Drought-resilient Urochloa forage for year-round livestock feeding

Better grass. Better livestock.

Urochloa grasses are climate-smart feed technologies. They survive long dry periods, grow on poor soils and produce 8–15 t of forage per hectare with up to 15 % protein. By stabilising soil and reducing erosion, they also protect watersheds. Supporting seed supply and farmer training will boost national milk and meat production while enhancing environmental sustainability.

This technology is pre-validated.

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

Inclusion assessment

Climate impact

Problem

- **Low livestock output:** Native pasture is low and poor-quality, so milk and meat stay low.
- **Dry-season feed gaps:** When rains stop, grass stops—farmers buy costly feed or reduce herds.
- **Soil erosion:** Thin pasture leaves soil exposed and degrades land.

Solution

- **Drought resilience:** Deep roots (~2 m) keep forage productive in dry spells, improving feed security.
- **High yield + nutrition:** 8–15 t/ha dried forage with 8–15% protein, reducing feed imports.
- **Higher output:** Better feed can lift milk and meat yields by 15–30%, raising rural incomes.
- **Soil benefits:** Dense cover reduces erosion and supports land restoration.
- **Year-round feed:** Harvest every 8–12 weeks for continuous supply.

Key points to design your project

Urochloa (Brachiaria) forage grasses are a practical way to reduce dry-season feed shortages and boost livestock productivity by producing more, better fodder from the same land.

To integrate this technology into your project, plan activities around:

- **Ensuring seed access before the rains** and guiding farmers on correct planting (shallow seed covering).
- **Establishing demo plots and farmer training hubs** in key livestock areas to show the full pasture cycle.
- **Packaging early establishment support** (seedbed preparation and strong weed control in the first weeks).
- **Including basic soil fertility support** (fertilizer/manure top-ups to maintain regrowth).
- **Promoting hay making and fodder storage** to secure feed for the dry season.
- **Setting simple cutting/grazing rules** to protect regrowth and keep fodder available year-round.

For best results, keep the message simple: plant on time, control weeds early, and manage cutting/grazing properly to maintain regrowth.

Implementing partners could collaborate with **Alliance Bioversity International & CIAT**, national extension and livestock services, seed companies and regulators, cooperatives/dairy hubs, and women/youth groups to scale adoption.

2616 USD	**20400 USD**	**17784 USD**	**680 %**
Cost Per hectare over 10 years	Revenue Per hectare over 10 years	Net income Per hectare over 10 years	ROI Over 10 years

Alliance

The Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT)

Solomon Mwendia

Commodities

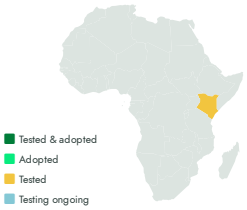
Forage grasses

Sustainable Development Goals

Categories

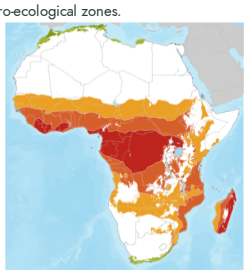
Production, Improved varieties, Yield improvement, Drought tolerance

Tested/adopted in



Where it can be used

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



Target groups

Breeders, Development institutions, Farmers, Seed companies,