SPIN Farming

And its Potential Impact on Detroit

NRE 501
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What SPIN farming is and why it’s significant

Overview

- SPIN stands for Small Plot INtensive farming
- Developed by a Canadian farmer named Wally Satzewich
- Designed for those with little to no agricultural experience
- Can be combined with different methods of growing

Why urban?

High value vs. low value crops

Less labor

Backyard resources

Elimination of barriers to entry

Owning land

Capital investments

Education

Sample Crop Profile from SPIN

SPIN-Farming 2.0 Crop Profile

BABY HEAD LETTUCE, transplants
Baby head lettuce can be classed as a very-high value SPIN crop under good marketing conditions. It is easier to achieve targeted revenue with baby head lettuce than with single large head production at same price tier. This crop also has great relay potential. Depending on the length of the growing season, they can be included in either 2 or 3 member relays to boost revenue of a segment.

Days to harvest: 35 to 40 days after setting out transplants

DESIGN
Walkway: Standard
Number of beds per segment: 13 beds

PLANTING
In-bed spacing: Three row beds, 12" apart. 6" between plants in-row. Three seeds per cell, thinned to one plant.
Number of plants per row: 50 plants
Number of plants per bed: 150 plants
Number of plants per segment: 1,950 plants
Number of rows per segment: 39 rows

YIELD
Yield per row: 50 head
Yield per bed: 150 head
Yield per segment: 1,950 head

SEEDING
Average seed count per oz: 24,000 seeds
Seed required per row: 150 seeds
Seed required per bed: 450 seeds per bed
Seed required per segment: 5,850 seeds per bed

COST
Typical cost per one oz. quantities: $10 - $40, or more, depending on variety
Cost to seed a bed: $1 range
Cost to seed a segment: $10 range

REVENUE TARGETING
Value status: Very-high value crop

Where SPIN Farming is taking place now

Usually at

Case Study 1: Voss Organics, Madison, WI

Voss Organics: sample flyer

Looking for land in the neighborhood to farm – Yep, farm!

Voss Organics at 1622 Mayfield Lane is looking for more land to expand our urban farm production to feed people in the neighborhood from the neighborhood.

Benefits to you:

- Less lawn to mow
- Attractive edible landscaping
- Compensation: in cash or vegetables – let's talk!
- Bragging rights to friends: Look at "my" beautiful organic garden!
- Be an essential part of the urban farming movement

What we are looking for:

- Large-ish (>1000 sq. ft.) plots in front or back yard with good (8 hours) sun exposure to bring into production in April
- Yards that have NOT had chemical weed killer or fertilizer applied since March 2009
- Access to water for drip irrigation (very little water needed)

Our commitment to you:

- **We will** work out a schedule for planting, weeding, watering, and harvesting that is most convenient and least disruptive to your lifestyle.
- **We will** be courteous and communicative.
- **We will** maintain the garden in "showcase" condition – healthy, weeded, mulched, vibrant.
- When we are done with a bed, **we will** plant a new cash crop or cover crop (a crop that enriches the soil between cash crops ex. oats and peas).

What I do with the vegetables:

- I am an urban farmer. I sell the produce at the Dane County Farmer's Market on the Square, the Northside Farmer's Market, the Willy Street Co-op, and Madison's finest restaurants.
- We also make a commitment to donate a portion of the harvest to the Dane County Food Pantry.
- Oh, and my family and the neighbors (that's you) eat it!

Interested? Contact Mark at vossorganics@gmail.com 556.8143

Voss Organics: going to market

Case Study 2: Penrose Market Garden, Detroit, MI

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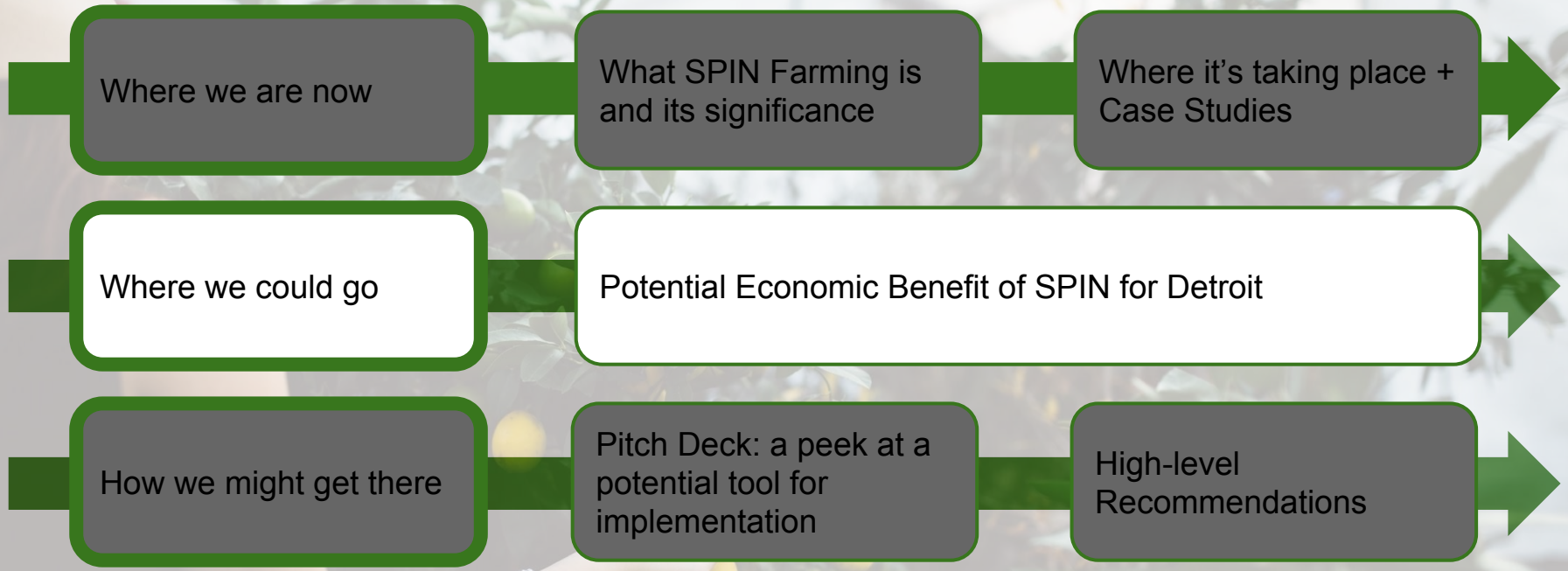
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Potential Economic Benefit of SPIN for Detroit

Overview

10 farms with 120k in sales per year will have a total annual direct and indirect economic impact $2.466 million and support 46 full time positions.

Indirect impact tracks additional rounds of spending induced by businesses and their employees as a result of this direct farming activity.

Using U.S. Department of Commerce's RIMS II multipliers, the multiplier for indirect economic activity resulting from direct farming activity is 1.055. Applying this to $1.2M from direct farming activity of 10 farms gives us $1.266M.

Annual Economic Impact of Ten Farms in Philadelphia (In 2007 Dollars)

Direct Economic Impact	
Individual Farm Economic Impact	$120,000
Total Direct Economic Impact (Ten Farms)	$1,200,000
Indirect Economic Impact	
Indirect Impact of an Individual Farm	$126,600
Total Indirect Economic Impact (Ten Farms)	$1,266,000
Total Economic Impact	**$2,466,000**

Potential Economic Benefit (contd)

Annual Taxes on Wages & Salaries
Generated by Ten Farms in Philadelphia

	Total Paid Within Philadelphia Region	Total Paid Within Philadelphia	Total Paid To Philadelphia Residents	Total Paid Within Philadelphia To Non-Philadelphia Residents
Total Direct Wages & Salaries	$170,000	$170,000	$128,000	$42,000
Total Indirect Wages & Salaries	$466,000	$350,000	$262,000	$88,000
Total Wages & Salaries	$636,000	$520,000	$390,000	$130,000
Wage Taxes Paid To City of Philadelphia		**$21,500**	**$16,600**	**$4,900**
Income Taxes Paid To State of Pennsylvania	**$19,500**			

Annual Business Tax & Real Estate Tax Benefits
Generated by Ten Farms in Philadelphia

	Within Region	Within Philadelphia
For-Profit Business Activity		
For-Profit Business Activity Due To Farms	$1,200,000	$1,200,000
Indirect For-Profit Business Activity	$1,095,000	$657,000
Total For-Profit Business Activity	$2,295,000	$1,857,000
Annual Business Privilege Taxes Paid		**$41,300**
Annual Net Profits Taxes Paid		**$3,500**
Annual Real Estate Taxes Paid On Business Property		**$12,400**
Annual Use & Occupancy Taxes Paid On Business Property		**$6,900**
State Corporate and Other Business Tax Paid	**$12,000**	

Annual Wage & Salary Impacts of
Ten Farms in Philadelphia
(2007 Dollars)

	Within Region	Within Philadelphia	Philadelphia Residents
Wage & Salary Impacts			
Farm Payrolls	$170,000	$170,000	$128,000
Indirect Wage & Salary Impacts	$466,000	$350,000	$262,000
Total Wage & Salary Impacts	**$636,000**	**$520,000**	**$390,000**

Sales Tax & Hotel Tax Benefits
Generated by Ten Farms in Philadelphia

	Total	Total Paid To City of Philadelphia	Total Paid To State of Pennsylvania
Direct Economic Activity			
Sales Taxes On Farm Purchases	$15,800	$2,300	$13,500
Gasoline Tax	$4,500		$4,500
Total Sales Taxes On Direct Economic Activity	$20,300	$2,300	$18,000
Indirect Economic Activity			
Sales Tax On Taxable Indirect Economic Activity	$6,270	$570	$5,700
Liquor Tax On Indirect Economic Activity	$120	$120	
Hotel Tax	$1,110	$1,110	
Total Sales Taxes On Indirect Economic Activity	$7,500	$1,800	$5,700
Total Sales Taxes	**$27,800**	**$4,100**	**$23,700**

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Pitch Deck: a potential tool to support implementation

Recommendations for SPIN to increase implementation in Detroit

Why Detroit

Need for minimizing disparity in access to nutrition

Relatively low cost of land in Detroit

Entrepreneurial spirit of the city

Recommendations for SPIN to increase implementation in Detroit

How

Work with local SPIN farmers as bridges and advocates

Work with Community Partners as potential channels for communication

DEGC
We're all business.

EASTERN MARKET

Recommendations for SPIN to increase implementation in Detroit

What

Increased awareness of SPIN farming via:

- SPIN-grown food sold at local markets
- SPIN farm tours

Increased use of SPIN farming via:

- Pitch deck as an introduction
- Teaching local nonprofits (potentially including schools, community gardens, vocational training programs) and individuals with entrepreneurial spirit

References

- Borghi, Linda (2011, April 2). *Get Started With Spin Farming*. Retrieved from http://smallfarms.cornell.edu/2011/04/02/get-started-with-spin-farming/
- Christensen, R. (2016). Telephone Interview.
- Detroit Economic Growth Corporation (2016). *DETROIT ECONOMIC GROWTH CORPORATION*. Retrieved from http://www.degc.org/
- Eastern Market (2016). *Eastern Market*. Retrieved from https://www.easternmarket.com/
- Hagenbuch, B. (2016). Telephone Interview.
- Hagenbuch, B. (2016). *PMG Market Goals*
- Institute for Innovations in Local Farming (2007). *Farming in Philadelphia: Feasibility Analysis and Next Steps*. Retrieved from http://www.urbantilth.org/wp-content/uploads/2008/09/urban-farm-business-incubator.pdf
- Lacy, K. (2015). Introduction to the Symposium: Lessons from Detroit. *City & Community*, *14*(2), 102-105.
- Ledoux, T. F., & Vojnovic, I. (2013). Going outside the neighborhood: The shopping patterns and adaptations of disadvantaged consumers living in the lower eastside neighborhoods of Detroit, Michigan. *Health & place*, *19*, 1-14.
- SPIN Farming LLC (2012). *SPIN FARMING*. Retrieved from http://www.spinfarming.com/buy/
- The Noun Project. (2016). *The Noun Project*. Retrieved from https://thenounproject.com/
- Voss, M. (2016, November 22). Telephone interview.
- Voss, M. (2016). *Voss Organics* [Google Slides]. Retrieved from https://docs.google.com/presentation/d/1jt1Lv_b-65xMPcjU8X8d2O2aIlNR1vmzIisQWEt1TRA/edit#slide=id.p4

Questions?