

# Flour Milling and Blending Systems for Wheat, Sorghum and Millet

Produce a premium wheat, sorghum and millet flour close to production areas

This technology comprises milling and blending systems that enable the production of premium flour products in both rural and urban areas. Different milling systems are available, meeting industry standards. An abrasive grain mill typically includes a feed-in hopper, roller table for grinding, rotary sieve for bran separation, and a conveyor belt.



INTERNATIONAL CROPS RESEARCH  
INSTITUTE FOR THE SEMI-ARID TROPICS

**International Crops  
Research Institute for the  
Semi-Arid Tropics (ICRISAT)**  
Dougbedji Fatondji

Technology from

[ProPAS](#)

Commodities

Sorghum/Millet, Wheat

Sustainable Development Goals



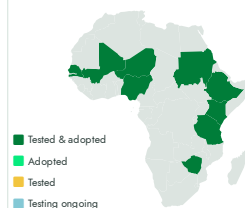
Categories

Transformation, Equipment,  
Agri-food processing

Best used with

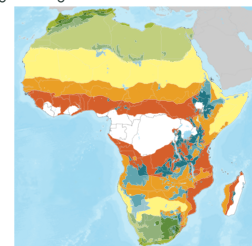
- [Millet and Sorghum  
Varieties for Better Nutrition  
and Stress Resistance](#)

Tested/adopted in



Where it can be used

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



✓ This technology is **TAAT1 validated**.

7.7



Scaling readiness: idea maturity  
7/9; level of use 7/9

Gender assessment

4

Climate impact

3

## Problem

- The traditional grinding and cooking of millet and sorghum grains are associated with significant time, energy burden, and labor intensity.
- Transport and cost issues arise in the distribution of raw grain to rural consumers.
- A lack of value addition to raw grain for products sold in urban markets and food processing.

## Solution

- The milling and blending systems automate the process, saving time, energy, and labor.
- They reduce the necessity to transport raw grain over long distances, lowering costs for rural consumers.
- The flour processing adds value to raw grain.

## Key points to design your project

This technology can be integrated into nutrition projects, offering job opportunities. To implement it, focus on :

- Awareness,
- Product standards,
- Efficient production setups,
- Collaboration with food processor companies.

Cost: \$\$\$ **3,500 USD**

For small flour mill machine with a capacity of 300 -  
500 kg flour per hour

ROI: \$\$\$ **12—15 %**

increase in milling yield

**38,000 USD**

**80—82 %**

**18—20 %**



Base price for a fully  
automatic flour mill with a  
capacity of 30 ton flour per  
day

maximal recovery of flour

maximal recovery of bran

Open source / open access



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<https://taat.africa/oxs>

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Enquiries [e-catalogs@taat.africa](mailto:e-catalogs@taat.africa)