TECHNICAL SHEET

Improved rice parboiler

Definition of parboiling

According to the Larousse dictionary 2021, parboiling is the treatment of a food product in a closed enclosure, at a defined temperature, in the presence or not of steam.

The 180 kg parboiling kit is the equipment used to process paddy rice (rice in its raw state) for marketing and consumption. Parboiled rice is therefore post-harvest processed rice that has a higher nutritional and preservation value than normal rice (FAO, 2013).

Materials needed for rice parboiling (FAO, 2013)

For good parboiling, one must have at one's disposal: - an improved parboiling kit; - jute bags to trap the hot steam; - a piece of rope woven cloth to be put at the junction between the parboiling pan and the pot; - paddy rice; - a scale to weigh the amount of rice to be parboiled and then rice to be put in the package after parboiling; - a source of drinking water; - firewood; - a basin; - a bucket; - a calabash; - a strainer; - a clean basket for wringing out the paddy rice; - an improved hearth; - a spatula for stirring; - a clean tarpaulin for drying; and finally, a wooden rake for spreading the rice during the drying process

Process for parboiling rice

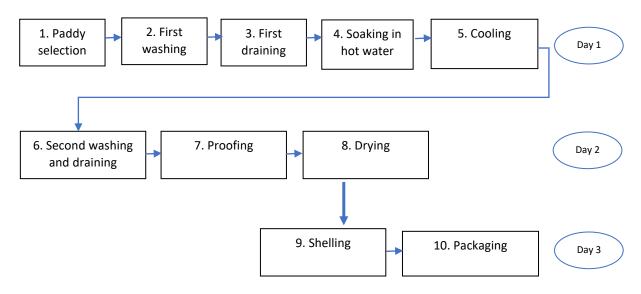


Figure 1: Steaming operations (source: Houssou, 2017)

Characteristics of the technology

- Increased labor productivity (double the amount of parboiled rice per day)
- Better quality of parboiled rice (no breakage and long shelf life)

Bibliographic references

FAO (2013): Les bonnes pratiques d'obtention du riz étuvé, Bénin ; 5p.

HOUSSOU (2017): GUIDE D'INNOVATION PRODUCTION DE RIZ ETUVE DE BONNE QUALITE; AfricaRice; 20p.

Web sites consulted

https://www.larousse.fr/dictionnaires/francais/%C3%A9tuvage/31600 ; 05/10/2021 at 16h03

http://www.fao.org/3/ca3809fr/ca3809fr.pdf; 05/10/2021 at 16h10

https://www.enabel.be/sites/default/files/la demarche du projet dappui a la filiere du riz au benin.pdf; 05/10/2021 at 16h14

http://www.louvaincooperation.org/sites/default/files/2019-03/89j-

<u>Fiche%20Techniques%20Agricole%20%28%C3%A9tuvage%20riz%29.pdf</u>; 05/10/2021 at 16h59

https://cgspace.cgiar.org/bitstream/handle/10568/101538/Exp Cap10 Moumouni.pdf?seq uence=1&isAllowed=y; 05/10/2021 at 17h19

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