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NATURAL RESOURCES**

Facilitated by the Office of the Vice President for  
Research and Graduate Studies



## Urban Agriculture, Detroit, and Michigan's Opportunities

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## Top 20 Trends



- 1 Locally grown produce
- 2 Locally sourced meats and seafood
- 3 Sustainability
- 4 Bite-size/mini desserts
- 5 Locally-produced wine and beer
- 6 Nutritionally balanced children's dishes
- 7 Half-portion/smaller portion for a smaller price
- 8 Farm/estate-branded ingredients
- 9 Gluten-free/food allergy conscious
- 10 Sustainable seafood

11 Superfruits (e.g. acai, goji berry, mangosteen, purslane)

12 Organic produce

13 Culinary cocktails (e.g. savory, fresh ingredients)

14 Micro-distilled/artisan liquor

15 Nutrition/health

16 Simplicity/back to basics

17 Regional ethnic cuisine

18 Non-traditional fish (e.g. branzino, Arctic char, barramundi)

19 Newly fabricated cuts of meat (e.g. Denver steak, pork flat iron, Petite Tender)

20 Fruit/vegetable children's side items



## Maximum crop acreage adjustments

implied by full adoption of select recommendations  
from the 2005 Dietary Guidelines for Americans

Crop	Average harvested area, 1999-2003	Adjustments in acreage	Acreage needed to meet Guidelines
		<i>Million acres</i>	
Fruit	3.5	4.1	7.6
Vegetables:	6.5	8.9	15.3
Dark green	0.3	0.5	0.8
Orange	0.2	0.4	0.6
Legumes	2.0	8.8	10.8
Starchy	2.3	-0.8	1.5
Other	1.7	--	1.7
Wheat (example for whole grains)	22.6	-5.6 <sup>2</sup>	17.04
Dairy <sup>3</sup>	NA	NA	NA
Total <sup>4</sup>	32.6	7.4	39.9

J. C. Bizby, H. Farah-Wells, and G. V. Possible Implications for U.S. Agriculture From Adoption of Select Dietary Guidelines (ERS Report #21, 2006)



## Opportunity: Jobs

WHAT IF... Michigan's residents bridged the "Public Health Gap"?

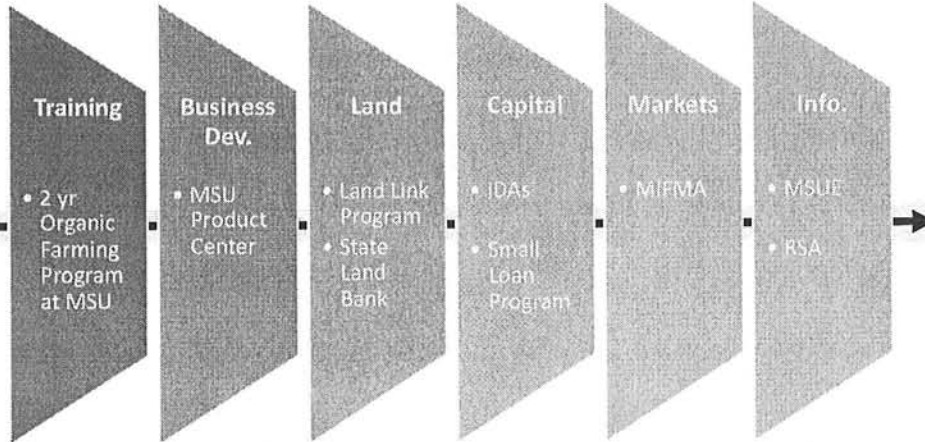
- Shift from current consumption to public health recommendations
- Eating more of what people currently eat
- Get it from MI when available fresh with typical technology
- Need approximately 37,000 more acres of production

**\$211 Million increased net income;**  
**1,800 off-farm jobs**

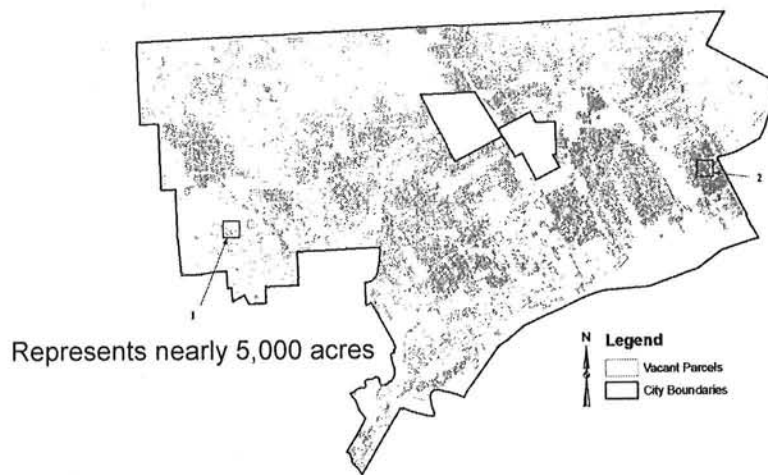
From: Conner, D.S., Knudson, W., Peterson, H.C., Hamm, M.W.  
*Journal of Hunger & Environmental Nutrition*, 2008.



# Seeding economies



# Distribution of Vacant Parcels



## Example of a High-Vacancy Neighborhood



Zip Code  
48215

2005 Aerial  
Image



Colasanti and Hamm (2009) In Preparation

## Acreage Needed to Meet Current and Recommended Consumption

Production Scenario		Acreage Needed to Meet Current Consumption	Acreage Needed to Meet Recommended Consumption	% Consumption Supplied
Field Only	High Productivity	263	916	31% Veg 17% Fruit
	Low Productivity	894	3,001	
	Commercial Yields	1,660	5,549	
Field + Storage	High Productivity	511	1,831	65% Veg 39% Fruit
	Low Productivity	1,839	6,174	
	Commercial Yields	3,063	10,210	
Field + Storage + Extension	High Productivity	568	2,014	76% Veg 42% Fruit
	Low Productivity	2,086	6,976	
	Commercial Yields	3,602	12,067	



Colasanti and Hamm (2009) In Preparation

## Urban Agriculture at Various Scales

- Individual Scale
  - Backyard and community gardens
- Small, family Scale
  - D-Town Farm
  - Detroit Ag Network and Garden Resource Collaborative
- Larger Scale
  - Hantz Farms
  - SHAR, Inc.



## Opportunity: Increasing Access



North Park  
Street Plaza  
Kalamazoo, Mich.



## Programs to help increase the *demand* for healthy food

Marketing, outreach, and educational efforts to encourage better food choices:



### Bridge Card

Eastern Market is the largest farmer's market in the country with regard to SNAP benefits having passed \$250,000 in benefits from recipients to farmers since July 2007.

### Food Voucher Programs (Mo' Bucks)

Voucher program to create an incentive for SNAP benefit recipients to eat fresh fruit and veggies while supporting local farmers.

### Market Programming

Eastern Market has begun to integrate cooking demonstrations into retail market days and is adding kitchens to improve education and outreach efforts.



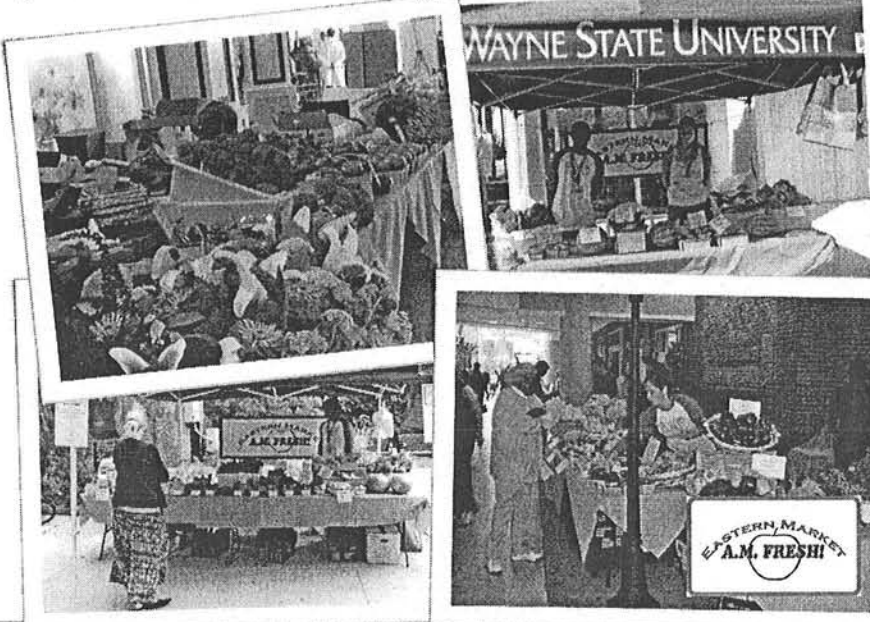
Slide from Dan Carmody, President, Eastern Market Corporation



Carmody, President, Eastern Market Corporation

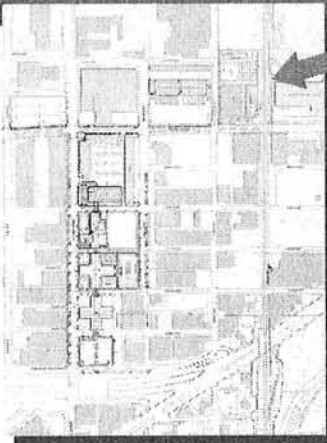


Neighborhood Markets and Farm Stands



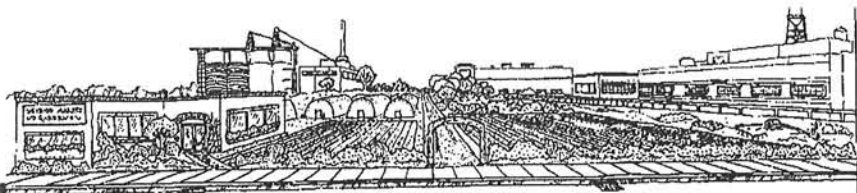
Slide from Dan Carmody, President, Eastern Market Corporation

the c.s. mott group



### The Greening of Detroit Market Garden Project

- 2.5 acre site
- Intensely gardened with a variety of different planting strategies including unheated hoop sheds, woody crops, specialty crops, and flowers.
- On-site composting center
- Greenhouse for growing starter plants for community gardens throughout city.
- Storage, classroom, and food processing facilities to expand grower training programs.
- Intended to demonstrate financial results of small plot cultivation as much as growing practices.



Slide from Dan Carmody, President, Eastern Market Corporation

the c.s. mott group

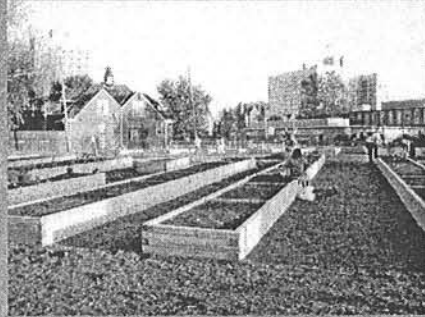


## Other Community Garden Examples

John R Garden, Midtown

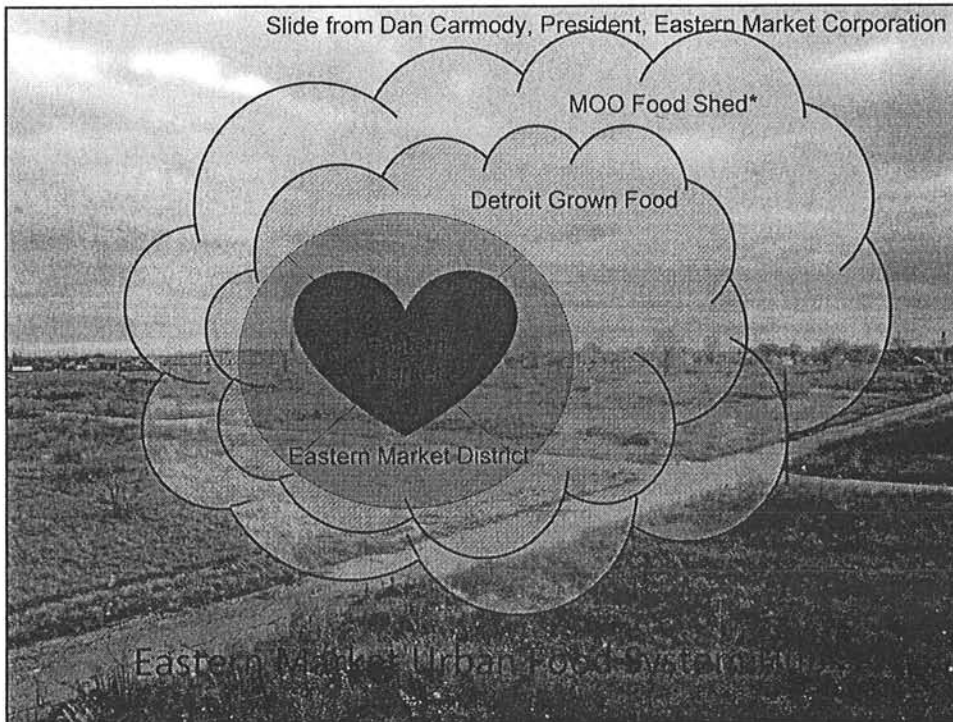


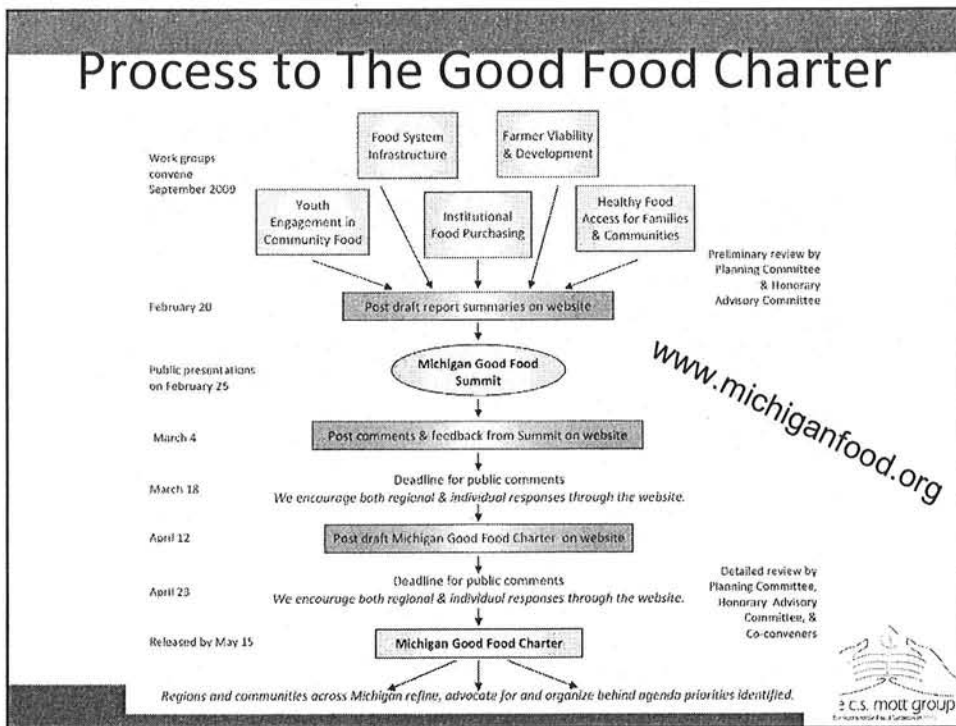
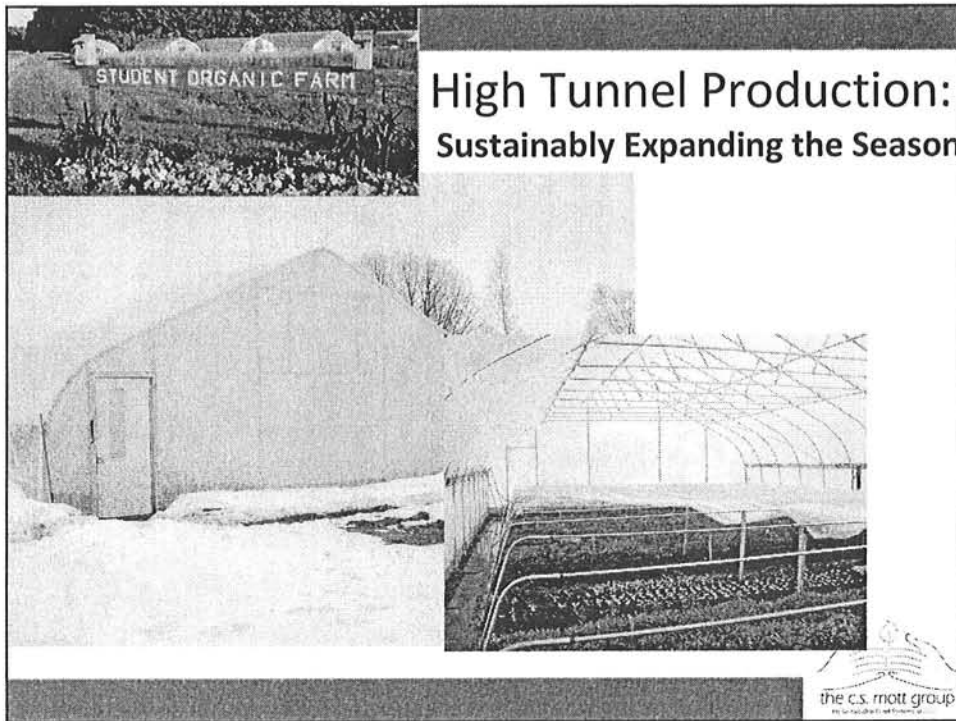
North Cass Avenue, Midtown

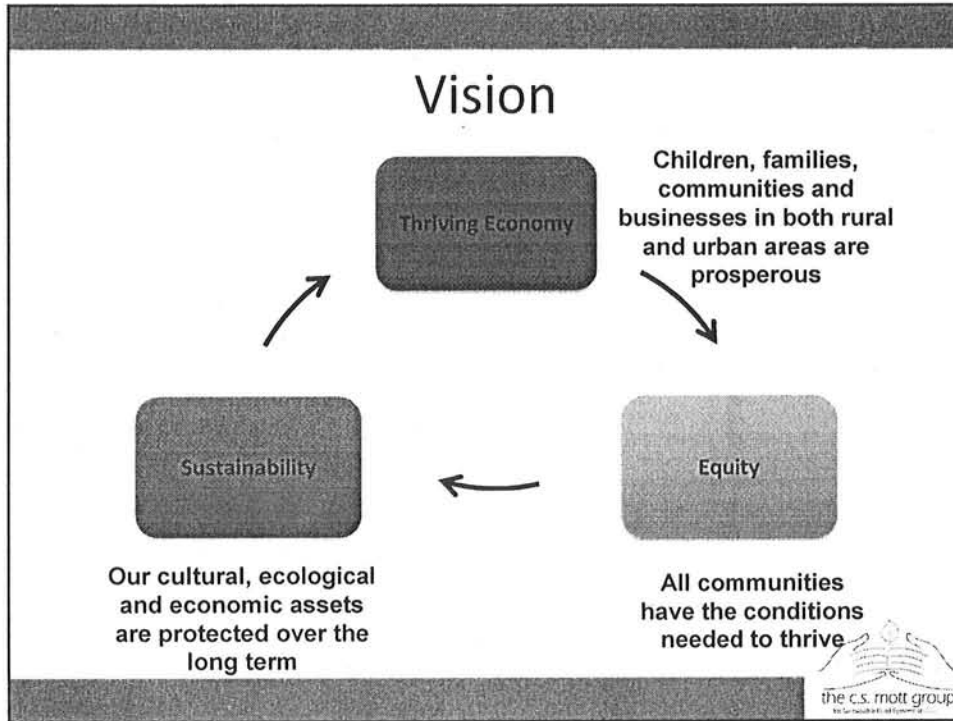



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