

Are you Making Money?

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Record Keeping Software

- Production
 - COG PRO : Organic certification, production, GAPS
 - AgRenaissance: Production
 - AgSquared: Production
 - Crop Planning: Production
- Financial
 - Veggie Compass: Financial
- CSA Management
 - CSA Member Assembler: CSA management
 - FARMIGO: CSA Management

www.carolinafarmstewards.org/record-keeping-software-and-templates/

Successful Record Keeping Tips

- Write down what you do every day.
 - Field note book, field activity sheets, dry erase board, calendar.
 - Field prep, planting, cultivating, irrigating, harvesting, cleaning
- Develop recordkeeping sheets.
 - Harvest notebook for each market, greenhouse seeding log, calendar.
- Compile daily notes and sheets into a master file.
- Save all invoice, product labels, seed packets.
- If certified organic you must maintain records for the production, harvest, and handling of all products intended to be sold as certified organic.

What is an Enterprise Budget

- An enterprise budget is a listing of estimated production, income, expenses, and profit for a single crop per acre.
 - Variable Costs: costs that a farmer incurs because he/she decided to grow this specific crop.
 - Fixed Costs: costs that a farmer incurs whether or not a crop is grown.
- It is NOT a whole farm budget, which estimates total farm production, income, expenses and profit.



Overview of the Project

- Identified 10 crops to create enterprise budgets for based on results from CFSA's Organic Produce Market Survey.

- Broccoli
- Sweet Potatoes
- Watermelon
- Greens
- Cucumber
- Irish Potatoes
- Peppers
- Tomatoes
- Lettuce
- Summer Squash



Organic Produce Market Survey

- In 2011, CFSA conducted an Organic Produce Marketing Survey.
- Conducted market research to determine the demand for organic produce that could be met by local producers.
 - 500 retail grocery stores, 150 wholesale distributors, 3 value-added food processors
- Compared that demand with data from the USDA's 2011 Certified Organic Production Survey.



The Gap Between Supply and Demand for Organic Fruits and Vegetables in the Carolinas

ITEM	GAP (LBS)	VALUE OF GAP
Broccoli	1,329,683	\$2,089,500
Tomatoes	1,147,362	\$1,577,620
Irish Potatoes	954,581	\$801,850
Leaf Lettuce	630,144	\$712,062
Spinach	546,978	\$531,972
Cabbage	835,095	\$437,000
Summer Squash	382,165	\$382,165
Strawberries	148,329	\$296,660
Sweet Corn	326,662	\$171,500
Cucumbers	127,650	\$153,180
Bell Peppers	89,813	\$107,775
Watermelon	229,460	\$54,180

TOTAL VALUE OF GAP : \$7.3 MILLION DOLLARS

Overview of the Project

- Contracted with Randy James, PhD. , Professor Emeritus, The Ohio State University and Kathy Folsom, Ed. Specialist Reading, South Carolina Dept. of Ed., Retired
- Budgets were developed based on one acre of production on a ten acre farm.
- Conducted a preliminary review of existing data.
- Developed and used various survey instruments.
- Developed drafts of the budgets.
- Sent drafts out for farmer review.
- Developed final budgets based on farmer feedback.



How to Use *these* Enterprise Budgets

- Provide a BASELINE of production costs.
- Enable you to create a budget specific to your operation.
- Use that information to:
 - determine which crops are most profitable for you.
 - determine if your costs are in line with those listed in the budgets.
- For New Growers
 - What are the start up costs?
 - What are the necessary inputs?
- Organic Growers
 - Increase / decrease production for profitable/less profitable crops?
 - Reduce production costs?
- For Conventional Growers
 - Compare conventional production with organic production.
 - Can organic be more profitable for you?



Organic Broccoli

Irrigated – Wholesale Market – 20 lb Case

Budget Based on 1 acre of broccoli on a 10 acre mixed organic vegetable farm.

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL \$/AC</u>	<u>YOUR FARM</u>
RECEIPTS					
1. Broccoli	Case	300	\$31	\$9,800	_____

Yield extrapolated from Mississippi State University Budgets 2013.

Price taken from Carolina Farm Stewardship Assoc. (CFSA) Organic Produce Marketing Survey, 2013. Price/unit from USDA Agricultural Marketing Services, 2013.

Variable Costs

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL\$/AC</u>	<u>YOUR FARM</u>
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3. Organic Cert.	Acre	1	\$80	\$80	_____
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Average organic certification cost from NC Dept. of Agriculture, Organic Cost Share Program, 2012.

4. Seedlings	Thous.	18	\$45	\$820	_____
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Extrapolated from organic seedling prices found in Internet search, and Mississippi State University enterprise budgets.

5. Compost	Ton	1	\$40	\$40	_____
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Average price of 1 ton of compost, chicken litter, or manure found in Internet search.

Variable Costs

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL\$/AC</u>	<u>YOUR FARM</u>
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6. Cover Crop	Acre	1	\$80	\$80	_____
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Average of various cover crop seed and planting cost. Estimated from farmer interviews, and Mississippi State University enterprise budgets, 2013.

7. Lime (prorated)	Ton	0.33	\$40	\$13	_____
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Equals 1 ton of lime per acre every 3 years. Price from Internet search.

8. Organic Pest Sprays	Oz.	296	\$0.70	\$207	_____
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Application rates and weighted average price for Dipel DF, PyGanic, and Trilogy, taken from Carolina Farm Stewardship 2013 pest control worksheets.

Organic Pesticides - Broccoli

Pests¹	Pesticides²	Application Rate³	Appx. Times/Crop
Lepidoptera, sp.	Dipel DF	0.5 #/ acre	3
Flea Beetles	PyGanic	16-64 ounces / acre	2
Aphids	Trilogy (Neem)	96 ounces/acre (1.5%)	2

¹ *Top Eight Reported Insect Pests on Carolina Organic Produce Farms.* NCSU Coop. Ext. Serv. AG 295. David L. Stephan. Ed. by K.A. Sorenson and J.R. Baker.

² Pesticides chosen from results from CFSA's Organic Inputs Survey, 2013.

³ Application rates and frequency determined from product labels.

Variable Costs

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL\$/AC</u>	<u>YOUR FARM</u>
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9. Fuel	Gal.	20	\$4.00	\$80	_____
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Mississippi State University, Traditional Vegetables 2013 Planning Budgets.

10. Box and Cool	Each	300	\$2	\$800	_____
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Cost estimated from Internet search of various suppliers.

11. Labor	Hrs.	170	\$10	\$1700	_____
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Labor estimates vary widely. This estimate is extrapolated from enterprise budget developed by Mississippi State University 2013.

Variable Costs

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL\$/AC</u>	<u>YOUR FARM</u>
12. Irrigation Supplies	Acre	1	\$1070	\$1070	_____

Irrigation supplies include 1.5 rolls of drip tape and 6 acre inches of rural water cost. Derived from the Mississippi State University 2013 enterprise budgets.

13. Plastic Mulch	Acre	1	\$200	\$200	_____
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Cost estimated from Internet search of various suppliers.

14. Other					_____
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Purposely left blank for other unspecified costs.

Fixed Costs

	<u>UNIT</u>	<u>QUANTITY</u>	<u>\$/UNIT</u>	<u>TOTAL\$/AC</u>	<u>YOUR FARM</u>
16. Machine and Equipment	Acre	1	\$240	\$240	_____
<i>See table on next slide.</i>					
17. Irrigation	Acre	1	\$80	\$80	_____
<i>Annual fixed cost for irrigation setup.</i>					
18. Land Charge	Acre	1	\$50	\$50	_____

Average of farm rental values for North and South Carolina. Estimated from the USDA national Agricultural Statistics Services 2010 published cropland rents.

Machinery and Equipment Costs*

Item	Purchase Price	Salvage Value	Useful Life (Yrs.)	Acres Used (Per Yr.)	Repair & Maint. (\$/Ac.)	Total (\$/Ac.)**
Tractor	\$17,000	\$4,000	20	10	\$3	\$68
Chisel Plow	\$2,500	\$600	15	10	\$0.30	\$13
Transplanter	\$2,600	\$600	20	4	\$0.20	\$25
Pest. Sprayer	\$9,400	\$1,900	20	10	\$9.50	\$47
Trailer	\$1,100	\$200	20	10	\$0.10	\$5
Disk	\$4,450	\$900	15	10	\$0.20	\$24
Manure Spreader	\$3,000	\$1,500	20	10	\$0.20	\$8
Bed Shaper	\$2,500	\$600	20	5	\$1.50	\$21
200 Buckets	\$1,000	0	5	7	0	\$29
TOTAL \$/acre						\$240

*Estimates derived from Mississippi State University, Traditional Vegetables 2013 Planning Budgets; Why Cows Need Names, and More Secrets of Amish Farms, Randy James, Kent State University Press, 2013 and Internet searches of various machinery suppliers.

**Total \$/Ac. = Purchase Price – Salvage Value/Useful Life/ Acres Used + Repair & Maintenance.

Budget Totals

	COST (\$/ACRE)
TOTAL VARIABLE COSTS	\$4,880
TOTAL FIXED COSTS	\$370
TOTAL COSTS	\$5,250
RECEIPTS	\$9,300
RETURN	\$4,050

CFSA's Enterprise Budgets

- Budgets are in two formats:
 - Microsoft Word: Baseline Budgets: provide a general overview of the costs (variable and fixed) and returns for growing an acre of that crop on a 10 acre farm.
 - Microsoft Excel: Interactive Budgets: enable users to calculate their own projected costs and returns.

<http://www.carolinafarmstewards.org/enterprise-budgets/>