

Value Addition to Poultry Manure

Transforming waste into wealth

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.



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

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INTERNATIONAL
LIVESTOCK RESEARCH
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✓ This technology is **TAAT1 validated**.

7.7



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

Gender assessment

4

Climate impact

7

Technology from

ProPAS

Commodities

Poultry

Sustainable Development Goals



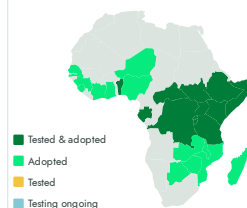
Categories

Production, Pre-production, Practices,
Animal waste management

Best used with

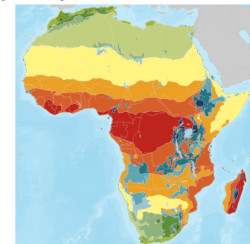
- [Biosecurity for Disease Prevention](#)
- [Low-Cost Cage and Free-Range Containment](#)

Tested/adopted in



Where it can be used

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



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.

Key points to design your project

Poultry farming boosts women's financial independence and leadership roles. This technology transforms waste into valuable organic fertilizer, reducing odors, groundwater contamination, and methane emissions. It also reduces reliance on chemical fertilizers, supporting climate goals. This project contributes to achieving SDGs 1 (poverty reduction), 2 (food security), 5 (gender equality), and 13 (climate action).

Key points for project step up:

- **Assess & Select:** Identify farmers interested in value addition with suitable farm size and resources.
- **Train & Build Capacity:** Train extension agents and farmers on composting and value-added products.
- **Implement & Support:** Organize workshops, establish demonstration plots, and provide technical support and financing access.
- **Market Access & Sustainability:** Connect farmers with buyers and evaluate project impact.

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



Open source / open access



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<https://taat.africa/hoj>

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