



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

Sponsored by:



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

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

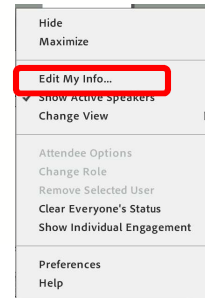
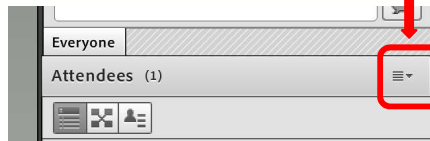
Emily Coll, Program Coordinator  
[ecoll@iastate.edu](mailto:ecoll@iastate.edu)

## 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)

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## **FFED:**

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

[www. extension.iastate.edu/ffed/](http://www.extension.iastate.edu/ffed/)



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## My Specific Programming

### Focus on \$\$\$

- 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/>
- Ag Decision-maker tool, <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.”

## 2017 Iowa Commercial Horticulture Food Crop Survey Results



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.

## 2017 Iowa Commercial Horticulture Food Crop Survey Results ▶

“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.”

[Iowa Commercial Horticulture Food Crop Survey Results](#)

## 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](http://mustardseedfarm.org)



*Farmer Alice McGary*



## Farmers' markets: JoyGrow Mushrooms

- Urban farm near Ogden
- Grows gourmet mushrooms
- [www.facebook.com/pg/Joygrowmushrooms](https://www.facebook.com/pg/Joygrowmushrooms)



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## U-pick: Miss Effie's Country Flowers

- You-pick garden and event venue
- [www.misseffiesflowers.com](http://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

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**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/](http://www.extension.iastate.edu/ffed/market-based-enterprise-budgets-toolkit/)

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AutoSave FFED-28A-Transplant-Budget-1 - Excel Coll, Emily J [FFED]

File Home Insert Page Layout Formulas Data Review View Help Acrobat Search

Clipboard Font Alignment Number Styles Cells Editing Ideas

S38

A B C D E F G H I J K L M N O P Q R S

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

2 **Assumptions & Summary**

3

4 \*This research was possible due to funding through the USDA Agricultural Marketing Resource Center.

5 Developed by: Emily Coll- ISU Extension and Outreach, Farmer partners

6

7 The purpose of this budgeting tool is to guide small-scale farmers when analyzing net returns. There are many things to consider to increase

8 profitability of an enterprise and ultimately the whole farm operation. Marketing costs can dramatically change the profitability of an

9 enterprise or the whole farm which is the focus of this research because many farmers do not include marketing costs in net return analysis.

10 Therefore, the true net return is not understood. This decision-informing tool provides farmers the information they need to determine what

11 sales market outlets to further develop or reduce and how a change in production practices can influence the bottom line.

12

13 The budget presented here is a snapshot of vegetable, fruit and herb transplant production and sales. It should be used as an example

14 because every operation is unique. Production costs, marketing costs, sales market outlets and revenue per market varies significantly

15 across enterprises, farms, regions, and sales markets. Enter your own production costs, sales receipts per market outlet and marketing

16 costs to determine your profitability for that enterprise.

17

18 This workbook is divided into three tabs. The first tab includes the assumptions of the research and directs the user how to interpret and

19 use the worksheets. The second tab in this workbook are the sales receipts per sales market outlet and the costs of production. There is a

Assumptions & Summary Cost of Production & Sales Annual Return per Market Outlet

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Paste Font Alignment Number Styles

C68 Emily Coll

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

**Cost of Production & Sales**

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

Greenhouse Size (sq. ft.) (26X48)	1,248 ft.
Utilization	93%
Approximate Original Greenhouse Costs including heaters, electricity and all other costs	\$14,240.00

Receipts	Qty Sold	\$/unit	Total
3" Transplants - Farmers' market (FM)	747.0	\$3.67	\$2,741.49
3" Transplants - Farm stand (FS)	186.0	\$3.67	\$682.62
3" Transplants - Retail, grocery	135.0	\$2.00	\$270.00
72 cell Flat Transplants - Commercial growers	487.0	\$25.00	\$12,175.00
72 cell Flat Transplants - Commercial growers	88.0	\$22.50	\$1,980.00
72 cell Flat Transplants - Commercial growers	120.0	\$20.00	\$2,400.00
4-pack flat Transplants - Retail, grocery	132.0	\$2.00	\$264.00

Assumptions & Summary Cost of Production & Sales Annual Return per Market Outlet

A	B	C	D	E	F	G	H	I
21	<b>Total Receipts</b>				2468.0		\$22,616.02	
22								
23	<b>Annual Expenses</b>					<b>Total</b>		
24	Seeds				\$1,000.00			
25	Fertilizers				\$135.00			
26	Soil				\$169.20			
27	Electricity				\$120.00			
28	Propane				\$1,592.50			
29	Irrigation supplies				\$120.00			
30	Water				\$0.00			
31	Pest Control - Beneficial insects				\$150.00			
32	Insurance				\$201.08			
33	Miscellaneous supplies				\$40.00			
34	Flats, containers, packs				\$511.20			
35	Heater Service - routine maintenance				\$90.00			
36	<b>Total Annual Expenses</b>				<b>\$4,128.98</b>			
37								
38	<b>Equipment Costs</b>					<b>Total</b>		
39	Propagation supplies				\$44.00			
40	Small tools				\$65.00			

Assumptions & Summary Cost of Production & Sales Annual Return per Market Outlet

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February - May	Hours	\$/Unit	Total
<b>Labor Costs</b>			
Seeding	17.00	\$12.00	\$204.00
General Maintenance	23.00	\$12.00	\$276.00
Transplanting	10.50	\$12.00	\$126.00
Pest Management	0.25	\$12.00	\$3.00
Watering	48.80	\$12.00	\$585.60
<b>Total Annual Expenses</b>	<b>99.55</b>		<b>\$1,194.60</b>
<b>Ownership Costs</b>	<b>Annual</b>		
Depreciation - Greenhouse	\$1,424.00		
Depreciation - Plastic Cover	\$162.50		
Depreciation - other	\$470.00		
Greenhouse lease	\$200.00		
<b>Total Ownership</b>	<b>\$2,256.50</b>		
<b>Total Costs</b>			
Transplant operation		\$7,779.08	
Per Square Foot		\$6.23	

AgMRC Enterprise Profitability Analysis: Vegetable, Fruit & Herb Transplant Production						
Marketing Costs and Annual Return per Market Outlet						
Marketing Costs	Hours/Unit	\$/Unit	Total	% FM Sales		Summary
				of Total Farm	Total after Allocation	
Labor - FM	68.00	\$12.00	\$816.00	87%	\$709.92	Total Receipts \$ 22,616.02
Booth Supplies - FM		\$200.00	\$200.00	87%	\$174.00	Annual Expenses \$ 4,128.98
Delivery/Mileage - FM	179.20	\$0.58	\$103.94	87%	\$90.42	Labor \$ 1,194.60
Market Fees - FM		\$96.40	\$96.40	87%	\$83.87	Ownership Costs \$ 2,455.50
Van rental - FM	4.00	\$110.00	\$440.00	87%	\$382.80	Marketing \$2,225.74
Labor - FS	21.00	\$12.00	\$252.00			<b>Net Profit \$ 12,611.21</b>
Stand Supplies - FS			\$0.00			
Labor - Retail - Grocery	6.00	\$12.00	\$72.00			
Delivery/Mileage - Retail - Grocery	180.00	\$0.58	\$104.40			
Labor Invoicing/AR - Retail - Grocery	0.75	\$12.00	\$9.00			
Labor - Commercial growers	1.00	\$12.00	\$12.00			
Delivery/Mileage - Commercial growers			\$0.00			
Advertising - FB Boosts	1.00	\$170.00	\$170.00			

	A	B	C	D	E	F	G	H
2	Labor - Retail - Grocery			6.00	\$12.00	\$72.00		
3	Delivery/Mileage - Retail - Grocery			180.00	\$0.58	\$104.40		
4	Labor Invoicing/AR - Retail - Grocery			0.75	\$12.00	\$9.00		
5	Labor - Commercial growers			1.00	\$12.00	\$12.00		
6	Delivery/Mileage - Commercial growers					\$0.00		
7	Advertising - FB Boosts			1.00	\$120.00	\$120.00		
8				460.95		\$2,225.74		
9								
10								
1	<b>Annual Return Over Total Costs</b>							
2	3" and 4-pack Transplants - FM			\$355.39				
3	3" and 4-pack Transplants - FS			\$1,283.01				
4	3" and 4-pack Transplants - Retail - Grocery			\$124.12				
5	72 cell Flat Transplants - Commercial growers			\$10,848.69				
6				\$12,611.21				
7								
8	Version 1							
9	<a href="#">Emily Coll</a>							
10	Date Printed:							
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## USDA AMS

- [Specialty Crops Custom Reports](#)
- Use as a resource to price your products
- ALWAYS start with cost of production!

Close Window

## Report Results for Retail

Report Name: Weekly Advertised Fruit & Vegetables Retail Prices

Go To Other Retail Reports: Livestock & Grain | Poultry

Information represents weekly advertised retail fruit and vegetable sale prices to consumers at major retail supermarket outlets. Please view the Retail Reports Help Page for more information.

Download as: Excel Text XML PDF (adobe reader required) Printable View (adobe reader required)

Category:	Date	Region	Class	Commodity	Variety	Organic	Environment	Unit	Number of Stores	Weighted Avg Price	Low Price	High Price	% Marked Local
Retail	09/06/2019	MIDWEST U.S.	VEGETABLES	BEETS				per pound	6	.49	.49	.49	
	09/13/2019	MIDWEST U.S.	VEGETABLES	BEETS				per bunch	24	1.00	1.00	1.00	100
Class(es):	09/13/2019	MIDWEST U.S.	VEGETABLES	BEETS				per pound	7	.33	.33	.33	100
ALL	09/13/2019	MIDWEST U.S.	VEGETABLES	BEETS		Y		per bunch	11	2.99	2.99	2.99	
FRUITS	09/20/2019	MIDWEST U.S.	VEGETABLES	BEETS				per pound	7	.33	.33	.33	100
ONIONS AND POTATOES	09/27/2019	MIDWEST U.S.	VEGETABLES	BEETS				per pound	21	.49	.49	.49	
VEGETABLES													
HERBS													
ORNAMENTALS													
Commodity(s):													
ALL													
ARTICHOKEs													
ASPARAGUS													
BEANS													
BEETS													
Region(s):													
ALL													
NATIONAL													

## ISU Extension and Outreach AgDecisionMaker

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

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Ag Decision Maker

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Ag Decision Maker: An agricultural economics and business website



### Renewable Energy

Decisions

Ethanol profitability meter, biodiesel profitability meter, industry outlook, and more.

Click for more info

Homepage

Crops

March 2020 Updates

AgDM Platinum Supporters

1 2 3 4 5

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Crops

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Storage & Markets

Outlook & Prices

Machinery

Other

Industry Analysis

Organic Crops

Specialty Crops

Livestock




Whole Farm

Business Development

Cooperatives

Renewable Energy

Stay up-to-date with AgDM

## Crops -- Other





**Industry Analysis**

*Newsletter Articles*

CenUSA Bioenergy in 2015 -- August 2015				
Value of the dollar and exports of major agricultural crops -- April 2015				

**Organic Crops**








*Information Files*

Organic Crop Production Enterprise Budgets -- A1-18			
Adapting Enterprise Budgets for Organic Crops			
Making the Transition from Conventional to Organic			
Risk Management Practices: Organic No-Till Grain Production with Cover Crops -- A1-92			

*Newsletter Articles*

**Specialty Crops**

*Information Files*

Iowa Fruit and Vegetable Production Budgets -- A1-17			
Using Enterprise Budgets to Make Decisions -- A1-19			
Estimated Costs for Production, Storage and Transportation of Switchgrass -- A1-22			
Vegetable Production Budgets for a High Tunnel -- A1-23			

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# AgMRC

- <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

The screenshot shows the AgMRC website interface. At the top left is the AgMRC logo (Agricultural Marketing Resource Center) and the tagline "A national information resource for value-added agriculture". To the right are social media icons for Facebook and YouTube. Below this is a navigation menu with categories: CURRICULUM, PRODUCTS & COMMODITIES, MARKETS & INDUSTRIES, BUSINESS DEVELOPMENT, RENEWABLE ENERGY, and DIRECTORIES & STATE RESOURCES. The breadcrumb trail reads "Home \ Commodities & Products \ Fruits \ Pears". On the left is a vertical menu with categories: FOODSEARCHER TOOL, AGRITOURISM, AQUACULTURE, BIOMASS, FIBER, FORESTRY, and FRUITS. The main content area is titled "Pears" and includes the following text: "Updated by: Gina Marzolo, graduate student of Agricultural Sciences, California State Polytechnic University, Pomona, gmarzolo@cpp.edu, July 2015." and "By Malinda Geisler, content specialist, Ag Marketing Resource Center, Iowa State University." There is a photograph of a pear on a tree. Below the photo is the "Introduction" section, which states: "Commercial pear production is concentrated in the Northwest United States. Total U.S. production in 2014 was more than 1.6 billion pounds, down five percent from 2013 and was valued at \$457.1 million - up six percent from the previous two years (NASS, 2015). There are two types of pears: The European or French pears (*Pyrus communis*) including varieties such as Bartlett, Bosc, and D'Anjou, and Asian pears (*Diospyros pumila*) with varieties". At the bottom of the page is the Iowa State University logo and "Extension and Outreach".

Blackberries	<p><b>Marketing Channels</b></p> <p>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).</p> <p>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).</p> <p>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).</p> <p><b>Production</b></p> <p>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.</p> <p>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).</p>
Blueberries	
Cherries	
Cranberries	
Dates	
Dragon Fruit	
Figs	
Gooseberry	
Grapes	
Mulberries	
Olives	
Pawpaw	
Peaches	

**Questions??**