

**Development and Fabrication of Biomass Compactor machine as
Source for Producing Bio Fuel Energy**

Completed By

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In this study, durability, density and compression strength of sawdust, cotton stalks, maize straw and rice straw briquettes at different levels of moisture content, particle size and compression ratio was determined. Maximum durability, density and compression strength of sawdust (94%, 1005 kg-1 m-3, 9.8 MPa), cotton stalks (91%, 1001 kg-1 m-3, 9.5 MPa), maize straw (85%, 998 kg-1 m-3, 8.2 MPa) and rice straw (78%, 975 kg-1 m-3, 7.7 MPa), respectively, was at 12% moisture content, 1:10 compression ratio and 3 mm particle size. The effect of compression ratio was Maximum as compared to moisture content and particle size. It was also found that durability and compression strength of rice straw briquettes was minimum as compared to sawdust, cotton stalk and maize straw briquettes.