



**COOPERATIVE EXTENSION**  
*College of Agriculture, Forestry and Life Sciences*

# EBITDA IMPROVEMENT PLAN

## 2023 EXECUTIVE FARM MANAGEMENT

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**FINANCIAL & MARKETING:**

*"Life is fairly simple, complicating it is the problem."* Margaret Mara

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2023 Crop Plan and Cash Flow Requirements				
Farm Name:	Brown Family Farms - Oper			
County:	Coastal			
State:	Carolina			
Crop Year:	2023			
<b>BREAKEVEN EBITDA Requirements (EBITDA-Earnings Before Interest, Taxes, Depreciation &amp; Amortization)</b>				
Family living & taxes	375,000	Operating	Term Debt	Side by Side
Interest Expense	223,977	191,092	32,885	Side by Side
Term Debt Principal Due	211,687			Side by Side
<b>BREAKEVEN Profit Needed</b>	<b>810,664</b>	EBITDA Required		
<b>Other Information Needed</b>				
<b>Non-Crop Income</b>		<b>2023 Projected</b>		<b>Financial Position as of 12/31/2022</b>
Government Payments				Current Assets
ARC/PLC Payments	5,000			2,271,696
EQUIP				Total Assets
Conservation Security Payments				9,297,414
				Total Liabilities
				3,059,081
		5,000		Owner Equity
				6,238,333
<b>Other farm income (Including Livestock EBITDA)</b>				Working Capital
Custom work income	47,500			1,345,143
Refunds/Patronages	16,750			
Other Farm Income				
Misc Crop Income	24,400			
		82,650		
<b>Total Non-Crop Income</b>		<b>87,650</b>		

Enterprise Plan								
Select Crop	Practice	Planted Acres	Double Crop Acres	Sales Units	Expected Yield Per Acre	Harvest Basis	MPCI Coverage %	Operating Cost Per Acre
1 Corn - CZ	Irrigated	1,600.0		BU	200	0.60	75%	\$1,028
2 Soybeans	Dryland	800.0		BU	38.0	0.10	75%	\$516
3 Cotton	Dryland	400.0		LBS	950	0.01	75%	\$881
4 Tobacco, Flue Cured	Dryland	275.0		LBS	2,400	Contract	75%	\$4,508
5 Sweet Potatoes	Dryland	400.0		BU	565	Contract	0%	\$4,845
6 Peanuts	Dryland	500.0		LBS	4,000	Contract	75%	\$909
7 Cucumbers, Pickling	Irrigated	275.0		CWT	140	Contract	0%	\$1,749
8 Squash, Yellow	Irrigated	250.0		BU	250	Contract	0%	\$3,167
9								
10								
		Crop Acres	D/C Acres	Land Acres				
<b>Total</b>		<b>4,500</b>	<b>0</b>	<b>4,500</b>				

## 2023 EBITDA REQUIREMENTS

**Step 1 Determine operating profit requirements.**

			<u>Total</u>	<u>/ Land Acres</u>	<u>= Per Acre</u>
1	+	Family living & taxes	<i>FL</i>	_____	_____
2	+	Interest	<i>I</i>	_____	_____
3	+	Principal payments	<i>D</i>	_____	_____
4	=	<b>BREAKEVEN EBITDA</b>	<i>(Line 1 + Line 2 + Line 3)</i>	_____	_____
5	-	<b>* Non-crop Income</b>	<i>From table below</i>	_____	_____
6	=	<b>BREAKEVEN CROP EBITDA</b>	<i>(Line 4 - Line 5)</i>	_____	_____

**\* Estimate non-crop sources of income.**

+	Government Payments	_____
+	Other farm income	_____
=	<b>Non Crop Revenue</b>	_____

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## COMPLETE STEP 2

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# 2023 EBITDA REQUIREMENTS

Step 1 Determine EBITDA requirements.

		<u>Total</u>	<u>/ Land Acres</u>	<u>= Per Acre</u>
1 +	Family living & taxes <i>FL</i>	375,000	4,500	83
2 +	Interest <i>I</i>	223,977	4,500	50
3 +	Principal payments <i>D</i>	211,687	4,500	47
4 =	<b>BREAKEVEN EBITDA</b> <i>(Line 1 + Line 2 + Line 3)</i>	<b>810,664</b>	<b>4,500</b>	<b>180</b>
5 -	* Non-crop Revenue <i>From table below</i>	<b>-87,650</b>	4,500	-19
6 =	<b>BREAKEVEN CROP EBITDA</b> <i>(Line 4 - Line 5)</i>	<b>723,014</b>	<b>4,500</b>	<b>161</b>

**\* Estimate non-crop sources of income.**

+	Government Payments (ARC/PLC, EQIP, WHIP, CFAP)	5,000
+	Other farm income (Custom, patronage, rebates, etc)	<u>82,650</u>
=	<b>Non Crop Revenue</b>	<b>\$ 87,650</b>

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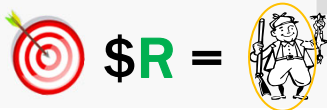
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# COMMODITY PRICING SIGNALS

Step 2 Calculate BREAK-EVEN prices

Covers FLOID and leaves WORKING CAPITAL unchanged.

	<u>Corn - CZ</u>	<u>Soybeans</u>	<u>Cotton</u>	<u>Tobacco, Flue Cured</u>
	<u>Irrigated</u>	<u>Dryland</u>	<u>Dryland</u>	<u>Dryland</u>
*** Land Acres Allocation	100%	100%	100%	100%
Operating Cost	\$1,028	\$516	\$881	\$4,508
+ <b>BREAKEVEN CROP EBITDA</b>	<b>\$161</b>	<b>\$161</b>	<b>\$161</b>	<b>\$161</b>
= <b>BREAKEVEN Crop Revenue</b>	<b>\$1,189</b>	<b>\$677</b>	<b>\$1,042</b>	<b>\$4,669</b>
/ Expected Yield	200	38	950	2,400
= <b>BREAKEVEN CROP Price</b>	<b>\$5.94</b>	<b>\$17.81</b>	<b>\$1.10</b>	<b>\$1.95</b>



What if Yield =	210	42	1,100	2,200
	\$5.66	\$16.11	\$0.94	\$2.12

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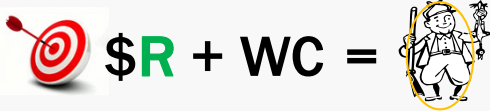
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# COMMODITY PRICING SIGNALS

Step 3 Calculate CASH FLOW prices.

Covers FLOID by using 20% of available working capital.

	<u>Corn - CZ</u>	<u>Soybeans</u>	<u>Cotton</u>	<u>Tobacco, Flue Cured</u>
Operating Cost	\$1,028	\$516	\$881	\$4,508
+ <b>CASH FLOW CROP EBITDA</b>	<b>\$101</b>	<b>\$101</b>	<b>\$101</b>	<b>\$101</b>
= <b>CASH FLOW Revenue Required</b>	\$1,129	\$617	\$982	\$4,609
/ Expected Yield	200	38	950	2,400
= <b>CASH FLOW CROP Price</b>	<b>\$5.64</b>	<b>\$16.23</b>	<b>\$1.03</b>	<b>\$1.92</b>



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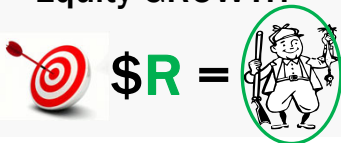
# COMMODITY PRICING SIGNALS

Step 4 Calculate GROWTH prices.

Covers FLOID + Uncertainty ==> "Get a DUCK!"

	<u>Corn - CZ</u>	<u>Soybeans</u>	<u>Cotton</u>	<u>Tobacco, Flue Cured</u>
Operating Cost	\$1,028	\$516	\$881	\$4,508
+ <b>GROWTH EBITDA Goal</b>	<b>\$221</b>	<b>\$221</b>	<b>\$221</b>	<b>\$221</b>
= <b>GROWTH Revenue Required</b>	\$1,249	\$737	\$1,102	\$4,729
/ Expected Yield	200	38	950	2400
= <b>GROWTH CROP Price</b>	<b>\$6.24</b>	<b>\$19.39</b>	<b>\$1.16</b>	<b>\$1.97</b>

Equity GROWTH



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### 2023 Marketing Objectives

#### Brown Family Farms - Oper

Crop	Total	Corn - CZ		Soybeans	Cotton	Tobacco, Flue Cured
		Irrigated	Dryland	Dryland	Dryland	Dryland
Intended Acres	4,500	1,600	800	400	400	275
Non Crop Revenue	-87,650	-19	-19	-19	-19	-19
+ FL (Family Living & Taxes)	375,000	83	83	83	83	83
+ O (Operating expenses)	7,314,925	1,028	516	881	4,508	4,508
+ I (Interest)	223,977	50	50	50	50	50
+ D (term Debt due)	<u>211,687</u>	<u>47</u>	<u>47</u>	<u>47</u>	<u>47</u>	<u>47</u>
<b>= BREAKEVEN CROP REVENUE</b>	<b>\$8,037,939</b>	<b>\$1,189</b>	<b>\$677</b>	<b>\$1,042</b>	<b>\$4,669</b>	<b>\$4,669</b>
Expected Yield		200	38	950	2,400	2,400
<b>* Cash BREAKEVEN Price Target</b>		<b>\$5.94</b>	<b>\$17.81</b>	<b>\$1.10</b>	<b>\$1.95</b>	<b>\$1.95</b>
Less: Expected Harvest Basis		\$0.60	\$0.10	\$0.01	\$0.00	\$0.00
<b>Futures BREAKEVEN Price Target</b>		<b>\$5.34</b>	<b>\$17.71</b>	<b>\$1.09</b>	<b>\$1.95</b>	<b>\$1.95</b>

#### Futures - Commodity Pricing Signals

	Crop Revenue	Corn - CZ	Soybeans	Cotton	Tobacco, Flue Cured
<b>Agile (Growth)</b>	Futures Price: <b>\$8,308,160</b> DUCK Value: \$270,221 Crop Revenue: <b>\$8,308,160</b>	Futures Price: <b>\$5.64</b> DUCK Value: \$0.30 Crop Revenue: <b>\$1,997,950</b>	Futures Price: <b>\$19.29</b> DUCK Value: \$1.58 Crop Revenue: <b>\$589,375</b>	Futures Price: <b>\$1.15</b> DUCK Value: \$0.06 Crop Revenue: <b>\$440,688</b>	Futures Price: <b>\$1.97</b> DUCK Value: \$0.03 Crop Revenue: <b>\$1,300,398</b>
<b>Resilient (Breakeven)</b>	Futures Price: <b>\$8,037,939</b> Crop Revenue: <b>\$8,037,939</b>	Futures Price: <b>\$5.34</b> Crop Revenue: <b>\$1,901,872</b>	Futures Price: <b>\$17.71</b> Crop Revenue: <b>\$541,336</b>	Futures Price: <b>\$1.09</b> Crop Revenue: <b>\$416,668</b>	Futures Price: <b>\$1.95</b> Crop Revenue: <b>\$1,283,884</b>
<b>Vulnerable (Cash Flow)</b>	Futures Price: <b>\$7,768,910</b> WC Burned: \$269,029 Crop Revenue: <b>\$7,768,910</b>	Futures Price: <b>\$5.04</b> WC Burned: \$0.30 Crop Revenue: <b>\$1,806,217</b>	Futures Price: <b>\$16.13</b> WC Burned: \$1.57 Crop Revenue: <b>\$493,509</b>	Futures Price: <b>\$1.02</b> WC Burned: \$0.06 Crop Revenue: <b>\$392,754</b>	Futures Price: <b>\$1.92</b> WC Burned: \$0.02 Crop Revenue: <b>\$1,267,444</b>

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### 2023 Projected Earnings and Uses (As of December 30, 2022)

	Last Year	Current Market Price	Resilient	Growth	Cash Flow
Crop Revenue		8,427,615	8,037,939	8,308,160	7,768,910
Non- Crop income		87,650	87,650	87,650	87,650
Total Revenue	8,307,087	8,515,265	8,125,589	8,395,810	7,856,560
Operating Expense	(7,335,950)	(7,314,925)	(7,314,925)	(7,314,925)	(7,314,925)
<b>EBITDA</b>	<b>971,137</b>	<b>1,200,340</b>	<b>810,664</b>	<b>1,080,885</b>	<b>541,635</b>
Family Living	(350,000)	(375,000)	(375,000)	(375,000)	(375,000)
Interest Expense	(243,267)	(223,977)	(223,977)	(223,977)	(223,977)
Debt payments	(245,790)	(211,687)	(211,687)	(211,687)	(211,687)
<b>GROWTH</b>	<b>132,080</b>	<b>389,676</b>	<b>-9.31323E-10</b>	<b>270,221</b>	<b>(269,029)</b>
<b>EBITDA Efficiency</b>	<b>12%</b>	<b>14%</b>	<b>10%</b>	<b>13%</b>	<b>7%</b>

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### Assignment:

Page 42. BFF 2023 Projected Operating Budgets

Page 54. Completed Pricing Targets based on current budgets.

Page 48. **To make changes to BFF Operating Projection**