

Motorized Crop Residue Processing for Animal Feed

Powered Crop Residue Processing for Livestock Feed Enhancement

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.



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



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Technology from

[ProPAS](#)

Commodities

Sorghum/Millet

Sustainable Development Goals



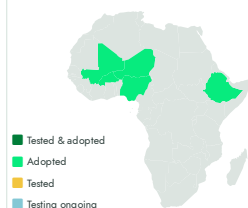
Categories

Pre-production, Equipment,
Animal feed production

Best used with

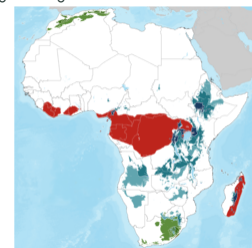
- [Dual-purpose Millet Varieties for Crop and Livestock Integration](#)

Tested/adopted in



Where it can be used

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



This technology is **TAAT1 validated**.

8-8



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

Cost: \$\$\$ **1250–1700 USD/unit**

Self-contained stover chopping and crushing machine

10 years

Lifespan

22,000 USD

Production value in 6 months

1,000–1,500 USD

Alternative motorized cutters for cereals



Unknown

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
- Compacts feed materials effectively, enhancing flavor and nutritive value
- Particularly beneficial for low rainfall regions in Sub-Saharan Africa

Key points to design your business plan

For Resellers:

- To enter the market effectively, identify reliable equipment sources, arrange transportation, and assess storage facilities.
- Costs vary by technology size, with self-contained stover chopping and crushing machines ranging from USD 1,250 to USD 1,700, and alternative cutters from USD 1,000 to USD 1,500. Consider additional expenses for transportation, import duties, and taxes.
- Target customers include farmers, development projects, and farmer cooperatives.

For Users:

- Key partners include sellers of crop residue processing for animal feed.
- Costs range from USD 1,000 to USD 1,700 for the technology, with potential additional expenses for transportation, import duties, and taxes.
- Optimal results can be achieved by integrating the technology with Dual-purpose Varieties for Crop and Livestock Integration.

Gender assessment



Climate impact





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<https://taat.africa/kaq>

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