## Whole Farm Financial Project - An Analysis of 2013 Financials

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## Cooperators:

- 11 PFI Fruit and Vegetable Producers


## 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

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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

|  | Category of Sales - Produce |  |  |  |  |  |  | Category of Sales - Other than Produce |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $$ | $\begin{aligned} & \pm \\ & \stackrel{ \pm}{\leftrightarrows} \overleftarrow{\ddots} \end{aligned}$ |  |  | $\begin{aligned} & \pm \\ & \stackrel{ \pm}{ \pm} \end{aligned}$ | む |  | $\frac{0}{\pi}$ <br> $\frac{0}{0}$ <br> $\frac{0}{3}$ |  |
| 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 \& Benchmarks

| Ratios and Benchmarks | Formula Used | Description |
| :---: | :---: | :---: |
| Debt to asset ratio * | = total farm liabilities $\div$ 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) $\div$ 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) $\div$ total farm assets | Measure of profitability; "interest rate" earned on farm investments (including \$ returns to the farmer) |
| Operating profit margin | $\begin{aligned} = & \text { (net farm income }+ \text { mortgage interest expense } \\ & + \text { other interest expense) } \div \text { gross revenue } \end{aligned}$ | Measure of profitability; operating efficiency of the farm |
| Operating profit margin (with forced return to farmer) ** | $\begin{aligned} & =\text { (net farm income }+ \text { mortgage interest expense } \\ & + \text { other interest expense - return to farmer) } \div \\ & \text { gross revenue } \end{aligned}$ | Measure of profitability; operating efficiency of the farm (including \$ returns to the farmer) |
| Asset turnover ratio * | $=$ gross revenue $\div$ total farm assets | Measure of efficiency; efficiency in using capital (assets) |
| Operating expense/revenue ratio | $\begin{gathered} =\text { (total operating expense }- \text { interest expense - } \\ \text { depreciation expense) } \div \text { gross revenue } \end{gathered}$ | Measure of efficiency; portion of revenue supporting operating expenses |
| Depreciation expense ratio | $=$ depreciation expense $\div$ gross revenue | Measure of efficiency; portion of revenue supporting depreciation expenses |
| Interest expense ratio | $=$ interest expense $\div$ gross revenue | Measure of efficiency; portion of revenue supporting interest expenses |
| Net income ratio | $=$ net income $\div$ 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.

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## 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 $\mathbf{2}$ 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 $\mathbf{3}$ 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).

Farm Financial Ratios by Farm

|  |  |  |  | и!блеш дуолd би!деләдо | Operating profit margin (inc. return to farmer of $\$ 6 / \mathrm{hr}$ )* |  | о!̣ел әsuədxə бu!ұеләdo |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| B | 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 |
| C | 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 |
| K | 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 |
| M | 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 |
| Average | 0.36 | 0.19 | -0.04 | 0.17 | -0.10 | 0.75 | 0.67 | 0.13 | 0.05 | 0.14 | 8 | 82 | 59 |  |  |
| Median | 0.47 | 0.05 | 0.02 | 0.14 | 0.02 | 0.67 | 0.66 | 0.11 | 0.03 | 0.11 | 9 | 100 | 82 |  |  |
| Range | 0.92 | 0.74 | 0.83 | 0.51 | 0.83 | 3.13 | 0.44 | 0.36 | 0.22 | 0.58 | 17 | 100 | 100 |  |  |

## Benchmark Values

|  | strong | < 0.30 | > 0.05 | > 0.05 | > 0.25 | > 0.25 | varies | < 0.65 | varies | < 0.12 | varies |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | stable | $\begin{gathered} 0.30- \\ 0.70 \end{gathered}$ | $\begin{gathered} 0.01- \\ 0.05 \end{gathered}$ | $\begin{gathered} 0.01- \\ 0.05 \end{gathered}$ | $\begin{gathered} 0.10- \\ 0.25 \end{gathered}$ | $\begin{gathered} 0.10- \\ 0.25 \end{gathered}$ |  | $\begin{gathered} 0.65- \\ 0.80 \end{gathered}$ |  | $\begin{gathered} 0.12- \\ 0.20 \end{gathered}$ |  |
|  | weak | > 0.70 | < 0.01 | < 0.01 | < 0.10 | < 0.10 |  | > 0.80 |  | > 0.20 |  |
|  | High third | 0.28 | 0.158 | 0.158 | 0.37 | 0.37 | 0.45 | 0.54 | 0.06 | 0.04 | 0.36 |
|  | 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 $\$ 6 / \mathrm{hr}$ was used in this calculation unless the reported return to the farmer was $>\$ 6 / \mathrm{hr}$. The $\$ 6 / \mathrm{hr}$ 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. expenses per acre were $\$ 9,548 /$ acre laving an average profit of $\$ 2,903 /$ acre Farms with over 50 percent of their acres earning income planted to fruits and vegetables netted an 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 $\$ 170 /$ acre (gross $\sim \$ 3,600 / a c r e$ ). The revenue and profit potential per acre of fruits and vegetables is enormous, but high labor costs, management demands, and affordable risk 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.


## Table 4

Revenue, Expenses, and Balance per Acre (All Acres Earning Income) by Farm for FY2013


## 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 acredependent, 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, Data Aggregated by Fruit and Vegetable Acres for FY2013 (cont. on next page)
11 farms were categorized based on their acreage planted to fruits and vegetables. The two categories are $<1-4$ acres ( $n=6$ ) and 6-18 acres ( $n=5$ ). From these categories, the average, median, and range for farm responses is reported below.

|  | Profit (loss) on livestock for resa |  | 1,662 | (72) | 0 | 0 | 8,308 | 359 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sales of livestock, produce, grain | other products | 65,082 | 133,357 | 69,625 | 98,276 | 78,370 | 312,279 |
|  | Category of Sales - Produce | 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 |
|  |  | 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 |
|  |  | Wholesale Produce | 2,079 | 49,483 | 725 | 16,500 | 6,045 | 118,850 |
|  |  | Other | 5,432 | 758 | 5,895 | 0 | 10,780 | 3,032 |
|  | Category of Sales - Other than Produce | CSA | 841 | 0 | 0 | 0 | 5,047 | 0 |
|  |  | Farmers Market | 4,785 | 0 | 0 | 0 | 19,648 | 0 |
|  |  | 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 |

11 farms were categorized based on their acreage planted to fruits and vegetables. The two categories are <1-4 acres ( $n=6$ ) and 6-18 acres ( $n=5$ ). From these categories, the average, median, and range for farm responses is reported below.

|  | 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 |
|  | Insurance (other than health) | 1,492 | 4,713 | 1,235 | 2,750 | 3,856 | 12,512 |
|  | Mortgage interest | 3,364 | 2,947 | 116 | 0 | 17,756 | 10,854 |
|  | Other interest | 833 | 3,356 | 46 | 389 | 3,256 | 14,400 |
|  | Labor hired | 11,072 | 38,848 | 13,045 | 17,429 | 22,187 | 101,966 |
|  | Vehicle, machinery, equipment rent | 166 | 3,632 | 0 | 491 | 548 | 12,071 |
|  | 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 Farm 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 |
|  | Total acres earning income | 20.9 | 43.4 | 3.8 | 60.0 | 99.3 | 67.6 |
|  | Number years farming as a business | 7.3 | 9.6 | 9.0 | 6.0 | 7.0 | 15.0 |
|  | Goal percent of household income from farming | 72 | 95 | 90 | 100 | 100 | 25 |
|  | Current percent of household income from farming | 37 | 85 | 21 | 100 | 100 | 60 |
|  | Estimated hours each owner worked on farm in 2013 | 2,105 | 2,360 | 2,040 | 2,200 | 450 | 1,200 |
|  | 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.
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
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.

Table 6
Financial Ratios for FY2013, Farms Aggregated by Fruit and Vegetable Acres (cont. on next page)


Financial Ratios for FY2013, Farms Aggregated by Fruit and Vegetable Acres

| 11 farms were categorized based on their acreage planted to fruits and vegetables. The two categories are <1-4 acres ( $n=6$ ) and 6-18 acres ( $n=5$ ). From these categories, the average, median, and range for farm responses is reported below. |  | Average |  | Median |  | Range |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | <1-4 ac | 6-18 ac | <1-4 ac | 6-18 ac | <1-4 ac | 6-18 ac |
|  | Acres in vegetable production | 2 | 11 | 2 | 8 | 3 | 13 |
|  | Total acres earning income | 21 | 43 | 4 | 60 | 99 | 68 |
|  | Number years farming as a business | 7 | 10 | 9 | 6 | 7 | 15 |
|  | Goal percent of household income from farming | 72 | 95 | 90 | 100 | 100 | 25 |
|  | Current percent of household income from farming | 37 | 85 | 21 | 100 | 100 | 60 |
|  | Estimated hours each owner worked on farm in 2013 | 2,105 | 2,360 | 2,040 | 2,200 | 450 | 1,200 |
|  | Estimated farmer compensation (higher of net income or owners draw (\$) | 15,024 | 6,800 | 15,559 | 5,000 | 34,033 | 24,000 |
|  | Earnings/hours 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 $\$ 6 / \mathrm{hr}$ was used in this calculation unless the reported return to the farmer was $>\$ 6 / \mathrm{hr}$. The $\$ 6 / \mathrm{hr}$ 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 Aggregated by Total Assets (cont. on next page)

| 11 farms were categorized based on their total assets (\$0-40k, \$100$250 \mathrm{k}, \$ 400 \mathrm{k}+$ ). Average values for each data item are reported by category. |  |  | \$0-40k Average | $\begin{aligned} & \text { \$100-250k } \\ & \text { Average } \end{aligned}$ | \$400k+ <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Profit (loss) on livestock for resale |  | 0 | 1,662 | (180) |
|  | Sales of livestock, produce, grains, and other products |  | 52,781 | 83,729 | 160,095 |
|  | Category of Sales - Produce | Early Season CSA | 0 | 0 | 9,112 |
|  |  | Summer CSA | 25,750 | 25,233 | 63,492 |
|  |  | Late CSA | 6,935 | 3,464 | 5,010 |
|  |  | Winter CSA | 0 | 1,008 | 7,852 |
|  |  | Farmers Market | 8,367 | 19,604 | 11,817 |
|  |  | Wholesale Produce | 5,983 | 23,438 | 41,583 |
|  |  | Other | 5,746 | 915 | 6,906 |
|  | Category of Sales - Other than Produce | CSA | 0 | 1,009 | 0 |
|  |  | Farmers Market | 0 | 3,930 | 9,060 |
|  |  | 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 |

Balance Sheet for FY2013, Farms Aggregated by Total Assets

| 11 farms were categorized based on their total assets ( $\$ 0-40 \mathrm{k}, \$ 100-250 \mathrm{k}, \$ 400 \mathrm{k}+$ ). Average values for each data item are reported by category. |  | $\$ 0-40 k$ <br> 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 |
|  | Insurance (other than health) | 657 | 2,067 | 6,737 |
|  | Mortgage interest | 0 | 485 | 10,831 |
|  | Other interest | 4,800 | 1,398 | 130 |
|  | Labor hired | 9,318 | 20,020 | 44,206 |
|  | 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 Farm Profit (Loss) (\$) |  | 10,137 | 15,787 | 7,717 |
|  | Acres in vegetable production | 3 | 7 | 9 |
|  | Total acres earning income | 5 | 19 | 78 |
|  | Number years farming as a business | 4 | 9 | 12 |
|  | Goal percent of household income from farming | 100 | 81 | 67 |
|  | Current percent of household income from farming | 62 | 53 | 67 |
|  | Estimated hours each owner worked on farm in 2013 | 2,207 | 2,058 | 2,507 |
|  | 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 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, Farms Aggregated by Total Assets

| 11 farms were categorized based on their total assets ( $\$ 0-40 k, \$ 100-250 k, \$ 400 k+$ ). Average values for each data item are reported by category. |  | \$0-40k <br> Average | \$100-250k Average | \$400k+ Average | Benchmark Values |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Kohl(Blonde modified2009) |  |  | Ag Decision Maker 2014 |  |
| Gross income (\$) |  |  | 54,336 | 96,997 | 166,236 | strong | stable | weak | High third | Low third |
| Total 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 | $\begin{array}{\|c\|} \hline 0.30- \\ 0.70 \\ \hline \end{array}$ | > 0.70 | 0.28 | 0.22 |
|  | Rate of Return (RoR) on Farm Assets | 0.52 | 0.09 | 0.03 | > 0.05 | $\begin{gathered} 0.01- \\ 0.05 \end{gathered}$ | < 0.01 | 0.158 | 0.029 |
|  | RoR on Farm Assets (with forced return to owner)** | -0.13 | -0.05 | -0.02 | > 0.05 | $\begin{gathered} \hline 0.01- \\ 0.05 \\ \hline \end{gathered}$ | < 0.01 | 0.158 | 0.029 |
|  | Operating profit margin | 0.22 | 0.20 | 0.16 | > 0.25 | $\begin{gathered} \hline 0.10- \\ 0.25 \end{gathered}$ | < 0.10 | 0.37 | 0.13 |
|  | Oper. Profit margin (with forced return to owner) ** | -0.20 | -0.07 | -0.06 | > 0.25 | $\begin{gathered} \hline 0.10- \\ 0.25 \end{gathered}$ | < 0.10 | 0.37 | 0.13 |
|  | Asset turnover ratio | 2.05 | 0.55 | 0.33 | varies |  |  | 0.45 | 0.28 |
|  | Operating expense ratio | 0.65 | 0.65 | 0.75 | < 0.65 | $\begin{gathered} \hline 0.65- \\ 0.80 \\ \hline \end{gathered}$ | > 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 | $\begin{gathered} 0.12- \\ 0.20 \end{gathered}$ | > 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 |  |  |  |  |  |
|  | Number years farming as a business | 4 | 9 | 12 |  |  |  |  |  |
|  | Goal percent of household income from farming | 100 | 81 | 67 |  |  |  |  |  |
|  | Current percent of household income from farming | 62 | 53 | 67 |  |  |  |  |  |
|  | Estimated hours each owner worked on farm in 2013 | 2,207 | 2,058 | 2,507 |  |  |  |  |  |
|  | 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 $\$ 6 / \mathrm{hr}$ was used in this calculation unless the reported return to the farmer was $>\$ 6 / \mathrm{hr}$. The $\$ 6 / \mathrm{hr}$ 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.
- Depreciation 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.

Appendix 1
SCHEDULE F
(Form 1040)
Adjusted for PFI Whole
Farm Project

Name of proprietor



| Please itemize (item, depreciated value) depreciation and section 179 expenses from (14) here or attach as separate document. |
| :--- | :--- |
|  |



## Part B: Balance Sheet

Total Assets . . . . . . . . $\square$

Liabilities $\square$
$\square$

Total Liabilities + Equity . . .

## Part C: Additional Questions

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

Oyes
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.


[^0]:    ** Return to farmer = highest of: $\$ 6 /$ hr worked, owners draw, net income, or wages paid to farmer

