

# 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)



**International Livestock Research Institute (ILRI)**  
Tunde Amole

This technology is **TAAT1 validated**.
 


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

**Project adoption** 1  
 Technology integrated in the EFPFP project, in Malawi.

Inclusion 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.

Technology from  
**ProPAS**

Commodities  
Poultry

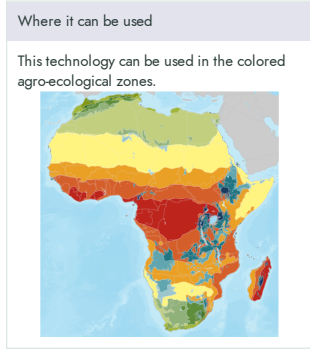
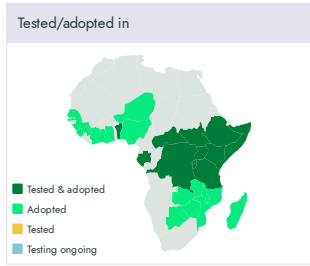
Sustainable Development Goals

2 ZERO HUNGER

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Categories  
Pre-production, Practices, Animal waste management

Best used with  
Biosecurity for Disease Prevention, Low-Cost Cage and Free-Range Containment  
See all 2 technologies online



Target groups  
Breeders, Farmers

### Key points to design your program

Value Addition to Poultry Manure can be integrated into sustainable agriculture, soil health, climate resilience, and circular economy programs to improve soil fertility, reduce waste, and create income opportunities through organic fertilizer production. Its adoption contributes to **SDGs 1, 2, 12, and 13**.

To integrate this technology into your project, plan and budget for the following activities and prerequisites:

- Facilitate access to composting facilities, manure processing equipment, and storage systems.
- Build partnerships with ILRI, poultry producers, cooperatives, extension services, and private sector actors.
- Train beneficiaries on composting, fertilizer production, and safe manure management.
- Promote women's and youth participation in organic fertilizer enterprises.
- Monitor manure processing, fertilizer adoption, soil health improvements, crop productivity, and job creation.

**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**

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