Go & Chang, 2018) suggests that their application may require more than a simple biopolymer irrigation. Furthermore, improving the clarity of Table 2 would be advisable. Defining in the text what constitutes high, medium, or low levels, and even establishing ranges of values for these levels within the table, would significantly enhance understanding.