

Horticulture Research



Whole Farm Financial Project - An Analysis of 2013 Financials

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Cooperators:

• 11 PFI Fruit and Vegetable Producers

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In a Nutshell

- 11 fruit and vegetable farms provided a profit-loss statement and simple balance sheet from FY 2013.
- Five of the 11 farms are meeting their personal expectations for profitability.
- Six of the 11 farms plan to someday earn 100% of their household income from the farm.
- Farming experience ranged from 3 to 20 years.
- No two farm financial strategies or situations are the same. This report serves as a starting point for profitability conversations, and for farmers to compare their own numbers with their peers

Introduction

Enthusiasm for local fruits and vegetables continues to grow among consumers, the media, and farmers. Little attention has been paid to the bottom line of the local foods movement: How does a beginning farmer build a successful business? Are Iowa fruits and vegetable farms currently making a profit? Can a farm generate profit raising only fruits and vegetables? What do successful fruit and vegetable farm financials look like?

To help answer these questions, 11 fruit and vegetable producers in Practical Farmers of Iowa's membership contributed their financial statements from the 2013 growing year to be aggregated and published. The goal of this report is to provide a starting point for conversation about the profit potential of fruit and vegetable farms, and to provide farmers in planning stages a look at the financials of a sample of existing farms. The farm financials in this report are intended to be illustrative and educational. Such a small dataset should not be used as benchmarks, nor taken as a reflection of all diversified fruit and vegetables farms.

This report cannot be used as a blueprint for farm financial success. This report will be immediately useful to farmers with a few years of financial numbers of their own to compare. For beginning and aspiring farmers, this report can show them which ratios to begin tracking, and what level of revenue may be reasonable to expect.

When deciding the methods for this project, several previous reports were used, and may be of interest to other farmers and researchers. Farmer members have found Hendrickson (2005) particularly informative for farm business comparison. Several reports from Iowa State University were employed to evaluate farm business health (Chase 2012, Plastina, et al. 2014, Edwards 2014), as well as reports from other universities (Blonde 2009), Practical Farmers of Iowa (1999) and "Fearless Farm Finances" by Padgham et al. (2012).

The conclusion of this report includes reflections from three of the participating farmers, on their farm, their finances, and using this report. While some of the financial information in this report is rather dense, **Table 4** is similar to a balance sheet and is a good starting place for those less familiar with financial ratios.

Data Collection and Reporting

For this report, farmers were asked to complete a Schedule F tax form that was modified to include a more detailed breakdown of revenue, a simple balance sheet of equity and liabilities, and a 10

Web Link:

http://bit.ly/pfi_horticulture

question survey (**Appendix 1**). To preserve anonymity of the farms, the data is reported by categorical aggregation or by transforming data into common financial ratios and per acre values.

Data from the eleven farms were aggregated and transformed for reporting in the following ways:

- Financial ratios by farm, A M (each farm is identified by a letter to preserve anonymity)
- Acres in fruits and vegetables (<1-4 acres, 6-18 acres)
- Total assets (\$0-40k, \$100-250k, \$400k+)

Overview of Participating Farms

Eleven Iowa farms participated in this study. Farmers were asked to participate not based on their perceived profitability, but by their willingness share data for the benefit of others. The 11 farms all raise a diverse set of fruits and vegetables for direct market. Beyond that, they differ in many ways: some also raise livestock or field crops. Some farm on their own, while others farm with a spouse or family. Some have been farming only a few years, others are seasoned veterans. On the financial side, six are sole proprietorships, four are LLCs, one is a C-corporation. Three farms' financials are organized so their house is included in the farm assets. Some started their farms slowly, easing in after prior careers; some others are all-in, and on their own. Five of the 11 are meeting their expectations for profitability, six are not. Four farms currently get all their household income from the farm; seven hope to someday derive their full household income from the farm. Because fruit and vegetable farm business structures vary

Table 1		Marko	t Darticir	action an	d Povonu	Strooms	EV2012				
		Marke	Catego	ry of Sales	- Produce	Streams	12013	Catego	ory of Sale: Produ	s - Ot Ice	ther than
	Early Season CSA	Summer CSA	Late CSA	Winter CSA	Farmers Market	Wholsale Produce	Other	CSA	Farmers Market	Wholsale	Other
Total Sales (sum from all reporting farms)	\$27,336	\$393,888	\$53,156	\$28,597	\$158,571	\$259,889	\$35,623	\$5,047	\$28,708	-	\$112,139
Number of Farms Reporting	2	8	6	2	8	8	6	1	2	0	5

greatly, it is difficult to analyze farm profit without knowing all these details.

Table 1 shows the market participation of farms in the study. Among the 11 farms participating in this study, the most popular produce markets for sales were summer CSA, farmers market, and wholesale (eight farms in each category). Six of eleven farms had late-season CSAs. Only five farms sold farm products other than produce (honey, fiber, art, meat, etc), and all five farms selling nonproduce items reported all or a significant portion of their nonproduce sales in the "other" sales category. One farm reported sales in all produce sales categories (except "other"); the average number of produce sale categories reported was 3.6.

Table 2		
	Farm Financial Ratios & Benchmark	(S
Ratios and Benchmarks	Formula Used	Description
Debt to asset ratio *	= total farm liabilities ÷ total farm assets	Measure of solvency; percent of total assets financed by loans
Rate of return on farm assets *	= (net farm income + other interest expense + mortgage interest expense) ÷ total farm assets	Measure of profitability; "interest rate" earned on farm investments
Rate of return on farm assets * (with forced return to farmer) **	= (net farm income + other interest expense + mortgage interest expense – return to farmer) ÷ total farm assets	Measure of profitability; "interest rate" earned on farm investments (including \$ returns to the farmer)
Operating profit margin	= (net farm income + mortgage interest expense + other interest expense) ÷ gross revenue	Measure of profitability; operating efficiency of the farm
Operating profit margin (with forced return to farmer) **	= (net farm income + mortgage interest expense + other interest expense - return to farmer) ÷ gross revenue	Measure of profitability; operating effi- ciency of the farm (including \$ returns to the farmer)
Asset turnover ratio *	= gross revenue ÷ total farm assets	Measure of efficiency; efficiency in using capital (assets)
Operating expense/revenue ratio	= (total operating expense – interest expense – depreciation expense) ÷ gross revenue	Measure of efficiency; portion of revenue supporting operating expenses
Depreciation expense ratio	= depreciation expense ÷ gross revenue	Measure of efficiency; portion of revenue supporting depreciation expenses
Interest expense ratio	= interest expense ÷ gross revenue	Measure of efficiency; portion of revenue supporting interest expenses
Net income ratio	= net income ÷ gross revenue	Measure of efficiency; return for unpaid labor and management

* Five farmers' homes were included in their farm assets. For three farms, the value of the dwelling was included in all calculations. For two farms, the value of the dwelling (based on the county assessor website) was subtracted from the total assets for two calculations: rate of return on farm assets and asset turnover ratio. Ideally, the dwelling value would have been removed from all asset categories, but due to data limitations (percent of dwelling value as equity, etc), this wasn't possible. Therefore, the values for total assets may very be slightly inflated for the farm, and the debt to asset ratio includes debt and equity of the dwelling, in addition to the farm.

** Return to farmer = highest of: \$6/hr worked, owners draw, net income, or wages paid to farmer

Farm Ratios

Financial ratios can help expose weaknesses and strengths in a farm business. Over time, ratios and benchmarks can be used to set goals that drive short-term financial decision-making. Ten ratios and benchmarks were selected for use in this study. Broadly, they speak to solvency, profitability, and financial efficiency. Because only total liabilities and equity were reported (instead of current, long-term, etc), liquidity and repayment ratios could not be used in this report. **Table 2** shows the ratios and benchmarks calculated and the formulas used.

Financial Ratios by Farm

Table 3 shows financial ratios for each farm for 2013, with averages and benchmark values below. Green values indicate a favorable ratio, blue indicates stable, and red indicates an unfavorable ratio. Stability ranges were based on two farm financial publications: Blonde (2009) and Edwards (2014). The benchmarks for these reports are not specifically for fruit and vegetable farms; these benchmarks are a suitable alternative. Blonde (2009) reports "strong, stable" and "weak" ranges for financial ratios and benchmarks, though the type of farm is not specified. Edwards' (2014) benchmarks use a different approach. After categorizing farms into three profitability categories (high, medium, low), ratio averages are reported for the high third and the low third. This does not provide ideal ratios like those provided by Blonde (2009), but allows for comparison. Edwards' benchmark values are also shown in **Tables 6** and **8**.

Solvency - Debt to Asset Ratio

The debt to asset ratio is a measure of solvency: how a farm's assets compare to the farm's debt. In **Table 3**, most farms have low (favorable) or stable debt to asset ratio. Two farms have a ratio of 0, because they carry no debt. The farms with the next lowest ratios, A and C (0.10 and 0.11 debt to asset), are the most established farms in the survey (10-11 years farming). According to Craig Chase, debt to asset ratio should stay below 0.60, and ideally stay below 0.30. Some debt can be beneficial as long as the rate of return on assets is larger than the interest paid on the debt.

Profitability – *Rate of Return on Farm Assets, Operating Profit Margin*

Two profitability measures are shown in **Table 3**, the rate of return (RoR) on farm assets and the operating profit margin. The rate of return on farm assets shows how quickly the net worth of the farm is growing, or can be assessed similarly to an interest rate earned by the farm from farm assets. This ratio, like others relying on total farm assets, can be misleading because it is scale-dependent; farms with very low assets may have very high rates of return. For the 11 farms in this study, all except one (E) show favorable or stable rates of return. At nine farms, the RoR on farm assets was greater than their interest expense; an indication of sound investing. However, the RoR on farm assets shifts dramatically when farmer-labor is accounted for; with farmer-labor included, only six farms maintained RoR on farm assets greater than or equal to their interest expense.

The operating profit margin is similar to the net income ratio; higher numbers are favorable. This number represents the efficiency of operational expenses to create a financial return, after accrual adjustments. Three farms show favorable margins; five farms and the average and median of all farms show stable margins. Two farms, F and K, show low operating profit margins (0.03 and 0.05). One farm (E) shows a negative operating profit margin, however, reports they are still on course to meet their farm financial goals.

Efficiency – Asset Turnover Ratio, Operating Expense Ratio, Depreciation Expense Ratio, Interest Expense Ratio, Net Farm Income Ratio

The last five ratios in **Table 3** highlight how efficiently the farm operates. First, the asset turnover ratio indicates how efficiently the farm's assets are put to use; higher numbers are more favorable. Chase recommends a minimum goal of 0.30, and a preferred goal of 0.45. Seven of the farms and the average and median for all 11 farms have very favorable asset turnover ratios, ranging from 0.45 - 2.02. That is, the farm with an asset turnover ratio of 2.02 brought in the value of their total assets twice over in gross revenue during FY2013. To make assets appear so efficient, this farm likely had low assets, which may change over time and should be considered when setting goals and evaluating your own business structure and performance.

The final four ratios, when summed, account for 100% of gross revenue. This set of ratios shows where revenue is allocated among expenses (operating, depreciation, and interest), and profit (net). The operating expense ratio is the portion of revenue put toward operating expenses for the year. For these 11 farms, the average and median operating expense ratios are stable.

The depreciation expense ratio indicates how quickly a farm is acquiring or replacing capital assets. According to Chase, the depreciation expense ratio and the interest expense ratio should not be over 10 percent. Half of the farms, along with the average and median of all farms, show unfavorable ratios (highlighted in red) for depreciation, with an average of 0.13 and a median depreciation expense ratio of 0.11. This measure, however, is highly variable by year, and will be higher during farm start-up and expansion. When the depreciation expense ratio is high, however, it is displacing operating expense and net income, which may lead the farmer to undervalue their labor. The interest expense ratios are very favorable for nine of the 11 farms, whose interest expense ratios do not exceed 0.05.

The net income ratio is the portion of the revenue that returns to the farm as profit after adjustments. This is often used as a starting place for assessing business viability. Craig Chase recommends a goal of 0.20 for net income ratio. For these 11 farms, net income ratio is generally low and quite variable, ranging from -0.07 to 0.51 with an average value of 0.14. Several reasons may contribute to this. Like all farms, the annual success of a fruit and vegetable farm can hinge on extreme weather events and conditions, and the risk of disease and pest outbreak is always present. There will be year-to-year variability; tracking the net income ratio over time will provide a better picture of business viability.

Furthermore, unlike commodity farms that can receive subsidies and subsidized crop insurance, fruit and vegetable farmers build higher risk into their business model so they can withstand lower-profit years. In 2015 insurance for diversified farms became available for the first time in Iowa (Risk Management Agency's Whole Farm Revenue Program). In 2013, Iowa State University and the Iowa Farm Business Association reported the net farm income ratio for farms with >\$100,000 in revenue was 0.18 for high-profit farms, 0.13 for middle-profit farms, and 0.01 for low-profit farms – not too far from the 0.14 average for the fruit and vegetable farms in this study (Plastina 2014).

		Table 3)			Бакие	Finan d		a hu C							
						Farm	Financ	iai Katit	оѕ бу га	arm						
	Farm	Debt to asset ratio	Rate of Return (RoR) Farm Assets (as reported)	RoR Farm Assets (inc. return to farmer of \$6/hr)*	Operating profit margin	Operating profit margin (inc. return to farmer of \$6/hr)*	Asset turnover ratio	Operating expense ratio	Depreciation expense ratio	Interest expense ratio	Net income ratio	Number years farming as a busi- ness	Goal percent of household income from farming	Current percent of household income from farming	Type of farm business	are you meeting your expecta- tions for farm profitability?
A		0.10	0.17	0.04	0.57	0.12	0.32	0.44	0.03	0.03	0.51	10	80	82	sole prop.	yes
В		0.47	0.13	0.02	0.17	0.02	0.77	0.53	0.30	0.02	0.14	9	50	41	sole prop.	no
с		0.11	0.11	0.11	0.14	0.14	0.75	0.80	0.06	0.01	0.13	11	100	100	LLC	yes
D		0.00	0.02	-0.07	0.11	-0.32	0.22	0.61	0.28	0.00	0.11	6	75	40	sole prop.	no
E		0.47	0.02	-0.03	0.17	-0.23	0.17	0.71	0.15	0.22	-0.07	9	0	0	sole prop.	yes
F		0.92	0.05	-0.64	0.05	-0.68	0.93	0.59	0.36	0.00	0.05	4	100	0	LLC	no
G		0.56	0.03	-0.17	0.11	-0.27	0.69	0.84	0.11	0.04	0.00	9	100	0	sole prop.	no
I		0.67	0.77	0.19	0.23	0.06	3.29	0.77	0.00	0.19	0.04	5	100	85	LLC	no
к		0.56	0.04	0.04	0.07	0.07	0.67	0.88	0.06	0.03	0.03	6	100	100	C-corp	no
м		0.00	0.75	0.06	0.38	0.03	1.94	0.59	0.02	0.00	0.38	3	100	100	LLC	yes
Aver	age	0.36	0.19	-0.04	0.17	-0.10	0.75	0.67	0.13	0.05	0.14	8	82	59		
Med	ian	0.47	0.05	0.02	0.14	0.02	0.67	0.66	0.11	0.03	0.11	9	100	82		
Rang	je	0.92	0.74	0.83	0.51	0.83	3.13	0.44	0.36	0.22	0.58	17	100	100		
Benc	hmark	/alues														
nde 09)	strong	< 0.30	> 0.05	> 0.05	> 0.25	> 0.25	varies	< 0.65	varies	< 0.12	varies					
hl (Bloi od. 20(stable	0.30 - 0.70	0.01 - 0.05	0.01 - 0.05	0.10 - 0.25	0.10 - 0.25		0.65 - 0.80		0.12 - 0.20						
ъ Ко	weak	> 0.70	< 0.01	< 0.01	< 0.10	< 0.10		> 0.80		> 0.20						
ecision r 2014	High third	0.28	0.158	0.158	0.37	0.37	0.45	0.54	0.06	0.04	0.36					
Ag De Makei	Low third	0.22	0.029	0.029	0.13	0.13	0.28	0.71	0.1	0.05	0.14					

* forced return to farmer of \$6/hr was used in this calculation unless the reported return to the farmer was > \$6/hr. The \$6/hr return was imposed on five farms. ** Due to privacy concerns, only 10 farms are included in this table. The 11th farm is included in the average, median and range values.

Per Acre by Farm

revenue and expenses by farm. Total number of acres for each farm are not included in this report, nor are the number of acres each farm has planted to fruits and vegetables (only aggregated values are given in report tables). In 2013, the 11 farms participating in this study had an average gross revenue of \$12,450/acre, with a range of \$33,292/acre. Average average of over \$6,000/acre (gross revenue > \$23,000/acre). Farms with less than 50 percent of their acres earning income planted to fruits and vegetables netted on average only expenses per acre were \$9,548/acre, leaving an average profit of \$2,903/acre. Farms with over 50 percent of their acres earning income planted to fruits and vegetables netted an \$170/acre (gross ~ \$3,600/acre). The revenue and profit potential per acre of fruits and vegetables is enormous, but high labor costs, management demands, and affordable risk Because this dataset uses whole farm revenue and expenses, all acres earning income (not only acres planted to fruits and vegetables) are used in **Table 4** to calculate per acre abatement are barriers to profitability. For land-limited farmers, however, fruits and vegetables are perhaps the best choice for making a living on a few acres.

				levenue, E	xpense	s, and E	salance	per Acı	re (All A	Acres Ea	nning li	ncome)	by Far	m for I	FY2013					
	R	evenue	per Acre	(\$)					Expe	enses po	er Acre ((\$)						Adi Qu	ditiona estion	
Farm	Produce	Other than produce	nədi O İlA	emooni eeone	car & truck expenses	Shirt motsuD	Pepreciation & section 179	Gasoline, fuel, oil	(dtleəd nedt rədto) əonsruzul	Labor hired	92nen9tniem & zrieq9Я	stnalq bna sbee2	səilqqu2	Utilities	Other Expenses	zəsnəqxə lafoT	(S) * (szol) fitorq mrsf fəV	a se primita farais farmin *ssanisud	ക്നെ blohəsuod fo % lood *gnimısî morî	are you meeting your expecta- tions for farm profitability؟
A	22,007	1,161	1,037	24,205	1,196	207	685	97	312	3,979	160	991	1,335	614	2,390	11,965	12,240	10	80	yes
8	20,616	0	2,850	23,466	0	0	7,135	78	501	4,034	859	745	1,844	638	4,317	20,152	3,314	6	50	ou
υ	1,940	836	28	2,805	0	74	160	91	69	532	26	120	164	45	1,151	2,433	372	11	100	yes
٥	7,615	0	683	8,299	55	0	2,325	267	182	2,204	393	321	820	101	707	7,374	925	9	75	ou
ш	333	365	107	804	69	50	118	17	39	0	59	25	29	31	429	864	(09)	6	0	yes
Ŀ	19,200	0	6,221	25,421	1,064	669	9,089	1,352	0	0	2,192	1,451	4,396	480	3,372	24,095	1,327	4	100	ou
U	2,514	2,544	91	5,149	465	62	589	150	102	1,479	157	122	764	228	1,004	5,123	26	6	100	ou
I	6,060	0	0	6,060	440	80	0	384	128	1,104	112	704	224	288	2,339	5,803	257	ъ	100	ou
×	4,981	224	14	5,218	58	76	307	251	227	1,920	137	223	212	166	1,489	5,064	154	9	100	ou
Σ	34,097	0	0	34,097	250	1,925	731	1,095	186	7,077	361	729	4,954	828	2,857	20,993	13,104	3	100	yes
Average	10,973	466	1,011	12,450	327	289	1,935	345	162	2,051	407	502	1,347	313	1,870	9,548	2,903	∞	82	
Median	6,060	0	94	6,060	69	74	589	150	128	1,479	157	321	764	228	1,489	5,803	372	6	100	
Range	33,764	2,544	6,221	33,292	1,196	1,925	9,089	1,337	501	7,077	2,172	1,426	4,925	807	3,888	23,231	13,163	17	100	
* Unpaid la	bor is no	t accoun	ted for (no	forced retu	ırn to farı	mer)					ue to pri	/acy con	cerns, o	nly 10 f	arms are	includec	l in this ta	able.		

Table 4

Aggregated by Acres Planted to Fruits and Vegetables (Expense and Ratios)

Table 5 shows the average, median, and range values of the 11 farms when categorized by number of acres planted to vegetables. In the income section, one revenue line stands out for vegetables: farmers market sales. The average annual farmers market sales are nearly equal between the two acreage categories, around \$14,000; the median and range differ more widely. It is clear that larger farms are selling more into wholesale markets and the summer CSA. On average, the larger farms exceed smaller farms summer CSA sales by \$27,000 and wholesales sales by \$47,000.

Net farm profit was slightly higher for farms with 6-18 acres in vegetables. Because these farm businesses may be LLCs, sole proprietorships, or C-corporations, the role of net profit in farm viability differs by farm. The range (difference between highest and lowest reported values) of net profit for farms with <1-4 acres planted to fruits and vegetables is nearly \$40,000, twice the range of the farms with 6-18 acres in vegetables. This reinforces that small farm profitability is highly variable, and is perhaps reflective of differences in growth strategy, farm goals for profitability, and personal resources not reflected in financial statements. The differences in depreciation and Section 179 expenses are also noteworthy. Like the farmers market, these numbers are consistent across farm size, indicating that the smaller farms are investing more per acre in capital expenses, perhaps planning to expand. Labor hired is the most expensive category for most farms. For farms with <1-4 acres in vegetables, in 2013 they spent an average of \$11,072 for labor. Farms with 6-18 acres of vegetables spent an average of \$38,848, but the median was only \$17,429 – much closer to the <1-4 acre-farm median labor expense of \$13,045.

The average and median expenses for supplies, taxes, and utilities were also similar between <1-4 acre farms and 6-18 acre farms. For utilities, some efficiency may be lost at a smaller scale, or maybe the current utility use is out-sized for the current need. However, the cost of some supplies and utilities are not acre-dependent, like office products, software, phones, etc. Another possible issue with supply costs on smaller farms is the heavier reliance on farmers markets, which requires more supplies (bags, scales, signage, tents, etc) than a CSA or wholesale account requires.

Looking at the additional question data, the farms with 6-18 acres planted in fruits and vegetables also have more total acres earning income (hay, pasture, field crops, etc.), especially when considering the median value.

	Table 5							
	Balance Sheet, Da	ta Aggregated by Fruit a	nd Vegeta	ble Acres	for FY20	13 (cont. o	n next pag	je)
11 farr	ns were categorized based on their	acreage planted to fruits	Ave	rage	Mee	dian	Rai	nge
and ve acres (for fari	getables. The two categories are <. n=5). From these categories, the av m responses is reported below.	I-4 acres (n=6) and 6-18 erage, median, and range	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac
	Profit (loss) on livestock for resale		1,662	(72)	0	0	8,308	359
	Sales of livestock, produce, grains	, and other products	65,082	133,357	69,625	98,276	78,370	312,279
		Early season CSA	0	5,467	0	0	0	18,000
		Summer CSA	23,586	50,474	23,631	34,250	51,256	120,350
		Late CSA	5,688	3,806	2,660	4,000	16,805	8,372
	Category of Sales - Produce	Winter CSA	840	4,711	0	0	5,040	23,557
(\$)		Farmers Market	14,439	14,388	6,667	17,931	55,780	21,206
me		Wholesale Produce	2,079	49,483	725	16,500	6,045	118,850
O D L		Other	5,432	758	5,895	0	10,780	3,032
n I		CSA	841	0	0	0	5,047	0
-arr	Category of Sales - Other than	Farmers Market	4,785	0	0	0	19,648	0
_	Produce	Wholesale	0	0	0	0	0	0
		Other	7,391	16,949	1,742	6,712	27,391	54,372
	Cooperative distributions		278	0	0	0	1,639	0
	Ag program payments		250	2,491	0	1,464	1,499	6,080
	Other income		3,532	319	3,801	0	7,566	1212
	Gross income		70,111	145,208	73,585	105,209	86,735	263,372

Ta	ble 5, cont.						
	Balance Sheet, Data Aggregated by Fru	uit and Ve	getable /	Acres for F	Y2013		
11 farı	ns were categorized based on their acreage planted to fruits	Ave	rage	Ме	lian	Rai	nge
and ve acres (for far	egetables. The two categories are <1-4 acres (n=6) and 6-18 (n=5). From these categories, the average, median, and range m responses is reported below.	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac
	Car and truck expenses	3,124	1,863	2,194	328	6,978	5,500
	Chemicals	19	1,235	0	0	115	6,177
	Custom hire	1,826	2,132	0	1,000	5,025	4,840
	Depreciation and section 179	10,506	10,771	779	11,092	30,643	18,406
	Employee benefit (other than pension/profit sharing)	159	3,980	7,828	0	954	18,683
	Feed	4,265	1,844	3,506	0	11,732	5,797
	Fertilizers and lime	439	912	0	335	2,635	2,304
	Freight and trucking	106	1,050	0	0	635	5,250
€	Gasoline, fuel, oil	1,294	5,703	1,339	4,800	1,963	13,899
) se	Insurance (other than health)	1,492	4,713	1,235	2,750	3,856	12,512
nse	Mortgage interest	3,364	2,947	116	0	17,756	10,854
kpe	Other interest	833	3,356	46	389	3,256	14,400
Ш С	Labor hired	11,072	38,848	13,045	17,429	22,187	101,966
arn	Vehicle, machinery, equipment rent	166	3,632	0	491	548	12,071
L	Other rent (land, animals)	264	7,705	0	870	1,400	35,903
	Repairs and maintenance	2,486	3,031	1,997	1,681	5,378	6,820
	Seeds and plants	2,196	7,706	2,153	7,794	2,266	11,454
	Supplies	6,639	7,263	6,151	5,184	8,599	9,945
	Taxes	1,094	807	1,237	0	2,240	3,497
	Utilities	2,209	3,712	2,356	2,900	3,057	9,338
	Vet, breeding, and medicine	220	5,936	45	183	672	29,272
	Other	4,722	13,668	3,371	3,372	9,625	39,383
	Total expense	58,330	132,814	59,468	85,300	72,612	259,628
Net F	arm Profit (Loss) (\$)	11,781	12,362	8,057	9,199	39,990	20,988
	Acres in vegetable production	2.2	10.9	2.4	8.0	3.3	12.5
su	Total acres earning income	20.9	43.4	3.8	60.0	99.3	67.6
stio	Number years farming as a business	7.3	9.6	9.0	6.0	7.0	15.0
Que	Goal percent of household income from farming	72	95	90	100	100	25
onal	Current percent of household income from farming	37	85	21	100	100	60
lditio	Estimated hours each owner worked on farm in 2013	2,105	2,360	2,040	2,200	450	1,200
Ad	Estimated farmer compensation (higher of net income or owners draw (\$)	15,024	6,800	15,559	5,000	34,033	24,000
	Estimated farmer compensation per owner hour worked (\$) *	5.4	5.0	5.9	4.2	11.5	7.8

* for Income per owner-hours worked, the larger of value of "net income" or "owners draw" was used, divided by the total number of owner hours worked. Example: farm net income = \$10,000; farm owners draw = \$8,500; the farm has two owners, each worked 2,000 hours. Income/owner-hour = \$10,000/(2,000*2) = \$2.5/hour. If owners were paid out of hired labor, however, hours were not multiplied by the number of owners (which is an imperfect assumption). Owners were paid out of hired labor on two farms.

When considering the financial ratios grouped by number of acres planted to fruits and vegetables in **Table 6**, the farms with 6-18 acres in fruits and vegetables tend to have more equity and assets, lower debt to asset ratios, and lower depreciation expense ratios. This may reflect the larger land holdings (total acres earning income). It may also reflect a more mature state of farm growth; farms with higher depreciation and carrying more debt may be investing in buildings and machinery at a faster rate.

seven percent higher than 6-18 acre farms. This is consistent with expectations; by having more produce to sell, the larger farms can build profit through volume of sales rather than through a high profit margin. The smaller farms need a high net income ratio to earn a living on smaller volume. As reflected in the variability of farm profit, the <1-4 acre farms showed a larger range of values for each ratio than the 6-18 acre farms. This was true in every ratio category except the asset turnover ratio.

The net income ratio for <1-4 acre farms was higher than the 6-18 acre farms. On average, net income for <1-4 acre farms was

	Table 6 Financial Ra	atios for F	Y2013, Fa	arms Agg	regated b	y Fruit an	d Vegetal	ble Acre	s (cont.	on next	: page)	
11	farms were categorized	Ave	rage	Med	dian	Rai	nge		Bench	mark Va	alues	
base ed t The acre (n=5 the rang	d on their acreage plant- o fruits and vegetables. two categories are <1-4 es (n=6) and 6-18 acres). From these categories, e average, median, and ge for farm responses is reported below.	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac	(Blon	Kohl de moc 2009)	lified	Ag Dee Maker	cision 2014
Gro	ss income (\$)	70,111	145,208	73,585	105,209	86,735	263,372	strong	stable	weak	High third	Low third
Tota	ll expense (\$)	58,316	132,814	59,468	85,300	72,692	259,628					
Net	farm profit (loss) (\$)	11,794	12,362	8,097	9,199	39,990	20,988					
	Liabilities (\$)	72,947	76,899	42,997	26,900	223,894	263,953	-				
	Equity (\$)	111,006	265,956	86,244	216,046	248,901	667,231				ĺ	
	Liabilities+Equity (\$)	183,953	342,855	170,700	242,946	454,004	729,872					
	Debt to asset	0.42	0.29	0.47	0.11	0.92	0.67	< 0.30	0.30 - 0.70	> 0.70	0.28	0.22
	Rate of Return (RoR) on Farm Assets	0.19	0.20	0.09	0.04	0.72	0.74	> 0.05	0.01 - 0.05	< 0.01	0.158	0.029
d Ratios	RoR on Farm Assets (with forced return to owner)**	-0.12	0.01	-0.01	-0.01	0.70	0.26	> 0.05	0.01 - 0.05	< 0.01	0.158	0.029
et and	Operating profit margin	0.23	0.16	0.17	0.14	0.48	0.17	> 0.25	0.10 - 0.25	< 0.10	0.37	0.13
nce She	Oper. Profit margin (with forced return to owner)**	-0.17	-0.01	-0.09	0.06	0.77	0.47	> 0.25	0.10 - 0.25	< 0.10	0.37	0.13
ala	Asset turnover ratio	0.80	1.02	0.73	0.67	1.77	3.13	varies			0.45	0.28
8	Operating expense ratio	0.62	0.74	0.59	0.77	0.38	0.27	< 0.65	0.65 - 0.80	> 0.80	0.54	0.71
	Depreciation expense ratio	0.16	0.10	0.13	0.06	0.34	0.28	varies			0.06	0.1
	Interest expense ratio	0.05	0.06	0.02	0.03	0.22	0.19	< 0.12	0.12 - 0.20	> 0.20	0.04	0.05
	Net income ratio	0.17	0.10	0.10	0.11	0.56	0.16	varies			0.36	0.14

_ Tak	la 6 cont							
Idu	ne o, cont.	Financial Ratios for FY2013, Farr	ns Aggregat	ted by Fru	it and Ve	getable A	cres	
11 far	ms were cat	egorized based on their acreage planted to	Avera	ige	Mee	dian	Rai	nge
fruits a and me	and vegetab 6-18 acres (dian, and rar	les. The two categories are <1-4 acres (n=6) (n=5). From these categories, the average, nge for farm responses is reported below.	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac	<1-4 ac	6-18 ac
	Acres in ve	getable production	2	11	2	8	3	13
suc	Total acres	earning income	21	43	4	60	99	68
stie	Number ye	ears farming as a business	7	10	9	6	7	15
Que	Goal perce	nt of household income from farming	72	95	90	100	100	25
al (Current pe	rcent of household income from farming	37	85	21	100	100	60
ion	Estimated	hours each owner worked on farm in 2013	2,105	2,360	2,040	2,200	450	1,200
Addit	Estimated or owners o	farmer compensation (higher of net income draw (\$)	15,024	6,800	15,559	5,000	34,033	24,000
	Earnings/ho	ours worked (\$) *	5.4	5.0	5.9	4.2	11.5	7.8

* for Income per owner-hours worked, the larger of value of "net income" or "owners draw" was used, divided by the total number of owner hours worked. Example: farm net income = \$10,000; farm owners draw = \$8,500; the farm has two owners, each worked 2,000 hours. Income/owner-hour = \$10,000/(2,000*2) = \$2.5/hour. If owners were paid out of hired labor, however, hours were not multiplied by the number of owners (which is an imperfect assumption). Owners were paid out of hired labor on two farms. ** forced wage of \$6/hr was used in this calculation unless the reported return to the farmer was > \$6/hr. The \$6/hr wage was imposed on five farms.

Aggregated by Total Farm Assets (Expense and Ratios)

When the 11 farms were categorized based on their total farm assets, three distinct categories emerged: farms with assets <\$40,000, total assets of \$100,000 - \$250,000, and total assets >\$400,000. As seen in **Table 7**, on average, the farms with assets >\$400,000 have been farming longer, have only slightly more acres in vegetables, but have nearly four times the amount of total acres earning income (median and range values are not provided because two categories have only three farms). The average gross income and expenses increases with average assets, however, profit is highest for the \$100,000 - \$250,000 range.

This could be due partially to hired labor, which accounts for an average of 22 percent of the surveyed farms' expenses. Using the actual farm numbers, farms with the <\$40,000 in assets put 18 percent of their expenses toward hired labor, similar to the farms with >\$400,000 in assets, which put, on average, 19 percent of expenses toward hired labor. The middle category (\$100,000 – 250,000) put 27 percent of expenses toward hired labor. The \$100,000 - \$250,000 category of farms also works fewer hours, on average, and takes home more money per hour. The average estimated farmer compensation is nearly double for the farmers with \$100,000 - \$250,000 asset category than the other two categories.

	Table 7 Balance Sheet for	FY2013, Farms Aggregate	d by Total As	sets (cont. on nex	t page)
11 far 250k, s catego	ms were categorized based on thei \$400k+). Average values for each da ory.	r total assets (\$0-40k, \$100- ata item are reported by	\$0-40k Average	\$100-250k Average	\$400k+ Average
	Profit (loss) on livestock for resale		0	1,662	(180)
	Sales of livestock, produce, grains	s, and other products	52,781	83,729	160,095
		Early Season CSA	0	0	9,112
		Summer CSA	25,750	25,233	63,492
		Late CSA	6,935	3,464	5,010
	Category of Sales - Produce	Winter CSA	0	1,008	7,852
(\$)		Farmers Market	8,367	19,604	11,817
me		Wholesale Produce	5,983	23,438	41,583
100		Other	5,746	915	6,906
n I		CSA	0	1,009	0
Farı	Category of Sales - Other than	Farmers Market	0	3,930	9,060
	Produce	Wholesale	0	0	0
		Other	0	14,265	20,407
	Cooperative distributions		0	7	546
	Ag program payments		0	1,113	2,797
	Other income		1,555	1,869	2,926
	Gross income		54,336	96,997	166,236

	Table 7, cont. Balance Sheet for FY2013, Farms Aggregated by Tota	Assets		
11 far Averag	ms were categorized based on their total assets (\$0-40k, \$100-250k, \$400k+). ge values for each data item are reported by category.	\$0-40k Average	\$100-250k Average	\$400k+ Average
	Car and truck expenses	2,266	2,179	3,456
	Chemicals	0	1,258	0
	Custom hire	1,791	1,280	3,282
	Depreciation and section 179	2,760	13,472	13,752
	Employee benefit (other than pension/profit sharing)	0	434	6,228
	Feed	0	2,771	6,983
	Fertilizers and lime	1,445	44	880
	Freight and trucking	1,750	127	0
(\$	Gasoline, fuel, oil	2,668	2,088	5,945
;) Se	Insurance (other than health)	657	2,067	6,737
inse	Mortgage interest	0	485	10,831
xpe	Other interest	4,800	1,398	130
Ш и	Labor hired	9,318	20,020	44,206
arn	Vehicle, machinery, equipment rent	2,049	89	4,187
	Other rent (land, animals)	1,112	7,355	0
	Repairs and maintenance	1,255	2,146	5,191
	Seeds and plants	3,782	3,576	7,493
	Supplies	5,335	7,870	6,931
	Taxes	180	869	1,830
	Utilities	1,872	2,326	4,855
	Vet, breeding, and medicine	0	5,984	359
	Other	1,158	3,494	25,242
	Total expense	44,199	81,179	158,519
Net F	arm Profit (Loss) (\$)	10,137	15,787	7,717
	Acres in vegetable production	3	7	9
suc	Total acres earning income	5	19	78
estic	Number years farming as a business	4	9	12
Ŋ	Goal percent of household income from farming	100	81	67
onal	Current percent of household income from farming	62	53	67
dditi	Estimated hours each owner worked on farm in 2013	2,207	2,058	2,507
Ă	Estimated farmer compensation (higher of net income or owners draw (\$)	9,998	18,929	9,703
	Estimated farmer compensation per owner hour worked (\$) *	4.7	6.2	3.6
* for Ir	ncome per owner-hours worked, the larger of value of "net income" or "owners dr	aw" was used, d	ivided by the total r	number of

* for Income per owner-hours worked, the larger of value of "net income" or "owners draw" was used, divided by the total number of owner hours worked. Example: farm net income = \$10,000; farm owners draw = \$8,500; the farm has two owners, each worked 2,000 hours. Income/owner-hour = \$10,000/(2,000*2) = \$2.5/hour. If owners were paid out of hired labor, however, hours were not multiplied by the number of owners (which is an imperfect assumption). Owners were paid out of hired labor on two farms.

Table 8 shows the financial ratios for farms aggregated by total assets. Debt to equity ratios are stable for the middle and high asset categories, but the average of the low asset farm is highly leveraged (more debt than equity). Because of their low total assets, however, these farms have a favorable operating expense ratio (0.65), and a fast rate of return on assets (0.52) and high asset turnover ratio (1.63). The low asset farms also have most of their acres in vegetables (82 percent), are beginning farmers (on average farming less than 5 years), and all have a goal of earning 100 percent of their income from farming. The middle asset farms

have the highest depreciation expense ratio, but also the highest average net income ratios, with and without depreciation included. They also have a favorable asset turnover ratio and a very strong debt to asset ratio. High asset farms, on average, have lower rates of return, net income ratios, and operating profit margins.

Because several farms include their house with the farm property, and thus with their assets, using asset-based financial ratios to assess profitability and/or efficiency should be approached conservatively.

	Table 8 Financial Ratios for	FY2013, Fa	rms Aggrega	ted by Tota	al Assets	5			
						Bench	mark Va	alues	
11 f sets f	arms were categorized based on their total as- (\$0-40k, \$100-250k, \$400k+). Average values or each data item are reported by category.	\$0-40k Average	\$100-250k Average	\$400k+ Average	(Blon	Kohl de moc 2009)	lified	Ag Dee Maker	ision 2014
Gro	ss income (\$)	54,336	96,997	166,236	strong	stable	weak	High third	Low third
Tota	ll expense (\$)	44,199	81,179	158,519					
Net	farm profit (loss) (\$)	10,137	15,787	7,717					
	Liabilities (\$)	11,430	44,379	188,663					
	Equity (\$)	14,775	163,940	377,263					
	Liabilities+Equity (\$)	26,205	208,319	565,926					
	Debt to asset	0.53	0.25	0.38	< 0.30	0.30 - 0.70	> 0.70	0.28	0.22
ios	Rate of Return (RoR) on Farm Assets	0.52	0.09	0.03	> 0.05	0.01 - 0.05	< 0.01	0.158	0.029
id Rat	RoR on Farm Assets (with forced return to owner)**	-0.13	-0.05	-0.02	> 0.05	0.01 - 0.05	< 0.01	0.158	0.029
eet an	Operating profit margin	0.22	0.20	0.16	> 0.25	0.10 - 0.25	< 0.10	0.37	0.13
ce She	Oper. Profit margin (with forced return to owner)**	-0.20	-0.07	-0.06	> 0.25	0.10 - 0.25	< 0.10	0.37	0.13
ano	Asset turnover ratio	2.05	0.55	0.33	varies			0.45	0.28
Bal	Operating expense ratio	0.65	0.65	0.75	< 0.65	0.65 - 0.80	> 0.80	0.54	0.71
	Depreciation expense ratio	0.13	0.16	0.10	varies			0.06	0.1
	Interest expense ratio	0.07	0.03	0.10	< 0.12	0.12 - 0.20	> 0.20	0.04	0.05
	Net income ratio (farm profit only)	0.16	0.17	0.05	varies			0.36	0.14
	Net income ratio (farm profit + depreciation)	0.29	0.33	0.15	varies			0.36	0.14
	Acres in vegetable production	3	7	9					
	Total acres earning income	5	19	78					
suo	Number years farming as a business	4	9	12					
uesti	Goal percent of household income from farm- ing	100	81	67					
nal Q	Current percent of household income from farming	62	53	67					
lditio	Estimated hours each owner worked on farm in 2013	2,207	2,058	2,507					
Ac	Estimated farmer compensation (higher of net income or owners draw (\$)	9,998	18,929	9,703					
	Earnings/hours worked (\$) *	4.7	6.2	3.6					

* for Income per owner-hours worked, the larger of value of "net income" or "owners draw" was used, divided by the total number of owner hours worked. Example: farm net income = \$10,000; farm owners draw = \$8,500; the farm has two owners, each worked 2,000 hours. Income/owner-hour = \$10,000/(2,000*2) = \$2.5/hour. If owners were paid out of hired labor, however, hours were not multiplied by the number of owners (which is an imperfect assumption). Owners were paid out of hired labor on two farms.

** forced wage of \$6/hr was used in this calculation unless the reported return to the farmer was > \$6/hr. The \$6/hr wage was imposed on five farms.

Conclusion and Next Steps

This report, aggregating and analyzing the financials of 11 diversified fruit and vegetable farms, is intended to be illustrative and educational for farmers with similar types of operations. Just as no two farms have the same physical attributes, not two farmers have the same farm financial goals and strategy.

Craig Chase suggests tracking one ratio from each category (liquidity, solvency, profitability, efficiency), and to begin, he recommends tracking: the current ratio, debt to asset ratio, rate of return on farm assets, and the balance of the efficiency ratios (operating expense ratio + depreciation expense ratio + interest expense ratio + net income ratio = 100%).

He also offers five common profitability problems to watch out for:

- Capital investments are too high relative to income: This will affect the rate of return on farm assets, the asset turnover ratio, and likely the depreciation and interest expense ratios.
- Deprectation or interest expenses are too high (>10% of gross revenue): This will make less cash available for operating expenses and net profit.
- Operating expenses (especially feed and labor) are too high (>60% of gross revenue): This will make less cash available for net profit. Farmers should be mindful of the value of their own labor, however. Too often farmers do not account for their labor when analyzing financials. At times, hiring labor for field work makes more financial sense, as it frees up valuable owner-labor for higher value management tasks.
- High market value for assets makes adequate returns difficult to achieve: This is especially true for land values. Chase recommends keeping land values constant, and conservative, in the balance sheet to avoid becoming "upside down" if land values decline.
- Sales prices are too low: Ensure that you are receiving a fair price for your work. Enterprise budgets by crop or by market are needed to establish fair prices.

Reflections from Three Farms

Three farms offered reflections of their financial positions in relation to the data presented in the study. Farm E intentionally draws no income from their farm, re-investing all the revenue to expanding and improving the farm for future success and wealth creation. The current personal income needs for this farm are supported by an off-farm income, and the farm carries significant debt for land and infrastructure expenses.

Conversely, Farm A draws 100% of their household income from the farm, are satisfied with their income and work load, and have very little farm debt. Though these two farms are structured very differently, both farms feel they are in a strong financial position. Farm F was in their third year of production. Though they realize their numbers don't look ideal, a lot of what they were doing then wasn't going to show up on paper.

Farm E:

On getting where they are: "Growing up on a farm, I had realistic expectations that we wouldn't make money every year, but that we would accrue wealth by investing in and expanding the farm while using the tax code to our advantage. The first few years, we were sort flying by the seat of our pants. We had some offfarm income to help, and we also took out loans. We didn't have unlimited resources; those limitations made us more risk averse and prevented us from making some foolish decisions. By year 3 we had some data to evaluate, places where we had some success and places we knew to avoid. Only by having the years of records and some time to reflect do I feel comfortable about our position going forward.

Fruits and vegetables generate the greatest return, which for us, wasn't pulled out as income, but provided the cash flow to continue investing in the other parts of our farm. But produce requires labor. We decided one of us would work on the farm full time, trading the input of off-farm income (which is taxed) for revenue from produce sales. Because we still had one off-farm income, we decided not to pull out any of the produce revenue as net income. Re-investing this revenue directly in the farm allowed us to bypass income tax on the revenue. When we work that hard to grow produce, we want to retain the maximum value possible.

On the next five years: "Our farm has no net income, yet I would consider our farm to be very successful, and maybe even more so than others. Our goal has been wealth creation, we're in our 11th year, and I would say we've done very well. That said, if we didn't have the appreciating asset of the farm house to lean on, building our wealth and our farm would have been much more challenging. We're pretty typically tired for our age, and we're moving in a direction that is less labor intensive. We kind of know better what we're doing, we are doing fewer things that are less successful, leaning on our equipment and infrastructure, improved soils.

We still have a high debt load on farm infrastructure investments, but by 2017 we will have freed up a significant amount of cash from debt service, and some of the financial ratios should start shifting. Though we are about five years behind what I expected, we can see the light at the end of the tunnel. When we shift toward a more cattle-based operation in a few years (lower revenue than vegetables, but lower labor), we will have most of the needed infrastructure paid off.

On using at the data set: Every person and possible variable for each farm is different. Rather than picking from this data or following this model, the approach of a beginning farmer should be, "what do I want to do as a farmer, what are my assets, how much risk am I willing to take?" When you've thought through those things, this data can be used to help groundtruth that vision – "How do my goals match up or compare with the data of these farms?"

Farm E also noted a spot in this report's data where it appears farms are in the black hole of transitioning to more hired labor: where farmers rely mostly on household (owner) labor, hiring enough additional labor to incur significant expense, but not hiring enough additional labor to really make a jump in efficiency. Planning through this transition is essential.

Farm A:

Looking at the numbers: I'm pretty comfortable with our workload, our product quality and our income. But it hasn't always been that way, for sure. When we started our farm, if our numbers had been in this table, they would have looked pretty bad for a few years. I'm sure we can still improve more and earn more income, but I think from now on the gains will be more incremental – the easy gains have been made.

I think people should make money farming. If farmers have a realistic plan, are well organized and efficient in production and harvesting, they should make money. If they are not well organized and efficient – they won't be successful. Looking at these numbers, it seems that some people are struggling to make money, and I would really like to know why. The numbers indicate

that efficiency with labor may be an indicator; something that sets the well-managed farms apart from those making marginal income. I know labor management is an area we can improve, too. Always having the next job ready, ensuring the staff is properly trained to do the work, and creating realistic but high standards of work takes time and attention.

Future research: What would really be helpful for me, when comparing farm financial information, is to see breakdowns like net income per CSA box and labor hours per CSA box. If I was way off on those numbers, I'd really start to dig into why. And if I saw someone doing only wholesale or restaurant sales was earning returns per acre twice as high, I might reconsider what I'm doing. Much of the usefulness of this data is lost in the financial jargon and aggregation, but some of the simple calculations are useful, and could be useful for beginning farmers as they decide what financial data to track for their farm business.

Farm F:

Super interesting. Yes, it's dense, but the interpretation is clear.

On the numbers: I'm not surprised my numbers look a little silly and are way off the "favorable" range, but I was just trying to learn how to run a farm – it was my third year. That's what I would expect to see. I was pouring all of myself, my time, and my personal savings into the farm and to get minor assets like irrigation. I was learning skills, expanding my market, learning efficiencies – I wasn't trying to make money yet. None of that work shows up on paper at that early stage. So it may not look good on paper, but I had a successful year, for me, at that time.

On using this report in the future: I feel like every year I've farmed has been a success, that I've achieved what I set out to do. Into

year five, I'm looking at things a little differently. Now when I look at these numbers, I realize I better track and understand a few of these ratios, and to know how low-interest farm loans, for example, can help me grow my business.

In this report, I was surprised how much non-produce income factored into some farms. What could I do if I partnered with someone to value add or diversify my enterprises? For now I'll stick to learning about vegetables, but that opened my eyes. At the end of the day, the answer to: "How do I create a successful farm business? is: "It depends." There is no silver bullet. But each person reading this should be able to get a nugget our of this report that will help them and their farm.

A good resource for farmers on financial planning and management is "Fearless Farm Finances: Farm Financial Management Demystified" by Jody Padgham, Paul Dietmann, Chase, and Chris Blanchard. Practical Farmers of Iowa uses this book for beginning farmer workshops and participants in the Practical Farmers Savings Incentive Program.

Practical Farmers is working to gather 2014 financial data from more farmers, and plans to publish an updated report with further clarification on long-term vs. short term assets and liabilities for each farm. Special thanks to the farmers who participated in 2013, and to Craig Chase for his expertise and contributions to this report.

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PFI Cooperators' Program

PFI's Cooperators' Program gives farmers practical answers to questions they have about on-farm challenges through research, record-keeping, and demonstration projects. The Cooperators' Program began in 1987 with farmers looking to save money through more judicious use of inputs. If you are interested in conducting an on-farm trial contact Stefan Gailans @ 515-232-5661 or stefan@ practicalfarmers.org.



SCHEDULE F (Form 1040) Adjusted for PFI Whole Farm Project

Name of proprietor

Part I 1a b c 2	Farm Income—Cash Methor Sales of livestock and other resale ite							: Ac	Counting method Cash 🗌 Acc	od: rual				
1a b c 2	Sales of livestock and other resale ite	d.	Complete	Parts I	and II (/	Accrua	al method	d. C	omplete Parts	II and III, a	and Part	t I, lin	e 9.)	
b c 2		ms (se	e instructions	5)			1a	a	·					
с 2	Cost or other basis of livestock or oth	ner iten	ns reported o	n line 1	a.	•	1k	b						
2	Subtract line 1b from line 1a					•••					1c			
Г	Sales of livestock, produce, grains, ar	nd othe	r products ye	ou raise	d						2			
Γ	Category of sales:													
	Produce Sales:	v	/inter CSA .	[0	ther than Produ	uce Sales:				
	Early Season CSA		armore Mark	 				0	SA			C	ther	
	Summer CSA							F	armers Market					
			Vholesale Pro	oduce .				1	Vholesale					
L			otner	•••				Ľ						
3a	Cooperative distributions (Form(s) 10	099-PA	TR) .	3a					3b Taxable a	amount	3b			
4a	Agricultural program payments (see	e instruc	tions) .	4a					4b Taxable a	amount	4b			
5a	Commodity Credit Corporation (CCC) loans	reported une	der elec	tion						5a			
b	CCC loans forfeited			5b					5c Taxable a	amount	5c			
6	Crop insurance proceeds and federal	l crop c	lisaster paym	ents (se	e instru	ctions)								
а	Amount received in 2013			бa	_				6b Taxable a	amount	6b			
с	If election to defer to 2014 is attache	d, chec	k here				6d Am	nour	nt deferred from	2012	6d			
7	Custom hire (machine work) income										7			
8	Other income, including federal and	state g	asoline or fu	el tax cr	edit or r	efund	(see i	inst	ructions)		8			
9	Gross income. Add amounts in t	he righ	nt column (li	nes 1c,	2, 3b, -	4b, 5a,	, 5c, 6b, 6	6d,	7, and 8). If you	u use the				
	accrual method, enter the amount fr	om Par	t III, line 50 (s	ee instr	uctions)) .					9			
art II	Farm Expenses—Cash and A	ccrua	Method.	0	Do not i	nclude	e persona	al o	or living expension	ses (see in:	structio	ons).		
0	Car and truck expenses (see													
	instructions) Also attach Form 4562	10									1 1			
	113th detto113). 71130 detde11 1 01111 +302	10				23	Pension	n an	d profit-sharing	plans	23			
1	Chemicals	10				23 24	Pension Rent or l	n an Ieas	d profit-sharing se (see instructio	plans ons):	23			
1 2	Chemicals	10 11 12				23 24 a	Pension Rent or I Vehicles	n an Tleas s, m	d profit-sharing se (see instructic achinery, equip	plans ons): ment	23 24a			
1 2 3	Chemicals	10 11 12 13				23 24 a b	Pension Rent or I Vehicles Other (la	n an Ieas s, m Iand	d profit-sharing se (see instructic achinery, equipi I, animals, etc.)	plans ons): ment 	23 24a 24b			
1 2 3 4	Chemicals	10 11 12 13				23 24 a b 25	Pension Rent or I Vehicles Other (la Repairs a	n an leas s, m land anc	d profit-sharing se (see instructic achinery, equip I, animals, etc.) I maintenance	plans ons): ment 	23 24a 24b 25			
1 2 3 4	Chemicals	10 11 12 13 14				23 24 a b 25 26	Pension Rent or I Vehicles Other (la Repairs a Seeds ar	n and leas s, m land and and	d profit-sharing se (see instructic achinery, equipi I, animals, etc.) d maintenance plants	plans pns): ment 	23 24a 24b 25 26			
1 2 3 4	Chemicals	10 11 12 13 14				23 24 a 25 26 27	Pension Rent or I Vehicles Other (la Repairs a Seeds ar Storage	leas s, m land and and e and	d profit-sharing se (see instructic achinery, equipi I, animals, etc.) I maintenance plants d warehousing	plans ons): ment 	23 24a 24b 25 26 27			
1 2 3 4 5	Chemicals	10 11 12 13 14				23 24 b 25 26 27 28	Pension Rent or l Vehicles Other (la Repairs Seeds ar Storage Supplies	n and leas s, m land and and e and es	d profit-sharing se (see instructic achinery, equipi I, animals, etc.) I maintenance plants d warehousing	plans ons): 	23 24a 24b 25 26 27 28			
1 2 3 4 5	Chemicals	10 11 12 13 14 14				23 24 a 25 26 27 28 29	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes	n and leas s, m land and e and e and es	d profit-sharing se (see instructic achinery, equipi I, animals, etc.) d maintenance plants d warehousing	plans ons): 	23 24a 24b 25 26 27 28 29			
1 2 3 4 5 6	Chemicals	10 11 12 13 14 15 16				23 24 a 25 26 27 28 29 30	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities	n and leas s, m land and e and e and es	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants d warehousing	plans ons): 	23 24a 24b 25 26 27 28 29 30			
1 2 3 4 5 6 7	Chemicals	10 11 12 13 14 15 16 17				23 24 a 25 26 27 28 29 30 31	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities Veterina	n and leas s, m land and p and p e and es	d profit-sharing se (see instructic achinery, equipi I, animals, etc.) d maintenance plants d warehousing	plans ons): 	23 24a 24b 25 26 27 28 29 30 31			
11 2 3 4 5 6 7 8	Chemicals	10 11 12 13 14 15 16 17 18				23 24 a 25 26 27 28 29 30 31 32	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities Veterina Other ex	n and leas s, m land and p e and es	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants d warehousing breeding, and me nses (specify):	plans ons): ment 	23 24a 24b 25 26 27 28 29 30 31			
1 2 3 4 5 6 7 8 9	Chemicals	10 11 12 13 14 14 15 16 17 18 19				23 24 a 25 26 27 28 29 30 31 32 a	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities Veterina Other ex	n and l leas s, m land and p and p e and es	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants d warehousing breeding, and me nses (specify):	plans ons): ment 	23 24a 24b 25 26 27 28 29 30 31 31 32a			
1 2 3 4 5 6 7 8 9 00	Chemicals	10 11 12 13 14 14 15 16 17 18 19 20				23 24 a 25 26 27 28 29 30 31 32 a b	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities Veterina Other ex	n and i leas s, m land i and i	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants d warehousing breeding, and me nses (specify):	plans ons): ment 	23 24a 24b 25 26 27 28 29 30 31 32a 32a			
11 23 4 5 6 7 8 9 90	Chemicals	10 11 12 13 14 15 16 17 18 19 20				23 24 a b 25 26 27 28 29 30 31 32 a b c	Pension Rent or l Vehicles Other (la Repairs - Seeds ar Storage Supplies Taxes Utilities Veterina Other ex	n and leas s, m land and e and e and s	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants d warehousing breeding, and me nses (specify):	plans ons): ment 	23 24a 24b 25 26 27 28 29 30 31 32 32b 322 32b			
11 2 3 4 5 6 7 8 9 00 11 2	Chemicals	10 11 12 13 14 15 16 17 18 19 20 21a				23 24 a b 25 26 27 28 29 30 31 32 a b c d	Pension Rent or l Vehicles Other (la Repairs a Seeds an Storage Supplies Taxes Utilities Veterina Other ex	n and leas s, m land and p and p e and s	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants	plans ons): 	23 24a 24b 25 26 27 28 29 30 31 32a 32b 32c 32d			
11 12 13 14 15 6 7 8 9 90 11 a b	Chemicals	10 11 12 13 14 15 16 17 18 19 20 21a 21b 22				23 24 a b 25 26 27 28 29 30 31 32 a b c d e	Pension Rent or l Vehicles Other (la Repairs a Seeds ar Storage Supplies Taxes Utilities Veterina Other ex	n and leas s, m land and p and p e and e and s	d profit-sharing se (see instructic achinery, equipi l, animals, etc.) d maintenance plants	plans ons): 	23 24a 24b 25 26 27 28 29 30 31 32a 32b 32c 32d 32e 22c			

Part B: Balance Sheet

Total Assets	
Liabilities	
Equity	
Total Liabilities + Equity	

Part C: Additional Questions

1. Acres in vegetable production
2. Total acres earning income
3. Number of years farming as a business
4. Goal percent of household income from farming
5. Current percent of household income from farming
6. Type of farm business (LLC, C-corporation, etc)
7. Estimated hours each owner worked on farm in 2013 .
8. Estimated owners draw in 2013

- 9. Are you meeting your expectations for farm profitability?
- O yes
- O no

10. If you are not meeting your expectations for farm profitability, are you planning to make changes?

O yes

O no

O I am meeting my expectations for farm profitability.

11. Please write a paragraph describing your farm business, or attach as a separate document.