Rice Threshing and Polishing Machines Axial flow thresher and improved quality polishing

Efficient rice threshing and polishing for premium quality grains, boosting income and market access in african communities.

Axial flow threshers utilize a rotating drum to separate rice grain from the surrounding husk, while abrasive polishers remove outer bran layers. Key parts are made of stainless steel for durability and hygiene. These equipment can be powered by diesel/petrol generators or solar installations for easy use in rural areas.

This technology is TAAT1 validated.

8•8 Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment 3 1

Climate impact 5

Problem

- High grain losses due to manual threshing methods.
- Inefficiencies in the traditional polishing process, particularly manual rubbing.
- Time-consuming and labour-intensive artisanal practices.
- Difficulty in processing large volumes of rice in communities.

Solution

- The motorized axial flow threshers reduces grain breakage and loss compared to traditional manual methods.
- The mechanized equipment drastically reduces the time and labour required for threshing and polishing.
- The mobile units are designed to be highly mobile and can be easily transported to even remote rural areas.

Cost: $$

4500 USD
Local thresher

20 %
Losses reduced

15000—20000 USD
Advanced polishers and whiteners

3000 USD
Small bench-top polishers

IP
Patent granted

Africa Rice Center
Sali Atanga Ndindeng

Technology originally documented by

ProPAS

Commodities

Rice

Sustainable Development Goals

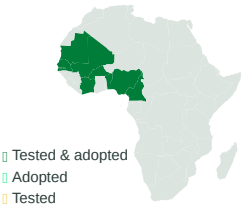
2 ZERO HUNGER

8 DECENT WORK AND ECONOMIC GROWTH

Categories

Harvest, Equipment,
Post-harvest handling

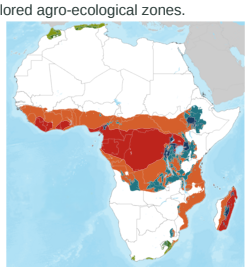
Tested/adopted in



Tested & adopted
Adopted
Tested

Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers