# **FICHE TECHNIQUE**

# **Bricklayers for rice husks**

# Definitions

A briquette is a packaging of a combustion material as a manipulable element, marketed with others of the same weight and shape, obtained by moulding under pressure a natural resource previously crushed. If the shape is very small (2 cm in diameter), it is called granulated (<u>https://fr.wikipedia.org/wiki/Briquette</u>).

According to the Larousse dictionary (2021), to briquette is to transform certain materials into briquettes.

According to the Dictionary Encyclopedia.fr (2021), the bricklayer is the trowel used by bricklayers, with a broad blade approximately ovoid. In the specific case, it is a mechanical device, which allows the manufacture of briquettes of rice husks, used for cooking.

# Benefits of the Rice Husk Bricker (Africa Rice, 2020)

AfricaRice and its partners have developed a multi-piston manual rice husk briquetting machine that compresses rice husks into briquettes, which burn efficiently in well-ventilated stoves. They can be used for cooking by rural and urban households who cannot afford or do not have access to gas.

The rice husker does not require much investment and can be used in the field, which is very convenient for farmers. It adds value to the product and increases the amount of briquettes that one person can produce in a day.

Using briquettes is a more economical, healthy and environmentally friendly way to provide renewable green energy, as it reduces the need to cut down trees to make firewood. Producing energy from rice husk for domestic use, agricultural operations, and industrial processes has advantages for farmers and processors.

#### Features of the technology

- Increases income by 20%.
- Eliminates deforestation
- Conversion of waste (e.g. rice husks, sawdust, etc.) into energy
- This technique has made it possible to valorize rice husks by producing briquettes from them, a source of fuel for cooking food and to preserve the environment

# **Bibliographic references**

KOALA (2012) : Fabrication manuelle de briquette de balles de rizet évaluation des performances du foyer amélioré à balles de riz ; Mémoire de fin de cycle ; 103p.

Mamadou (2009) : Fabrication manuelle de briquettes de balles de riz et évaluation des performances du foyer amélioré à balles de riz ; résumé ; 1p.

# Web sites consulted

https://beep.ird.fr/collect/upb/index/assoc/IDR-2012-KOA-FAB/IDR-2012-KOA-FAB.pdf; 01/12/2021 at 13h28 https://www.africarice-fr.org/briquette-de-balles-de-riz ; 01/12/2021 at 13h38 https://publicationschercheurs.inrab.org/uploads/fichiers/lots1/Fiches%20techniques/AHOYO/FT%2001 %20Lia nts%20et%20forme%20de%20balle%20de%20riz.pdf ; 01/12/2021 at 13h41 http://www.secheresse.info/spip.php?article55803 ; 01/12/2021 at 13h57

#### Other references

REGIONAL CENTER OF SPECIALIZATION ON RICE ; HEADQUARTERS INSTITUTION: INSTITUT D'ECONOMIE RURALE (IER) ; HOST COUNTRY: Mali ;; NSC MEMBER INSTITUTIONS: The 3 Regional Agricultural Research Centers working on rice: Niono (main site), Sikasso and Mopti; The Soil-Water-Land Laboratory (CRRA Sotuba, Bamako); The Food Technology Laboratory (CRRA Sotuba, Bamako); The Regional Agricultural Research Centers of IER ; The training structures (IPR/IFRA, USTTB) through the Laboratory of Research in Microbiology and Microbial Biotechnology (LaboREM-Biotech), the Laboratory of Applied Molecular Biology (LBMA), the Laboratory of Agro-Physiogenetics and Plant Biotechnology; Coordinator: Karime TRAORE; Email: kartraore@yahoo.com; Telephone: +223 7618 98 98