# **BIG IDEAS** FOOD SYSTEMS





## **OVERVIEW**

The production and distribution of food intersect with some of the most critical issues of our time: health and nutrition, poverty, energy, climate change, biodiversity, water, and labor. The world's dominant food and agriculture systems are fraught by complex and urgent challenges, including pervasive hunger and malnutrition, as well as obesity, environmental degradation and emissions from farming activities, labor injustices, and extreme inequities in distribution of farm land and food access. Many initiatives and efforts have emerged in recent years, as attempts to address these persistent food-related problems, from local to global levels. Yet, the problems persist, and have escalated in some areas, often due to political and economic causes. Achieving food security, justice, health, and sustainability in food systems, and equitable access to nutritious food, requires significant changes, ideas, and problem-solving by people and organizations in a wide variety of disciplines.

## THE CHALLENGE

The aim of this category is to encourage the development of innovative solutions or approaches that address challenges in food systems, or that will result in progress or changes to support food security, sustainability and/or justice and health in food systems, and/or equitable access to nutritious food. Proposals may be aimed at campus based program, local/domestic issues or international efforts.

Examples of proposals include (but are not limited to) the following:

- A public health prevention initiative that aims to improve children's nutrition and health outcomes or address issues of hunger and/or obesity.
- A technology or innovation that greatly reduces agriculture's greenhouse gas emissions and promotes sustainable agricultural practices.
- A public awareness campaign that highlights labor issues in food systems and aims to improve working conditions for farmworkers.
- A project that aims to improve storage methods to reduce food loss and food waste for small-scale farmers in the developing world.

## **BIG IDEAS** PAST WINNERS

#### **BACK TO THE ROOTS**

3rd Place Winner, Scaling Up (2011) 1st Place Winner, Partnerships for Social Innovation (2009)

Back to the Roots started with with a goal to turn one of the largest waste streams in the Bay Area into a highly-demanded, nutritious, and valuable food product. Their coffee-ground grown specialty mushrooms not only create a healthy food source, but also provide urban jobs, save thousands of tons of valuable substrate from being dumped into landfills, and help the team donate substantial amounts of cash flow back into the communities from which the waste originated.

**Status:** Back to the Roots has since introduced an aquaponic fish tank, a three-ingredient breakfast cereal and other products. Their line is available for sale at 10,000 points of distribution including, Whole Foods, Target, Home Depot, Petco, Nordstrom, Amazon, Kroger, Safeway and Costco.

https://www.backtotheroots.com/



#### **SAFI ORGANICS**

### 1st Place Winner, Food Systems (2016)

Biomass waste is present in most rural farms around the world after harvest. The majority of this waste is burned rather than economically utilized because existing capital-intensive and centralized processing technologies are too expensive and/or inconvenient for farmers. Safi Organics produces a carbon-negative soil conditioner derived from farm waste. Designed for rural smallholder farmers in East Africa, the soil conditioner leads to a 30% increase in crop yield and 50% increase in income by reversing soil degradation. Safi Organics has developed patent-pending environmentally-friendly reactors and unique recipes that enable the low-cost and decentralized conversion of waste into carbon-negative soil conditioner in under 2 hours. This product actively sequesters 1.5 tons of  $\mathrm{CO}_2$  per acre into the soil each planting season thereby directly mitigating climate change.

**Status:** The company's EcoCert-certified product is currently used in more than 80 acres of land in Safi Organics' preliminary pilot project in Kenya.

http://safi.strikingly.com



#### **FOODFUL.LY**

#### 3rd Place Winner, Food System Innovations (2015)

Foodful.ly is a web service and mobile application that, when associated with a credit card or email, tracks food purchase from the point of purchase using increasingly available electronic receipts. These electronic receipts are parsed quickly to a user's inventory, and users are alerted when items are most likely to spoil according to independently developed spoilage algorithms. Recipes are sent to users based on learned preference and cooking experience level that uses these likely-to-spoil foods, minimizing the amount of food waste and time spent planning meals, ultimately resulting in health benefits and cost savings for users.

**Status:** The Foodful.ly team has gone on to win multiple business plan and innovation contests, and recently secured a place in a Silicon Valley incubator.



http://foodful.ly/