### Small Farm Cost Estimator – A Multifunctional Tool for Small Acreage Farmers

# Trent Teegerstrom, Ursula K. Schuch, Russ Tronstad, University of Arizona Stuart T. Nakamoto, University of Hawaii





Dept. of Agricultural and Resource Economics and School of Plant Sciences



#### **Purpose of the Small Farm Cost Estimator**

- Calculate profitability and break-even values for each crop and sales unit
- Use for intensive field, greenhouse, and high tunnel production
- Help plan crop mix and schedule crops for an operation
- Calculate costs based on square footage and time occupied by a crop
- Allocate fixed costs over different crops
- Allocate costs that are not traced to a specific crop
- Allocate costs that can be traced to a specific crop

#### **Components of the Estimator**

- Contact Information
- Production Space
- Crop Planning- Crop List and Scheduler
- Capital Assets & Non-Cash Costs
- Unallocated Cash Costs
- Allocated Cash Costs
- Analysis & Comparison
- Crop Profit Summary

## Define your Crops, Location Grown, Sale Unit and Yields

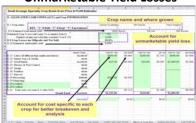


#### **Crop Scheduler**

List crops and plan out the areas they will be grown. Green shading indicates data entry.



#### Account for Crop Specific Cost and Unmarketable Yield Losses



#### **Program Application Examples**

- Pricing
- Selecting crop mix and sales unit
- Growing versus buying transplants
- Comparing production practices
- Use of space
- Product mix decisions
- Evaluating new inputs (fertilizer, chemicals)
- Planning and performance

#### **Outputs**

### Break-Even Price and Profit Estimator calculates the following summary:

- + Break-even price for sales unit
- + Break-even yields for crop
- + Total cost plus return on investment (ROI)
- + Returns per crop
- + Returns per unit sold

A	k-Even Price & Pro	fit Estimator	0	E	,	G	н	1	K	L	N	0
	This sheet is to present	total and per u	nit info for each	defined crop	(Column B)					H		_
П			TOTAL					PER UNIT SOLD		ı	BREAK-EVEN	
		Sales			Total Cost	Total	Harvest	Total Cost	Expected		BE Price	BE Yiel
	Crop Name:	Price	Total Links sold	Total Revenue	Plus ROX	Expedied Profit	Unds	Plus ROI	Profit		Per Unit	per "cros
- 1	Carota (5 plantos)	\$0.05	8.000	\$400	\$26,039	(\$25,639)	Bunch	\$3.25	(\$3.20)		\$3.255	520.78
2	HH Carrots	\$8.00	150	\$1,200	\$697,77	\$502	Lbs	\$4.65	\$3.35		\$4.652	
- 3	Trans Peopers	\$10.00	200	52,000	\$1,978.76	521	Bucket	\$9.09	50.11		59.894	190
4	F Peppers	\$8.00	300	\$2,400	\$7,143.33	(\$4.743)	flucket	523.81	(\$15.01)		\$23.811	. 09
	Sweet Com	\$6.00	2,500	\$15,000	\$17,206.72	(\$2,207)	Bag	\$6.88	(\$0.88)		\$6.883	2,86
- 6	HH Kale		0	50	\$0.00	\$0		1000	2000		10000	17.
7	F Beets	51.00	5,000	\$5,000	\$4,196,76	\$803	Piece	\$0.84	\$0.16		\$0.839	4,19
- 1	Spinach	\$1.00	500	\$500	\$2,634.17	(\$2,034)	Bunch	\$5.07	(\$4.07)		\$5.068	2.53
9	HH Lettuce Mix	\$1.00	300	\$300	\$228.08	572	Bunch	50.76	50.24		50.760	. 22
10	Cilardro	\$1.00	200	\$200	\$97.47	5103	Bunch	50.49	\$0.51		\$0.487	9
11	HH Mustard Mx	\$1.00	350	\$350	\$257.32	\$93	Bunch	50.74	50.26		\$0.735	25
	Diff		0	\$0	\$0.00	\$0						
	GH Mico Greens	\$5.00	400	\$2,000	\$1,820.68	\$179	Bunch	\$4.55	\$0.45		\$4,552	36
14	F Spring Melana	\$5.00	2,500	\$12,500	\$2,098.38	\$10,402	Each	\$0.84	\$4.16		\$0.839	42
	F Fall Melons	\$3.00	2,000	\$6,000	\$2,098.38	\$3,902	Each	\$1.05	\$1.95		\$1.049	69
	Watermelonz	\$3.00	1,500	\$4,500	\$4,616.44	(\$116)	Each	\$3.00	(\$0,08)		\$3.078	1,53
17		100000000	0	\$0	\$0.00	\$0	d120					
18		l.	. 0	50	\$0.00	50						
19			0	\$0	50.00	50						
	crop20		20	\$8	\$0.00	50	unit20	\$0.00	\$0.00	ш	\$0,000	
21			0	\$0	\$0.00	\$0						

Information highlights crops that make a profit and those that don't at the specified prices. Non-profitable crops - Continue production or charge higher price?

#### **Field Crop Tracking**



**Hoop House Crop Tracking** 



#### **Greenhouse Crop Tracking**

