WASTES IN LOCAL BUILDING MATERIALS

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Abstract - The main objective of this study is to compare the performances of two basic materials, rice straw wastesorfrakewood chipswastes mixed with clay. This allowed us to propose properties of samples for building materials.
Clay formations represent the most abundant materials resources in Africa.Frake is a tree characterized by its light, white wood turning yellow. It is particularly used in carpentry, which means that these chips are available and very accessible.Frake wood is an organic material. Among these main constituents we can cite cellulose, hemicellulose and lignin.Fraké, also called limba, is an exotic wood from Africa appreciated for the manufacture of glued laminated panels, plywood and sliced veneer. It is used in interior design, furniture and carpentry. It is also used for making frames.The thermal conductivity values of wood and its derivatives are much lower than those of most building materials used in construction.Agriculture is among the economic sectors that produce more waste. For rice straw waste, its high content of cellulose makes it difficult to digest. So, few animals can use it as food. Most of the straws are lost, buried, burned, or used as litter.The thermal conductivity values of rice straw are low.
The Interesting results obtained show that the integration of frake wood chips waste andrice strawwaste in building materialsimproves the thermal comfort and recycles the two materials. Also, the comparison of performances of materials makes it possible to indicate ranges of properties that we can use in the construction of buildings.

Keywords - Building Materials, Clay, Compare, Frake Wood Chips, Properties, Rice Straw, Waste