

# ALTERNATIVE FARMING: INNOVATIVE WAYS TO INCREASE FOOD PRODUCTION IN AMERICA

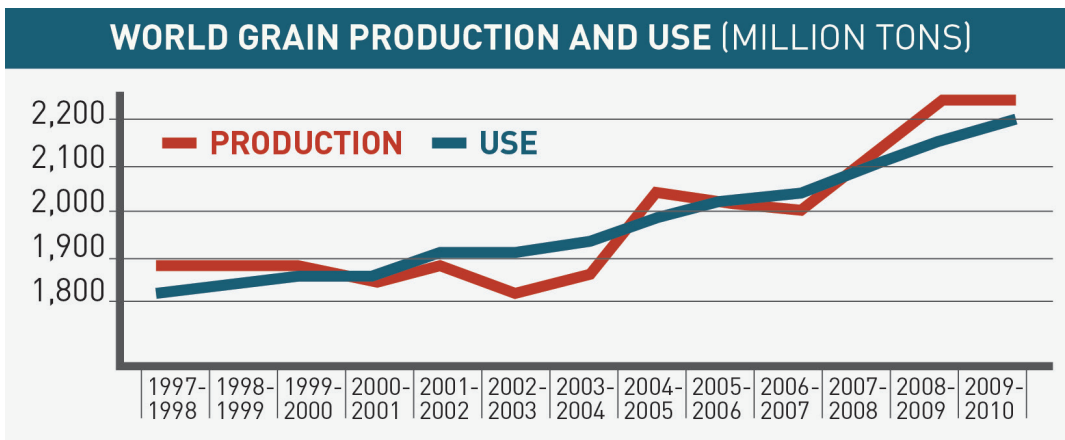
Global oil and food systems are both operating near full capacity, and demand is on the rise. As a result, rising prices are hurting Americans today, and the United States is at risk of food and fuel shortages in the future.

To help head off an impending food and fuel crisis, Sustainable America aims to reduce U.S. oil consumption by 50% by 2030 while increasing U.S. food availability by 50% by 2035. One way we believe we can accomplish these goals is by increasing local food production through alternative farming methods. Here's a little background:

## *Population Trends Drive Increased Demand, Increased*

**Food Insecurity.** As the global population surges from 7 billion (2012)<sup>1</sup> to approximately 9 billion in 2035<sup>2</sup> and demand from growing middle and upper classes in emerging market nations increases, the amount of food needed to feed people will grow from approximately 20 trillion calories per day to 25 trillion calories per day<sup>3</sup>, a 25% increase that will strain already stressed food systems. Already, we're able to see the pressure on the food system and food prices here in the United States, as reflected by the nearly 50 million Americans living in a state of food insecurity, meaning that they cannot always meet their basic food needs.

While food consumption continues to grow, food production remains only marginally ahead of demand and faces many challenges in the future stemming from the availability of arable land, questions over whether crop yields can continue to grow, and increasingly unpredictable and extreme weather.



**One Solution: Local and Alternative Farming.** Alternative farming methods, which include local, non-industrial farms; organic farms; hydroponic and aquaponic farms; and urban farms, have the potential to increase our food supply while reducing energy use. Only about 3% of current total food production in the U.S. is from alternative methods. In a system where food can travel 5,000 miles to reach a customer, there is ample room to increase local, alternative farming methods, particularly on terrain unsuited to industrial farming and in urban/suburban areas.



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AMERICA  
SUPPORTS**

- Food Waste Solutions
- Alternative Farming
- Precision Agriculture
- Natural Gas Vehicles
- Electric Vehicles
- Fuel Efficiency
- Advanced Biofuels

<sup>1</sup> US Census Bureau

<sup>2</sup> UN World Population Division

<sup>3</sup> Bridgespan Group and Sustainable America estimate, based on data and projections from the Food and Agriculture Organization of the UN, and the International Institute for Applied Sciences.

## ALTERNATIVE FARMING BENEFITS & CHALLENGES

### *Benefits:*

- Uses less energy from reduced transport and/or fertilizer use
- Increases crop diversity and resiliency
- Improves local access to healthy, fresh food
- Improves our ability to withstand potential shortages by diversifying the food supply
- Creates 13 jobs (vs. 3 for industrial agriculture) for every \$1M in revenue<sup>4</sup>
- Strengthens underutilized or abandoned urban areas

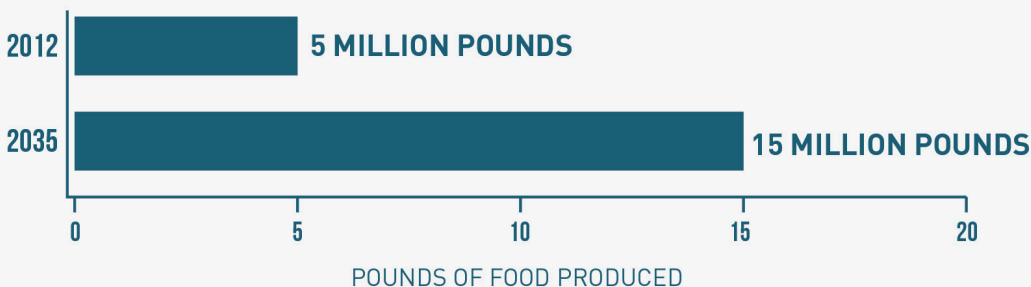
### *Challenges:*

- Limited selection during certain times of the year
- Small farms have difficulty competing on price with industrial farms
- Distribution methods for small or urban farms are not firmly in place
- Lack of wide public awareness of local food options

### *Our Proposed Solutions include:*

- **Supporting entrepreneurs** seeking to develop commercial-scale alternative farming efforts, including farming in urban areas, vertical farming in urban areas, hydroponics and traditional local organic farming.
- **Fostering the development of consumer markets** (household, retail outlets and restaurants) to support local and alternative farming efforts.
- **Developing enterprises** that seek to alleviate supply chain and distribution bottlenecks in the local farming / local eating system.
- **Initiating public awareness campaigns** about the benefits of eating locally produced food and how to find it.

### OUR GOAL: TRIPLE ALTERNATIVE FARMING PRODUCTION BY 2035



*Sustainable America is concerned with increasing food availability and making our food systems in America more resilient to price shocks, severe weather and other unforeseen events in the future. We believe that with focused and concerted efforts, we can simultaneously increase food production and decrease food waste to create a more sustainable America into the future.*

<sup>4</sup> "Comparing the Size, Structure and Performance of Local and Mainstream Food Supply Chains", USDA ERS, 2010; "Local Food Systems: Concepts, Impacts and Issues", USDA ERS, May 2010