

A Growing Culture



The Situation

Livestock farming has long been criticized for its negative impacts on the environment, waterways and local communities. According to a 2005 EPA report, livestock animals in the United States produce between 1.2 and 1.37 billion tons of manure annually. In many cases the waste produced by big farms has serious consequences. The leaching of manure can contaminate groundwater, the primary source of drinking water for most rural communities. Air quality is also at risk with many studies suggesting higher rates of asthma and respiratory issues in populations working in or living around livestock farms. A Growing Culture (AGC) seeks to spread the use of innovative approaches that can not only offset the damage, but also create new opportunities for social and environmental regeneration. As the largest producer of pork in southeast Asia, Vietnam offers a particularly important opportunity for impact. Hogs make up about 70% of all livestock in Vietnam with a larger number of these hogs belonging to small scale farmers. In fact, smallholder farmers that integrate hog production with rice and crop production make up the largest portion of pork producers in the country. However, many of these farmers are still using traditional concrete pigsties resulting in many ecological and social challenges.

Ecosystem: Wetlands, Grasslands, Forest, Other

Area Impacted: 10 ha

Production Quantity: 100+ hogs

People Employed: 8

Population Impacted: 1,500+ people

The Solution

Living bio-beds provide an affordable way for pig farmers to ensure sustainable livestock management and increase food security all while using approaches that protect the environment and raise incomes. AGC worked with smallholder farmers in Hanoi, Vietnam to develop ecologically stable alternatives to traditional hog farming. By mixing mold warm water, molasses and lactobacillus and spraying the mixture on the bedding, living bacteria in the bedding breaks down the manure and pig urine, therefore eliminating all odor and runoff.

The community has seen many benefits thanks to the use of living bio-beds. First, there is immediate improvement in the hogs' health. These beds encourage hogs to exhibit their natural rooting behavior because the healthy microorganisms in the bed are beneficial to them. Additionally, since the beds are living they produce heat, which the hogs use for warmth during colder seasons. These improve overall hog health, thereby significantly reducing the need for antibiotics.

Secondary social and economic benefits are also realized in the community. The ability of these beds to break down hog waste eliminates runoff, effectively protecting the community from the toxic waste associated with industrial hog farms. Moreover the local economy is stimulated through the purchase of the absorbent materials needed for the hog beds.





Farming for Biodiversity

Unsustainable agricultural practices remain one of the greatest threats to ecosystems and biodiversity. As the world population is expected to reach nine billion by 2050 and climate change further threatens livelihoods, we have to find ways of agricultural production that support farmers and the environment we all rely on.

The good news is these solutions already exist: From modern beekeepers who work on reviving ancient local wisdom to phone apps connecting rural farmers with urban consumers.

With Farming for Biodiversity, we are on a global mission to surface these local solutions, celebrate them and bring them to scale.

Our vision is to make these community-led initiatives shine and reach:

- Over 200 million globally through media impressions and publications
- Over 100,000 active website participants and readers of online publications
- 200 selected agriculture & biodiversity pioneers through eight technical and campaign trainings, hosted across the globe
- 800,000 farmers, conservationists and other land users at the community-level



Through our crowd-sourcing contest Solution Search, we have identified over 300 innovative and replicable ideas that connect agriculture, livelihood and the environment. These selections were assessed by our renowned panel of expert judges from leading organizations around the world.

Based on the solutions surfaced, we will host eight in-country workshops to introduce the most promising approaches to local influencers. Trainings will equip participants with the skills to implement locally driven solutions in their own communities. Longer term grants will provide an additional incentive to continue their work. These efforts will expand these approaches globally, reaching 800,000 people!

Throughout the project, we will gather, analyze and publish lessons learned. An online peer-to-peer network will connect all solution providers and facilitate interactive exchange across countries and themes. We will actively engage in global environment and agriculture policy processes – such as the Convention for Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC) and Sustainable Development Goals (SDG) meetings, drawing attention to community leaders and local champions.