

# GCAD Town Hall Meeting

## *Producer Education and Innovation*

January 29, 2014

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### The Company Mission

“To promote sustainable agriculture  
through innovation in technology”

**AgriVolution**

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## What Consumers Buy

**72%** said Connecticut Grown products are **important**

**45%** would pay more for **locally grown**

### Connecticut Grown products purchased

Vegetables	81 %
Fruit	69 %
Landscaping Materials	35 %
Milk or Other Dairy Items	27 %
Eggs	23 %



### First Thing that Comes to Mind...

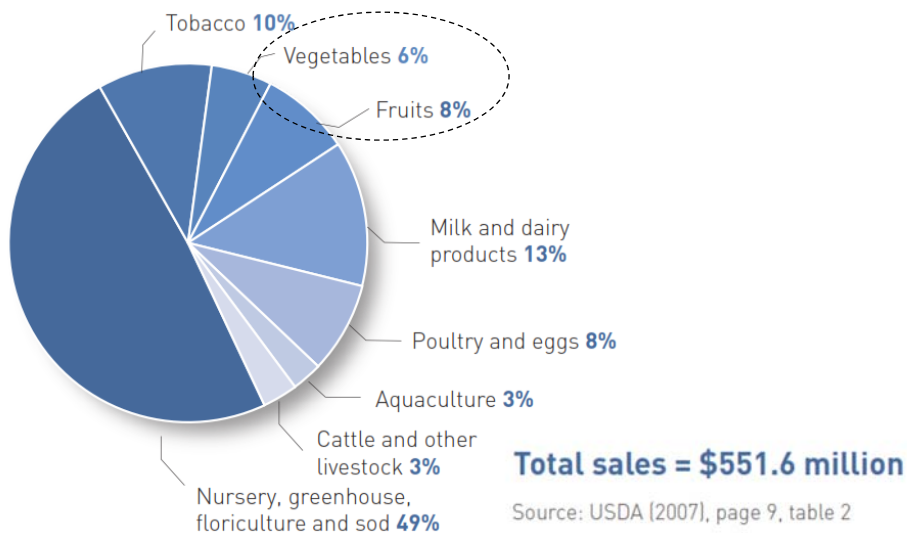
Purchasing Connecticut Grown Foods	28 %
Fruits and Vegetables	22 %
Local Farms/Farm Stands	21 %

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## What We Produce

### 2007 Sales of Agricultural Products by Commodity Groups



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## State of Agriculture in Connecticut

### ✓ Connecticut produces 1-2% of food consumed

- Limited available land
- Short growing season
- High energy costs
- High labor cost

### ✓ Challenge in recruiting young farmers

- Average farmer age: 57.6 years

#### **GCAD's Mission:**

“Make recommendations to the Department of Agriculture on ways to **increase the percentage of consumer dollars spent on Connecticut Grown** fresh produce and farm product **by 2020, to not less than five per cent** of all money spent by such residents on food.”

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## Benefits of Indoor Vertical Farming

- ✓ Locally grown
- ✓ Hydroponic technology
- ✓ High quality, pesticide free
- ✓ Facilitated growth
- ✓ Year-round production
- ✓ Minimal transportation
- ✓ Low water usage & run off
- ✓ Safe & Healthy
- ✓ Multiple crop-cycles
- ✓ Protection from disasters



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## Why Indoor Vertical Farming?

### New Sustainable Farming

- ✓ Delivers fresh vegetables within same-day
- ✓ Avoids loss of nutritional constituents by 30-50%
- ✓ Saves water use by 95%
- ✓ Reduces CO<sub>2</sub> emissions (from transportation) by 98%
- ✓ Contributes to the local economy

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## The Difference is in the Lighting!

### Triple-Banded LED Grow Lights

Flat Panel-Type



Tubular-Type



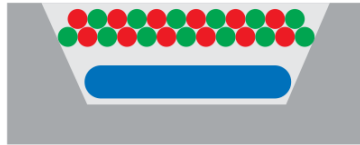
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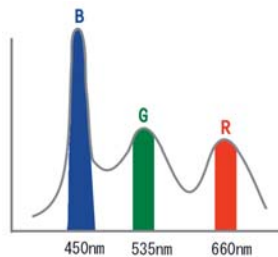
## Triple-Banded LED — New Technology

For **Primary** and **Supplemental** Lighting

New Single-Chip Architecture



Blue Diode +  
Red & Green Phosphor



- **Blue + Green + Red**
- **Ultra Thin** Profile (7 mm)
- **Low** power consumption  
Panel-Type: **40 W**  
Tubular-Type: **26 W**
- **Uniform** light distribution
- Low waste heat
- Cost effective
- **Long life** (40,000 hours)


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