

# Sustainable enhancement in Construction Sector: The Role of Sugarcane Bagasse Ash as a Partial Cement Replacement in Mortar

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**Abstract:** *The rate of infrastructure development increases day by day, the requirement of concrete is also increasing proportionately. The high demand for concrete or mortar is further increasing the consumption of their ingredients such as cement, sand and aggregate. Cement industry plays an important role in environmental pollution because of its CO<sub>2</sub> emission. Therefore it becomes essential to find out the substitutes for cement. In proposed work sugarcane bagasse ash (SCBA) used as a partial replacement to cement in mortar. For obtaining better result this raw SCBA requires processing in the form of grinding. After grinding heat of hydration will be measured. Test on standard consistency, Initial&Final Setting time, compressive strength and microstructure analysis will be proposed.*

**Keywords:** SCBA, OPC, mortar, Compressive Strength

