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# 2001–2002 Arizona Vegetable Crop Budgets

# Southern Arizona Cochise, Pima, and Pinal Counties

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#### **Abstract**

This 2001–2002 Vegetable Crop Budget Book is composed of tables estimating operating and ownership costs of producing vegetable crops in Southern Arizona. The costs are computed for a representative farm using representative cropping operations derived from expert opinions of Arizona crop management specialists, county extension agents, and local growers, but they are not a statistical sample of farms in the area. These estimated costs are based on materials, custom services, labor, utilities, and machinery costs derived from surveys of input suppliers both within the county and throughout the state. Tables show individual operations required for producing the crop and they estimate the cumulative costs of production. Monthly resource and cash flows are also estimated. Summary tables include information on the total operating and ownership costs of production.

## **Acknowledgments**

The authors would like acknowledge the cooperation of farmers, county extension agents, crop specialists, lenders, and input suppliers in providing information used in the cost estimates.

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# 2001–2002 Arizona Vegetable Crop Budgets

#### INTRODUCTION

The tables of this publication provide information on the costs of producing vegetable crops in Arizona. The crop production techniques and associated costs are to serve as general guides to the costs incurred by producers in the area. Operations and procedures vary with local conditions and farmer preference. Growers, lenders, and other users of this information should recognize the representative nature of these income and cost estimates. Some growers may be more efficient than others. Adjustments to yields, prices, and input requirements are probably needed to refine the estimates of income and costs for a particular grower and area within a county. Crops selected for this publication are based on their economic importance within the county and the availability of data for each crop.

The remainder of this publication is divided as follows:

- Descriptive narrative of budget tables,
- Tables of average yields and prices,
- Tables of farm descriptions,
- Budget tables for each crop, and
- Appendices providing the support data for the cost estimates, including estimated costs of alternative water sources.

This publication will not give the details of calculating each item within the budget since most calculations are evident.

The table descriptions that follow give clarifying definitions and assumptions where such information is needed.

#### **DESCRIPTIONS OF BUDGET TABLES**

The Arizona Crop Budgeting System provides six tables to describe the details of each crop production system and the costs of production. These tables are labeled as follows:

- Table A. Income and Operating Cost Summary
- Table B. Allocation of Ownership Costs
- Table C. Variable Operating Costs
- Table D. Resource and Cash Flow Requirements
- Table E. Schedule of Operations
- Table F. Operations Calendar

All six tables are provided for each budgeted crop with the table number designating the budget and the following letter designating the table.

These tables are ordered to provide

- General summaries of cost,
- · Detailed categorization of costs, and
- Technical information required for calculation of all costs.

Each table is briefly described in the following paragraphs.

# **Yield and Price Assumptions**

Yield and price assumptions are very important in estimating the gross revenue of various cropping systems. For the purposes of this budget publication

**Budgeted yields** are based, in so far as possible, on five-year county average yields using the most recent five years available.

**Budgeted prices** for each commodity are based on five-year state average prices since county level prices are not available. Due to the highly seasonal nature of most vegetable prices, particular caution is warranted in using these state level prices.

#### **Table Headings**

All tables have the same general heading immediately following the table number and title. This heading gives location and crop-specific descriptions that define the crop being budgeted. The data provided include information on the location, soil type, irrigation water source, and crop yield.

# Income and Cash Operating Cost Summary (Table A)

Table A for each budget provides a summary of the estimated income and operating costs incurred in producing the specified crop. The total income estimate is the sum of the contributions toward projected income of all products produced by the cropping system, including possible subsidies.

Income estimates are based on five-year county averages for yields for most crops and five-year state averages for commodity prices. These estimates are shown in Table 1.

The income projection is followed by a summary of described in a following section. operating cost in several categories:

Labor,
Chemical and Custom Application,
Farm Machinery and Vehicles,
Irrigation Water, and
Other Purchased Inputs and Services.

These items are subtotaled as **Total Cash Land Preparation Growing Expenses**.

In addition, itemized harvest costs are

Labor, Chemical and Custom Application, Farm Machinery and Vehicles, Custom Harvest/Post Harvest,

**Crop Assessments**, and **Other Materials**.

These items are subtotaled as **Total Harvest and Post Harvest Expenses**.

Estimates of Operating Overhead for Pickup Use and Operating Interest are listed separately.

Operating costs, including sales taxes where appropriate, are summed to provide an estimate of cash operating expenses. The final entry in the table provides an estimate of the **Returns Over Cash Operating Expenses**.

The costs of this table are detailed in Table C described in a following section.

#### **Allocation of Ownership Costs (Table B)**

Table B provides a summary of the allocation of ownership costs and the resulting expected returns of the enterprise. The first three lines of this table are summaries of the information from Table A.

Two sets of columns provide information on a "Cash Basis" and on a "Total Cost Basis." The distinction is important. The long-term profitability of the enterprise requires that *all cost* (not just cash cost) be paid.

## **Important Assumptions for Operating Costs**

- A charge is included for all labor services (except management) including "non-paid" operator and family labor.
- 2. An interest charge is calculated for all operating costs irrespective of the source of operating funds (loan or equity funds).
- Yields are estimated using historical averages and trends for the appropriate crop and technology.
- 4. Crop price estimates are based on commodity trend and outlook information.
- 5. Costs of individual input items are derived from extensive data surveys and are reported in the appendices of this document.

An overview of the table shows that **Cash Overhead Expenses** include estimates for

Taxes, Housing, and Insurance on Farm Machinery (including vehicles),
Taxes, Housing, and Insurance on Irrigation Equipment (excluding ditches),
General and Office Overhead, and
General Farm Insurance.

The last two items are estimated as percentages of the Total Operating Expenses. The percentages are derived from conversations with farm owners and managers. Estimating procedures for Taxes, Housing, and Insurance are more complex and are documented elsewhere. This group of costs is designated as "cash costs" since they are generally paid in cash during the cropping year.

Capital Allocations are designated on a "Total Cost Basis" since they may or may not be paid during the cropping year depending upon the equity/debt structure of the farm and the capital replacement strategy used. Farmers often replace capital equipment with large "lump sum" purchases. New equipment is then depreciated for tax purposes and replaced when sufficiently worn out or when personal tax strategy calls for replacement. The funds for such purchases will be borrowed capital, equity capital, or a combination of the two. Interest will be cash interest on borrowed capital and/or opportunity interest on equity capital. Capital Replacement estimates and interest costs for Farm Machinery, Vehicles, and Irrigation Equipment are shown in Table B.

Cash rental rates are used as the total cost of land. In utilizing the cash rental rates all cost; opportunity costs, time costs, user costs, property taxes, and other overhead costs associated with the land are captured in the rental rate. Management Services are estimated on "Total Cost Basis" by taking a percentage of Total Operating Cost as is the common practice of professional farm management farms, since these costs may or may not be paid by the grower depending upon the farm's organization. Most owner- or renter-managed farms will not pay these costs directly. Assessments made by irrigation districts, which must be paid whether or not a farm is producing, are charged as land costs. If the budgeted crop is part of a "double crop" sequence, one-half of the land costs are attributed to each crop of the sequence.

Table B also provides estimates of net returns at various levels of allocation of ownership costs. The level of net returns depends on whether one examines costs on a "Cash Basis" or a "Total Cost Basis." Returns Over Cash Operating Expenses, Returns Over Cash Operating Expenses and Overhead, Returns to Land, Management and Risk, Returns to Management and Risk, and Returns to Risk (Profits) are all listed in Table B.

**Returns over Cash Operating Expenses** are the differences between Total Income and the Cash Operating Expenses. If positive, these returns represent the funds available to pay overhead, ownership expenses, land expenses, and management services plus profits.

#### **Definition—Cash Basis**

Cash Basis includes all costs for labor, materials, custom services, and an interest charge. Land rent, land taxes, and irrigation assessments are assumed to be paid in cash if applicable.

#### **Definition—Total Cost Basis**

Allocations for costs which may or may not be paid in cash, but which are normally *not* paid in cash, are considered in addition to the cash items. These costs include allocations for capital replacement of farm equipment, opportunity interest on farm equipment and farm land, and a charge for management.

#### **Definition—Opportunity Costs**

Capital invested in farm equipment and farm land would earn interest or other revenue in alternative investment opportunities. Either the interest paid for the use of the capital or its opportunity cost is expensed.

<sup>1</sup> Teegerstrom, T. 2000–2001 Arizona Farm machinery Costs, Extension Bulletin No. 198026, Cooperative Extension, The University of Arizona, Tucson, AZ, February 2000.

Overhead are the residual funds available after Cash Operating and Cash Overhead expenses are paid (excluding cash land costs). These funds are available to pay for equipment capital usage, land usage, and management services. These returns are identical to Returns to Land, Capital, Management and Risk.

Returns to Land, Management, and Risk further reduce the funds available by extracting the costs of equipment capital usage through Capital Allocations. These include the costs of Capital Replacement and opportunity interest on equipment. The grower is assumed to have 75% equity in all equipment. Thus, 75% of the costs are considered non-cash and are allocated on a "Total Cost Basis" only. These costs might be partially cash as noted above in the category Capital Allocations.

**Returns to Management and Risk** are the returns remaining after charges for land usage have been extracted. Land clearly represents a dilemma in the allocation of costs since it can be cash in the form of rents or leases, or can be partially cash and partially "economic" cost. For 100% equity ownership of lands, the cash costs are for taxes. However, opportunity interest on land ownership is charged for the "Total Cost Basis."

Returns to Risk (Profits) further reduce the net returns for the costs of Management Services. This charge is made on a "Total Cost Basis" only, since many farmers do not directly pay the cost of such management services. Returns to Risk represent the purest level of profits after all resources have been allocated an appropriate portion of the returns. If an sented at the end of the table.

Returns over Cash Operating Expenses and investment is risk-free and all inputs, including management, are paid an appropriate amount equal to their contribution, then net economic profit will be zero in a competitive industry (such as agriculture).

> Table B concludes with an estimate of the breakeven prices of the primary output considering all of the costs previously described and the assumed yield. Break-even prices are those commodity prices below which all resources will not be paid.

### Variable Operating Costs (Table C)

Table C provides the detail costs of each operation required to produce the crop (some operations are performed more than one time). The operations are listed sequentially, with the machine and labor hours required to produce one acre displayed in the first two columns after the operation name. The next five columns give the Machine, Labor, Custom, Materials, and Total Costs for completing the operation one time. The next column gives the number of times the specific operation will be performed. The final cost column gives the Total Expense (Cash) for the total number of times the operation is performed. The final column classifies the operation:

Land Preparation (L), Growing (G), Harvest (H), Post Harvest (P), or Marketing (M).

The total cost for each of these categories is pre-

#### **Water Costs**

Arizona is a patchwork of irrigated farms which receive irrigation water from many different sources. This document estimates costs of production for each crop based on one assumed water source. Producing the crop in some other area of the county or state likely uses water from different sources. To use these estimates for areas other than their original ones, new water cost estimates should be made. New water costs estimates can be made by removing the water costs from the original budget and replacing them with the cost of irrigation water in the new area.

All Costs presented in this table are variable operating expenses. No ownership costs are presented. A line entry (if appropriate) following the last operation describes the assumptions for pickup truck usage.

Operating Interest is included as the last line of the table and represents the interest paid on the cash operating expenses excluding pickup truck costs. Total Cash Operating Expenses summarizes the total cost for each category for the total number of times the operations are performed. The specific physical details of operations are presented in Table E, including assumed job rates, materials, applications rates, equipment requirements, labor requirements, and custom costs.

Table C also includes a summary of cost by Class of Operation:

Land Preparation (L), Growing (G), Harvest (H), Post Harvest (P), Marketing (M), and Operating Overhead (O).

Finally, a sensitivity of Net Revenues over Total Cash Expenses examines changes in net returns with changes in price and yield of the produced commodities.

# Resource and Cash Flow Requirements (Table D)

Resource and Cash Flow Requirements are summarized in Table D by month where the abbreviations P, C, and N represent Previous Year, Current Year, and Next Year, respectively. The Current Year is defined as the calendar year in which harvesting of the output takes place. Summary columns give information on the number of irrigations, water applied, and labor required in each month. Variable (cash) operating expenses are subdivided into Water, Machine, Labor, Chemical, Other Purchases, and Services for each month. The last column gives the Total Cash required to pay variable expenses in each month. These dates all are based on the schedule and calendar of operations described in Table E.

Additional summary information totals all the requirement columns and provides plant nutrient, water, labor, and purchased energy (fuels) summaries.

Finally, detailed lists of all of the equipment, labor, and material requirements for the enterprise are provided.

#### **Schedule of Operations (Table E)**

The Schedule of Operations (Table E) provides the underlying information for the budgeted costs. The physical requirement and description of each operation is listed in detail, including the first month in which the operation is performed, the number of times the operation is performed, the tractors and implements required, the job rate (acres per labor hour) of each operation, the required materials (quantity, price, and units), the prices and units of required custom (or hired) services, and the labor type used to complete the operation.

Since this table is very important in defining the physical elements of the budgeting process, each column is described in some detail in the table below. The physical descriptions of the cropping operations provide the documentation of the cropping system for which cost estimates are being made.

#### **Operations Calendar (Table F)**

The Operations Calendar (Table F) is a flow chart of the operations used in the production process of each crop presented in the budgets. The table provides information on which month each operation occurs and the number of times each operation occurs.

#### THE BUDGET TABLES

The results of the cost of production estimates are included in a series of Tables A through F for each crop as noted in the Table of Contents. To aid the users of this publication, a table of the abbreviations is presented below. Background data for these estimates are provided in Table 2, Representative Farm Description for Budget Estimates, and Appendices A and B. Appendix A identifies those data groups uniquely specified by each county while Appendix B identifies the input items where state average prices were used.

Chemical materials provide a unique challenge for these estimates since each material is identified by its common generic name. However, in order to avoid confusion some (most) items are also identified, insofar as possible because of limited printing space, by trade names. Some identifiers are truncated because of space limitations.

	List of Column He	adings for Ta	ible E
Column Heading	Description	Column Heading	Description
No.	The sequence number of each operation is provided for the ordering of operations.	Job Rate	Job Rate (Acres/Hr) is defined as the number of acres that can be completed
First Month	The first month in which each operation is to be performed is identified. An operation name may occur several times in a sequence of budget operations, but usually if all elements of the operation		per hour of <i>labor</i> . Machinery hours are usually less than labor hours. The budgeting program adjusts all job rates to provide labor and machine hours, as shown in Table C.
	are identical (e.g., job rate or quantity of materials) then the operations will be combined into a single entry.	Material Use and Cost	Under this broad heading, all materials applied during a specific operation are identified using the following information.
Operation	The operation name is identified. Some abbreviations are necessary to fit the limited space available in the table.	Name	The name or names of any fertilizer, chemical, seed, water, or miscellaneous materials used in crop production are
Equipment/ Custom Oper.	This general heading identifies either 1) the combination of equipment required to accomplish the operations, or 2) the custom or hired service activity. This entry may be truncated. If quesions arise about		listed (one per line). In so far as possible, the names used are generic, nontrade names. This entry may be truncated. If questions about the actual material arise, refer to Appendices A and B.
	the actual material, refer to the alphabetical entries in Appendices A or B.	Appl. Rate	Each material application rate is identified with the appropriate application unit.
НР	The horsepower rating of the tractor used in this operation is identified. If no tractor is used, this entry is blank.	\$/Unit	This column specifies the cost of the material with the appropriate units at which the material is purchased.
Self-Prop./ Implement	The implement column identifies 1) the descriptive name of an implement used in the operation, 2) the descriptive name of the self-propelled implement used in the op-	Service Cost	The cost and purchase unit (\$/unit) of any custom operation identified in the Self-Prop./Implem. column is noted here with the appropriate purchase unit.
	eration, or 3) the descriptive name of a custom activity used in the operation (preceded by the abbreviation CST). Multiple lines may be required for identification of implements towed behind tractors or vehicles.	Labor Type	The type of labor used in the operation is identified.

			Table	of Abbrevia	tions		
					Units of	Measure	
ai Appl CST Defol. Fld G Gnd Gr Herb Insur Irrig	Active ingredient Applications Custom Defoliant Field Granules Ground Graded Herbicides Insurance Irrigation	L Oper. Over. Prop. Rw Sk Spr W/ X	Liquid Operating Overhead Propelled Row Shank Spray With Times Number	AF AI Ac, AC Ba Bn CW, CWT CI, Cwl Cotton Ct, Ctn DB Ea Er Fn Ft Ga, Gal	Acre-Foot Acre-Inch Acre Bale 12 Bun 100 Pounds 100 Pounds Lint  Carton 1 Dozen Bunches Each 12 Ears of Corn Feet/ton Feet Gallon	Gm HD Hr, Hrs Lb, Lbs Lg M MI, Mi Mu Qt Sk TF Th Tn, T	Gram Head Days Hours Pound Lug Meter Miles Module Quart Sack Thousand Feet Thousand Ton Tarp

Table 1. Five Year Average Yields and Prices, Southern Arizona Vegetables

Fall Cantaloupe /1

Cochise Spring Lettuce 2/

\$112.00

\$136.00

\$141.60

Dry Onions 3/

\$10.32

\$4.20

\$5.46

	Harvested	Yield/Acre	Harvested	Yield/Acre	Harvested	Yield/Acre	Harvested	Yield/Acre	
	Acres	(Cartons)	Acres	(Cartons)	Acres	(Cartons)	Acres	CWT	
Southern	Arizona Acı	reage and \	/ields						
1996	250	443	6,000	204	500	244	250	316	
1997	600	349	3,400	225	800	207	800	361	
1998	600	443	2,000	288	1,500	222	1,500	417	
1999	600	813	2,000	299	400	340	350	494	
2000			3,600	285	500	300	500	430	
Average	363	401	3,400	269	740	263	680	404	
Arizona P	rices ( Dolla	ars per Carl	ton )						
		II Lettuce		taloupe /1		ng Lettuce 2/		nions 3/	
	Price per	47	Price per	75	Price per	47	Price per	100	
1996	\$6.	carton		l carton 5.60	\$6.	carton		unds .60	
1997	\$5.			1.40	\$5.			2.60	
1998	\$11			).43	\$11			5.30	
1999	\$4.			).35	\$4.			.53	
2000	\$6.			1.70	\$6.		\$4.64		
	,				75		<b>,</b>		
Average	\$6.	88	\$13	3.10	\$6.	88	\$9	.33	
	D: I D	otatoes	Arizona	Chilies 4/	Waterr	melons	Sweet	Corn 4/	
1									
	Harvested	Yield/Acre	Harvested	Yield/Acre	Harvested	Yield/Acre	Harvested	Yield/Acre	
	Harvested Acres	Yield/Acre (cwt)	Harvested Acres	Yield/Acre (Tons)		Yield/Acre (Tons)	Harvested Acres	Yield/Acre (Cartons)	
	Harvested Acres <b>Arizona Ac</b> i	Yield/Acre (cwt) reage and \	Harvested Acres /ields	(Tons)	Harvested Acres	(Tons)	Acres	(Cartons)	
1996	Harvested Acres Arizona Ac 3,700	Yield/Acre (cwt) reage and \ 285	Harvested Acres /ields 2,500	(Tons) 3.8	Harvested Acres 2,300	(Tons) 16.40	1,400	(Cartons) 108	
1996 1997	Harvested Acres Arizona Acr 3,700 1,600	Yield/Acre (cwt) reage and \ 285 274	Harvested Acres /ields 2,500 3,800	3.8 3.9	Acres 2,300 2,000	(Tons) 16.40 16.85	1,400 1,800	(Cartons) 108 140	
1996 1997 1998	Arizona Aci 3,700 1,600 3,300	Yield/Acre (cwt) reage and Y 285 274 277	Harvested Acres /ields 2,500 3,800 5,500	(Tons) 3.8 3.9 2.6	2,300 2,000 1,900	(Tons) 16.40 16.85 15.75	1,400 1,800 1,640	(Cartons) 108 140 204	
1996 1997 1998 1999	Arizona Ac 3,700 1,600 3,300 2,100	Yield/Acre (cwt) reage and \ 285 274 277 297	/ields 2,500 3,800 5,500 6,100	3.8 3.9 2.6 2.9	2,300 2,000 1,900 1,800	(Tons) 16.40 16.85 15.75 17.15	1,400 1,800 1,640 2,000	(Cartons) 108 140 204 142	
1996 1997 1998	Arizona Aci 3,700 1,600 3,300	Yield/Acre (cwt) reage and Y 285 274 277	Harvested Acres /ields 2,500 3,800 5,500	(Tons) 3.8 3.9 2.6	2,300 2,000 1,900	(Tons) 16.40 16.85 15.75	1,400 1,800 1,640	(Cartons) 108 140 204	
1996 1997 1998 1999	Arizona Ac 3,700 1,600 3,300 2,100	Yield/Acre (cwt) reage and \ 285 274 277 297	/ields 2,500 3,800 5,500 6,100	3.8 3.9 2.6 2.9	2,300 2,000 1,900 1,800	(Tons) 16.40 16.85 15.75 17.15	1,400 1,800 1,640 2,000	(Cartons) 108 140 204 142	
1996 1997 1998 1999 2000 Average	Arizona Ac 3,700 1,600 3,300 2,100 2,500 2,640 rices ( Dollar	Yield/Acre (cwt)  reage and Y 285 274 277 297 285 284  ars per Care	/ields 2,500 3,800 5,500 6,100 3,300 4,240	3.8 3.9 2.6 2.9 3.8 3.4	2,300 2,000 1,900 1,800 900 1,780	(Tons)  16.40 16.85 15.75 17.15 18.00 16.83	1,400 1,800 1,640 2,000 2,400 1,848	(Cartons)  108 140 204 142 148 148	
1996 1997 1998 1999 2000 Average	Arizona Ac 3,700 1,600 3,300 2,100 2,500 2,640 rices ( Dolla	Yield/Acre (cwt)  reage and Y 285 274 277 297 285 284  ars per Care	/ields 2,500 3,800 5,500 6,100 3,300 4,240	(Tons)  3.8 3.9 2.6 2.9 3.8 3.4  Chilies 4/	2,300 2,000 1,900 1,800 900 1,780 Wateri	(Tons)  16.40 16.85 15.75 17.15 18.00 16.83	1,400 1,800 1,640 2,000 2,400 1,848 Sweet	(Cartons)  108 140 204 142 148 148  Corn 4/	
1996 1997 1998 1999 2000 Average	Arizona Aci 3,700 1,600 3,300 2,100 2,500 2,640 rices ( Dolla Price per	Yield/Acre (cwt)  reage and Y 285 274 277 297 285 284  ars per Care tooes 100	/ields 2,500 3,800 5,500 6,100 3,300 4,240  Arizona Price per	(Tons)  3.8 3.9 2.6 2.9 3.8 3.4  Chillies 4/ 2000	2,300 2,000 1,900 1,800 900 1,780  Waterr Price per	(Tons)  16.40 16.85 15.75 17.15 18.00 16.83  melons 2000	1,400 1,800 1,640 2,000 2,400 1,848 Sweet Price per	(Cartons)  108 140 204 142 148 148  Corn 4/ 50	
1996 1997 1998 1999 2000 Average	Arizona Aci 3,700 1,600 3,300 2,100 2,500 2,640 rices ( Dolla Price per pound	Yield/Acre (cwt)  reage and Y 285 274 277 297 285 284  ars per Cart tooes 100 d sack	/ields 2,500 3,800 5,500 6,100 3,300 4,240  Arizona Price per	(Tons)  3.8 3.9 2.6 2.9 3.8 3.4  Chilies 4/ 2000 unds	2,300 2,000 1,900 1,800 900 1,780  Waterr Price per pound of	(Tons)  16.40 16.85 15.75 17.15 18.00 16.83  melons 2000 ontainer	1,400 1,800 1,640 2,000 2,400 1,848 Sweet Price per pound	(Cartons)  108 140 204 142 148 148  Corn 4/ 50 I carton	
1996 1997 1998 1999 2000 Average	Arizona Aci 3,700 1,600 3,300 2,100 2,500 2,640 rices ( Dolla Price per	Yield/Acre (cwt)  reage and Y 285 274 277 297 285 284  ars per Cart tooes 100 d sack .20	/ields 2,500 3,800 5,500 6,100 3,300 4,240  con )  Arizona Price per poi \$73	(Tons)  3.8 3.9 2.6 2.9 3.8 3.4  Chillies 4/ 2000	2,300 2,000 1,900 1,800 900 1,780  Waterr Price per	(Tons)  16.40 16.85 15.75 17.15 18.00 16.83  melons 2000 ontainer 1.00	1,400 1,800 1,640 2,000 2,400 1,848 Sweet Price per pound \$4	(Cartons)  108 140 204 142 148 148  Corn 4/ 50	

\$9.05

\$10.60

Pima Fall Lettuce

1999

2000

\$649.44

\$543.49

\$683.00

Average \$9.98

<sup>1</sup> Maricopa County Numbers
2 Year 2000 state average number
3 All counties except La Paz and Maricopa

<sup>4</sup> State Averages

**Table 2. Representative Farm Description for Budget Estimation** 

	<u>Vegetables</u>										
	Cochise	Pinal	Pima								
	County	County	County								
General Characteristics											
Farm Size	500	1,000	1,000	Acres							
Land Rent	\$50	\$100	\$100	/ Acre							
Property Tax Rate (Average)	\$14.4971	\$16.9889	\$19.0228	/ \$100 Assessment							
Assessment Rate	16%	16%	16%	of Appraised Value							
Appraised Land Value	\$368	\$447	\$540	/ Acre							
Land Cash Value	\$1,200	\$2,000	\$2,000	/ Acre							
Land Equity	100%	100%	100%								
Sales Tax	5.5%	6%	5%	of Material Purchases							
General Overhead	3%	3%	3%	of Operating Costs							
Office Overhead	2%	2%		of Operating Costs							
Maintenance Overhead	3%	3%		of Operating Costs							
Management Overhead	6%	8%		of Operating Costs							
Energy and Equipment											
Equipment Equity											
Machine Hours	90%	90%	90%								
Unleaded Gasoline	\$1.150	\$1.150	\$1.060	/ Gallon							
Diesel Fuel	\$0.763	\$0.740	\$0.662	/ Gallon							
L P Gas	\$0.900	\$0.810	\$0.850	/ Gallon							
Natural Gas	\$0.41286	\$0.37065	\$0.37065	/ cu.ft.							
Electricity	\$0.07827	\$0.03050	\$0.05321	/ kwh							
Lubrication Factor	15%	15%	15%	of Fuel Costs							
Interest Rates											
Operating Credit	10%	10%	10%								
Long Term	6%	6%	6%								
Average Investment	10%	10%	10%								
Labor Benefits											
FICA	7.65%	7.65%	7.65%	of Cash Wages							
Worker Compensation	7.73%	7.73%		of Cash Wages							
FUTA .	1.56%	1.56%		of Cash Wages							
Fringe Benefits	13%	13%		of Cash Wages							

# 2001–2002 Arizona Vegetable Crop Budgets Tables

Southern Arizona Cochise, Pima, and Pinal Counties

Note: Column and row totals may not exactly equal the sum of a row or column due to rounding error. Differences are usually less than \$.10.

Table 3A. Income and Cash Operating Summary; Green Chiles, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Chile, Green Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: 3.4 Tn / Acre 10/8/01 AREA: Kansas Settlement YIELD: PREVIOUS CROP: Wheat, Winter DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Gr. Chile Rd. Chile	Ton Pound	3.40 700.00	\$366.33 \$0.67	\$1,245.52 \$469.00	\$1,714.52	
CASH LAND PREPARATION Paid Labor (including ben Tractor/Self Propelled Irrigation Other/ Contract		luding sales tax)		31.09 28.91 2.30	62.31	
Chemicals and Custom A Fertilizer Insecticide Herbicide Other Chemicals	pplications			97.24 7.52 9.87 33.85	148.48	
Farm Machinery and Veh Diesel Fuel Repairs and Maintena Irrigation Water (excluding Natural Gas/Pumping Repairs and Maintena Water Assessment (See I	ance g labor) ance			16.71 21.11 186.06 27.58	37.83 213.63	
Other Purchased Inputs & Seed/Transplants Other Services and R				180.56 75.00	255.56	
CASH HARVEST AND POS	TOTAL CASH LAND PREF F HARVEST EXPENSES	PARATION AND GROW	ING EXPENSES		717.81	
Paid Labor (including ben Tractor/Self Propelled				1.82	1.82	
Farm Machinery and Vehi Diesel Fuel Repairs and Maintena				0.87 0.98	1.85	
Custom Harvest/Post Har	TOTAL HARVEST AND PO	OST HARVEST EXPEN	SE		338.00 341.67	
OPERATING OVERHEAD -> OPERATING INTEREST AT	10.0%				20.34 23.85	
TOTAL CASH OPERATING RETURNS OVER CAS	EXPENSES SH OPERATING EXPENSES				\$1,103.66 \$610.86	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 3B. Allocations of Ownership Costs; Green Chiles, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

	CASH COST BAS	IS (\$/ACRE)	TOTAL COST BA	SIS (\$/ACRF)	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns	
TOTAL INCOME at \$366.33 / Tn	\$1,714.52		\$1,714.52		
TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$1,103.66	\$610.86	\$1,103.66	\$610.86	
CASH OVERHEAD EXPENSES Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	4.33 16.26 55.18 33.11		4.33 16.26 55.18 33.11		
Total Cash Overhead Expenses	108.89		108.89		
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	1,212.55	\$501.98	1,212.55	\$501.98	
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			23.63 60.53 11.88 30.86		
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK	>	\$501.98 	126.90	\$375.07	
Land Cost / Rent or Lease	75.00		75.00		
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	75.00 >	\$426.98	75.00	\$300.07	
Management Services (8% of Total Operation Expenses)			88.29		
TOTAL OWNERSHIP COST	183.89		399.08		
TOTAL COST  RETURNS TO CAPITAL, MANAGEMENT AND RISK  RETURNS TO RISK (PROFITS)	\$1,287.55 >	\$426.98	\$1,502.74 >	\$211.78	
Item	CASH COST BASI Income and Costs		TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns	
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$186.66 \$54.08 \$240.75		\$186.66 \$117.38 \$304.04	

Table 3C. Variable Operating Costs; Green Chiles, 2001

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional ACRES: 1.0 Sandy-Loam CROP: Chile, Green IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

	First		Hour	s *	Operatir	Tot. Cash						
No.	Month	Operation	Machine	Labor	Fuel/Rps.		ust/Serv.		Total	Times		Class
1	Jan	Plow	0.321	0.357	4.27	3.13			7.41	1.0	7.41	L
2	Feb	Disk	0.225	0.250	2.92	2.19			5.12	2.0	10.23	L
3	Feb	Laser Level	0.900	2.000	11.81	16.44			28.26	0.3	8.48	L
4	Feb	Landplane	0.225	0.250	2.64	2.19			4.83	0.5	2.41	L
5	Feb	List	0.180	0.200	2.18	1.75			3.94	1.0	3.94	L
6	Mar	Apply Herbicide/Ground	0.150	0.167	1.73	1.47		9.87	13.06	1.0	13.06	G
7	Mar	Buck Rows	0.023	0.025	0.19	0.22			0.41	5.0	2.04	G
8	Mar	Preirrigate		0.424	23.74	3.25			26.99	1.0	26.99	G
9	Mar	Disk Ends	0.023	0.025	0.27	0.22			0.49	4.0	1.96	G
10	Mar	Apply Fert/Ground	0.150	0.167	1.82	1.47		37.45	40.74	1.0	40.74	G
11	Apr	Plant	0.225	0.250	3.62	2.19		180.56	186.37	1.0	186.37	L
12	Apr	Irrigate		0.279	15.82	2.14			17.96	10.0	179.64	G
13	May	Cultivate	0.200	0.222	1.93	1.95			3.88	5.0	19.40	G
14	Jun	Thinning					75.00		75.00	1.0	75.00	G
15	Jun	Irrigate/Run Fertilizer		0.278	15.82	2.13		29.89	47.85	2.0	95.70	G
16	Jun	Apply Fungicide/Air					5.23	6.05	11.28	3.0	33.84	G
17	Aug	Apply Insecticide/Air					4.75	2.77	7.52	1.0	7.52	G
18	Sep	Prepare Ends	0.022	0.025	0.26	0.22			0.48	1.0	0.48	Н
19	Sep	Pick 3.4 Tn					255.00		255.00	1.0	255.00	Н
20	Sep	Haul, Custom 3.4 Tn					34.00		34.00	1.0	34.00	Н
21	Nov	Pick .3 Tn					28.00		28.00	1.0	28.00	Н
22	Nov	Haul, Custom .3 Tn					21.00		21.00	1.0	21.00	Н
23	Nov	Cut Stalks .3 Tn	0.164	0.182	1.59	1.60			3.19	1.0	3.19	Р
24	Nov	Disk Residue .3 Tn	0.129	0.143	1.82	1.25			3.07	1.0	3.07	L
		Pickup Use 80 Mi/Acre	2.667		20.34						20.34	
		Operating Interest at 10.0					23.85				23.85	
		TOTAL CASH OPERATING	S EXPENSE	S (includes	all times over):						1,103.66	Т

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY E	BY CLASS	SENSITIVITY C	F THE	NET REVE	ENUES OVI	ER TOTAL CA	ASH EXPEN	SES (\$/AC	CRE)
Land Preparation (L)	221.91	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Growing (G)	495.90	Yields		\$274.75	\$329.70	\$366.33	\$402.96	\$457.91	Break-even Price
Harvest (H)	338.48								
Post Harvest (P)	3.19	- 25%	2.6	-325.17	-185.05	-91.64	1.78	141.90	402.27
Marketing (M)	0.00	- 10%	3.1	-236.30	-68.16	43.94	156.04	324.18	351.97
Operating Overhead (O)	44.18	Budgeted	3.4	-177.05	9.77	134.33	258.88	445.71	326.82
		+ 10%	3.7	-117.81	87.71	224.71	361.72	567.23	306.25
Total (T)	\$1,103.66								
		Break-even Yield		4.42	3.36	2.89	2.54	2.15	

Table 3D. Resource and Cash Flow Requirements; Green Chiles, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

		Water				Ope	eratir	g Costs (\$/A	CRE *)			
	Number	Applied	Total	Purchased	Fuel, Oil	•			Other			
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Lab	or	Chemicals	Purchases	Services	Total	
JAN C			0.86		10.12	7	.52				17.64	
FEB C			0.88		7.05		.52 .78				14.83	
MAR C	1.0	6.0	0.93		27.74		.76 .62	47.32			81.68	
APR C	2.0	8.0	0.83		35.45		.62 .69	47.32	180.56		222.70	
MAY C	2.0	8.0	0.83		34.04		.67		100.50		40.71	
JUN C	3.0	12.0	1.33		51.80		.07 .75	35.95		80.23	178.73	
JUL C	2.0	8.0	1.05		35.97		.73 .61	6.05		5.23	55.86	
AUG C	3.0	12.0	0.84		47.47		.41	38.72		9.98	102.58	
SEP C	3.0	12.0	0.03		0.26		.22	30.72		289.00	289.48	
NOV C			0.32		3.41		.85			49.00	55.26	
Pickup Use	80 Mi/Acre		0.52	I	20.34	2	.00			49.00	20.34	
	iterest at 10.0				20.54					23.85	23.85	
Water Asses				**						20.00	20.00	
Water Asset	Soment											
Total	13.0	54.0	7.82		273.65	64	1.12	128.04	180.56	457.29	1103.66	
%		00			24.79		5.81	11.60	16.36	41.43	100.00	
Total N Total P Total Labo Total Wate		234.4 106.0 7.8 54.0		Diesel Fu Unleaded Nat Gas/ All Direct	d Gas Pumping	18.6 8.0 436.7 47.3	Gal Gal The M B					
EQUIPMEN	T REQUIREM	IENTS (per A	Acre)									
Bed Shap			22 Hr	Drag Scraper, 10'	0	.27 Hr		Fert. Side	Dress Unit,	0.15 Hr		
Landplan	e 12'X 45'	0.	11 Hr	Laser, Complete S	ystem 0	.27 Hr		Lister, 7 Bo	ottom	0.18 Hr		
Moldboar	d Plow, 4-16 2	2 0.	32 Hr	Offset Disk, 12'	0	.45 Hr		Offset Disk		0.24 Hr		
Pickup Tr	uck, 1/2 Ton	2.	67 Hr	Planter, Drill Type,		.22 Hr		Rolling Cu	Itivator, 6 Rw	1.15 Hr		
	alk Cutter, 4 F		16 Hr	Rowbuck, 10'		.12 Hr			Sprayer, 2 Tk 8			
Tractor, 1	00 PTO HP,	1.	92 Hr	Tractor, 125 PTO F	HP 0	.27 Hr		Tractor, 12	25 PTO HP,	1.19 Hr		
MATERIALS	REQUIREM	ENT (per Ac	re)									
11-53-00			00 Lb	32-00-00, URAN 3	2, Lgd 60	.00 Ga		ВТ		0.25 Lb		
	per Sd (OP)		00 Lb	Copper hydroxide		.75 Lb		Trifluralin		3.00 Pt		
Water, Pเ		54.	00 AI									
LABOR REC	QUIREMENT	(per Acre)										
Irrigators		· ,	77 Hr	Other	0	.30 Hr		Tractor		3.75 Hr		
	D	0 0								00 111		

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Table 3E. Schedule of Operations; Green Chiles, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 3.4 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

First		Equipment/ Custom Oper	Job Rate					_	ervice Cost	
No. Month	Times Operation	HP Self-Prop./ Implement	Acre/Hr	Name	Appl.	Ra	te \$/Uı	nit	\$ / Unit	Type
Jan	1.0 Plow	125 Moldboard Plow, 4-16 2	2.80							Tractor
Feb	2.0 Disk	125 Offset Disk, 12'	4.00							Tractor
Feb	0.3 Laser Level	125 Drag Scraper, 10'	1.00							Tractor
		Laser, Complete System								Other
Feb	0.5 Landplane	125 Landplane 12'X 45'	4.00							Tractor
Feb	1.0 List	125 Lister, 7 Bottom	5.00							Tractor
Mar	1.0 Apply Herbicide/Groun	d 100 Rolling Cultivator, 6 Rw	6.00	Trifluralin	3.00	Pt	24.95	Ga		Tractor
		Saddle Tk Sprayer, 2 Tk 8 Row								
Mar	5.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor
Mar	1.0 Preirrigate		2.40	Water, Pump	6.00	ΑI	47.47	ΑF		Irrigators
Mar	4.0 Disk Ends	100 Offset Disk, 16.5'	40.00							Tractor
Mar	1.0 Apply Fert/Ground	100 Fert. Side Dress Unit,	6.00	11-53-00, Dry	200.00	Lb	355.00	Tn		Tractor
Apr	1.0 Plant	100 Bed Shaper, 6 Rw Planter, Drill Type, 6 Row	4.00	Chile Pepper Sd (OP)	5.00	Lb	34.23	Lb		Tractor
Apr	10.0 Irrigate	riantor, Driii Typo, o riew	3.60	Water, Pump	4.00	ΑI	47.47	AF		Irrigators
May	5.0 Cultivate	100 Rolling Cultivator, 6 Rw	4.50							Tractor
Jun	1.0 Thinning	CST Thinning							75.00 Ad	
Jun	2.0 Irrigate/Run Fertilizer	3	3.60	Water, Pump	4.00	ΑI	47.47	AF		Irrigators
	3			32-00-00, URAN 32,	30.00	Ga	170.80	Tn		Ü
Jun	3.0 Apply Fungicide/Air	CST Air Spray, 7 Gal Mix		Copper hydroxide	2.25		2.55	Lb	5.23 Ac	
Aug	1.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix		BT ,	0.25		10.50		4.75 Ac	
Sep	1.0 Prepare Ends	100 Offset Disk, 16.5'	40.00							Tractor
Sep	1.0 Pick	CST Pick Green Chiles							75.00 Tr	1
Sep	1.0 Haul, Custom	CST Haul Green Chiles							10.00 Tr	1
Nov	1.0 Pick	CST Pick Red Chile after Green							80.00 Tr	1
Nov	1.0 Haul, Custom	CST Haul Red Chiles							60.00 Tr	1
Nov	1.0 Cut Stalks	100 Rotary Stalk Cutter, 4 Row	5.50							Tractor
Nov	1.0 Disk Residue	125 Offset Disk, 16.5'	7.00							Tractor
	Pickup use 80 Mi/Ac	Pickup Truck, 1/2 Ton	0.38							

Table 3F Operations Calendar; Green Chiles, 2001

COUNT CROP: AREA:	Y: Cochise Chile, Green Kansas Settlement	FARM: S ACRES: YIELD: S	1.0	rn Vegetab Tn/Acre		IRRIGA	R SOURCE TION SYS DUS CROI	STEM:	Ks Sett Flodd F Wheat,		3	TILLAG SOIL: DATE:	SE:	Conver Sandy- 10/08/0	Loam
7 (1 (12) (1	randa Cottomone	TILLD.	0.1							n Perform	ed			10/00/	
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow			1.0 C											
2	Disk			2.0 C											
3	Laser Level			0.3 C											
4	Landplane			0.5 C											
5	List				1.0 C										
6	Apply Herbicide/Ground					1.0 C									
7	Buck Rows					1.0 C	1.0 C	1.0 C	1.0 C	1.0 C					
8	Preirrigate					1.0 C									
9	Disk Ends					1.0 C		1.0 C	1.0 C	1.0 C					
10	Apply Fert/Ground					1.0 C									
11	Plant						1.0 C								
12	Irrigate						2.0 C	2.0 C	2.0 C	2.0 C	2.0 C				
13	Cultivate							1.0 C	2.0 C	2.0 C					
14	Thinning								1.0 C						
15	Irrigate/Run Fertilizer								1.0 C		1.0 C				
16	Apply Fungicide/Air								1.0 C	1.0 C	1.0 C				
17	Apply Insecticide/Air										1.0 C				
18	Prepare Ends											1.0 C			
19	Pick, Green											1.0 C			
20	Haul, Custom											1.0 C			
21	Pick, Red													1.0 C	
22	Haul, Custom													1.0 C	
23	Cut Stalks													1.0 C	
24	Disk Residue													1.0 C	

#### Table 4A. Income and Cash Operating Summary; Pumpkins, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Pumpkins Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: 10.0 Tn / Acre 10/8/01 AREA: Kansas Settlement YIELD: PREVIOUS CROP: Wheat, Durum DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Pumpkins	Ton	10.00	\$102.00	\$1,020.00	\$1,020.00	
CASH LAND PREPARATION AND GR Paid Labor (including benefits) Tractor/Self Propelled Irrigation	OWING EXPENSES (inc	luding sales tax)		28.66 28.93	57.59	
Chemicals and Custom Applications Fertilizer Insecticide Herbicide Other Chemicals	5			57.97 30.40 3.29 28.44	120.10	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Natural Gas/Pumping Repairs and Maintenance Water Assessment (See Note Belov	v) **			16.39 21.79 144.71 21.45	38.18 166.16	
Other Purchased Inputs & Seed/Transplants	OTAL CASH LAND PRE	PARATION AND GROWI	NG EXPENSES	272.65	272.65 654.68	
CASH HARVEST AND POST HARVES		TANGET AND CROWN	NO EXI ENGLO		004.00	
Paid Labor (including benefits) Tractor/Self Propelled Other/Contract				52.86 92.03	144.89	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				19.23 33.95	53.18	
T OPERATING OVERHEAD -> PICKUP OPERATING INTEREST AT 10.0%		OST HARVEST EXPENS	E		198.07 5.08 16.27	
TOTAL CASH OPERATING EXPENSE RETURNS OVER CASH OPERA					\$874.11 \$145.89	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 4B. Allocations of Ownership Costs; Pumpkins, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional RRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE: 10/8/01

	CASH COST BAS	IS (\$/ACRE)	TOTAL COST BAS	SIS (\$/ACRE)
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$102.00 / Tn TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$1,020.00 \$874.11	\$145.89	\$1,020.00 \$874.11	\$145.89
CASH OVERHEAD EXPENSES Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	6.76 12.65 43.71 26.22		6.76 12.65 43.71 26.22	
Total Cash Overhead Expenses	89.34		89.34	
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	963.45	\$56.55	963.45	\$56.55
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			44.68 47.08 21.00 24.00	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK			136.77	(\$80.21)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	75.00	(\$18.45)	75.00	(\$155.21)
Management Services (8% of Total Operation Expenses)			69.93	
TOTAL OWNERSHIP COST	164.34		371.03	
TOTAL COST RETURNS TO CAPITAL, MANAGEMENT AND RISK	\$1,038.45 >	(\$18.45)	\$1,245.14	
RETURNS TO RISK (PROFITS)			>	(\$225.14)
ltem	CASH COST BASI Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$87.41 \$16.43 \$103.84		\$87.41 \$37.10 \$124.51

Table 4C. Variable Operating Costs; Pumpkins, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Pumpkins ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: AREA: Kansas Settlement YIELD: 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE: 10/8/01

	First		Hour	s *	Operation	ng Costs (\$	ACRE *) Per Opera	ition		Tot. Cash		
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor Cus	st/Serv. Materials	Total	Times	Expenses	Class	
1	Apr	Disk	0.225	0.250	3.75	2.19		5.95	2.0	11.89	L	
2	Apr	Apply Fert/Ground	0.075	0.083	1.00	0.73	30.07	31.79	1.0	31.79	G	
3	Apr	Laser Level	0.900	1.000	11.81	8.77		20.59	0.3	6.18	L	
4	Apr	Landplane	0.225	0.250	2.59	2.19		4.78	0.5	2.39	L	
5	May	List	0.180	0.200	2.58	1.75		4.33	1.0	4.33	L	
6	May	Buck Rows	0.023	0.025	0.23	0.22		0.45	3.0	1.35	G	
7	May	Preirrigate		0.565	23.74	4.33		28.07	1.0	28.07	G	
8	May	Scratch	0.180	0.200	1.83	1.75		3.59	1.0	3.59	G	
9	Jun	Plant	0.225	0.250	2.59	2.19	272.65	277.44	1.0	277.44	L	
10	Jun	Apply Insect./Ground	0.112	0.125	1.25	1.10	30.40	32.75	1.0	32.75	G	
11	Jun	Remove Cap	0.150	0.167	1.53	1.47		2.99	1.0	2.99	G	
12	Jun	Cult/Spread Herbicide	0.225	0.250	2.94	2.19	3.29	8.43	1.0	8.43	G	
13	Jun	Irrigate		0.424	15.82	3.25		19.08	2.0	38.15	G	
14	Jun	Disk Ends	0.023	0.025	0.30	0.22		0.52	3.0	1.56	G	
15	Jul	Cultivate	0.300	0.333	3.37	2.92		6.29	1.0	6.29	G	
16	Jul	Irrigate		0.337	15.82	2.58		18.41	6.0	110.46	G	
17	Jul	Irrigate/Run Fertilizer		0.337	15.82	2.58	27.90	46.31	1.0	46.31	G	
18	Aug	Apply Fungicide/Ground	0.150	0.167	1.70	1.47	14.22	17.38	2.0	34.76	G	
19	Oct	Prepare Ends	0.023	0.025	0.30	0.22		0.52	1.0	0.52	Н	
20	Oct	Pick and Load	1.800	4.000	17.63	71.38		89.01	1.0	89.01	Н	
21	Oct	Haul 1	3.600	4.000	35.26	73.28		108.54	1.0	108.54	Н	
22	Oct	Disk Residue	0.225	0.250	3.75	2.19		5.95	1.0	5.95	L	
		Pickup Use 20 Mi/Acre	0.667		5.08					5.08		
		Operating Interest at 10.0					16.27			16.27		
		TOTAL CASH OPERATING	EXPENSE	S (includes	s all times over):					797.42	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

#### OPERATING COST SUMMARY BY CLASS

#### Land Preparation (L) 308.18 Growing (G) 346.50 Harvest (H) 198.07 Post Harvest (P) 0.00 Marketing (M) 0.00 Operating Overhead (O) 21.36 Total (T) \$874.11

#### SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

0=::0:::::	. 0					0-0 (411 10	,
Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$76.50	\$91.80	\$102.00	\$112.20	\$127.50	Break-even Price
- 25%	7.5	-177.05	-62.30	14.20	90.70	205.45	100.11
- 10%	9.0	-80.51	57.19	148.99	240.79	378.49	85.45
Budgeted	10.0	-16.15	136.85	238.85	340.85	493.85	78.11
+ 10%	11.0	48.21	216.51	328.71	440.91	609.21	72.12
Break-even Y	ïeld	10.25	8.28	7.34	6.59	5.72	

Table 4D. Resource and Cash Flow Requirements; Pumpkins, 2001

Water

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Pumpkins Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 10/8/01 AREA: Kansas Settlement 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE:

	Number	Applied	Total	Purchased Fuel,					Other			
Month *	Irrigations	(inches)	Labor (Hrs)	Water and Re	pairs	Lab	or C	hemicals	Purchases	Services	Total	
APR C			1.01		13.34	8	.84	30.07			52.25	
MAY C	1.0	6.0	0.99		28.38		.06	30.07			36.44	
JUN C	1.0	4.0	1.29		24.97	10.		33.69	272.65		342.17	
JUL C	3.0	12.0	1.48		51.38	11.		27.90	212.03		91.06	
AUG C	3.0	12.0	1.35		50.87	10.		28.44			89.99	
SEP C	2.0	8.0	0.67		31.65		.17	20.44			36.82	
OCT C	2.0	0.0	18.27		56.94	147.					204.03	
	20 Mi/Acre		10.27	•	5.08	177.	.00				5.08	
	nterest at 10.0	١			3.00					16.27	16.27	
Operating in	niciosi ai 10.0	•								10.27	10.27	
Total	10.0	42.0	25.06	26	32.61	202	.48	120.10	272.65	16.27	874.11	
%				3	80.04	23	.16	13.74	31.19	1.86	100.00	
Total N Total P Total Labo Total Wat		124.1 132.5 25.1 42.0		Diesel Fuel Unleaded Gas Nat Gas/Pumping All Direct Energy	3	2.0 39.6	Gal Gal Therms M BTU					
EQUIPMEN	IT REQUIREN	IENTS (per A	Acre)									
Directed	Spray Rig, 8	0.	.11 Hr	Drag Scraper, 10'	0.27			Fertilizer B	roadcaster,	0.08 Hr		
	ne 12'X 45'		.11 Hr	Laser, Complete System	0.27			Lister, 5 Bo	ottom	0.18 Hr		
Offset Dis	,		.09 Hr	Offset Disk, 16.5'	0.67				ck, 1/2 Ton	0.67 Hr		
	Planet Jr, 4 Ro		.22 Hr	Rolling Cultivator, 4 Rw	0.52			Rowbuck,		0.07 Hr		
	k Sprayer, 2 T		.52 Hr	Section Harrow, 4 Section	0.33			Tractor, 70		5.40 Hr		
Tractor, 1	100 PTO HP	1.	.76 Hr	Tractor, 125 PTO HP	1.20	Hr		Vegetable	Trailer Flat Bed	5.40 Hr		
MATERIALS	S REQUIREM	ENT (per Ac	re)									
10-53-00	), Dry	250.	00 Lb	32-00-00, URAN 32, Lqd	28.00	Ga		Benomyl		0.50 Lb		
Carbofura			.00 Pt	Pumpkin Seed (Hyb)	13.00			Triadimefo	n	0.24 Lb		
Trifluralin	ı	1.	.00 Pt	Water, Pump	42.00	ΑI						
LABOR REG	QUIREMENT	(per Acre)										
Irrigators			.77 Hr	Other	12.00	Hr		Tractor		9.29 Hr		

Operating Costs (\$/ACRE \*) -----

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 10.0 Tn / Acre PREVIOUS CROP: Wheat, Durum DATE: 10/8/01

First		Equipment/ Custom Oper	Job Rate	Material	Use and C	ost		- 5	Service Cost Labor
No. Month	Times Operation	HP Self-Prop./ Implement	Acre/Hr	Name	Appl.	Rat	te \$/Ur	iit	\$ / Unit Type
Apr	2.0 Disk	125 Offset Disk, 16.5'	4.00						Tractor
Apr	1.0 Apply Fert/Ground	125 Fertilizer Broadcaster,	12.00	10-53-00, Dry	250.00	Lb	228.00	Tn	Tractor
Apr	0.3 Laser Level	125 Drag Scraper, 10' Laser, Complete System	1.00						Tractor
Apr	0.5 Landplane	100 Landplane 12'X 45'	4.00						Tractor
May	1.0 List	125 Lister, 5 Bottom	5.00						Tractor
May	3.0 Buck Rows	100 Rowbuck, 10'	40.00						Tractor
May	1.0 Preirrigate	·	1.77	Water, Pump	6.00	ΑI	47.47	AF	Irrigators
May	1.0 Scratch	100 Section Harrow, 4 Section	5.00	·					Tractor
Jun	1.0 Plant	100 Planter, Planet Jr, 4 Row	4.00	Pumpkin Seed (Hyb)	13.00	Th	19.88	Th	Tractor
Jun	1.0 Apply Insect./Ground	100 Directed Spray Rig, 8		Carbofuran	3.00	Pt	76.85	Ga	Tractor
Jun	1.0 Remove Cap	100 Section Harrow, 4 Section	6.00						Tractor
Jun	1.0 Cult/Spread Herbicide	100 Rolling Cultivator, 4 Rw Saddle Tk Sprayer, 2 Tk 8 Row		Trifluralin	1.00	Pt	24.95	Ga	Tractor
Jun	2.0 Irrigate	, ,	2.36	Water, Pump	4.00	ΑI	47.47	ΑF	Irrigators
Jun	3.0 Disk Ends	100 Offset Disk, 13.5'	40.00						Tractor
Jul	1.0 Cultivate	100 Rolling Cultivator, 4 Rw	3.00						Tractor
Jul	6.0 Irrigate	-	2.97	Water, Pump	4.00	ΑI	47.47	ΑF	Irrigators
Jul	1.0 Irrigate/Run Fertilizer		2.97	Water, Pump	4.00	ΑI	47.47	ΑF	Irrigators
			;	32-00-00, URAN 32,	28.00	Ga	170.80	Tn	
Aug	2.0 Apply Fungicide/Groun	d 100 Saddle Tk Sprayer, 2 Tk 8	6.00	Benomyl	0.25	Lb	20.25	Lb	Tractor
			-	Triadimefon	0.12	Lb	70.12	Lb	
Oct	1.0 Prepare Ends	100 Offset Disk, 13.5'	40.00						Tractor
Oct	1.0 Pick and Load	70 Vegetable Trailer Flat Bed	0.50						Tractor
									Other
Oct	1.0 Haul	70 Vegetable Trailer Flat Bed	0.25						Tractor
Oct	1.0 Disk Residue	125 Offset Disk, 16.5'	4.00						Tractor
	Pickup use 20 Mi/Ac	Pickup Truck, 1/2 Ton	1.50						

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

## 2

Table 4F Operations Calendar; Pumpkins, 2001COUNTY: CochiseFARM: Southern VeCROP: PumpkinsACRES: 1.0 FARM: Southern Vegetables ACRES: 1.0 TILLAGE: WATER SOURCE: Ks Settlement, NG Conventional IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam

AREA:	Kansas Settlement	YIELD:	10.0	Tn/Acre	9	PREVI	OUS CROP	P:	Wheat,	Duram		DATE:		10/08/0	)1
							Month a	nd Times	Operatio	n Perform	ed				
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk						2.0 C								
2	Apply Fert/Ground						1.0 C								
3	Laser Level						0.3 C								
4	Landplane						0.5 C								
5	List							1.0 C							
6	Buck Rows							1.0 C	1.0 C	1.0 C					
7	Preirrigate							1.0 C							
8	Scratch							1.0 C							
9	Plant								1.0 C						
10	Apply Fert/Ground								1.0 C						
11	Remove Cap								1.0 C						
12	Cult/Spread Herbicide								1.0 C						
13	Irrigate								1.0 C	1.0 C					
14	Disk Ends								2.0 C	1.0 C					
15	Cultivate									1.0 C					
16	Irrigate									1.0 C	3.0 C	2.0 C			
17	Irrigate/Run Fertilizer									1.0 C					
18	Apply Fungicide/Ground										1.0 C				
19	Prepare Ends												1.0 C		
20	Pick and Load												1.0 C		
21	Haul												1.0 C		
22	Disk Residue												1.0 C		

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

#### Table 5A. Income and Cash Operating Summary; Red Chiles, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional CROP: Chile, Red Sandy-Loam SOIL: IRRIGATION SYSTEM: Flood Furrow 10/8/01 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE:

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Red Chile	Pound	2,269.00	\$0.67	\$1,520.23	\$1,520.23	
CASH LAND PREPARATION AND GR	ROWING EXPENSES (inc	luding sales tax)				
Paid Labor (including benefits)	`	,			72.77	<del></del>
Tractor/Self Propelled Irrigation				42.05 29.76		<del></del>
Other/ Contract				0.96		
Chemicals and Custom Application	S				121.98	
Fertilizer				73.63		
Insecticide Herbicide				35.55 12.80		<del></del>
				12.00	00.00	<del></del>
Farm Machinery and Vehicles Diesel Fuel				26.26	62.23	
Repairs and Maintenance				35.98		
Irrigation Water (excluding labor)				044.00	336.35	
Pump Energy - Electric Repairs and Maintenance				311.69 24.66		
Other Purchased Inputs &					480.56	
Seed/Transplants				180.56	100.00	
Other Services and Rentals				300.00		
-	TOTAL CASH LAND PRE	PARATION AND GROWI	NG EXPENSES		1073.89	
CASH HARVEST AND POST HARVES	STEXPENSES					
Paid Labor (including benefits)  Tractor/Self Propelled				31.07	43.85	<del></del>
Other/Contract				31.07 12.78		
Farm Machinery and Vehicles					63.30	
Diesel Fuel				11.82	00.00	
Repairs and Maintenance				51.48		
Custom Harvest/Post Harvest					67.80	
Other Materials	OTAL HARVEST AND P	OST HADVEST EXDENS	· <b>-</b>		10.02 184.97	<del></del>
OPERATING OVERHEAD -> PICKUP		OUT HARVEUT EXPENS	· <b>L</b>		20.34	
OPERATING INTEREST AT 10.0%					29.81	
TOTAL CASH OPERATING EXPENSE	ES				\$1,309.00	
RETURNS OVER CASH OPERA	ATING EXPENSES				\$211.23	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 5B. Allocations of Ownership Costs; Red Chiles, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional RRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	CASH COST BASI	S (\$/ACRE)	TOTAL COST BAS	SIS (\$/ACRE)
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.67 / Lb  TOTAL OPERATING EXPENSES  RETURN OVER CASH OPERATING EXPENSES	\$1,520.23 \$1,309.00	\$211.23	\$1,520.23 \$1,309.00	\$211.23
CASH OVERHEAD EXPENSES Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	9.86 13.97 65.45 39.27		9.86 13.97 65.45 39.27	
Total Cash Overhead Expenses	128.56		128.56	
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	1,437.56	\$82.67	1,437.56	\$82.67
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			68.78 48.22 24.20 26.53	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK	>	\$82.67	167.74	(\$85.07)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK  RETURNS TO MANAGEMENT AND RISK	75.00	\$7.67	75.00	(\$160.07)
Management Services (8% of Total Operation Expenses)			104.72	
TOTAL OWNERSHIP COST	203.56		476.02	
TOTAL COST	\$1,512.56		\$1,785.02	
RETURNS TO CAPITAL, MANAGEMENT AND RISK	>	\$7.67 	, ,	(\$264.79)
ltem	CASH COST BASI Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	IS (\$/ACRE) Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.58 \$0.09 \$0.67		\$0.58 \$0.21 \$0.79

Table 5C. Variable Operating Costs; Red Chiles, 2001

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional ACRES: Sandy-Loam CROP: Chile, Red 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	First		Hour	s *	Operatir	na Costs (	\$/ACRF *	) Per Opera	tion		Tot. Cash		
No.		Operation	Machine	Labor	Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class	
1	Jan	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L	
2	Jan	Rip	0.300	0.333	4.92	2.92			7.84	1.0	7.84	L	
3	Feb	Apply Fert/Ground	0.150	0.167	1.70	1.47		35.76	38.93	1.0	38.93	G	
4	Jan	Disk	0.225	0.250	4.26	2.19			6.45	2.0	12.90	L	
5	Feb	Landplane	0.225	0.250	3.72	2.19			5.91	2.0	11.82	L	
6	Feb	List	0.180	0.200	3.05	1.75			4.81	1.0	4.81	L	
7	Mar	Buck Rows	0.023	0.050	0.23	0.41			0.64	5.0	3.21	G	
8	Mar	Preirrigate		0.424	36.04	3.25			39.29	1.0	39.29	G	
9	Mar	Disk Ends	0.023	0.025	0.20	0.22			0.42	4.0	1.67	G	
10	Mar	Mulch	0.225	0.250	2.94	2.19			5.13	1.0	5.13	L	
11	Apr	Plant	0.225	0.250	4.09	2.19		189.20	195.49	1.0	195.49	L	
12	Apr	Remove Cap	0.180	0.200	1.81	1.75			3.57	1.0	3.57	G	
13	Apr	Irrigate		0.279	24.03	2.14			26.16	10.0	261.65	G	
14	May	Cultivate	0.225	0.250	2.65	2.19			4.84	4.0	19.38	G	
15	Jun	Apply Herbicide/Ground	0.150	0.167	1.66	1.47		12.80	15.93	1.0	15.93	G	
16	Jun	Thinning					75.00		75.00	1.0	75.00	G	
17	Jun	Hand Weeding					75.00		75.00	3.0	225.00	G	
18	Jul	Cultivate	0.150	0.167	1.77	1.47			3.23	3.0	9.70	G	
19	Aug	Irrigate/Run Fertilizer		0.333	30.03	2.55		18.93	51.52	2.0	103.04	G	
20	Aug	Apply Insecticide/Air					4.75	22.15	26.90	1.0	26.90	G	
21	Sep	Prepare Ends	0.023	0.025	0.38	0.22			0.59	1.0	0.59	Н	
22	Oct	Harvest	1.500	3.334	47.70	27.41			75.11	1.0	75.11	Н	
23	Oct	Load Produce	1.500	1.667	13.29	14.63		10.02	37.94	1.0	37.94	Н	
24	Oct	Haul, Custom 1.1 Tn					67.80		67.80	1.0	67.80	Н	
25	Nov	Cut Stalks 1.1 Tn	0.164	0.182	1.94	1.60			3.53	1.0	3.53	Р	
26	Nov	Disk Residue 1.1 Tn	0.129	0.143	2.43	1.25			3.69	1.0	3.69	L	
		Pickup Use 80 Mi/Acre	2.667		20.34						20.34		
		Operating Interest at 10.0					29.81				29.81		
		TOTAL CASH OPERATING	EXPENSE	S (include	s all times over):						1,309.00	T	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY B	Y CLASS	SENSITIV	ITY OF THE	NET REV	ENUES OVI	ER TOTAL CA	ASH EXPEN	ISES (\$/AC	RE)
Land Preparation (L)	250.63	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Growing (G)	823.26	Yields		\$0.50	\$0.60	\$0.67	\$0.74	\$0.84	Break-even Price
Harvest (H)	181.44								
Post Harvest (P)	3.53	- 25%	1,701.8	-827.83	-656.80	-542.78	-428.77	-257.74	0.99
Marketing (M)	0.00	- 10%	2,042.1	-684.55	-479.32	-342.49	-205.67	-0.44	0.84
Operating Overhead (O)	50.14	Budgeted	2,269.0	-589.03	-360.99	-208.97	-56.95	171.09	0.76
		+ 10%	2,495.9	-493.51	-242.67	-75.44	91.78	342.62	0.70
Total (T)	\$1,309.00								
		Break-even	Yield	3,668.18	2,961.25	2,624.10	2,355.88	2,042.69	

Table 5D. Resource and Cash Flow Requirements; Red Chiles, 2001

Total

Labor (Hrs)

0.94

Water

Applied

(inches)

Number

Irrigations

Month \*

JAN C

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional ACRES: Sandy-Loam CROP: Chile, Red IRRIGATION SYSTEM: Flood Furrow SOIL: 1.0 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Purchased

Water

Fuel, Oil

and Repairs

15.00

JAN C			0.94	1	5.00	5.25				23.23	
FEB C			1.12	1	6.44	9.80	35.76			62.00	
MAR C	1.0	6.0	0.62			4.98				42.91	
APR C	1.0	4.0	0.90			7.60	8.64	180.56		228.43	
MAY C	2.0	8.0	0.88			7.10	0.0.			58.23	
JUN C	2.0	8.0	1.55			2.96	12.80		150.00	233.85	
JUL C	2.0	8.0	0.97	_		7.84	12.00		75.00	134.85	
AUG C	4.0	18.0	1.39	_		7.0 <del>4</del> 0.85	60.02		79.75	260.50	
SEP C	1.0	4.0	0.30	_		2.36	00.02		19.15	26.76	
	1.0	4.0						10.00	67.00		
OCT C			5.00			2.04		10.02	67.80	180.85	
NOV C			0.32			2.85				7.22	
Pickup Use 80				2	0.34					20.34	
Operating Inte									29.81	29.81	
Water Assessr	ment			**							
Total	13.0	56.0	14.01	482		6.63	117.22	190.58	402.36	1309.00	
%				36	.84	8.91	8.95	14.56	30.74	100.00	
Total N Total P Total Labor Total Water		216.7 38.8 14.0 56.0		Diesel Fuel Unleaded Gas Electric / Pumping All Direct Energy	40.4 8.0 3893.7 19.9	Gal Gal KWH M BTU	J				
EQUIPMENT I	REQUIREM	ENTS (per Acı	re)								
Bed Shaper	r, 6 Rw	0.22		Chili Harvester, SP 2 Row	1.50 Hr		Directed Spr	ay Rig, 8	0.15 Hr		
Flat Trailer		1.50	) Hr	Landplane 12'X 45'	0.45 Hr		Lister, 7 Bott	om	0.18 Hr		
Moldboard I	Plow, 4-16 2	2 0.32	2 Hr	Offset Disk, 12'	0.09 Hr		Offset Disk,	16.5'	0.60 Hr		
Pickup Truc	k, 1/2 Ton	2.67	' Hr	Planter, Drill Type, 6 Row	0.22 Hr		Power Mulch	ner, 4 Rw	0.22 Hr		
Rolling Cult	ivator. 6 Rw	1.35	5 Hr	Rotary Stalk Cutter, 4 Row	0.16 Hr		Rowbuck, 10	)' <sup>^</sup>	0.11 Hr		
Saddle Tk S				Section Harrow, 3 Section	0.18 Hr		Tractor, 60 I		1.59 Hr		
Tractor, 100		2.56		Tractor, 125 PTO HP	0.02 Hr		Tractor, 150		1.83 Hr		
V-Ripper, 5		0.30		114661, 1201 10111	0.02 111		ridotor, roo		1.00 111		
MATERIALS F											
10-34-00, L	qd	10.00	) Ga	32-00-00, URAN 32, Lqd	58.00 Ga		Boxes & Sup	plies	10.00 Ct		
BT		2.00	) Lb	Carbofuran	7.00 Lb		Chile Pepper	r Sd (OP)	5.00 Lb		
ВІ		1.00	) Pt	Water, Pump	56.00 AI			,			
Dicamba											
	JIREMENT (	(per Acre)									

Operating Costs (\$/ACRE \*) -----

Labor Chemicals

8.25

Other

**Purchases** 

Services

Total

23.25

## 26

#### Table 5E. Schedule of Operations; Red Chiles, 2001

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, Elect TILLAGE: Conventional CROP: Chile, Red ACRES: Sandy-Loam 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: 10/8/01 AREA: Kansas Settlement YIELD: 2,269.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE:

First No. Month 1	imes Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material U Name			e \$/Un		ervice Cost \$ / Unit	Labor Type
Jan	1.0 Plow	150 Moldboard Plow, 4-16 2	2.80		7.44		<del>• • • • • • • • • • • • • • • • • • • </del>		<del>*</del> * • • • • • • • • • • • • • • • • • •	Tractor
Jan	1.0 Rip	150 V-Ripper, 5 Shnk	3.00							Tractor
Feb	1.0 Apply Fert/Ground	100 Saddle Tk Sprayer, 2 Tk 8		32-00-00, URAN 32,	20.00	Ga	170.80	Tn		Tractor
. 00	/	roo cadalo in opiayon, 2 in o		0-34-00, Lqd			263.33			
Jan	2.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor
Feb	2.0 Landplane	150 Landplane 12'X 45'	4.00							Tractor
Feb	1.0 List	150 Lister, 7 Bottom	5.00							Tractor
Mar	5.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor
										Other
Mar	1.0 Preirrigate		2.36	Water, Pump	6.00	ΑI	72.08	AF		Irrigators
Mar	4.0 Disk Ends	60 Offset Disk, 12'	40.00							Tractor
Mar	1.0 Mulch	100 Power Mulcher, 4 Rw	4.00							Tractor
Apr	1.0 Plant	100 Bed Shaper, 6 Rw	4.00	Chile Pepper Sd (OP)	5.00	Lb	34.23	Lb		Tractor
		Planter, Drill Type, 6 Row	C	arbofuran	7.00	Lb	1.17	Lb		
Apr	1.0 Remove Cap	100 Section Harrow, 3 Section	5.00							Tractor
Apr	10.0 Irrigate		3.58	Water, Pump	4.00	ΑI	72.08	ΑF		Irrigators
May	4.0 Cultivate	100 Rolling Cultivator, 6 Rw	4.00							Tractor
Jun	1.0 Apply Herbicide/Ground	d 100 Directed Spray Rig, 8	6.00	Dicamba	1.00	Pt	97.06	Ga		Tractor
Jun	1.0 Thinning	CST Thinning							75.00 Ac	;
Jun	3.0 Hand Weeding	CST Hand Weeding							75.00 Ac	;
Jul	3.0 Cultivate	100 Rolling Cultivator, 6 Rw	6.00							Tractor
Aug	2.0 Irrigate/Run Fertilizer		3.00	Water, Pump	5.00	ΑI	72.08	ΑF		Irrigators
				2-00-00, URAN 32,	19.00		170.80			
Aug	1.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix		Т	2.00	Lb	10.50	Lb	4.75 Ac	
Sep	1.0 Prepare Ends	125 Offset Disk, 16.5'	40.00							Tractor
Oct	1.0 Harvest	Chili Harvester, SP 2 Row	0.60							Tractor
										Other
Oct	1.0 Load Produce	60 Flat Trailer	0.60	Boxes & Supplies	10.00	Ct	0.95	Ct		Tractor
Oct	1.0 Haul, Custom	CST Haul Red Chiles							60.00 Tn	
Nov	1.0 Cut Stalks	100 Rotary Stalk Cutter, 4 Row								Tractor
Nov	1.0 Disk Residue	150 Offset Disk, 16.5'	7.00							Tractor
	Pickup use 80 Mi/Ac	Pickup Truck, 1/2 Ton	0.38							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 5F Operations Calendar; Red Chiles, 2001

COUNT CROP: AREA:			FARM: Southern Vegetables ACRES: 1.0 YIELD: 2,269 Lb/Acre			WATER SOURCE: IRRIGATION SYSTEM: PREVIOUS CROP:			Flood F	lement, NO urrow Upland	3	TILLAGE: SOIL: DATE:		Conventional Sandy-Loam 10/08/01	
N	0									n Perform					D
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow			1.0 C											
2	Rip			1.0 C											
3	Disk			1.0 C	1.0 C										
4	Apply Fert/Ground				1.0 C										
5	Landplane				2.0 C										
6	List				1.0 C										
7	Buck Rows					1.0 C	1.0 C	1.0 C	1.0 C	1.0 C					
8	Preirrigate					1.0 C									
9	Disk Ends					1.0 C		1.0 C	1.0 C	1.0 C					
10	Mulch					0.5 C	0.5 C								
11	Plant						1.0 C								
12	Remove Cap						1.0 C								
13	Irrigate						1.0 C	2.0 C	2.0 C	2.0 C	2.0 C	1.0 C			
14	Cultivate							1.0 C	3.0 C						
15	Apply Herbicide/Ground								1.0 C						
16	Thinning								1.0 C						
17	Hand Weeding								1.0 C	1.0 C	1.0 C				
18	Cultivate									2.0 C	1.0 C				
19	Irrigate/Run Fertilizer										2.0 C				
20	Apply Insecticide/Air										1.0 C				
21	Prepare Ends											1.0 C			
22	Harvest												1.0 C		
23	Load Produce												1.0 C		
24	Haul, Custom												1.0 C		
25	Cut Stalks													1.0 C	
26	Disk Residue													1.0 C	

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

#### Table 6A. Income and Cash Operating Summary; Spring Lettuce, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Lettuce, Iceberg Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: 545.0 Ct / Acre AREA: Kansas Settlement YIELD: PREVIOUS CROP: Chile, Green DATE: 10/8/01

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Lettuce	Crtn	545.00	\$8.96	\$4,883.20	\$4,883.20	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation	DWING EXPENSES (incl	uding sales tax)		36.61 30.87	67.48	
Chemicals and Custom Applications Fertilizer Insecticide				152.93 305.41	458.34	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Natural Gas/Pumping Repairs and Maintenance Water Assessment (See Note Below	)**			23.16 32.83 196.39 29.11	56.00 225.50	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals	OTAL CACULAND DEFE			126.60 150.00	276.60	
CASH HARVEST AND POST HARVES		PARATION AND GROWI	NG EXPENSES		1083.92	<del></del>
Custom Harvest/Post Harvest Other Materials	OTAL HARVEST AND PO	OST HARVEST EXPENS	F		1308.00 505.98 1813.98	
OPERATING OVERHEAD -> PICKUP L OPERATING INTEREST AT 10.0%		SOLITATIVE OF EMPLEMENT	_		15.25 21.91	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$2,935.06 \$1,948.14	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 6B. Allocations of Ownership Costs; Spring Lettuce, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional RRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

Item	CASH COST BASI	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns
TOTAL INCOME at \$8.96 / Ct		Net Neturns		Net Neturis
TOTAL INCOME at \$6.96 7 Ct  TOTAL OPERATING EXPENSES	\$4,883.20 \$2,935.06		\$4,883.20 \$2,935.06	
RETURN OVER CASH OPERATING EXPENSES	Ψ2,303.00	\$1,948.14	Ψ2,333.00	\$1,948.14
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	5.05 17.16 146.75 88.05		5.05 17.16 146.75 88.05	
Total Cash Overhead Expenses	257.02		257.02	
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	3,192.08	\$1,691.12	3,192.08	\$1,691.12
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			28.88 63.89 13.53 32.58	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK	>	\$1,691.12	138.89	\$1,552.23
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	75.00 >	\$1,616.12	75.00	\$1,477.23
Management Services (8% of Total Operation Expenses)			234.80	<b>V</b> ,, <b>2</b>
TOTAL OWNERSHIP COST	332.02		705.71	
TOTAL COST	\$3,267.08		\$3,640.78	
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)		\$1,616.12 	>	\$1,242.42
Item	CASH COST BASIS Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.39 \$0.61 \$5.99		\$5.39 \$1.29 \$6.68

Table 6C. Variable Operating Costs; Spring Lettuce, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Lettuce, Iceberg ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

	First		Hour	s *	Operating Costs (\$/ACRE *) Per Operation						Tot. Cash	
No.	Month	Operation	Machine		Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class
1	Dec	Disk	0.225	0.250	4.13	2.19			6.32	3.0	18.96	L
2	Dec	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L
3	Dec	Laser Level	0.900	1.000	12.19	8.77			20.96	0.3	6.29	L
4	Dec	Landplane	0.225	0.250	3.72	2.19			5.91	0.5	2.96	L
5	Dec	Apply Fert/Ground	0.075	0.083	0.79	0.73		84.27	85.79	1.0	85.79	G
6	Jan	Apply Herbicide/Ground	0.112	0.125	1.35	1.10			2.45	1.0	2.45	G
7	Jan	List	0.180	0.200	2.98	1.75			4.74	1.0	4.74	L
8	Jan	Shape Beds	0.138	0.154	1.69	1.35		77.60	80.64	1.0	80.64	L
9	Jan	Plant	0.333	0.370	5.55	3.25		126.60	135.40	1.0	135.40	L
10	Jan	Buck Rows	0.023	0.025	0.23	0.22			0.45	3.0	1.35	G
11	Jan	Irrigate		0.847	47.47	6.50			53.97	1.0	53.97	G
12	Jan	Irrigate		0.212	11.87	1.62			13.49	15.0	202.40	G
13	Jan	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	G
14	Jan	Cultivate	0.300	0.333	3.37	2.92			6.29	3.0	18.88	G
15	Jan	Apply Fert/Ground	0.150	0.167	2.14	1.46		34.33	37.93	2.0	75.86	G
16	Feb	Thinning					75.00		75.00	1.0	75.00	G
17	Mar	Apply Insecticide/Air					4.75	22.43	27.18	4.0	108.72	G
18	Mar	Hand Weeding					75.00		75.00	1.0	75.00	G
19	Apr	Apply Insecticide/Air					4.75	30.15	34.90	1.0	34.90	G
20	Apr	Apply Insecticide/Air					4.75	37.35	42.10	2.0	84.20	G
21	May	Harvest 545 Ct					1308.00	505.98	1813.98	1.0	1813.98	Н
22	May	Disk Residue 545 Ct	0.225	0.250	4.26	2.19			6.45	1.0	6.45	L
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25	
		Operating Interest at 10.0					21.91				21.91	
		TOTAL CASH OPERATING	G EXPENSE	S (includes	all times over):						2,935.06	Т

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

# OPERATING COST SUMMARY BY CLASS Land Preparation (L) 264.39 Growing (G) 819.53 Harvest (H) 1,813.98 Post Harvest (P) 0.00 Marketing (M) 0.00 Operating Overhead (O) 37.16

Total (T) \$2,935.06

#### SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	,
Yields		\$6.72	\$8.06	\$8.96	\$9.86		Break-even Price
- 25%	408.8	220.64	770.00	1,136.24	1,502.48	2,051.84	6.18
- 10%	490.5	497.90	1,157.14	1,596.62	2,036.11	2,695.34	5.70
Budgeted	545.0	682.75	1,415.23	1,903.55	2,391.87	3,124.35	5.47
+ 10%	599.5	867.59	1,673.32	2,210.47	2,747.62	3,553.35	5.27
Break-even \	/iald	343 70	246 15	206 99	178 58	148 09	

Table 6D. Resource and Cash Flow Requirements; Spring Lettuce, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

	Water									
Number Month * Irrigation	100	Total Labor (Hrs)		l, Oil epairs l	.abor	Chemicals	Other Purchases	Services	Total	
DEC P JAN C 3.0 FEB C 3.0 MAR C 5.0 APR C 4.0 MAY C 1.0 Pickup Use 60 Mi/Ac Operating Interest at		1.12 2.95 1.41 1.39 0.85 0.49		16.26 93.17 45.47 62.71 47.47 16.41 15.25	9.79 24.44 11.67 11.05 6.50 4.04	84.27 111.93 34.33 67.28 127.29	126.60 505.98	75.00 89.25 19.00 1308.00 21.91	110.32 356.13 166.47 230.29 200.26 1834.43 15.25 21.91	
Total 16.0	57.0	8.20		96.74 10.11	67.48 2.30	425.10 14.48	632.58 21.55	1513.16 51.55	2935.06 100.00	
TOTAL RESOURCE I Total N Total P Total Labor Total Water	REQUIREMENT 270.3 238.5 8.2 57.0	S (per Acre)	TOTAL ENERGY RE Diesel Fuel Unleaded Gas Nat Gas/Pumping All Direct Energy	24. 6.0 9 460.	6 Gal Gal 9 The	erms				
EQUIPMENT REQUIF Bed Shaper, 4 Rw Fert. Side Dress Ur Laser, Complete St Offset Disk, 12' Pickup Truck, 1/2 T Rowbuck, 10' Tractor, 125 PTO F	0. nit, 0. ystem 0. fon 2. 0. IP 0.	.14 Hr .30 Hr .27 Hr .05 Hr .00 Hr .07 Hr .27 Hr	Blade Scraper, 10' Fertilizer Broadcaster, Lister, 5 Bottom Offset Disk, 13.5' Planter, Stanhay, 4 Row Saddle Tk Sprayer, 2 Tk 8 Tractor, 150 PTO HP	0.27 Hr 0.08 Hr 0.18 Hr 0.67 Hr 0.33 Hr 0.14 Hr 1.51 Hr		Landplane Moldboard Offset Disk Rolling Cu	l Plow, 4-16 2	0.11 Hr 0.11 Hr 0.32 Hr 0.22 Hr 0.90 Hr 1.97 Hr		
MATERIALS REQUIR 11-53-00, Dry Chlorpyrifos Imidacloprid Spinosad  LABOR REQUIREME Irrigators	450. 12. 16. 6. NT (per Acre)	re) .00 Lb .00 Pt .00 Oz .00 Oz	46-00-00, Urea 46 Cypermethrin Lettuce Cartons Water, Pump	480.00 Lb 20.00 Oz 545.00 Ct 57.00 Al		Benefin Head Lettu Methomyl	uce Sd	3.00 Pt 200.00 Th 8.00 Pt		

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 545.0 Ct / Acre PREVIOUS CROP: Chile, Green DATE: 10/8/01

First		Equipment/ Custom Oper	Job Rate	Materia	I Use and C	ost		- S	ervice Cost	Labor
No. Month Ti	mes Operation	HP Self-Prop./ Implement	Acre/Hr	Name	Appl.	Rat	te \$/Ur	nit	\$ / Unit	Туре
Dec	3.0 Disk	150 Offset Disk, 13.5'	4.00							Tractor
Dec	1.0 Plow	150 Moldboard Plow, 4-16 2	2.80							Tractor
Dec	0.3 Laser Level	125 Blade Scraper, 10'	1.00							Tractor
		Laser, Complete System								
Dec	0.5 Landplane	150 Landplane 12'X 45'	4.00							Tractor
Dec	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	12.00	11-53-00, Dry	450.00	Lb	355.00	Tn		Tractor
Jan	1.0 Apply Herbicide/Ground	100 Directed Spray Rig, 16	8.00	Benefin	3.00	Pt	0.00	Ga		Tractor
Jan	1.0 List	150 Lister, 5 Bottom	5.00							Tractor
Jan	1.0 Shape Beds	100 Bed Shaper, 4 Rw	6.50	Imidacloprid	16.00	Oz	588.40	Ga		Tractor
		Saddle Tk Sprayer, 2 Tk 8 Row								
Jan	1.0 Plant	100 Planter, Stanhay, 4 Row	2.70	Head Lettuce Sd	200.00	Th	0.60	Th		Tractor
Jan	3.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor
Jan	1.0 Irrigate		1.18	Water, Pump	12.00	ΑI	47.47	AF		Irrigators
Jan	15.0 Irrigate		4.72	Water, Pump	3.00	ΑI	47.47	AF		Irrigators
Jan	2.0 Disk Ends	100 Offset Disk, 12'	40.00							Tractor
Jan	3.0 Cultivate	100 Rolling Cultivator, 4 Rw	3.00							Tractor
Jan	2.0 Apply Fert/Ground	100 Fert. Side Dress Unit,	6.00	46-00-00, Urea 46	240.00	Lb	271.17	Tn		Tractor
Feb	1.0 Thinning	CST Thinning							75.00 Ac	;
Mar	4.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix	N	/lethomyl	2.00	Pt	39.45	Ga	4.75 Ac	;
				Cypermethrin	5.00	Oz	291.66	Ga		
Mar	1.0 Hand Weeding	CST Hand Weeding							75.00 Ac	
Apr	1.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix	5	Spinosad	6.00	Oz	609.67	Ga	4.75 Ac	;
Apr	2.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix		Chlorpyrifos	6.00		47.21		4.75 Ac	
May	1.0 Harvest	CST Harv/pack/haul Lettuce	L	ettuce Cartons	545.00	Ct	0.88	Ct	2.40 Ct	t
May	1.0 Disk Residue	150 Offset Disk, 16.5'	4.00							Tractor
	Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 6F Operations Calendar; Lettuce (Spring), 2001COUNTY: CochiseFARM:Southern Vegetables WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional ACRES: 1.0 Sandy-Loam 10/08/01 CROP: Lettuce, Iceberg IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Kansas Settlement YIELD: 545.0 Ct/Acre PREVIOUS CROP: Chile, Green DATE:

ANLA.	Nansas Settlement	TIEED. 343.0	CUACIE		1 1 1 1	JUS CRUI		Crille, C	OICCII		DATE.		10/00/0	/ I
						Month a	and Times	Operatio	n Perforr	ned				
No.	Operation		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk		1.0 C	1.0 C										1.0 P
2	Plow													1.0 P
3	Laser Level													0.3 P
4	Landplane													0.5 P
5	Apply Fert/Ground													1.0 P
6	Apply Herbicide/Ground		1.0 C											
7	List		1.0 C											
8	Shape Beds		1.0 C											
9	Plant		1.0 C											
10	Buck Rows		2.0 C	1.0 C										
11	Irrigate		1.0 C											
12	Irrigate		2.0 C	3.0 C	5.0 C	4.0 C	1.0 C							
13	Disk Ends		1.0 C				1.0 C							
14	Cultivate		1.0 C	1.0 C	1.0 C									
15	Apply Fert/Ground		1.0 C	1.0 C										
16	Thinning			1.0 C										
17	Apply Insecticide/Air				3.0 C	1.0 C								
18	Hand Weeding				1.0 C									
19	Apply Insecticide/Air					1.0 C								
20	Apply Insecticide/Air					2.0 C								
21	Harvest/Pack/Haul						1.0 C							
22	Disk Residue						1.0 C							

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

### Table 7A. Income and Cash Operating Summary; Sweet Corn, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional Sandy-Loam CROP: Corn, Sweet IRRIGATION SYSTEM: Flood Furrow SOIL: 10/8/01 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Ears	Crtn	148.00	\$5.46	\$808.08	\$808.08	
CASH LAND PREPARATION AND Paid Labor (including benefits) Tractor/Self Propelled Irrigation	GROWING EXPENSES (inc	luding sales tax)		26.48 31.93	58.41	
Chemicals and Custom Applicati Fertilizer Insecticide Herbicide	ons			82.29 103.26 8.96	194.52	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Natural Gas/Pumping Repairs and Maintenance	1			17.42 25.97 165.38 24.51	43.39 189.90	
Other Purchased Inputs & Seed/Transplants	TOTAL CASH LAND PRE		ING EVDENCES	116.60	116.60 602.82	
CASH HARVEST AND POST HAR\		FARATION AND GROW	ING EXPENSES		002.62	
Paid Labor (including benefits) Tractor/Self Propelled Other/Contract				48.75 230.06	278.81	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Other Materials	TOTAL HARVEST AND P	OST HARVEST EXPENS	SF.	17.70 31.27	48.97 189.06 516.83	
OPERATING OVERHEAD -> PICKU OPERATING INTEREST AT 10.0%		OOT THE ENGLISH ENG	· <b>-</b>		7.63 7.07	
TOTAL CASH OPERATING EXPEN RETURNS OVER CASH OPE					\$1,134.35 (\$326.27)	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

Table 7B. Allocations of Ownership Costs; Sweet Corn, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional RRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

	CASH COST BASI	S (\$/ACRE)	TOTAL COST BAS	SIS (\$/ACRE)
ltem	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$5.46 / Ct TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$808.08 \$1,134.35	(\$326.27)	\$808.08 \$1,134.35	(\$326.27)
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	6.94 14.45 56.72 34.03		6.94 14.45 56.72 34.03	
Total Cash Overhead Expenses	112.14		112.14	
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	1,246.49	(\$438.41)	1,246.49	(\$438.41)
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			46.64 53.80 15.64 27.43	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK		(\$438.41)	143.51	(\$581.92)
Land Cost / Rent or Lease	75.00		75.00	
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	75.00 >	(\$513.41)	75.00	(\$656.92)
Management Services (8% of Total Operation Expenses)			90.75	,
TOTAL OWNERSHIP COST	187.14		421.40	
TOTAL COST RETURNS TO CAPITAL, MANAGEMENT AND RISK	\$1,321.49	(\$513.41)	\$1,555.75	
RETURNS TO RISK (PROFITS)	·		>	(\$747.67)
Item	CASH COST BASI: Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.66 \$1.26 \$8.93		\$7.66 \$2.85 \$10.51

Table 7C. Variable Operating Costs; Sweet Corn, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Corn, Sweet ACRES: IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam 1.0 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

	First		Hour	s *	Operati	ng Costs (\$	/ACRE *) Per Opera	ition		Tot. Cash	
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor Cu	st/Serv. Materials	Total	Times	Expenses	Class
1	Mar	Disk	0.180	0.200	3.40	1.75		5.16	2.0	10.32	L
2	Mar	Apply Fert/Ground	0.075	0.083	1.00	0.73	37.45	39.18	1.0	39.18	G
3	Mar	Chisel	0.214	0.238	3.51	2.09		5.60	1.0	5.60	L
4	Mar	List	0.180	0.200	2.58	1.75		4.33	1.0	4.33	L
5	Mar	Buck Rows	0.023	0.025	0.23	0.22		0.45	4.0	1.80	G
6	Mar	Preirrigate		0.333	15.82	2.92		18.75	1.0	18.75	G
7	Apr	Disk Ends	0.023	0.025	0.29	0.22		0.51	4.0	2.03	G
8	Apr	Plant	0.180	0.200	3.07	1.75	116.60	121.42	1.0	121.42	L
9	Apr	Irrigate		0.333	15.82	2.55		18.38	8.0	147.03	G
10	Apr	Apply Herbicide/Ground	0.180	0.200	2.16	1.75	8.96	12.87	1.0	12.87	G
11	May	Irrigate/Run Fertilizer		0.333	15.82	2.55	14.95	33.33	3.0	99.98	G
12	May	Cultivate	0.150	0.167	1.77	1.28		3.05	3.0	9.14	G
13	Jul	Apply Insect./Ground	0.075	0.083	1.05	0.73	12.91	14.68	8.0	117.47	G
14	Jul	Pick and Load	4.500	10.00	44.07	168.29	189.06	401.42	1.0	401.42	Н
15	Jul	Haul 1	0.500	0.556	4.90	100.74		115.41	1.0	115.41	Н
16	Aug	Disk Residue	0.225	0.250	4.26	2.19		6.45	2.0	12.90	L
	•	Pickup Use 30 Mi/Acre	1.000		7.63					7.63	
		Operating Interest at 10.0					7.07			7.07	
		TOTAL CASH OPERATING	EXPENSE	S (include:	all times over)	:				942.63	Т

\$6.82 Break-even Price

7.70 6.78

6.32

5.95

5.50

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY I	BY CLASS	SENSITIVITY	Y OF THE N	NET REVEN	IUES OVER	R TOTAL CAS	H EXPENSE	ES (\$/ACRE)
Land Preparation (L)	154.57	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%
Growing (G)	448.25	Yields		\$4.10	\$4.91	\$5.46	\$6.01	\$6.82 Bre
Harvest (H)	516.83							
Post Harvest (P)	0.00	- 25%	111.0	-399.73	-308.83	-248.22	-187.61	-96.70
Marketing (M)	0.00	- 10%	133.2	-357.59	-248.50	-175.77	-103.05	6.04
Operating Overhead (O)	14.69	Budgeted	148.0	-329.50	-208.29	-127.48	-46.67	74.54
		+ 10%	162.8	-301.40	-168.07	-79.18	9.71	143.04
Total (T)	\$1,134.35	+ 25%	185.0	-259.26	-107.75	-6.74	94.27	245.79
		Break-even \	/ield	321.58	224.65	187.06	160.25	131.89

Table 7D. Resource and Cash Flow Requirements; Sweet Corn, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

		Water				Ор	erating	Costs (\$/A	CRE *)			
	Number	Applied	Total	Purchased	Fuel, Oil	•	•	, ,,	Óther			
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Lab	or	Chemicals	Purchases	Services	Total	
MAR C	1.0	4.0	1.28		29.95	11	.22	37.45			78.62	
APR C	2.0	8.0	1.12		37.39		9.06	8.96	116.60		172.01	
MAY C	3.0	12.0	1.55		53.30		.94	14.95	110.00		80.19	
JUN C	3.0	12.0	1.05		47.99		3.10	29.89			85.98	
JUL C	3.0	12.0	37.24		105.11		2.52	103.26	189.06		689.95	
AUG C	0.0	12.0	0.50		8.51		1.39	100.20	100.00		12.90	
	30 Mi/Acre		0.00	•	7.63						7.63	
	nterest at 10.0				7.00					7.07	7.07	
opolamig ii												
Total	12.0	48.0	42.74		289.88	33	7.23	194.51	305.66	7.07	1135.35	
%					25.55	2	9.73	17.15	26.95	0.62	100.00	
Total Labo Total Wat		42.7 48.0		Nat Gas/F All Direct		388.1 44.4	Then M BT					
EQUIPMEN	T REQUIREM	IENTS (per A	Acre)									
Directed	Spray Rig, 16	0.	18 Hr	Fertilizer Broadcast	er, 0	.08 Hr		Lister, 5 B	ottom	0.18 Hr		
Offset Dis	- ,		09 Hr	Offset Disk, 16.5'		.81 Hr			uck, 1/2 Ton	1.00 Hr		
,	Orill Type, 6 Ro		18 Hr	Rolling Cultivator, 6		.45 Hr		Rowbuck,		0.09 Hr		
. ,	Air Blast 500		60 Hr	Tractor, 70 PTO H		.00 Hr		,	00 PTO HP	1.59 Hr		
,	125 PTO HP		25 Hr	Tractor, 150 PTO H	P 1	.02 Hr		V-Ripper,	5 Shnk	0.21 Hr		
Vegetabl	e Trailer Flat E	Bed 5.	00 Hr									
	S REQUIREM											
11-53-00	, ,		00 Lb	32-00-00, URAN 32	, I	.00 Ga		Alachlor		2.50 Pt		
Methomy			00 Pt	Sweet Corn (Super	12	.00 Lb		Water, Pu	mp	48.00 AI		
Wirebour	nd Crates	112.	00 Ct									
LABOR REG	QUIREMENT	(per Acre)										
Irrigators			16 Hr	Other	30	.00 Hr		Tractor		8.57 Hr		
-												

\*NOTE: P = Previous Year C = Current Year N = Next Year

Table 7E. Schedule of Operations; Sweet Corn, 2001

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional ACRES: Sandy-Loam CROP: Corn, Sweet IRRIGATION SYSTEM: Flood Furrow SOIL: 1.0 AREA: Kansas Settlement YIELD: 148.0 Ct / Acre PREVIOUS CROP: Watermelons DATE: 10/8/01

First No. Month T	imes Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Materia Name	I Use and C Appl.		te \$ / U		Service Cost \$ / Unit	Labor Type	
Mar	2.0 Disk	150 Offset Disk, 16.5'	5.00							Tractor	
Mar	1.0 Apply Fert/Ground	125 Fertilizer Broadcaster,	12.00	11-53-00, Dry	200.00	Lb	355.00	Tn		Tractor	
Mar	1.0 Chisel	150 V-Ripper, 5 Shnk	4.20	•						Tractor	
Mar	1.0 List	125 Lister, 5 Bottom	5.00							Tractor	
Mar	4.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor	
Mar	1.0 Preirrigate		3.00	Water, Pump	4.00	ΑI	47.47	AF		Tractor	
Apr	4.0 Disk Ends	100 Offset Disk, 12'	40.00							Tractor	
Apr	1.0 Plant	100 Planter, Drill Type, 6 Row	5.00	Sweet Corn (Super	12.00	Lb	9.21	Lb		Tractor	
Apr	8.0 Irrigate	• •	3.00	Water, Pump	4.00	ΑI	47.47	AF		Irrigators	
Apr	1.0 Apply Herbicide/Ground	d 100 Directed Spray Rig, 16	5.00	Alachlor	2.50	Pt	27.18	Ga		Tractor	
May	3.0 Irrigate/Run Fertilizer		3.00	Water, Pump	4.00	ΑI	47.47	AF		Irrigators	
•	ū		3	32-00-00, URAN 32,	15.00	Ga	170.80	Tn		· ·	
May	3.0 Cultivate	100 Rolling Cultivator, 6 Rw	6.00							Irrigators	
Jul	8.0 Apply Insect./Ground	100 Sprayer, Air Blast 500	12.00	Methomyl	2.00	Pt	48.94	Ga		Tractor	
Jul	1.0 Pick and Load	70 Vegetable Trailer Flat Bed	0.20	Wirebound Crates	112.00	Ct	1.60	Ct		Tractor	
		•								Other	
Jul	1.0 Haul	70 Vegetable Trailer Flat Bed	1.80							Tractor	
Aug	2.0 Disk Residue	150 Offset Disk, 16.5'	4.00							Tractor	
J	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00								

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

## Table 7F Operations Calendar; Sweet Corn, 2001 COUNTY: Cochise FARM: Southern Vegetables

COUNT\ CROP: AREA:	Y: Cochise Corn, Sweet Kansas Settlement	FARM: Southe ACRES: 1.0 YIELD: 148.0				WATER SOURCE: IRRIGATION SYSTEM: PREVIOUS CROP:			Ks Settlement, NG Flood Furrow Watermelons			TILLAGE: SOIL: DATE:		Conver Sandy- 10/08/0	Loam
						Month and Times Operation Perform									
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk					1.0 C									
2	Apply Fert/Ground					1.0 C									
3	Chisel					1.0 C									
4	List					1.0 C									
5	Buck Rows					1.0 C	1.0 C	1.0 C	1.0 C						
3	Preirrigate					1.0 C									
7	Disk Ends						1.0 C	1.0 C	1.0 C	1.0 C					
3	Plant						1.0 C								
)	Irrigate						2.0 C	2.0 C	1.0 C	3.0 C					
0	Apply Herbicide/Ground						1.0 C								
1	Irrigate/Run Fertilizer							1.0 C	2.0 C						
12	Cultivate							3.0 C							
13	Apply Insect./Ground									8.0 C					
14	Pick and Load									1.0 C					
15	Haul									1.0 C					
16	Disk Residue										2.0 C				

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 8A. Income and Cash Operating Summary; Watermelons, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Watermelons Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: 10/8/01 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

ltem	Unit	Quantity	Price/	Budgeted	Total	Your Farm
			Unit	/Acre	/Acre	Budget
INCOME -> Melons	Ton	16.83	\$141.60	\$2,383.13	\$2,383.13	
CASH LAND PREPARATION AND GRO	WING EXPENSES (inc	cluding sales tax)				
Paid Labor (including benefits)					59.91	
Tractor/Self Propelled				28.53		
Irrigation				31.37		<del></del>
Chemicals and Custom Applications					54.19	
Fertilizer				50.90		<del></del>
Herbicide				3.29		<del></del>
Farm Machinery and Vehicles					41.09	
Diesel Fuel				17.32		<del></del>
Repairs and Maintenance Irrigation Water (excluding labor)				23.77	229.46	<del></del>
Natural Gas/Pumping				199.84	229.40	
Repairs and Maintenance				29.62		
Other Purchased Inputs &					133.45	
Seed/Transplants				58.45	100.40	
Other Services and Rentals				75.00		
ТО	TAL CASH LAND PRE	PARATION AND GROW	ING EXPENSES		518.10	
CASH HARVEST AND POST HARVEST	EXPENSES					
Paid Labor (including benefits)					131.98	
Tractor/Self Propelled				70.63		
Other/Contract				61.35		
Farm Machinery and Vehicles					58.52	
Diesel Fuel				18.43		
Repairs and Maintenance				40.08	040.00	<del></del>
Other Materials	TALA.D. /EOT AND D	00T HADVEOT EVDEN	\_		319.03	<del></del>
		OST HARVEST EXPENS	SE		509.53	
OPERATING OVERHEAD -> PICKUP U: OPERATING INTEREST AT 10.0%	SE.				15.25 44.04	<del></del>
TOTAL CASH OPERATING EXPENSES					\$1,086.91	<del></del>
RETURNS OVER CASH OPERAT	ING EXPENSES				\$1,296.22	<del></del>

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

### Table 8B. Allocations of Ownership Costs; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

Item	CASH COST BASI	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns	
		Net Keturns		Net Returns	
TOTAL INCOME at \$141.60 / Tn	\$2,383.13		\$2,383.13		
TOTAL OPERATING EXPENSES  RETURN OVER CASH OPERATING EXPENSES	\$1,086.91	\$1,296.22	\$1,086.91	\$1,296.22	
CASH OVERHEAD EXPENSES		, ,		, ,	
Taxes, Housing and Insurance, Farm Machinery	7.59		7.59		
Wells and Irrigation System	17.46		17.46		
General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	54.35 32.61		54.35 32.61		
Total Cash Overhead Expenses	112.00		112.00		
Total Cash Operating and Overhead Cost	1,198.92		1,198.92		
RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	.,	\$1,184.21	,,,,,,,	\$1,184.21	
Capital Replacement, Machinery and Vehicles			51.34		
Wells and Irrigation System Interest on Equity, Machinery and Vehicles			65.01 17.10		
Wells and Irrigation System			33.15		
Total Capital Allocations			166.60		
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK				\$1,017.62	
Land Cost / Rent or Lease	75.00		75.00	ψ1,017.02	
Total Land Costs	75.00		75.00		
RETURNS TO CAPITAL, MANAGEMENT AND RISK		\$1,109.21	75.00		
RETURNS TO MANAGEMENT AND RISK			>	\$942.62	
Management Services (8% of Total Operation Expenses)			86.95		
TOTAL OWNERSHIP COST	187.00		440.55		
TOTAL COST	\$1,273.92		\$1,527.46		
RETURNS TO CAPITAL, MANAGEMENT AND RISK	>	\$1,109.21	, ,,		
RETURNS TO RISK (PROFITS)			>	\$855.66	
Item	CASH COST BASIS	S (\$/ACRE) Net Returns	TOTAL COST BAS	SIS (\$/ACRE) Net Returns	
цетт	moonie and Costs	INCLINETALINE	income and Costs	Net Metallis	
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$64.58		\$64.58	
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$11.11		\$26.18	
BREAK-EVEN PRICE TO COVER TOTAL COST		\$75.69		\$90.76	

Table 8C. Variable Operating Costs; Watermelons, 2001

FARM: Southern AZ Veg COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional ACRES: Sandy-Loam CROP: Watermelons 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

	First		Hour	s *	Operatir	na Costs (	(\$/ACRE *) Pei	r Opera	tion		Tot. Cash		
No.		Operation	Machine	Labor	Fuel/Rps.	•	ust/Serv. Mate	•	Total	Times	Expenses	Class	
1	Jan	Plow	0.321	0.357	5.83	3.13			8.96	1.0	8.96	L	
2	Feb	Disk	0.225	0.250	3.62	2.19			5.82	2.0	11.63	L	
3	Mar	Apply Fert/Ground	0.075	0.083	0.79	0.73	;	39.64	41.16	1.0	41.16	G	
4	Feb	Laser Level	0.900	1.000	11.81	8.77			20.59	0.3	6.18	L	
5	Mar	Landplane	0.225	0.250	2.59	2.19			4.78	0.5	2.39	L	
6	Apr	List	0.180	0.200	2.58	1.75			4.33	1.0	4.33	L	
7	Apr	Buck Rows	0.023	0.025	0.23	0.22			0.45	4.0	1.80	G	
8	Apr	Preirrigate		0.565	31.65	4.33			35.98	1.0	35.98	G	
9	Apr	Plant	0.333	0.370	4.77	3.25		58.45	66.47	1.0	66.47	L	
10	May	Apply Herbicide/Ground	0.150	0.167	1.70	1.47		3.29	6.45	1.0	6.45	G	
11	May	Cultivate	0.225	0.250	2.53	2.19			4.72	3.0	14.16	G	
12	May	Irrigate		0.279	15.82	2.14			17.96	2.0	35.93	G	
13	Jun	Thinning					75.00		75.00	1.0	75.00	G	
14	Jun	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	G	
15	Jun	Irrigate		0.424	23.74	3.25			26.99	6.0	161.93	G	
16	Jun	Irrigate/Run Fertilizer		0.424	23.74	3.25		11.26	38.25	1.0	38.25	G	
17	Jul	Prepare Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.01	Н	
18	Aug	Harvest, Load & Haul	3.600	8.000	28.97	65.77	1:	59.52	254.26	2.0	508.51	Н	
19	Sep	Disk Residue	0.225	0.250	4.26	2.19			6.45	1.0	6.45	L	
	•	Pickup Use 60 Mi/Acre	2.000		15.25						15.25		
		Operating Interest at 10.0					44.04				44.04		
		TOTAL CASH OPERATING	EXPENSE	S (includes	ı s all times over):						1086.91	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY B	SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)									
Land Preparation (L)	106.41	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	<u> </u>	
Growing (G)	411.69	Yields		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	Break-even Price	
Harvest (H)	509.53									
Post Harvest (P)	0.00	- 25%	12.6	425.02	693.12	871.85	1,050.59	1,318.69	72.53	
Marketing (M)	0.00	- 10%	15.1	616.69	938.41	1,152.89	1,367.38	1,689.10	65.49	
Operating Overhead (O)	59.29	Budgeted	16.8	744.47	1,101.94	1,340.25	1,578.57	1,936.04	61.97	
		+ 10%	18.5	872.25	1,265.47	1,527.61	1,789.76	2,182.97	59.08	
Total (T)	\$1,086.91	+ 25%	21.0	1,063.93	1,510.76	1,808.65	2,106.55	2,553.38	55.63	
		Break-even Y	ield	7.02	5.49	4.79	4.25	3.64		

Table 8D. Resource and Cash Flow Requirements; Watermelons, 2001

COUNTY: Cochise FARM: Southern AZ Veg WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/8/01

		Water				On	erating	Costs (\$/A	CRE *)			
	Number	Applied	Total	Purchased F	uel, Oil	٠,		(4	Other			
Month *	Irrigations	(inches)	Labor (Hrs)		d Repairs	Lal	bor (	Chemicals	Purchases	Services	Total	
JAN C			0.36		5.83	,	3.13				8.96	
FEB C			0.55		7.17		4.83				12.00	
MAR C			0.46		5.71		4.02	39.64			49.37	
APR C	1.0	8.0	1.16		39.23		9.55	39.04	58.45		107.23	
MAY C	1.0	4.0	0.70		20.05		5.80	3.29	30.43		29.14	
JUN C	3.0	18.0	1.87		77.30		5.02	11.26		75.00	178.58	
JUL C	4.0	24.0	1.72		95.24		3.23	11.20		75.00	108.47	
AUG C	1.0	4.0	16.33		74.28		4.11		319.03		527.42	
SEP C	1.0	4.0	0.25		4.26		2.19		010.00		6.45	
Pickup Use 6	30 Mi/Acre		0.20		15.25	4	10				15.25	
	terest at 10.0				10.20					44.04	44.04	
operating in	terest at 10.0	'								77.07	44.04	
Total	10.0	58.0	23.39		344.32	19	1.88	54.19	377.48	119.04	1086.91	
%					31.68	1	7.65	4.99	34.73	10.95	100.00	
Total N Total P Total Labo Total Wate		88.0 60.0 23.4 58.0		Diesel Fuel Unleaded Gas Nat Gas/Pump All Direct Ener	oing	37.9 6.0 469.0 52.9	Gal Gal Thern M BT					
FOUIPMENT	T REQUIREM	IFNTS (ner A	Acre)									
Bed Shap			33 Hr	Drag Scraper, 10'	0	.27 Hr		Fertilizer F	Broadcaster,	0.08 Hr		
Landplane			11 Hr	Laser, Complete System		.27 Hr		Lister, 5 B	,	0.18 Hr		
	d Plow, 4-16		32 Hr	Offset Disk, 12'		.09 Hr		Offset Dis		0.45 Hr		
Offset Dis			22 Hr	Pickup Truck, 1/2 Ton		.00 Hr			tanhay, 2 Row	0.33 Hr		
	ultivator, 4 Rw		67 Hr	Rowbuck, 10'		.09 Hr			Sprayer, 2 Tk 8			
	50 PTO HP		20 Hr	Tractor, 100 PTO HP		.53 Hr			25 PTO HP	0.90 Hr		
	50 PTO HP		55 Hr	Vegetable Trailer Flat Be		.20 Hr				0.00 111		
MATERIALS	REQUIREM	ENIT (ner Acı	-a)	-								
16-20-00,			00 Lb	32-00-00, URAN 32, Lgc	d 11	.30 Ga		Trifluralin		1.00 Pt		
Water, Pu	,		00 AI	Watermelon Bins		.60 Ea			on Seed (OP)	2.00 Th		
	•		00 AI	vvateriileidii biilə	30	.00 La		vvalciiileit	on deed (Or)	2.00 111		
	QUIREMENT		00.11	011	_			<b>-</b> .		44.00		
Irrigators		4.	09 Hr	Other	8	.00 Hr		Tractor		11.30 Hr		

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Cochise WATER SOURCE: Ks Settlement, NG TILLAGE: Conventional CROP: Watermelons Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: 10/8/01 AREA: Kansas Settlement YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

First No. Month	Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material U Name			te \$ / Uı		ervice Cos \$ / Unit	t Labor Type	
Jan	1.0 Plo	W	150 Moldboard Plow, 4-16 2	2.80							Tractor	
Feb	2.0 Dis	k	125 Offset Disk, 13.5'	4.00							Tractor	
Mar		oly Fert/Ground	100 Fertilizer Broadcaster,		16-20-00, Dry	300.00	Lb	250.50	Tn		Tractor	
Feb		er Level	125 Drag Scraper, 10' Laser, Complete System	1.00							Tractor	
Mar	0.5 Lan	ndplane	100 Landplane 12'X 45'	4.00							Tractor	
Apr	1.0 List		125 Lister, 5 Bottom	5.00							Tractor	
Apr		ck Rows	100 Rowbuck, 10'	40.00							Tractor	
Apr	1.0 Pre	irrigate	•		Water, Pump	8.00	ΑI	47.47	AF		Irrigators	
Apr	1.0 Pla		100 Bed Shaper, 4 Rw Planter, Stanhay, 2 Row	2.70	Watermelon Seed (OP)	2.00	Th	27.70	Th		Tractor	
May	1.0 App	oly Herbicide/Ground	100 Saddle Tk Sprayer, 2 Tk 8	6.00	Trifluralin	1.00	Pt	24.95	Ga		Tractor	
May	3.0 Cul	•	100 Rolling Cultivator, 4 Rw	4.00							Tractor	
May	2.0 Irrig	ate	,	3.58	Water, Pump	4.00	ΑI	47.47	AF		Irrigators	
Jun	1.0 Thii	nning	CST Thinning		•					75.00 A	С	
Jun	2.0 Dis	•	100 Offset Disk, 12'	40.00							Tractor	
Jun	6.0 Irric	ate	,	2.36	Water, Pump	6.00	ΑI	47.47	AF		Irrigators	
Jun		ate/Run Fertilizer		2.36	Water, Pump	6.00	ΑI	47.47	AF		Irrigators	
		•			32-00-00, URAN 32,	11.30	Ga	170.80	Tn		-	
Jul	2.0 Pre	pare Ends	100 Offset Disk, 12'	40.00	The state of the s						Tractor	
Aug			50 Vegetable Trailer Flat Bed	0.25	Watermelon Bins	16.80	Ea	9.00	Ea		Tractor Other	
Sep	10 Dis	k Residue	150 Offset Disk, 16.5'	4.00							Tractor	
ОСР		up use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50							1143101	

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 8F Operations Calendar; Watermelons, 2001COUNTY: CochiseFARM: Southern Vegetables

COUNT\ CROP: AREA:	': Cochise Watermelons Kansas Settlement	FARM: ACRES: YIELD:		rn Vegetat		IRRIGA	R SOURCE TION SYS OUS CRO	STEM:	Ks Settl Flood F Wheat,		3	TILLAC SOIL: DATE:		Conver Sandy- 10/08/0	Loam
/ (( \L_ / \.	ransas cetternent	HELD.	10.0	111/7 (01)	<u> </u>						ed			10/00/0	, 1
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow			1.0 C											
2	Disk				1.0 C	1.0 C									
3	Laser Level				0.3. C										
4	Apply Fert/Ground					1.0 C									
5	Landplane					0.5 C									
6	List						1.0 C								
7	Buck Rows						1.0 C		2.0 C		1.0 C				
8	Preirrigate						1.0 C								
9	Plant						1.0 C								
10	Apply Herbicide/Ground							1.0 C							
11	Cultivate							1.0 C	2.0 C						
12	Irrigate							1.0 C			1.0 C				
13	Thinning								1.0 C						
14	Disk Ends								2.0 C						
15	Irrigate								2.0 C	4.0 C					
16	Irrigate/Run Fertilizer								1.0 C						
17	Prepare Ends									1.0 C	1.0 C				
18	Harvest, Load & Haul										1.0 C				
19	Disk Residue													1.0 C	

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

### Table 9A. Income and Cash Operating Summary; Fall Lettuce, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Pima WATER SOURCE: Cortaro-Marana TILLAGE: Conventional CROP: Lettuce, Iceberg SOIL: Sandy-Loam IRRIGATION SYSTEM: Flood Furrow 401.0 Ct / Acre 10/9/01 AREA: Marana YIELD: PREVIOUS CROP: Cotton, Upland DATE:

Item	Unit	Quantity	Price/	Budgeted	Total	Your Farm
			Unit	/Acre	/Acre	Budget
INCOME -> Lettuce	Crtn	401.00	\$6.88	\$2,758.88	\$2,758.88	
CASH LAND PREPARATION AND GR	OWING EXPENSES (inc	luding sales tax)				
Paid Labor (including benefits)	·	,			80.09	
Tractor/Self Propelled				39.24 40.85		
Irrigation				40.65		
Chemicals and Custom Applications Fertilizer	S			126.29	245.25	
Insecticide				63.79		<del></del>
Herbicide				55.17		
Farm Machinery and Vehicles					49.67	
Diesel Fuel				20.68		
Repairs and Maintenance				28.99		
Irrigation Water (excluding labor)	++				135.00	
Water Assessment (See Note Belov	N) ^^					
Other Purchased Inputs &				400.00	400.80	
Seed/Transplants Other Services and Rentals				100.80 300.00		
	TOTAL CASHLAND PRE	PARATION AND GROWI	NG EXPENSES	333.33	910.80	
CASH HARVEST AND POST HARVES		I AIGHTON AND ONOW	NO EXI LINOLO		310.00	
Custom Harvest/Post Harvest					962.40	
Other Materials					370.52	
Т	OTAL HARVEST AND P	OST HARVEST EXPENS	E		1332.92	· · · · · · · · · · · · · · · · · · ·
OPERATING OVERHEAD -> PICKUP	USE				15.25	
OPERATING INTEREST AT 10.0%					131.92	
TOTAL CASH OPERATING EXPENSE	ES				\$2,390.90	<del></del>
RETURNS OVER CASH OPERA	ATING EXPENSES				\$367.98	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.

### Table 9B. Allocations of Ownership Costs; Fall Lettuce, 2001

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Cortaro-Marana TILLAGE: Conventional CROP: Lettuce, Iceberg ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Marana YIELD: 401.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

\$2,758.88	Net Returns	Income and Costs	Net Returns
Ψ=,. σσ.σσ		\$2,758.88	-
\$2,390.90		\$2,390.90	
	\$367.98		\$367.98
5.01		5.01	
119.54		119.54	
71.73		71.73	
2,588.08	\$170.80	2,588.08	\$170.80
		31.98	
		12.51	
		44.49	
		>	\$126.31
100.00		100.00	
45.00			
	\$25.80	145.00	
		>	(\$18.69)
		191.27	
342 18		577 94	
>	\$25.80	, ,	
		>	(\$209.96)
SH COST BASIS	(\$/ACRE)	TOTAL COST BAS	IS (\$/ACRE)
e and Costs	Net Returns	Income and Costs	Net Returns
	\$5.96		\$5.96
			\$1.44 \$7.40
	5.91 119.54 71.73 197.18 2,588.08 2,588.08 100.00 45.00 145.00 145.00 342.18 \$2,733.08	\$367.98  5.91 119.54 71.73 197.18 2,588.08  \$170.80  100.00 45.00 145.00 145.00 342.18 \$2,733.08> \$25.80  SH COST BASIS (\$/ACRE) le and Costs Net Returns	\$367.98  5.91 119.54 71.73 197.18 2,588.08 \$170.80  100.00 45.00 145.00 145.00 145.00  145.00  \$25.80  \$170.80  \$25.80  \$170.80  \$25.80  \$170.80  \$25.80  \$2733.08 \$2,968.84  \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84  \$2,733.08 \$2,968.84

Table 9C. Variable Operating Costs; Fall Lettuce, 2001

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Cortaro-Marana TILLAGE: Conventional ACRES: CROP: Lettuce, Iceberg 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Marana YIELD: 401.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

	First		Hour	s *	Operatir	na Costs	(\$/ACRE *)	Per Opera	ation		Tot. Cash		
No.		Operation	Machine	Labor	Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class	
1	Jun	Disk	0.225	0.250	3.32	2.19			5.51	2.0	11.02	L	
2	Jun	Plow	0.360	0.400	5.23	3.51			8.74	1.0	8.74	L	
3	Jun	Landplane	0.257	0.286	3.32	2.51			5.83	2.0	11.66	L	
4	Jul	Apply Fert/Ground	0.075	0.083	0.34	0.73		86.63	87.70	1.0	87.70	G	
5	Jul	Apply Herbicide/Ground	0.225	0.250	3.59	2.19		55.17	60.95	1.0	60.95	G	
6	Jul	Buck Rows	0.023	0.025	0.10	0.22			0.32	2.0	0.64	G	
7	Jul	Shovel Ends		0.067		0.51			0.51	2.0	1.03	G	
8	Jul	Preirrigate		1.000		7.67		30.00	37.67	1.0	37.67	G	
9	Aug	Disk Ends	0.011	0.013	0.16	0.11			0.28	2.0	0.55	G	
10	Aug	List	0.225	0.250	4.13	2.19			6.33	1.0	6.33	L	
11	Aug	Plant	0.300	0.333	3.80	2.92		100.80	107.53	1.0	107.53	L	
12	Aug	Irrigate		0.599		4.59		15.00	19.59	7.0	137.15	G	
13	Sep	Roll Beds	0.129	0.143	0.73	1.25			1.99	1.0	1.99	L	
14	Sep	Thinning					75.00		75.00	1.0	75.00	G	
15	Sep	Apply Insecticide/Air					4.24	3.21	7.45	3.0	22.35	G	
16	Sep	Cultivate	0.300	0.333	1.99	2.92			4.92	3.0	14.75	G	
17	Sep	Apply Fert/Ground	0.300	0.333	4.70	2.92		19.84	27.46	2.0	54.92	G	
18	Oct	Hand Weeding					75.00		75.00	3.0	225.00	G	
19	Oct	Apply Insecticide/Air					4.24	9.57	13.81	3.0	41.43	G	
20	Nov	Harvest 401 Ct					962.40	370.52	1332.92	1.0	1332.92	Н	
21	Dec	Disk Residue 401 Ct	0.180	0.200	2.65	1.75			4.41	1.0	4.41	L	
		Pickup Use 60 Mi/Acre	2.000		15.25						15.25		
		Operating Interest at 10.0					131.92				131.92		
		TOTAL CASH OPERATING	S EXPENSE	S (includes	s all times over):						2,390.90	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

# A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY E	BY CLASS	SENSITIVI	TY OF THE	NET REVE	ENUES OVI	ER TOTAL CA	SH EXPENS	SES (\$/AC	RE)
Land Preparation (L)	151.66	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Growing (G)	759.15	Yields		\$5.16	\$6.19	\$6.88	\$7.57	\$8.60	Break-even Price
Harvest (H)	1,332.92								
Post Harvest (P)	0.00	- 25%	300.8	-874.76	-564.38	-357.47	-150.55	159.82	8.07
Marketing (M)	0.00	- 10%	360.9	-764.32	-391.87	-143.57	104.73	477.17	7.28
Operating Overhead (O)	147.17	Budgeted	401.0	-690.70	-276.87	-0.98	274.91	688.74	6.88
		+ 10%	441.1	-617.07	-161.86	141.62	445.09	900.31	6.56
Total (T)	\$2,390.90								
		Break-even	rield	777.20	497.54	401.27	336.22	270.46	

Table 9D. Resource and Cash Flow Requirements; Fall Lettuce, 2001

FARM: Southern AZ Veg COUNTY: Pima WATER SOURCE: Cortaro-Marana TILLAGE: Conventional ACRES: Sandy-Loam CROP: Lettuce, Iceberg 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 401.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Marana Cotton, Upland DATE:

		Water				Operat	ing Costs (\$/A	CRE *)			
Month *	Number Irrigations	Applied (inches)	Total Labor (Hrs)	Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
MOIILII	irrigations	(inches)	Labor (HIS)	water	anu Repairs	Labor	Chemicais	Pulcilases	Services	TOTAL	
JUN C			1.19		15.18	10.41				25.59	
JUL C	1.0	12.0	1.74	30.00	7.35	13.83	141.79			192.97	
AUG C	1.0	6.0	1.31	15.00	8.20	10.56		100.80		134.56	
SEP C	2.0	12.0	2.35	30.00	9.58	19.32	29.47		87.72	176.09	
OCT C	2.0	12.0	1.86	30.00	6.70	15.03	38.98		158.48	249.19	
NOV C	2.0	12.0	1.20	30.00		9.20	9.57	370.52	1041.64	1460.93	
DEC C			0.20		2.65	1.75				4.40	
Pickup Use	60 Mi/Acre			•	15.25					15.25	
Operating In	nterest at 10.0								131.92	131.92	
Water Asses	ssment			**							
Total	8.0	54.0	9.85	135.00	64.91	80.10	219.81	471.32	1419.76	2390.90	
%	0.0	04.0	0.00	5.65	2.71	3.35		19.71	59.38	100.00	
Total P Total Labo Total Wate		240.0 9.8 54.0		Unleaded All Direct		6.0 Ga 4.1 M	BTU				
	T REQUIREM			Dad Chanas 4 D	0.4	20 11-	Diale Linta	- C D	0.00 11-		
Bed Rolle	e Dress Unit,		13 Hr 60 Hr	Bed Shaper, 4 Rw Fert. Side Dress U		30 Hr 22 Hr	Disk-Liste	r, o Rw Broadcaster,	0.22 Hr 0.08 Hr		
	e 12'X 45'		51 Hr	Moldboard Plow, 4		22 FI 36 Hr	Offset Dis	,	0.65 Hr		
	ruck, 1/2 Ton		00 Hr	Planter/Gramor, 4		30 Hr		ultivator, 4 Rw	0.90 Hr		
Rowbuck			05 Hr	Tractor, 50 PTO F		12 Hr		0 PTO HP,	1.33 Hr		
	150 PTO HP,		58 Hr	110001, 001 101	,	12 111	Tradioi, 7	0110111,	1.00 111		
MATERIALS	S REQUIREM	ENT (per Ac	re)								
11-48-00	, Dry	" 500.	0Ó Lb	32-00-00, URAN 3	2, Lqd 40.0	00 Ga	Benefin		2.00 Pt		
Cyperme			00 Oz	Head Lettuce Sd		00 Th	Lettuce Ca	artons	401.00 Ct		
Methomy	1	1.	50 Pt	Pronamide	2.0	00 Lb	Water, Dis	strict	54.00 AI		
LABOR REC	QUIREMENT (	per Acre)									
Irrigators	· ·	 5.	33 Hr	Tractor	4.4	47 Hr					

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$45.00 per Acre is included as an ownership cost in Table B.

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Table 9E. Schedule of Operations; Fall Lettuce, 2001

FARM: Southern AZ Veg COUNTY: Pima WATER SOURCE: Cortaro-Marana TILLAGE: Conventional ACRES: Sandy-Loam CROP: Lettuce, Iceberg 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 401.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Marana Cotton, Upland DATE:

First No. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Materia Acre/Hr Name	I Use and Cost Appl. Ra		_	ervice Cost Labor \$ / Unit Type	
Jun	2.0 Disk	150 Offset Disk, 13.5'	4.00				Tractor	
Jun	1.0 Plow	150 Moldboard Plow, 4-16 2	2.50				Tractor	
Jun	2.0 Landplane	150 Landplane 12'X 45'	3.50				Tractor	
Jul	1.0 Apply Fert/Ground	50 Fertilizer Broadcaster,	12.00 11-48-00, Dry	500.00 Lb	330.00	Tn	Tractor	
Jul	1.0 Apply Herbicide/Groun	d 150 Fert. Side Dress Unit,	4.00 Benefin	2.00 Pt	0.00	Ga	Tractor	
			Pronamide	2.00 Lb	26.27	Lb		
Jul	2.0 Buck Rows	50 Rowbuck, 10'	40.00				Tractor	
Jul	2.0 Shovel Ends		15.00				Irrigators	S
Jul	1.0 Preirrigate		1.00 Water, District	12.00 AI	30.00	ΑF	Irrigators	S
Aug	2.0 Disk Ends	150 Offset Disk, 13.5'	80.00				Tractor	
Aug	1.0 List	150 Disk-Lister, 6 Rw	4.00				Tractor	
Aug	1.0 Plant	70 Bed Shaper, 4 Rw	3.00 Head Lettuce Sd	160.00 Th	0.60	Th	Tractor	
		Planter/Gramor, 4 Bd,8 Line/B	e					
Aug	7.0 Irrigate		1.67 Water, District	6.00 AI	30.00	ΑF	Irrigators	S
Sep	1.0 Roll Beds	70 Bed Roller, 4 Rw	7.00				Tractor	
Sep	1.0 Thinning	CST Thinning					75.00 Ac	
Sep	3.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix	Methomyl	0.50 Pt	48.94	Ga	4.24 Ac	
Sep	3.0 Cultivate	70 Rolling Cultivator, 4 Rw	3.00				Tractor	
Sep	2.0 Apply Fert/Ground	150 Fert. Side Dress Unit,	3.00 32-00-00, URAN 32,	20.00 Ga	170.80	Tn	Tractor	
Oct	3.0 Hand Weeding	CST Hand Weeding					75.00 Ac	
Oct	3.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix	Cypermethrin	4.00 Oz	291.66	Ga	4.24 Ac	
Nov	1.0 Harvest	CST Harv/pack/haul Lettuce	Lettuce Cartons	401.00 Ct	0.88	Ct	2.40 Ct	
Dec	1.0 Disk Residue	150 Offset Disk, 13.5'	5.00				Tractor	
	Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50					

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 9F Operations Calendar; Fall Lettuce, 2001

COUNTY: Pima FARM: Southern Vegetables TILLAGE: Conventional WATER SOURCE: Cortaro-Marana CROP: Lettuce, Iceberg ACRES: 1.0 Sandy-Loam 10/09/01 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 401.0 US CROP: Cotton, Upland
--Month and Times Operation Performed AREA: Marana Ct/Acre PREVIOUS CROP: DATE:

					Month	and Times	S Operation	n Perform	ed				
No.	Operation	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Disk						2.0 C						
2	Plow						1.0 C						
3	Landplane						1.0 C						
1	Apply Fert/Ground							1.0 C					
5	Apply Herbicide/Ground							1.0 C					
3	Buck Rows							1.0 C	1.0 C				
7	Shovel Ends							1.0 C	1.0 C				
3	Preirrigate							1.0 C					
9	Disk Ends								1.0 C	1.0 C			
10	List								1.0 C				
11	Plant								1.0 C				
12	Irrigate								1.0 C	2.0 C	2.0 C	2.0 C	
13	Roll Beds									1.0 C			
14	Thinning									1.0 C			
5	Apply Insecticide/Air									3.0 C			
6	Cultivate									2.0 C	1.0 C		
7	Apply Fert/Ground									1.0 C	1.0 C		
8	Hand Weeding										2.0 C	1.0 C	
9	Apply Insecticide/Air										2.0 C	1.0 C	
20	Harvest/Pack/Haul											1.0 C	
22	Disk Residue												1.0 C

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

### Table 10A. Income and Cash Operating Summary; Pumpkins, 2001

FARM: Southern AZ Veg ACRES: 1.0 Avra Valley, Electric COUNTY: Pima WATER SOURCE: TILLAGE: Conventional CROP: Pumpkins IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam 3.6 Tn / Acre 10/9/01 AREA: Avra Valley YIELD: PREVIOUS CROP: Cotton, Upland DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Pumpkins	Ton	3.60	\$102.00	\$367.20	\$367.20	
CASH LAND PREPARATION AND Paid Labor (including benefits) Tractor/Self Propelled Irrigation	GROWING EXPENSES (inc	cluding sales tax)		19.96 20.59	40.55	
Chemicals and Custom Applicat Fertilizer Insecticide Other Chemicals	ions			42.15 82.27 46.41	170.83	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor Pump Energy - Electric Repairs and Maintenance Water Assessment (See Note B	,			10.39 15.48 111.67 18.01	25.87 129.69	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals	TOTAL CASH LAND PRE	PARATION AND GROW	ING EXPENSES	250.49 150.00	400.49 767.43	
CASH HARVEST AND POST HAR	VEST EXPENSES					
Paid Labor (including benefits) Tractor/Self Propelled Other/Contract				52.62 90.98	143.59	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance	TOTAL HARVEST AND P	OST HARVEST EXPENS	SF	24.95 43.05	68.00 211.59	
OPERATING OVERHEAD -> PICK OPERATING INTEREST AT 10.0%	UP USE	22			5.08 14.89	
TOTAL CASH OPERATING EXPERIENCE OF CASH OPI					\$998.99 (\$631.79)	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

### Table 10B. Allocations of Ownership Costs; Pumpkins, 2001

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

	CASH COST BASI	S (\$/ACRE)	TOTAL COST BA	SIS (\$/ACRE)	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns	
TOTAL INCOME at \$102.00 / Tn TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$367.20 \$998.99	(\$631.79)	\$367.20 \$998.99	(\$631.79)	
CASH OVERHEAD EXPENSES Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	7.16 10.19 49.95 29.97		7.16 10.19 49.95 29.97		
Total Cash Overhead Expenses	97.27		97.27		
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	1,096.26	(\$729.06)	1,096.26	(\$729.06)	
Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles Wells and Irrigation System			46.09 27.83 20.72 15.88		
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK	>	(\$729.06)	110.52	(\$839.58)	
Land Cost / Rent or Lease	100.00		100.00		
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	100.00	(\$829.06)	100.00	(\$939.58)	
Management Services (8% of Total Operation Expenses)			79.92		
TOTAL OWNERSHIP COST	197.27		387.71		
TOTAL COST	\$1,196.26		\$1,386.70		
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)	>	(\$829.06) 	>	(\$1,019.50)	
Item	CASH COST BASI Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns	
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$277.50 \$54.80 \$332.29		\$277.50 \$107.70 \$385.19	

Table 10C. Variable Operating Costs; Pumpkins, 2001

FARM: Southern AZ Veg COUNTY: Pima WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional CROP: Pumpkins ACRES: 1.0 SOIL: Sandy-Loam IRRIGATION SYSTEM: Flood Furrow 10/9/01 AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE:

	First		Hour	s *	Operatir	ng Costs	(\$/ACRE	) Per Opera	ition		Tot. Cash	
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor C	ust/Serv.	Materials	Total	Times	Expenses	Class
1	May	Disk	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L
2	May	Landplane	0.360	0.400	3.99	3.51			7.50	1.0	7.50	L
3	May	List	0.225	0.250	3.19	2.19			5.38	1.0	5.38	L
4	May	Buck Rows	0.023	0.025	0.22	0.22			0.44	3.0	1.32	G
5	May	Preirrigate		0.565	23.71	4.33			28.05	1.0	28.05	G
6	May	Mulch	0.225	0.250	2.84	2.19			5.03	1.0	5.03	L
7	Jun	Plant	0.225	0.250	2.43	2.19		250.49	255.11	1.0	255.11	L
8	Jul	Irrigate/Run Fertilizer		0.424	23.71	3.25		8.43	35.40	5.0	176.98	G
9	Jul	Disk Ends	0.023	0.025	0.29	0.22			0.51	2.0	1.02	G
10	Jul	Cultivate	0.225	0.250	2.44	2.19			4.63	2.0	9.26	G
11	Jul	Hand Weeding					75.00		75.00	2.0	150.00	G
12	Aug	Apply Fungicide/Air					4.75	14.15	18.90	2.0	37.80	G
13	Sep	Apply Insecticide/Air					4.75	17.97	22.72	4.0	90.88	G
14	Oct	Prepare Ends	0.023	0.025	0.29	0.22			0.51	1.0	0.51	Н
15	Oct	Pick and Load	2.000	4.444	25.21	34.66			59.87	1.0	59.87	Н
16	Oct	Haul 1	3.371	3.750	42.49	32.90			75.39	1.0	75.39	Н
17	Oct	Disk Residue	0.225	0.250	3.20	2.19			5.39	1.0	5.39	L
		Pickup Use 20 Mi/Acre	0.667		5.08						5.08	
		Operating Interest at 10.0					14.89				14.89	
		TOTAL CASH OPERATING	EXPENSE	S (include:	s all times over):						998.99	Т

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY B	Y CLASS	SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)									
Land Preparation (L)	284.72	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%			
Growing (G)	558.53	Yields		\$76.50	\$91.80	\$102.00	\$112.20	\$127.50	Break-even Price		
Harvest (H)	135.77										
Post Harvest (P)	0.00	- 25%	2.7	-896.89	-855.58	-828.04	-800.50	-759.19	408.68		
Marketing (M)	0.00	- 10%	3.2	-875.95	-826.38	-793.33	-760.28	-710.71	346.85		
Operating Overhead (O)	19.97	Budgeted	3.6	-861.99	-806.91	-770.19	-733.47	-678.39	315.94		
		+ 10%	4.0	-848.02	-787.43	-747.04	-706.65	-646.06	290.65		
Total (T)	\$998.99	+ 25%	4.5	-827.08	-758.23	-712.33	-666.43	-597.58	260.30		
		Break-even Yi	eld	25.82	18.52	15.58	13.45	11.16			

Table 10D. Resource and Cash Flow Requirements; Pumpkins, 2001

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

	Total bor (Hrs)	Purchased Water	Fuel, Oil and Repair	•		Costs (\$/A	Other		
MAY C 1.0 8.0	` ,	Water							
	1 74		and Repair	s Lal	oor (	Chemicals	Purchases	Services	Total
			38.0	6 14	4.64				52.70
	0.28		2.6		2.41		250.49		255.55
JUL C 2.0 16.0	1.15		50.3	8 9	9.14	16.86		75.00	151.38
AUG C 2.0 16.0	1.12		50.1	6 8	3.92	45.16		84.50	188.74
SEP C 1.0 8.0	0.42		23.7	1 ;	3.25	80.31		19.00	126.27
OCT C	19.58		71.1	9 13	3.19				204.38
Pickup Use 20 Mi/Acre			5.0	8					5.08
Operating Interest at 10.0								14.89	14.89
Water Assessment		**							
Total 6.0 48.0	24.29		241.23	17	1.55	142.33	250.49	193.39	998.99
%			24.15	1	7.17	14.25	25.07	19.36	100.00
Total Labor 24.3 Total Water 48.0		Unleaded Electric / F All Direct	Pumping	2.0 2844.4 15.6	Gal KWH M BT				
EQUIPMENT REQUIREMENTS (per Acre)									
Cultivator, Sweep, 4 Rw 0.45 H	dr D	Disk-Lister, 4 Rw		0.22 Hr		Flexi-Plant	er - 4 Units	0.22 Hr	
Landplane 12'X 45' 0.36 F		Offset Disk, 12'		0.22 Hr		Offset Disk	κ, 13.5'	0.07 Hr	
Offset Disk, 16.5' 0.22 H		Pickup Truck, 1/2 To		0.67 Hr			cher, 4 Rw	0.22 Hr	
Rowbuck, 10' 0.07 H		Tractor, 100 PTO H		6.99 Hr		Tractor, 15	0 PTO HP	0.22 Hr	
Tractor, 150 PTO HP, 0.22 H	łr ۱	Vegetable Trailer Fl	at Bed	5.37 Hr					
MATERIALS REQUIREMENT (per Acre)									
32-00-00, URAN 32, Lqd 42.50 G		Benomyl		0.50 Lb		Endosulfar		4.00 Pt	
Esfenvalerate 38.40 C		Pumpkin Seed (Hyb		12.00 Th		Surfactant	(spreader)	4.00 Pt	
Triadimefon 0.24 L	.b V	Nater, Pump	•	48.00 AI					
LABOR REQUIREMENT (per Acre)									
Irrigators 2.68 H	dr (	Other		13.33 Hr		Tractor		8.27 Hr	

\*NOTE: P = Previous Year C = Current Year N = Next Year

### Table 10E. Schedule of Operations; Pumpkins, 2001

COUNTY: Pima FARM: Southern AZ Veg WATER SOURCE: Avra Valley, Electric TILLAGE: Conventional CROP: Pumpkins ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Avra Valley YIELD: 3.6 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/9/01

First Io. Month 1	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material L Name	Jse and Cos Appl. R				Service Cost \$ / Unit	t Labor Type	
May	1.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor	
May	1.0 Landplane	100 Landplane 12'X 45'	2.50							Tractor	
May	1.0 List	100 Disk-Lister, 4 Rw	4.00							Tractor	
May	3.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor	
May	1.0 Preirrigate		1.77	Water, Pump	8.00 A	d :	35.57	ΑF		Irrigators	
May	1.0 Mulch	100 Power Mulcher, 4 Rw	4.00	·						Tractor	
Jun	1.0 Plant	100 Flexi-Planter - 4 Units	4.00	Pumpkin Seed (Hyb)	12.00 Th	า	19.88	Th		Tractor	
Jul	5.0 Irrigate/Run Fertilizer		2.36	Water, Pump	8.00 A	.1	35.57	ΑF		Irrigators	
			3:	2-00-00, URAN 32,	8.50 Ga	a 1	70.80	Tn			
Jul	2.0 Disk Ends	100 Offset Disk, 13.5'	40.00							Tractor	
Jul	2.0 Cultivate	100 Cultivator, Sweep, 4 Rw	4.00							Tractor	
Jul	2.0 Hand Weeding	CST Hand Weeding							75.00 A	C	
Aug	2.0 Apply Fungicide/Air	CST Air Spray, 5 Gal Mix	В	enomyl	0.25 Lt	)	20.25	Lb	4.75 A	C	
			Т	riadimefon	0.12 Lb	)	70.12	Lb			
Sep	4.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix	E	sfenvalerate	9.60 Oz	z 1	44.04	Ga	4.75 A	C	
			E	ndosulfan	1.00 P		34.08				
				urfactant (spreader)	1.00 P	't	16.40	Ga			
Oct	1.0 Prepare Ends	100 Offset Disk, 13.5'	40.00							Tractor	
Oct	1.0 Pick and Load	100 Vegetable Trailer Flat Bed	0.45							Tractor	
										Other	
Oct	1.0 Haul	100 Vegetable Trailer Flat Bed								Tractor	
Oct	1.0 Disk Residue	150 Offset Disk, 12'	4.00							Tractor	
	Pickup use 20 Mi/Ac	Pickup Truck, 1/2 Ton	1.50								

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 10F Operations Calendar; Pumpkins, 2001COUNTY: PimaFARM: Southern Vegetables

COUNTY CROP: AREA:	∕: Pima Pumpkins Marana	FARM: ACRES: YIELD:	1.0	ern Vegetat Tn/Acre		IRRIGA	R SOURC ATION SY OUS CRO	STEM:	Avra Va Flood F Cotton,		•	TILLAG SOIL: DATE:	E:	Conver Sandy- 10/09/0	Loam
							Month	and Times	Operation	n Perform	ed				
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Disk							1.0 C							
<u> </u>	Landplane							1.0 C							
3	List							1.0 C							
	Buck Rows							1.0 C	1.0 C	1.0 C					
5	Preirrigate							1.0 C							
i	Mulch							1.0 C							
•	Plant								1.0 C						
3	Irrigate/Run Fertilizer									2.0 C	2.0 C	1.0 C			
	Disk Ends									1.0 C	1.0 C				
0	Cultivate									1.0 C	1.0 C				
1	Hand Weeding									1.0 C	1.0 C				
2	Apply Fungicide/Air										2.0 C				
13	Apply Insecticide/Air											4.0 C			
14	Prepare Ends												1.0 C		
15	Pick and Load												1.0 C		
16	Haul												1.0 C		
17	Disk Residue												1.0 C		

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 11A. Income and Cash Operating Summary; Cauliflower, 2001

FARM: Southern AZ Veg ACRES: 1.0 TILLAGE: Double Crop COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. CROP: Cauliflower IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: 10/9/01 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Cauliflower	Crtn	816.00	\$7.74	\$6,315.84	\$6,315.84	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation	OWING EXPENSES (inc	cluding sales tax)		64.75 85.89	150.64	
Chemicals and Custom Applications Fertilizer Herbicide				122.05 3.31	125.35	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				22.65 34.92	57.57	
Irrigation Water (excluding labor) Water Assessment (See Note Below	) **				156.33	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				101.76 3.00	104.76	
TC CASH HARVEST AND POST HARVES		PARATION AND GROWI	NG EXPENSES		594.65	<del></del>
Custom Harvest/Post Harvest Other Materials					2652.00 683.32	
TC OPERATING OVERHEAD -> PICKUP U OPERATING INTEREST AT 10.0%		OST HARVEST EXPENS	E		3335.32 10.21 7.18	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$3,947.37 \$2,368.47	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

Table 11B. Allocations of Ownership Costs; Cauliflower, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. Double Crop CROP: Cauliflower ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

	CASH COST BASIS	S (\$/ACRE)	TOTAL COST BA	SIS (\$/ACRE)
ltem	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$7.74 / Ct	\$6,315.84		\$6,315.84	
TOTAL OPERATING EXPENSES	\$3,947.37		\$3,947.37	
RETURN OVER CASH OPERATING EXPENSES		\$2,368.47		\$2,368.47
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery General and Office Overhead (5.0% of Total Operating Exp.)	6.31 197.37		6.31 197.37	
General Farm Maintenance (3.0% of Total Operating Exp.)			118.42	
Total Cash Overhead Expenses	322.10		322.10	
Total Cash Operating and Overhead Cost	4,269.47		4,269.47	
RETURNS OVER CASH OPER. AND OVER. EXPENSES	,	\$2,046.37	,,	\$2,046.37
CAPITAL ALLOCATIONS (100% Equity) Capital Replacement, Machinery and Vehicles			36.21	
Interest on Equity, Machinery and Vehicles			10.90	
Total Capital Allocations			47.12	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK	>	\$2,046.37	47.12	
RETURNS TO LAND, MANAGEMENT AND RISK			>	\$1,999.25
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	>	\$1,933.87 	>	\$1,886.75
			·	Ψ1,555.75
Management Services (8% of Total Operation Expenses)			315.79	
TOTAL OWNERSHIP COST	434.60		797.51	
TOTAL COST	\$4.381.97		\$4,744.88	
RETURNS TO CAPITAL, MANAGEMENT AND RISK	>	\$1,933.87	φ4, <i>1</i> 44.00	
RETURNS TO RISK (PROFITS)			>	\$1,570.96
	CASH COST BASIS	S (\$/ACRE)	TOTAL COST BAS	SIS (\$/ACRE)
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.84		\$4.84
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.53		\$0.98
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.37		\$5.81

Table 11C. Variable Operating Costs; Cauliflower, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop ACRES: CROP: Cauliflower 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE: 10/9/01

	First		Hour	s *	Operatir	ng Costs	(\$/ACRE *)	Per Oper	ation		Tot. Cash		
No.	Monti	n Operation	Machine	Labor	Fuel/Rps.	Labor C	ust/Serv.	Materials	Total	Times	Expenses	Class	
1	Jul	Plow	0.180	0.200	2.87	1.75			4.62	1.0	4.62	L	
2	Jul	Disk	0.090	0.100	1.52	0.88			2.40	3.0	7.20	L	
3	Jul	Landplane	0.300	0.333	3.88	2.92			6.80	1.0	6.80	L	
4	Jul	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
5	Jul	Buck Rows	0.022	0.025	0.10	0.22			0.31	3.0	0.94	G	
6	Jul	Preirrigate		0.800		6.14		11.17	17.30	1.0	17.30	G	
7	Jul	Soil Fertility					3.00		3.00	1.0	3.00	G	
8	Jul	Disk Ends	0.023	0.025	0.12	0.22			0.34	5.0	1.71	G	
9	Jul	Apply Fert/Ground	0.300	0.333	3.44	2.92		41.37	47.73	1.0	47.73	G	
10	Jul	Apply Herbicide/Ground	0.225	0.250	1.67	2.19		3.31	7.16	1.0	7.16	G	
11	Aug	Mulch	0.225	0.250	2.86	2.19			5.05	1.0	5.05	L	
12	Aug	Plant	0.450	0.500	3.51	4.39		101.76	109.66	1.0	109.66	L	
13	Aug	Irrigate		0.800		6.14		11.17	17.30	13.0	224.92	G	
14	Aug	Cultivate	0.300	0.333	2.00	2.92			4.92	4.0	19.70	G	
15	Aug	Apply Fert/Ground	0.300	0.333	2.49	2.92		39.83	45.24	1.0	45.24	G	
16	Aug	Apply Insect./Ground	0.180	0.200	0.97	1.75			2.72	10.0	27.21	G	
17	Aug	Apply Fert/Ground	0.300	0.333	3.44	2.92		13.62	19.97	3.0	59.92	G	
18	Nov	Harvest 816 Ct					2652.00	683.32	3335.32	1.0	3335.32	Н	
19	Jan	Disk Residue 816 Ct	0.090	0.100	1.38	0.88			2.26	1.0	2.26	L	
		Pickup Use 40 Mi/Acre	1.333		10.21						10.21		
		Operating Interest at 10.0					7.18				7.18		
		TOTAL CASH OPERATING	EXPENSE	S (include:	s all times over):						3947.37	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY B	Y CLASS	SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)										
Land Preparation (L)	139.81	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%				
Growing (G)	454.85	Yields		\$5.80	\$6.97	\$7.74	\$8.51	\$9.67	Break-even Price			
Harvest (H)	3,335.32											
Post Harvest (P)	0.00	- 25%	612.0	446.30	1,156.83	1,630.52	2,104.21	2,814.74	5.08			
Marketing (M)	0.00	- 10%	734.4	656.54	1,509.17	2,077.60	2,646.03	3,498.66	4.91			
Operating Overhead (O)	17.39	Budgeted	816.0	796.69	1,744.07	2,375.65	3,007.24	3,954.61	4.83			
		+ 10%	897.6	936.85	1,978.96	2,673.70	3,368.45	4,410.56	4.76			
Total (T)	\$3,947.37	+ 25%	1,020.0	1,147.08	2,331.30	3,120.78	3,910.26	5,094.48	4.68			
		Break-even	Yield	352.16	210.13	165.60	136.64	108.25				

Table 11D. Resource and Cash Flow Requirements; Cauliflower, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Cauliflower ACRES: IRRIGATION SYSTEM: Flood Furrow 1.0 SOIL: Sandy-Loam 10/9/01 AREA: Maricopa YIELD: 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE:

		Water				Operat	ing Costs (\$/A				
Month *	Number Irrigations	Applied (inches)	Total Labor (Hrs)	Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
	4.0	4.0	2.52	44.47	10.00	04.40	44.07		3.00	00.00	
JUL C AUG C	1.0 4.0	4.0 16.0	2.52 13.16	11.17 44.67	18.66 29.39	21.19 59.23	44.67 80.68	101.76	3.00	98.69 315.73	
SEP C	3.0	12.0	3.81	33.50	7.18	30.76	00.00	101.70		71.44	
OCT C	3.0	12.0	2.60	33.50	0.97	20.16				54.63	
NOV C	3.0	12.0	2.40	33.50	0.31	18.41		683.32	2652.00	3387.23	
DEC C	3.0	12.0	0.10	33.30	1.38	0.88		000.02	2002.00	2.26	
Pickup Use	40 Mi/Δcre		0.10	ı	10.21	0.00				10.21	
	iterest at 10.0				10.21				7.18	7.18	
Water Asses				**					7.10	7.10	
Water Asset	Soment										
Total	14.0	56.0	24.58	156.34	67.79	150.63	125.35	785.08	2662.18	3947.37	
%		00.0		3.96	1.72	3.82		19.89	67.44	100.00	
Total Labo Total Wate		24.6 56.0		All Direct	Energy	4.1 M	BTU				
FOLIIPMEN	T REQUIREM	FNTS (ner /	Acre)								
Bed Shap		(1	45 Hr	Cultivator, Sweep,	4 Rw 1	20 Hr	Fert. Side	Dress Unit,	0.30 Hr		
	Injector, 4 Rov		20 Hr	Landplane 12'X 45		30 Hr	Lister, 5 E		0.22 Hr		
Moldboar	d Plow, 5-16 2	2 0.	.18 Hr	Offset Disk, 16.5'	0	.09 Hr	Offset Dis		0.27 Hr		
Offset Dis	sk, 8'	0.	.11 Hr	Pickup Truck, 1/2	Γon 1.	33 Hr	Planter, P	Planet Jr, 4 Row	0.45 Hr		
Power Mu	ulcher, 6 Rw	0.	.22 Hr	Row Crop Sprayer	, 8 Rw 0	22 Hr	Rowbuck	, 10'	0.07 Hr		
Saddle TI	k Sprayer, 2 T	k 8 1.	.80 Hr	Tractor, 50 PTO H	IP, 2	51 Hr	Tractor, 7	70 PTO HP,	1.65 Hr		
Tractor, 1	00 PTO HP,	1.	.65 Hr	Tractor, 150 PTO H	HP, 0	84 Hr					
MATERIALS	REQUIREMI	ENT (per Ac	re)								
10-34-00,			00 Ga	16-20-00, Dry	300	00 Lb	32-00-00,	URAN 32, Lqd	40.80 Ga		
	Cauliflower		00 Ct	Cauliflower Sd (Hy		00 Th	Methomyl		0.00 Pt		
Trifluralin		1.	.00 Pt	Water, District	56	00 AI	·				
LABOR REC	QUIREMENT (	per Acre)									
Irrigators		11.	20 Hr	Tractor	7.	38 Hr					

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

Table 11E. Schedule of Operations; Cauliflower, 2001

FARM: Southern AZ Veg Maricopa-Stanfield Irrig. COUNTY: Pinal WATER SOURCE: TILLAGE: Double Crop CROP: Cauliflower ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: YIELD: 10/9/01 AREA: Maricopa 816.0 Ct / Acre PREVIOUS CROP: Pimento DATE:

First No. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material I Name	Use and C Appl.		te \$ / Ur		Service Cost \$ / Unit	Labor Type
Jul	1.0 Plow	150 Moldboard Plow, 5-16 2	5.00							Tractor
Jul	3.0 Disk	150 Offset Disk, 21'	10.00							Tractor
Jul	1.0 Landplane	150 Landplane 12'X 45'	3.00							Tractor
Jul	1.0 List	100 Lister, 5 Bottom	4.00							Tractor
Jul	3.0 Buck Rows	50 Rowbuck, 10'	40.00							Tractor
Jul	1.0 Preirrigate		1.25	Water, District	4.00	ΑI	33.50	ΑF		Irrigators
Jul	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac	
Jul	5.0 Disk Ends	50 Offset Disk, 8'	40.00							Tractor
Jul	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.00	10-34-00, Lqd	26.00	Ga	263.33	Tn		Tractor
Jul	1.0 Apply Herbicide/Ground	d 50 Row Crop Sprayer, 8 Rw	4.00	Trifluralin	1.00	Pt	24.95	Ga		Tractor
Aug	1.0 Mulch	100 Power Mulcher, 6 Rw	4.00							Tractor
Aug	1.0 Plant	70 Planter, Planet Jr, 4 Row Bed Shaper, 4 Rw	2.00	Cauliflower Sd (Hyb)	20.00	Th	4.80	Th		Tractor
Aug	13.0 Irrigate		1.25	Water, District	4.00	ΑI	33.50	AF		Irrigators
Aug	4.0 Cultivate	70 Cultivator, Sweep, 4 Rw	3.00							Tractor
Aug	1.0 Apply Fert/Ground	50 Fert. Side Dress Unit, 4Row	3.00	16-20-00, Dry	300.00	Lb	250.50	Tn		Tractor
Aug	10.0 Apply Insect./Ground	50 Saddle Tk Sprayer, 2 Tk 8	5.00	Methomyl	0.00	Pt	48.94	Ga		Tractor
Aug	3.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.00	32-00-00, URAN 32,	13.60	Ga	170.80	Tn		Tractor
Nov	1.0 Harvest	CST Harv/pack/haul		Boxes for Cauliflower	816.00	Ct	0.79	Ct	3.25 Ct	
Jan	1.0 Disk Residue	150 Offset Disk, 16.5'	10.00							Tractor
	Pickup use 40 Mi/Ac	Pickup Truck, 1/2 Ton	0.75							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 11F Operations Calendar; Cauliflower, 2001

COUNTY: Pinal	FARM: Southern Vegetables	WATER SOURCE:	MSID	TILLAGE:	Double Crop
CROP: Cauliflower	ACRES: 1.0	IRRIGATION SYSTEM:	Flood Furrow	SOIL:	Sandy-Loam
AREA: Maricopa	YIELD: 816 Ct/Acre	PREVIOUS CROP:	Pimento	DATE:	10/09/01

AREA.	Мапсора	TIELD.	o to Cl/Acie			Month a		Operatio	n Perform	ed	DATE.		10/09/0	•
No.	Operation		Ja	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Plow								1.0 C					
	Disk								3.0 C					
	Landplane								1.0 C					
	List								1.0 C					
	Buck Rows								1.0 C	1.0 C	1.0 C			
	Preirrigate								1.0 C					
	Soil Fertility								1.0 C					
	Disk Ends								1.0 C	2.0 C	2.0 C			
	Apply Fert/Ground								1.0 C					
)	Apply Herbicide/Ground								1.0 C					
	Mulch									1.0 C				
	Plant									1.0 C				
3	Irrigate									4.0 C	3.0 C	3.0 C	3.0 C	
	Cultivate									3.0 C	1.0 C			
;	Apply Fert/Ground									1.0 C				
<b>;</b>	Apply Insect./Ground									4.0 C	5.0 C	1.0 C		
7	Apply Fert/Ground									3.0 C				
3	Harvest												1.0 C	
9	Disk Residue													1.0 C

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 12A. Income and Cash Operating Summary; Green Chiles, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional IRRIGATION SYSTEM: Flood Furrow CROP: Chile, Green SOIL: Sandy-Loam 10/9/01 AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

	Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
NCOME ->	Gr. Chile Rd. Chile	Ton Pound	2.28 700.00	\$366.33 \$0.67	\$835.23 \$469.00	\$1,304.23	
CASH LAND F	REPARATION AND G	ROWING EXPENSES (inc	luding sales tax)				
	(including benefits)					66.54	
I ractor Irrigatio	/Self Propelled				35.48 31.06		
•					31.00		
	and Custom Applicatio	ns			00.50	197.54	<del></del>
Fertilize Insection					98.59 32.57		
Herbici					32.44		
	Chemicals				33.94		
Farm Mach	inery and Vehicles					53.09	
Diesel					20.22	33.09	
	s and Maintenance				32.86		
	ater (excluding labor) essment (See Note Bel	ow) **				161.92	
Other Purc	hased Inputs &	,				256.42	
	ransplants				181.42		
	Services and Rentals				75.00		
		TOTAL CASH LAND PREI	PARATION AND GROW	ING EXPENSES		735.50	
CASH HARVE	ST AND POST HARVE	EST EXPENSES					
Paid Labor	(including benefits)					1.82	
Tractor	/Self Propelled				1.82		
Farm Mach	inery and Vehicles					2.15	
Diesel I					0.86		
Repairs	and Maintenance				1.29		
Custom Ha	rvest/Post Harvest					246.30	
		TOTAL HARVEST AND PO	OST HARVEST EXPENS	SE		250.27	
	OVERHEAD -> PICKUI	P USE				20.43	
PERATING I	NTEREST AT 10.0%					21.61	<del></del>
TOTAL CASH	OPERATING EXPENS	SES				\$1,027.81	
DETLIDA	NS OVER CASH OPER	RATING EXPENSES				\$276.42	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 12B. Allocations of Ownership Costs; Green Chiles, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	CASH COST BASI	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns	
		Net Returns		Net Returns	
TOTAL INCOME at \$366.33 / Tn TOTAL OPERATING EXPENSES	\$1,304.23		\$1,304.23		
RETURN OVER CASH OPERATING EXPENSES	\$1,027.81	\$276.42	\$1,027.81	\$276.42	
CASH OVERHEAD EXPENSES					
Taxes, Housing and Insurance, Farm Machinery	5.11		5.11		
General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	51.39 30.83		51.39 30.83		
Total Cash Overhead Expenses	87.34		87.34		
Total Cash Operating and Overhead Cost	1.115.15		1,115.15		
RETURNS OVER CASH OPER. AND OVER. EXPENSES	1,110.10	\$189.09	1,110.10	\$189.09	
CAPITAL ALLOCATIONS (100% Equity)			20.00		
Capital Replacement, Machinery and Vehicles Interest on Equity, Machinery and Vehicles			29.66 14.20		
			42.00		
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK	>	\$189.09	43.86		
RETURNS TO LAND, MANAGEMENT AND RISK			>	\$145.23	
Land Cost / Rent or Lease	100.00		100.00		
Water Assessment **	25.00		25.00		
Total Land Costs RETURNS TO CAPITAL, MANAGEMENT AND RISK	125.00	\$64.09	125.00		
RETURNS TO CAPITAL, MANAGEMENT AND RISK			>	\$20.23	
Management Services (8% of Total Operation Expenses)			82.22		
management cervices (e/s or retail operation Expenses)			02.22		
TOTAL OWNERSHIP COST	212.34		338.42		
TOTAL COST	\$1,240.15		\$1,366.23		
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)	>	\$64.09		(\$62.00)	
RETURNS TO RISK (PROFITS)				(\$62.00)	
Item	CASH COST BASIS Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns	
nom	modifie and ooots	TTO T TO COMPANY	moonic and costs	110t Itotullio	
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$245.09		\$245.09	
BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$93.13		\$148.43 \$393.52	
BREAK-EVEN PRICE TO COVER TOTAL COST		\$338.22		<b>₱</b> ᲐᲧᲐ.5∠	

Table 12C. Variable Operating Costs; Green Chiles, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 SOIL: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

	First		Hour	· · *	Operati	na Cooto	(¢/ACDE *	) Bor Oper	tion		Tot. Cash		
No.		Operation	Machine		Fuel/Rps.		(३/ACKE ust/Serv.		Total	Times	Expenses	Class	
1	Jan	Plow	0.321	0.357	5.62	3.13			8.75	1.0	8.75	1	
2	Feb	Disk	0.225	0.250	4.11	2.19			6.30	2.0	12.61	i i	
3	Feb	Laser Level	0.900	1.000	13.25	8.77			22.02	0.3	6.61	Ī	
4	Feb	Landplane	0.225	0.250	2.49	2.19			4.69	0.5	2.34	Ī	
5	Feb	List	0.180	0.200	2.93	1.75			4.69	1.0	4.69	Ī	
6	Mar	Apply Herbicide/Ground	0.150	0.167	1.98	1.47		32.44	35.88	1.0	35.88	G	
7	Mar	Buck Rows	0.023	0.025	0.22	0.22		02	0.44	5.0	2.21	G	
8	Mar	Preirrigate	0.020	0.424	0.22	3.25		16.75	20.00	1.0	20.00	G	
9	Mar	Disk Ends	0.023	0.025	0.29	0.22			0.51	4.0	2.04	Ğ	
10	Mar	Apply Fert/Ground	0.150	0.167	2.07	1.47		37.63	41.17	1.0	41.17	G	
11	Mar	Mulch	0.225	0.250	2.84	2.19			5.03	1.0	5.03	Ĺ	
12	Apr	Plant	0.225	0.250	4.60	2.19		181.42	188.21	1.0	188.21	L	
13	Apr	Irrigate		0.279		2.14		11.17	13.31	12.0	159.67	G	
14	May	Cultivate	0.200	0.222	2.27	1.95			4.22	5.0	21.09	G	
15	Jun	Thinning					75.00		75.00	1.0	75.00	G	
16	Jun	Apply Fert/Ground	0.225	0.250	3.63	2.19		35.93	41.75	1.0	41.75	G	
17	Jun	Apply Fungicide/Air					5.23	6.08	11.31	3.0	33.93	G	
18	Aug	Irrigate/Run Fertilizer		0.278		2.13		36.20	38.33	1.0	38.33	G	
19	Aug	Apply Insecticide/Air					4.75	27.82	32.57	1.0	32.57	G	
20	Sep	Prepare Ends	0.023	0.025	0.29	0.22			0.51	1.0	0.51	Н	
21	Sep	Pick 2.3 Tn					172.50		172.50	1.0	172.50	Н	
22	Sep	Load Produce 2.3 Tn					4.60		4.60	1.0	4.60	Н	
23	Sep	Haul, Custom 2.3 Tn					23.00		23.00	1.0	23.00	Н	
24	Nov	Pick .3 Tn					28.00		28.00	1.0	28.00	Н	
25	Nov	Load Produce .3 Tn					0.70		0.70	1.0	0.70	Н	
26	Nov	Haul, Custom .3 Tn					17.50		17.50	1.0	17.50	Н	
27	Nov	Cut Stalks .3 Tn	0.164	0.182	1.86	1.60			3.46	1.0	3.46	Р	
28	Nov	Disk Residue .3 Tn	0.129	0.143	2.35	1.25			3.60	1.0	3.60	L	
		Pickup Use 80 Mi/Acre	2.667		20.43						20.43		
		Operating Interest at 10.0					21.61				21.61		
		TOTAL CASH OPERATING	EXPENSE	S (include:	s all times over)	:					1,027.81	T	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY E	BY CLASS	SENSITIVIT	Y OF THE	NET REVE	ENUES OVI	ER TOTAL CA	ASH EXPEN	SES (\$/AC	RE)
Land Preparation (L)	231.84	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Growing (G)	503.66	Yields		\$274.75	\$329.70	\$366.33	\$402.96	\$457.91	Break-even Price
Harvest (H)	246.81								
Post Harvest (P)	3.46	- 25%	1.7	-505.19	-411.23	-348.58	-285.94	-191.98	570.18
Marketing (M)	0.00	- 10%	2.1	-448.77	-336.01	-260.84	-185.67	-72.91	493.44
Operating Overhead (O)	42.04	Budgeted	2.3	-411.15	-285.87	-202.34	-118.82	6.47	455.08
		+ 10%	2.5	-373.54	-235.72	-143.85	-51.97	85.84	423.69
Total (T)	\$1,027.81								
		Break-even Yi	eld	4.77	3.58	3.07	2.69	2.26	

Table 12D. Resource and Cash Flow Requirements; Green Chiles, 2001

Water

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional ACRES: CROP: Chile, Green Sandy-Loam 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Maricopa YIELD: 2.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Number   Irrigations   Irrig			vvalei				Operau	ilg Costs (\$/A				
JAN C 0.88 13.84 7.52 21.36 FEB C 0.88 13.84 7.52 21.36 FEB C 0.89 16.75 8.16 5.48 13.64 MAR C 1.0 6.0 0.93 16.75 8.99 7.72 70.07 100.53 APR C 2.0 8.0 0.96 22.33 6.24 7.79 181.42 217.78 MAY C 3.0 12.0 1.11 33.50 22.33 8.88 10.81 42.01 80.23 164.06 JUN C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.55 22.33 8.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.55 22.33 8.88 10.88 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.55 22.33 8.88 10.82 12.14 SEP C 0.03 1.22 44.67 8.55 88.94 9.98 122.14 SEP C 0.03 1.22 42.12 8.5 8.94 9.98 122.14 SEP C 0.03 1.22 42.12 8.5 8.94 9.98 122.14 SEP C 0.03 1.22 42.12 8.5 8.94 9.98 122.14 SEP C 0.03 1.22 42.12 8.5 8.94 9.98 122.14 SEP C 1.24 12.15 12.16 Water Assessment												
FEB C	Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Labor	Chemicals	Purchases	Services	Total	
FEB C												
MAR C 1.0 6.0 0.93 16.75 5.99 7.72 70.07 100.53 APR C 2.0 8.0 0.96 22.33 6.24 7.79 181.42 217.78 MAY C 3.0 12.0 1.11 33.50 2.78 8.81 4.01 80.23 164.06 JUN C 2.0 8.0 1.30 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 5.05 8.61 6.08 5.23 47.30 AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14 SEP C 0.03 0.29 0.22 200.10 20.61 NOV C 0.32 4.21 2.85 46.20 53.26 Pickup Use 80 Mi/Acre 20.43 Operating interest at 10.0 21.61 21.61 Water Assessment ***  Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81 % 15.75 7.36 6.65 17.23 17.65 35.35 100.00  TOTAL RESOURCE REQUIREMENTS (per Acre) Total N 225.5 Diesel Fuel 24.4 Gal Unleaded Gas 8.0 Gal Total Labor 8.3 All Direct Energy 4.4 M BTU  EQUIPMENT REQUIREMENTS (per Acre) Bed Shaper, 6 Rw 0.22 Hr Drag Scraper, 10' 0.27 Hr Lister, 7 Bottom 0.18 Hr Moldboard Plow, 4-16 2 0.32 Hr Offset Disk, 13.5' 0.11 Hr Offset Disk, 16.5' 0.58 Hr Pickup Tuse, 138 Hr Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 150 PTO HP 1.35 Hr												
APR C 2.0 8.0 0.96 MAY C 3.0 12.0 1.11 33.50 2.78 8.81 42.01 80.23 164.06 JUN C 2.0 8.0 1.30 22.33 8.68 10.81 42.01 80.23 164.06 JUN C 2.0 8.0 1.05 22.33 5.05 8.61 6.08 5.23 47.30 AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14 SEP C 0.03 0.32 44.67 8.55 58.94 9.98 122.14 SEP C 0.03 0.32 42.1 2.85 46.20 65.26 Pickup Use 80 Mi/Acre 20.43 20												
MAY C 3.0 12.0 1.11 33.50 2.78 8.81 42.01 80.23 164.06 JUN C 2.0 8.0 1.30 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 8.68 10.81 42.01 80.23 164.06 JUL C 2.0 8.0 1.05 22.33 47.30 AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14 SEP C 0.03 42.1 2.85 46.20 53.26 Pickup Use 80 Mi/Acre 2.04.3 20.43 20.43 20.43 20.43 20.43 20.43 21.61 21.61 Water Assessment ""  Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81 8.6 15.75 7.36 6.65 17.23 17.65 35.35 100.00 ***  TOTAL RESOURCE REQUIREMENTS (per Acre) Total N 225.5 Diesel Fuel 24.4 Gal Unleaded Gas 8.0 Gal Vulleaded Gas 9.0 Gal Vulleaded Gas 9.0 Gal Vulleaded Gas 9.0 Gal Vulleaded Gas 9.0 Gal Vulleaded Gas 9								70.07				
JUN C 2.0 8.0 1.30 22.33 8.68 10.81 42.01 80.23 164.06  JUL C 2.0 8.0 1.05 22.33 5.05 8.61 6.08 5.23 47.30  AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14  SEP C 0.03 0.29 0.22 200.10 200.61  NOV C 0.32 4.21 2.85 46.20 53.26  Pickup Use 80 Mi/Acre 20.43  Operating Interest at 10.0 ***  Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81  % 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 100.00  TOTAL RESOURCE REQUIREMENTS (per Acre)  Total N 225.5 Diesel Fuel 24.4 Gal  Unleaded Gas 8.0 Gal  Total P 106.0 Unleaded Gas 8.0 Gal  Total Water 58.0  EQUIPMENT REQUIREMENTS (per Acre)  Bed Shaper, 6 Rw 0.22 Hr Langblane 12% 45' 0.11 Hr Laser, Complete System 0.27 Hr Lister, 7 Bottom 0.18 Hr Moldboard Plow, 4-16 2 0.32 Hr Offset Disk, 13.5' 0.11 Hr Offset Disk, 16.5' 0.58 Hr Pickup Truck, 1/2 Ton 2.67 Hr Planter, Drill Type, 6 Row 0.22 Hr Power Mulcher, 4 Rw 0.22 Hr Rolling Cultivator, 6 Rw 1.38 Hr Rotary Stalk Cutter, 4 Row 0.16 Hr Rowbuck, 10' 0.11 Hr Saddle Tk Sprayer, 2 Th S 1.35 Hr  Tractor, 150 PTO HP 1.35 Hr									181.42			
JUL C 2.0 8.0 1.05 22.33 5.05 8.61 6.08 5.23 47.30 AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14 SEP C 0.03 0.32 4.21 2.85 46.20 53.26 Pickup Use 80 Mi/Acre 20.43 Operating Interest at 10.0 21.61 21.61 Water Assessment ***  Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81 % 15.75 7.36 6.65 17.23 17.65 36.35 100.00  TOTAL RESOURCE REQUIREMENTS (per Acre) Total P 106.0 Unleaded Gas 8.0 Gal Total Labor 8.3 All Direct Energy 4.4 M BTU  EQUIPMENT REQUIREMENTS (per Acre) Bed Shaper, 6 Rw 0.22 Hr Langhane 12'X 45' 0.11 Hr Laser, Complete System 0.27 Hr Lister, 7 Bottom 0.18 Hr Moldboard Plow, 4-16 2 0.32 Hr Offset Disk, 13.5' 0.11 Hr Offset Disk, 16.5' 0.58 Hr Planter, Drill Type, 6 Row 0.22 Hr Planter, Drill Type, 6 Row 0.22 Hr Rolling Cultivator, 6 Rw 1.38 Hr Rotary Stalk Cutter, 4 Row 0.16 Hr Rowbuck, 10' 0.11 Hr Saddle Tx Sprayer, 2 Tx 8 0.15 Hr Tractor, 150 PTO HP 1.35 Hr												
AUG C 4.0 16.0 1.12 44.67 8.55 58.94 9.98 122.14  SEP C 0.03 0.03 0.29 0.29 20.10 200.10 200.61  NOV C 0.32 4.21 2.85 46.20 53.26  Pickup Use 80 Mi/Acre 20.43  Operating Interest at 10.0  Water Assessment ***  Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81  % 15.75 7.36 6.65 17.23 17.65 35.35 100.00  TOTAL RESOURCE REQUIREMENTS (per Acre) Total N 225.5 Diesel Fuel 24.4 Gal Total Labor 8.3 All Direct Energy 4.4 M BTU  EQUIPMENT REQUIREMENTS (per Acre) Bed Shaper, 6 Rw 0.22 Hr Landplane 12'X 45' 0.11 Hr Rolling Cultivator, 6 Rw 1.38 Hr Pickup Truck, 1/2 Ton 2.67 Hr Pickup Truck, 1/2 Ton 2.67 Hr Rolling Cultivator, 6 Rw 1.38 Hr Saddle Tx Sprayer, 2 Tx 8 1.58 Hr  Tractor, 150 PTO HP 1.35 Hr												
SEP C   0.03   0.29   0.22   20.10   200.61						5.05						
NOV C		4.0	16.0		44.67			58.94				
Pickup Use 80 Mi/Acre				0.03						200.10		
Comparison   Com	NOV C			0.32		4.21	2.85			46.20	53.26	
Total	Pickup Use	80 Mi/Acre				20.43						
Total 14.0 58.0 8.30 161.91 75.67 68.36 177.10 181.42 365.35 1027.81 % 15.75 7.36 6.65 17.23 17.65 35.35 100.00  TOTAL RESOURCE REQUIREMENTS (per Acre) Total N 225.5 Diesel Fuel 24.4 Gal Total P 106.0 Unleaded Gas 8.0 Gal Total Labor 8.3 All Direct Energy 4.4 M BTU  EQUIPMENT REQUIREMENTS (per Acre) Bed Shaper, 6 Rw 0.22 Hr Landplane 12'X 45' 0.11 Hr Laser, Complete System 0.27 Hr Lister, 7 Bottom 0.18 Hr Moldboard Plow, 4-16 2 0.32 Hr Offset Disk, 13.5' 0.11 Hr Offset Disk, 16.5' 0.58 Hr Pickup Truck, 1/2 Ton 2.67 Hr Planter, Drill Type, 6 Row 0.22 Hr Power Mulcher, 4 Rw 0.22 Hr Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 100 PTO HP 2.25 Hr Tractor, 150 PTO HP 1.35 Hr	Operating Ir	nterest at 10.0								21.61	21.61	
15.75   7.36   6.65   17.23   17.65   35.35   100.00	Water Asse	ssment			**							
15.75   7.36   6.65   17.23   17.65   35.35   100.00	Total	14.0	58.0	8.30	161 91	75.67	68.36	177 10	181 42	365.35	1027 81	
TOTAL RESOURCE REQUIREMENTS (per Acre)  Total N 225.5 Diesel Fuel 24.4 Gal  Total P 106.0 Unleaded Gas 8.0 Gal  Total Water 58.0  EQUIPMENT REQUIREMENTS (per Acre)  Bed Shaper, 6 Rw 0.22 Hr Drag Scraper, 10' 0.27 Hr Fert. Side Dress Unit, 0.38 Hr  Landplane 12'X 45' 0.11 Hr Laser, Complete System 0.27 Hr Lister, 7 Bottom 0.18 Hr  Moldboard Plow, 4-16 2 0.32 Hr Offset Disk, 13.5' 0.11 Hr Offset Disk, 16.5' 0.58 Hr  Pickup Truck, 1/2 Ton 2.67 Hr Planter, Drill Type, 6 Row 0.22 Hr Power Mulcher, 4 Rw 0.22 Hr  Rolling Cultivator, 6 Rw 1.38 Hr Rotary Stalk Cutter, 4 Row 0.16 Hr Rowbuck, 10' 0.11 Hr  Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 100 PTO HP 2.25 Hr Tractor, 125 PTO HP 0.22 Hr  Tractor, 150 PTO HP 1.35 Hr		11.0	00.0	0.00								
Bed Shaper, 6 Rw       0.22 Hr       Drag Scraper, 10'       0.27 Hr       Fert. Side Dress Unit,       0.38 Hr         Landplane 12'X 45'       0.11 Hr       Laser, Complete System       0.27 Hr       Lister, 7 Bottom       0.18 Hr         Moldboard Plow, 4-16 2       0.32 Hr       Offset Disk, 13.5'       0.11 Hr       Offset Disk, 16.5'       0.58 Hr         Pickup Truck, 1/2 Ton       2.67 Hr       Planter, Drill Type, 6 Row       0.22 Hr       Power Mulcher, 4 Rw       0.22 Hr         Rolling Cultivator, 6 Rw       1.38 Hr       Rotary Stalk Cutter, 4 Row       0.16 Hr       Rowbuck, 10'       0.11 Hr         Saddle Tk Sprayer, 2 Tk 8       0.15 Hr       Tractor, 100 PTO HP       2.25 Hr       Tractor, 125 PTO HP       0.22 Hr         Tractor, 150 PTO HP       1.35 Hr					All Direct	Energy	4.4 M E	BTU				
Bed Shaper, 6 Rw       0.22 Hr       Drag Scraper, 10'       0.27 Hr       Fert. Side Dress Unit,       0.38 Hr         Landplane 12'X 45'       0.11 Hr       Laser, Complete System       0.27 Hr       Lister, 7 Bottom       0.18 Hr         Moldboard Plow, 4-16 2       0.32 Hr       Offset Disk, 13.5'       0.11 Hr       Offset Disk, 16.5'       0.58 Hr         Pickup Truck, 1/2 Ton       2.67 Hr       Planter, Drill Type, 6 Row       0.22 Hr       Power Mulcher, 4 Rw       0.22 Hr         Rolling Cultivator, 6 Rw       1.38 Hr       Rotary Stalk Cutter, 4 Row       0.16 Hr       Rowbuck, 10'       0.11 Hr         Saddle Tk Sprayer, 2 Tk 8       0.15 Hr       Tractor, 100 PTO HP       2.25 Hr       Tractor, 125 PTO HP       0.22 Hr         Tractor, 150 PTO HP       1.35 Hr	EQUIDMEN	IT DECLUDEN	ENTO (	N \								
Landplane 12'X 45'       0.11 Hr       Laser, Complete System       0.27 Hr       Lister, 7 Bottom       0.18 Hr         Moldboard Plow, 4-16 2       0.32 Hr       Offset Disk, 13.5'       0.11 Hr       Offset Disk, 16.5'       0.58 Hr         Pickup Truck, 1/2 Ton       2.67 Hr       Planter, Drill Type, 6 Row       0.22 Hr       Power Mulcher, 4 Rw       0.22 Hr         Rolling Cultivator, 6 Rw       1.38 Hr       Rotary Stalk Cutter, 4 Row       0.16 Hr       Rowbuck, 10'       0.11 Hr         Saddle Tk Sprayer, 2 Tk 8       0.15 Hr       Tractor, 100 PTO HP       2.25 Hr       Tractor, 125 PTO HP       0.22 Hr         Tractor, 150 PTO HP       1.35 Hr					Drag Caranar 10'	0.2	7 110	Fort Cido	Droop I Init	0.20 11		
Moldboard Plow, 4-16 2       0.32 Hr       Offset Disk, 13.5'       0.11 Hr       Offset Disk, 16.5'       0.58 Hr         Pickup Truck, 1/2 Ton       2.67 Hr       Planter, Drill Type, 6 Row       0.22 Hr       Power Mulcher, 4 Rw       0.22 Hr         Rolling Cultivator, 6 Rw       1.38 Hr       Rotary Stalk Cutter, 4 Row       0.16 Hr       Rowbuck, 10'       0.11 Hr         Saddle Tk Sprayer, 2 Tk 8       0.15 Hr       Tractor, 100 PTO HP       2.25 Hr       Tractor, 125 PTO HP       0.22 Hr         Tractor, 150 PTO HP       1.35 Hr									,			
Pickup Truck, 1/2 Ton 2.67 Hr Planter, Drill Type, 6 Row 0.22 Hr Power Mulcher, 4 Rw 0.22 Hr Rolling Cultivator, 6 Rw 1.38 Hr Rotary Stalk Cutter, 4 Row 0.16 Hr Rowbuck, 10' 0.11 Hr Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 100 PTO HP 2.25 Hr Tractor, 125 PTO HP 0.22 Hr Tractor, 150 PTO HP 1.35 Hr								,				
Rolling Cultivator, 6 Rw 1.38 Hr Rotary Stalk Cutter, 4 Row 0.16 Hr Rowbuck, 10' 0.11 Hr Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 100 PTO HP 2.25 Hr Tractor, 125 PTO HP 0.22 Hr Tractor, 150 PTO HP 1.35 Hr		,							,			
Saddle Tk Sprayer, 2 Tk 8 0.15 Hr Tractor, 100 PTO HP 2.25 Hr Tractor, 125 PTO HP 0.22 Hr Tractor, 150 PTO HP 1.35 Hr												
Tractor, 150 PTO HP 1.35 Hr												
MATERIALS REQUIREMENT (per Acre)					Tractor, 1001 101	11 2.2	5 111	Tractor, 12	231 10111	0.22 111		
Tr	MATERIALS	S REQUIREM	ENT (per Ac	re)								
11-53-00, Dry Ü 200.00 Lb 32-00-00, URAN 32, Lqd 25.00 Ga 46-00-00, Urea 46 250.00 Lb					32-00-00, URAN 3	2, Lqd 25.0	0 Ga	46-00-00,	Urea 46	250.00 Lb		
BT 2.50 Lb Chile Pepper Sd (OP) 5.00 Lb Copper hydroxide 6.75 Lb		-						Copper hy	/droxide	6.75 Lb		
Napropamide 4.00 Lb Water, District 58.00 Al	Napropar	mide	4.	.00 Lb	Water, District	58.0	0 AI	•				
LABOR REQUIREMENT (per Acre)	LABOR RE	QUIREMENT	(per Acre)									
Irrigators 4.05 Hr Tractor 4.25 Hr	Irrigators		4.	.05 Hr	Tractor	4.2	5 Hr					

Operating Costs (\$/ACRE \*) ------

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 12E. Schedule of Operations; Green Chiles, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Chile, Green ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: YIELD: 2.3 Tn / Acre PREVIOUS CROP: 10/9/01 AREA: Maricopa Wheat, Winter DATE:

				<b></b>						
First No. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material l Name	Jse and Cos Appl. R			Service S / U		Labor Type
	1.0 Plow	150 Moldboard Plow, 4-16 2	2.80	Humo	дри п	uto 4	,, 01111	. ψ, υ		Tractor
Jan Feb	2.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor
		*	1.00							Tractor
Feb	0.3 Laser Level	150 Drag Scraper, 10' Laser, Complete System	1.00							Tractor
Feb	0.5 Landplane	100 Landplane 12'X 45'	4.00							Tractor
Feb	1.0 List	150 Lister, 7 Bottom	5.00							Tractor
Mar	1.0 Apply Herbicide/Ground	d 100 Rolling Cultivator, 6 Rw Saddle Tk Sprayer, 2 Tk 8 Row	6.00	Napropamide	4.00 Lk	0	7.65	Lb		Tractor
Mar	5.0 Buck Rows	100 Rowbuck, 10'	40.00							Tractor
Mar	1.0 Preirrigate		2.40	Water, District	6.00 A	.1 33	3.50 A	٩F		Irrigators
Mar	4.0 Disk Ends	100 Offset Disk, 13.5'	40.00							Tractor
Mar	1.0 Apply Fert/Ground	100 Fert. Side Dress Unit,	6.00	11-53-00, Dry	200.00 Lt	355	5.00	Γn		Tractor
Mar	1.0 Mulch	100 Power Mulcher, 4 Rw	4.00	·						Tractor
Apr	1.0 Plant	125 Bed Shaper, 6 Rw Planter, Drill Type, 6 Row	4.00	Chile Pepper Sd (OP)	5.00 Lt	o 34	4.23	Lb		Tractor
Apr	12.0 Irrigate	<b>3.</b>	3.60	Water, District	4.00 A	.1 33	3.50 A	٩F		Irrigators
May	5.0 Cultivate	100 Rolling Cultivator, 6 Rw	4.50							Tractor
Jun	1.0 Thinning	CST Thinning						75	.00 Ac	
Jun	1.0 Apply Fert/Ground	100 Rolling Cultivator, 6 Rw Fert. Side Dress Unit, 4Row	4.00	46-00-00, Urea 46	250.00 Lt	27	1.17	Гп		Tractor
Jun	3.0 Apply Fungicide/Air	CST Air Spray, 7 Gal Mix	(	Copper hydroxide	2.25 Lt	2	2.55	Lb 5	.23 Ac	
Aug	1.0 Irrigate/Run Fertilizer		3.60	Water, District	4.00 A	.1 33	3.50 A	\F		Irrigators
Ü	•		3	2-00-00, URAN 32,	25.00 Ga	a 170	0.80	Γn		Ū
Aug	1.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix		BT ,	2.50 Lt	o 10	0.50	Lb 4	.75 Ac	
Sep	1.0 Prepare Ends	100 Offset Disk, 13.5'	40.00							Tractor
Sep	1.0 Pick	CST Pick Green Chiles						75	.00 Tn	
Sep	1.0 Load Produce	CST Load Chiles						2	.00 Tn	
Sep	1.0 Haul, Custom	CST Haul Green Chiles						10	.00 Tn	
Nov	1.0 Pick	CST Pick Red Chile after Green						80	.00 Tn	
Nov	1.0 Load Produce	CST Load Chiles						2	.00 Tn	
Nov	1.0 Haul, Custom	CST Haul Red Chiles						50	.00 Tn	
Nov	1.0 Cut Stalks	100 Rotary Stalk Cutter, 4 Row	5.50							Tractor
Nov	1.0 Disk Residue	150 Offset Disk, 16.5'	7.00							Tractor
	Pickup use 80 Mi/Ac	Pickup Truck, 1/2 Ton	0.38							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

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Table 12F Operations Calendar; Green Chiles, 2001COUNTY: PinalFARM: Southern VegetablesCROP: Chile, GreenACRES: 1.0 WATER SOURCE: MSID TILLAGE: Conventional CROP: Chile, Green Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: BDEVIOUS CROP: VIELD: 2.3 Tn/Acro DATE:

AREA:	Maricopa	YIELD:	2.3 Tn/Acre		PREVI	OUS CRO	P:	Wheat,	Winter		DATE:		10/09/0	)1
						Month a	and Times	Operatio	n Perform	ed				
No.	Operation		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Plow		1.0 C	;										
2	Disk		2.0 C	;										
3	Laser Level			0.3 C										
4	Landplane			0.5 C										
5	List			1.0 C										
6	Apply Herbicide/Ground				1.0 C									
7	Buck Rows				1.0 C	1.0 C	1.0 C	1.0 C	1.0 C					
8	Preirrigate				1.0 C									
9	Disk Ends				1.0 C		1.0 C	1.0 C	1.0 C					
10	Apply Fert/Ground				1.0 C									
11	Mulch				0.5 C	0.5 C								
12	Plant					1.0 C								
13	Irrigate					2.0 C	3.0 C	2.0 C	2.0 C	3.0 C				
14	Cultivate						1.0 C	2.0 C	2.0 C					
15	Thinning							1.0 C						
16	Apply Fert/Ground							1.0 C						
17	Apply Fungicide/Air							1.0 C	1.0 C	1.0 C				
18	Irrigate/Run Fertilizer									1.0 C				
19	Apply Insecticide/Air									1.0 C				
20	Prepare Ends										1.0 C			
21	Pick, Green										1.0 C			
22	Load Produce										1.0 C			
23	Haul, Custom										1.0 C			
24	Pick, Red												1.0 C	
25	Load Produce												1.0 C	
26	Haul, Custom												1.0 C	
27	Cut Stalks												1.0 C	
28	Disk Residue												1.0 C	

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 13A. Income and Cash Operating Summary; Dry Onions, 2001

FARM: Pinal Vegetables COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Onions, Dry ACRES: IRRIGATION SYSTEM: Flood Furrow 1.0 Sandy-Loam SOIL: 404.0 Sk / Acre 10/8/01 AREA: Maricopa YIELD: PREVIOUS CROP: Cotton, Upland DATE:

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Onions	Sack	404.00	\$9.33	\$3,769.32	\$3,769.32	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation Other/ Contract	DWING EXPENSES (inc	cluding sales tax)		39.24 33.74 7.67	80.66	
Chemicals and Custom Applications Fertilizer Herbicide				108.41 131.02	239.42	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				17.31 27.96	45.27	
Irrigation Water (excluding labor) Water Assessment (See Note Below	·) **				122.83	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				943.40 3.00	946.40	
TO CASH HARVEST AND POST HARVES		PARATION AND GROWI	NG EXPENSES		1434.58	
Paid Labor (including benefits) Tractor/Self Propelled				0.44	0.44	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance				0.19 0.29	0.49	
Custom Harvest/Post Harvest Other Materials	OTAL HADVEST AND D	OST HARVEST EXPENS			1329.16 376.85 1706.94	
OPERATING OVERHEAD -> PICKUP L OPERATING INTEREST AT 10.0%		OSI HAKVESI EXPENS	°C		1706.94 15.32 61.38	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERA					\$3,218.22 \$551.10	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 13B. Allocations of Ownership Costs; Dry Onions, 2001

COUNTY: Pinal FARM: Pinal Vegetables WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Item	CASH COST BASI	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns	
TOTAL INCOME at \$9.33 / Sk  TOTAL OPERATING EXPENSES  RETURN OVER CASH OPERATING EXPENSES	\$3,769.32 \$3,218.22	\$551.10	\$3,769.32 \$3,218.22	\$551.10	
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	5.76 160.91 96.55	*******	5.76 160.91 96.55	******	
Total Cash Overhead Expenses  Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity) Capital Replacement, Machinery and Vehicles Interest on Equity, Machinery and Vehicles	263.22 3,481.44	\$287.88	263.22 3,481.44 31.43 13.49	\$287.88	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK	>	\$287.88	44.93	\$242.95	
Land Cost / Rent or Lease Water Assessment **	100.00 25.00		100.00 25.00		
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK  RETURNS TO MANAGEMENT AND RISK	125.00	\$162.88	125.00	\$117.95	
Management Services (8% of Total Operation Expenses)			257.46		
TOTAL OWNERSHIP COST	388.22		690.60		
TOTAL COST RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)	\$3,606.44 >	\$162.88	\$3,908.82	(\$139.50)	
Item	CASH COST BASIS Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns	
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.97 \$0.96 \$8.93		\$7.97 \$1.71 \$9.68	

Table 13C. Variable Operating Costs; Dry Onions, 2001

FARM: Pinal Vegetables COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Onions, Dry ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	First		Hour	s *	Operatir	na Costs	(\$/ACRE	*) Per Oper	ation		Tot. Cash	
No.		Operation	Machine	Labor	Fuel/Rps.			Materials	Total	Times	Expenses	Class
1	Oct	Disk	0.225	0.250	2.81	2.19			5.00	3.0	15.01	L
2	Oct	Plow	0.321	0.357	4.11	3.13			7.25	1.0	7.25	L
3	Nov	List	0.300	0.333	2.71	2.92			5.63	1.0	5.63	L
4	Nov	Buck Rows	0.045	0.050	0.23	0.44			0.67	3.0	2.01	G
5	Nov	Preirrigate		0.800		6.14		22.33	28.47	1.0	28.47	G
6	Nov	Soil Fertility					3.00		3.00	1.0	3.00	G
7	Nov	Disk Ends	0.045	0.050	0.27	0.44			0.71	2.0	1.43	G
8	Nov	Apply Fert/Ground	0.180	0.200	0.96	1.75		48.34	51.05	1.0	51.05	G
9	Nov	Plant	0.900	2.000	13.27	16.44		943.40	973.11	1.0	973.11	L
10	Nov	Apply Herbicide/Ground	0.225	0.250	1.38	2.19		65.51	69.08	2.0	138.16	G
11	Nov	Irrigate		0.400		3.07		11.17	14.23	9.0	128.11	G
12	Dec	Cultivate	0.225	0.250	2.47	2.19			4.66	1.0	4.66	G
13	Feb	Apply Fert/Ground	0.300	0.333	3.44	2.92		30.04	36.39	2.0	72.79	G
14	Apr	Prepare Ends	0.045	0.050	0.49	0.44			0.93	1.0	0.93	Н
15	May	Harvest 404 Sk					876.68	214.12	1090.80	1.0	1090.80	Н
16	May	Field Grade 404 Sk					404.00	162.73	566.73	1.0	566.73	Н
17	May	Haul, Custom 404 Sk					48.48		48.48	1.0	48.48	Н
18	Jun	Disk Residue 404 Sk	0.150	0.167	2.45	1.47			3.92	1.0	3.92	L
		Pickup Use 60 Mi/Acre	2.000		15.32						15.32	
		Operating Interest at 10.0					61.38				61.38	
		TOTAL CASH OPERATING	EXPENSE	S (includes	s all times over):						3218.22	Т

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY B	SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)									
Land Preparation (L)	1,004.92	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	<u> </u>	
Growing (G)	429.67	Yields		\$7.00	\$8.40	\$9.33	\$10.26	\$11.66	Break-even Price	
Harvest (H)	1,706.94									
Post Harvest (P)	0.00	- 25%	303.0	-609.86	-185.82	96.88	379.58	803.63	9.01	
Marketing (M)	0.00	- 10%	363.6	-441.86	67.00	406.24	745.48	1,254.34	8.21	
Operating Overhead (O)	76.70	Budgeted	404.0	-329.85	235.55	612.48	989.41	1,554.81	7.81	
		+ 10%	444.4	-217.84	404.09	818.72	1,233.34	1,855.28	7.49	
Total (T)	\$3,218.22	+ 25%	505.0	-49.84	656.91	1,128.08	1,599.24	2,305.99	7.10	
		Break-even	/ield	522.98	347.54	284.02	240.13	194.95		

Table 13D. Resource and Cash Flow Requirements; Dry Onions, 2001

Water

FARM: Pinal Vegetables COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional ACRES: CROP: Onions, Dry Sandy-Loam 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

		water				Opera	tillig Costs (#/F				
	Number	Applied	Total	Purchased	Fuel, Oil			Other			
Month * I	rrigations	(inches)	Labor (Hrs)	Water	and Repairs	Labor	Chemicals	Purchases	Services	Total	
OOT D			0.00		0.74	7.5	2			47.05	
OCT P	0.0	40.0	0.86	00.50	9.74	7.52		0.40, 40	0.00	17.25	
NOV P	2.0	12.0	4.33	33.50	21.63	35.56		943.40	3.00	1150.93	
DEC P	1.0	4.0	0.95	11.17	4.08	7.89				88.65	
JAN C	1.0	4.0	0.50	11.17	0.50	3.94				15.61	
FEB C	1.0	4.0	0.73	11.17	3.44	5.99				50.64	
MAR C	2.0	8.0	1.13	22.33	3.44	9.06				64.87	
APR C	3.0	12.0	1.25	33.50	0.49	9.64	4			43.63	
MAY C								376.85	1329.16	1706.01	
JUN C			0.17		2.45	1.47	7			3.92	
Pickup Use 60	Mi/Acre				15.32					15.32	
Operating Inter	rest at 10.0								61.38	61.38	
Water Assessr				**							
Total	10.0	44.0	9.92	122.84	61.09	81.0	7 239.43	1320.25	1393.54	3218.22	
10tai %	10.0	44.0	9.92			2.5				100.00	
70				3.82	1.90	2.5	2 7.44	41.02	43.30	100.00	
Total N Total P Total Labor Total Water		252.4 212.0 9.9 44.0		Diesel Fi Unleade All Direc	d Gas	6.0	Sal Sal 1 BTU				
EQUIPMENT F	REQUIREM	ENTS (per A	Acre)								
Bed Shaper		<b>(1</b>	90 Hr	Cultivator, Sweep,	4 Rw 0.:	22 Hr	Fertilizer I	Broadcaster,	0.18 Hr		
Fertilizer Inj			60 Hr	Lister. 5 Bottom		30 Hr		d Plow, 4-16 2	0.32 Hr		
Offset Disk,			67 Hr	Offset Disk, 13.5'		05 Hr	Offset Dis		0.15 Hr		
Offset Disk,			.09 Hr	Pickup Truck, 1/2		00 Hr		ramor, 4 Bd,8	0.90 Hr		
Rowbuck, 1			14 Hr	Saddle Tk Sprayer		45 Hr		60 PTO HP.	0.86 Hr		
Tractor, 100			.84 Hr	Tractor, 125 PTO I		22 Hr		50 PTO HP,	0.15 Hr		
				110001, 1201 101	,	'''	1140(01, 1		0.10 111		
MATERIALS R											
10-53-00, D	ry		.00 Lb	32-00-00, URAN 3	· •	00 Ga	Burlap Sa		404.00 Sk		
DCPA		20.	00 Lb	Onion Bags 50# M	lesh 404.	00 Sk	Onion Se	ed (Pelletized)	1000.00 Th	ł	
Water, Distr	rict	44.	00 AI	-				ŕ			
LABOR REQU	IIREMENT	er Acre)									
Irrigators	INCIVILIAT (		40 Hr	Other	4	00 Hr	Tractor		4.52 Hr		
inigators		4.	- <del>1</del> 0 III	Oulei	1.1	00 111	Haciol		4.52 H		

Operating Costs (\$/ACRE \*) -----

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 13E. Schedule of Operations; Dry Onions, 2001

FARM: Pinal Vegetables ACRES: 1.0 Maricopa-Stanfield Irrig. COUNTY: Pinal WATER SOURCE: TILLAGE: Conventional CROP: Onions, Dry ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: AREA: Maricopa YIELD: 404.0 Sk / Acre PREVIOUS CROP: 10/8/01 Cotton, Upland DATE:

First lo. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material U Name			te \$ / Ur		Service Cost \$ / Unit	Labor Type
Oct	3.0 Disk	125 Offset Disk, 12'	4.00							Tractor
Oct	1.0 Plow	125 Moldboard Plow, 4-16 2	2.80							Tractor
Nov	1.0 List	100 Lister, 5 Bottom	3.00							Tractor
Nov	3.0 Buck Rows	60 Rowbuck, 10'	20.00							Tractor
Nov	1.0 Preirrigate		1.25	Water, District	8.00	ΑI	33.50	ΑF		Irrigators
Nov	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ad	
Nov	2.0 Disk Ends	60 Offset Disk, 8'	20.00							Tractor
Nov	1.0 Apply Fert/Ground	60 Fertilizer Broadcaster,	5.00	10-53-00, Dry	400.00	Lb	228.00	Tn		Tractor
Nov	1.0 Plant	100 Planter/Gramor, 4 Bd,8	1.00	Onion Seed (Pelletized)	1000.00	Th	0.89	Th		Tractor
		Bed Shaper, 4 Rw								Other
Nov	2.0 Apply Herbicide/Grou	ind 60 Saddle Tk Sprayer, 2 Tk 8	4.00	DCPA	10.00	Lb	6.18	Lb		Tractor
Nov	9.0 Irrigate		2.50	Water, District	4.00	ΑI	33.50	ΑF		Irrigators
Dec	1.0 Cultivate	125 Cultivator, Sweep, 4 Rw	4.00							Tractor
Feb	2.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.00	32-00-00, URAN 32,	30.00	Ga	170.80	Tn		Tractor
Apr	1.0 Prepare Ends	100 Offset Disk, 13.5'	20.00							Tractor
May	1.0 Harvest	CST Cut/Top/Field Sack Dry		Burlap Sacks	404.00	Sk	0.50	Sk	2.17 SI	(
May	1.0 Field Grade	CST Grade/Size/Pack Onions	(	Onion Bags 50# Mesh	404.00	Sk	0.38	Sk	1.00 SI	<
May	1.0 Haul, Custom	CST Field Haul Dry Onions		-					0.12 SI	<
Jun	1.0 Disk Residue	150 Offset Disk, 18'	6.00							Tractor
	Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 13F Operations Calendar; Dry Onions, 2001

COUNT			Southern	Vegetab	les		R SOURCE		MSID			TILLAG	E:	Conven	
CROP:	Onions, Dry	ACRES:					TION SYS		Flood F	urrow		SOIL:		Sandy-l	
AREA:	Maricopa	YIELD:	404 Sk/A	cre		PREVIO	DUS CROF	P:	Cantalo	upe		DATE:		10/08/0	1
							Month a	nd Times	Operation	n Perforn	ned				
No.	Operation			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Disk												2.0 P	1.0 P	
2	Plow												1.0 P		
3	List													1.0 P	
4	Buck Rows													1.0 P	1.0 P
5	Preirrigate													1.0 P	
6	Soil Fertility													1.0 P	
7	Disk Ends			1.0 C										1.0 P	
8	Apply Fert/Ground													1.0 P	
9	Plant													1.0 P	
10	Apply Herbicide/Ground													1.0 P	1.0 P
11	Irrigate			1.0 C	1.0 C	2.0 C	3.0 C							1.0 P	1.0 P
12	Cultivate														1.0 P
13	Apply Fert/Ground				1.0 C	1.0 C									
14	Prepare Ends						1.0 C								
15	Harvest							1.0 C							
16	Field Grade							1.0 C							
17	Haul, Custom							1.0 C							
18	Disk Residue								1.0 C						

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

# Table 14A. Income and Cash Operating Summary; Fall Cantaloupe, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop IRRIGATION SYSTEM: Flood Furrow Sandy-Loam CROP: Cantaloupes SOIL: 10/9/01 AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE:

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Crtn	260.00	\$13.10	\$3,406.00	\$3,406.00	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation Other/ Contract	OWING EXPENSES (inc	luding sales tax)		48.21 40.92 3.07	92.20	
Chemicals and Custom Applications Fertilizer Insecticide Herbicide				104.98 142.91 56.42	304.31	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Water Assessment (See Note Below	) **			20.80 27.68	48.48 0.00	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				15.04 174.00	189.04	
TC CASH HARVEST AND POST HARVES		PARATION AND GROWI	NG EXPENSES		634.04	
Custom Harvest/Post Harvest Other Materials	OTAL HARVEST AND P	OST HARVEST EXPENS	E		403.00 192.92 595.92	
OPERATING OVERHEAD -> PICKUP U OPERATING INTEREST AT 10.0%			_		7.66 5.43	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$1,243.05 \$2,162.95	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

# Table 14B. Allocations of Ownership Costs; Fall Cantaloupe, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	CASH COST BASI	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns
TOTAL INCOME at \$13.10 / Ct	\$3,406.00	Net Neturns	\$3,406.00	Net Neturns
TOTAL OPERATING EXPENSES	\$1,243.05		\$1,243.05	
RETURN OVER CASH OPERATING EXPENSES	¥ :,= :::::	\$2,162.95	<b>4</b> 1, <b>2</b> 10100	\$2,162.95
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery General and Office Overhead (5.0% of Total Operating Exp.)	5.36 62.15		5.36 62.15	
General Farm Maintenance (3.0% of Total Operating Exp.)			37.29	
Total Cash Overhead Expenses	104.81		104.81	
Total Cash Operating and Overhead Cost	1,347.85		1,347.85	
RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)		\$2,058.15		\$2,058.15
Capital Replacement, Machinery and Vehicles			29.13	
Interest on Equity, Machinery and Vehicles			12.84	
Total Capital Allocations			41.97	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK			>	\$2.016.18
Land Cost / Rent or Lease	100.00		100.00	Ψ2,010.10
Water Assessment **	12.50		12.50	
Total Land Costs	112.50		112.50	
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	>	\$1,945.65	>	\$1,903.68
				φ1,903.00
Management Services (8% of Total Operation Expenses)			99.44	
TOTAL OWNERSHIP COST	217.31		358.72	
TOTAL COST	\$1,460.35		\$1,601.77	
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)		\$1,945.65	>	¢4 004 22
RETURNS TO RISK (PROFITS)			>	\$1,804.23
	CACIL COOT DAGG	C (#/A CDE)	TOTAL 000T 240	NO (CACRE)
Item	CASH COST BASIS Income and Costs	Net Returns	TOTAL COST BAS Income and Costs	Net Returns
				-
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$4.78		\$4.78
BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.84 \$5.62		\$1.38 \$6.16

Table 14C. Variable Operating Costs; Fall Cantaloupe, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop ACRES: CROP: Cantaloupes 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 260.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

	First Hours * Opera					ng Costs	(\$/ACRE *)	Per Opera	ition		Tot. Cash		
No.		Operation	Machine		Fuel/Rps.	•	ust/Serv.	•	Total	Times	Expenses	Class	
1	Jun	Rip	0.225	0.250	2.88	2.19			5.07	0.5	2.53	L	
2	Jun	Disk	0.150	0.167	2.45	1.47			3.92	2.0	7.83	L	
3	Jun	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L	
4	Jun	Laser Level	0.450	0.500	5.58	4.39			9.97	0.5	4.98	L	
5	Jun	Soil Fertility					3.00		3.00	1.0	3.00	G	
6	Jun	Apply Fert/Ground	0.180	0.200	1.44	1.75		34.98	38.17	1.0	38.17	G	
7	Jun	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
8	Jul	Plant	0.360	0.800	5.08	6.58		15.04	26.70	1.0	26.70	L	
9	Jul	Apply Herbicide/Ground	0.225	0.250	1.21	2.19		56.42	59.82	1.0	59.82	G	
10	Jul	Apply Insect./Ground	0.180	0.200	0.92	1.75		24.36	27.04	1.0	27.04	G	
11	Jul	Buck Rows	0.045	0.050	0.20	0.44			0.63	5.0	3.17	G	
12	Jul	Irrigate		0.667		5.12			5.12	7.0	35.81	G	
13	Jul	Cultivate	0.225	0.250	1.50	2.19			3.70	9.0	33.26	G	
14	Jul	Plant Fertility					6.00		6.00	1.0	6.00	G	
15	Jul	Irrigate/Run Fertilizer	0.600	0.667	1.94	5.12		30.04	37.09	1.0	37.09	G	
16	Jul	Thinning					75.00		75.00	1.0	75.00	G	
17	Aug	Apply Insecticide/Air					4.24	55.03	59.27	2.0	118.54	G	
18	Aug	Hand Weeding					75.00		75.00	1.0	75.00	G	
19	Aug	Apply Fert/Ground	0.257	0.286	2.94	2.51		39.96	45.41	1.0	45.41	G	
20	Aug	Pollinate					15.00		15.00	1.0	15.00	G	
21	Sep	Harvest, Load & Haul 260					403.00	192.92	595.92	1.0	595.92	Н	
22	Sep	Disk Residue 260 Ct	0.180	0.200	2.76	1.75			4.51	1.0	4.51	L	
		Pickup Use 30 Mi/Acre	1.000		7.66						7.66		
		Operating Interest at 10.0					5.43				5.43		
		TOTAL CASH OPERATING	EXPENSE	S (include	ı s all times over):						1,243.05	T	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

First	Hours	*		Tot. Cash					
No. Month Operation	Machine	Labor Fue	el/Rps. I	_abor Cust	t/Serv. Mat	erials To	otal Time	:S	Class
OPERATING COST SUMMARY BY	CLASS	SENSITIVI	TY OF THE	NET REVI	ENUES OVI	ER TOTAL CA	ASH EXPEN	ISES (\$/AC	RE)
Land Preparation (L)	61.71	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Growing (G)	572.33	Yields		\$9.83	\$11.79	\$13.10	\$14.41	\$16.38	Break-even Price
Harvest (H)	595.92								
Post Harvest (P)	0.00	- 25%	195.0	818.76	1,201.93	1,457.38	1,712.83	2,096.01	5.63
Marketing (M)	0.00	- 10%	234.0	1,112.55	1,572.36	1,878.90	2,185.44	2,645.25	5.07
Operating Overhead (O)	13.09	Budgeted	260.0	1,308.40	1,819.30	2,159.90	2,500.50	3,011.40	4.79
		+ 10%	286.0	1,504.26	2,066.25	2,440.91	2,815.57	3,377.56	4.57
Total (T)	\$1,243.05								
		Break-even	/ield	86.31	68.45	60.16	53.65	46.17	

Table 14D. Resource and Cash Flow Requirements; Fall Cantaloupe, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam CROP: Cantaloupes SOIL: YIELD: 260.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Maricopa Wheat, Winter DATE:

		Water				Ор	eratin	g Costs (\$/A	CRE *)			
<b>.</b>	Number	Applied	Total	Purchased	Fuel, Oil				Other		<b>-</b>	
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Lal	bor	Chemicals	Purchases	Services	Total	
JUN C			1.66		19.14	1,	4.56	34.98		3.00	71.68	
JUL C	4.0	20.0	4.77		14.05		4.30 8.44	110.82	15.04	81.00	259.35	
AUG C	4.0	20.0	3.85		8.04		0.87	95.00	15.04	94.24	239.33	
SEP C	4.0	20.0	0.95		7.26		8.33	55.03	192.92	407.24	670.78	
Pickup Use	30 Mi/Acre		0.55	ı	7.66		0.00	33.03	132.32	407.24	7.66	
	terest at 10.0				7.00					5.43	5.43	
Water Asses				**						0.10	0.10	
Total	8.0	40.0	11.23		56.15		2.20	295.83	207.96	590.91	1243.05	
%					4.52		7.42	23.80	16.73	47.54	100.00	
TOTAL DE0		UDEMENIT	2 (	TOTAL ENE	201/2501/125	NATIO (						
	OURCE REQ		S (per Acre)		RGY REQUIRE			re)				
Total N		158.2		Diesel Fu		24.1	Gal					
Total P		126.0		Unleaded		3.0	Gal	<b></b> .				
Total K		15.0		All Direct	Energy	3.7	M B	TU				
Total Labo		11.2										
Total Wate	er	40.0										
	T REQUIREM	<b>\</b> 1	,									
Bed Shap	,		36 Hr	Cultivator, Sweep,		2.02 Hr			pray Rig, 8	0.18 Hr		
Drag Scra			22 Hr	Fertilizer Broadcas		0.18 Hr			njector, 4 Row	0.26 Hr		
	mplete Syste		22 Hr	Lister, 5 Bottom		0.22 Hr			I Plow, 4-16 2	0.45 Hr		
Offset Dis	,		18 Hr	Offset Disk, 18'		0.30 Hr			ıck, 1/2 Ton	1.00 Hr		
	Orill Type, 4 Ro		36 Hr	Rowbuck, 10'		0.23 Hr			Sprayer, 2 Tk 8			
	35 PTO HP		60 Hr	Tractor, 50 PTO H		0.63 Hr			0 PTO HP,	2.02 Hr		
ractor, 1	00 PTO HP,	1.	02 Hr	Tractor, 150 PTO F	1P,	1.27 Hr		V-Ripper,	5 SNNK	0.11 Hr		
MATERIALS	REQUIREM	ENT (per Acı	re)									
10-10-05,			00 Ga	11-48-00, Dry		0.00 Lb			URAN 32, Lqd	30.00 Ga		
Abamecti			00 Oz	Bensulide		0.00 Pt		Bifenthrin		10.00 Oz		
	oe Cartons		00 Ct	Cantaloupe Sd		1.50 Lb		Endosulfar	n	2.00 Pt		
Imidaclop	rid	5.	00 Oz	Water, Pump	4	0.00 AI						
LABOR REC	QUIREMENT	(per Acre)										
Irrigators		· · · · ·	34 Hr	Other		0.40 Hr		Tractor		5.49 Hr		
0												

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Cantaloupes ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: YIELD: 260.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Maricopa Wheat, Winter DATE:

First lo. Month 1	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material Name	I Use and C		te \$/Ur		Service Cost \$ / Unit	Labor Type
Jun	0.5 Rip	150 V-Ripper, 5 Shnk	4.00	Humo	дри.		.c		Ç, Jint	Tractor
Jun	2.0 Disk	150 Offset Disk. 18'	6.00							Tractor
Jun	1.0 Plow	150 Moldboard Plow, 4-16 2	2.00							Tractor
Jun	0.5 Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00							Tractor
Jun	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac	;
Jun	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00	Lb	330.00	Tn		Tractor
Jun	1.0 List	100 Lister, 5 Bottom	4.00	, ,						Tractor
Jul	1.0 Plant	100 Planter, Drill Type, 4 Row Bed Shaper, 4 Rw	2.50	Cantaloupe Sd	1.50	Lb	9.46	Lb		Tractor Other
Jul	1.0 Apply Harbicida/Groups	d 50 Saddle Tk Sprayer, 2 Tk 8	4.00	Bensulide	10.00	Dŧ	42.58	Ca		Tractor
Jul	1.0 Apply Insect./Ground	50 Directed Spray Rig, 8 Row		Imidacloprid			588.40			Tractor
Jul	5.0 Buck Rows	50 Rowbuck, 10'	20.00	ппаасторна	3.00	02	300.40	Ou		Tractor
Jul	7.0 Irrigate	30 Nowback, 10		Water, Pump	5.00	ΔΙ	0.00	ΔF		Irrigators
Jul	9.0 Cultivate	70 Cultivator, Sweep, 4 Rw	4.00	water, ramp	0.00	<i>,</i> (1	0.00	<i>,</i> (1		Tractor
Jul	1.0 Plant Fertility	CST Plant Tissue Anal.(Petiole)							6.00 Ac	
Jul	1.0 Irrigate/Run Fertilizer	Tractor, 35 PTO HP	1.50	Water, Pump	5.00		0.00 170.80		0.00710	Irrigators
led	1.0 Thinning	CST Thinning	3	32-00-00, URAN 32,	30.00	Ga	170.00	111	75.00 Ac	
Jul	2.0 Apply Insecticide/Air	CST Triffilling CST Air Spray, 3 Gal Mix		Bifenthrin	5.00	07	490.00	Ga	4.24 Ac	
Aug	2.0 Apply Insecticide/All	Co i Ali Opiay, o Gai Mix		Endosulfan	1.00				4.24 AC	•
				Abamectin			732.91			
Aug	1.0 Hand Weeding	CST Hand Weeding	,	abameetiii	5.00	02	132.31	Ja	75.00 Ac	
Aug	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3 50	10-10-05, Lgd	30.00	Ga	251.33	Tn	70.00 AC	Tractor
Aug	1.0 Pollinate	CST Bee Hive Rental	0.00	10 10 00, Equ	30.00	Ju	_000	• • • •	15.00 Ac	
Sep	1.0 Harvest, Load & Haul	CST Harv/pack/haul Melons	(	Cantaloupe Cartons	260.00	Ct	0.70	Ct	1.55 Ct	
Sep	1.0 Disk Residue	150 Offset Disk, 16.5'	5.00	zantaloupo ourtono	250.00	υί	3.70	Ji	1.00 01	Tractor
COP	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

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# Table 14F Operations Calendar; Fall Cantaloupe, 2001

COUNTY: Pinal FARM: Southern Vegetables WATER SOURCE: MSID TILLAGE: Conventional CROP: Cantaloupes ACRES: 1.0 Sandy-Loam 10/09/01 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 260 Ct/Acre AREA: Maricopa PREVIOUS CROP: Wheat Winter DATE:

AREA.	мансора	TIELD.	260 Cl/Acre			1003 CRC		wneat,			DATE.		10/09/0	<i>)</i>	
						Month				ed					
No.	Operation		Jar	r Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	Rip							0.5 C							
2	Disk							2.0 C							
3	Plow							1.0 C							
4	Laser Level							0.5 C							
5	Soil Fertility							1.0 C							
6	Apply Fert/Ground							1.0 C							
7	List							1.0 C							
8	Plant								1.0 C						
9	Apply Herbicide/Ground								1.0 C						
10	Apply Insect/Ground								1.0 C						
11	Buck Rows								2.0 C	3.0 C					
12	Irrigate								3.0 C	4.0 C					
13	Cultivate								3.0 C	3.0 C	3.0 C				
14	Plant Fertility								1.0 C						
15	Irrigate/Run Fertilizer								1.0 C						
16	Thinning								1.0 C						
17	Apply Insecticide/Air									1.0 C	1.0 C				
18	Hand Weeding									1.0 C					
19	Apply Fert/Ground									1.0 C					
20	Pollinate									1.0 C					
21	Harvest, Load & Haul										1.0 C				
22	Disk Residue										1.0 C				

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

# Table 15A. Income and Cash Operating Summary; Fall Honeydews, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: CROP: 10/9/01 AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE:

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Crtn	638.00	\$5.84	\$3,725.92	\$3,725.92	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation Other/ Contract	OWING EXPENSES (inc	luding sales tax)		48.21 40.92 3.07	92.20	
Chemicals and Custom Applications Fertilizer Insecticide Herbicide				104.98 142.91 56.42	304.31	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Water Assessment (See Note Below	)**			20.42 27.26	47.67 0.00	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				32.23 174.00	206.23	
TC CASH HARVEST AND POST HARVES		PARATION AND GROWI	NG EXPENSES		650.41	
		OST HARVEST EXPENS	E		988.90 912.98 1901.88	
OPERATING OVERHEAD -> PICKUP U OPERATING INTEREST AT 10.0%	JSE				7.66 5.64	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$2,565.59 \$1,160.33	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

Table 14B. Allocations of Ownership Costs; Fall Honeydews, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. Double Crop CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	CASH COST BASIS	S (\$/ACRE) Net Returns	TOTAL COST BASIS (\$/ACRE) Income and Costs Net Returns
TOTAL INCOME at \$5.84 / Ct  TOTAL OPERATING EXPENSES  RETURN OVER CASH OPERATING EXPENSES	\$3,725.92 \$2,565.59	\$1,160.33	\$3,725.92 \$2,565.59 \$1,160.33
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	5.27 128.28 76.97		5.27 128.28 76.97
Total Cash Overhead Expenses  Total Cash Operating and Overhead Cost	210.51 2,776.10		210.51 2,776.10
RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity) Capital Replacement, Machinery and Vehicles Interest on Equity, Machinery and Vehicles	2,	\$949.82	\$949.82 28.66 12.56
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK		\$949.82	41.21 \$908.60
Land Cost / Rent or Lease Water Assessment **	100.00 12.50		100.00 12.50
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK  RETURNS TO MANAGEMENT AND RISK	112.50	\$837.32	112.50 \$796.10
Management Services (8% of Total Operation Expenses)			205.25
TOTAL OWNERSHIP COST	323.01		569.48
TOTAL COST RETURNS TO CAPITAL, MANAGEMENT AND RISKRETURNS TO RISK (PROFITS)	\$2,888.60 >	\$837.32	\$3,135.06 > \$590.86
Item	CASH COST BASIS Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BASIS (\$/ACRE) Income and Costs Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.02 \$0.51 \$4.53	\$4.02 \$0.89 \$4.91

Table 15C. Variable Operating Costs; Fall Honeydews, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 638.0 Ct / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

	First		Hour	s *	Operatir	na Costs	(\$/ACRE *)	Per Oper	ation		Tot. Cash		
No.		Operation	Machine	Labor	Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class	
1	Jun	Rip	0.225	0.250	2.88	2.19			5.07	0.5	2.53	L	
2	Jun	Disk	0.150	0.167	2.45	1.47			3.92	2.0	7.83	L	
3	Jun	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L	
4	Jun	Laser Level	0.450	0.500	5.58	4.39			9.97	0.5	4.98	L	
5	Jun	Soil Fertility					3.00		3.00	1.0	3.00	G	
6	Jun	Apply Fert/Ground	0.180	0.200	1.44	1.75		34.98	38.17	1.0	38.17	G	
7	Jun	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
8	Jul	Plant	0.360	0.800	5.08	6.58		32.23	43.88	1.0	43.88	L	
9	Jul	Apply Herbicide/Ground	0.225	0.250	1.21	2.19		56.42	59.82	1.0	59.82	G	
10	Jul	Apply Insect./Ground	0.180	0.200	0.92	1.75		24.36	27.04	1.0	27.04	G	
11	Jul	Buck Rows	0.045	0.050	0.20	0.44			0.63	5.0	3.17	G	
12	Jul	Irrigate		0.667		5.12			5.12	7.0	35.81	G	
13	Jul	Cultivate	0.225	0.250	1.50	2.19			3.70	9.0	33.26	G	
14	Jul	Plant Fertility					6.00		6.00	1.0	6.00	G	
15	Jul	Irrigate/Run Fertilizer	0.600	0.667	1.94	5.12		30.04	37.09	1.0	37.09	G	
16	Jul	Thinning					75.00		75.00	1.0	75.00	G	
17	Aug	Apply Insecticide/Air					4.24	55.03	59.27	2.0	118.54	G	
18	Aug	Hand Weeding					75.00		75.00	1.0	75.00	G	
19	Aug	Apply Fert/Ground	0.257	0.286	2.94	2.51		39.96	45.41	1.0	45.41	G	
20	Aug	Pollinate					15.00		15.00	1.0	15.00	G	
21	Sep	Harvest, Load & Haul 638					988.90	912.98	1901.88	1.0	1901.88	Н	
22	Sep	Disk Residue 638 Ct	0.180	0.200	1.95	1.75			3.70	1.0	3.70	L	
	•	Pickup Use 30 Mi/Acre	1.000		7.66						7.66		
		Operating Interest at 10.0					5.64				5.64		
		TOTAL CASH OPERATING	EXPENSE	S (include:	s all times over):						2565.59	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY	CLASS
Land Preparation (L)	78.08
Growing (G)	572.33
Harvest (H)	1,901.88
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	13.30

Total (T) \$2,574.0

### SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$4.38	\$5.26	\$5.84	\$6.42	\$7.30	Break-even Price
- 25% - 10%	478.5 574.2	2.87 136.75	422.03 639.75	701.48 975.08	980.92 1.310.42	1,400.09 1,813.42	4.37 4.14
Budgeted + 10%	638.0 701.8	226.01 315.26	784.90 930.04	1,157.49 1,339.89	1,530.08 1,749.74	2,088.97 2,364.52	4.03 3.93
Break-even \	Yield	476.45	292.99	233.14	193.60	154.33	

Table 15D. Resource and Cash Flow Requirements; Fall Honeydews, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Honeydew Melons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: 638.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Maricopa YIELD: Wheat, Winter DATE:

		Water			Operating Costs (\$/ACRE *)								
	Number	Applied	Total	Purchased	Fuel, Oil				Other				
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	La	bor	Chemicals	Purchases	Services	Total		
JUN C			1.66		19.14	1	4.56	34.98		3.00	71.67		
JUL C	4.0	20.0	4.77		14.05		88.43	110.82	32.23	81.00	276.53		
AUG C	4.0	20.0	3.85		8.04		30.87	95.00	32.23	94.24	228.14		
SEP C	4.0	20.0	0.95		6.45		8.33	55.03	912.98	993.14	1975.94		
Pickup Use	30 Mi/Acre			•	7.66						7.66		
Operating In	iterest at 10.0	)								5.64	5.64		
Water Asses	ssment			**									
Total	8.0	40.0	11.23		55.34		92.19	295.83	945.21	1177.04	2565.59		
%	0.0		0		2.16	·	3.59	11.53	36.84	45.88	100.00		
TOTAL DEG	OUDOE DEC	NUDEMENT	0 ( 1)	TOTAL FAIFE	NOV DECLUDE	NACNITO (	/ ·- A -						
	OURCE REC		S (per Acre)		RGY REQUIRE								
Total N		158.2		Diesel Fu		23.7							
Total P		126.0		Unleaded		3.0	Gal						
Total K		15.0 11.2		All Direct	Energy	3.7	M B	10					
Total Labo		40.0											
TOTAL WATE	<b>5</b> I	40.0											
FQUIPMEN	T REQUIREM	MENTS (per A	Acre)										
Bed Shap		<b>(1</b>	.36 Hr	Cultivator, Sweep,	4 Rw	2.02 Hr		Directed S	pray Rig, 8	0.18 Hr			
Drag Scra			22 Hr	Fertilizer Broadcast		0.18 Hr			njector, 4 Row	0.26 Hr			
	mplete Syste		.22 Hr	Lister, 5 Bottom	,	0.22 Hr			l Plow, 4-16 2	0.45 Hr			
Offset Dis	sk, 13.5'	0.	.18 Hr	Offset Disk, 18'		0.30 Hr		Pickup Tru	ıck, 1/2 Ton	1.00 Hr			
Planter, D	Orill Type, 4 R	ow 0.	36 Hr	Rowbuck, 10'		0.23 Hr			Sprayer, 2 Tk 8	0.22 Hr			
	35 PTO HP		.60 Hr	Tractor, 50 PTO HI		0.63 Hr			0 PTO HP,	2.02 Hr			
Tractor, 1	00 PTO HP,	1.	.20 Hr	Tractor, 150 PTO H	IP,	1.09 Hr		V-Ripper,	5 Shnk	0.11 Hr			
	REQUIREM	<b>\1</b>	,										
10-10-05,			00 Ga	11-48-00, Dry		0.00 Lb			URAN 32, Lqd	30.00 Ga			
Abamecti			00 Oz	Bensulide		0.00 Pt		Bifenthrin		10.00 Oz			
Endosulfa			.00 Pt	Honeydew Seeds		1.50 Th		Imidaclopr	rid	5.00 Oz			
Water, Ρι	ımp	40.	00 AI	Waxed Cartons	63	8.00 Ct							
	QUIREMENT							_					
Irrigators		5.	.34 Hr	Other		0.40 Hr		Tractor		5.49 Hr			

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

# Table 15E. Schedule of Operations; Fall Honeydews, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Honeydew Melons ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: 638.0 Ct / Acre PREVIOUS CROP: 10/9/01 AREA: Maricopa YIELD: Wheat, Winter DATE:

First		Equipment/ Custom Oper	Job Rate	Material	I Use and C	ost		- S	Service Cost	Labor
No. Month	Times Operation	HP Self-Prop./ Implement	Acre/Hr	Name	Appl.	Rat	te \$/Ur	iit	\$ / Unit	Туре
Jun	0.5 Rip	150 V-Ripper, 5 Shnk	4.00							Tractor
Jun	2.0 Disk	150 Offset Disk, 18'	6.00							Tractor
Jun	1.0 Plow	150 Moldboard Plow, 4-16 2	2.00							Tractor
Jun	0.5 Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00							Tractor
Jun	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac	
Jun	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00	Lb	330.00	Tn		Tractor
Jun	1.0 List	100 Lister, 5 Bottom	4.00	-						Tractor
Jul	1.0 Plant	100 Planter, Drill Type, 4 Row Bed Shaper, 4 Rw	2.50	Honeydew Seeds	1.50	Th	20.27	Th		Tractor Other
Jul	1.0 Apply Herbicide/Ground	d 50 Saddle Tk Sprayer, 2 Tk 8	4.00	Bensulide	10.00	Ρt	42.58	Ga		Tractor
Jul	1.0 Apply Insect./Ground	50 Directed Spray Rig, 8 Row	5.00	Imidacloprid	5.00	Oz	588.40	Ga		Tractor
Jul	5.0 Buck Rows	50 Rowbuck, 10'	20.00							Tractor
Jul	7.0 Irrigate		1.50	Water, Pump	5.00	ΑI	0.00	AF		Irrigators
Jul	9.0 Cultivate	70 Cultivator, Sweep, 4 Rw	4.00							Tractor
Jul	1.0 Plant Fertility	CST Plant Tissue Anal.(Petiole)							6.00 Ac	
Jul	1.0 Irrigate/Run Fertilizer	Tractor, 35 PTO HP		Water, Pump 2-00-00, URAN 32,	5.00 30.00		0.00 170.80			Irrigators
Jul	1.0 Thinning	CST Thinning							75.00 Ac	
Aug	2.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix	Е	Bifenthrin	5.00	Oz	490.00	Ga	4.24 Ac	
			E	Indosulfan	1.00	Pt	33.17	Ga		
			A	Abamectin	5.00	Oz	732.91	Ga		
Aug	1.0 Hand Weeding	CST Hand Weeding							75.00 Ac	
Aug	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.50	10-10-05, Lqd	30.00	Ga	251.33	Tn		Tractor
Aug	1.0 Pollinate	CST Bee Hive Rental							15.00 Ac	
Sep	1.0 Harvest, Load & Haul	CST Harv/pack/haul Melons	٧	Vaxed Cartons	638.00	Ct	1.35	Ct	1.55 Ct	
Sep	1.0 Disk Residue	100 Offset Disk, 13.5'	5.00							Tractor
·	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

# Table 15F Operations Calendar; Fall Honeydews, 2001

COUNTY: Pinal FARM: Southern Vegetables WATER SOURCE: MSID TILLAGE: Conventional CROP: Honeydew Melons AREA: Maricopa Sandy-Loam 10/09/01 ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: YIFI D: 638 Ct/Acre PREVIOUS CROP Wheat Winter DATE:

AREA:	Maricopa	YIELD:	638 Ct/Acre			PREVI	OUS CRC	)P:	vvneat,	vviriter		DATE:		10/09/0	) [	
							Month	and Times	S Operation	n Perform	ed					
No.	Operation		Ja	n	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	Rip								0.5 C							
2	Disk								2.0 C							
3	Plow								1.0 C							
4	Laser Level								0.5 C							
5	Soil Fertility								1.0 C							
6	Apply Fert/Ground								1.0 C							
7	List								1.0 C							
8	Plant									1.0 C						
9	Apply Herbicide/Ground									1.0 C						
10	Apply Insect/Ground									1.0 C						
11	Buck Rows									2.0 C	3.0 C					
12	Irrigate									3.0 C	4.0 C					
13	Cultivate									3.0 C	3.0 C	3.0 C				
14	Plant Fertility									1.0 C						
15	Irrigate/Run Fertilizer									1.0 C						
16	Thinning									1.0 C						
17	Apply Insecticide/Air										1.0 C	1.0 C				
18	Hand Weeding										1.0 C					
19	Apply Fert/Ground										1.0 C					
20	Pollinate										1.0 C					
21	Harvest, Load & Haul											1.0 C				
22	Disk Residue											1.0 C				

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

# Table 16A. Income and Cash Operating Summary; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg ACRES: 1.0 Coolidge, Electric WATER SOURCE: TILLAGE: Conventional CROP: Potatoes, Early IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam 291.0 CW / Acre 10/9/01 AREA: Coolidge Area YIELD: PREVIOUS CROP: Wheat, Winter DATE:

	Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Po	otatoes	Hundred Lbs	291.00	\$9.98	\$2,904.18	\$2,904.18	
CASH LAND PRE	PARATION AND GR	OWING EXPENSES (inclu	ding sales tax)				
Paid Labor (in	cluding benefits)		, 9 ,			130.09	
	elf Propelled				60.54		
Irrigation Other/ Cor	ntract				43.26 26.29		
					20.29	450.05	<del></del>
Chemicals and Fertilizer	d Custom Applications	5			101.55	150.35	
Insecticide	<u> </u>				11.38		<del></del>
Herbicide					4.96		
Other Che	micals				32.47		
Farm Machine	ry and Vehicles					73.23	
Diesel Fue	el				24.60		
Gasoline	nd Maintananaa				3.54 45.09		
Irrigation Wate	nd Maintenance er (excluding labor)				45.09	171.68	<del></del>
	ergy - Electric				147.06		
	nd Maintenance ment (See Note Belov	v) **			24.62		
Other Purchas	sed Inputs &					699.60	
Seed/Tran	isplants				699.60		
CASH HARVEST	T AND POST HARVES	OTAL CASH LAND PREPART EXPENSES	ARATION AND GROW	ING EXPENSES		1224.96	<del></del>
Paid Labor (inc	cluding benefits)					49.77	
	If Propelled				26.76		
Other/Con	tract				23.01		
	ry and Vehicles					46.23	
Diesel Fue					10.54		
Repairs ar	nd Maintenance	OTAL LIADVEST AND DO	OT 114 DV/EOT EV/DEN/	\ <del>-</del>	35.69	00.00	<del></del>
ODEDATING OV		OTAL HARVEST AND PO	ST HARVEST EXPENS	bE .		96.00	
OPERATING OVE	ERHEAD -> PICKUP EREST AT 10.0%	USE				15.32 29.02	
TOTAL CASH OF	PERATING EXPENSE	ES				\$1,365.30	
	OVER CASH OPERA					\$1,538.88	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

# Table 16B. Allocations of Ownership Costs; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

Item	CASH COST BASI Income and Costs	S (\$/ACRE) Net Returns	TOTAL COST BASI Income and Costs	S (\$/ACRE) Net Returns
TOTAL INCOME at \$9.98 / CW TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$2,904.18 \$1,365.30	\$1,538.88	\$2,904.18 \$1,365.30	\$1,538.88
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery Wells and Irrigation System General and Office Overhead (5.0%of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	13.98 8.30 68.26 40.96		13.98 8.30 68.26 40.96	
Total Cash Overhead Expenses  Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity) Capital Replacement, Machinery and Vehicles Wells and Irrigation System Interest on Equity, Machinery and Vehicles	131.50 1,496.80	\$1,407.38	131.50 1,496.80 84.17 31.83 36.10	\$1,407.38
Wells and Irrigation System  Total Capital Allocations  RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK  RETURNS TO LAND, MANAGEMENT AND RISK	>	\$1,407.38	15.73 167.83	\$1,239.56
Land Cost / Rent or Lease	100.00		100.00	
Total Land Costs  RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK		\$1,307.38	100.00	\$1,139.56
Management Services (8% of Total Operation Expenses)			109.22	
TOTAL OWNERSHIP COST	231.50		508.55	
TOTAL COST  RETURNS TO CAPITAL, MANAGEMENT AND RISK  RETURNS TO RISK (PROFITS)	\$1,596.80 >	\$1,307.38	\$1,873.85	\$1.030.33
Item	CASH COST BASIS Income and Costs		TOTAL COST BASIS	, ,
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.69 \$0.80 \$5.49		\$4.69 \$1.75 \$6.44

Table 16C. Variable Operating Costs; Red Potatoes, 2001

FARM: Southern AZ Veg TILLAGE: Conventional COUNTY: Pinal WATER SOURCE: Coolidge, Electric ACRES: CROP: Potatoes, Early IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam 1.0 AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

	First		Hour	s *	Operatii	na Costs	(\$/ACRE *	) Per Opera	ition		Tot. Cash		
No.		Operation	Machine		Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class	
1	Nov	Rip	0.225	0.250	2.88	2.19			5.07	0.5	2.53	L	
2	Nov	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L	
3	Nov	Disk	0.225	0.250	3.44	2.19			5.64	3.0	16.91	L	
4	Nov	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
5	Nov	Buck Rows	0.045	0.050	0.23	0.44			0.67	3.0	2.01	G	
6	Nov	Preirrigate		0.377	11.95	2.89			14.84	1.0	14.84	G	
7	Dec	Mulch	0.300	0.333	2.36	2.92			5.28	1.0	5.28	L	
8	Dec	Prep/Haul Seed Potato	0.900	2.000	9.97	10.55			20.53	1.0	20.53	L	
9	Dec	Plant	0.750	1.666	15.33	13.70		764.93	793.96	1.0	793.96	L	
10	Jan	Apply Herbicide/Ground	0.300	0.333	3.17	2.92		4.96	11.05	1.0	11.05	G	
11	Jan	Hilling	0.360	0.400	3.05	3.51			6.56	3.0	19.69	L	
12	Jan	Disk Ends	0.045	0.050	0.49	0.44			0.93	2.0	1.85	G	
13	Jan	Irrigate/Run Fertilizer		0.658	20.90	5.05		24.80	50.75	2.0	101.51	G	
14	Feb	Irrigate		0.658	20.90	5.05			25.95	6.0	155.70	G	
15	Apr	Apply Insecticide/Air					4.75	25.70	30.45	1.0	30.45	G	
16	Apr	Prepare Ends	0.045	0.050	0.49	0.44			0.93	1.0	0.93	Н	
17	Apr	Cut Vines	0.750	0.833	6.67	7.31			13.98	1.0	13.98	G	
18	Apr	Disk Ends	0.045	0.050	0.24	0.44			0.68	1.0	0.68	G	
19	Apr	Knock Ditches	0.045	0.050	0.23	0.44			0.67	1.0	0.67	G	
20	Apr	Roll Beds	0.129	0.143	0.65	1.25			1.91	1.0	1.91	L	
21	Apr	Dig	0.900	2.000	31.63	16.44			48.07	1.0	48.07	Н	
22	Apr	Haul 10	1.800	4.000	14.12	32.88			47.00	1.0	47.00	Н	
23	May	Disk Residue	0.225	0.250	3.44	2.19			5.64	1.0	5.64	L	
	•	Pickup Use 60 Mi/Acre	2.000		15.32						15.32		
		Operating Interest at 10.0					29.02				29.02		
		TOTAL CASH OPERATING	EXPENSE	S (include:	s all times over):						1365.30	Т	

<sup>\*</sup>NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.

OPERATING COST SUMMARY B	Y CLASS	SEN
Land Preparation (L)	881.59	Prices
Growing (G)	343.37	Yields
Harvest (H)	96.00	
Post Harvest (P)	0.00	- 25%
Marketing (M)	0.00	- 10%
Operating Overhead (O)	44.34	Budge + 10%
Total (T)	\$1,365.30	

SENSITIVI <sup>*</sup>	TY OF THE	NET REVI	ENUES OVE	ER TOTAL CA	ASH EXPEN	ISES (\$/AC	RE)
Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$7.48	\$8.98	\$9.98	\$10.98	\$12.47	Break-even Price
- 25% - 10% Budgeted	218.3 261.9 291.0	331.95 644.27 852.49	658.67 1,036.34 1,288.11	876.49 1,297.71 1,578.53	1,094.30 1,559.09 1,868.95	1,421.02 1,951.15 2,304.58	5.96 5.03 4.56
+ 10%	320.1	1,060.70	1,539.89	1,859.35	2,178.81	2,658.00	4.17
Break-even Y	⁄ield	171.86	142.12	127.42	115.48	101.25	

Table16D. Resource and Cash Flow Requirements; Red Potatoes, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Coolidge, Electric TILLAGE: Conventional CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Coolidge Area YIELD: 291.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

		Water				Operati	ng Costs (\$/A				
Month *	Number Irrigations	Applied (inches)	Total Labor (Hrs)	Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
			1.00			4-00					
NOV P	1.0	4.0	1.80		29.07	15.39				44.46	
DEC P			8.92		31.11	47.49	65.33	699.60		839.95	
JAN C	1.0	7.0	1.49		27.84	12.35	29.76			69.95	
FEB C	3.0	21.0	1.97		62.71	15.14	24.80			102.65	
MAR C	2.0	14.0	1.72		44.86	13.60				58.46	
APR C	2.0	14.0	8.94		99.60	73.69	25.70		4.75	199.86	
MAY C			0.25		3.44	2.19				5.63	
Pickup Use					15.32					15.32	
Operating In	iterest at 10.0								29.02	29.02	
Total	9.0	60.0	25.09		313.95	172.09	145.59	699.90	33.77	1365.30	
%					22.99	12.60	10.66	51.26	2.47	100.00	
TOTAL RES Total N Total P Total Labo Total Wate		UIREMENT 150.0 184.0 25.1 60.0	S (per Acre)	TOTAL ENER Diesel Fu Unleaded Electric / I All Direct	Gas Pumping	40.7 Ga 8.7 Ga 3887.4 KW					
<b>EQUIPMEN</b>	T REQUIREM	IENTS (per /	Acre)								
Bed Rolle	,		.13 Hr	Blade Scraper, 10'		05 Hr	Flat Traile		0.90 Hr		
Hiller, 4 F			.08 Hr	Lister, 5 Bottom		22 Hr		d Plow, 4-16 2	0.45 Hr		
Offset Dis			.14 Hr	Offset Disk, 16.5'		90 Hr	Offset Dis	, -	0.05 Hr		
	ruck, 1/2 Ton		.90 Hr	Planter, Potato 3 Co		75 Hr		rvester, 4 Row	0.90 Hr		
	ulcher, 4 Rw		.30 Hr	Rolling Cultivator, 4		30 Hr		er-Puller, 4 Row			
Rowbuck			.14 Hr	Saddle Tk Sprayer,		30 Hr		50 PTO HP,	0.05 Hr		
,	60 PTO HP,		.41 Hr	Tractor, 100 PTO H		24 Hr	Tractor, 15	50 PTO HP,	2.36 Hr		
V-Ripper,	, 5 Shnk	0.	.11 Hr	Vegetable Trailer Fl	at Bed 1.	80 Hr					
	REQUIREM										
18-46-00,			.00 Lb	20-0-0-45, Nitro-Sul		00 Ga	Carbaryl		2.00 Pt		
Metalaxyl			.50 Pt	Paraquat		50 Ga	Potato Se	ed	30.00 C		
Trifluralin		1.	.50 Pt	Water, Pump	60.	00 AI					
	QUIREMENT										
Cutter			.00 Hr	Irrigators	5.	64 Hr	Other		5.50 Hr		
Tractor		9.	.95 Hr								

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# Table 16E. Schedule of Operations; Red Potatoes, 2001

FARM: Southern AZ Veg Coolidge, Electric COUNTY: Pinal WATER SOURCE: TILLAGE: Conventional CROP: Potatoes, Early ACRES: IRRIGATION SYSTEM: Flood Furrow 1.0 Sandy-Loam SOIL: YIELD: 291.0 CW / Acre PREVIOUS CROP: 10/9/01 AREA: Coolidge Area Wheat, Winter DATE:

First		Equipment/ Custom Oper	Job Rate	Materia	I Use and Cos				Service Cost	Labor
No. Month	Times Operation	HP Self-Prop./ Implement	Acre/Hr	Name	Appl. R	Rate	\$ / Uı	nit	\$ / Unit	Туре
Nov	0.5 Rip	150 V-Ripper, 5 Shnk	4.00							Tractor
Nov	1.0 Plow	150 Moldboard Plow, 4-16 2	2.00							Tractor
Nov	3.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor
Nov	1.0 List	100 Lister, 5 Bottom	4.00							Tractor
Nov	3.0 Buck Rows	60 Rowbuck, 10'	20.00							Tractor
Nov	1.0 Preirrigate		2.65	Water, Pump	4.00 A	٩I	35.84	ΑF		Irrigators
Dec	1.0 Mulch	60 Power Mulcher, 4 Rw	3.00							Tractor
Dec	1.0 Prep/Haul Seed Potato	Pickup Truck, 1/2 Ton	1.00							Tractor
										Cutter
Dec	1.0 Plant	100 Planter, Potato 3 Comp. 4	1.20	Potato Seed	30.00	С	22.00	CW		Tractor
				8-46-00, Dry	400.00 L					Other
			N	/letalaxyl	0.50 F	Pt :	202.05	Ga		
Jan	1.0 Apply Herbicide/Ground	d 100 Saddle Tk Sprayer, 2 Tk 8 Rolling Cultivator, 4 Rw	3.00	Trifluralin	1.50 F	₽t	24.95	Ga		Tractor
Jan	3.0 Hilling	100 Hiller, 4 Row	2.50							Tractor
Jan	2.0 Disk Ends	100 Offset Disk, 13.5'	20.00							Tractor
Jan	2.0 Irrigate/Run Fertilizer		1.52	Water, Pump	7.00 A	AΙ	35.84	AF		Irrigators
	-		2	0-0-0-45, Nitro-Sul	20.00 G	a :	240.00	Tn		_
Feb	6.0 Irrigate		1.52	Water, Pump	7.00 A	٩I	35.84	AF		Irrigators
Apr	1.0 Apply Insecticide/Air	CST Air Spray, 5 Gal Mix		Carbaryl	2.00 F	⊃t	25.00	Ga	4.75 Ac	
		• •	F	Paraquat	0.50 G	ia	36.00	Ga		
Apr	1.0 Prepare Ends	100 Offset Disk, 13.5'	20.00							Tractor
Apr	1.0 Cut Vines	100 Root Cutter-Puller, 4 Row	1.20							Tractor
Apr	1.0 Disk Ends	50 Offset Disk, 8'	20.00							Tractor
Apr	1.0 Knock Ditches	60 Blade Scraper, 10'	20.00							Tractor
Apr	1.0 Roll Beds	60 Bed Roller, 4 Rw	7.00							Tractor
Apr	1.0 Dig	150 Potato Harvester, 4 Row	1.00							Tractor
-	-									Other
Apr	1.0 Haul	60 Vegetable Trailer Flat Bed	0.50							Tractor
-		-								Other
May	1.0 Disk Residue	150 Offset Disk, 16.5'	4.00							Tractor
•	Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 16F Operations Calendar; Red Potatoes, 2001COUNTY: PinalFARM: Southern Vegetables WATER SOURCE: Coolidge, Electric TILLAGE: Conventional CROP: Potatoes ACRES: 1.0 Sandy-Loam 10/09/01 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 291.0 Cw/Acre DATE: AREA: Coolidge Area PREVIOUS CROP: Wheat Winter

AREA.	Coolidge Area	TIELD. 291.0 CW/	Acre		PREVIO	003 CRU	۲.	wneat	,vviriter		DATE.		10/09/0	VI
						Month a	and Times	S Operation	n Perforr	ned				
No.	Operation		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip												0.5 P	
2	Plow												1.0 P	
3	Disk												2.0 P	1.0 P
4	List												1.0 P	
5	Buck Rows		1.0 C			1.0 C							1.0 P	
6	Preirrigate												1.0 P	
7	Mulch													1.0 P
8	Prep/Haul Seed Potato													1.0 P
9	Plant													1.0 P
10	Apply Herbicide/Ground		1.0 C											
11	Hilling		1.0 C		1.0 C	1.0 C								
12	Disk Ends		1.0 C			1.0 C								
13	Irrigate/Run Fertilizer		1.0 C	1.0 C										
14	Irrigate			2.0 C	2.0 C	2.0 C								
15	Apply Insecticide/Air					1.0 C								
16	Prepare Ends					1.0 C								
17	Cut Vines					1.0 C								
18	Disk Ends					1.0 C								
19	Knock Ditches					1.0 C								
20	Roll Beds					1.0 C								
21	Dig					1.0 C								
22	Haul					1.0 C								
23	Disk Residue						1.0 C							
* NOTE	. D = D====i==== V===	N - Naut V	/											•

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 17A. Income and Cash Operating Summary; Spring Cantaloupe, 2001

FARM: Southern AZ Veg ACRES: 1.0 TILLAGE: Double Crop COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. CROP: Cantaloupes IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: 360.0 Ct / Acre 10/8/01 AREA: Maricopa YIELD: PREVIOUS CROP: Cotton, Upland DATE:

NCOME -> Melons	Item	Unit	Quantity	Price/	Budgeted	Total	Your Farm
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)       100.06         Paid Labor (including benefits)       100.06         Tractor/Self Propelled       43.92         Irrigation       51.15         Other/ Contract       4.98         Chemicals and Custom Applications       186.07         Fertilizer       129.65         Herbicide       56.42         Farm Machinery and Vehicles       44.30         Diesel Fuel       18.45         Repairs and Maintenance       25.86         Irrigation Water (excluding labor)       111.67         Water Assessment (See Note Below) **       263.06         Other Purchased Inputs & 263.06       243.00         Seed/Transplants 2006       243.00         Other Services and Rentals       265.10         CASH HARVEST AND POST HARVEST EXPENSES       705.15         CASH HARVEST AND POST HARVEST EXPENSES       558.00         Other Materials       267.12         OTAL HARVEST AND POST HARVEST EXPENSES       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12							
Paid Labor (including benefits)         100.06           Tractor/Self Propelled         43.92           Irrigation         51.15           Other/ Contract         4.98           Chemicals and Custom Applications         186.07           Fertilizer         129.65           Herbicide         56.42           Farm Machinery and Vehicles         44.30           Diesel Fuel         18.45           Repairs and Maintenance         25.86           Irrigation Water (excluding labor)         111.67           Water Assessment (See Note Below)**         263.06           Other Purchased Inputs &         263.06           Seed/Transplants         20.06           Other Services and Rentals         243.00           CASH HARVEST AND POST HARVEST EXPENSES         705.15           Custom Harvest/Post Harvest         558.00           Other Materials         267.12           OTHER Materials         7.66           OPERATING OVERHEAD -> PICKUP USE         7.66           OPERATING INTEREST AT 10.0%         9.19           TOTAL CASH OPERATING EXPENSES         \$1,547.12	INCOME -> Melons	Crtn	360.00	\$13.10	\$4,716.00	\$4,716.00	
Tractor/Self Propelled   13.92		GROWING EXPENSES (inc	cluding sales tax)				
Irrigation Other/ Contract					42.02	100.06	<del></del>
Other/ Contract         4.98           Chemicals and Custom Applications         186.07           Fertilizer         129.65           Herbicide         56.42           Farm Machinery and Vehicles         44.30           Diesel Fuel         18.45           Repairs and Maintenance         25.86           Irrigation Water (excluding labor)         111.67           Water Assessment (See Note Below) **         263.06           Seed/Transplants         20.06           Other Purchased Inputs &         20.06           Seed/Transplants         70.515           Other Services and Rentals         243.00           CASH HARVEST AND POST HARVEST EXPENSES         705.15           CUSTOM Harvest/Post Harvest         558.00           Other Materials         107.12           OPERATING OVERHEAD -> PICKUP USE         7.66           OPERATING INTEREST AT 10.0%         9.19           TOTAL CASH OPERATING EXPENSES         \$1,547.12							
Fertilizer Herbicide							
Fertilizer Herbicide	Chemicals and Custom Applica	tions				186.07	
Farm Machinery and Vehicles       44.30         Diesel Fuel Repairs and Maintenance       18.45         Repairs and Maintenance       25.86         Irrigation Water (excluding labor)       111.67         Water Assessment (See Note Below)**       263.06         Other Purchased Inputs & 20.06 Seed/Transplants       20.06         Other Services and Rentals       243.00         TOTAL CASH LAND PREPARATION AND GROWING EXPENSES       705.15         CASH HARVEST AND POST HARVEST EXPENSES       558.00         Custom Harvest/Post Harvest       267.12         Other Materials       267.12         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12					129.65		
Diesel Fuel Repairs and Maintenance       18.45	Herbicide				56.42		
Repairs and Maintenance       25.86         Irrigation Water (excluding labor)       111.67         Water Assessment (See Note Below) **       263.06         Other Purchased Inputs & 263.06 Seed/Transplants       263.06         Other Services and Rentals       20.06         Other Services and Rentals       705.15         CASH HARVEST AND POST HARVEST EXPENSES       705.15         Custom Harvest/Post Harvest       267.12         Other Materials       267.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12	Farm Machinery and Vehicles					44.30	
Irrigation Water (excluding labor)							
Water Assessment (See Note Below) **         Other Purchased Inputs & 263.06 Seed/Transplants       20.06 243.00         TOTAL CASH LAND PREPARATION AND GROWING EXPENSES       705.15         CASH HARVEST AND POST HARVEST EXPENSES         Custom Harvest/Post Harvest       558.00 267.12         Other Materials       267.12         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE OPERATING INTEREST AT 10.0%       7.66 9.19         TOTAL CASH OPERATING EXPENSES	•				25.86		<del></del>
Seed/Transplants       20.06         Other Services and Rentals       243.00         TOTAL CASH LAND PREPARATION AND GROWING EXPENSES         CASH HARVEST AND POST HARVEST EXPENSES         Custom Harvest/Post Harvest         Other Materials       558.00         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12	` `	,				111.67	
Seed/Transplants       20.06         Other Services and Rentals       243.00         TOTAL CASH LAND PREPARATION AND GROWING EXPENSES         CASH HARVEST AND POST HARVEST EXPENSES         Custom Harvest/Post Harvest         Other Materials       558.00         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12	Other Purchased Inputs &	,				263.06	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  CASH HARVEST AND POST HARVEST EXPENSES  Custom Harvest/Post Harvest Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  825.12  OPERATING OVERHEAD -> PICKUP USE OPERATING INTEREST AT 10.0%  TOTAL CASH OPERATING EXPENSES  \$1,547.12					20.06	200.00	
CASH HARVEST AND POST HARVEST EXPENSES       558.00         Custom Harvest/Post Harvest       558.00         Other Materials       267.12         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12	Other Services and Rentals				243.00		
Custom Harvest/Post Harvest       558.00         Other Materials       267.12         TOTAL HARVEST AND POST HARVEST EXPENSE       825.12         OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12		TOTAL CASH LAND PRE	PARATION AND GROWI	NG EXPENSES		705.15	
Other Materials         267.12           TOTAL HARVEST AND POST HARVEST EXPENSE         825.12           OPERATING OVERHEAD -> PICKUP USE         7.66           OPERATING INTEREST AT 10.0%         9.19           TOTAL CASH OPERATING EXPENSES         \$1,547.12	CASH HARVEST AND POST HAR	VEST EXPENSES					
TOTAL HARVEST AND POST HARVEST EXPENSE 825.12  OPERATING OVERHEAD -> PICKUP USE 7.66  OPERATING INTEREST AT 10.0% 9.19  TOTAL CASH OPERATING EXPENSES \$1,547.12	Custom Harvest/Post Harvest					558.00	
TOTAL HARVEST AND POST HARVEST EXPENSE 825.12  OPERATING OVERHEAD -> PICKUP USE 7.66  OPERATING INTEREST AT 10.0% 9.19  TOTAL CASH OPERATING EXPENSES \$1,547.12	Other Materials					267.12	
OPERATING OVERHEAD -> PICKUP USE       7.66         OPERATING INTEREST AT 10.0%       9.19         TOTAL CASH OPERATING EXPENSES       \$1,547.12			OST HARVEST EXPENS	E		825.12	
TOTAL CASH OPERATING EXPENSES \$1,547.12							
· · · · · · · · · · · · · · · · · · ·	OPERATING INTEREST AT 10.0%	0				9.19	
RETURNS OVER CASH OPERATING EXPENSES \$3,168.88	TOTAL CASH OPERATING EXPE	NSES				\$1,547.12	
	RETURNS OVER CASH OP	ERATING EXPENSES				\$3,168.88	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

Table 17B. Allocations of Ownership Costs; Spring Cantaloupe, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

Item	CASH COST BASIS	S (\$/ACRE) Net Returns	TOTAL COST BA	SIS (\$/ACRE) Net Returns
TOTAL INCOME at \$13.10 / Ct	\$4,716.00		\$4,716.00	
TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$1,547.12	\$3,168.88	\$1,547.12	\$3,168.88
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)	4.99 77.36 46.41		4.99 77.36 46.41	
Total Cash Overhead Expenses	128.76		128.76	
Total Cash Operating and Overhead Cost RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)	1,675.88	\$3,040.12	1,675.88	\$3,040.12
Capital Replacement, Machinery and Vehicles Interest on Equity, Machinery and Vehicles			27.64 12.08	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK RETURNS TO LAND, MANAGEMENT AND RISK			39.72	\$3,000.40
Land Cost / Rent or Lease Water Assessment **	100.00 12.50		100.00 12.50	
Total Land Costs RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO MANAGEMENT AND RISK	112.50	\$2,927.62	112.50	\$2,887.90
Management Services (8% of Total Operation Expenses)			123.77	
TOTAL OWNERSHIP COST	241.26		404.75	
TOTAL COST	\$1,788.38	#0.00 <del>7</del> .00	\$1,951.87	
RETURNS TO CAPITAL, MANAGEMENT AND RISK RETURNS TO RISK (PROFITS)		\$2,927.62 	>	\$2,764.13
Item	CASH COST BASIS Income and Costs	s (\$/ACRE) Net Returns	TOTAL COST BAS Income and Costs	SIS (\$/ACRE) Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb ) BREAK-EVEN PRICE TO COVER OWNERSHIP COST BREAK-EVEN PRICE TO COVER TOTAL COST		\$4.30 \$0.67 \$4.97		\$4.30 \$1.12 \$5.42

Table 17C. Variable Operating Costs; Spring Cantaloupe, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop ACRES: CROP: Cantaloupes 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	First Hours * Operating Costs (\$/ACRE *) Per Operation Tot. Cash												
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor C	ust/Serv.	Materials	Total	Times	Expenses	Class	
1	Feb	Disk	0.150	0.167	2.45	1.47			3.92	2.0	7.83	L	
2	Feb	Plow	0.450	0.500	6.53	4.39			10.92	1.0	10.92	L	
3	Feb	Laser Level	0.450	1.000	4.52	8.22			12.74	0.5	6.37	L	
4	Feb	Soil Fertility					3.00		3.00	1.0	3.00	G	
5	Feb	Apply Fert/Ground	0.180	0.200	1.44	1.75		34.98	38.17	1.0	38.17	G	
6	Feb	Apply Herbicide/Ground	0.225	0.250	1.46	2.19		56.42	60.08	1.0	60.08	G	
7	Feb	Incorporate Herbicide	0.225	0.250	2.31	2.19			4.50	1.0	4.50	G	
8	Feb	List	0.225	0.250	2.03	2.19			4.23	1.0	4.23	L	
9	Mar	Plant	0.360	0.800	5.08	6.58		20.06	31.71	1.0	31.71	L	
10	Mar	Buck Rows	0.023	0.025	0.10	0.22			0.32	6.0	1.92	G	
11	Mar	Irrigate		0.667		5.12		11.17	16.28	10.0	162.82	G	
12	Mar	Disk Ends	0.023	0.025	0.14	0.22			0.36	6.0	2.15	G	
13	Mar	Cultivate	0.225	0.250	1.50	2.19			3.70	6.0	22.18	G	
14	Mar	Apply Fert/Ground	0.257	0.286	2.94	2.51		54.71	60.17	1.0	60.17	G	
15	Mar	Thinning					75.00		75.00	1.0	75.00	G	
16	Apr	Hand Weeding					75.00		75.00	2.0	150.00	G	
17	Apr	Apply Fert/Ground	0.257	0.286	2.94	2.51		39.96	45.41	1.0	45.41	G	
18	Apr	Pollinate					15.00		15.00	1.0	15.00	G	
19	May	Harvest, Load & Haul 360					558.00	267.12	825.12	1.0	825.12	Н	
20	May	Disk Residue 360 Ct	0.180	0.200	1.95	1.75			3.70	1.0	3.70	L	
	,	Pickup Use 30 Mi/Acre	1.000		7.66						7.66		
		Operating Interest at 10.0					9.19				9.19		
		TOTAL CASH OPERATING	EXPENSE	S (includes	s all times over):						1547.12	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY	BY CLASS	SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)									
Land Preparation (L)	64.76	Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%			
Growing (G)	640.39	Yields		\$9.83	\$11.79	\$13.10	\$14.41	\$16.38	Break-even Price		
Harvest (H)	825.12										
Post Harvest (P)	0.00	- 25%	270.0	1,171.09	1,701.64	2,055.34	2,409.04	2,939.59	5.49		
Marketing (M)	0.00	- 10%	324.0	1,577.88	2,214.54	2,638.98	3,063.42	3,700.08	4.96		
Operating Overhead (O)	16.85	Budgeted	360.0	1,849.06	2,556.46	3,028.06	3,499.67	4,207.06	4.69		
		+ 10%	396.0	2,120.25	2,898.39	3,417.15	3,935.91	4,714.05	4.47		
Total (T)	\$1,547.12	+ 25%	450.0	2,527.03	3,411.28	4,000.78	4,590.29	5,474.53	4.21		
		Break-even \	/ield	114.54	90.84	79.83	71.20	61.27			

Table 17D. Resource and Cash Flow Requirements; Spring Cantaloupe, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop CROP: Cantaloupes ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: 10/8/01 AREA: Maricopa YIELD: 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE:

		Water				Operati	ng Costs (\$/A				
Month *	Number Irrigations	Applied (inches)	Total Labor (Hrs)	Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
	<u> </u>	( /									
FEB C			2.28		20.95	19.76	91.40		3.00	135.11	
MAR C	4.0	16.0	4.58	44.67	12.87	36.78	54.71	20.06	75.00	244.09	
APR C	3.0	12.0	2.91	33.50	6.56	23.34	39.96		165.00	268.36	
MAY C	3.0	12.0	2.35	33.50	1.98	18.42				53.90	
JUN C			0.20	ļ	1.95	1.75		267.12	558.00	828.82	
Pickup Use					7.66					7.66	
	iterest at 10.0			**					9.19	9.19	
Water Asses	ssment			^^							
Total	10.0	40.0	12.33	111.67	51.97	100.05	186.07	287.18	810.19	1547.12	
%				7.22	3.36	6.47	12.03	18.56	52.37	100.00	
TOTAL RES Total N Total P Total K Total Labo Total Wate		UIREMENT: 101.9 152.6 28.3 12.3 40.0	S (per Acre)	TOTAL ENEF Diesel Fu Unleaded All Direct	l Gas	21.4 Gal 3.0 Gal					
	T REQUIREM			Outtimeters Outside	4.0		Discrete d C	Dia	0.00 11-		
Bed Shap Drag Scra			36 Hr 22 Hr	Cultivator, Sweep, Fertilizer Broadcast		5 Hr 8 Hr		Spray Rig, 8 njector, 4 Row	0.22 Hr 0.51 Hr		
	omplete Syster		22 Hr	Lister. 5 Bottom		2 Hr		d Plow. 4-16 2	0.45 Hr		
Offset Dis			14 Hr	Offset Disk, 12'		2 Hr	Offset Dis		0.43 Hr		
Offset Dis			30 Hr	Pickup Truck, 1/2 T		0 Hr		rill Type, 4 Row			
Rowbuck			14 Hr	Tractor, 50 PTO H		8 Hr		'0 PTO HP,	1.57 Hr		
Tractor, 1	00 PTO HP,	1.	68 Hr	Tractor, 125 PTO H		2 Hr		50 PTO HP,	0.75 Hr		
MATERIALS	REQUIREME	ENT (per Ac	re)								
10-10-05,		30.	00 Ga	11-48-00, Dry	200.0		15-08-04,		30.00 Ga		
Bensulide			00 Pt	Cantaloupe Carton	s 360.0	0 Ct	Cantaloup	e Sd	2.00 Lb		
Water, Di	strict	40.	00 AI								
LABOR REC	QUIREMENT (	per Acre)									
Irrigators		6.	67 Hr	Other	0.6	5 Hr	Tractor		5.01 Hr		

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$12.50 per Acre is included as an ownership cost in Table B.

Table 17E. Schedule of Operations; Spring Cantaloupe, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Double Crop ACRES: CROP: Cantaloupes 1.0 Sandy-Loam IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 10/8/01 AREA: Maricopa 360.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE:

First No. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Materia Name	I Use and Cos Appl. R			_	ervice Cost \$ / Unit	Labor Type	
Feb	2.0 Disk	150 Offset Disk, 18'	6.00							Tractor	
Feb	1.0 Plow	150 Moldboard Plow, 4-16 2	2.00							Tractor	
Feb	0.5 Laser Level	125 Drag Scraper, 10'	2.00							Tractor	
		Laser, Complete System								Other	
Feb	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac		
Feb	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	5.00	11-48-00, Dry	200.00 Lb	33	30.00	Tn		Tractor	
Feb	1.0 Apply Herbicide/Ground	d 70 Directed Spray Rig, 8 Row	4.00	Bensulide	10.00 P	t 4	42.58	Ga		Tractor	
Feb	1.0 Incorporate Herbicide	100 Offset Disk, 12'	4.00							Tractor	
Feb	1.0 List	100 Lister, 5 Bottom	4.00							Tractor	
Mar	1.0 Plant	100 Planter, Drill Type, 4 Row	2.50	Cantaloupe Sd	2.00 Lt	)	9.46	Lb		Tractor	
		Bed Shaper, 4 Rw								Other	
Mar	6.0 Buck Rows	50 Rowbuck, 10'	40.00							Tractor	
Mar	10.0 Irrigate		1.50	Water, District	4.00 A	.1 3	33.50	AF		Irrigators	
Mar	6.0 Disk Ends	50 Offset Disk, 10.5'	40.00							Tractor	
Mar	6.0 Cultivate	70 Cultivator, Sweep, 4 Rw	4.00							Tractor	
Mar	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.50	15-08-04, Lqd	30.00 Ga	a 3′	10.00	Tn		Tractor	
Mar	1.0 Thinning	CST Thinning							75.00 Ac		
Apr	2.0 Hand Weeding	CST Thinning							75.00 Ac		
Apr	1.0 Apply Fert/Ground	100 Fertilizer Injector, 4 Row	3.50	10-10-05, Lqd	30.00 Ga	a 25	51.33	Tn		Tractor	
Apr	1.0 Pollinate	CST Bee Hive Rental							15.00 Ac		
May	1.0 Harvest, Load & Haul	CST Harv/pack/haul Melons	(	Cantaloupe Cartons	360.00 C	t	0.70	Ct	1.55 Ct		
May	1.0 Disk Residue	100 Offset Disk, 13.5'	5.00							Tractor	
-	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00								

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 17F Operations Calendar; Spring Cantaloupe, 2001

COUNT CROP: AREA:	•		FARM: Southern Vegetables ACRES: 1.0 YIELD: 260 Ct/Acre			WATER SOURCE: IRRIGATION SYSTEM: PREVIOUS CROP:			MSID Flood Furrow Wheat,Winter			TILLAC SOIL: DATE:		Conventional Sandy-Loam 10/08/01		
N	0								Operation Perform				O-4		D	
No.	Operation		•	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	Disk				2.0 C											
2	Plow				1.0 C											
3	Laser Level				0.5 C											
4	Soil Fertility				1.0 C											
5	Apply Fert/Ground				1.0 C											
6	Apply Herbicide/Ground				1.0 C											
7	Incorporate Herbicide				1.0 C											
8	List				1.0 C											
9	Plant					1.0 C										
10	Buck Rows					2.0 C	2.0 C	2.0 C								
11	Irrigate					4.0 C	3.0 C	3.0 C								
12	Disk Ends					1.0 C	3.0 C	2.0 C								
13	Cultivate					3.0 C	2.0 C	1.0 C								
14	Apply Fert/Ground					1.0 C										
15	Thinning					1.0 C										
16	Hand Weeding						2.0 C									
17	Apply Fert/Ground						1.0 C									
18	Pollinate						1.0 C									
19	Harvest, Load & Haul								1.0 C							
20	Disk Residue								1.0 C							

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 18A. Income and Cash Operating Summary; Sweet Corn, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-Loam SOIL: 148.0 Ct / Acre 10/8/01 AREA: Maricopa YIELD: PREVIOUS CROP: Cotton, Upland DATE:

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Ears	Crtn	148.00	\$5.46	\$808.08	\$808.08	
CASH LAND PREPARATION AND GRC Paid Labor (including benefits) Tractor/Self Propelled Irrigation	OWING EXPENSES (inc	cluding sales tax)		28.22 42.20	70.43	
Chemicals and Custom Applications Fertilizer Insecticide Herbicide				77.03 90.20 9.00	176.23	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Water Assessment (See Note Below)	**			18.34 31.39	49.73 100.50	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				117.15 3.00	120.15	
TO CASH HARVEST AND POST HARVEST		PARATION AND GROWI	NG EXPENSES		517.04	
Paid Labor (including benefits)  Tractor/Self Propelled  Other/Contract				48.75 230.06	278.81	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Other Materials	TAL MADVEOT AVE -	007   14   10   10   10   10   10   10   10	-	23.13 39.90	63.03	
TO OPERATING OVERHEAD -> PICKUP U OPERATING INTEREST AT 10.0%		OST HARVEST EXPENS	SE		592.85 7.66 15.16	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$1,132.71 (\$324.63)	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

# Table 18B. Allocations of Ownership Costs; Sweet Corn, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Corn, Sweet ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	CASH COST BASI	S (\$/ACRE)	TOTAL COST BA	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$5.46 / Ct	\$808.08		\$808.08	
TOTAL OPERATING EXPENSES	\$1,132.71		\$1,132.71	
RETURN OVER CASH OPERATING EXPENSES		(\$324.63)		(\$324.63)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	8.91 56.64		8.91 56.64	
General and Office Overhead (5.0% of Total Operating Exp.) General Farm Maintenance (3.0% of Total Operating Exp.)			33.98	
Total Cash Overhead Expenses	99.53		99.53	
Total Cash Operating and Overhead Cost	1,232.24		1,232.24	
RETURNS OVER CASH OPER. AND OVER. EXPENSES	1,202.21	(\$424.16)	1,202.21	(\$424.16)
CAPITAL ALLOCATIONS (100% Equity)			56.68	
Capital Replacement, Machinery and Vehicles Interest on Equity, Machinery and Vehicles			22.06	
Total Capital Allocations RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK	>	(\$424.16)	78.74	
RETURNS TO LAND, MANAGEMENT AND RISK			>	(\$502.90)
Land Cost / Rent or Lease	100.00		100.00	
Water Assessment **	25.00		25.00	
Total Land Costs	125.00		125.00	
RETURNS TO CAPITAL, MANAGEMENT AND RISK		(\$549.16)		(#007.00)
RETURNS TO MANAGEMENT AND RISK			>	(\$627.90)
Management Services (8% of Total Operation Expenses)			90.62	
TOTAL OWNERSHIP COST	224.53		393.89	
TOTAL COST	\$1,357.24		\$1,526.60	
RETURNS TO CAPITAL, MANAGEMENT AND RISK		(\$549.16)		(\$740.FQ)
RETURNS TO RISK (PROFITS)			>	(\$718.52)
ltom	CASH COST BASIS		TOTAL COST BAS	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$7.65		\$7.65
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$1.52		\$2.66
BREAK-EVEN PRICE TO COVER TOTAL COST		\$9.17		\$10.31

Table 18C. Variable Operating Costs; Sweet Corn, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional ACRES: CROP: Corn, Sweet 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam AREA: Maricopa YIELD: 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE: 10/8/01

	First		Hour	s *	Operati	ng Costs (	ACRE	*) Per Opera	ation		Tot. Cash	
No.	Month	Operation	Machine	Labor	Fuel/Rps.	Labor Cu	st/Serv.	Materials	Total	Times	Expenses	Class
1	Feb	Rip	0.225	0.250	3.54	2.19			5.74	1.0	5.74	L
2	Feb	Disk	0.225	0.250	4.11	2.19			6.30	3.0	18.91	L
3	Feb	Soil Fertility					3.00		3.00	1.0	3.00	G
4	Feb	Apply Fert/Ground	0.090	0.100	0.91	0.88		34.98	36.77	1.0	36.77	G
5	Feb	List	0.225	0.250	3.10	2.19			5.30	1.0	5.30	L
6	Feb	Buck Rows	0.045	0.050	0.44	0.44			0.88	6.0	5.30	G
7	Feb	Preirrigate		0.333		2.55		22.33	24.89	1.0	24.89	G
8	Feb	Disk Ends	0.045	0.050	0.58	0.44			1.02	5.0	5.10	G
9	Feb	Apply Herbicide/Ground	0.600	0.667	9.09	5.85		9.00	23.94	1.0	23.94	G
10	Mar	Plant	0.360	0.400	5.98	3.51		117.15	126.64	1.0	126.64	L
11	Mar	Irrigate/Run Fertilizer		0.667		5.12		17.17	22.29	7.0	156.02	G
12	Apr	Cultivate	0.150	0.167	1.70	1.28			2.98	3.0	8.95	G
13	Apr	Apply Insect./Ground					4.75	17.80	22.55	4.0	90.20	G
14	Jun	Pick and Load	4.500	10.00	133.42	197.24		251.01	581.67	1.0	581.67	Н
15	Jun	Haul 1	0.500	0.556	6.30	4.88			11.18	1.0	11.18	Н
16	Aug	Disk Residue	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L
	_	Pickup Use 30 Mi/Acre	1.000		7.66						7.66	
		Operating Interest at 10.0					15.16				15.16	
		TOTAL CASH OPERATING	EXPENSE	S (include	s all times over)	•					1,132.71	Т

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY (	CLASS
Land Preparation (L)	162.88
Growing (G)	354.16
Harvest (H)	592.85
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	22.82
Total (T)	\$1,132.71

SENSITIVIT	Y OF THE I	NET REVEN	NUES OVER	R TOTAL CAS	SH EXPENSI	ES (\$/ACR	E)
Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields		\$4.10	\$4.91	\$5.46	\$6.01	\$6.82	Break-even Price
250/	111.0	420.00	227.00	276 40	015.00	104.07	7.05
- 25%	111.0	-428.00	-337.09	-276.49	-215.88	-124.97	7.95
- 10%	133.2	-397.26	-288.17	-215.44	-142.72	-33.63	7.08
Budgeted	148.0	-376.77	-255.56	-174.75	-93.94	27.27	6.64
+ 10%	162.8	-356.28	-222.94	-134.05	-45.17	88.17	6.28
+ 25%	185.0	-325.54	-174.02	-73.01	28.00	179.51	5.85
Break-even \	rield	420.10	263.97	211.55	176.50	141.37	

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Table 18D. Resource and Cash Flow Requirements; Sweet Corn, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Corn, Sweet ACRES: SOIL: Sandy-Loam 1.0 IRRIGATION SYSTEM: Flood Furrow 148.0 Ct / Acre PREVIOUS CROP: AREA: Maricopa YIELD: Cotton, Upland DATE: 10/8/01

		Water								
	Number	Applied	Total	Purchased	Fuel, Oil	•	ing Costs (\$/A	Other		
Month *	Irrigations	(inches)	Labor (Hrs)	Water	and Repairs	Labor	Chemicals	Purchases	Services	Total
FEB C	1.0	8.0	2.15	22.33	25.30	18.50	43.98		3.00	113.11
MAR C	1.0	4.0	1.42	11.17	11.11	11.70	6.01	117.15	0.00	157.14
APR C	2.0	8.0	1.60	22.33	2.73	12.39	29.81	117.10	4.75	72.01
MAY C	2.0	8.0	1.87	22.33	5.45	14.55	29.81		4.75	76.89
JUN C	2.0	8.0	36.99	22.33	64.06	289.93	47.61	251.01	9.50	684.44
JUL C			0.25		4.11	2.19				6.30
Pickup Use	30 Mi/Acre				7.66					7.66
Operating In	nterest at 10.0								15.16	15.16
Water Asse	ssment			**						
Total	8.0	36.0	44.28	100.49	120.42	349.26	157.22	368.16	37.161132.71	
%				8.87	10.63	30.83	13.88	32.50	3.28	100.00
Total P Total Lab Total Wat		96.0 44.3 36.0		Unleaded All Direct		3.0 Ga 7.0 M	BTU			
EOI IIDMEN	IT REQUIREM	IENTS (ner A	ucre)							
	Spray Rig, 16		60 Hr	Fertilizer Broadcast	ter 0.0	)9 Hr	Lister, 5 B	ottom	0.22 Hr	
Offset Di			23 Hr	Offset Disk, 16.5'		90 Hr		uck, 1/2 Ton	1.00 Hr	
Planter, !	Drill Type, 6 Ro	ow 0.	36 Hr	Power Mulcher, 4 F	Rw 0.6	30 Hr		ıltivator, 6 Rw	0.45 Hr	
Rowbuck	ς, 10'	0.:	27 Hr	Tractor, 100 PTO F	IP 6.9	99 Hr		25 PTO HP	0.22 Hr	
Tractor,	150 PTO HP	1.	13 Hr	V-Ripper, 5 Shnk	0.2	22 Hr	Vegetable	Trailer Flat Bed	5.00 Hr	
MATERIAL	S REQUIREM	ENT (per Acr	re)							
11-48-00	, ,		00 Lb	32-00-00, URAN 32		00 Ga	Alachlor		2.50 Pt	
Cyperme			00 Oz	Methomyl		00 Pt	Sweet Co	rn (Super	12.00 Lb	
	istrict	36.	00 AI	Wirebound Crates	148.0	00 Ct				
Water, D	1011101									
Water, D	QUIREMENT (	(I /	50 Hr	Other		00 Hr	Tractor		8.77 Hr	

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 18E. Schedule of Operations; Sweet Corn, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Corn, Sweet ACRES: IRRIGATION SYSTEM: Flood Furrow Sandy-Loam 1.0 SOIL: YIELD: 10/8/01 AREA: Maricopa 148.0 Ct / Acre PREVIOUS CROP: Cotton, Upland DATE:

First No. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material Name	l Use and Co Appl.		te \$/Ur		Service Cost \$ / Unit	Labor Type	
Feb	1.0 Rip	150 V-Ripper, 5 Shnk	4.00							Tractor	
Feb	3.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor	
Feb	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 Ac		
Feb	1.0 Apply Fert/Ground	100 Fertilizer Broadcaster,	10.00	11-48-00, Dry	200.00	Lb	330.00	Tn		Tractor	
Feb	1.0 List	125 Lister, 5 Bottom	4.00							Tractor	
Feb	6.0 Buck Rows	100 Rowbuck, 10'	20.00							Tractor	
Feb	1.0 Preirrigate		3.00	Water, District	8.00	ΑI	33.50	AF		Irrigators	
Feb	5.0 Disk Ends	100 Offset Disk, 13.5'	20.00							Tractor	
Feb	1.0 Apply Herbicide/Ground	d 100 Directed Spray Rig, 16 Power Mulcher, 4 Rw	1.50	Alachlor	2.50	Pt	27.18	Ga		Tractor	
Mar	1.0 Plant	100 Planter, Drill Type, 6 Row	2.50	Sweet Corn (Super	12.00	Lb	9.21	Lb		Tractor	
Mar	7.0 Irrigate/Run Fertilizer	· · · · · · · · · · · · · · · · · · ·	1.50	Water, District	4.00	ΑI	33.50	AF		Irrigators	
	· ·		3	32-00-00, URAN 32,	6.00	Ga	170.80	Tn		Ū	
Apr	3.0 Cultivate	100 Rolling Cultivator, 6 Rw	6.00	,						Irrigators	
Apr	4.0 Apply Insect./Ground	CST Air Spray, 5 Gal Mix	N	Methomyl	2.00	Pt	48.94	Ga	4.75 Ac	Ū	
•	,	1 37		Cypermethrin	2.00	Oz	291.66	Ga			
Jun	1.0 Pick and Load	100 Vegetable Trailer Flat Bed		Wirebound Crates	148.00		1.60			Tractor	
		ŭ								Other	
Jun	1.0 Haul	100 Vegetable Trailer Flat Bed	1.80							Tractor	
Aug	1.0 Disk Residue	150 Offset Disk, 16.5'	4.00							Tractor	
3	Pickup use 30 Mi/Ac	Pickup Truck, 1/2 Ton	1.00								

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

Table 18F Operations Calendar; Sweet Corn, 2001

COUNTY CROP: AREA:	r: Pinai Corn, Sweet Maricopa	ACRES: YIELD:	Southern Vege 1.0 148 Ct/Acre	tables	IRRIGA	R SOURCE TION SYS OUS CRO	STEM:	MSID Flood F Cotton,			TILLAC SOIL: DATE:		Sandy- 10/08/0		
,,	Month and Times Operation Performed														
No.	Operation		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1	Rip			1.0 C											
2	Disk			2.0 C	1.0 C										
3	Soil Fertility			1.0 C											
4	Apply Fert/Ground			1.0 C											
5	List			1.0 C											
6	Buck Rows			1.0 C	1.0 C	1.0 C	2.0 C	1.0 C							
7	Preirrigate			1.0 C											
8	Disk Ends			1.0 C	1.0 C	1.0 C	2.0 C	1.0 C							
9	Apply Herbicide/Ground			1.0 C											
10	Plant				1.0 C										
11	Irrigate/Run Fertilizer				1.0 C	2.0 C	2.0 C	2.0 C							
12	Cultivate					1.0 C	2.0 C								
13	Apply Insect./Ground					1.0 C	1.0 C	2.0 C							
14	Pick and Load							1.0 C							
15	Haul							1.0 C							
16	Disk Residue								1.0 C						

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

Table 19A. Income and Cash Operating Summary; Watermelons, 2001

FARM: Southern AZ Veg ACRES: 1.0 COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional IRRIGATION SYSTEM: Flood Furrow Sandy-loam CROP: Watermelons SOIL: 10/9/01 AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

ltem	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ton	16.80	\$141.60	\$2,378.88	\$2,378.88	
CASH LAND PREPARATION AND GRO Paid Labor (including benefits) Tractor/Self Propelled Irrigation	OWING EXPENSES (in	cluding sales tax)		46.48 49.85	96.33	
Chemicals and Custom Applications Fertilizer Insecticide Herbicide				71.56 25.21 39.30	136.07	
Farm Machinery and Vehicles Diesel Fuel Repairs and Maintenance Irrigation Water (excluding labor) Water Assessment (See Note Below	) **			21.92 32.89	54.81 181.46	
Other Purchased Inputs & Seed/Transplants Other Services and Rentals				88.09 543.00	631.09	
TC CASH HARVEST AND POST HARVES		PARATION AND GROW	ING EXPENSES		1099.76	
Custom Harvest/Post Harvest Other Materials			_		1344.00 160.27	
OPERATING OVERHEAD -> PICKUP U OPERATING INTEREST AT 10.0%		POST HARVEST EXPENS	SE		1504.27 15.32 16.05	
TOTAL CASH OPERATING EXPENSES RETURNS OVER CASH OPERAT					\$2,635.40 (\$256.52)	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

### Table 19B. Allocations of Ownership Costs; Watermelons, 2001

COUNTY: Pinal FARM: Southern AZ Veg WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

lás ma	CASH COST BASI		TOTAL COST BAS	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$141.60 / Tn	\$2,378.88		\$2,378.88	
TOTAL OPERATING EXPENSES RETURN OVER CASH OPERATING EXPENSES	\$2,635.40	(\$256.52)	\$2,635.40	(\$256.52)
		(ψ230.32)		(\$230.32)
CASH OVERHEAD EXPENSES  Taxes, Housing and Insurance, Farm Machinery	5.26		5.26	
General and Office Overhead (5.0% of Total Operating Exp.)	131.77		131.77	
General Farm Maintenance (3.0% of Total Operating Exp.)	79.06		79.06	
Total Cash Overhead Expenses	216.10		216.10	
Total Cash Operating and Overhead Cost	2,851.50		2,851.50	
RETURNS OVER CASH OPER. AND OVER. EXPENSES CAPITAL ALLOCATIONS (100% Equity)		(\$472.62)		(\$472.62)
Capital Replacement, Machinery and Vehicles			30.11	
Interest on Equity, Machinery and Vehicles			10.11	
Total Capital Allocations			40.22	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK	>	(\$472.62)		(27.12.2.1)
RETURNS TO LAND, MANAGEMENT AND RISK			>	(\$512.84)
Land Cost / Rent or Lease Water Assessment **	100.00 25.00		100.00 25.00	
Total Land Costs RETURNS TO CAPITAL, MANAGEMENT AND RISK	125.00	(\$597.62)	125.00	
RETURNS TO MANAGEMENT AND RISK			<del>&gt;</del>	(\$637.84)
Management Services (8% of Total Operation Expenses)			210.83	
TOTAL OWNERSHIP COST	341.10		592.15	
TOTAL COST	\$2,976.50		\$3,227.55	
RETURNS TO CAPITAL, MANAGEMENT AND RISK		(\$597.62)		(0.40.07)
RETURNS TO RISK (PROFITS)			>	(\$848.67)
Hom	CASH COST BASIS		TOTAL COST BAS	
Item	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$156.87		\$156.87
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$20.30		\$35.25
BREAK-EVEN PRICE TO COVER TOTAL COST		\$177.17		\$192.12

Table 19C. Variable Operating Costs; Watermelons, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam AREA: Maricopa YIELD: 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 10/9/01

	First		Hour	s *	Operatir	na Costs	(\$/ACRE *)	Per Opera	ation		Tot. Cash		
No.		Operation	Machine		Fuel/Rps.		ust/Serv.		Total	Times	Expenses	Class	
1	Dec	Rip	0.450	0.500	5.75	4.39			10.14	1.0	10.14	L	
2	Dec	Disk	0.225	0.250	4.11	2.19			6.30	2.0	12.61	L	
3	Dec	Landplane	0.225	0.250	3.57	2.19			5.77	2.0	11.53	L	
4	Dec	List	0.300	0.333	3.89	2.92		39.30	46.12	1.0	46.12	L	
5	Dec	Buck Rows	0.045	0.050	0.27	0.44			0.71	5.0	3.55	G	
6	Dec	Preirrigate		0.500		3.83		13.96	17.79	1.0	17.79	G	
7	Jan	Disk Ends	0.045	0.050	0.58	0.44			1.02	5.0	5.10	G	
8	Jan	Plant	0.300	0.333	3.33	2.92		88.09	94.34	1.0	94.34	L	
9	Jan	Soil Fertility					3.00		3.00	1.0	3.00	G	
10	Jan	Apply Fert/Ground	0.300	0.333	3.21	2.92		25.97	32.11	1.0	32.11	G	
11	Feb	Irrigate		0.400		3.07		11.17	14.23	9.0	128.11	G	
12	Feb	Cultivate	0.257	0.286	1.98	2.51			4.49	6.0	26.95	G	
13	Feb	Thinning					75.00		75.00	1.0	75.00	G	
14	Mar	Hand Weeding					75.00		75.00	2.0	150.00	G	
15	Apr	Apply Fert/Ground	0.300	0.333	2.99	2.92		21.56	27.47	1.0	27.47	G	
16	Apr	Pollinate					15.00		15.00	1.0	15.00	G	
17	Apr	Turn Vines					75.00		75.00	4.0	300.00	G	
18	Apr	Irrigate/Run Fertilizer		0.400		3.07		15.17	18.24	6.0	109.43	G	
19	Apr	Apply Insecticide/Air					4.24	8.37	12.61	2.0	25.22	G	
20	Jun	Harvest, Load & Haul 16.8					1344.00	160.27	1504.27	1.0	1504.27	Н	
21	Jul	Disk Residue 16.8 Tn	0.225	0.250	4.11	2.19			6.30	1.0	6.30	L	
		Pickup Use 60 Mi/Acre	2.000		15.32						15.32		
		Operating Interest at 10.0					16.05				16.05		
		TOTAL CASH OPERATING	EXPENSE	S (includes	s all times over):						2,635.40	Т	

\*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY	CLASS
Land Preparation (L)	181.04
Growing (G)	918.72
Harvest (H)	1,504.27
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	31.37

\$2,635.40

Total (T)

#### SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	<u> </u>
Yields		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	Break-even Price
- 25%	12.6	-1,963.64	-1,696.02	-1,517.60	-1,339.19	-1,071.56	262.04
- 10%	15.1	-1,921.66	-1,600.51	-1,386.41	-1,172.31	-851.17	233.29
Budgeted	16.8	-1,893.67	-1,536.84	-1,298.95	-1,061.06	-704.23	218.92
+ 10%	18.5	-1,865.68	-1,473.17	-1,211.49	-949.81	-557.30	207.16
Break-even Y	ield	130.47	57.35	41.75	32.82	24.85	

Table 19D. Resource and Cash Flow Requirements; Watermelons, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional ACRES: Sandy-loam CROP: Watermelons 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: YIELD: 10/9/01 AREA: Maricopa 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

Water						Operat					
Month *	Number Irrigations	Applied (inches)	Total Labor (Hrs)	Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
DEC P	1.0	5.0	2.38	13.96	25.28	20.36	39.30	22.22	0.00	98.90	
JAN C	0.0	40.0	0.72	00.50	7.12	6.28	25.97	88.09	3.00	130.46	
FEB C MAR C	3.0 3.0	12.0 12.0	1.59 1.77	33.50 33.50	2.83 3.97	12.59 14.22			75.00 75.00	123.92 126.69	
APR C	5.0 5.0	20.0	3.19	55.83	3.97 8.94	25.79	37.93		75.00 244.24	372.73	
MAY C	4.0	16.0	1.80	44.67	1.71	14.02	24.39		154.24	239.03	
JUN C	4.0	10.0	0.10	44.07	0.85	0.88	24.55	160.27	1344.00	1506.00	
JUL C			0.10		4.11	2.19		100.27	1044.00	6.30	
Pickup Use	60 Mi/Acre		0.20		15.32	2.10				15.32	
	nterest at 10.0								16.05	16.05	
Water Asses				**							
Total	16.0	65.0	11.80	181.46	70.13	96.33	127.59	248.36	1916.53	2635.40	
%				6.89	2.66	3.66	4.84	9.42	72.53	100.00	
Total N Total P Total Labo Total Wate		189.9 92.0 11.8 65.0	,	Diesel Fu Unleaded All Direct	d Gas	25.4 Ga 6.0 Ga 4.3 M					
FOUIPMEN	T REQUIREM	IFNTS (ner /	Acre)								
	r, Sweep, 4 Rv	<b>\</b> 1	.54 Hr	Fert. Side Dress Ur	nit. 0.	.60 Hr	Landplane	e 12'X 45'	0.45 Hr		
Lister, 5 E			.30 Hr	Offset Disk, 13.5'		.23 Hr	Offset Dis		0.67 Hr		
Pickup Tr	ruck, 1/2 Ton		.00 Hr	Planter, Planet Jr,		.30 Hr	Rowbuck,	10'	0.23 Hr		
	k Sprayer, 2 T		.30 Hr	Tractor, 60 PTO H		.53 Hr		70 PTO HP	1.84 Hr		
	100 PTO HP		.83 Hr	Tractor, 150 PTO H	HP 1.	.13 Hr	Tractor, 1	50 PTO HP,	0.45 Hr		
V-Ripper,	, 5 Shnk	0.	.45 Hr								
	S REQUIREM	<b>\1</b>	,								
18-46-00,	, Dry		.00 Lb	32-00-00, URAN 3		.00 Ga	46-00-00,		150.00 Lb		
BT	. 5:		.00 Pt	DCPA		.00 Lb	Water, Dis	strict	65.00 AI		
Watermel	ion Bins	16.	.80 Ea	Watermelon Seed	(01) 3.	.00 Th					
	QUIREMENT	· · · · ·									
Irrigators		6.	.50 Hr	Tractor	5.	.30 Hr					

<sup>\*</sup>NOTE: P = Previous Year C = Current Year N = Next Year

<sup>\*\*</sup> A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

### Table 19E. Schedule of Operations; Watermelons, 2001

FARM: Southern AZ Veg COUNTY: Pinal WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow Sandy-loam SOIL: YIELD: 10/9/01 AREA: Maricopa 16.8 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE:

First Io. Month	Times Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acre/Hr	Material U			te \$ / Ur	_	Service Cos \$ / Unit	t Labor Type
Dec	1.0 Rip	150 V-Ripper, 5 Shnk	2.00							Tractor
Dec	2.0 Disk	150 Offset Disk, 16.5'	4.00							Tractor
Dec	2.0 Landplane	150 Landplane 12'X 45'	4.00							Tractor
Dec	1.0 List	100 Lister, 5 Bottom Saddle Tk Sprayer, 2 Tk 8 Row		DCPA	6.00	Lb	6.18	Lb		Tractor
Dec	5.0 Buck Rows	60 Rowbuck, 10'	20.00							Tractor
Dec	1.0 Preirrigate		2.00	Water, District	5.00	ΑI	33.50	ΑF		Irrigators
Jan	5.0 Disk Ends	100 Offset Disk, 13.5'	20.00							Tractor
Jan	1.0 Plant	100 Planter, Planet Jr, 4 Row	3.00	Watermelon Seed (OP)	3.00	Th	27.70	Th		Tractor
Jan	1.0 Soil Fertility	CST Soil Analysis (Surface)							3.00 A	c
Jan	1.0 Apply Fert/Ground	70 Fert. Side Dress Unit, 4Row	3.00	18-46-00, Dry	200.00	Lb	245.00	Tn		Tractor
Feb	9.0 Irrigate		2.50	Water, District	4.00	ΑI	33.50	ΑF		Irrigators
Feb	6.0 Cultivate	70 Cultivator, Sweep, 4 Rw	3.50							Tractor
Feb	1.0 Thinning	CST Thinning							75.00 A	C
Mar	2.0 Hand Weeding	CST Hand Weeding							75.00 A	c
Apr	1.0 Apply Fert/Ground	60 Fert. Side Dress Unit, 4Row	3.00	46-00-00, Urea 46	150.00	Lb	271.17	Tn		Tractor
Apr	1.0 Pollinate	CST Bee Hive Rental							15.00 A	C
Apr	4.0 Turn Vines	CST Hand Weeding							75.00 A	C
Apr	6.0 Irrigate/Run Fertilizer		2.50	Water, District	4.00	ΑI	33.50	ΑF		Irrigators
			;	32-00-00, URAN 32,	4.00	Ga	170.80	Tn		
Apr	2.0 Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		ВТ	2.00	Pt	31.57	Ga	4.24 A	C
Jun	1.0 Harvest, Load & Haul	CST Harv/pack/haul	0.25	Watermelon Bins	16.80	Ea	9.00	Ea	80.00 T	'n
Jul	1.0 Disk Residue	150 Offset Disk, 16.5'	4.00							Tractor
	Pickup use 60 Mi/Ac	Pickup Truck, 1/2 Ton	0.50							

<sup>\*</sup>NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

FARM: Southern Vegetables ACRES: 1.0 YIELD: 16.8 Tn/Acre WATER SOURCE: IRRIGATION SYSTEM: PREVIOUS CROP: MSID Flood Furrow Wheat, Winter TILLAGE: SOIL: DATE: Conventional Sandy-Loam 10/09/01

AINLA.	Mancopa	TILLU.	0.0 III/ACIE		1 11= 11	JUS CITOI	•	vviicai,	*********		DAIL.		10/03/0	1
	·					Month a	nd Times	Operation	n Perform	ned				
No.	Operation		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip													1.0 P
2	Disk													2.0 P
3	Landplane													2.0 P
4	List													1.0 P
5	Buck Rows			1.0 C			2.0 C	1.0 C						1.0 P
6	Preirrigate													1.0 P
7	Disk Ends		1.0 C	1.0 C			2.0 C	1.0 C						
8	Plant		1.0 C											
9	Soil Fertility		1.0 C											
10	Apply Fert/Ground		1.0 C											
11	Irrigate			3.0 C	3.0 C	3.0 C								
12	Cultivate			1.0 C	2.0 C	3.0 C								
13	Thinning			1.0 C										
14	Hand Weeding				1.0 C	1.0 C								
15	Apply Fert/Ground					1.0 C								
16	Pollinate					1.0 C								
17	Turn Vines					2.0 C	2.0 C							
18	Irrigate/Run Fertilizer					2.0 C	4.0 C							
19	Apply Insecticide/Air					1.0 C	1.0 C							
20	Harvest, Load & Haul							1.0 C						
21	Disk Residue								1.0 C					

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

# Appendix A. Tables of Prices of Selected Inputs for Cochise, Pima, and Pinal Counties, Arizona

Table A.1	Estimated Costs of Pumping Irrigation Water	A-2
Table A.2	Water Cost in Irrigation Districts	A-3
Table A.3	Selected Labor and Price Rates	A-3
Table A.4	Property Taxes and Tax Assessments	A-4
Table A.5	Costs of Selected Custom Operations	A-5
Table A.6	Costs of Owning and Operating Irrigation Systems (This table is included only when such irrigation systems are included in the budget tables.)	A-6

Table A.1 Estimated Cost of Pumping Irrigation Water in Southern Arizona, 2001

			Pump	Pump	Case		Overall	Well	Ownership	Annual	Cost of I	Pumpin	g Irrigati	on Wate	er	TOTAL
Area	Energy	Price	Lift	Rate	Diam	Depth	Pump	Cost	Cost *	Pump	Fixed		Variable	Cost/AF		COST
			(Ft)	(GPM)	(in)	(Ft)	Efficiency		(\$/Yr)	(AF)	/AF	Energy	Repairs	P Tax	Total	/AF
Cochise County																
KANSAS SETTLEMENT AREA KANSAS SETTLEMENT AREA	Diesel Electric	0.82000 /Gal 0.08005 /Kwh	440 440	800 800		600 600		104015 94424	11539 10077	530 530	\$21.77 \$19.01	\$54.71 \$66.76	\$6.13 \$5.28		\$60.84 \$72.04	\$82.61 \$91.06
KANSAS SETTLEMENT AREA	Nat. Gas	0.42609 /Th	440	800	16	600	0.154	112942	12679	530	\$23.92	\$41.35	\$6.13		\$47.48	\$71.40
STEWART AREA STEWART AREA	Diesel Electric	0.82000 /Gal 0.08124 /Kwh	340 340	800 800		600 600		97558 88533	10564 9280	530 530	\$19.93 \$17.51	\$42.28 \$52.38	\$4.74 \$4.08		\$47.02 \$56.46	
STEWART AREA	Nat. Gas	0.42918 /Th	340	800	16	600	0.154	87321	9481	530	\$17.89	\$32.18	\$4.74		\$36.92	\$54.80
BOWIE AREA BOWIE AREA BOWIE AREA	Diesel Electric Nat. Gas	0.82000 /Gal 0.07978 /Kwh 0.42219 /Th	470 470 470	1200 1200 1200	16	800 800 800	0.54	157502 148419 166113	17745 16210 18899	795 795 795	\$22.32 \$20.39 \$23.77		\$6.55 \$5.64 \$6.55		\$64.99 \$76.74 \$50.31	
ELFRIDA-MCNEAL AREA ELFRIDA-MCNEAL AREA ELFRIDA-MCNEAL AREA	Diesel Electric Nat. Gas	0.82000 /Gal 0.08101 /Kwh 0.42868 /Th	340 340 340	800 800 800	16	600 600 600		98583 88533 88346	10609 9218 9535	530 530 530	\$20.02 \$17.39 \$17.99	\$42.28 \$52.23 \$32.14	\$4.74 \$4.08 \$4.74		\$47.02 \$56.31 \$36.88	\$67.03 \$73.71 \$54.87
SAN SIMON AREA SAN SIMON AREA SAN SIMON AREA	Diesel Electric Nat. Gas	0.82000 /Gal 0.08080 /Kwh 0.42635 /Th	360 360 360	800 800 800	16	600 600 600	0.54	99416 92160 88907	10949 9763 9822	530 530 530	\$20.66 \$18.42 \$18.53	\$44.77 \$55.16 \$33.85	\$5.01 \$4.32 \$5.01		\$49.78 \$59.48 \$38.86	\$77.90
Pima County																
AVRA VALLEY AREA AVRA VALLEY AREA AVRA VALLEY AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03926 /Kwh 0.42054 /Th	375 375 375	1300 1300 1300		1000 1000 1000	0.54	160713 128823 157534	18165 13931 18031	1034 1034 1034	\$17.57 \$13.47 \$17.44	\$36.30 \$27.92 \$34.78	\$5.22 \$4.50 \$5.22	\$3.15 \$3.15 \$3.15	\$35.57	\$62.24 \$49.05 \$60.59
MARANA AREA MARANA AREA MARANA AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03929 /Kwh 0.42336 /Th	320 320 320	950 950 950	16	800 800 800	0.54	113448 101171 127892	13095 11188 14952	756 756 756	\$17.32 \$14.80 \$19.78	\$23.84	\$4.46 \$3.84 \$4.46	\$3.15 \$3.15 \$3.15	\$30.83	\$45.63
Pinal County																
COOLIDGE AREA COOLIDGE AREA COOLIDGE AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03783 /Kwh 0.42436 /Th	410 410 410	900 900 900	16	600 600 600	0.54	120973 89348 117799	14310 10222 14187	915 915 915	\$15.64 \$11.17 \$15.50	\$29.41	\$5.71 \$4.92 \$5.71	\$1.50 \$1.50 \$1.50	\$46.90 \$35.83 \$45.58	\$47.01
CASA GRANDE AREA CASA GRANDE AREA CASA GRANDE AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03776 /Kwh 0.42337 /Th	575 575 575	1050 1050 1050	16	1500 1500 1500	0.54	210821 179281 259901	23482 19152 29503	835 835 835	\$28.12 \$22.94 \$35.33	\$41.17	\$8.01 \$6.91 \$8.01	\$1.50 \$1.50 \$1.50	\$65.17 \$49.58 \$63.20	
ELOY AREA ELOY AREA ELOY AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03779 /Kwh 0.42414 /Th	620 620 620	800 800 800		1800 1800 1800	0.54	238013 201768 287804	26140 21391 32244	636 636 636	\$41.10 \$33.63 \$50.70		\$8.64 \$7.45 \$8.64		\$53.38	\$111.25 \$87.01 \$118.82
STANFIELD AREA STANFIELD AREA STANFIELD AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03781 /Kwh 0.42317 /Th	640 640 640	1000 1000 1000	16	1500 1500 1500	0.54	232407 194869 277182	25839 20742 31392	795 795 795	\$32.50 \$26.09 \$39.49	\$45.88	\$8.91 \$7.69 \$8.91	\$1.50	\$55.07	\$104.87 \$81.16 \$109.63
MARICOPA AREA MARICOPA AREA MARICOPA AREA	Diesel Electric Nat. Gas	0.75000 /Gal 0.03773 /Kwh 0.42223 /Th	495 495 495	1800 1800 1800	16	1200 1200 1200	0.54	222447 167509 260976	26250 18940 31311	1432 1432 1432	\$13.23	\$47.91 \$35.41 \$46.09	\$6.89 \$5.94 \$6.89	\$1.50	\$42.85	\$74.64 \$56.08 \$76.35

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Table A.2. Estimated Cost of Surface Irrigation Water in Southern Arizona, 2001

Name		Assess	Water C	Costs
		ment	Do	llars per Acre Foot (AF)
Pinal County				
Central Arizona Irrigation District	CAID	\$19.80	plus	\$38.00 /AF
Hohokam Irrigation District	HID	\$25.00	plus	\$22.50 /AF
Maricopa-Stanfield Irrigation District	MSID	\$25.00	plus	\$33.50 /AF
New Magma Irrigation District	NMID	\$24.00	plus	\$33.00 /AF
Queen Creek Irrigation District	QCID	\$10.00	plus	\$32.00 /AF
San Carlos Irrigation District	SCID	\$42.00	plus	\$20.00 /AF
San Carlos Indian Irrigation Project	SCIIP	\$43.00	plus	\$20.00 /AF
Pima County				
Cortaro-Marana Irrigation District	C-MID	\$45.00	plus	\$30.00 /AF

Table A.3. Wage and Piece Rates, Southern Arizona, 2001

	W 5.4	
Labor Group	Wage Rate	
Hand Weeders	\$6.62	/Hr
Harvest	\$6.77	/Hr
Irrigators	\$6.62	/Hr
Tractor	\$6.77	/Hr
Other	\$6.77	/Hr
Truck Driver	\$11.00	/Hr
Produce Loader	\$5.75	/Hr
Contract Labor	\$6.75	/Hr
Contract Labor, Harvest	\$6.75	/Hr
Picker	\$5.75	/Hr
Cutter	\$1.37	/Box

Table A. 4. Custom Service Costs, Southern Arizona 2001

Operation	
Air Spray, 5 Gal Mix	\$5.55 / Acre
Air Spray, 7 Gal Mix	\$7.50 / Acre
Hand Weeding	\$75.00 / Acre
Thinning	\$75.00 / Acre
Scout For Insects	\$15.00 / Acre
Bee Hive Rental	\$35.00 / Acre
Bird Control	\$3.50 / Acre
Soil Analysis (Complete)	\$35.00 / Acre
Soil Analysis (Surface)	\$10.00 / Acre
Harvest-Load-Haul Lettuce	\$3.40 / Crtn
Cut/Top/Field Sack Dry Onions	\$3.17 / Sack
Harvest Garlic	\$3.50 / Crtn
Pick Red Chile after Green	\$400 / Ton
Load Chiles	\$5.00 / Ton
Pick Green Chiles	\$85.00 / Ton
Pick Red Chiles	\$0.30 / lb
Haul Garlic	\$0.25 / Crtn
Haul Green Chiles	\$15.00 / Ton
Haul Red Chiles	\$60.00 / Ton
Field Haul Dry Onions	\$0.21 / Sack
Sales Brokerage	\$0.60 / Sack

**Table A.5. Property Taxes Assessments, Southern Arizona** 

State Code	Budget System Area Descripion	State Area Description	2000 Primary	2000 Secondary	2000 Total
Cochise C	ounty (02) Property	Гахеѕ			
1300	Kansas Settlement	Wilcox Outside	\$9.5536	\$4.4433	\$13.9969
1300	Stewart	Wilcox Outside	\$9.5536	\$4.4433	\$13.9969
1400	Bowie	Bowie	\$16.5423	\$1.4871	\$18.0294
1200	Elfrida		\$8.5039	\$1.4885	\$9.9924
4500	Double Adobe		\$10.3661	\$0.5148	\$10.8809
5304	Ash Creek (VUHSD)		\$14.0668	\$2.4608	\$16.5276
5500	McNeal		\$13.3055	\$0.5148	\$13.8203
	Elfrida/McNeal		\$11.5606	\$1.2447	\$12.8053
1800	San Simon	San Simon	\$15.1676	\$1.0773	\$16.2449
	Average		\$12.1324	\$2.0537	\$14.1862
Pima Cou	nty (10) Property Tax	es,	Primary	Secondary	Total
600	Avra Valley	Avra Valley	\$9.8919	\$8.4770	\$18.3689
610	Marana	Marana	\$9.8919	\$8.4770	\$18.3689
	Average		\$9.8919	\$8.4770	\$18.3689
3000	Sahuarita	Sahuarita	\$5.9840	\$5.8956	\$11.8796
	Special District Tax	Assess	sment_		
830	Cortaro-Marana Irrigatio	n District	\$1.00		
987	CAWCD	\$18	37.00		
Pinal Cou	nty (11) Property Tax	es			
2100	Coolidge	Coolidge OCL/ED2 (21)	\$10.0656	\$3.6319	\$13.6975
400	Casa Grande	Casa Grande OCL/ED2 (82-	4) \$12.4261	\$3.8292	\$16.2553
1100	Eloy	Eloy OFD/OCL/ED4 (40-11)	\$12.0912	\$3.5642	\$15.6554
2400	Stanfield	Stanfield ED3 (82-24)	\$11.8762	\$3.9511	\$15.8273
2000	Maricopa	Maricopa (20)	\$14.9539	\$6.2863	\$21.2402
	Average		\$12.5872	\$3.8506	\$16.4378
500	Red Rock	Red Rock (40-5)	\$12.1302	\$1.9397	\$14.0699
	Special District Tax	Assessment			
601	San Carlos ID	\$43.0000			
602	Maricopa-Stanfield ID	\$25.0000			
603	Central Arizona ID	\$19.8000			
604	New Magma ID	\$24.0000			
605	Queen Creek ID	\$10.0000			
606	Silver Bell	\$3.0000			
608	Hohokam ID	\$23.0000			

## **Appendix B. Tables of Prices of Selected Inputs, Arizona**

Table B.1	Prices of Materials Used	B-2
Table B.2	Cost Data for Equipment and Implements	B-6

Note: These average input prices are used for all Arizona counties when appropriate. Not all items listed are used in all counties.

**Table B.1 Prices of Materials Used** 

Common Name	Example Trade Name	1998 Price	2001 Price
	Fertilizers		
0.0.404.00		055.00 / 5	<b>^</b>
0-0-12 LQD 7.5-26-0-8 LQD	0-0-12 LQD 7.5-26-0-8 LQD	\$55.00 / Tn	\$55.00 \$260.00
· · · · · · ·		\$260.00 / Tn	
00-45-00, TREBLE SUPER 00-52-00 LQD	00-45-00, TREBLE SUPER 00-52-00 LQD	\$317.50 / Tn \$317.00 / Tn	\$260.00 \$299.50
05-26-00-08 PHOSFURIC	05-26-00-08 PHOSFURIC	\$290.00 / Tn	\$299.00
10-34-00 LQD	10-34-00 LQD	\$266.40 / Tn	\$263.33
11-48-00 DRY	11-48-00 DRY	\$330.00 / Tn	\$330.00
11-52-00 DRY	11-52-00 DRY	\$284.00 / Tn	\$273.33
15-0-0-16 N-phuric ACID	15-0-0-16 N-phuric ACID	\$205.00 / Tn	\$205.00
15-15-15 DRY	15-15-15 DRY	\$320.00 / Tn	\$320.00
16-20-00 DRY	16-20-00 DRY	\$240.67 / Tn	\$250.50
16-20-00 LQD	16-20-00 LQD	\$220.00 / Tn	\$220.00
17-00-00 LQD, CAN 17	17-00-00 LQD, CAN 17	\$0.00 / Tn	\$175.00
18-46-00 DRY	18-46-00 DRY	\$275.00 / Tn	\$245.00
20-0-0-40 Nitro-Sul	20-0-0-40 Nitro-Sul	\$0.00 / Tn	\$280.00
20-00-00 Amm. NITRATE, DRY	20-00-00 Amm. NITRATE, DRY	\$0.00 / Tn	\$222.50
20-00-00 Amm. NITRATE, LQD	20-00-00 Amm. NITRATE, LQD	\$0.00 / Tn	\$155.00
21-00-00 Amm SULFATE	21-00-00 Amm SULFATE	\$0.00 / Tn	\$184.00
28-0-0-9 N-Phuric ACID	28-0-0-9 N-Phuric ACID	\$0.00 / Tn	\$240.00
32-00-00 URAN 32, LQD	32-00-00 URAN 32, LQD	\$173.00 / Tn	\$170.80
33-00-00 Amm. NITRATE, DRY	33-00-00 Amm. NITRATE, DRY	\$320.00 / Tn	\$320.00
46-00-00 L B UREA	46-00-00 L B UREA	\$0.00 / Tn	\$30.00
46-00-00 UREA 46	46-00-00 UREA 46	\$257.00 / Tn	\$271.17
82-00-00 Anhyd. AMMONIA	82-00-00 Anhyd. AMMONIA	\$317.00 / Tn	\$306.67
	Herbicides		
Atrazine	AATREX, 4L, 2.5 GAL	\$0.00 / Lb	\$15.75
Atrazine	AATREX, 80W, 5 LB	\$2.18 / Lb	\$2.98
I		·	
Benefin	BALAN, 1.5EC, 2.5 GAL	\$14.95 / Ga	\$8.69
Dicamba	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL	\$14.95 / Ga \$85.76 / Ga	\$8.69 \$97.06
Dicamba Cyanazine	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga	\$8.69 \$97.06 \$31.25
Dicamba Cyanazine Bromoxynil	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga	\$8.69 \$97.06 \$31.25 \$53.30
Dicamba Cyanazine Bromoxynil Bromoxynil	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E)	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL STAPLE OZ.	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58 \$22.23
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin Pyritiodac-sodium	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga \$23.00 / Oz	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$42.58 \$22.23 \$24.72 \$18.75
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin Pyritiodac-sodium Butylate	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL STAPLE OZ. SUTAN+, 6.7E, 2.5 GAL TREFLAN, 4E, 30 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga \$27.52 / Ga \$23.00 / Oz \$17.98 / Ga \$0.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$42.58 \$22.23 \$24.72 \$18.75 \$24.95
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin Pyritiodac-sodium Butylate Trifluralin	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL STAPLE OZ. SUTAN+, 6.7E, 2.5 GAL TREFLAN, 4E, 30 GAL TREFLAN, 4E, 30 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga \$27.52 / Ga \$27.52 / Ga \$23.00 / Oz \$17.98 / Ga \$0.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58 \$22.23 \$24.72 \$18.75 \$24.95 \$21.15
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin Pyritiodac-sodium Butylate Trifluralin Trifluralin Trifluralin	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL STAPLE OZ. SUTAN+, 6.7E, 2.5 GAL TREFLAN, 4E, 30 GAL TREFLAN, 4E, 2.5 GAL TREFLAN, 4E, 2.5 GAL TREFLAN, 4E, 2.5 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58 \$22.23 \$24.72 \$18.75 \$24.95 \$21.15
Dicamba Cyanazine Bromoxynil Bromoxynil Prometryn 2,4-d Metolachlor Metolachlor EPTC Fluazifop Diclofop Methyl Pronamide MSMA MSMA Bensulide Pendimethalin Pyritiodac-sodium Butylate Trifluralin Trifluralin	BALAN, 1.5EC, 2.5 GAL BANVEL, 4E, 1 GAL BLADEX, 4L, 2.5 GAL BRONCO, 2.6/1.4L, 2.5 GAL BUCTRIL, 4E, 2,5 GAL CAPAROL, 4L, 2.5 GAL D - 2,4-D AMINE, 4E, 1 GAL DUAL, 8E, 2.5 GAL DUAL, 8E, 30 GAL EPTAM, 7E, 5 GAL FUSILADE, 2000 (1E) HOELON, 3EC, 5 GAL KERB, 50W, 3LB BUENO 6 MSMA ANY BRAND, 6S, 5 GAL PREFAR, 4E, 5 GAL PROWL, 4E, 5 GAL STAPLE OZ. SUTAN+, 6.7E, 2.5 GAL TREFLAN, 4E, 30 GAL TREFLAN, 4E, 30 GAL	\$14.95 / Ga \$85.76 / Ga \$25.26 / Ga \$52.93 / Ga \$67.93 / Ga \$30.00 / Ga \$11.71 / Ga \$0.00 / Ga \$60.84 / Ga \$26.08 / Ga \$120.00 / Ga \$55.54 / Ga \$22.75 / Lb \$0.00 / Ga \$18.33 / Ga \$38.12 / Ga \$27.52 / Ga \$27.52 / Ga \$27.52 / Ga \$23.00 / Oz \$17.98 / Ga \$0.00 / Ga	\$8.69 \$97.06 \$31.25 \$53.30 \$105.81 \$29.63 \$15.15 \$82.50 \$65.23 \$34.09 \$125.00 \$67.75 \$26.27 \$20.60 \$18.00 \$42.58 \$22.23 \$24.72 \$18.75 \$24.95 \$21.15

**Table B.1 Prices of Materials Used** 

Common Name	Example Trade Name	1998	2001
		Price	Price
	Herbicides Continued		
Oryzalin	SURFLAN	\$0.00 / Ga	\$80.86
Napropamide	DEVRINOL	\$0.00 / Ga	\$8.75
Simazine	PRINCEP 4L	\$0.00 / Ga	\$19.50
Carfentrazone-ethyl	AIM	\$0.00 / Oz	\$8.80
Diglycolamine	CLARITY	\$0.00 / Ga	\$91.30
Clethodim	SELECT 2 EC	\$0.00 / Ga	\$192.71
Pronamide	COTTON PRO	\$0.00 / Ga	\$28.00
Imazethapyr	PURSUIT DG	\$0.00 / Oz	\$10.65
Sethoxydim	POAST	\$0.00 / Ga	\$67.85
	Insecticides		
Imidacloprid	ADMIRE, F	\$591.67 / Ga	\$588.40
Abamectin	AGRI-MEK, 15EC, 1 GAL	\$706.00 / Ga	\$732.91
Permethrin	AMBUSH,2E, 1GAL	\$115.83 / Ga	\$120.50
Cypermethrin	AMMO, 2.5EC, 1GAL	\$285.64 / Ga	\$291.66
Fenvalerate	ASANA, XL, 1 GAL	\$146.61 / Ga	\$144.04
Cyfluthrin	BAYTHROID, 2E, 1 GAL	\$496.00 / Ga	\$520.67
Sulprophos	BOLSTAR, 6E, 5 GAL	\$490.00 / Ga	\$288.38
Bifenthrin	CAPTURE, 2EC, 1 GAL	\$549.00 / Ga	\$490.00
Profenofos	CURACRON, 6E, 2.5 GAL	\$120.00 / Ga	\$120.00
Profenofos	CURACRON, 8E, 2.5 GAL	\$0.00 / Ga	\$113.00
Dimethoate	CYGON,'267', 5 GAL	\$26.50 / Ga	\$26.50
Dimethoate	CYGON,'400', 2.5 GAL	\$35.13 / Ga	\$35.59
Dimethoate	CYGON,'400', 5 GAL	\$38.00 / Ga	\$38.00
Malathion	CYTHION, ULV, 5 GAL	\$29.42 / Ga	\$32.00
Fenpropathrin	DANITOL	\$174.00 / Ga	\$167.83
Dimethoate	DIMETHONATE, 4E, 2.5 GAL	\$24.75 / Ga	\$12.00
BT	DIPEL, 2X, 1 LB	\$10.50 / Lb	\$11.02
Disulfoton	DISYSTON, 15G, 10 LB	\$1.79 / Lb	\$1.74
Disulfoton	DISYSTON, 15G, 50 LB	\$0.00 / Lb	\$20.50
Disulfoton	DISYSTON, 8E, 5 GAL	\$71.08 / Ga	\$66.44
Carbofuran	FURADAN, 15G, 50 LB	\$1.65 / Lb	\$1.17
Carbofuran	FURADAN,4F,2.5GAL	\$75.95 / Ga	\$76.85
Azinphos Methyl	GUTHION, 2L, 5 GAL	\$31.25 / Ga	\$30.30
Lambdacyhalothrin	KARATE, 1E, 1 GAL	\$278.75 / Ga	\$270.00
Methomyl	LANNATE, 24%L, 2.5 GAL	\$49.05 / Ga	\$48.94
Chlorpyrifos	LOCK - ON	\$37.08 / Ga	\$37.73 \$47.21
Chlorpyrifos Malathion	LORSBAN, 4E, 2.5 GAL	\$50.95 / Ga \$20.00 / Ga	\$47.21 \$21.50
Malathion	MALATHION, 5S, 2.5 GAL MALATHION, 8E, 5 GAL	\$20.00 / Ga \$30.73 / Ga	\$21.50 \$31.69
Methamidophos	MONITOR, 4L, 2 GAL	\$76.50 / Ga	\$77.00
Methamidophos	MONITOR, 4L, 2 GAL MONITOR, 4L, 5 GAL	\$86.48 / Ga	\$77.00 \$82.98
Zetacypermethrin	MUSTANG (FURY)	\$317.83 / Ga	\$321.18
Acephate	ORTHENE, 75S, 10 LB	\$9.00 / Lb	\$9.61
Acephate	ORTHENE, 90S, 10 LB	\$10.31 / Lb	\$10.49
Amitraz	OVASYN, 5 GAL	\$47.56 / Lb	\$46.74
Methyl Parathion	PARATHION/METHYL, 4E, 5 GAL	\$0.00 / Ga	\$30.00
Methyl Parathion	PENNCAP M, 2L, 5 GAL	\$27.50 / Ga	\$25.75
Endosulfan	PHASER, 3EC, 1 GAL	\$33.47 / Ga	\$34.08
Tralomethrin	SCOUT X-TRA, 1 GAL	\$283.89 / Ga	\$330.00
Carbaryl	SEVIN, 4F, 2.5 GAL	\$28.75 / Ga	\$28.75
Carbaryl	SEVIN, 80S, 10 LB	\$4.76 / Lb	\$4.98
Carbaryl	SEVIN, XLR PLUS, 2.5 GAL	\$25.00 / Ga	\$25.00
Spinosad	SUCCESS	\$600.00 / Ga	\$609.67
Phorate	THIMET, 20G, 50 LB	\$2.18 / Lb	\$2.03
Endosulfan	THIODAN, 3EC, 2.5 GAL	\$34.80 / Ga	\$33.17
Abamectin	ZEPHYR, 15EC, 2.5 GAL	\$550.00 / Ga	\$550.00
Lambdacyhalothrin	WARRIOR T	\$0.00 / Ga	\$336.00
		\$0.00 / Ou	<b>4000.00</b>

**Table B.1 Prices of Materials Used** 

Common Name	Example Trade Name	1998 Price	2001 Price
	Fungicides		
Triadimefon Benomyl Chlorothalonil Mancozeb Mancozeb Metalaxyl Vinclozolin	BAYETON, 50WP, 5 LB BENLATE, 50WP, 2 LB BRAVO 500, 2.5 GAL DITHANE, M45, 80W, 3 LB DITHANE, M45, 80W, 50 LB RIDOMIL, 2E, 1 GAL RONILAN, 50DF, 5 LB	\$61.50 / Lb \$19.03 / Lb \$59.00 / Ga \$0.00 / Lb \$3.20 / Lb \$204.58 / Ga \$23.20 / Lb	\$70.12 \$20.25 \$42.60 \$3.20 \$3.10 \$202.05 \$24.59
	Defoliants		
Endothall Tribufos Thidiazuron Merphos Thidiazuron/Diuron Paraquat Paraquat	ACCELERATE, 0.5S, 5 GAL DEF-6, 6E, 2.5 GAL DROPP, 50WP, 1 LB FOLEX, 6E, 5 GAL GINSTAR GRAMOXONE EXTRA, 2.5L, 2.5 GAL GRAMOXONE, 2S, 5 GAL SODIUM CHLORATE 3, 1 GAL SODIUM CHLORATE #2, 3, 1 GAL	\$24.33 / Ga \$45.92 / Ga \$56.16 / Lb \$46.88 / Ga \$200.00 / Lb \$0.00 / Ga \$40.00 / Ga \$1.40 / Ga \$0.00 / Ga	\$24.35 \$46.28 \$59.00 \$50.78 \$216.71 \$43.00 \$40.78 \$1.25 \$6.50
	Miscellaneous		
Chlorine Comp. Gas Mepiquat Chloride Ethephon Spreader-Activator Sulfuric Acid Surfactant Vegetable Oil	Chlorine Comp. Gas PIX, .35L, 1 GAL PREP, 6E, 5 GAL Sorba Spray Zip Sulfuric Acid Bulk Surfactant (Spreader) Vegetable Oil Concentrate	\$0.80 / Lb \$107.75 / Ga \$62.67 / Ga \$13.50 / Ga \$75.00 / Tn \$16.13 / Ga \$13.00 / Ga	\$0.80 \$118.60 \$64.33 \$13.50 \$75.00 \$16.40 \$14.75

**Table B.1 Prices of Materials Used** 

Common Name	Example Trade Name	1998	2001		
		Price	Price		
	Cartons & Boxes				
Boxes & Supplies	Boxes & Supplies	\$0.95 / Ct	\$0.95		
Boxes for Cauliflower	Boxes for Cauliflower	\$0.95 / Ct	\$0.95		
Boxes for Leaf Lettuce	Boxes for Leaf Lettuce	\$1.05 / Ct	\$1.09		
Broccoli Boxes	Broccoli Boxes	\$0.82 / Ct	\$0.90		
Field Crates (Bu)	Field Crates (Bu)	\$0.00 / Sk	\$7.58		
Cantaloupe Cartons	Cantaloupe Cartons	\$0.87 / Ct \$0.49 / Sk	\$1.00		
Corn Sacks 5 Dz Cap Lettuce Cartons	Corn Sacks 5 Dz Cap Lettuce Cartons	\$0.49 / Sk \$1.00 / Ct	\$0.84 \$1.15		
Onion Bags	Onion Bags	\$1.10 / Sk	\$1.10		
Plastic Mulch (Average)	Plastic Mulch (Average)	\$75.00 / Roll	\$85.00		
Watermelon Bins	Watermelon Bins	\$9.00 / Ea	\$11.00		
Waxed Cartons	Waxed Cartons	\$1.20 / Ct	\$1.30		
Wirebound Crates	Wirebound Crates	\$1.60 / Ct	\$1.70		
	Vegetable Seeds				
Beet Seed	Beet Seed	\$5.67 / Lb	\$6.08		
Bell Pepper (OP)	Bell Pepper (OP)	\$31.67 / Lb	\$32.67		
Broccoli Seed (Hybrid)	Broccoli Seed (Hybrid)	\$2.36 / Th	\$2.65		
Broccoli Seed (OP)	Broccoli Seed (OP)	\$15.00 / Lb	\$15.00		
Butternut Squash Sd	Butternut Squash Sd	\$11.18 / Lb	\$11.80		
Cabbage Sd (OP)	Cabbage Sold (Hybrid)	\$16.75 / Lb	\$17.13		
Cabbage Seed (Hybrid)	Cabbage Seed (Hybrid)	\$2.54 / Th	\$2.89 \$9.90		
Cantaloupe Sd (Hybrid) Carrot Seed (Raw/Hybrid)	Cantaloupe Sd (Hybrid) Carrot Seed (Raw/Hybrid)	\$9.46 / Lb \$0.22 / Th	\$9.90 \$0.25		
Carrot Seed (Raw/Hybrid) Cauliflower Sd (Hyb)	Carrot Seed (Raw/Hybrid) Cauliflower Sd (Hyb)	\$0.22 / Th	\$0.23 \$5.10		
Cauliflower Seed	Cauliflower Seed	\$61.67 / Lb	\$71.6		
Cauliflower Trans	Cauliflower Trans	\$32.50 / Th	\$33.00		
Chile Pepper Sd (OP)	Chile Pepper Sd (OP)	\$34.23 / Lb	\$32.67		
Chinese Cabbage Sd	Chinese Cabbage Sd	\$0.87 / Lb	\$1.0		
Collard Seed	Collard Seed	\$5.50 / Lb	\$5.50		
Egg Plant (Hybrid)	Egg Plant (Hybrid)	\$2.86 / Th	\$2.95		
Garlic Cloves	Garlic Cloves	\$10.00 / Cw	\$10.00		
Green Bean Sd	Green Bean Sd	\$2.49 / Lb	\$3.00		
Green Onion Seed	Green Onion Seed	\$21.18 / Lb	\$12.33		
Head Lettuce Sd	Head Lettuce Sd	\$0.60 / Th	\$0.60		
Head Lettuce Sd, Coated	Head Lettuce Sd, Coated	\$0.77 / Th	\$0.77		
Head Lettuce Sd, Pellet	Head Lettuce Sd, Pellet	\$0.77 / Th	\$0.7		
Honeydew Melons(Hybrid)	Honeydew Melons(Hybrid)	\$20.27 / Lb	\$21.43		
Leaf Lettuce Sd (raw)	Leaf Lettuce Sd (raw)	\$0.36 / Th	\$0.54		
Okra Seed	Okra Seed	\$4.83 / Lb	\$4.42		
Okra Seed (Hybrid)	Okra Seed (Hybrid)	\$61.33 / Lb	\$61.3		
Onion Seed (Pelletized) Parslev Seed	Onion Seed (Pelletized) Parsley Seed	\$0.87 / Th \$11.83 / Lb	\$0.87 \$12.67		
Pickling Cucumber (Hyb)	Pickling Cucumber (Hyb)	\$11.63 / Lb \$19.48 / Lb	\$12.67 \$19.48		
Potato Seed	Potato Seed	\$16.00 / Cw	\$16.00		
Potato Seed + Fung.	Potato Seed + Fung.	\$0.00 / Cw	\$0.00		
Pumpkin Seed (Hyb)	Pumpkin Seed (Hyb)	\$19.88 / Th	\$20.25		
Radish Seed	Radish Seed	\$4.51 / Lb	\$5.7		
Rappini Seed	Rappini Seed	\$16.50 / Lb	\$19.0		
Slicer Cucumber (Hyb)	Slicer Cucumber (Hyb)	\$44.67 / Lb	\$44.6		
Snap Bean Seed	Snap Bean Seed	\$2.55 / Lb	\$2.5		
Spinach Seed (Hyb)	Spinach Seed (Hyb)	\$2.84 / Lb	\$2.84		
Summer Squash	Summer Squash	\$38.14 / Lb	\$38.1		
Sweet Corn (Super Sweets)	Sweet Corn (Super Sweets)	\$9.21 / Lb	\$9.2		
Sweet Corn Seed	Sweet Corn Seed	\$7.58 / Lb	\$7.5		
Sweet Corn Seed + Fung.	Sweet Corn Seed + Fung.	\$8.50 / Lb	\$8.5		
Sweet Potato Slips	Sweet Potato Slips	\$20.00 / Th	\$20.0		
Γomato Seed (Hybrid)	Tomato Seed (Hybrid)	\$10.34 / Th	\$10.0		
Γurnip Sd (Hyb)	Turnip Sd (Hyb)	\$25.17 / Lb	\$25.1		
Turnip Seed (OP)	Turnip Seed (OP)	\$4.75 / Lb	\$4.7		
Watermelon Seed (Hyb)	Watermelon Seed (Hyb)	\$30.26 / Th	\$31.5		
Watermelon Seed (OP)	Watermelon Seed (OP)	\$27.70 / Th	\$27.7		
Watermelon, Seedless	Watermelon, Seedless	\$186.00 / Lb	\$189.0		
Zucchini Seed (Hybrid)	Zucchini Seed (Hybrid)	\$50.00 / Lb	\$47.0		

**Table B.2 Cost Data for Equipment and Implements** 

	New	Hrs to	Annual		Dolla	ır Cost ı	er Hour o	f Use	
Name	Price	Wearout	Hours	Deprec	Opp. Int.	THI	Repairs	Fuel	Total
Tractors									
Tractor, 25 PTO HP	\$13,003	12,000	1200	\$0.76	\$0.59	\$0.14	\$1.09	\$1.12	\$3.71
Tractor, 25 PTO HP, MFWD	\$16,577	16,000	1200	\$0.80	\$0.71	\$0.17	\$0.80	\$1.03	\$3.51
Tractor, 35 PTO HP	\$20,550	12,000	1200	\$1.21	\$0.94	\$0.22	\$1.73	\$1.57	\$5.66
Tractor, 35 PTO HP, MFWD	\$22,786	16,000	1200	\$1.11	\$0.97	\$0.23	\$1.09	\$1.45	\$4.85
Tractor, 40 PTO HP	\$21,942	12,000	1200	\$1.29	\$1.00	\$0.24	\$1.84	\$1.80	\$6.17
Tractor, 40 PTO HP , MFWD	\$25,371	16,000	1200	\$1.23	\$1.08	\$0.26	\$1.22	\$1.66	\$5.45
Tractor, 50 PTO HP	\$25,307	12,000	1200	\$1.49	\$1.15	\$0.27	\$2.13	\$2.25	\$7.29
Tractor, 50 PTO HP, MFWD	\$29,041	16,000	1200	\$1.41	\$1.24	\$0.30	\$1.39	\$2.07	\$6.41
Tractor, 60 PTO HP	\$29,285	12,000	1200	\$1.72	\$1.33	\$0.32	\$2.46	\$2.70	\$8.53
Tractor, 60 PTO HP, MFWD	\$35,664	16,000	1200	\$1.73	\$1.52	\$0.36	\$1.71	\$2.48	\$7.81
Tractor, 70 PTO HP	\$32,461	12,000	1200	\$1.91	\$1.48	\$0.35	\$2.73	\$3.15	\$9.61
Tractor, 70 PTO HP, MFWD	\$39,646	16,000	1200	\$1.92	\$1.69	\$0.40	\$1.90	\$2.90	\$8.82
Tractor, 80 PTO HP	\$36,784	12,000	1200	\$2.16	\$1.67	\$0.40	\$3.09	\$3.60	\$10.92
Tractor, 80 PTO HP, MFWD	\$45,029	16,000	1200	\$2.18	\$1.92	\$0.46	\$2.16	\$3.31	\$10.04
Tractor, 100 PTO HP	\$50,344	12,000	1200	\$2.96	\$2.29	\$0.54	\$4.23	\$4.50	\$14.52
Tractor, 100 PTO HP, MFWD	\$61,243	16,000	1200	\$2.97	\$2.62	\$0.62	\$2.94	\$4.14	\$13.29
Tractor, 125 PTO HP	\$65,746	12,000	1200	\$3.86	\$2.99	\$0.71	\$5.52	\$6.07	\$19.16
Tractor, 125 PTO HP, MFWD	\$76,656	16,000	1200	\$3.72	\$3.28	\$0.78	\$3.68	\$5.59	\$17.04
Tractor, 150 PTO HP	\$81,578	12,000	1200	\$4.79	\$3.71	\$0.88	\$6.85	\$6.74	\$22.98
Tractor, 150 PTO HP, MFWD	\$92,268	16,000	1200	\$4.48	\$3.94	\$0.94	\$4.43	\$6.21	\$20.00
Tractor, 175 PTO HP	\$98,877	12,000	1200	\$5.81	\$4.50	\$1.07	\$8.31	\$7.87	\$27.55
Tractor, 175 PTO HP, MFWD	\$110,999 \$119,274	16,000 16,000	1200 2000	\$5.39 \$4.85	\$4.74 \$3.41	\$1.13 \$0.80	\$5.33 \$5.73	\$7.24 \$8.99	\$23.83 \$23.79
Tractor, 200 PTO HP, 4WD Tractor, 85 hp "MUDDER"	\$42,913	12,000	1200	\$4.65 \$2.52	\$3.41 \$1.95	\$0.46	\$3.73 \$3.60	\$3.73	\$23.79 \$12.27
Tractor, 235 Eng HP, Art.	\$118,900	16,000	2000	\$4.84	\$3.40	\$0.40	\$5.00 \$5.71	\$3.73 \$7.87	\$22.62
Tractor, 300 Eng HP, Art.	\$1134,560	16,000	2000	\$5.48	\$3. <del>4</del> 0 \$3.85	\$0.80	\$6.46	\$10.12	\$26.81
Tractor, 335 Eng HP, Art.	\$137,034	16,000	2000	\$5.58	\$3.92	\$0.92	\$6.58	\$11.02	\$28.01
Tractor, 375 Eng HP, Art.	\$151,900	16,000	2000	\$6.18	\$4.35	\$1.02	\$7.29	\$12.81	\$31.66
Tractor, Crawler, Rubber Track	\$160,240	16,000	2000	\$6.52	\$4.58	\$1.08	\$7.69	\$10.57	\$30.44
Skip Loader, Wheeled	\$89,426	12,000	1000	\$5.59	\$4.69	\$1.12	\$7.51	\$4.05	\$22.96
Motor Grader, 12'	\$184,230	16,000	1200	\$8.94	\$7.87	\$1.88	\$8.84	\$5.62	\$33.15
Self Propelled Harvest Equipment		-,		***					,
Bale Wagon, SP PRC	\$107,880	3,000	300	\$30.02	\$17.96	\$4.19	\$59.75	\$4.44	\$116.37
Bale Wagon, SP PRC W/Squeeze	\$110,680	3,000	300	\$30.80	\$18.43	\$4.30	\$61.30	\$4.44	\$119.28
Combine, Sm. Gr., PL20, 155 Bu	\$126,986	3,000	400	\$31.49	\$17.21	\$3.99	\$17.01	\$4.19	\$73.89
Combine, Sm. Gr., PL20, 190 Bu	\$140,511	3,000	400	\$34.85	\$19.04	\$4.41	\$18.82	\$4.61	\$81.73
Combine, Corn, 190 Bu, 6 Row	\$157,934	3,000	400	\$39.17	\$21.40	\$4.96	\$21.15	\$4.61	\$91.29
Cotton Picker, 4Rw, HDC C PC	\$232,671	3,000	500	\$53.71	\$26.49	\$6.09	\$61.64	\$6.71	\$154.62
Cotton Picker, 5Rw, HDC C PC	\$244,800	3,000	500	\$56.51	\$27.87	\$6.40	\$64.85	\$6.71	\$162.33
Cotton Picker, 2Rw	\$139,749	3,000	500	\$32.26	\$15.91	\$3.66	\$37.02		
Cotton Stripper, 4Rw PSB PC	\$122,138				Ψ10.01	φ3.00	\$37.02	\$4.61	\$93.45
	Ψ.ΖΕ, 100	3,000	500	\$28.19	\$13.90	\$3.00 \$3.19	\$32.35	\$4.61 \$5.53	\$93.45 \$83.18
Forage Harv,SP RC 3.0 PSB FC	\$173,618	3,000 4,000	500 400						
Forage Harv,SP RC 3.0 PSB FC Forage Harv,SP SB 14.0 PSB FC				\$28.19	\$13.90	\$3.19	\$32.35	\$5.53	\$83.18
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC	\$173,618 \$208,616 \$62,738	4,000	400	\$28.19 \$36.24	\$13.90 \$21.68 \$32.73 \$10.44	\$3.19 \$5.06	\$32.35 \$20.83 \$25.03 \$11.29	\$5.53 \$4.19	\$83.18 \$88.00 \$116.10 \$44.57
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw	\$173,618 \$208,616 \$62,738 \$89,000	4,000 4,000 3,000 12,000	400 300 300 1000	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000	4,000 4,000 3,000	400 300 300	\$28.19 \$36.24 \$46.43 \$17.46	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12	\$3.19 \$5.06 \$7.72 \$2.44	\$32.35 \$20.83 \$25.03 \$11.29	\$5.53 \$4.19 \$4.19 \$2.93	\$83.18 \$88.00 \$116.10 \$44.57
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000	4,000 4,000 3,000 12,000	400 300 300 1000	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000	4,000 4,000 3,000 12,000 12,000 4,000 4,000	400 300 300 1000 1000 1000 1000	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000	4,000 4,000 3,000 12,000 12,000 4,000 4,000	400 300 300 1000 1000 1000 1000	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, w/4' Head	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, w/4' Head Catch Frame Harvester	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493	4,000 4,000 3,000 12,000 12,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75 \$16.95	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08 \$32.04	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7'	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, w/4' Head Catch Frame Harvester	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493	4,000 4,000 3,000 12,000 12,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75 \$16.95	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08 \$32.04	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, w/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7'	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400 400	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 1/2 Ton	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860 \$21,212	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400 400 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20
Forage Harv, SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 3/4 Ton	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000	400 300 300 1000 1000 1000 1000 400 400 400 400 600 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77 \$4.17 \$3.80 \$4.51	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24 \$1.29 \$1.52 \$1.81	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02 \$2.95 \$3.69 \$4.39	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20 \$11.79 \$13.87 \$16.39
Forage Harv, SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 3/4 Ton Pickup Truck, 3/4 Ton Pickup Truck, 3/4 Ton	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860 \$21,212 \$23,169	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 5,500	400 300 300 1000 1000 1000 1000 400 400 400 400 600 600 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77 \$4.17 \$3.80 \$4.51 \$3.58	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24 \$1.29 \$1.52 \$1.81 \$1.92	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99 \$0.70 \$0.86 \$1.02 \$1.11	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02 \$2.95 \$3.69 \$4.39 \$4.95	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18 \$2.67 \$4.00 \$4.67 \$5.34	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20 \$11.79 \$13.87 \$16.39 \$16.89
Forage Harv,SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, w/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 3/4 Ton Pickup Truck, 3/4 Ton Pickup Truck, 1 Ton	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860 \$21,212 \$23,169 \$22,875	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 5,500 5,500	400 300 1000 1000 1000 1000 400 400 400 400 600 600 600 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77 \$4.17 \$3.80 \$4.51 \$3.58 \$3.54	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24 \$1.29 \$1.52 \$1.81 \$1.92 \$1.90	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99 \$0.70 \$0.86 \$1.02 \$1.11 \$1.10	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02 \$2.95 \$3.69 \$4.39 \$4.95 \$4.88	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18 \$2.67 \$4.00 \$4.67 \$5.34 \$7.34	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20 \$11.79 \$13.87 \$16.39 \$16.89 \$18.75
Forage Harv, SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 3/4 Ton Pickup Truck, 3/4 Ton Pickup Truck, 1 Ton Truck, 5 Ton w/1000 Gal Tank	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$188,000 \$29,500 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860 \$21,212 \$23,169 \$22,875 \$39,638	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 5,500 5,500 5,500	400 300 1000 1000 1000 1000 400 400 400 400 600 600 600 600 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77 \$4.17 \$3.80 \$4.51 \$3.58 \$3.54 \$6.13	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24 \$1.29 \$1.52 \$1.81 \$1.92 \$1.90 \$3.28	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99 \$0.70 \$0.86 \$1.02 \$1.11 \$1.10 \$1.90	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02 \$2.95 \$3.69 \$4.39 \$4.95 \$4.88 \$8.46	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18 \$2.67 \$4.00 \$4.67 \$5.34 \$7.34 \$9.34	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20 \$11.79 \$13.87 \$16.39 \$16.89 \$18.75
Forage Harv, SP SB 14.0 PSB FC Windrower, 14.0', HS, SC Lettuce Harvester, 12Rw Cauliflower Harvester, 18 Row Chili Harvester, SP 2 Row Chili Harvester, SP 2 Row Chili Harvester, SP 4 Row Nut Harvester, W/4' Head Catch Frame Harvester Tree Shaker, SP 7' Sweeper, 7.5' w/30 HP Wisc  Trucks Pickup Truck, Mini Pickup Truck, 1/2 Ton Pickup Truck, 3/4 Ton Pickup Truck, 3/4 Ton 4WD Pickup Truck, 1 Ton Truck, 5 Ton w/1000 Gal Tank Truck, 5 Ton, Grain	\$173,618 \$208,616 \$62,738 \$89,000 \$105,000 \$125,000 \$125,000 \$133,493 \$80,157 \$33,400 \$14,703 \$17,860 \$21,212 \$23,169 \$22,875 \$39,638 \$48,138	4,000 4,000 3,000 12,000 4,000 4,000 4,000 4,000 4,000 4,000 4,000 5,500 5,500 5,500	400 300 1000 1000 1000 1000 400 400 400 400 600 600 600 600 600	\$28.19 \$36.24 \$46.43 \$17.46 \$6.32 \$7.46 \$18.98 \$18.98 \$28.55 \$5.98 \$27.08 \$16.26 \$6.77 \$4.17 \$3.80 \$4.51 \$3.58 \$3.54 \$6.13 \$7.44	\$13.90 \$21.68 \$32.73 \$10.44 \$4.34 \$5.12 \$7.72 \$11.61 \$3.75 \$16.95 \$10.18 \$4.24 \$1.29 \$1.52 \$1.81 \$1.92 \$1.90 \$3.28 \$3.99	\$3.19 \$5.06 \$7.72 \$2.44 \$1.02 \$1.21 \$1.74 \$2.62 \$0.88 \$3.97 \$2.38 \$0.99 \$0.70 \$0.86 \$1.02 \$1.11 \$1.10 \$1.90 \$2.31	\$32.35 \$20.83 \$25.03 \$11.29 \$64.08 \$75.60 \$30.00 \$45.12 \$7.08 \$32.04 \$19.24 \$8.02 \$2.95 \$3.69 \$4.39 \$4.95 \$4.88 \$8.46 \$10.28	\$5.53 \$4.19 \$4.19 \$2.93 \$3.82 \$3.73 \$3.82 \$4.05 \$3.47 \$2.52 \$2.52 \$2.18 \$2.67 \$4.00 \$4.67 \$5.34 \$7.34 \$9.34	\$83.18 \$88.00 \$116.10 \$44.57 \$79.58 \$93.20 \$62.18 \$62.27 \$91.95 \$21.15 \$82.55 \$50.57 \$22.20 \$11.79 \$13.87 \$16.39 \$16.89 \$18.75 \$29.11 \$33.35

Fuel Prices: Diesel (D) \$0.729, Gasoline (UG) \$1.16

**Table B.2 Cost Data for Equipment and Implements** 

Na	New	Hrs to	Annual	Dollar Cost per Hour of Us					T-4-1
Name	Price	Wearout	Hours	Deprec	Opp. Int.	THI	Repairs	Fuel	Total
Spray Equipment									
High Clearance Sprayer, 18 Rw	\$70,308	12,000	900	\$5.22	\$3.68	\$0.87	\$5.91	\$5.34	\$21.00
Over Vine Sprayer, 2 row	\$22,100	1,500	200	\$11.43	\$5.87	\$1.35	\$10.23		\$28.89
Directed Spray Rig, 8 Row	\$3,775	1,500	500	\$1.54	\$0.48	\$0.10	\$1.75		\$3.87
Directed Spray Rig, 16 Row	\$8,250	1,500	500	\$3.37	\$1.05	\$0.23	\$3.82		\$8.47
Saddle Tk Sprayer, 2 Tk 8 Row Manual Spray Rig, 150 g on ski	\$8,250 \$2,400	1,500 1,500	200 200	\$4.27 \$1.24	\$2.19 \$0.64	\$0.51 \$0.15	\$3.82 \$1.11		\$10.78 \$3.14
Sprayer, Air Blast 500 GAL ENG	\$51,000	2,000	500	\$16.74	\$6.15	\$1.37	\$1.11 \$15.46	\$4.67	\$3.14 \$44.39
Sprayer, Air Blast 500 GAL ENG Sprayer, Air Blast 500 GAL PTO	\$14,818	2,000	500	\$4.86	\$1.79	\$0.40	\$4.49	φ4.07	\$44.39 \$11.54
Spraycab	\$12,000	3,000	500	\$2.85	\$1.75	\$0.40	\$0.25		\$4.76
Trailed Harvest Equipment	Ψ12,000	3,000	300	Ψ2.00	ψ1.55	ψ0.51	ψ0.25		ψ4.70
Bale Wagon, Pull	\$32,284	3,000	300	\$8.99	\$5.37	\$1.25	\$8.53		\$24.14
Baler, 1 Tn, 'BIG BALE'	\$90,000	3,000	500	\$21.93	\$10.01	\$2.28	\$21.67		\$55.90
Baler, 2 Wire Auto PTO	\$21,935	2,000	300	\$8.25	\$3.98	\$0.91	\$8.78		\$21.92
Baler, 3 wire w/motor	\$51,045	2,000	300	\$19.19	\$9.26	\$2.12	\$20.44	\$3.34	\$54.35
Forage Harvester PTO RC2	\$36,672	2,500	300	\$11.70	\$6.35	\$1.47	\$9.53		\$29.05
Forage Harvester PTO SB8.0	\$36,873	2,500	300	\$11.77	\$6.38	\$1.48	\$9.58		\$29.21
Forage Harvester PTO WP6.2	\$32,023	2,500	300	\$10.22	\$5.54	\$1.28	\$8.32		\$25.37
Forage Wagon PTO Unloader	\$30,000	2,000	400	\$10.44	\$4.33	\$0.98	\$6.82		\$22.57
Tree Shaker, PTO	\$7,635	2,500	400	\$2.26	\$1.05	\$0.24	\$2.41		\$5.96
Nut Harvester	\$14,835	2,500	400	\$4.39	\$2.05	\$0.47	\$4.63		\$11.53
Module Builder	\$28,339	3,000	400	\$7.33	\$3.76	\$0.87	\$7.49		\$19.45
Module Handler	\$62,000	3,000	200	\$18.81	\$14.26	\$3.38	\$16.38		\$52.84
Mower, 7'	\$3,903	2,000	300	\$1.47	\$0.71	\$0.16	\$2.92		\$5.25
Potato Harvester, 2 Rw	\$70,350	2,500	450	\$20.15	\$8.84	\$2.01	\$19.28		\$50.27
Potato Harvester, 4 Rw	\$92,000	2,500	450	\$26.35	\$11.55	\$2.63	\$25.22		\$65.75
Combine Pickup Regular Head	\$10,239	2,000	450	\$3.45	\$1.34	\$0.30	\$2.33		\$7.43
Bean Knife Rig - 3 Pt/8 Row	\$13,040	2,000	450	\$4.25	\$1.73	\$0.39	\$3.95		\$10.32
Bean Rod/Windrower 10 Row	\$6,589	2,000	450	\$2.15	\$0.88	\$0.20	\$2.00		\$5.22
Rake, 9.5' LH	\$13,619	2,500	300	\$4.35	\$2.36	\$0.55	\$3.34		\$10.59
Rake, 9.5' LH AND RH	\$17,600	2,500	300	\$5.62	\$3.05	\$0.71	\$4.32		\$13.68
Sweeper, 13' Tractor Mounted	\$22,475	250	200	\$46.69	\$8.52	\$1.67	\$4.91		\$61.78
Leveling Equipment									
Blade Scraper, 10'	\$4,560	2,500	130	\$1.72	\$1.55	\$0.37	\$0.96		\$4.60
Blade Scraper, 8'	\$3,145	2,500	130	\$1.19	\$1.07	\$0.26	\$0.66		\$3.17
•			130	\$1.19		\$0.42			\$5.17 \$5.18
Drag Scraper, 14'	\$5,127	2,500			\$1.75		\$1.08		
Landplane 14'X 60'	\$25,600	2,500	200	\$8.91	\$6.14	\$1.45	\$14.03		\$30.53
Laser Receiver, Complete Syste	\$24,500	20,000	1500	\$1.08	\$0.77	\$0.18	\$0.49		\$2.53
Plows									
Moldboard Plow, 3-16 2 Way	\$7,235	2,000	200	\$2.98	\$1.82	\$0.43	\$3.65		\$8.88
Moldboard Plow, 4-16 2 Way	\$7,470	2,000	200	\$3.07	\$1.88	\$0.44	\$3.77		\$9.17
Moldboard Plow, 5-16 2 Way	\$10,329	2,000	110	\$4.83	\$4.19	\$1.00	\$5.22		\$15.24
Switch Plow, 6-16	\$10,200	2,000	110	\$4.77	\$4.14	\$0.99	\$5.15		\$15.05
Subsoiler, Heavy Duty, 3 Shank	\$4,400	2,000	120	\$2.03	\$1.66	\$0.40	\$1.63		\$5.71
Subsoiler, Heavy Duty, 7 Shank	\$7,290	2,000	110	\$3.41	\$2.96	\$0.71	\$2.69		\$9.77
Ripper, 3 Shank	\$3,743	2,000	110	\$1.75	\$1.52	\$0.36	\$1.38		\$5.01
V-Ripper, 5 Sk	\$5,331	2,000	110	\$2.49	\$2.16	\$0.52	\$1.97		\$7.14
V-Ripper, 7 Sk	\$6,440	2,000	110	\$3.01	\$2.61	\$0.62	\$2.38		\$8.63
V-Ripper, 7 Sk with Wings	\$7,650	2,000	110	\$3.58	\$3.11	\$0.74	\$2.83		\$10.25
V-Ripper, 9 Sk	\$8,031	2,000	200	\$3.31	\$2.02	\$0.47	\$2.97		\$8.77
V-Ripper, 11 Sk	\$8,206	2,000	200	\$3.38	\$2.07	\$0.48	\$3.03		\$8.96
Disks	1	, , , , ,		,					
Border Disk, Dbl. Gang	\$5,600	2,000	200	\$2.30	\$1.41	\$0.33	\$1.64		\$5.68
Border Disk, 6 Disk	\$2,372	2,000	200	\$0.98	\$0.60	\$0.14	\$0.69		\$2.41
Border Disk, Heavy Duty	\$2,572	2,000	200	\$1.05	\$0.64	\$0.15	\$0.75		\$2.59
Dbl. Offset Disk, 11.5'	\$13,979	2,000	200	\$5.75	\$3.52	\$0.15	\$4.09		\$2.59 \$14.18
Dbl. Offset Disk, 11.5 Dbl. Offset Disk, 13'									1 -
	\$8,768	2,000	200	\$3.61	\$2.21	\$0.52	\$2.56		\$8.90
Dbl. Offset Disk, 16'	\$18,156	2,000	200	\$7.47	\$4.57	\$1.07	\$5.31		\$18.42
Dbl. Offset Disk, 21'	\$20,808	2,000	200	\$8.56	\$5.24	\$1.22	\$6.08		\$21.11
Offset Disk, 10.5'	\$8,851	2,000	200	\$3.64	\$2.23	\$0.52	\$2.59		\$8.98
Offset Disk, 12'	\$11,758	2,000	200	\$4.84	\$2.96	\$0.69	\$3.44		\$11.93
Offset Disk, 13.5'	\$13,604	2,000	200	\$5.60	\$3.43	\$0.80	\$3.98		\$13.80
Offset Disk, 16.5'	\$16,163	2,000	200	\$6.65	\$4.07	\$0.95	\$4.73		\$16.40
Offset Disk, 18'	\$19,224	2,000	200	\$7.91	\$4.84	\$1.13	\$5.62		\$19.51
Offset Disk, 21'	\$21,342	2,000	200	\$8.78	\$5.37	\$1.26	\$6.24		\$21.66
Offset Disk, 8'	\$6,787	2,000	200	\$2.79	\$1.71	\$0.40	\$1.98		\$6.89
Tandem Disk, 10'	\$7,800	2,000	200	\$3.21	\$1.96	\$0.46	\$2.28		\$7.91
Tandem Disk, 12'	\$8,600	2,000	200	\$3.54	\$2.17	\$0.51	\$2.51		\$8.73
Cultivators								·	l
Section Harrow, 3 Section	\$1,437	2,000	200	\$0.59	\$0.36	\$0.08	\$0.51		\$1.55
Section Harrow, 4 Section	\$1,699	2,000	200	\$0.70	\$0.43	\$0.10	\$0.61		\$1.83
Vegetable Cultivator, 4 Row	\$7,850	2,000	250	\$3.04	\$1.66	\$0.39	\$3.07		\$8.15
Rolling Cultivator, 4 Rw	\$4,823	2,000	250	\$1.87	\$1.02	\$0.24	\$1.88		\$5.01
Rolling Cultivator, 6 Rw	\$6,492	2,000	250	\$2.51	\$1.37	\$0.32	\$2.54		\$6.74
Rotary Hoe, 4 Rw	\$4,710	2,000	250	\$1.82	\$1.00	\$0.32	\$1.43		\$4.48
•									
Rotary Hoe, 6 Rw	\$5,587	2,000	250	\$2.16	\$1.18	\$0.27	\$1.70		\$5.31
Cultivator, Sweep, 4 Rw	\$4,721	2,000	250	\$1.83	\$1.00	\$0.23	\$1.68		\$4.74
	\$6,527	2,000	250	\$2.53	\$1.38	\$0.32	\$2.33		\$6.55
Cultivator, Sweep, 6 Rw		_	_	a	A	A			a - ·
Cultivator, 6 Row Spring Tooth Revovator, 16'	\$6,100 \$7,497	2,000 2,000	250 200	\$2.36 \$3.09	\$1.29 \$1.89	\$0.30 \$0.44	\$2.17 \$2.67		\$6.12 \$8.09

**Table B.2 Cost Data for Equipment and Implements** 

	New	Hrs to	Annual		Dolla	ar Cost r	per Hour of U	se	
Name	Price	Wearout	Hours	Deprec	Opp. Int.	THI		Fuel	Total
Miscellaneous Tillage									
Cultipacker, 13'	\$4,800	2,000	200	\$1.98	\$1.21	\$0.71	\$0.95		\$4.84
Pegasus, 4 Row	\$26,436	2,000	250	\$10.23	\$5.59	\$3.24	\$5.21		\$24.28
Pegasus, 6 Row	\$36,174	2,000	250	\$14.00	\$7.65	\$1.77	\$7.13		\$30.56
Furrow Spike, 4 Rw	\$5,200	2,000	250	\$2.01	\$1.10	\$0.26	\$1.85		\$5.22
Lister, 5 Bottom	\$5,597	2,000	200	\$2.30	\$1.41	\$0.33	\$2.83		\$6.87
Lister, 7 Bottom Mulch Layer, 1 Rw	\$6,628 \$1,225	2,000 2,500	200 200	\$2.73 \$0.43	\$1.67 \$0.29	\$0.39 \$0.07	\$3.35 \$1.10		\$8.14 \$1.89
Row Checker, 6 Row	\$1,967	2,500	200	\$0.68	\$0.47	\$0.11	\$0.49		\$1.76
Power Mulcher, 4 Rw	\$5,198	2,000	200	\$2.14	\$1.31	\$0.31	\$3.74		\$7.50
Power Mulcher, 6 Rw	\$8,538	2,000	200	\$3.51	\$2.15	\$0.50	\$6.15		\$12.31
Rowbuck, 10'	\$2,719	2,500	150	\$1.00	\$0.82	\$0.20	\$0.93		\$2.95
Rototiller, 6'	\$3,876	1,500	200	\$1.96	\$1.04	\$0.24	\$2.09		\$5.34
Disk-Lister, 2 Rw	\$9,850	2,000	200	\$4.05	\$2.48	\$0.58	\$2.88		\$9.99
Disk-Lister, 4 Rw	\$19,164	2,000	200	\$7.89	\$4.83	\$1.13	\$5.60		\$19.45
Disk-Lister, 6 Rw	\$27,026	2,000	200	\$11.12	\$6.81	\$1.59	\$7.90		\$27.42
Bed Roller, 4 Rw	\$9,367	2,000	110	\$4.38	\$3.80	\$0.91	\$1.85		\$10.93
Bed Roller, 6 Rw Root Cutter-Puller, 2 Rw	\$12,704 \$4,005	2,000 2,000	110 250	\$5.94 \$1.55	\$5.16 \$0.85	\$1.23 \$0.20	\$2.50 \$1.22		\$14.83 \$3.81
Root Cutter-Puller, 4 Rw	\$6,190	2,000	250	\$1.55	\$0.85 \$1.31	\$0.20	\$1.88		\$5.89
Root Cutter-Puller, 6 Row	\$8,734	2,000	250	\$3.38	\$1.85	\$0.43	\$2.65		\$8.31
	**,	_,		40.00	*	*****	¥=		40.0
Fertilizer Application									
Fert. Side Dress Unit, 4Rw	\$8,400	1,200	150	\$5.42	\$2.96	\$0.69	\$5.59		\$14.66
Fert. Side Dress Unit, 6Rw	\$9,300	1,200	150	\$6.00	\$3.28	\$0.76	\$6.19		\$16.23
Fertilizer Injector, 3 Rw	\$5,686	1,200	200	\$3.37	\$1.60	\$0.37	\$3.78		\$9.12
Fertilizer Injector, 4 Rw	\$7,108	1,200	200	\$4.22	\$2.00	\$0.46	\$4.73		\$11.40
Fertilizer Injector, 6 Rw	\$9,296	1,200	200	\$5.51	\$2.62	\$0.60	\$6.19		\$14.91
Planters									
	#20 000	1 500	200.00	£12.40	<b>CE 04</b>	<b>60.00</b>	£15.00		CO7 C4
Air Planter 8 Row Seeder, Broadcast	\$30,000 \$15,643	1,500 1,500	300.00	\$13.49 \$9.80	\$5.84 \$8.69	\$3.32 \$5.19	\$15.00 \$13.20		\$37.64 \$36.87
Grain Drill, 12'	\$9,180	1,500	140.00	\$5.13	\$3.25	\$1.91	\$4.59		\$14.88
Grain Drill, 12' W/Fert Box	\$10,614	1,500	140.00	\$5.93	\$3.76	\$2.20	\$5.31		\$17.20
Grain Drill, 14'	\$11,010	1,500	140.00	\$6.15	\$3.90	\$2.29	\$5.50		\$17.84
Flexi-Planter - 4 Units	\$3,610	1,500	150.00	\$1.98	\$1.21	\$0.71	\$1.80		\$5.71
Planter, Drill Type, 4 Rw	\$10,956	1,500	150.00	\$6.01	\$3.68	\$2.15	\$5.48		\$17.32
Planter, Drawn Drill Type 4 Rw	\$18,666	1,500	150.00	\$10.24	\$6.27	\$3.66	\$9.33		\$29.50
Planter, Drill Type, 6 Rw	\$15,643	1,500	150.00	\$8.58	\$5.25	\$3.07	\$7.82		\$24.73
Planter, Drawn Drill Type 6 Rw	\$16,481	1,500	150.00	\$9.04	\$5.53	\$3.23	\$8.24		\$26.05
Planter/Gramor, 4 Bd,6 Line/Be	\$11,958	1,500	150.00	\$6.56	\$4.02	\$2.35	\$5.98		\$18.90
Planter/Gramor, 4 Bd,8 Line/Be	\$13,891	1,500	120.00	\$8.05	\$5.56	\$3.27	\$6.94		\$23.83
Planter, Potato, 3 Comp, 4 Rw Planter, Potato 3 Comp. 6 Row	\$32,000 \$43,000	1,500 1,500	120.00 120.00	\$18.55 \$24.93	\$12.80 \$17.20	\$7.54 \$10.13	\$16.00 \$21.49		\$54.89 \$73.75
Planter, Planet Jr, 2R, 4 Unit	\$2,562	1,500	120.00	\$1.49	\$1.02	\$0.60	\$1.28		\$4.39
Planter, Planet Jr, 4 Rw	\$5,124	1,500	120.00	\$2.97	\$2.05	\$1.21	\$2.56		\$8.79
Planter, Flex 2 Line	\$886	1,500	120.00	\$0.51	\$0.35	\$0.21	\$0.44		\$1.52
Planter, Stanhay, 4 Rw	\$14,375	1,500	120.00	\$8.33	\$5.75	\$3.39	\$7.19		\$24.66
Transplanter, Veg, 2Rw	\$4,228	1,500	120.00	\$2.45	\$1.69	\$1.00	\$2.11		\$7.25
Transplanter, Veg, 4Rw	\$9,578	1,500	120.00	\$5.55	\$3.83	\$2.26	\$4.79		\$16.43
Miscellaneous									
Brush Rake	\$5,356	2,500	200	\$1.86	\$1.29	\$0.30	\$1.31		\$4.76
Cane Trimmer, 1 Head	\$1,775	2,000	200	\$0.73	\$0.45	\$0.10	\$0.66		\$1.94
Cane Trimmer, 2 Heads	\$3,013	2,000	200	\$1.24	\$0.76	\$0.18	\$1.11		\$3.29
Rotary Stalk Cutter, 2 Rw Rotary Stalk Cutter, 4 Rw	\$5,129 \$0,153	2,000	200 200	\$2.11 \$3.77	\$1.29 \$2.30	\$0.30 \$0.54	\$1.89 \$3.38		\$5.60 \$9.99
Row Crop Shredder, 4 Row	\$9,152 \$12,600	2,000 2,000	200	\$5.77 \$5.19	\$3.17	\$0.54	\$3.36 \$4.66		\$13.76
Rotary Mower, Offset 10.7'	\$8,007	2,000	200	\$3.19	\$2.02	\$0.74	\$7.05		\$13.70
3 Point Guidance Hitch	\$7,164	12,000	1200	\$0.42	\$0.33	\$0.08	\$0.09		\$0.91
Post Hole Digger, PTO Drive	\$6,445	2,500	200	\$2.24	\$1.55	\$0.36	\$5.80		\$9.95
French Plow	\$4,565	2,000	200	\$1.88	\$1.15	\$0.27	\$2.30		\$5.60
Berm Sweep	\$5,800	2,000	200	\$2.39	\$1.46	\$0.34	\$2.91		\$7.10
Water Wagon, 1000 Gal Tank	\$4,600	3,000	200	\$1.39	\$1.06	\$0.25	\$1.22		\$3.92
Mixer/Feeder Wagon w/Scales	\$42,274	3,000	1000	\$8.23	\$2.72	\$1.50	\$11.17		\$23.62
Border Blocker	\$5,200	3,000	500	\$1.23	\$0.59	\$0.13	\$1.16		\$3.11
Front End Loader	\$7,272	5,000	500	\$1.20	\$0.73	\$0.17	\$1.89		\$3.99
Flat Trailer	\$1,615	3,000	200	\$0.49	\$0.37	\$0.09	\$0.43		\$1.38
Vineyard Shredder, 7'	\$9,495	2,500	200	\$3.30	\$2.28	\$0.54 \$0.07	\$3.15		\$9.27
Bin Trailer Cattle Trailer, Gooseneck	\$1,275 \$3,012	3,000 3,000	200 500	\$0.38 \$0.71	\$0.29 \$0.34	\$0.07 \$0.08	\$0.34 \$0.80		\$1.09 \$1.93
Vineyard Tiller 8'	\$13,500	2,000	200	\$0.71 \$5.56	\$0.3 <del>4</del> \$3.40	\$0.06 \$0.79	\$0.60 \$4.99		\$1.93 \$14.74
Vineyard Tiller 6'	\$9,142	2,000	200	\$3.76	\$3.40	\$0.79	\$3.38		\$9.98
Orchard Trimmer Heavy Duty	\$147,300	3,000	300	\$41.00	\$24.52	\$5.72		3.86	\$174.43
1			300	\$24.78	\$14.82				
Orchard Trimmer Mid Range	\$89,030	3,000	300	φ <b>24</b> .70	ψ14.0Z	\$3.46	φ00.03 φ	3.86	\$106.95