

From Waste to Wealth: How Organic Compost is Boosting Yields and Livelihoods in the Rice Value Chain.

Across Burkina Faso, Ghana, and Sierra Leone, rice farmers have faced a growing challenge: soil degradation. Years of dependency on chemical fertilizers promised more but often delivered less, depleting soil structure and increasing vulnerability to erratic climate conditions. Yields dropped, input costs soared, and traditional farming knowledge fell by the wayside. For many smallholder farmers, the situation posed not only an agronomic crisis but a threat to their very livelihoods.

MOVE recognised that empowering farmers with accessible, actionable knowledge was key to achieving sustainable improvements. In response, the MOVE project introduced a low-cost alternative in the form of practical training focused on preparing and using organic compost. The clear goal was to restore soil health, reduce dependence on fertilizers, and help farming communities turn local waste into long-term value.



Composting is a straightforward yet effective solution. By repurposing plant prunings, manure and food waste to create nutrient-rich compost, farmers could improve soil fertility, boost crop yields and reduce production costs, all while lowering their environmental impact. This would also enhance their climate resilience.

In partnership with local stakeholders, MOVE developed a practical composting training manual tailored to the needs of rice-growing communities. This training was delivered through practical workshops, enabling farmers and extension agents to learn through hands-on experience.

To date, the impact has been significant:

- In **Burkina Faso**, **335 farmers** were trained across 10 rice-growing communities. Notably, **65% were women**, and **a third were youth**.
- In **Sierra Leone**, **15 trainers** - **67% women and 93% youth** - are now **cascading the knowledge** to an estimated 1,000 farmers.
- In **Ghana**, **30 trainers**, including **30% women and over 50% youth**, are reaching an additional **1,000 farmers** with composting skills.

The training sessions covered everything from choosing composting sites to layering organic material, watering and turning the piles, as well as recognising when the compost is ready - usually within two to three months.

In Burkina Faso, farmers began to see tangible improvements within a single season. **Yields increased from 3-4 tonnes** per hectare **to 5-6 tonnes**, while the price of paddy **rice rose from 175 to 200 CFA** per kilogram. These gains reflect not only healthier soils, but also greater household income and food security.

Results That Speak for Themselves

The broader environmental benefits are equally important. Composting reduces greenhouse gas emissions, eases the burden on landfills and improves moisture retention in increasingly unpredictable weather conditions.

As Isha Tarawallie, a young farmer in Sierra Leone, explained:

I can now use my waste to make compost for my farm to improve productivity—and even sell it to earn extra income.”

Facilitating Transformation

Composting itself is not new. But the knowledge, structure, and support to scale it effectively often do not exist. That's where MOVE plays a crucial role.



The training actively promotes the inclusion of women and youth, not merely as beneficiaries, but as drivers of change within their communities. Knowledge is passed on in a sustainable and scalable way, through a network of community-based trainers and extension agents who can continue delivering guidance beyond the initial sessions.

MOVE also supports essential linkages between farmers, cooperatives, and markets, ensuring that composting contributes not only to soil health, but also to viable business opportunities and stronger local economies.

Importantly, composting is not treated as a standalone solution, it is embedded within a broader vision of climate-smart, cost-effective rice production.



Path Forward

With its demonstrated success in improving soil health and boosting productivity, composting has become a practical and affordable solution for many rice-growing communities. The next step is to scale up these efforts, expanding reach in Burkina Faso and initiating large-scale implementation in Ghana and Sierra Leone.

Through MOVE's facilitation, this practical solution ensures that sustainable agriculture is not only possible, but profitable. By turning waste into wealth, composting is helping farmers across West Africa to strengthen local economies, enhance food security and promote self-reliant communities. With each compost pile turned, farmers are building a more resilient future, one that restores their soils, strengthens their yields, and allows them to take ownership of their land and livelihoods.

