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ORGANIC FACT PACK

PREPARED BY

FLANAGAN STATE BANK AG DEPT

Data Research by Richard Ritter
Formatting by Logan Weber

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Richard Ritter (309) 747-3600
DJ Wyss (815) 796-2264
Sarah Hoerner (309) 962-4707
Logan Weber (309) 394-2785

Reasons to Consider Organic Farming

By: Rich Ritter

- Healthier soils, better balanced and more microorganisms working in soil
- More earthworms to convert nutrients and regenerate new soil
- More organic matter in soil means increased water holding capacity and less crop risk for the owner and the tenant
- Better water quality with less chemical and fertilizer run off
- Utilization of better conservation farming practices
- With diverse crop rotations less weed and bug pressure and resistance
- More net return per acre annually versus conventional crops (See pg. 5 & 6)
- Growing consumer and world acceptance of organic products which means continued growth and potential in the future…this is not just a 'fad'
- Improving organic crop yields were 50% of conventional yields, but it is up around 70% of the conventional yields [2]
- More local buyers of organic crop production available to buy your crops
- New technology, practices, and seed genetics available to help make organic production practical and profitable
- Many of the top organic farmers are not known because their weed control and yields are very similar to their conventional neighbors. The difference is in their soils, values of their farms, and their net income per acre
- Less health risk for the tenant farmer and his/her family working with dangerous farm chemicals
- More opportunities for family farms with enterprises and diversification by more family members
- Higher crop insurance guarantees compared to conventional farmers. This helps insure greater farm profits for organic producers and, in turn, less risk for their lenders.

Sources:

1) https://www.fibl.org/en/homepage.html
https://www.ers.usda.gov/amber-waves/2017/januaryfebruary/growing-organic-demand-provides-high-value-opportunities-for-many-types-of-producers/
2) "On the Road with an Old Ag Lender" by Rich Ritter

FIBL World Net Yearbook [1]

Top Ten Countries with the Largest Acres of Organic Ag Land in 2017

1. Australia
2. Argentina
3. China
4. Spain
5. United States
6. Italy
7. Uruguay
8. India
9. France
10. Germany

Top Ten Countries with the Highest Food per Capita Consumption in 2017

1. United States
2. Germany
3. France
4. China
5. Italy
6. Canada
7. Switzerland
8. Sweden
9. United Kingdom
10. Spain

Top Ten Countries with the Largest Number of Organic Producers in 2017

1. India
2. Uganda
3. Mexico
4. Ethiopia
5. Philippines
6. Tanzania
7. Peru
8. Turkey
9. Italy
10. Paraguay

Country Rank for Retail Sales Share of Food Worldwide in 2017

1. United States
2. Germany
3. France
4. China
5. Canada
6. Sweden
7. Italy
8. Switzerland

General Worldwide Organic Facts [1]

- 181 – Countries with organic farming in 2017
- 2.9 Million – Total organic farmers in 2017
- 172,970,000 – Worldwide acers of organic production in 2017
- 103 Billion – Organic worldwide market in US Dollars in 2017
- 1.4% – organic acres in production in 2017
- Australia and China – Most acres increased in 2017
- 11.7% – Increase of organic land in production in 2017

Sources:

1) https://www.fibl.org/en/homepage.html

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FBFM 2018 Advanced Report Farm Income and Production Costs[1]

Cost to Grow Soybeans in Illinois

Years	Yield	Total Cost/A	Total Cost/Bu	Average Annual Price	Cash Difference
2018	68 bu	$645.00	$9.45	$8.71	-$0.78
2014-2018	64 bu	$649.00	$10.19	$9.50	-$0.69
2009-2018	58 bu	611	10.53	10.97	0.44

These numbers do not add in $2.21 to Soybeans for: Net Family Living, Income Tax, and Term Principal Payments

Cost to Grow Corn in Illinois

Years	Yield	Total Cost/A	Total Cost/Bu	Average Annual Price	Cash Difference
2018	219 bu	$863.00	$3.94	$3.52	-$0.42
2014-2018	211 bu	$883.00	$4.19	$3.55	-$0.64
2009-2018	188 bu	$845.00	$4.62	$4.42	-$0.21

These numbers do not add in $0.71 to Corn for: Net Family Living, Income Tax, and Term Principal Payments

2409 Illinois Crop Producers	**1186 Average Tillable Acres**

	Total	Per Acre
Net Farm Income	$137,704.00	$116.00
Net Non Farm Income	$44,727.00	$37.71
Family Living	$74,318.00	$62.66
Income and Social Security Tax	$19,523.00	$16.46
Interest Paid	$33,468.00	$28.22
Capital Purchases	$121,790.00	$104.27

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Sources:

1) FBFM Advanced Report Farm Income & Production for 2018 (PDF)

USDA NASS 2016 Producer Survey Summary [1]

	United States	Illinois	Indiana	Iowa	Missouri	Wisconsin
Certified Organic Farms	13,560	205	420	732	302	1,276
Cropland Acres Per Farm	200	191	103	141	136	172
Cropland Acres	2,714,498	35,441	43,219	103,136	41,078	219,266
Organic Land Owned	2,322,418	15,537	29,913	65,297	29,920	142,580
Percentage	45%	39%	68%	45%	72%	64%
Land Rent From Others	2,748,105	23,903	13,572	40,098	11,366	78,907
Percentage	54%	60%	31%	37%	27%	35%
Land Rented to Others	51,027	287	266	2,259	208	2,221
Percentage	1%	1%	1%	2%	1%	1%

Crops in Production by Acres	Total Acres United States	Illinois	Indiana	Iowa	Missouri	Wisconsin
Barley	51,254	69	261	785	203	902
Percentage	2%	0.20%	0.60%	0.76%	0.49%	0.41%
Corn	213,934	9,072	6,463	29,684	5,373	27,855
Percentage	8%	26%	15%	29%	13%	12.7%
Hay	490,187	3,303	8,820	11,377	3,011	45,025
Percentage	18%	9%	20%	11%	4.9%	21%
Wheat	336,550	3,592	904	2,626	3,246	3,810
Percentage	12%	10%	2%	2.5%	7.9%	1.7%
Oats	50,732	1,919	147	8,673	620	6,410
Percentage	2%	5%	0.34%	8%	1.5%	2.9%
Soybeans	124,591	10,787	2,403	20,547	9,698	7,102
Percentage	4.6%	30%	5.6%	20%	24%	3.2%

	United States	Illinois	Indiana	Iowa	Missouri	Wisconsin
Acres in 2015	4,361,849	36,952	34,858	93,707	31,681	209,615
Acres in 2016	5,019,496	39,153	43,219	103,136	41,078	219,266
Percent Change	15%	6%	24%	10%	30%	4.6%

U.S. Farms and Ranches in 2016 sold 7.6 Billion in certified organic commodities. This was up 23% from 2015. In 2016 certified organic farmers increased 11% and certified acres increased by 15%

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Sources:

1) https://downloads.usda.library.cornell.edu/usda-esmis/files/zg64tk92g/70795b52w/4m90dz33q/OrganicProduction-09-20-2017_correction.pdf

FINBIN Conventional Crop Production Data - 5 Year Averages - 2014-2018 [1]

INCOME (per acre)

	Corn	Soybeans
Yield	181.64	47.18
Price	$3.40	$9.10
Crop Income	$617.58	$429.34
Other Income	$45.86	$34.60
Total Income	$663.44	$463.94

EXPENSE (per acre)

Expense:	Corn	Soybeans
Seed	$108.83	$60.34
Fertilizer	$125.27	$20.84
Chemicals	$34.01	$36.27
Insurance	$29.58	$24.05
Drying	$13.86	$0.00
Storage	$1.76	$0.53
Fuel	$24.73	$15.33
Repairs	$40.94	$24.84
Custom Hire	$10.76	$7.13
Hired Labor	$16.25	$10.39
Land Rent	$132.63	$110.70
Leases	$8.85	$5.85
Utilities	$6.46	$4.17
Trucking	$1.56	$0.59
Marketing	$1.46	$0.89
Interest	$32.69	$20.79
Miscellaneous	$9.46	$6.36
R/E Tax	$8.21	$6.03
Dues	$3.70	$2.48
Depreciation	$54.64	$33.86
Management	$47.92	$30.25
Total Expenses	$713.57	$421.69
Cost per Bushel	$3.93	$8.94
Net Return Per Acre:	-$50.13	$42.25
Est Labor Hours Per Acre:	2.65 Hours	1.61 Hours

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Sources:

1) https://finbin.umn.edu/

FINBIN Organic Crop Production Data - 5 Year Averages - 2014-2018[1]

INCOME (per acre)

	Corn	Soybeans	Hay	Barley	Wheat	Oats
Yield	122	31.25	3.99	50.88	44.23	57.13
Price	$9.38	$21.16	$159.80	$7.56	$9.11	$6.03
Crop Income	$1,144.36	$661.25	$637.60	$384.65	$402.94	$344.49
Other Income	$76.25	$49.86	$14.08	$45.47	$74.72	$31.06
Total Income	$1,220.61	$711.11	$651.68	$430.12	$477.66	$375.55

EXPENSES (per acre)

EXPENSE	Corn	Soybeans	Hay	Barley	Wheat	Oats
Seed	$93.81	$52.70	$10.33	$29.59	$75.41	$33.07
Fertilizer	$121.07	$34.36	$43.05	$46.68	$44.10	$13.06
Weed Control	$9.08	$8.00	$0.34	$0.21	$0.00	$1.26
Cover Crop	$0.91	$0.60	$0.00	$2.39	$0.00	$0.78
Insurance	$34.76	$29.73	$11.06	$15.88	$9.34	$12.66
Drying	$13.20	$0.15	$0.00	$0.52	$0.00	$0.00
Storage	$0.38	$0.00	$1.92	$0.00	$0.00	$0.31
Supplies	$0.70	$0.42	$3.52	$0.88	$0.00	$0.00
Fuel	$35.59	$25.06	$32.22	$21.59	$20.26	$18.19
Repairs	$69.26	$47.02	$65.37	$42.96	$31.51	$37.80
Custom	$23.26	$15.55	$30.31	$23.93	$20.05	$16.77
Labor	$32.52	$93.55	$36.79	$29.17	$17.34	$16.28
Rent	$113.99	$117.00	$90.44	$66.51	$89.80	$81.92
Lease	$10.70	$6.18	$7.12	$5.65	$0.00	$4.86
Utilities	$8.64	$6.96	$6.54	$5.49	$2.98	$5.99
Trucking	$2.58	$2.50	$0.00	$1.76	$2.22	$0.29
Certification	$3.76	$3.53	$1.81	$2.51	$0.25	$3.16
Interest	$40.67	$27.57	$28.78	$21.98	$28.75	$30.36
Miscellaneous	$21.21	$14.84	$23.33	$5.21	$33.91	$9.12
R/E Tax	$9.09	$9.13	$5.16	$3.49	$1.76	$9.15
Dues	$7.61	$4.65	$5.32	$4.42	$1.90	$2.42
Depreciation	$57.42	$45.51	$56.42	$32.61	$43.79	$34.26
Management	$58.92	$45.08	$47.16	$32.21	$35.67	$33.54
Marketing	$0.00	$0.44	$0.00	$0.00	$0.00	$0.00
Total Expenses	$769.13	$590.53	$506.99	$395.64	$459.04	$365.25
Cost per Bushel	$6.30	$18.90	$127.07	$7.78	$10.38	$6.39
Net Return Per Acre	$451.48	$120.58	$144.69	$34.48	$18.62	$10.30
Est Labor Hours Per Acre	5.03 Hours	4.68 Hours	4.74 Hours	2.53 Hours	3.33 Hours	2.48 Hours

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Sources:

1) https://finbin.umn.edu/

Organic Vs. Conventional Comparison

FINBIN Organic Crop Production Rotation - 5 Year Averages - 2014-2018[1]

Crop	Wheat	Hay	Corn	Soybeans	AVERAGE
Net Return Per Acre	$18.62	$144.69	$451.52	$120.58	**$183.85**
Est Labor Hours Per Acre	3.33 Hours	4.74 Hours	5.03 Hours	4.65 Hours	**4.44 Hours**
Cost Per Bushel	$10.38	$127.07	$6.30	$18.90	
Average Sale Price	$9.11	$159.80	$9.38	$21.16	
				Total Net Return:	**$735.41**

FINBIN Conventional Crop Production Rotation - 5 Year Averages - 2014-2018

Crop	Corn	Soybeans	Corn	Soybeans	AVERAGE
Net Return Per Acre	-$50.13	$42.19	-$50.13	$42.19	**-$16.06**
Est Labor Hours Per Acre	2.65 Hours	1.61 Hours	2.65 Hours	1.61 Hours	**2.13 Hours**
Cost Per Bushel	$3.93	$8.94	$3.93	$8.94	
Average Sale Price	$3.40	$9.10	$3.40	$9.10	
				Total Net Return:	**-$64.24**

Annual Difference	**$199.91**

Four Year Difference During Transition	**$799.65**

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Sources:

1) https://finbin.umn.edu/

FINBIN Conventional/Organic Crop Production Data - 5 Year Averages - 2014-2018

Conventional Rotation

Crop	Year 1: Corn	Year 2: Soybeans
Income	$663.44	$463.94
Expenses	$713.57	$421.75
Net Return Per Acre	-$50.13	$42.19
Labor Cost Per Acre	2.65 Hours	1.61 Hours
	Conventional 2-Year Return	**-$7.94**

Organic Transitional Rotation

Crop	Year 1: Wheat	Year 2: Hay	Year 3: Corn	Year 4: Soybeans
Income	$261.00	$538.22	$460.66	$318.97
Expenses	$459.04	$506.99	$769.13	$590.53
Net Return Per Acre	-$198.04	$31.23	-$308.47	-$271.56
Labor Cost Per Acre	3.33 Hours	4.74 Hours	5.03 Hours	4.68 Hours
	Organic Transition 2-Year Return (wheat then hay):			**-$166.81**

Conventional 2-Year Return	**-$7.94**
Organic Transition 2-Year Return:	**-$166.81**
Estimated Cost Difference for Transition Years Per Acre:	**-$158.87**

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Sources:

1) https://finbin.umn.edu/

Reasons to Consider an FSA Guaranteed Loan

- The Farm Service Agency offers a 90% loan guarantee of up to $1,750,000 maximum, and this, in turn, allows you to work with your local lender easier.
- The FSA Loan Program allows your local lender to:
    - Work with farm operations that have more risk than others
    - Work with farm operations that are unique and different than the bank/lender are comfortable or experienced with
    - In turn, this puts a lot less risk on the local lender
- Guaranteed portion of FSA Loans do not apply toward the local lenders' bank lending limits. This allows the lender to offer higher credit limits than traditional loans
- Unlike the traditional terms of conventional loans, guaranteed loans provide farmers a more flexible repayment schedule, lower interest rates, lower collateral requirements, and competitive fixed, longer loan rates though the secondary market
- Guaranteed loans provide another source of experience, knowledge, and support staff to assist and compliment your local lender
- These loans take some of the emotions and uncertainties from the lender/farmer relationship during tougher times
- FSA allows the local lender to continue financing the operation as long as you have a positive, but the FSA holds the most to lose at 90% of the loan, so, they have the final say in this relationship
- FSA loan officers can sometimes be an objective third party that helps both the lender and farmer work together even in the most stressful situations
- Often an FSA guaranteed loan is both easier, and funds are more readily available than just a direct FSA loans through your local FSA offices.

Sources:

1) https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/

Beginner's Guide to Organic Farming

By Rich Ritter

- Organic farming is a long-term commitment and, basically, a way of life. It is **NOT** a quick or temporary fix for conventional farmers until their cash flow improves
- Organic farming is **different** from conventional farming by:
    - Crop rotations
    - Diversification
    - Farming practices
    - Labor needs
    - Timing of work
    - Twelve-month farming of the soils
    - Marketing and Management
    - Weed control
    - Fertilization of the crops
- Conventional farmers plant primarily corn and soybeans and rotate them annually
- Organic farmers, on the other hand, could have 4-6 primary crops in the rotation alongside cover crops, and livestock. These additional crops and livestock in the operation help make the organic system work, diversify and add value to the operation, and complete the cycle of life
- These are the ways Organic and Conventional farmers/farming operations are different
- Success for organic farming is measured by organic matter, earthworms, balanced soils, water holding capacity, nutrients and fertilizer available, microorganisms in the soil, weed control, feeding in the soil, and the productivity and overall health of the soil
- The Mission Statement
    - Do you have a mission statement?
        - A mission statement forces you to summarize the purpose and goals of your operation. This helps to answer the basic questions: Who, What, When, Where, Why, and How
    - Why do you want to be an organic farmer, and what is your benefit?
    - Why should a consumer want to buy your products?
    - It also helps you determine if this is an emotional or a business decision for you and your operation
    - If you have a realistic, detailed, and focused mission statement you are one step closer to finishing your business plan and this shows you are a serious about this future venture
- Suggested Successful formula for Organic Farming
    - 40% financial management skills
    - 40% production management skills
    - 20% communication skills
- Organic Farming is sometimes seen as a “non-profit” business, but this is **not** the case. Organic farmers need to have a profitable operation to survive, continue, and grow in the future.
- An organic farmer must have accurate and timely farm records and use them to both manage, and adjust your operation
    - Do you know what it costs to produce your products?
    - What are your biggest expenses that you can control?
    - Is your operation positively cash flowing?
    - Do you have measurable, attainable goals that you can work towards each year?
    - Do you review your cash flow quarterly with advisors, lenders, and suppliers to determine ways to be more efficient, productive, and profitable?

THE BOTTOM LINE IS IMPORTANT

- Each organic farmer should have:
    - Transitional crop rotation plan
    - Organic crop rotation plan, once certified
    - Weed control plan
    - Soil improvement plan
- Transition Plan
    - Number or acres
    - Crops in transition rotation should all be based on your financial position and your ability to pay bills out of cash
    - **EXPECT** to have cash shortages on all transitional acres until it is certified
        - This could vary from $-147 to $-203 per acre based on FINBIN data for the past years on corn, soybeans, wheat, oats and hay (see previous charts in packet).
- **START SMALL**
    - Learn and experience organic farming, become profitable, and grow the operation SLOWLY. Some producers considering organic farming should possibly start with Non-GMO before transitioning to help them adjust. Things that need take time to adjust to are:
        - Living with more guidelines and monitoring
        - Marketing a value-added product
        - Learning to change farming practices and ways
    - Other farms have started by converting small tracts of CRP ground directly into organic production
- Common practices of organic producers
    - Convert small acreage annually
    - Primarily use small grain crops, such as, hay, wheat, and oats along with cover crops
    - Avoid row crops, such as corn and soybeans, during the first two years of production due to weed pressure
- Find and hire an experienced and knowledgeable organic mentor to advise you, help prepare a cash flow, let you know how to avoid mistakes they made, help market crops, weed control practices, help you convert your soils from conventional to organic, and overall BE PROFITABLE
- Start setting up emergency funds in savings accounts now for the transition period. There will most likely be shortages and this will help cover delays on payments until the crops can be sold on the specialty market.
- Finance your operation with an AGRICULTURAL lender that understands farming and organic production and one that cares about you and your operations future.
    - COMMUNICATE with your lender
    - Be responsible
    - Adjust the cash flow as needed
- Crop insurance guarantees can be used as collateral values for lenders. If crops are sold before July 1st above the spring price, then this becomes your insured price, as long as, it does not exceed max price of 150% of the spring price shown. This could significantly increase your crop insurance guarantees and needs to be considered each year. We HIGHLY RECOMMEND crop insurance guarantee.
    - Insurance Selection Process from a Lender [1]
        - RP 85% with contract sales
        - RP 85% with set price
        - Whole Farm
- **DO NOT** finance the operation with credit cards, family loans, personal loans, or additional home mortgages
- An organic producer must have family, landowner, and lender support. Communicate, inform, and educate them so ALL 3 understand and are comfortable with operations plans. Bring them with you to organic field days, meetings, and updates. Keep them all interest and excited about the operation.

- Have a marketing plan
    - Know your breakeven price for each product
    - Have grain storage for all organic crops
    - Try to have cash available to cover the delay in payments form the grain sales
- Well drained soils will help organic producers in both weed control and improved yields
- Check with your local USDA NRCS office about programs available for:
    - Cover crops
    - Transitional support
    - EQIP funds to support improved conservation practices
    - Other special programs to assist the organic farmer
- Organic farming income varies greatly from transition years to when you become certified organic. The crop rotation can play a big roll in the income also. This makes it extremely important that the organic farmer that their farms lease adjusts to the income per year. A Flex Lease is recommended such as:
    - $250 base fixed cash rent (minimum)
    - 33% Bonus to landowners over $400 income per acre on small grains. (Range $250-$354)
        - This is an example only for illustration purposes. You need to customize your farm leases, if possible, to your crops, income, and your operation.
        - This lease would allow you to pay the $250 cash rent minimum during the first two years of transition.
- FSA Direct or Guaranteed Financing [2]
    - Guaranteed funding
        - Max Financing Amount $1,750,000
        - 90% Guaranteed Loan
        - Work with local lenders to reduce the banks risk
        - Lenders are more inclined to work with more risky operations
        - More flexible repayment, lower interest rates, lower collateral requirements
    - Direct Loans
        - Operating, Farm Ownerships (FO), FO Participation
        - Max Financing – $600,000
        - Lowest interest rates and most favorable repayment terms
        - More experience and support with organic production
    - Beginning Farmer Direct Loans
        - Max Financing – $300,000
    - FSA Micro Loans
        - Direct – Max Financing $50,000
        - FO – Max Financing $50,000
- Organic Farming is growing and becoming more common, so, it may be in your best interest to run a classified ad or post that you are an organic farmer seeking more ground to rent and/or farm from a landowner that would like to try organic production.
- As an organic farmer, you must be thankful for what you have, enjoy what you are doing, and look forward to the future of not only your operation, but organic farming as a whole.

Sources:

1) https://www.rma.usda.gov/en/fact-sheets/national-fact-sheets/contract-price-addendum
2) https://www.fsa.usda.gov/programs-and-services/farm-loan-programs/

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Richard Ritter
(309) 747-3600
richardritter@flanaganstatebank.com

David Wyss, Jr.
(815) 796-2264
djwyss@flanaganstatebank.com

Sarah Hoerner
(309) 962-4707
sarahhoerner@flanaganstatebank.com

Logan Weber
(309) 394-2785
loganweber@flanaganstatebank.com

www.flanaganstatebank.com/ag

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