

Business Models and Solutions for Reuse of Agro-waste Workshop in Vietnam



The challenge...

With approximately 16.5 million pigs producing over 19.3 billion kilograms of solid waste per year, Vietnam faces a livestock waste management predicament. In the Red River Delta area, where roughly 55% of the country's pig farms are located, the majority of the livestock waste generated is unused, and often disposed of in the surrounding environment. Several business models based on livestock-waste reuse have been studied and/or developed where - if adopted - would benefit several departments at different scales.

Several business models based on waste reuse - if adopted - would benefit private sector organizations engaged in related businesses, technology developers, governmental departments and NGOs. Livestock businesses, for example could be using pig waste to produce energy or compost, which they could use themselves, resulting in cost savings. Alternatively this energy could be sold, providing an additional revenue stream. This effective reuse of waste would help to make these businesses both environmentally and economically sustainable.

Overall Goal and Project Objectives:

The International Water Management Institute (IWMI), in collaboration with the Center for Public Health and Ecosystem Research (CEPNHER), Hanoi School of Public Health, are hosting a one day workshop in Hanoi to explore the potential for scaling up business models that reuse agro-industrial waste. The workshop will also focus on developing a common understanding of the problems and opportunities relating to agro-waste, with existing initiatives in Vietnam.

This translates into the following two key objectives:

1. To explore the potential for scaling of business models that reuse livestock (pig) waste in collaboration with IFAD's existing initiative in the targeted region
2. To increase the scale and viability of productive reuse of water, nutrients, organic matter and energy from agro-industrial waste streams in Vietnam through the analysis, promotion and implementation of economically viable business models

Agro-waste Feasibility Studies

The RRR group at IWMI, after analyzing more than 150 reuse business cases, covering Africa, East Asia, South Asia and South America, have developed over 20 conceptual business models that recover and recycle water, nutrients and organic matter from agro-industrial waste into value-added products such as safe water, fertilizer and energy.

Through the IFAD funded "**Safe nutrient, water and energy recovery: developing a business case**" project the RRR team has focused on selected countries including Ghana, Uganda, Bangladesh, and Vietnam.

Key Project Output:

- The anticipated outputs are to identify a common understanding of potential business models for the reuse of agro waste in Vietnam and, with feedback from local partners, to develop research concepts and feasibility studies into long-term next steps.

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A research project funded by the International fund for Agricultural Development (IFAD)