

GROWING A NEW GENERATION OF ILLINOIS FRUIT AND VEGETABLE FARMERS

KEEPING GOOD FARM RECORDS FOR BETTER FARM DECISIONS

Andy Larson Local Foods & Small Farms Educator March 2015



Objectives

- As they start their farms, beginning fruit and vegetable growers will:
 - Understand the reasons to keep good records
 - Be aware of the types of records need to be kept
 - Utilize available tools to assist in their recordkeeping systems
 - Use the records they have kept to perform farm
 - financial analysis and make sound decisions



Why Keep Farm Records?



Why Keep Farm Records?

- To determine farm profitability (or lack of)
- To determine breakeven prices, showing which crops were winners and losers
- To determine which market channels are providing acceptable returns
- To pay appropriate taxes
- To provide some peace of mind





- Greenhouse production
 - Activities, labor hours, inputs, and supplies by crop
- Field production
 - Activities, labor hours, equipment, and inputs by crop
- Harvest & pack
 - Labor hours, equipment, yield, handling,
 - supplies, and storage by crop



1= Greenhouse TP seeding/watering 2= Apply Inputs (fertilizer/pesticide) 3 = Harvesting 4 = Irrigation (field) 5 = Mulch 6 = Pruning 7= Staking/Trellis 8 = Thinning 9 = Hand Weeding / Cultivating - tools / by hand 10 = Soil Work (primary tillage) 11 = Mechanical Cultivation - Stale Seed Bedding 12 = Other (specify)

 Activity codes at **Student Sustainable** Farm on campus

Credit: Zack Grant, Illinois Extension





- Administration/management
 - Labor hours, office expenses
- Marketing/distribution
 - Labor hours for loading, driving, setup, selling, breakdown, and backhaul
 - Mileage/depreciation for vehicle and marketing equipment
 - Load list, sales, and price

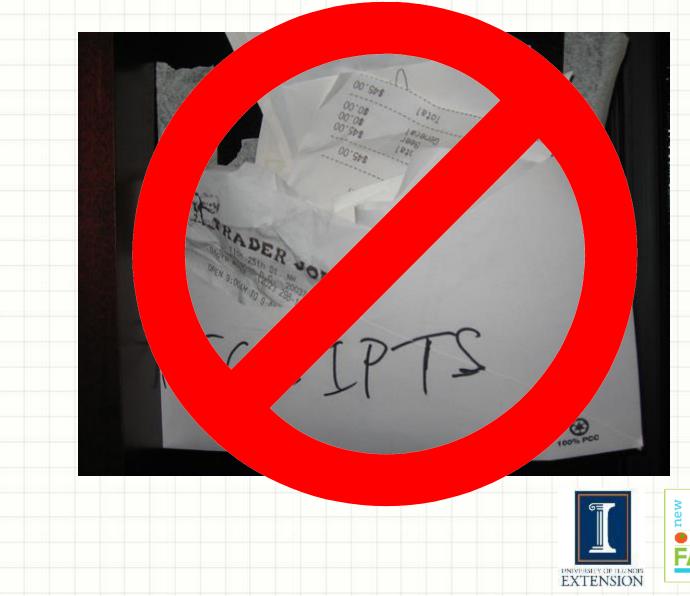


• Anything else?

ALL income and expenses related to farm

Part II Farm Expenses – Cash and Accrual Method. Do not include personal or living expenses (see instructions).

10	Car and truck expenses (see				23	Pension and profit-sharing plans	23			
	instructions). Also attach Form 4562	10			24	Rent or lease (see instructions):				
11	Chemicals	11			а	Vehicles, machinery, equipment	24a			
12	Conservation expenses (see instructions)	12			b	Other (land, animals, etc.)	24b			
13	Custom hire (machine work) .	13			25	Repairs and maintenance	25			
14	Depreciation and section 179				26	Seeds and plants	26			
	expense (see instructions) .	14			27	Storage and warehousing	27			
15	Employee benefit programs				28	Supplies	28			
	other than on line 23	15			29	Taxes	29			
16	Feed	16			30	Utilities	30			
17	Fertilizers and lime	17			31	Veterinary, breeding, and medicine	31			
18	Freight and trucking	18			32	Other expenses (specify):				
19	Gasoline, fuel, and oil	19			а		32a			
20	Insurance (other than health)	20			b		32b			
21	Interest:				с		32c			
а	Mortgage (paid to banks, etc.)	21a			d		32d			
b	Other	21b			е		32e	V-0		
22	Labor hired (less employment credits)	22			f		32f			
33	Total expenses. Add lines 10 through 32f. If line 32f is negative, see instructions									





/												34		Part Vinenter	51000	1000	
1	Greenhouse Plan																
	Greenhouse ID: Name:										and and						
	Crop Seeding Date		ato	# of Flats Planted			cted Plants	Actual Total Plants		l Notes							
				D 1	. D			1.17						1993			
		Name		Farm	ID:			tion Reco									
		Name:					Harves			vest	Harve	-	larve			vest	
		Сгор	Fiel		anting Date	Acres or # of Rows	Date/ Unit (Ibs.)	Unit	U		Date, Unit (Ibs.)		Date, Unit (Ibs.)	Unit	U	nit nit os.)	Yield = total units / total acres
	Weekly Market Load List & Sales Record																
1				- 1	Farm II	0											
				N	\arket	ID											
				Cro	p or Pro	duct	Measurement Unit (bunches, baskets, boxes in lbs.)		Market Date	Market Qty Date Mar) ty tover	Qty Se	Price per	Incor	ne	Notes
				0.0				,									
							Mileage Traveled for Farm Business										
				Date	(s)	Mode of Travel	1 Fr	om		Mileage		+	← 🏞 Return Miles	age =	- T	otal Mileages Traveled	
													+		=	:	
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Egg Records 🕁

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1	Date	Julian	Sell by	Eggs Collected	Laying %	Medium	Large	X-Large	Jumbo	Saleable Eggs	Checks	Shrink %
2	Thursday, January 1, 2015	1	31-Jan-2015	240	80.00%	0	34	162	24	220	20	8.33%
3	Friday, January 2, 2015	2	1-Feb-2015	257	85.67%	0	34	162	24	220	37	14.40%
4	Saturday, January 3, 2015	3	2-Feb-2015	240	80.00%	0	36	168	18	222	18	7.50%
5	Sunday, January 4, 2015	4	3-Feb-2015	256	85.33%	0	36	168	18	222	34	13.28%
6	Monday, January 5, 2015	5	4-Feb-2015	251	83.67%	0	48	163	18	229	22	8.76%
7	Tuesday, January 6, 2015	6									21	8.50%
8	Wednesday, January 7, 2015	7			0			T			35	15.02%
9	Thursday, January 8, 2015	8			_	\cap	10	510		rive	25	10.12%
10	Friday, January 9, 2015	9			G		בי			UIVE	15	6.02%
11	Saturday, January 10, 2015	10					C)			24	9.30%
12	Sunday, January 11, 2015	11			К	eep ev	ervth	ina. Sł	hare a	nything.	29	11.28%
13	Monday, January 12, 2015	12				ceb er	c. j ci			,	25	10.37%
14	Tuesday, January 13, 2015	13									42	16.28%
15	Wednesday, January 14, 2015	14									24	9.52%
16	Thursday, January 15, 2015	15			51						21	8.43%
17	Friday, January 16, 2015	16				E I		-		۹ 📈	25	10.37%
18	Saturday, January 17, 2015	17						-			38	1⁄2.96%
19	Sunday, January 18, 2015	18			02.0070	_					27	10.93%
20	Monday, January 19, 2015	19	18-Feb-2015	239	79.67%	0	40	164	16	220	19	र.95%
21	Tuesday, January 20, 2015	20	19-Feb-2015	259	86.33%	0	40	164	16	220	39	15.06%

Stone Circle Farm Work Log

* Required

- Who are you?*
 - □John □Maria □Emmett □Eli

Date (if different than today)

Crop*		
Not crop specific		
A Not Crop Specific		
Basil Beets	st/Pack	Greenhouse
Carrots	-	ance/Construction
Cucumbers		
Garlic		
T Kohlrabi Melons		
Onions		
Peas	con	
Peppers	son	EXTENSION

Stone Circle Farm Work Log

* Required

Who are you?*							
□John □M	aria 🛛 🗌	Emmett	Eli				
Date (if different th	an today)		an example of how In use Google Doc				
Crop*		Forms for farm labor tracking.					
Not crop specific	\$		ore on this, see: youtu.be/6AXO9vnoJns				
Activity*							
Growing	□Harvest	/Pack	Greenhouse				
□Office/Admin	□Repair/	r/Maintenance/Construction					
□Other							
Time*							
			fruit & versitale				

EXTENSION

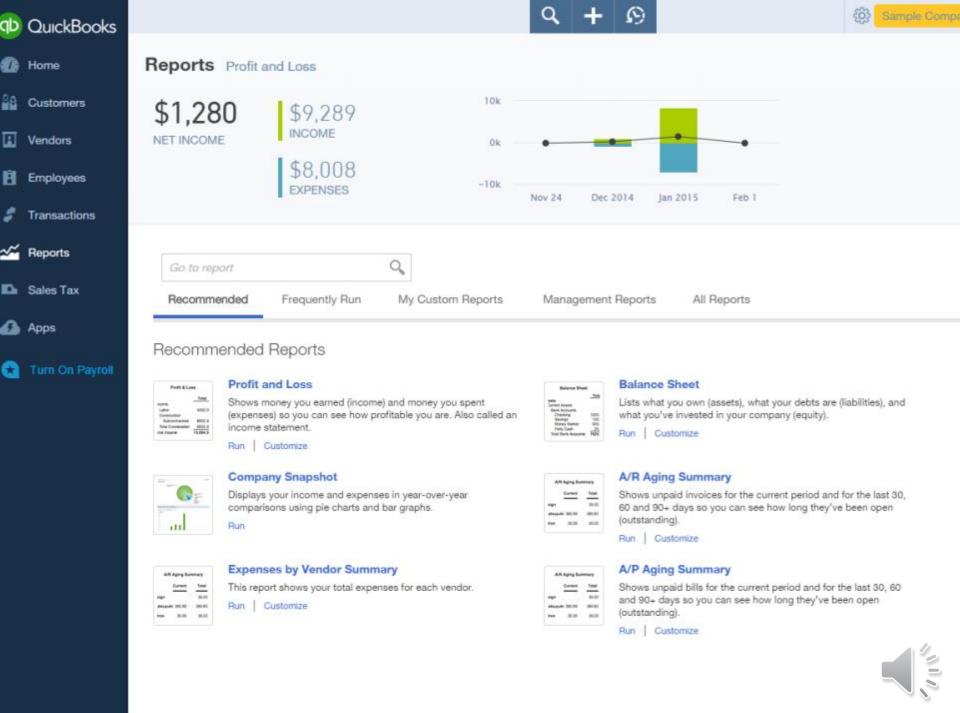
Credit: John Hendrickson, CIAS at UW-Madison



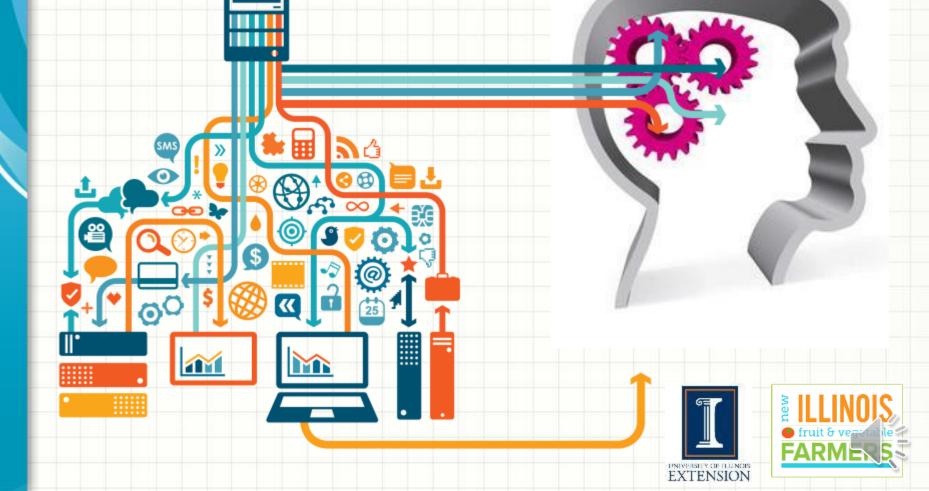
COG Pro Farm Information You are currently logged in as "Guest." Content in the Guest account is periodically reset. To begin using COG-Pro for Record-keeping for tility your records, please click here to log out of Guest and go to the signup page. Organic Certification Field My Field Work Records Work **Output Options** Add Record Activity Records Pe Filter by Work Date Filter by Field From date: <Any> ٠ Filter by Row/Section ID Format: 2015-02-24 Seeds, Plants, and Rootstocks and 5 To date: Filter by Crop ₹e Format: 2015-02-24 ۲ <Any> VER EN ESPAÑOL ۵ Filter by Type of Work Done S <Any> Overview Filter by Type of Work Done (Text Search) Regulatory Reports My Account Apply Filters Reset Filters Harvest/ Client Resources Row/Section Equipment Field ID Oth Crop Work Type of Work ID Date 🔻 Equip Sa Done Site Map ē Seedbed Onion, Generate Analytical Ο 01/09/2015 Sweet Prep Log Out Cover Field Field 06/03/2014 Cultivation Crop East Rodent Trap Bed 2 Almond 03/15/2014 Harrowing Plan Custom Reports ÷ Coldframe South Field Ð 02/10/2014 Rototilling tractor 5 Beets 02/05/2014 Mowing tractor æ CROPS North Field 02/03/2014 Corn tractor ÷ Field Cultivation Certified IVE 02/03/2014 Subsoiling tractor subsoi Corn + 2оск Organic Business Used t Solutions pottine CONTACT US







Farm Financial Analysis



Veggie Compass

whole-farm profit management



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TOOLS

THE TEAM

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Tools

The Veggie Compass team has created both Data Collection Forms and the Veggie Compass Spreadsheet to help growers determine their cost of production by crop.

The Veggie Compass Spreadsheet

ABOUT

The spreadsheet is designed as an intuitive system for data organization for diversified vegetable farms. It is a Microsoft Excel spreadsheet with three input pages and three output pages. Expenses are entered on the first spreadsheet page, and sales information on another. A third sheet requires growers to allocate detailed expenses to each crop including production labor hours. The spreadsheet uses the data from the input pages to calculate each crop's cost per pound (\$/lb), breakeven price, and gross margin by market channel. Farmers can then adjust which crops to grow, how much to grow, and pricing to increase profits as well as make more informed farm management decisions.

Financial data needed for the tool can come from accounting programs, checkbooks, receipts and invoices. Sales data can be gathered from sales receipts, harvest logs, and from the weekly sales chart available on the Forms page. Labor data will need to be recorded by crop and activity through the growing season, and growers will enter their labor totals into the spreadsheet at the end of the season. Downloadable Labor data collection forms and other options to record this information are discussed below.

To download the Veggle Compass spreadsheet, click on the link below. In earlier versions of Veggle Compass, the User Manual was a separate file but for ease of use, it is now contained within the spreadsheet file.

Veggie-Compass-2015

Important notes

 Because we continue to update and improve Veggie Compass, we highly recommend that people who download the Veggie Compass spreadsheet sign up to receive email updates when a new version has been posted. You will only receive notices when a new version of Veggie Compass is available and your email address will not be shared with others. To sign up, use the box on the right cide of the upbrage.

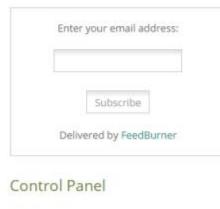
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Veggie Compass News

- » Recent Website Problems
- » Expanded and Improved Veggie Compass!
- » Updated 2014 Veggie Compass

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Veggie Compass

Inputs



- Farm Expenses
- Farm Sales
- Growing area of each crop
- Crop specific expenses
- # of plants in greenhouse
- Total greenhouse labor hours
- Labor hours by crop field growing, harvest & packing
- Not Crop Specific (NCS) hours

Outputs



- The cost of a crop up to harvest
- Total cost of a crop through harvest & packing
- Cost to produce each crop in \$/lb
- Break even prices
- Total labor costs by crop
- Gross margin by market channel





Credit: John Hendrickson, CIAS at UW-Madison

Cost of Production by Crop

	Veggie Compass - Whole Farm Profit		Harvesting & Packing									Total		
/	Cost of Production by Crop	Crop-S	and Packin Specific Exp ithout Labo \$25	enses	Harves	st and Packin by	H&P Total Expenses (without labor) \$1,150							
	/ellow = input data Steps 1,2,3)		Actual Labor (Costs (\$/hr) →	\$13.63			Total Cost of Production						
	fan = calculations			На	arvest & Pack	ing Labor Cos	sts	H&P NonLa	bor Costs	D	A+B+C+D			
	Сгор	Total Amount Sold	Unit of Measure	Harvest & Pack Crop- Specific Labor Hours	Harvest & Pack Crop- Specific Labor Cost	NonCrop- Specific Labor Allocated by H&Pack Hours	Harvest & Pack Labor Cost per Unit	Crop Specific NonLabor H&Pack Cost	NonLabor Allocated by H & Pack Labor Hours	Crop's Share of Total H&Pack Cost	Total Crop Cost to Produce, Harvest & Pack	Total Unit Cost to Produce, Harvest & Pack		
	proccoli	520	pound	15	\$204	\$100	\$0.59	\$0	\$6					
_	ettuce	4,200	head	120	\$1,635	\$801	\$0.58	\$0	\$44	\$2,480	\$6,477.13			
	omatoes, hybrid	575	pony	170	\$2,316	\$1,135	\$6.00	\$0	\$62	\$3,514	\$16,895.03	\$29.38		
	omatoes, heirloom	180	crate	85	\$1,158	\$567	\$9.59	\$0	\$31	\$1,757	\$7,979.47	\$44.33		
_	ierbs lowers	7,500 100	bunch bucket	100 40	\$1,363 \$545	\$667 \$267	\$0.27 \$8.12	\$0 \$25	\$37 \$15	\$2,067 \$852	\$4,646.19 \$1,301.39			
	arugula	118	bushel	35	\$343	\$207	\$6.02	\$25	\$13		\$1,793.69	-		
	basil	4,000	bunch	120	\$1,635	\$801	\$0.61	\$0	\$44		\$4,701.01	\$1.18		
	beans	132	pony	75	\$1,022	\$501	\$11.53	\$0	\$28	\$1,550	\$7,585.08			
_	peets	4,720	bunch	200	\$2,725	\$1,335	\$0.86	\$0	\$73	\$4,134	\$8,087.82	\$1.71		
(abbage	950	head	15	\$204	\$100	\$0.32	\$0	\$6		\$2,523.69			
(arrots	3,250	bunch	150	\$2,044	\$1,001	\$0.94	\$0	\$55		\$6,969.90			
	auliflower	39	crate	20	\$273	\$133	\$10.41	\$0	\$7	\$413	\$2,134.00	\$54.72		
	chard	2,650	bunch	100	\$1,363	\$667	\$0.77	\$0	\$37	\$2,067	\$5,445.91	\$2.06		
	chinese greens	2,100	bunch	72	\$981	\$481	\$0.70	\$0	\$26		\$2,598.41	\$1.24		
	cilantro	2,650	bunch	40	\$545	\$267	\$0.31	\$0	\$15		\$3,053.19			
	eleriac	23	pony	20	\$273	\$133	\$17.65	\$0	\$7	\$413	\$2,620.52			
_	elery	1,650	each	75	\$1,022	\$501	\$0.92	\$0	\$28		\$4,299.33	<u>9.61</u>		
(collard	800	bunch	25	\$341	\$167	\$0.63	\$0	\$9		\$1,323.12			
	cucumber	142	pony	50	\$681	\$334	\$7.15	\$0	\$18		\$7,523.70			
	Jill	1,300	bunch	20	\$273	\$133	\$0.31	\$0	\$7	\$413	\$2,631.83	\$2.02		

Sales Output by Market Channel

Veggie Comp Whole Farm Manageme	Sales Output											
	Unit of Measure	Total Sales										
Crop	(lbs, bunch, head, etc.)	Sales (\$)	# of Units	Crop Cost of Production	Crop Gross Profit (%)	Total Unit Net Profit	Total Crop Net Profit					
broccoli	pound	\$1,560.00	520	\$3,522.28	-126%	-\$4.90	-\$2,550.42					
lettuce	head	\$12,000.00	4,200	\$6,477.13	46%	\$0.24	\$1,006.12					
tomatoes, hybrid	pony	\$41,025.00	575	\$16,895.03	59%	\$15.33	\$8,816.00					
tomatoes, heirloom	crate	\$14,970.00	180	\$7,979.47	47%	\$6.84	\$1,231.04					
herbs	bunch	\$18,300.00	7,500	\$4,646.19	75%	\$0.91	\$6,857.36					
flowers	bucket	\$2,400.00	100	\$1,301.39	46%	\$1.56	\$156.41					
arugula	bushel	\$11,400.00	118	\$1,793.69	84%	\$45.81	\$5,405.94					
basil	bunch	\$9,600.00	4,000	\$4,701.01	51%	\$0.33	\$1,317.67					
beans	pony	\$6,270.00	132	\$7,585.08	-21%	-\$28.42	-\$3,751.76					
beets	bunch	\$14,760.00	4,720	\$8,087.82	45%	\$0.29						
cabbage	head	\$3,550.00	950	\$2,523.69	29%	-\$0.27	-3253_74					
carrots	bunch	\$12,325.00	3,250	\$6,969.90	43%	\$0.24	\$7,84.82					
cauliflower	crate	\$3,225.00	39	\$2,134.00	34%	-\$1.50	-\$58.64					

Profit & Loss by Market Channel

Veggie Compass - Whole Farm Profit Management

Farm Profit & Loss by Market Channel

v							
	<u>CSA</u>	<u>Farmer's</u> <u>Market</u>	<u>Wholesale</u>	<u>Stand</u>	<u>Total From</u> <u>On-Farm</u> Production	Buy-Resell	Grand Total
Sales - by Market Channel	\$39,000	\$210,490	\$91,100	\$26,610	\$367,200	\$29,370	\$396,570
Market Channel sales as % of Total sales	9.83%	53.08%	22.97%	6.71%	93%	7.41%	
All Production Expenses	\$20,681	\$109,184	\$58,706	\$14,501	\$203,072	\$16,280	\$219,352
Production Expense as % or Mitt Channel	53.03%	51.87%	64.44%	54.49%	55.30%	55.43%	55.31%
Gross Profit	\$18,319	\$101,306	\$32,394	\$12,109	\$164,128	\$13,090	\$177,218
Gross Profit as a % of Mkt Channel sales	46.97%	48.13%	35.56%	45.51%	44.70%	44.57%	44.69%
Market Channel Expenses	\$7,065	\$27,444	\$4,331	\$8,895	\$47,735	\$8,884	\$56,619
General Mgnt. & Admin. Expenses Allocated to Market Channel	\$9,431	\$50,899	\$22,029	\$6,435	\$88,793	\$7,102	\$95,895
Total Market Channel plus General Mgnt & Admin Expenses	\$16,496	\$78,343	\$26,360	\$15,330	\$136,528	\$15,986	\$152,514
Fotal MC & GM Exp as % of MKt Channel	42%	37%	29%	58%	37%	54.4%	38%
NET PROFIT BY MARKET CHANNEL	\$1,823	\$22,963	\$6,034	-\$3,220	\$27,600	-\$2,896	\$24,704
Net Profit as % of Mkt Channel Sales	5%	11%	7%	-12%	8%	-9.9%	6%
Net Profit as % of Total Net Profit	7%	93%	24%	-13%	112%	-11.7%	100%
Non Operating Income							
USDA Program Payments							\$0
Patronage Dividends							
Interest Income							
Other Income							\$12,003
TOTAL NET PROFIT							\$36,704

Summary

- Record keeping is the only way to know if you're making money, what is making you money, and how your farm should change
- If you're doing it for the farm, write it down
- Choose the suite of tools that is going to help you make keeping good records a habit
- Data is only of value when you turn it into information that helps make decisions



Resources: Templates

- Veggie Compass
- Southern SAWG's Growing Farm Profits
- FLAG's Recordkeeping Instructions and Templates for Small-Scale Fruit and Vegetable Growers
- Vermont Farm Viability Financial Workbooks
- Iowa Fruit & Vegetable Production Budgets



Resources: Books & Publications

- <u>The Organic Farmer's Business Handbook: A</u> <u>Complete Guide to Managing Finances</u>, <u>Crops, and Staff – and Making a Profit</u>
- Fearless Farm Finances: Farm Financial Management Demystified
- MOSES Financial Management Resources
- IRS Farmer's Tax Guide



To reach us

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