

# TECHNICAL SHEET

## Philippine SEEDER

### Definition of the seeder

According to the Larousse dictionary (2021), a seed drill is a machine used to sow grain. For cereals, the seed drills deposit in the ground, on rows, volumes of seed corresponding to the desired doses per hectare; for beets, the precision seed drills release a single seed at a time on the row at the constant spacing chosen by adjustment.

The Philippine seeder has two large wheels of 62 cm in diameter, 1 rod of 2.40m with 6 drums that can hold up to 2 kilograms of germinated rice, and a handle for driving. Originally from the Philippines, its design was modified in Mali to better adapt it to local realities. This technology allows users to save time, reduce labor and the drudgery of work. (See video <https://www.youtube.com/watch?v=4AOFMn7m6MQ>).

### Presentation of the Philippine seeder (WAAPP/PPAAO, 2009)

The mechanical seed drill for pre-sprouted rice originally known in the Philippines was implemented and adapted for rice production by the Centre National de Spécialisation-Riz (CNS) in Mali in 2013. The CNS modified the seeder, which was originally human-powered, into a mechanized mode. It was named the "WAAPP-AMA" seeder. This modified seeder also has animal-drawn versions.

The drill has resulted in a 50% reduction in the number of seeds/ha. Although testing is still underway, it was noted that the new seeder has enormous potential in rice production. For example, because of homogeneous planting of rice plants and better conditions for weeding the farms, the plants have flowered very well, and yield increases of up to 30% have been reported following the introduction of this cultural practice.

Other NHAs have expressed interest in benefiting from this technology. The price of the Philippine seeder is estimated at about 175,000 FCFA (local reproduction). Compared to the costs of transplanting, the use of the Philippine seeder allows a saving of about 50,000 FCFA per ha.

### Characteristics of the technology

- 50% reduction in the quantity of seeds to be sown per ha
- 30% increase in yields.

### **Bibliographic references**

WAAPP/PPAAO (2009) : Mali, le semoir WAAPP-AMA dans la culture du riz ; Fiche de présentation, 1p.

### **Web sites consulted**

[http://www.waapp-ppaao.org/sites/default/files/fiche\\_semoir\\_0.pdf](http://www.waapp-ppaao.org/sites/default/files/fiche_semoir_0.pdf) ; 30/11/2021 at 12h42

<https://www.youtube.com/watch?v=4AOFMn7m6MQ> ; 30/11/2021 at 12h47

### **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 (CRRRA Sotuba, Bamako); The Food Technology Laboratory (CRRRA 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