

Motorized Crop Residue Processing for Animal Feed

Powered Crop Residue Processing for Livestock Feed Enhancement



Use of motorized stover cutter (left) and mobile chopper (right)

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This technology is a motorized equipment for processing millet and sorghum residues into animal feed. It's self-powered, cost-effective, and easily transportable, requiring only two operators. By efficiently processing crop residues, it integrates crop and livestock enterprises, enhancing resource efficiency. The machine can process 1 to 1.5 tons of stover per hour.

This technology is **TAAT1 validated**.
 8•8
 Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment 4

Climate impact 6

Problem

- Manual processing of millet and sorghum stem residues is time-consuming.
- Unutilized residues are often burned, leading to soil carbon depletion and air pollution.
- Traditional feeding methods result in sub-optimal animal diets and digestion.
- Storage and preservation of feed face challenges.
- Dryland areas in Sub-Saharan Africa lack sufficient feed biomass due to low rainfall.

Solution

- Efficiently processes crop residues into feed or mulch
- Reduces wastage and maximizes livestock nutrition
- Enhances animal health and productivity
- Improves soil health and agricultural sustainability
- Compacts feed materials effectively, enhancing flavor and nutritive value
- Particularly beneficial for low rainfall regions in Sub-Saharan Africa

Technology originally documented by

ProPAS

Commodities

Sorghum/Millet

Sustainable Development Goals

2 ZERO HUNGER

13 CLIMATE ACTION

15 LIFE ON LAND

Categories

Pre-production, Equipment, Animal feed production

Best used with

- [Dual-purpose Varieties for Crop and Livestock Integration >](#)

Cost: **\$\$\$** **1250-1700 USD/unit**

Self-contained stover chopping and crushing machine

10 years	22,000 USD	1,000 - 1,500 USD	IP
Lifespan	Production value in 6 months	Alternative motorized cutters that can handle all types of cereals	Unknown

Tested/adopted in

■ Tested & adopted
■ Adopted
■ Tested

Where it can be used

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

