

# Dual-purpose Millet Varieties for Crop and Livestock Integration

Harvest More, Feed Better, Farm Smarter

"Dual-purpose Varieties for Crop and Livestock Integration" involves developing millet and sorghum varieties for both human food and animal fodder in African drylands, addressing challenges like overgrazing and soil degradation worsened by increasing livestock populations.



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This technology is **TAAT1 validated**.
  7\*8
 Scaling readiness: idea maturity: 7/9; level of use: 8/9

Cost: \$\$	<b>204 USD</b>	ROI: \$\$\$	<b>31 %</b>
Production cost for seed, fertilizer, and labor per Ha		increase in yield	
<b>204 USD</b>	<b>2.5—4 tons</b>	<b>10—15 tons</b>	<b>15 %</b>
Per hectare for seed, fertilizer, and labor	Sorghum grain yield per Ha	Sorghum stover yield per Ha	Sugar concentration
			No formal IP rights  IP

Technology from  
**ProPAS**

Commodities  
Sorghum/Millet

Sustainable Development Goals

Problem	Solution
<ul style="list-style-type: none"> <li>Growing livestock population exacerbating the demand for animal feed resources.</li> <li>Traditional millet and sorghum varieties unable to meet the dual requirements of human food and high-quality animal feed.</li> <li>Common millet and sorghum lines have higher lignin content, making them less digestible.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced lignin and tannin content for enhanced digestibility and palatability</li> <li>Greater fodder availability, especially during the dry season</li> <li>Increased manure availability for soil fertility management</li> <li>Sweet stover with high sugar concentration (around 15%)</li> <li>Suitable for syrup or bioethanol production</li> </ul>

Categories  
Production, Improved varieties, Quality improvement

Best used with

- [Proactive Management of Striga Infestation >](#)
- [Precision Fertilizer Micro-Dosing for Millet and Sorghum Yield Enhancement >](#)
- [Motorized Crop Residue Processing for Animal Feed >](#)

## Key points to design your business plan

- For Seed Multipliers:**  
To multiply seeds effectively, it is essential to acquire Registered Seed and comply with national certification regulations.
- Consider potential customers and establish strong partnerships with wholesale distributor networks, which are crucial for success.

**For Users:**

- Available in several countries, with cultivation costs averaging USD 204 per hectare.
- Partner with private seed companies, cooperatives, and seed growers for optimal results.

Tested/adopted in

■ Tested & adopted  
■ Adopted  
■ Tested

Where it can be used

Gender assessment 4

Climate impact 7