Upgradability of Quarry Dust Use as a Substitute for River Sand in Plastering Works in Construction Industry

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Due to its low supply and high demand, river sand has become one of the priciest building construction materials. Riverbeds are overly mined for river sand to cater to the high demand, and this has been causing irreversible environmental damage. Manufacturing sand (crushed stones/quarry dust), offshore sand, dune sand, fly ash, and granulated waste are some of the potential substitutes for river sand. This study examined the feasibility of quarry dust as a substitute for river sand for plastering indoor walls under multiple testing scenarios. After removing fines through wet sieving, the upgraded quarry dust can be used as a substitute for river sand for indoor wall plastering.

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