Value Addition to Poultry Manure

Transforming waste into wealth

Manure accumulated on the poultry house floor (left) and finished compost ready for use as an organic fertilizer (right)

Value Addition to Poultry Manure transforms chicken manure into nutrient-rich organic fertilizer. Composting detoxifies the manure, enhancing soil fertility and reducing reliance on chemical fertilizers.

International Livestock Research Institute (ILRI)
Adeniyi Adediran

This technology is TAAT1 validated.

7·7 Scaling readiness: idea maturity 7/9; level of use 7/9

Gender assessment 4

Climate impact 7

Problem

- **Pathogens and Unpleasant Odors**: Fresh chicken manure can contain harmful pathogens and emit an off-putting odor.
- **Underutilization**: Chicken manure is often unused due to these issues.
- **Environmental Impact**: Large-scale poultry farms generate significant manure, leading to unpleasant odors, groundwater pollution, and methane emissions.

Solution

- **Pathogen-Free Organic Fertilizer Production**: Converts chicken manure into safe, nutrient-rich organic fertilizer through composting, ensuring plant health and human safety.
- **Sustainable Environmental Impact Mitigation**: Transforms raw chicken manure into valuable organic fertilizer, reducing odors, preventing groundwater contamination, and mitigating methane emissions.
- **Cost-Efficient Waste Management**: Repurposes chicken manure into valuable organic fertilizer, reducing waste management costs and enhancing overall farm profitability.

Cost: $$$ **5,000—10,000 USD**

drying and pelleting equipment

30,000 USD
organic fertiliser production plant of 15 ton per hour

3,000 USD
15 m3 anaerobic digester able to process 300 kg of poultry manure per day

IP
Open source / open access

Technology from

ProPAS

Commodities

Poultry

Sustainable Development Goals

2 ZERO HUNGER

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

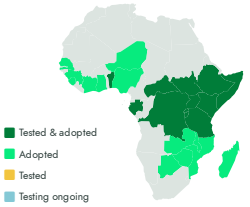
Categories

Production, Pre-production, Practices, Animal waste management

Best used with

- Biosecurity for Disease Prevention ›
- Low-Cost Cage and Free-Range Containment ›

Tested/adopted in



Where it can be used

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