

Agricultural Solid Wastes Generation in Nigeria and Their Recycling Potentials into Building Materials

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Abstract : Modern building industry lays much emphasis on sophisticated materials that have high embodied energy with intrinsic distinctiveness for damaging the environment. But today, advances in solid waste management have resulted in alternative building materials as partial or complete replacement of the conventional materials like cement, aggregate etc particularly for low cost housing. Investigations carried out revealed that an estimated 18.0 million tonnes of agricultural solid wastes are being generated in Nigeria annually. This constitutes a problem not only to the natural environment but also to the built environment more particularly with the way the wastes are being dispose of. The paper has discussed the present status on the generation and utilisation of agricultural solid wastes, their recycling potentials and environmental implications. It further discovered that although considerable quantity of these wastes were found to have the potentials of being recycled as building materials, the availability of the appropriate technology remains a big challenge in the country. Moreover, majority of the wastes type have gained popularity as fuel. As such, the economic and environmental benefits of recycling the wastes and the use of the wastes as fuel need further investigation.

Keywords : agricultural waste, building, environment, materials, Nigeria

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