

# 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.

This technology is **TAAT1 validated**.
 **8x8**
 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:

Categories: Pre-production, Equipment, Animal feed production

Best used with:
 

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

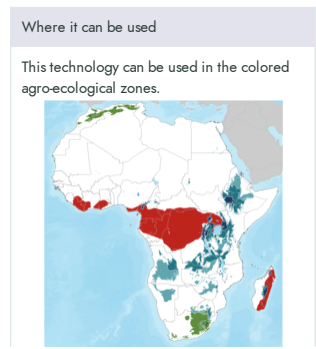
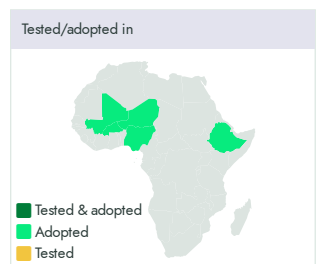
### Key points to design your project

To integrate this technology into your project:

- Conduct community-level demonstration sessions to promote the stover chopper/crusher.
- Provide operators with training on machine maintenance and usage.
- Facilitate connections between community-based organizations, youth groups, and animal feed producers.

During implementation, consider:

- Determining the size and quantity of units needed.
- Budgeting for equipment purchase: USD 1,250 to USD 1,700 for self-contained stover choppers and USD 1,000 to USD 1,500 for alternative motorized cutters.
- Accounting for delivery costs and potential import duties based on the technology's source country.



Cost: **\$\$\$ 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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