Studying the Potentials of Manufacturing Particle Boards from Dry Leaves for Interior Partitioning

R.A.S.D. Rathnayake
Faculty of Engineering, NSBM Green University
M. Mendis
Faculty of Engineering, NSBM Green University
Corresponding Author: asdrathnayak@students.nsbm.ac.lk

Abstract- Simply particle board is created by combining a wood particle with binding material and compressing and drying under high temperature and pressure. Dry or raw leaves are a great substitute for traditional raw materials for particle boards. The study discusses 5 different existing leave particle boards the manufacturing processes the properties of the leave particle boards and the existing particle board market in Sri Lanka. The study was conducted as a two-part first systematic literature review based on previous research articles and the second part was an industrial survey done by taking 20 particle board selling shops in the western province as a sample for the survey. Considering the results of the survey study found several potentials of manufacturing leave particle boards developing the properties and trying to manufacture low-cost leave particle boards gives more practicability to the leave particle boards to achieve and build it is own market for dry particle boards. Improving the marketing knowledge about the leaves particle board and creating confidence about the application and using leaves particle board among the public and laborers will gain more practicability toward the potentials of manufacturing particle boards from dry leaves and introducing them to the current particle board market.

Keywords - Leaves Particle Board, Dry Leaves, Sustainable, Properties, Substitute, Current Materials