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Load-Deflection Characteristics of Recycled Plastic Lumber for Wetland Pedestrian Footbridges: A Brief Report from the Niger Delta

H, a, d, i, z, a, I, d, r, i, s, s, a, ,, I, b, r, a, h, i, m, S, a, n, i, ,, A, b, d, o, u, l, a, y, e, M, o, u, s, s, a, ,, A, m, i, n, a, t, o, u, D, i, a, l, l, o

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Abstract

This study addresses a current research gap in Engineering concerning Load-deflection characteristics of recycled plastic lumber for pedestrian footbridge construction in the wetland communities of the Niger Delta in Niger. The objective is to clarify key debates, identify practical implications, and outline a focused agenda for scholarship and policy. A qualitative approach was used, drawing on recent literature and policy sources to frame the analysis. The analysis indicates persistent structural constraints alongside emerging local innovations; however, evidence remains uneven across contexts and sectors. The paper argues for context-specific approaches and stronger empirical foundations in future research. Stakeholders should prioritise inclusive, locally grounded strategies and improve data transparency. Load-deflection characteristics of recycled plastic lumber for pedestrian footbridge construction in the wetland communities of the Niger Delta, Niger, Africa, Engineering, brief report This structured abstract provides a standardised summary to support rapid screening, indexing, and assessment of scholarly contribution.