

Livestock Feed Pelleting: Small-scale feed production using local agricultural by-products

Farm-to-Feed Innovation: Turning local by-products into affordable, high-quality livestock feed

Small-scale Feed Production Using Local Agricultural By-products combines local feed resources, balanced formulations, capacity building, and appropriately selected processing equipment to establish decentralized livestock feed production systems. Ingredients are ground, mixed and, where appropriate, pelletized using configurations adapted to local production capacity, infrastructure, and energy conditions.



International Center for Agricultural Research in the Dry Areas (ICARDA)

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Commodities

Small livestock

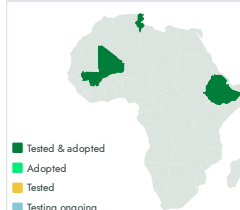
Sustainable Development Goals



Categories

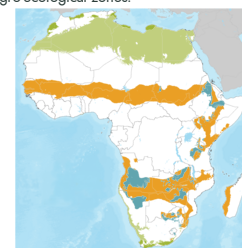
Production, Pre-production, Practices, Animal feed management

Tested/adopted in



Where it can be used

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



Target groups

Development institutions, Farmers, Governments, Processors, Sellers, Manufacturers, + 5 more

This technology is **pre-validated**.

9-8



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

Inclusion assessment

16

8

8

Climate impact

6

Problem

- Dependence on expensive imported livestock feed.
- Seasonal and climate-induced feed shortages.
- Underuse of agricultural and agro-industrial by-products.
- Limited access to appropriate feed processing solutions.
- Increasing pressure on natural grazing resources.

Solution

- Strengthens domestic feed production and reduces import dependence.
- Improves feed availability during seasonal shortages.
- Converts underused by-products into productive feed resources.
- Builds local feed production capacity through formulations, training and equipment.
- Provides alternative feed sources that reduce pressure on rangelands.

Key points to design your project

- **target livestock-producing areas with recurrent feed shortages** and sufficient local agricultural and agro-industrial by-products.
- **Adapt the feed production system** to local resources, production capacity, infrastructure and energy conditions.
- **Support farmer organisations and local enterprises** with training, equipment, finance, ingredient sourcing, storage, maintenance and spare parts.
- **Build partnerships and work with ICARDA** on feed formulation, equipment configuration, capacity building, technical services and sustainable scaling.

44250 USD

Cost Per ton of feed produced

48438 USD

Revenue Per ton of feed produced

4188 USD

Net income Per ton of feed produced

9 %

ROI year



Open source / open access

