Technology Fact Sheet

Organic fertilizer from agricultural residues/by-products[i]

1) Technology description

This technology produces organic fertilizers from agricultural crop residues by using certain enzymes to accelerate the decomposition of cellulose.

2) Socio-economic benefits

Increasing crop yields and cutting down costs of fertilizers.

3) Environmental benefits

- Reducing GHG emissions from burning agricultural residues.
- Preventing environmental pollution and plant diseases.

4) Status of technology

The application of technology projects have been deployed in some provinces in Vietnam.

5) Application potential

Can be used for the entire area of rice, maize, peanuts, soybean and sugarcane nationwide.

6) Barriers

- Time between crops in multiple cropping regions is too short for the composting process to produce high-quality compost.
- Treating agricultural waste and residues is still a rather new concept to farmers and treatment process requires complicated procedures and techniques.
- Limited understanding of this technology at the community level.
- Benefits gained from this technology have yet to appeal to farmers.
- This technology may be difficult to apply in dry season conditions.

7) Costs

Implementation and technology application costs

- The cost of technology depends on the type of yeast used. Average cost to produce 1 ton of fertilizer is 372000 VND (19 USD).

Incremental costs to adapt to climate change (compared to conventional technology)

- There is no incremental cost.

---

[i] **This fact sheet has been extracted from TNA Report - Adaptation for Vietnam. You can access the complete report from the TNA project website http://tech-action.org/**