



PADDY HUSK STOVE

Patent Application No.: 311/KOL/2011

INNOVATOR

Ashok Thakur | Bihar

PROBLEM ADDRESSED

Innovator observed that in his region the paddy husk used to be considered useless and huge amounts of paddy husk is discarded as agricultural waste. Paddy husk was available in plenty but could not be used effectively as fuel in the conventional wood stoves. So he modified the old stove developed for wood dust so as to use paddy husk as fuel.



PRODUCT

It is a uniquely designed stove to enable the use of paddy husk as fuel. Paddy husk (around one kg) is spread completely between the outer frustum and cylinder. A fire is ignited with the help of some kerosene oil to the fuel through inner frustum. In few minutes, a good smokeless flame of fire is obtained.

TECHNICAL DETAILS

- Weight : 4 kg
- Major and minor diameter of frustum is 8 inch and 4 inch respectively.
- Height of frustum is 8 inch.
- Frustum material: iron sheet of thickness 22 gauge .
- Lots of small holes of sizes 6mm (in zig zag manner) on downward side are provided for allowing entry of oxygen from outside for complete combustion of fuel.
- As per a test report by TERI University, New Delhi it has thermal efficiency 23% in cold & hot start and 32 % during simmering.

SALIENT FEATURES

- It is a mobile "chulha" as it is a portable one and easy to handle.
- Low running fuel cost as it enables use of paddy husk as a fuel which is considered useless thing after milling of paddy grain.
- Very cost effective and useful tool especially in rice growing region.

