Iowa Farm Bureau’s Margin Management Webinar Series presents:

**Horticultural Crop Enterprise Budgets**

*the why’s and how’s of enterprise budgets, market outlets can drastically change profitability*

**Thursday, April 9, 1:00 pm**

- **Emily Coll**  
  Farm, Food and Enterprise Development Program Coordinator from ISU Extension and Outreach

*Supported by:*

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**Horticultural Crops:**
**Enterprise Budget Development Per Market**

ISU Extension and Outreach Farm, Food, and Enterprise Development Program

Emily Coll, Program Coordinator  
ecoll@iastate.edu
Quick survey:
Let us know your enterprises on your farm or enterprises you are planning. Do you raise tomatoes, green beans, flowers?

1. Enter your enterprises here and click
Your name will appear.

2. If you wish to be anonymous, click and click

3. And change your name (anonymous)

FFED:

- Small Farms Team
- Community Food Systems Team
- Enterprise Development Team

www.extension.iastate.edu/ffed/
Focus on $$$

My Specific Programming

• MarketReady Producer Training – coming online soon!
• Ag Plan to Profit app
• Enterprise budget development per market outlet, [https://www.extension.iastate.edu/ffed/market-based-enterprise-budgets-toolkit/](https://www.extension.iastate.edu/ffed/market-based-enterprise-budgets-toolkit/)
• Ag Decision-maker tool, [https://www.extension.iastate.edu/agdm/](https://www.extension.iastate.edu/agdm/)

What are Horticultural Crops

• Fruits
• Vegetables
• Transplants
• Annuals, perennials
• Trees, shrubs
• Honey, nuts
• USDA refers to as Specialty Crops
  – Specialty crops are defined in law as “fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture.”
Total horticulture sales of respondents doubled from nearly $10 million to nearly $20 million from 2010-2015.

However, producers are deriving less gross family income from horticultural production.

“Higher efficiencies of scale by selling large quantities of product at low prices as opposed to small quantities at high prices is likely to generate more income due to the high transaction costs of direct-to-consumer sales.”
Market Types

- Direct-to-consumer (DTC)
  - CSA's
  - Farmers' Markets
  - On-farm: Farm stand, U-pick
- Not DTC
  - Wholesale
  - Retail
  - Grocery
  - Institution
  - Aggregator

Community-Supported Agriculture: Mustard Seed Community Farm

- Catholic Worker Farm near Ames
- Donates much of its produce to area food pantries
- Hosts many community events
- mustardseedfarm.org

Farmer Alice McGary
Farmers’ markets: JoyGrow Mushrooms

- Urban farm near Ogden
- Grows gourmet mushrooms
- www.facebook.com/pg/Joygrowmushrooms

U-pick: Miss Effie’s Country Flowers

- You-pick garden and event venue
- www.misseffiesflowers.com
Wholesale, Retail, Grocery, Institution, and Food Hub/Aggregator

- Wholesale
  - Loffredo’s, Capital City Fruit Company, Sysco, U.S. Foods
- Retail
  - Restaurants
- Grocery
  - Hy-Vee, Homegrown label
- Institution
  - School districts, hospitals, foodservice
- Food Hub/Aggregator
  - Iowa Food Cooperative, FarmTable Delivery, Prudent Produce, North Iowa Food Hub, That Iowa Girl

Profitability – Portfolio Analysis

Enterprise budgets:
- Who – any farm business
- What – sales receipts, production costs, marketing costs
- When – once per season
- Where – Online, paper and pencil
- Why - guide small-scale farmers when analyzing net returns
- How…
How to Develop a Budget:

- Keep receipts, records
- Track labor per activity 😊
- Calculate percentage of crop sales over total sales
- Calculate crop sales per market outlet
- Calculate percentage of crop sales per market outlet
- Don’t forget to include interest on loans

Time for a short recording break; we will continue in less than 30 seconds!

Horticultural Crop Enterprise Budgets

Speaker:
- Emily Coll

Farm, Food & Enterprise Development Program Coordinator,
ISU Extension and Outreach
Market-based Enterprise Budget Toolkit

www.extension.iastate.edu/ffed/market-based-enterprise-budgets-toolkit/
AgMRC Enterprise Profitability Analysis: Vegetable, Fruit & Herb Transplant Production

Cost of Production & Sales

1. Place the cursor over cells with red triangles to read comments.
2. Enter your input values in shaded cells.

Greenhouse Size (sq. ft.) (26X48)
1,248 ft.

Utilization
93%

Approximate Original Greenhouse Costs
$14,240.00

including heaters, electricity and all other costs

Receipts

<table>
<thead>
<tr>
<th>Qty Sold</th>
<th>$/unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot; Transplants - Farmers' market (FM)</td>
<td>747.0</td>
<td>$3.67</td>
</tr>
<tr>
<td>3&quot; Transplants - Farm stand (FS)</td>
<td>184.0</td>
<td>$3.67</td>
</tr>
<tr>
<td>3&quot; Transplants - Retail, grocery</td>
<td>135.0</td>
<td>$2.00</td>
</tr>
<tr>
<td>72 cell Flat Transplants - Commercial growers</td>
<td>487.0</td>
<td>$25.00</td>
</tr>
<tr>
<td>72 cell Flat Transplants - Commercial growers</td>
<td>86.0</td>
<td>$22.50</td>
</tr>
<tr>
<td>72 cell Flat Transplants - Commercial growers</td>
<td>120.0</td>
<td>$20.00</td>
</tr>
<tr>
<td>4-pack Flat Transplants - Retail, grocery</td>
<td>132.0</td>
<td>$2.00</td>
</tr>
</tbody>
</table>

Annual Return per Market Outlet

Total

<table>
<thead>
<tr>
<th>Total Receipts</th>
<th>$2468.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Expenses</td>
<td>$22,616.02</td>
</tr>
</tbody>
</table>

Annual Expenses

<table>
<thead>
<tr>
<th>Annual Expenses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeds</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>$35.00</td>
</tr>
<tr>
<td>Soil</td>
<td>$169.20</td>
</tr>
<tr>
<td>Electricity</td>
<td>$120.00</td>
</tr>
<tr>
<td>Propane</td>
<td>$1,592.50</td>
</tr>
<tr>
<td>Irrigation supplies</td>
<td>$120.00</td>
</tr>
<tr>
<td>Water</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pest Control - Beneficial insects</td>
<td>$150.00</td>
</tr>
<tr>
<td>Insurance</td>
<td>$201.08</td>
</tr>
<tr>
<td>Miscellaneous supplies</td>
<td>$40.00</td>
</tr>
<tr>
<td>Flats, containers, packs</td>
<td>$511.20</td>
</tr>
<tr>
<td>Heater Service - routine maintenance</td>
<td>$90.00</td>
</tr>
<tr>
<td>Total Annual Expenses</td>
<td>$4,128.98</td>
</tr>
</tbody>
</table>

Equipment Costs

<table>
<thead>
<tr>
<th>Equipment Costs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propagation supplies</td>
<td>$44.00</td>
</tr>
<tr>
<td>Irrigation tanks</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

Total Annual Expenses

$4,128.98
### February - May

<table>
<thead>
<tr>
<th>Labor Costs</th>
<th>Hours</th>
<th>$/Unit</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeding</td>
<td>17.00</td>
<td>$12.00</td>
<td>$204.00</td>
</tr>
<tr>
<td>General Maintenance</td>
<td>23.00</td>
<td>$12.00</td>
<td>$276.00</td>
</tr>
<tr>
<td>Transplanting</td>
<td>10.50</td>
<td>$12.00</td>
<td>$126.00</td>
</tr>
<tr>
<td>Pest Management</td>
<td>0.25</td>
<td>$12.00</td>
<td>$3.00</td>
</tr>
<tr>
<td>Watering</td>
<td>48.80</td>
<td>$12.00</td>
<td>$585.60</td>
</tr>
<tr>
<td><strong>Total Annual Expenses</strong></td>
<td><strong>99.55</strong></td>
<td><strong>$1,194.60</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Ownership Costs

<table>
<thead>
<tr>
<th>Ownership Costs</th>
<th>Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation - Greenhouse</td>
<td>$1,424.00</td>
</tr>
<tr>
<td>Depreciation - Plastic Cover</td>
<td>$162.50</td>
</tr>
<tr>
<td>Depreciation - other</td>
<td>$470.00</td>
</tr>
<tr>
<td>Greenhouse lease</td>
<td>$200.00</td>
</tr>
<tr>
<td><strong>Total Ownership</strong></td>
<td><strong>$2,256.50</strong></td>
</tr>
</tbody>
</table>

### Total Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplant operation</td>
<td>$7,779.08</td>
</tr>
<tr>
<td>Per Square Foot</td>
<td>$6.23</td>
</tr>
</tbody>
</table>

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**AgMRC Enterprise Profitability Analysis: Vegetable, Fruit & Herb Transplant Production**

**Marketing Costs and Annual Return per Market Outlet**

<table>
<thead>
<tr>
<th>Marketing Costs</th>
<th>Hours/Unit</th>
<th>$/Unit</th>
<th>Total</th>
<th>Farm Allocation</th>
<th>Total after</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor - FD</td>
<td>68.00</td>
<td>$12.00</td>
<td>$816.00</td>
<td>87%</td>
<td>$709.92</td>
<td>Total Receipts $22,616.02</td>
</tr>
<tr>
<td>Booth Supplies - FM</td>
<td>$200.00</td>
<td></td>
<td>$200.00</td>
<td>87%</td>
<td>$174.00</td>
<td>Annual Expenses $4,128.96</td>
</tr>
<tr>
<td>Delivery/ Mileage - FM</td>
<td>176.20</td>
<td>$0.38</td>
<td>$503.64</td>
<td>87%</td>
<td>$90.42</td>
<td>Labor $1,194.80</td>
</tr>
<tr>
<td>Market Fees - FM</td>
<td>$96.40</td>
<td></td>
<td>$96.40</td>
<td>87%</td>
<td>$83.87</td>
<td>Ownership Costs $2,455.30</td>
</tr>
<tr>
<td>Van rental - FM</td>
<td>4.00</td>
<td>$110.00</td>
<td>$440.00</td>
<td>87%</td>
<td>$382.80</td>
<td>Marketing $2,225.74</td>
</tr>
<tr>
<td>Labor - FS</td>
<td>21.00</td>
<td>$12.00</td>
<td>$252.00</td>
<td></td>
<td></td>
<td>Net Profit $12,411.31</td>
</tr>
<tr>
<td>Stand Supplies - FS</td>
<td></td>
<td></td>
<td>$0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor - Retail - Grocery</td>
<td>6.00</td>
<td>$12.00</td>
<td>$72.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery/ Mileage - Retail - Grocery</td>
<td>180.00</td>
<td>$0.58</td>
<td>$104.40</td>
<td></td>
<td>$9.00</td>
<td></td>
</tr>
<tr>
<td>Labor Invoicing/MR - Retail - Grocery</td>
<td>0.75</td>
<td>$12.00</td>
<td>$9.00</td>
<td>87%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor - Commercial growers</td>
<td>1.00</td>
<td>$12.00</td>
<td>$12.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery/ Mileage - Commercial growers</td>
<td></td>
<td>$0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration - FR Results</td>
<td>1.00</td>
<td>$120.00</td>
<td>$120.00</td>
<td>87%</td>
<td>$102.20</td>
<td></td>
</tr>
</tbody>
</table>

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IOWA STATE UNIVERSITY
Extension and Outreach
USDA AMS

- **Specialty Crops Custom Reports**
- Use as a resource to price your products
- ALWAYS start with cost of production!
ISU Extension and Outreach
AgDecisionMaker

- https://www.extension.iastate.edu/agdm/cdother.html
- Used to compare other budgets
- No market outlet analysis
AgMRC

- [https://www.agmrc.org/](https://www.agmrc.org/)
- Used for production, marketing, and other information per crop
- LOTS of information
- Not just fruits and veggies but also food businesses like value-added products
Blackberries
Blueberries
Cherries
Cranberries
Dates
Dragon Fruit
Figs
Gooseberry
Grapes
Mulberries
Olives
Pawpaw
Peaches

Marketing Channels

The marketing season for pears differs among the states they’re produced in and their varieties. For California, Oregon and Washington, the marketing season for Bartlett pears is from July to December. For other pears it is from July to June. In all other states the marketing season is from August to November (NASS, 2015).

Pear has a very sweet flavor, but is not overbearing, making it a great fruit to incorporate into processed foods such as, canned pears, baby food, glazes, vinaigrettes, and fruit bars. A way to add value to fresh pears could be starting a U-pick operation. Many consumers are concerned about where their produce comes from, therefore U-pick operations have the ability to make consumers feel more secure and connected to their food. Some very important factors to consider regarding U-pick operations are making sure the site is convenient and appealing to customers. Often U-pick operations will supply a farm stand with already picked product for people who do not have the time, ability or want to pick their own product (University of Tennessee – Extension, 2014).

Tapping into niche markets is another way value can be added to a product. In recent years apple ciders and alcoholic pear beverages (known as perry), have become more popular (Michigan State University - Extension, 2013).

Production

There are six main states in the U.S. that produce pears: California, Michigan, New York, Oregon, Pennsylvania and Washington. Of these states, California, Oregon and Washington make up the majority of production.

In 2014, Washington led the United States in pear production with 832 million pounds valued at $233.8 million. Oregon produced 432 million pounds valued at $127.4 million, and California produced 378 million pounds valued at $88.6 million. From these three states 776 million pounds were Bartlett pears valued at $180.7 million (NASS, 2015).