

# 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

Cost: **USD** **1250-1700 USD/unit**  
 Self-contained stover chopping and crushing machine

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

■ Tested & adopted  
■ Adopted  
■ Tested

Where it can be used

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

### 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

## Key points to design your business plan

**For Manufacturers:**

- To succeed, identify reliable suppliers for manufacturing machines and raw materials, considering transportation costs, import duties, and taxes.
- Potential customers include animal feed processing projects, farmers' cooperatives, and associations.

**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



## Motorized Crop Residue Processing for Animal Feed

Enquiries [techs@iaat-africa.org](mailto:techs@iaat-africa.org)

<https://e-catalogs.iaat-africa.org/com/technologies/motorized-crop-residue-processing-for-animal-feed>

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