Name of the Technology: Particle Board from Rice Husk

Summary: The disposal of paddy harvest residue is a major problem, since both wheat and rice are long-duration crops, with a short period available between rice harvesting and wheat plantation. India is the second largest producer of rice with the grain to straw ratio varying from 1:1.3 to 1:3, while Rice husk constitutes about 20% of the weight of rice. However, only a fraction of this residue is used as feed for ruminants and for other uses like manure, in brick kilns etc. The rest is mostly burned in the field that causes severe environmental hazards. The present know-how provides an eco-friendly solution for the management of the paddy harvest waste by converting it into particle board fulfilling the requirements for furnishing applications as per IS:3087-2005.

Applications: The particle board can be used for Furniture, False Ceilings, designer blocks to divide up rooms or outdoor areas & packaging material, Support structures of rooms, wall decorations, benches etc.

Advantages: The know-how offers a simple process of production of particle boards from rice husk. It not only promises an additional support living for the people involved in farming, but also converts waste, which is otherwise a huge problem for farmers into a useful product and saves the environment.

Readiness level of the Technology

<table>
<thead>
<tr>
<th>Idea</th>
<th>Concept Definition</th>
<th>Proof of Concept</th>
<th>Prototype</th>
<th>Lab Validation</th>
<th>Technology Development</th>
<th>Technology Demonstration</th>
<th>Technology Integrated</th>
<th>Market Launch</th>
</tr>
</thead>
</table>

Related Patents: Know-How; Year of Introduction: 2019

Broad Area/Category: Rural & Societal Technologies, Industries: Rice Industries, board manufacturers.

For further details please contact:
Head, Industrial Liaison Group (ILG)
Room No. 46-A, Main Building
CSIR-National Physical Laboratory
Dr. K.S. Krishnan Marg,
New Delhi 110012, India
Email: headilg@nplindia.org
Tel: +91-11-4560-8350/8449/8392
Fax: +91-11-4560-9310