

## APPENDIX 2 Data Tables

### All Crops

#### All.A1–A2. Size and Regional Profile

Table All.A1. Size and Regional Profile – Number of Farms, Average Acres per Farm, and Average Years of Farming by Region and Crop Category

	Number of Farms		Total Acres per Farm		Years of Farming	
	Obs. (n)	Percent Distribution Based on n = 10,200	Mean Acres	Standard Deviation	Mean Years	Standard Deviation
<b>By Region</b>						
All Regions	10,200	100%	203	1,412	25.1	15.5
Far North	89	1%	121	367	22.5	15.3
North Coast	1,211	12%	100	420	22.6	15.4
Central Coast – North	541	5%	248	991	24.8	16.3
Central Coast – South	793	8%	132	534	23.5	15.0
South Coast	811	8%	274	4,128	23.0	13.9
Sacramento Valley	1,322	13%	280	916	25.1	15.2
San Joaquin – North	1,776	17%	185	754	26.6	15.7
San Joaquin – Central	1,718	17%	208	819	26.9	16.0
San Joaquin – South	1,327	13%	268	1,263	26.4	15.9
Sierra Nevada	237	2%	62	133	24.3	15.9
Desert	373	4%	149	614	23.8	14.1
<b>By Crop Category</b>						
Fruits and Nuts	8,785	86%	157	676	25.4	15.7
Vegetables	459	5%	1,106	4,944	25.5	14.7
Ornamentals	956	9%	75	522	22.3	14.3

Table All.A2. Size and Regional Profile – Number of Farms, Average Acres per Farm, and Average Years of Farming by Crop Category/Region

	Number of Farms in the Region	Total Acres per Farm		Years of Farming	
		Mean Acres	Standard Deviation	Mean Years	Standard Deviation
<b>Fruits and Nuts</b>					
All Regions	8,785 (86%)	157	676	25.4	15.7
Far North	37	54	97	23.3	14.8
North Coast	1,091	106	438	22.6	15.5
Central Coast – North	301	145	366	25.4	18.3
Central Coast – South	633	129	549	23.7	15.4
South Coast	457	51	156	23.3	12.7
Sacramento Valley	1,215	204	623	25.1	15.3
San Joaquin – North	1,678	123	367	26.6	15.8
San Joaquin – Central	1,641	175	666	27.1	16.0
San Joaquin – South	1,281	260	1,278	26.5	15.9
Sierra Nevada	167	68	133	25.2	16.8
Desert	282	77	250	24.0	13.8
<b>Vegetables</b>					
All Regions	459 (5%)	1,106	4,944	25.5	14.7
Far North	19	124	190	25.8	16.3
North Coast	34	83	218	20.5	11.8
Central Coast – North	85	742	1,535	25.1	14.3
Central Coast – South	59	297	721	23.8	14.5
South Coast	27	3,983	19,200	23.3	15.9
Sacramento Valley	54	1,929	2,331	29.8	12.8
San Joaquin – North	64	1,397	1,929	28.5	14.7
San Joaquin – Central	54	1,300	2,604	23.6	15.5
San Joaquin – South	19	986	976	26.3	16.4
Sierra Nevada	6	179	290	18.7	14.4
Desert	38	805	1,662	27.6	15.5
<b>Ornamentals</b>					
All Regions	956 (9%)	75	522	22.3	14.3
Far North	33	193	573	19.4	15.1
North Coast	86	35	164	23.1	15.8
Central Coast – North	155	92	815	23.5	13.2
Central Coast – South	101	52	157	22.2	12.6
South Coast	327	63	600	22.6	15.3
Sacramento Valley	53	67	297	20.4	14.7
San Joaquin – North	34	316	679	22.6	10.3
San Joaquin – Central	23	15	27	20.4	15.4
San Joaquin – South	27	110	208	21.7	14.2
Sierra Nevada	64	35	106	22.5	13.4
Desert	53	55	200	19.6	13.6

**All.B1–B2. Crop Diversification**

Table All.B1. Crop Diversification – Mean Acres in Crop Diversification by Crop Category

<b>Major Crops</b>	<b>Observations (n)</b>	<b>Mean Acres per Farm</b>	<b>Standard Deviation</b>
<b>Fruits and Nuts</b>			
Field Crops	354	383	623
Fruits and Nuts	8,664	111	554
Vegetables	138	118	227
Ornamentals	69	10	31
<b>Vegetables</b>			
Field Crops	152	861	1,363
Fruits and Nuts	90	127	236
Vegetables	426	495	1,333
Ornamentals	11	57	164
<b>Ornamentals</b>			
Field Crops	12	374	520
Fruits and Nuts	55	178	1,077
Vegetables	26	648	2,239
Ornamentals	952	52	491

Table All.B2. Crop Diversification – Number of Organic Farms and Average Organic Acres per Farm by Region and Crop Category

	Farms with Organic or Transitional-Organic Land				Organic Land			Transitional Organic Land		
	Number of Farms		Total Acres / Farm		Mean Acres / Farm			Mean Acres / Farm		
	Obs.	Percent <sup>a</sup>	Mean	Std Dev.	Obs.	Mean	Std Dev.	Obs.	Mean	Std Dev.
<b>By Region</b>										
All Regions	612	6%	229	1,120	461	44	117	191	42	107
Far North	16	18%	29	45	10	4	2	3	41	28
North Coast	144	12%	143	651	109	47	138	41	14	14
Central Coast – North	53	10%	243	658	46	49	138	11	39	63
Central Coast – South	59	7%	102	292	48	52	215	17	86	287
South Coast	62	8%	99	274	54	40	138	13	32	55
Sacramento Valley	89	7%	272	799	63	50	86	36	43	65
San Joaquin – North	45	3%	356	1,345	29	36	62	20	44	60
San Joaquin – Central	50	3%	255	669	32	46	36	21	45	50
San Joaquin – South	42	3%	871	3,460	29	47	70	13	63	92
Sierra Nevada	24	10%	70	126	19	35	70	6	28	27
Desert	28	8%	104	255	22	23	33	10	67	184
<b>By Crop Category</b>										
Fruits and Nuts	508	6%	213	1,109	383	40	87	163	45	114
Vegetables	65	14%	454	1,464	50	74	224	18	29	44
Ornamentals	39	4%	63	196	28	46	188	10	13	14

<sup>a</sup> Numbers for this column were calculated based on the entire sample in each relevant category. For example, 6% = 612/10,200 where 10,200 was the sample size of all regions, and 18% = 16/89 where 89 was the size of the subsample Far North.

## All.C1–C4. Marketing

Table All.C1. Marketing – Processing versus Fresh Use: Number of Farms by Use and Average Volume Share by Region and Crop Category

	Total Observations (n)	Farms Reporting Having Some Crops		Average Volume Share Designated	
		Processing	Fresh <sup>a</sup>	To Processing by Farms with Some Processing	To Fresh by Farms with Some Fresh
<b>By Region</b>					
All Regions	10,854	65%	35%	92%	92%
Far North	89	28%	72%	92%	100%
North Coast	1,211	87%	15%	98%	86%
Central Coast – North	541	46%	62%	86%	95%
Central Coast – South	793	53%	65%	75%	88%
South Coast	811	19%	88%	68%	97%
Sacramento Valley	1,322	86%	17%	98%	83%
San Joaquin – North	1,776	89%	14%	98%	85%
San Joaquin – Central	1,718	81%	23%	96%	91%
San Joaquin – South	1,327	61%	53%	81%	93%
Sierra Nevada	237	57%	47%	93%	94%
Desert	373	35%	78%	69%	93%
<b>By Crop Category</b>					
Fruits and Nuts	8,785	79%	29%	93%	88%
Vegetables	459	34%	75%	82%	95%
Ornamentals	941	1%	99%	54%	100%

<sup>a</sup> The sum of percentages for Fresh and Processing can be greater than 100 percent because some farms supply their crops for both fresh and processing uses.

Table All.C2. **Marketing – Marketing Channels for Processing-Use Crops: Number of Farms Using Specific Marketing Channels and Average Volume Share for Each Marketing Channel by Crop Category**

<b>Marketing Channel (Processed Use)</b>	<b>No. of Farms</b>	<b>Percent of Farms</b>	<b>Mean Share of Volume Marketed</b>
<b>All Crops</b> (based on n = 7,055)			
Marketing Cooperative	2,475	35%	95%
Sold under Contract with a Predetermined Price	2,257	32%	93%
Sold under Contract without a Predetermined Price	952	28%	92%
Spot Market	339	5%	65%
Participation Plan	100	1%	54%
Other	550	8%	85%
<b>Crop Category<sup>a</sup> – Fruits and Nuts</b> (based on n = 6,940)			
Marketing Cooperative	2,453	35%	96%
Sold under Contract with a Predetermined Price	2,145	31%	93%
Sold under Contract without a Predetermined Price	1,916	28%	93%
Spot Market	319	5%	66%
Participation Plan	89	1%	57%
Other	515	7%	85%
<b>Crop Category<sup>a</sup> – Vegetables</b> (based on n = 156)			
Marketing Cooperative	17	11%	66%
Sold under Contract with a Predetermined Price	104	67%	93%
Sold under Contract without a Predetermined Price	30	19%	80%
Spot Market	15	10%	62%
Participation Plan	7	4%	44%
Other	18	12%	75%

<sup>a</sup> Most ornamental crops are sold fresh and thus were not included here.

Table All.C3a. **Marketing – Number of Grower/Shippers (Fresh Only)**

<b>Grower/Shipper Distribution (Fresh-Use Only)</b>	<b>Operation Type</b>	<b>No. of Farms</b>	<b>Percent of Farms in Category</b>
All Crops	Grower/Shipper	338	9%
	Grower Only	3,336	91%
<b>By Crop Category</b>			
Fruits and Nuts	Grower/Shipper	75	3%
	Grower Only	2,386	97%
Ornamentals	Grower/Shipper	217	24%
	Grower Only	671	76%
Vegetables	Grower/Shipper	46	14%
	Grower Only	279	86%

Table All.C3b. **Marketing – Number of Grower/Shippers and Volume (Percent) Sold at Predetermined Price by Crop Category**

<b>Crop Category</b>	<b>Number of Grower/Shippers</b>	<b>Mean Share of Volume (Percent) Sold at Predetermined Price</b>
Fruits and Nuts	48 (of 75)	71%
Ornamentals	167 (of 217)	86%
Vegetables	32 (of 46)	64%

Table All.C4. **Marketing – Marketing Channels of Fresh-Use Crops (Growers Only): Number of Farms Using Specific Marketing Channels and Average Volume Share by Crop Category**

<b>Marketing Channel (Fresh Use)</b>	<b>No. of Farms</b>	<b>Percent of Farms in Category<sup>a</sup></b>	<b>Mean Share of Volume Traded by Marketing Channel</b>
<b>All Crops</b> (Based on n = 3,799)			
Direct to Consumers	807	21%	75%
Marketing Cooperative	891	23%	93%
Independent Shipper/Brokers	1,202	31%	91%
Direct to Commercial Buyers	811	21%	81%
Other	213	5%	75%
<b>By Crop Category</b>			
<b>Fruits and Nuts</b> (Based on n = 1,845)			
Direct to Consumers	359	13%	68%
Marketing Cooperative	861	32%	95%
Independent Shipper/Brokers	1,013	38%	93%
Direct to Commercial Buyers	339	13%	81%
Other	118	4%	79%
<b>Ornamentals</b> (Based on n = 931)			
Direct to Consumers	339	38%	82%
Marketing Cooperative	11	1%	43%
Independent Shipper/Brokers	85	10%	78%
Direct to Commercial Buyers	374	42%	85%
Other	82	9%	73%
<b>Vegetables</b> (Based on n = 303)			
Direct to Consumers	109	32%	78%
Marketing Cooperative	19	6%	51%
Independent Shipper/Brokers	104	30%	89%
Direct to Commercial Buyers	98	29%	68%
Other	13	4%	54%

<sup>a</sup> The percent sum over the marketing channels in each category can be greater than 100 percent because some farmers use multiple marketing channels.

**All.D1–D3. Yield, Price, and Profit Fluctuations**

Table All.D1. Yield, Price, and Profit Fluctuations – Yield Deviation (Percent) from Individual Five-Year Averages: Sample Mean for 1997–2001, Sample Mean for 1999 by Region, and Sample Mean for 1997–2001 by Crop Category

	No. of Observations <sup>a</sup> (n)	Individual's Yield Deviation from Own Five-Year Average	
		Mean	Standard Deviation
<b>Sample Mean for 1997–2001</b>			
2001	4,402	20%	30%
2000	4,402	17%	23%
1999	4,402	16%	23%
1998	4,402	17%	23%
1997	4,402	18%	27%
<b>Sample Mean for 1999 by Region<sup>b</sup></b>			
Far North	16	21%	30%
North Coast	565	12%	15%
Central Coast – North	196	15%	32%
Central Coast – South	309	17%	30%
South Coast	234	16%	20%
Sacramento Valley	566	16%	22%
San Joaquin – North	813	17%	23%
San Joaquin – Central	898	15%	22%
San Joaquin – South	579	20%	25%
Sierra Nevada	87	16%	20%
Desert	139	14%	21%
<b>Sample Mean for 1997–2001 by Crop Category<sup>c</sup></b>			
<b>Fruits and Nuts</b>			
2001	4,057	17%	20%
2000	4,057	15%	18%
1999	4,057	14%	17%
1998	4,057	15%	18%
1997	4,057	16%	19%
<b>Vegetables</b>			
2001	195	11%	17%
2000	195	8%	14%
1999	195	7%	10%
1998	195	8%	13%
1997	195	8%	13%

<sup>a</sup> Yield deviations were calculated using the observations that provided all five-year yields.

<sup>b</sup> We selected only one single year (the mid-year of the five-year period) for presentation.

<sup>c</sup> There was no consistent yield measure for ornamental crops and thus they were excluded.

Table All.D2. Yield, Price, and Profit Fluctuations – Largest Yield Fluctuation: Number of Farms per Fluctuation Range by Crop Category

Fluctuation Range (Percent)	Yield		Price		Profit	
	No. of Farms (n)	Percent of Farms	No. of Farms (n)	Percent of Farms	No. of Farms (n)	Percent of Farms
<b>All Crops</b>						
0–9	2,217	28%	1,682	25%	1,621	25%
10–24	2,084	27%	1,674	25%	1,443	22%
25–49	1,706	22%	1,693	25%	1,355	21%
50–74	1,013	13%	1,124	17%	967	15%
75 or More	819	10%	628	9%	1,082	17%
Total	7,839	100%	6,801	100%	6,468	100%
<b>By Crop Category</b>						
<b>Fruits and Nuts</b>						
0–9	1,692	25%	1,131	20%	1,177	22%
10–24	1,801	27%	1,413	24%	1,150	21%
25–49	1,581	23%	1,574	27%	1,201	22%
50–74	930	14%	1,062	18%	895	16%
75 or More	761	11%	593	10%	1,033	19%
Total	6,765	100%	5,773	100%	5,456	100%
<b>Ornamentals</b>						
0–9	357	51%	415	61%	334	49%
10–24	175	25%	162	24%	192	28%
25–49	79	11%	64	9%	95	14%
50–74	48	7%	25	4%	39	6%
75 or More	43	6%	19	3%	22	3%
Total	702	100%	685	100%	682	100%
<b>Vegetables</b>						
0–9	168	45%	136	40%	110	33%
10–24	108	29%	99	29%	101	31%
25–49	46	12%	55	16%	59	18%
50–74	35	9%	37	11%	33	10%
75 or More	15	4%	16	5%	27	8%
Total	372	100%	343	100%	330	100%

Table All.D3. Yield, Price, and Profit Fluctuations – Main Cause for Lowest Profit by Crop Category, Use, and Grower/Shipper Status (Percent of Farmers Who Answered)

	Total Obs. (n)	Poor Yield	Poor Quality	High Input Cost	Low Market Price due to High Domestic Production	Low Market Price due to Increased Imports	Inability to Market a Crop due to Quarantine	Other
All Crops	9,169	29%	4%	7%	27%	16%	1%	17%
<b>By Crop Category</b>								
Fruits and Nuts	7,898	31%	4%	6%	28%	16%	1%	15%
Ornamentals	840	12%	6%	19%	15%	15%	1%	33%
Vegetables	431	19%	5%	14%	29%	21%	0%	13%
<b>By Use<sup>a</sup></b>								
Mainly Processing	5,690	32%	3%	6%	31%	13%	0%	15%
Mainly Fresh	2,951	25%	6%	10%	19%	18%	1%	20%
<b>By Grower/Shipper Status</b>								
Grower/Shipper	118	21%	6%	6%	33%	27%	0%	7%
Grower Only	2,487	28%	6%	7%	21%	22%	1%	15%

<sup>a</sup> Mainly Processing (or Mainly Fresh) was indicated by an output volume share greater than 80 percent.

## All.E1–E5. Risk Management

Table All.E1. Risk Management – Ranking of Risk Sources (in Order of Importance): Mean Ranking by Crop

	Mean Ranking of Risk Sources									
	Adverse Temperature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctuation	Output Price Fluctuation	Pests	Quarantine	Hail
<b>All Crops</b>										
Mean Ranking	2.0	7.2	5.4	3.8	4.7	3.5	2.3	3.5	7.8	5.6
Observations (n)	7,781	3,084	3,786	4,900	4,083	5,042	6,791	5,639	2,824	3,849
<b>By Region</b>										
Far North	1.9	7.0	4.3	2.9	3.8	3.6	3.4	2.7	8.1	6.1
North Coast	1.7	7.3	5.0	2.8	4.6	4.4	3.6	3.2	8.4	6.6
Central Coast – N.	2.1	6.3	5.2	3.3	4.7	3.4	2.5	3.3	7.9	7.1
Central Coast – S.	1.9	6.7	5.1	3.6	4.9	4.0	2.4	3.1	7.1	7.7
South Coast	2.4	7.8	4.1	3.9	3.5	3.4	2.5	3.3	6.4	7.0
Sacramento Valley	2.0	6.1	5.8	3.8	5.5	3.4	2.2	3.6	8.2	5.7
San Joaquin – N.	2.0	7.2	5.9	3.8	5.4	3.3	2.0	3.6	8.3	5.5
San Joaquin – Cen.	2.2	7.8	5.9	4.6	4.5	3.2	1.8	4.0	8.1	3.9
San Joaquin – S.	2.1	7.9	5.6	4.6	4.5	3.4	2.0	3.6	7.8	5.0
Sierra Nevada	1.9	7.8	3.9	3.2	4.0	4.3	3.4	3.0	8.4	5.2
Desert	2.0	7.3	4.8	3.7	3.8	3.4	2.3	3.2	5.8	7.8
<b>By Crop Category</b>										
Fruits and Nuts	2.0	7.3	5.4	3.9	4.7	3.5	2.2	3.5	7.9	5.4
Vegetables	2.4	6.1	5.5	3.6	4.6	3.3	2.3	3.5	8.2	6.7
Ornamentals	2.1	6.8	4.5	3.4	4.4	3.3	2.9	3.3	6.9	6.7
<b>By Use</b>										
Processing	2.0	7.1	5.4	3.6	4.8	3.5	2.2	3.5	8.2	5.5
Fresh Market	2.1	7.2	5.1	4.0	4.4	3.5	2.4	3.5	7.2	5.6
Both	2.3	7.3	5.7	4.2	5.1	3.7	2.0	3.6	7.3	6.0
<b>By Grower/Shipper Status</b>										
Grower/Shipper	2.2	7.3	5.9	3.9	5.1	3.4	2.5	3.7	7.4	5.7
Grower Only	2.1	7.2	5.1	4.1	4.5	3.6	2.3	3.5	7.3	5.7

Table All.E2. Risk Management – Ranking of Risk Sources (in Order of Importance):  
Distribution of Ranks by Risk Source

Rank		Mean Ranking of Risk Sources									
		Adverse Temper- ature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctu- ation	Output Price Fluctu- ation	Pests	Quar- antine	Hail
Total Responses		7,780	3,075	3,784	4,897	4,083	5,041	6,791	5,637	2,813	3,842
1	Obs. (n)	4,117	98	227	606	479	747	3,224	727	72	308
	Distribution	53%	3%	6%	12%	12%	15%	47%	13%	3%	8%
2	Obs. (n)	1,615	226	460	933	571	1,362	1,597	1,222	129	515
	Distribution	21%	7%	12%	19%	14%	27%	24%	22%	5%	13%
3	Obs. (n)	972	136	378	887	538	881	757	1,290	71	425
	Distribution	12%	4%	10%	18%	13%	17%	11%	23%	3%	11%
4	Obs. (n)	455	133	385	820	468	626	457	939	106	351
	Distribution	6%	4%	10%	17%	11%	12%	7%	17%	4%	9%
>4	Obs. (n)	621	2,482	2,334	1,651	2,027	1,425	756	1,459	2,435	2,243
	Distribution	8%	81%	62%	34%	50%	28%	11%	26%	87%	58%

Table All.E3. **Ranking of Preference for Risk Management Tools: Mean Ranking by Region, Crop Category, Use, and Grower/Shipper Status**

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Crops</b>								
Mean Ranking	2.1	4.8	3.0	3.9	5.7	3.6	2.9	2.6
Observations (n)	5,793	2,425	3,514	3,400	2,064	3,060	3,667	1,676
<b>By Region</b>								
Far North	3.5	4.6	2.4	4.0	6.5	3.8	2.3	1.8
North Coast	2.3	4.8	3.8	4.9	5.8	2.5	3.0	2.6
Central Coast – North	3.0	4.4	2.7	4.5	5.8	3.2	2.6	2.6
Central Coast – South	2.1	4.4	2.9	4.4	6.1	3.9	2.9	2.9
South Coast	2.7	4.1	2.4	4.6	5.9	4.2	2.6	2.0
Sacramento Valley	2.0	5.0	2.9	3.6	5.6	3.6	3.0	2.5
San Joaquin – North	1.9	4.8	3.2	3.9	5.5	3.5	3.1	2.8
San Joaquin – Central	1.9	4.9	3.0	3.5	5.6	3.9	3.0	2.7
San Joaquin – South	1.8	5.0	2.9	3.5	5.6	4.1	3.1	3.0
Sierra Nevada	2.6	4.9	2.9	4.0	6.0	3.2	2.6	2.0
Desert	2.4	4.2	3.3	4.2	5.7	3.5	2.2	1.7
<b>By Crop Category</b>								
Fruits and Nuts	1.9	4.9	3.2	3.8	5.7	3.5	3.0	2.6
Vegetables	3.1	3.9	2.1	4.1	5.6	3.5	2.9	2.7
Ornamentals	3.4	3.7	2.1	4.7	6.0	3.8	2.4	2.1
<b>By Use</b>								
Processing	2.0	5.0	3.3	3.8	5.6	3.2	3.0	2.6
Fresh Market	2.3	4.4	2.6	4.0	5.9	4.2	2.7	2.4
Both	2.1	4.5	2.8	4.1	5.9	4.3	3.1	3.3
<b>By Grower/Shipper Status</b>								
Grower/Shipper	2.9	4.3	2.4	4.7	5.9	3.6	2.3	3.0
Grower Only	2.2	4.5	2.7	4.1	6.0	4.5	2.9	2.5

Table All.E4. Risk Management – Rates of Availability and Utilization of Risk Management Tools and Mean Ranking of Preferences

Risk Management Tool	Availability		Utilization <sup>a</sup>		Preference <sup>b</sup>	
	No. of Farms that Answered Available	Rate of Availability Based on All (n = 10,200)	No. of Farms (n) that Utilized Tool	Rate of Utilization	Observations that Provided Ranking	Mean Ranking
Crop Insurance	4,583	45%	3,094	68%	4,068	1.9
Different Regions	804	8%	326	41%	711	3.6
Multiple Commodities	1,964	19%	1,320	67%	1,816	2.3
Government Programs	1,418	14%	848	60%	1,276	3.0
Hedging with Futures	304	3%	89	29%	252	4.6
Forwarding Contracting	1,298	13%	881	68%	1,193	2.4
Diversified Marketing	1,789	18%	1,127	63%	1,675	2.4
Other	283	3%	209	74%	261	2.4

<sup>a</sup> The rate of utilization was calculated based on the farms that reported that the tool was available.

<sup>b</sup> Preference rankings were based on availability.

Table All.E5. Status of Receipt of Government Disaster Payments or Loans by Region and Crop Category

		Receipt of Government Disaster Payments or Loans		
		Received	Not Qualified	Unaware
<b>All Crops</b>				
Observations (n)		2,859	3,663	2,746
Row Percent		31%	40%	30%
<b>By Region</b>				
Far North	Observations (n)	19	39	26
	Distribution	23%	46%	31%
North Coast	Observations (n)	124	468	480
	Distribution	12%	44%	45%
Central Coast – North	Observations (n)	81	235	172
	Distribution	17%	48%	35%
Central Coast – South	Observations (n)	208	282	216
	Distribution	29%	40%	31%
South Coast	Observations (n)	85	350	302
	Distribution	12%	47%	41%
Sacramento Valley	Observations (n)	534	422	267
	Distribution	44%	35%	22%
San Joaquin – North	Observations (n)	538	632	441
	Distribution	33%	39%	27%
San Joaquin – Central	Observations (n)	521	677	379
	Distribution	33%	43%	24%
San Joaquin – South	Observations (n)	646	337	233
	Distribution	53%	28%	19%
Sierra Nevada	Observations (n)	51	76	87
	Distribution	24%	36%	41%
Desert	Observations (n)	50	145	143
	Distribution	15%	43%	42%
<b>By Crop Category</b>				
Fruits and Nuts	Observations (n)	2,654	3,075	2,240
	Distribution	33%	39%	28%
Vegetables	Observations (n)	146	160	125
	Distribution	34%	37%	29%
Ornamentals	Observations (n)	59	428	381
	Distribution	7%	49%	44%

**All.F1–F6. Crop Insurance**

Table All.F1. Crop Insurance: Purchase History and Average Number of Purchases for the Last Five Years by Crop

<b>Crop Insurance Purchased in the Last Five Years</b>	<b>Response</b>	<b>Observations</b>	<b>Percent of Farms</b>			
<b>All Crops</b>						
	Yes	4,766	48%			
	No	5,179	52%			
<b>Crop Category</b>						
Fruits and Nuts	Yes	4,496	53%			
	No	4,057	47%			
Vegetables	Yes	139	31%			
	No	313	69%			
Ornamentals	Yes	131	14%			
	No	809	86%			
<b>Average Number of Purchases for the Last Five Years</b>						
		<b>One</b>	<b>Two</b>	<b>Three</b>	<b>Four</b>	<b>Five</b>
<b>All Crops</b>						
	Observations (n)	372	465	510	365	2,999
	Percent of Farms <sup>a</sup>	8%	10%	11%	8%	64%
<b>Crop Category</b>						
Fruits and Nuts	Observations (n)	345	440	468	352	2,841
	Percent of Farms	8%	10%	11%	8%	64%
Ornamentals	Observations (n)	17	15	25	11	61
	Percent of Farms	13%	12%	19%	9%	47%
Vegetables	Observations (n)	10	10	17	–	99 <sup>b</sup>
	Percent of Farms	7%	7%	13%	–	73%

<sup>a</sup> Percentages were based on the farmers who had purchased crop insurance at least once in the past five years.

<sup>b</sup> Four- and five-time purchasers were combined together because there were so few four-time purchasers (not reported).

Table All.F2. Crop Insurance – Number of Farmers Who Purchase Single-Peril Insurance against a Specific Peril by Crop

	Total Observations	Peril					
		Fire	Frost or Freeze	Rain	Hail	Other	None
<b>All Crops</b>							
Observations (n)	10,200	521	1,843	1,601	1,598	404	2,366
Percent		5%	18%	16%	16%	4%	23%
<b>By Crop</b>							
<b>Fruits and Nuts</b>							
Observations (n)	8,785	439	1,775	1,511	1,534	370	2,216
Percent		5%	20%	17%	17%	4%	25%
<b>Vegetables</b>							
Observations (n)	459	41	38	63	40	11	59
Percent		9%	8%	14%	9%	2%	13%
<b>Ornamentals</b>							
Observations (n)	956	41	30	27	24	23	91
Percent		4%	3%	3%	3%	2%	10%
<b>By Use<sup>a</sup></b>							
<b>Mainly Processing</b>							
Observations (n)	6,341	331	1,188	1,210	1,092	245	1,623
Percent		5%	19%	19%	17%	4%	26%
<b>Mainly Fresh</b>							
Observations (n)	3,228	150	501	308	407	130	600
Percent		5%	16%	10%	13%	4%	19%
<b>Processing/Fresh</b>							
Observations (n)	631	40	154	83	99	29	143
Percent		6%	24%	13%	16%	5%	23%

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent.

Table All.F3. Crop Insurance – Mean Ranking and Distribution of Reasons for Purchasing Crop Insurance by Crop Category and Use

	<b>Risk of Crop Loss Was High</b>	<b>Expected Water Supplies to Be Cut Back</b>	<b>Insurance Req'd to Qualify for Other USDA Programs</b>	<b>Expected to Receive Lower Prices for Crops</b>	<b>Bank or Other Lender Required Insurance</b>	<b>Other</b>
<b>All Crops</b>						
Mean Rank	1.3	3.5	2.3	2.7	2.8	1.5
No. of Observations that Provided Ranks	3,602	1,044	1,698	1,468	1,290	1,164
<b>By Crop Category</b>						
<b>Fruits and Nuts</b>						
Mean Rank	1.3	3.5	2.3	2.6	2.8	1.5
Observations (n)	3,414	960	1,593	1,376	1,194	1,047
<b>Vegetables</b>						
Mean Rank	1.5	3.4	2.3	2.9	3.2	2.0
Observations (n)	112	56	78	60	63	31
<b>Ornamentals</b>						
Mean Rank	1.5	2.9	2.8	2.8	2.8	1.2
Observations (n)	76	28	27	32	33	86
<b>By Use<sup>a</sup></b>						
<b>Mainly Processing</b>						
Mean Rank	1.3	3.5	2.4	2.6	2.6	1.5
Observations (n)	2,427	674	1,100	965	903	712
<b>Mainly Fresh</b>						
Mean Rank	1.4	3.4	2.1	2.7	3.1	1.5
Observations (n)	915	293	452	394	296	372
<b>Processing/Fresh</b>						
Mean Rank	1.3	3.4	2.1	2.5	3.1	1.6
Observations (n)	260	77	146	109	91	80

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent.

Table All.F4. Crop Insurance – Mean Ranking of Reasons for Not Purchasing Crop Insurance by Crop Category and Use

	Not Available for My Crop	Major Source of Risk Not Insured Cause of Loss	Too Much Paperwork to Apply	Never Lost Enough Prod'n or Revenue to File Claim	Premium Cost Too High	Couldn't Find Knowledgeable Insurance Agent	Do Not Understand Crop Insurance Program	Other
<b>All Crops</b>								
Mean Rank	2.2	2.8	3.3	1.8	1.9	4.0	2.8	1.5
No. of Obs. that Provided Ranks	2,425	1,566	1,499	2,722	2,849	1,167	2,171	2,011
<b>By Crop Category</b>								
<b>Fruits and Nuts</b>								
Mean Rank	2.3	2.8	3.2	1.8	1.9	4.0	2.7	1.5
Obs. (n)	1,849	1,278	1,247	2,288	2,450	935	1,770	1,747
<b>Vegetables</b>								
Mean Rank	1.6	3.0	3.9	2.4	2.5	4.0	3.0	1.7
Obs. (n)	205	100	85	131	125	83	132	78
<b>Ornamentals</b>								
Mean Rank	1.9	2.7	3.3	1.9	2.3	3.5	2.8	1.6
Obs. (n)	371	188	167	303	274	149	269	186
<b>By Use<sup>a</sup></b>								
<b>Mainly Processing</b>								
Mean Rank	2.6	2.8	3.3	1.7	1.8	4.1	2.8	1.5
Obs. (n)	1,169	922	879	1,713	1,767	652	1,205	1,332
<b>Mainly Fresh</b>								
Mean Rank	1.8	2.9	3.2	2.0	2.1	3.7	2.6	1.6
Obs. (n)	1,082	533	520	841	926	425	825	582
<b>Processing/Fresh</b>								
Mean Rank	2.1	2.9	3.5	2.0	2.3	4.0	2.8	1.8
Obs. (n)	174	111	100	168	156	90	141	97

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent.

Table All.F5. Crop Insurance – Mean Ranking of Suggestions to Modify Crop Insurance by Crop

	Compensate for a Higher Level of Production Loss	Compensate for a Loss of Gross Sales	Compensate for a Loss of Profit	Guarantee Cash Production Costs	Guarantee Costs of Establishing Orchard or Vineyard	Guarantee Replace- ment Costs of a Crop Inventory	Other
<b>All Crops</b>							
Mean Ranking	2.1	2.3	2.2	2.5	3.7	3.4	1.5
Observations that Provided Ranks	3,840	3,282	3,515	3,289	2,343	2,611	2,654
<b>By Crop Category</b>							
<b>Fruits and Nuts</b>							
Mean Rank	2.0	2.3	2.2	2.5	3.6	3.5	1.5
Obs. (n)	3,446	2,888	3,132	2,906	2,105	2,207	2,212
<b>Vegetables</b>							
Mean Rank	2.2	2.5	2.4	2.2	4.5	3.4	1.5
Obs. (n)	178	162	169	175	88	136	128
<b>Ornamentals</b>							
Mean Rank	2.7	2.3	2.5	3.0	3.8	2.3	1.3
Obs. (n)	216	232	214	208	150	268	314
<b>By Use<sup>a</sup></b>							
<b>Mainly Processing</b>							
Mean Rank	2.0	2.4	2.2	2.5	3.5	3.5	1.5
Obs. (n)	2,499	2,026	2,217	2,042	1,499	1,536	1,597
<b>Mainly Fresh</b>							
Mean Rank	2.3	2.3	2.2	2.6	3.9	3.1	1.5
Obs. (n)	1,088	1,022	1,048	1,001	679	896	929
<b>Processing/Fresh</b>							
Mean Rank	2.3	2.2	2.1	2.4	3.9	3.8	1.7
Obs. (n)	253	234	250	246	165	179	128

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent.

Table All.F6. Crop Insurance – Importance of Risk Management and Familiarity with Crop Insurance Compared with Five Years Ago

Response	Risk Management Is Becoming More Important		Becoming More Familiar with Crop Insurance		
	Obs. (n)	Percent of Farms	Obs. (n)	Percent of Farms	
<b>All Crops</b>					
Yes	5,041	55%	5,120	56%	
No	4,088	45%	4,089	44%	
<b>By Crop Category</b>					
Fruits and Nuts	Yes	4,455	57%	4,669	59%
	No	3,381	43%	3,243	41%
Vegetables	Yes	266	62%	197	46%
	No	161	38%	230	54%
Ornamentals	Yes	320	37%	254	29%
	No	546	63%	616	71%

**All.G1–G4. Financial Characteristics**

Table All.G1. Financial Characteristics – Off-Farm Income Share (Percent), Gross Agricultural Sales, Assets, and Debts: Mean Values by Region and Crop Category

	Off-Farm Income Share		Gross Ag. Sales		Assets		Debts	
	Mean (%)	Std Dev.	Mean (\$)	Std Dev.	Mean (\$)	Std Dev.	Mean (\$)	Std Dev.
<b>All</b>								
Mean	63%	33%	\$412,817	1,854,687	\$1,415,235	5,373,490	\$582,191	3,206,599
Obs. (n)	6,651		8,355		5,302		3,291	
<b>By Region</b>								
Far North	65%	34%	\$920,473	4,059,360	\$1,510,732	5,294,761	\$142,211	348,008
North Coast	64%	32%	\$325,815	1,099,370	\$2,783,341	10,507,516	\$924,470	3,060,051
Central Coast – N.	58%	36%	\$761,202	1,937,813	\$1,646,159	2,926,632	\$580,880	1,449,821
Central Coast – S.	65%	32%	\$696,340	3,093,924	\$1,981,227	4,714,187	\$653,165	1,559,505
South Coast	68%	32%	\$458,418	2,420,859	\$1,017,016	2,162,905	\$328,225	1,272,061
Sacramento Valley	61%	33%	\$323,894	980,417	\$1,261,088	4,302,686	\$576,354	3,509,270
San Joaquin – N.	63%	32%	\$311,111	1,295,385	\$1,184,176	4,218,182	\$440,402	1,567,944
San Joaquin – Cen.	63%	33%	\$314,182	1,360,128	\$1,041,383	3,106,078	\$464,177	1,771,200
San Joaquin – S.	60%	32%	\$557,383	2,717,588	\$1,459,186	6,840,180	\$827,639	5,841,383
Sierra Nevada	69%	31%	\$110,832	280,956	\$614,521	952,716	\$128,040	310,154
Desert	68%	33%	\$329,969	835,354	\$1,330,425	7,266,563	\$1,032,591	6,984,674
<b>By Crop Category</b>								
Fruits and Nuts	64%	32%	\$329,769	1,675,420	\$1,372,641	5,251,438	\$597,520	3,204,021
Vegetables	42%	34%	\$1,111,873	1,884,959	\$1,888,527	6,916,069	\$939,828	5,504,406
Ornamentals	61%	34%	\$817,913	2,921,573	\$1,574,915	5,624,793	\$394,742	2,017,626

Table All.G2. Financial Characteristics – Distribution of Gross Agricultural Sales by Region and Crop Category

	Gross Agricultural Sales (in \$1,000)							
	0–10	11–50	51–100	101–500	501–1,000	1,001–2,000	2,001–5,000	5,001 and Greater
<b>All</b>								
Observations (n)	1,160	2,607	1,364	2,124	471	300	203	103
Percent	14%	31%	16%	25%	6%	4%	2%	1%
Cumulative Percent	14%	45%	62%	87%	93%	96%	99%	100%
<b>By Region</b>								
Far North	20 31%	17 26%	13 20%	8 12%	– –	– –	0 0%	3 5%
North Coast	112 14%	224 28%	152 19%	229 28%	50 6%	23 3%	18 2%	5 1%
Central Coast – N.	60 14%	79 19%	56 13%	102 24%	47 11%	39 9%	30 7%	8 2%
Central Coast – S.	80 13%	162 25%	96 15%	193 30%	35 5%	29 5%	22 3%	20 3%
South Coast	138 21%	214 32%	103 15%	146 22%	30 4%	16 2%	13 2%	11 2%
Sacramento Valley	180 16%	357 31%	193 17%	264 23%	70 6%	36 3%	31 3%	8 1%
San Joaquin – N.	181 12%	553 37%	245 16%	365 24%	73 5%	47 3%	20 1%	13 1%
San Joaquin – Cen.	171 12%	506 35%	265 18%	366 25%	69 5%	42 3%	28 2%	11 1%
San Joaquin – S.	108 10%	310 28%	178 16%	356 32%	72 6%	50 4%	27 2%	23 2%
Sierra Nevada	53 27%	70 36%	24 12%	41 21%	6 3%	– –	– –	– –
Desert	57 18%	115 37%	38 12%	53 17%	18 6%	14 5%	13 4%	– –
<b>By Crop Category</b>								
Fruits and Nuts	971 14%	2,371 33%	1,215 17%	1,831 26%	369 5%	198 3%	125 2%	60 1%
Vegetables	25 7%	58 15%	37 10%	106 28%	43 11%	54 14%	42 11%	16 4%
Ornamentals	164 20%	178 22%	112 14%	187 23%	59 7%	48 6%	36 4%	27 3%

Table All.G3. Financial Characteristics – Distributions of Off-Farm Income Shares by Crop Category

	Off-Farm Income Share										
	0%	1–10%	11–20%	21–30%	31–40%	41–50%	51–60%	61–70%	71–80%	81–90%	91–100%
<b>All Crops</b>											
Observations (n)	131	650	396	429	244	854	275	314	906	754	1,698
Percent	2%	10%	6%	6%	4%	13%	4%	5%	14%	11%	26%
Cumulative Percent	2%	12%	18%	24%	28%	41%	45%	50%	63%	74%	100%
<b>Fruits and Nuts</b>											
Observations (n)	106	541	336	381	214	756	249	286	821	681	1,541
Percent	2%	9%	6%	6%	4%	13%	4%	5%	14%	12%	26%
Cumulative Percent	2%	11%	17%	23%	27%	39%	44%	49%	62%	74%	100%
<b>Vegetables</b>											
Observations (n)	14	47	25	18	9	31	7	8	16	13	25
Percent	7%	22%	12%	8%	4%	15%	3%	4%	8%	6%	12%
Cumulative Percent	7%	29%	40%	49%	53%	68%	71%	75%	82%	88%	100%
<b>Ornamentals</b>											
Observations (n)	11	62	35	30	21	67	19	20	69	60	132
Percent	2%	12%	7%	6%	4%	13%	4%	4%	13%	11%	25%
Cumulative Percent	2%	14%	21%	26%	30%	43%	47%	50%	63%	75%	100%

Table All.G4. Financial Characteristics – Distribution of Gross Agricultural Sales by Off-Farm Income Share Class and Acreage Class

	Observations (n)	Distribution (Percent)	Gross Agricultural Sales	
			Mean (\$)	Standard Deviation
<b>Off-Farm Income Share (Percent)</b>				
0%	131	2%	\$1,521,647	3,120,446
1-10%	650	10%	\$830,869	2,511,536
11-20%	396	6%	\$538,674	1,539,439
21-30%	429	6%	\$284,314	687,811
31-40%	244	4%	\$381,382	1,714,844
41-50%	854	13%	\$265,556	1,284,699
51-60%	275	4%	\$149,878	337,950
61-70%	314	5%	\$115,603	289,943
71-80%	906	14%	\$112,900	412,514
81-90%	754	11%	\$62,192	157,004
91-100%	1,698	26%	\$96,646	322,358
<b>Acreage Class (Total Acreage)</b>				
0-10	2,148	22%	\$74,448	212,468
11-20	1,775	19%	\$81,994	327,658
21-30	762	8%	\$140,429	539,135
31-40	892	9%	\$143,940	622,576
41-50	440	5%	\$155,114	365,585
51-60	376	4%	\$155,968	366,589
61-70	250	3%	\$302,429	1,404,148
71-80	314	3%	\$250,352	702,887
81-90	137	1%	\$244,588	433,546
91-100	220	2%	\$235,989	360,976
101-200	894	9%	\$401,116	1,100,624
201-500	738	8%	\$920,682	2,262,138
501-1,000	302	3%	\$1,601,144	2,227,883
More than 1,000	305	3%	\$4,424,373	7,436,838

## Fruits and Nuts

### Fn.A1–A2. Size and Regional Profile

Table Fn.A1. Size and Regional Profile – Number of Farms, Average Total Acres per Farm, and Average Fruit/Nut Acres per Farm by Region and Crop

	No. of Fruit/Nut Farms	Distribution (n)	Mean Fruit/Nut Acres	Standard Deviation
<b>By Region</b>				
Far North	38	0.4%	21	32
North Coast	1,092	12.4%	62	212
Central Coast – North	301	3.4%	101	244
Central Coast – South	633	7.2%	82	442
South Coast	457	5.2%	62	456
Sacramento Valley	1,217	13.8%	116	277
San Joaquin – North	1,680	19.1%	98	326
San Joaquin – Central	1,641	18.7%	137	519
San Joaquin – South	1,281	14.6%	186	1,158
Sierra Nevada	167	1.9%	32	44
Desert	282	3.2%	66	221
<b>By Crop</b>				
Berries	144	1.6%	68	118
Citrus	1,021	11.6%	117	614
Grapes	2,888	32.9%	119	431
Nuts	2,776	31.6%	119	768
Apples and Pears	218	2.5%	77	230
Stone Fruits	798	9.1%	125	255
Tropicals	946	10.8%	56	353
<b>By Acreage Class (Acres)</b>				
	No. of Fruit/Nut Farms	Distribution (n)	Cumulative Percent	
0–10	1,865	21.5%	21.5%	
11–20	1,791	20.7%	42.2%	
21–30	783	9.0%	51.2%	
31–40	826	9.5%	60.7%	
41–50	433	5.0%	65.7%	
51–60	361	4.2%	69.9%	
61–70	262	3.0%	72.9%	
71–80	286	3.3%	76.2%	
81–90	135	1.6%	77.8%	
91–100	193	2.2%	80.0%	
101–200	813	9.4%	89.4%	
201–500	629	7.3%	96.6%	
501–1,000	178	2.1%	98.7%	
More than 1,000	114	1.3%	100.0%	

Table Fn.A2. Size and Regional Profile – Distribution of Fruit and Nut Crops by Crop and Region

	Far North	North Coast	Cen. Coast No.	Cen. Coast So.	South Coast	Sac. Valley	San Joaq. No.	San Joaq. Cen.	San Joaq. So.	Sierra Nevada	Desert
<b>All Fruit and Nut Crops</b> (8,789 Observations)											
Observations (n)	38	1,092	301	633	457	1,217	1,680	1,641	1,281	167	282
Percent of Row	0.4%	12.4%	3.4%	7.2%	5.2%	13.9%	19.1%	18.7%	14.6%	1.9%	3.2%
<b>By Crop</b>											
<b>Berries</b> (144 Observations)											
Observations (n)	3	4	58	21	8	22	–	7	13	–	4
Percent of Row	2.1%	2.8%	40.3%	14.6%	5.6%	15.3%	–	4.9%	9.0%	–	2.8%
<b>Citrus</b> (1,021 Observations)											
Observations (n)	–	–	4	211	88	21	4	109	451	4	125
Percent of Row	–	–	0.4%	20.7%	8.6%	2.1%	0.4%	10.7%	44.2%	0.4%	12.2%
<b>Grapes</b> (2,887 Observations)											
Observations (n)	6	916	115	136	10	67	304	1,038	189	86	20
Percent of Row	0.2%	31.7%	4.0%	4.7%	0.4%	2.3%	10.5%	36.0%	6.6%	3.0%	0.7%
<b>Nuts</b> (2,776 Observations)											
Observations (n)	12	104	55	68	17	668	1,196	295	317	33	11
Percent of Row	0.4%	3.8%	2.0%	2.5%	0.6%	24.1%	43.1%	10.6%	11.4%	1.2%	0.4%
<b>Apples and Pears</b> (218 Observations)											
Observations (n)	6	60	34	6	6	33	13	15	17	23	5
Percent of Row	2.8%	27.5%	15.6%	2.8%	2.8%	15.1%	6.0%	6.9%	7.8%	10.6%	2.3%
<b>Stone Fruits</b> (798 Observations)											
Observations (n)	–	–	29	–	10	247	152	152	182	15	5
Percent of Row	–	–	3.6%	–	1.3%	31.0%	19.1%	19.1%	22.8%	1.9%	0.6%
<b>Tropicals</b> (945 Observations)											
Observations (n)	7	4	6	189	318	159	9	25	112	4	112
Percent of Row	0.7%	0.4%	0.6%	20.0%	33.7%	16.8%	1.0%	2.7%	11.9%	0.4%	11.9%

Note: Cells with less than three observations are indicated by "–".

**Fn.B1–B3. Crop Diversification****Table Fn.B1. Crop Diversification – Distribution of Single-Crop versus Multiple-Crop Growers and Average Fruit and Nut Acres by Diversification Pattern**

<b>Distribution of Single-Crop versus Multiple-Crop Growers</b>					
<b>Diversification</b>	<b>Number of Farms</b>	<b>Percent Based on All Fruit/Nut Farms</b>	<b>Mean Acres Total Land</b>	<b>Fruit and Nut Land</b>	
Single Crop	6,076	70%	76	67	
Diversified within Fruits and Nuts	2,093	24%	250	225	
Diversified into Vegetables and/or Other Crops	500	6%	592	159	
Total	8,669				
<b>Distribution of Single-Crop Growers within Fruits and Nuts</b>					
	<b>Total Number of Growers</b>	<b>Number of Single-Crop Growers</b>	<b>Share of Single-Crop Growers<sup>a</sup></b>	<b>Mean Acres of Total Land</b>	<b>Fruit and Nut Land</b>
Berries	144	97	67%	67	66
Citrus	1,021	499	49%	62	56
Grapes	2,887	2,409	83%	97	87
Nuts	2,776	2,024	73%	73	65
Apples and Pears	218	123	56%	52	41
Stone Fruits	798	277	35%	55	48
Tropicals	945	647	68%	31	26

<sup>a</sup> Sixty-seven percent was calculated as  $97/144 = 67$  percent where 144 was the number of berry farmers.

Table Fn.B2. **Crop Diversification – Diversification Pattern for Growers Who Diversified within Fruits and Nuts by Crop**

<b>Farmer's Main Crop</b>	<b>Diversification</b>	<b>No. of Farms</b>	<b>Percent Based on Farms within Same Main Crop<sup>a</sup></b>
Berries	Within Berries	12	41%
	With Stone Fruits	7	24%
	With Other Crops	10	35%
Citrus	Within Citrus	297	60%
	With Tropical Crops	139	28%
	With Other Fruits and Nuts	59	12%
Grapes	Within Grapes	82	23%
	With Stone Fruits	110	31%
	With Nuts	97	27%
	With Other Fruits and Nuts	65	19%
Nuts	Within Nuts	201	41%
	With Stone Fruits	130	27%
	With Grapes	96	20%
	With Other Fruits and Nuts	62	12%
Apples and Pears	Within Apples and Pears	22	23%
	With Stone Fruits	22	23%
	With Nuts	20	21%
	With Other Fruits and Nuts	30	33%
Stone Fruits	Within Stone Fruits	244	52%
	With Nuts	143	30%
	With Other Fruits and Nuts	93	18%
Tropicals	Within Tropical Crops	34	14%
	With Citrus	155	66%
	With Other Fruits and Nuts	46	20%

<sup>a</sup> This table uses the data set of multiple-crop growers who diversify only within fruit and nut crops. We report only the first two (or three when the third is substantial) major diversification crops.

Table Fn.B3. Crop Diversification – Number of Organic Farms and Average Acres of Organic and Transitional-Organic Fruit and Nuts by Crop

	Total Obs.	Mean Acres of Organic Farms						
		No. of Organic Farms		Total Fruit/ Nut Land	Organic Fruit/Nut Land		Transitional Organic Fruit/Nut Land	
		Obs. (n)	Distribution	Acres	n	Acres	n	Acres
<b>All Fruit and Nut Crops</b>								
	8,790	499	6%	146	375	41	163	45
<b>By Crop</b>								
Berries	144	22	15%	70	20	19	4	13
Citrus	1,021	58	6%	358	43	29	23	28
Grapes	2,887	149	5%	151	104	65	52	59
Nuts	2,776	132	5%	66	97	36	44	42
Apples and Pears	218	36	17%	58	30	40	8	14
Stone Fruits	798	37	5%	187	26	34	12	62
Tropicals	946	65	7%	160	55	24	20	45

**Fn.C1–C4. Marketing**

**Table Fn.C1. Marketing – Distribution of Use Type (Processing versus Fresh) and Average Volume Share Designated to Specific Use by Crop**

		Total Obs.	Use Type <sup>a</sup>		
			Mainly Processing	Mainly Fresh	Processing/Fresh
<b>All Fruit and Nut Crops</b>					
Observations (n)		8,791	6,227	1,988	576
Row Percent		100%	71%	23%	7%
<b>By Crop</b>					
<b>Berries</b>	Observations (n)	144	11	111	22
	Row Percent		8%	77%	15%
	Avg Volume Share		99% <sup>b</sup>	96%	
<b>Citrus</b>	Observations (n)	1,021	153	630	238
	Row Percent		15%	62%	23%
	Avg Volume Share		100%	98%	
<b>Grapes</b>	Observations (n)	2,888	2,698	126	64
	Row Percent		93%	4%	2%
	Avg Volume Share		100%	99%	
<b>Nuts</b>	Observations (n)	2,776	2,570	119	87
	Row Percent		93%	4%	3%
	Avg Volume Share		100%	100%	
<b>Apples and Pears</b>	Observations (n)	218	57	82	79
	Row Percent		26%	38%	36%
	Avg Volume Share		98%	99%	
<b>Stone Fruits</b>	Observations (n)	798	377	389	32
	Row Percent		47%	49%	4%
	Avg Volume Share		100%	100%	
<b>Tropicals</b>	Observations (n)	946	361	531	54
	Row Percent		38%	56%	6%
	Avg Volume Share		100%	99%	

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent, and the category of Processing/Fresh included farmers whose crops were not used for Mainly Processing or for Mainly Fresh.

<sup>b</sup> Interpretation of the volume share was as follows: The average output share designated to processing use by the Mainly Processing farmers was 99 percent. The fact that most average volume shares were either 99 percent or 100 percent indicates that farm production was, in general, specified by use.

Table Fn.C2. **Marketing – Marketing Channels for Processing-Use Crops: Number of Farms Using Specific Marketing Channels by Crop<sup>a</sup>**

	Marketing Channels						
	Total Obs.	Coop-erative	Sold to Processor under Contract with Predetermined Price	Sold to Processor under Contract without Predetermined Price	Partici-pation Plan	Spot Market	Other
<b>All Fruit and Nut Crops</b>							
Observations (n)	5,933	1,974	1,867	1,535	39	147	371
Distribution <sup>b</sup>		33%	31%	26%	1%	2%	6%
<b>By Crop</b>							
<b>Berries</b>							
Observations (n)	11	–	–	–	–	–	–
<b>Citrus</b>							
Observations (n)	150	79	13	45	–	6	7
Distribution		53%	9%	30%	–	4%	5%
<b>Grapes</b>							
Observations (n)	2,548	421	1,315	479	16	65	252
Distribution		17%	52%	19%	1%	3%	10%
<b>Nuts</b>							
Observations (n)	2,447	1,240	259	801	19	57	71
Distribution		51%	11%	33%	1%	2%	3%
<b>Apples and Pears</b>							
Observations (n)	55	7	21	15	–	–	7
Distribution		13%	38%	27%			13%
<b>Stone Fruits</b>							
Observations (n)	373	136	130	87	–	7	11
Distribution		36%	35%	23%		2%	3%
<b>Tropicals</b>							
Observations (n)	349	90	126	102	–	7	–
Distribution		26%	36%	29%		2%	–

<sup>a</sup> Data for this table include Mainly Processing farms (processing use greater than 80 percent of their volume).

<sup>b</sup> The row sums can be greater than 100 percent because some farmers use multiple channels.

Note: The cells with less than five observations are indicated by “–”.

Table Fn.C3. Marketing – Grower/Shippers (Fresh-Use Only): Number of Grower/Shippers and Volume Sold at Predetermined Price by Crop

<b>Distribution: Grower/Shippers versus Growers Only</b>			
	Total Observations	No. of Farms	
		Grower/Shippers	Growers Only
<b>All Fruit and Nut Crops</b>			
Observations (n)	2,462	75	2,387
Row Percent	100%	3%	97%
<b>By Crop</b>			
Berries	127	7%	93%
Citrus	819	2%	98%
Grapes	177	10%	90%
Nuts	201	1%	99%
Apples and Pears	163	2%	98%
Stone Fruits	412	6%	94%
Tropicals	563	1%	99%
<b>Number of Grower/Shippers Selling at Predetermined Price and their Average Output Share</b>			
	No. of Grower/Shippers	Mean Volume Sold at Predetermined Price	
Grapes	26	93%	
Nuts	15	71%	
Other	10	82%	

Table Fn.C4. Marketing – Marketing Channels for Fresh-Use Crops (Growers Only): Number of Farms Using Specific Marketing Channels by Crop<sup>a</sup>

	Total Obs.	Distribution of Farmers Using Specific Marketing Channel				
		Direct to Consumers	Marketing Cooperative	Independent Shipper/Broker	Direct to Commercial Buyers	Other
<b>All Fruit and Nut Crops</b>						
Observations (n)	2,311	227	803	927	263	91
Distribution <sup>b</sup>		10%	35%	40%	11%	4%
<b>By Crop</b>						
<b>Berries</b>						
Observations (n)	112	21	12	54	22	3
Distribution		19%	11%	48%	20%	3%
<b>Citrus</b>						
Observations (n)	785	42	420	237	68	18
Distribution		5%	54%	30%	9%	2%
<b>Grapes</b>						
Observations (n)	167	14	26	72	29	26
Distribution		8%	16%	43%	17%	16%
<b>Nuts</b>						
Observations (n)	222	33	91	62	29	7
Distribution		15%	41%	28%	13%	3%
<b>Apples and Pears</b>						
Observations (n)	139	44	15	58	19	3
Distribution		32%	11%	42%	14%	2%
<b>Stone Fruits</b>						
Observations (n)	353	35	29	239	36	14
Distribution		10%	8%	68%	10%	4%
<b>Tropicals</b>						
Observations (n)	533	38	210	205	60	20
Distribution		7%	39%	38%	11%	4%

<sup>a</sup> This table uses the observations of mainly-fresh-use growers (more than 80 percent of output designated to fresh use).

<sup>b</sup> The row sums can be greater than 100 percent because some farmers use multiple channels.

**Fn.D1–D4. Yield, Price, and Profit Fluctuations**

Table Fn.D1. Yield, Price, and Profit Fluctuations – Yield Deviation (Percent) from Individual Five-Year Averages: Sample Mean by Year (1997–2001) and All-Year Sample Mean by Region and Crop<sup>a</sup>

	Observations (n)	Mean Yield Deviation from Five-Year Average <sup>b</sup>
<b>Sample Mean by Year for 1997–2001</b>		
2001	4,057	17%
2000	4,057	15%
1999	4,057	14%
1998	4,057	15%
1997	4,057	16%
All-Year Average	4,057	15%
<b>All-Year Sample Mean by Region</b>		
	Observations (n)	All-Year Mean Yield Deviation from Five-Year Average <sup>b</sup>
Far North	9	23%
North Coast	552	13%
Central Coast – North	152	13%
Central Coast – South	279	17%
South Coast	218	17%
Sacramento Valley	521	16%
San Joaquin – North	767	15%
San Joaquin – Central	860	13%
San Joaquin – South	563	16%
Sierra Nevada	84	18%
Desert	123	15%
<b>All-Year Sample Mean by Crop</b>		
	Observations (n)	All-Year Mean Yield Deviation from Five-Year Average <sup>b</sup>
Berries	76	10%
Citrus	433	15%
Grapes	1,536	13%
Nuts	1,215	16%
Apples and Pears	101	15%
Stone Fruits	337	16%
Tropicals	430	21%

<sup>a</sup> Data include only the observations that provided all five-year yields.

<sup>b</sup> We did not differentiate the direction of deviation. All yield deviations were calculated using absolute values.

Table Fn.D2. **Yield, Price, and Profit Fluctuations – Yield Deviation (Percent) from Individual Five-Year Averages: All-Year Sample Mean by Crop/Region**

<b>Crop</b>	<b>Region</b>	<b>Observations (n)</b>	<b>Yield Deviation from Five-Year Average</b>
Berries	Central Coast – North	35	6%
	Central Coast – South	13	5%
	Sacramento Valley	11	19%
Citrus	Central Coast – South	106	13%
	South Coast	33	10%
	San Joaquin – Central	42	17%
	San Joaquin – South	192	17%
	Desert	43	10%
Grapes	North Coast	479	12%
	Central Coast – North	65	16%
	Central Coast – South	59	12%
	Sacramento Valley	24	15%
	San Joaquin – North	155	12%
	San Joaquin – Central	584	12%
	San Joaquin – South	95	13%
	Sierra Nevada	52	15%
	Desert	15	15%
Nuts	North Coast	39	16%
	Central Coast – North	24	15%
	Central Coast – South	16	16%
	South Coast	12	21%
	Sacramento Valley	286	16%
	San Joaquin – North	528	16%
	San Joaquin – Central	146	16%
	San Joaquin – South	146	14%
	Sierra Nevada	14	23%
Apples and Pears	North Coast	32	13%
	Central Coast – North	13	15%
	Sacramento Valley	22	8%
Stone Fruits	Sacramento Valley	106	16%
	San Joaquin – North	73	17%
	San Joaquin – Central	67	14%
	San Joaquin – South	71	15%
Tropicals	Central Coast – South	81	27%
	South Coast	160	18%
	Sacramento Valley	63	22%
	San Joaquin – Central	11	12%
	San Joaquin – South	48	24%
	Desert	58	19%

Note: We do not report all eleven regions. We excluded regions where the number of farms was too few.

Table Fn.D3. Yield, Price, and Profit Fluctuations – Largest Yield, Price, and Profit Fluctuations:  
Number of Farms in Ranges of Fluctuation by Crop

Fluctuation Range (Percent)	Yield		Price		Profit	
	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms
<b>All Fruit and Nut Crops</b>						
0-9	1,692	25%	1,132	20%	1,177	22%
10-24	1,802	27%	1,415	24%	1,150	21%
25-49	1,583	23%	1,575	27%	1,203	22%
50-74	930	14%	1,062	18%	895	16%
75 or More	762	11%	593	10%	1,033	19%
Total	6,769	100%	5,777	100%	5,458	100%
<b>Berries</b>						
0-9	33	29%	19	18%	26	27%
10-24	38	33%	33	32%	23	24%
25-49	22	19%	42	40%	22	23%
50-74	11	10%	4	4%	10	10%
75 or More	10	9%	6	6%	15	16%
Total	114	100%	104	100%	96	100%
<b>Citrus</b>						
0-9	174	23%	92	13%	118	18%
10-24	197	26%	126	18%	94	14%
25-49	165	21%	176	26%	139	21%
50-74	118	15%	138	20%	114	17%
75 or More	116	15%	155	23%	195	30%
Total	770	100%	687	100%	660	100%
<b>Grapes</b>						
0-9	656	29%	447	23%	426	23%
10-24	645	28%	450	23%	367	20%
25-49	555	24%	465	24%	379	21%
50-74	243	11%	395	20%	307	17%
75 or More	176	8%	170	9%	337	19%
Total	2,275	100%	1,927	100%	1,816	100%

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Table Fn.D3. Continued

Fluctuation Range (Percent)	Yield		Price		Profit	
	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms
<b>Nuts</b>						
0-9	482	23%	255	15%	332	20%
10-24	555	27%	462	27%	395	24%
25-49	525	25%	534	31%	392	24%
50-74	310	15%	349	20%	265	16%
75 or More	190	9%	142	8%	257	16%
Total	2,062	100%	1,742	100%	1,641	100%
<b>Apples and Pears</b>						
0-9	28	17%	43	28%	33	24%
10-24	50	30%	32	21%	26	19%
25-49	34	21%	37	25%	23	17%
50-74	22	13%	24	16%	21	15%
75 or More	31	19%	15	10%	34	25%
Total	165	100%	151	100%	137	100%
<b>Stone Fruits</b>						
0-9	155	24%	146	26%	126	23%
10-24	159	24%	141	25%	114	21%
25-49	138	21%	155	27%	122	22%
50-74	101	15%	78	14%	86	16%
75 or More	105	16%	48	8%	95	17%
Total	658	100%	568	100%	543	100%
<b>Tropicals</b>						
0-9	164	23%	130	22%	116	21%
10-24	158	22%	171	29%	131	23%
25-49	144	20%	166	28%	126	22%
50-74	125	17%	74	12%	92	16%
75 or More	134	18%	57	10%	100	18%
Total	725	100%	598	100%	565	100%

Table Fn.D4. Yield, Price, and Profit Fluctuations – Main Cause for Lowest Profit by Region, Crop, and Processor Pricing Method (with and without Predetermined Price)

	Total No. Obs. that Answered	Main Cause for Lowest Profit (Percent of Farmers Who Answered)						
		Main Cause	Poor Yield	Poor Quality	High Input Cost	Low Market Price due to High Domestic Production	Low Market Price due to Increased Imports	Inability to Market Crop due to Quarantine
All Fruit and Nut Crops	7,902	29%	4%	7%	27%	16%	1%	17%
<b>By Region</b>								
Far North	34	50%	6%	6%	18%	9%	0%	12%
North Coast	976	50%	2%	8%	9%	6%	0%	24%
Central Coast – N.	258	37%	5%	10%	23%	11%	0%	14%
Central Coast – S.	561	38%	6%	4%	14%	22%	1%	17%
South Coast	417	34%	5%	12%	13%	20%	5%	11%
Sacramento Valley	1,099	34%	5%	5%	29%	12%	0%	14%
San Joaquin – N.	1,480	28%	3%	5%	41%	8%	0%	16%
San Joaquin – Cen.	1,510	19%	2%	5%	40%	24%	0%	10%
San Joaquin – S.	1,161	27%	6%	5%	26%	22%	0%	15%
Sierra Nevada	149	41%	7%	9%	11%	5%	0%	27%
Desert	255	26%	7%	5%	23%	25%	1%	13%
<b>By Crop</b>								
Berries	132	24%	5%	8%	33%	18%	1%	11%
Citrus	931	25%	6%	4%	19%	31%	1%	15%
Grapes	2,596	32%	2%	6%	29%	15%	0%	16%
Nuts	2,433	30%	4%	5%	38%	8%	0%	15%
Apples and Pears	199	33%	9%	8%	11%	28%	0%	12%
Stone Fruits	747	28%	8%	8%	27%	13%	1%	15%
Tropicals	865	44%	3%	7%	10%	21%	3%	12%
<b>By Processor Pricing Method</b>								
Sold to Processor under Contract with Predetermined Price	1,828	38%	3%	7%	24%	13%	0%	16%
Sold to Processor under Contract Without Predetermined Price	1,622	27%	4%	5%	33%	16%	1%	15%
<b>By Use<sup>a</sup></b>								
Mainly Processing	5,581	32%	3%	6%	31%	13%	0.3%	15%
Mainly Fresh	1,839	32%	6%	6%	20%	20%	1.0%	15%

<sup>a</sup> Mainly Processing (or Fresh) was indicated by output volume share greater than 80 percent.

**Fn.E1–E5. Risk Management**

Table Fn.E1. Risk Management – Ranking of Risk Sources (in Order of Importance): Mean Ranking by Crop

	Mean Ranking of Risk Sources									
	Adverse Temper- ature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctu- ation	Output Price Fluctu- ation	Pests	Quar- antine	Hail
<b>All Fruit and Nut Crops</b>										
Mean Ranking	2.0	7.3	5.4	3.8	4.7	3.5	2.2	3.5	7.9	5.4
Observations (n)	6,755	2,639	3,247	4,158	3,501	4,309	5,932	4,805	2,422	3,393
<b>By Crop</b>										
<b>Berries</b>										
Mean Rank	1.9	5.8	6.1	4.3	5.0	3.3	2.1	3.7	8.6	6.1
Observations (n)	105	53	58	68	56	74	104	74	39	52
<b>Citrus</b>										
Mean Rank	1.9	7.7	5.3	4.9	4.4	3.6	1.9	3.7	7.2	6.2
Observations (n)	836	313	423	429	451	534	767	536	315	376
<b>Grapes</b>										
Mean Rank	2.0	7.6	5.5	3.4	4.7	3.7	2.4	3.5	8.2	5.2
Observations (n)	2,247	886	1,093	1,477	1,208	1,428	1,916	1,622	847	1,220
<b>Nuts</b>										
Mean Rank	2.1	6.8	5.4	3.7	4.8	3.4	2.1	3.4	8.5	6.2
Observations (n)	2,039	824	971	1,308	1,015	1,328	1,893	1,488	670	904
<b>Apples and Pears</b>										
Mean Rank	2.2	7.2	5.7	3.7	5.9	3.6	2.3	3.5	8.3	4.4
Observations (n)	171	65	83	106	73	106	140	138	58	108
<b>Stone Fruits</b>										
Mean Rank	2.1	7.2	6.5	4.5	5.7	3.1	2.0	4.1	7.9	3.4
Observations (n)	631	249	260	359	296	419	566	400	225	454
<b>Tropicals</b>										
Mean Rank	2.0	7.3	4.7	4.0	3.9	3.8	2.7	3.2	6.2	6.7
Observations (n)	726	249	359	411	402	420	546	547	268	279

Table Fn.E2. Risk Management – Ranking of Risk Sources (in Order of Importance): Distribution of Ranks by Risk Source

Rank		Mean Ranking of Risk Sources									
		Adverse Temperature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctuation	Output Price Fluctuation	Pests	Quarantine	Hail
Total Responses		6,755	2,639	3,247	4,158	3,501	4,309	5,932	4,805	2,422	3,393
1	Obs. (n)	3,599	72	177	496	392	596	2,874	605	61	287
	Distribution	53%	3%	5%	12%	11%	14%	48%	13%	3%	8%
2	Obs. (n)	1,407	187	369	766	484	1,182	1,412	1,024	108	475
	Distribution	21%	7%	11%	18%	14%	27%	24%	21%	4%	14%
3	Obs. (n)	849	114	318	732	461	751	649	1,109	54	394
	Distribution	13%	4%	10%	18%	13%	17%	11%	23%	2%	12%
4	Obs. (n)	382	98	343	709	404	533	383	807	82	319
	Distribution	6%	4%	11%	17%	12%	12%	6%	17%	3%	9%
5	Obs. (n)	220	144	402	596	398	453	217	581	106	257
	Distribution	3%	5%	12%	14%	11%	11%	4%	12%	4%	8%
6	Obs. (n)	137	188	388	399	403	293	147	279	119	299
	Distribution	2%	7%	12%	10%	12%	7%	2%	6%	5%	9%
7	Obs. (n)	72	272	440	218	348	241	100	193	195	296
	Distribution	1%	10%	14%	5%	10%	6%	2%	4%	8%	9%
8	Obs. (n)	44	396	407	149	332	145	87	131	260	300
	Distribution	1%	15%	13%	4%	9%	3%	1%	3%	11%	9%
9	Obs. (n)	26	503	266	59	151	72	29	48	541	391
	Distribution	0.4%	19%	8%	1%	4%	2%	0%	1%	22%	12%
10	Obs. (n)	18	656	135	31	128	42	34	26	885	368
	Distribution	0.3%	25%	4%	1%	4%	1%	1%	1%	37%	11%

Table Fn.E3. Risk Management – Rank of Selected Risk Sources That May Be Specific to Region: Mean Ranking by Region

Region		Mean Ranks of Risk Sources		
		Drought	Irrigation Water Supply Problems	Hail
Far North	Mean Rank	3.5	4.2	5.4
	Observations (n)	12	10	10
North Coast	Mean Rank	5.1	4.7	6.6
	Observations (n)	434	461	380
Central Coast – North	Mean Rank	5.4	5.0	7.2
	Observations (n)	131	128	116
Central Coast – South	Mean Rank	5.1	4.8	7.6
	Observations (n)	264	256	196
South Coast	Mean Rank	4.0	3.2	7.4
	Observations (n)	209	248	132
Sacramento Valley	Mean Rank	5.8	5.5	5.6
	Observations (n)	425	424	453
San Joaquin – North	Mean Rank	5.9	5.5	5.5
	Observations (n)	536	580	621
San Joaquin – Central	Mean Rank	5.9	4.6	3.9
	Observations (n)	573	676	817
San Joaquin – South	Mean Rank	5.5	4.4	4.9
	Observations (n)	486	543	534
Sierra Nevada	Mean Rank	4.0	4.2	5.1
	Observations (n)	70	59	63
Desert	Mean Rank	4.8	3.7	7.7
	Observations (n)	105	114	69

Table Fn.E4. Risk Management – Ranking of Preferences for Risk Management Tools: Mean Ranking by Region and Crop

	Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Gov't Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Fruit and Nut Crops</b>								
Observations (n)	5,224	2,023	2,853	2,975	1,777	2,644	3,044	1,372
<b>Mean Preference Ranking by Region</b>								
Far North	3.3	7.5	4.3	4.0	7.0	6.5	2.8	8.0
North Coast	2.5	5.6	3.5	4.2	5.6	3.1	2.8	2.0
Central Coast – No.	3.0	5.1	3.2	4.4	5.6	3.6	2.7	1.0
Central Coast – So.	2.2	4.0	3.0	4.5	6.8	4.8	2.9	2.1
South Coast	2.5	6.2	2.5	3.5	6.0	4.3	3.4	1.6
Sacramento Valley	1.9	5.3	3.1	3.6	5.8	3.5	2.9	2.2
San Joaquin – N.	1.8	4.7	3.3	3.9	5.3	3.6	3.0	3.1
San Joaquin – Cen.	1.7	4.8	3.4	3.1	5.3	3.9	2.8	2.1
San Joaquin – S.	1.5	5.5	3.1	3.2	5.2	3.5	3.3	2.6
Sierra Nevada	1.4	5.0	4.3	2.8	5.5	2.6	3.6	3.5
Desert	3.1	3.2	2.8	3.7	5.8	4.3	2.8	4.0
<b>Mean Preference Ranking by Crop</b>								
Berries	1.7	3.0	2.0	3.5	8.0	8.0	1.0	1.0
Citrus	1.7	3.9	2.8	4.0	6.0	5.0	6.2	3.2
Grapes	1.8	5.0	3.6	3.0	5.2	3.1	2.7	2.4
Nuts	2.1	5.2	3.2	3.9	5.3	3.6	3.0	2.4
Apples and Pears	2.2	5.4	2.9	4.6	6.2	4.3	2.6	3.5
Stone Fruits	1.6	4.8	2.8	3.2	6.2	4.5	3.4	2.5
Tropicals	1.7	6.1	3.2	3.1	6.6	4.1	3.3	1.0

Table Fn.E5. **Risk Management – Availability and Utilization of Risk Management Tools: Rates of Availability and Utilization and Mean Ranking of Preference by Crop**

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Fruit and Nut Crops</b> (Total Observations = 8,791)								
Obs. with Availability	4,284	627	1,518	1,285	251	1,114	1,427	234
Availability Rate <sup>a</sup>	49%	7%	17%	15%	3%	13%	16%	3%
Utilization Rate <sup>b</sup>	69%	39%	63%	60%	27%	67%	60%	75%
Mean Ranking	1.8	3.7	2.4	3.0	4.5	2.4	2.4	2.4
<b>Berries</b> (Total Observations = 144)								
Obs. with Availability	33	17	22	18	3	7	27	8
Availability Rate	23%	12%	15%	13%	2%	5%	19%	6%
<b>Citrus</b> (Total Observations = 1,021)								
Obs. with Availability	598	96	221	207	37	68	189	32
Availability Rate	59%	9%	22%	20%	4%	7%	19%	3%
<b>Grapes</b> (Total Observations = 2,888)								
Obs. with Availability	1,495	215	417	339	72	546	495	80
Availability Rate	52%	7%	14%	12%	2%	19%	17%	3%
<b>Nuts</b> (Total Observations = 2,776)								
Obs. with Availability	1,246	169	443	385	96	346	393	64
Availability Rate	45%	6%	16%	14%	3%	12%	14%	2%
<b>Apples and Pears</b> (Total Observations = 218)								
Obs. with Availability	91	20	56	42	5	21	50	9
Availability Rate	42%	9%	26%	19%	2%	10%	23%	4%
<b>Stone Fruits</b> (Total Observations = 798)								
Obs. with Availability	474	71	235	173	24	74	153	14
Availability Rate	59%	9%	29%	22%	3%	9%	19%	2%
<b>Tropicals</b> (Total Observations = 946)								
Obs. with Availability	347	39	124	121	14	52	120	27
Availability Rate	37%	4%	13%	13%	1%	6%	13%	3%

<sup>a</sup> Availability rates were calculated as a ratio of the number of observations with availability to the total number of observations.

<sup>b</sup> Utilization rates were calculated based on the number of observations with availability. Crop-specific utilization rates are not provided due to too few number of observations that utilized the tool.

**Fn.F1–F6. Crop Insurance**

**Table Fn.F1. Crop Insurance: Purchase History and Average Number of Purchases for the Last Five Years by Crop**

Crop Insurance Purchased in the Last Five Years		Number of Years Purchased	Observations	Distribution
<b>Yes</b>		1	345	8%
Observations	4,496	2	440	10%
Distribution	53%	3	468	10%
<b>No</b>		4	352	8%
Observations	4,062	5	2,841	64%
Distribution	47%			

**Mean Number of Purchases by Crop for the Last Five Years**

	Observations	Mean		Observations	Mean
Berries	23	3.3	Apples and Pears	100	3.9
Citrus	671	4.4	Stone Fruits	556	4.2
Grapes	1,541	4.2	Tropicals	347	3.0
Nuts	1,208	4.2			

**Table Fn.F2. Crop Insurance – Number of Farmers Who Purchase Single-Peril Insurance against a Specific Peril by Crop**

		Total Number of Farmers	Fire	Frost or Freeze	Rain	Hail
<b>All Fruit and Nut Crops</b>						
Observations (n)		8,791	439	1,775	1,511	1,534
Percent			5%	20%	17%	17%
<b>By Crop</b>						
Berries	Observations (n)	144	–	6	8	6
	Percent		–	4%	6%	4%
Citrus	Observations (n)	1,021	48	372	106	180
	Percent		5%	36%	10%	18%
Grapes	Observations (n)	2,888	149	605	701	600
	Percent		5%	21%	24%	21%
Nuts	Observations (n)	2,776	134	445	394	382
	Percent		5%	16%	14%	14%
Apples and Pears	Observations (n)	218	10	30	26	39
	Percent		5%	14%	12%	18%
Stone Fruits	Observations (n)	798	43	200	199	254
	Percent		5%	25%	25%	32%
Tropicals	Observations (n)	946	54	117	77	73
	Percent		6%	12%	8%	8%

Table Fn.F3. Crop Insurance – Mean Ranking and Distribution of Reasons for Purchasing Crop Insurance

	<b>Risk of Crop Loss Was High</b>	<b>Expected Water Supplies to Be Cut Back</b>	<b>Insurance Req'd to Qualify for Other USDA Programs</b>	<b>Expected to Receive Lower Prices for Crops</b>	<b>Bank or Other Lender Required Insurance</b>	<b>Other</b>
<b>All Fruit and Nut Crops</b>						
Mean Rank	1.2	3.4	2.2	2.6	2.7	1.5
No. of Observations that Provided Ranks	3,414	960	1,593	1,376	1,194	1,048
<b>By Crop</b>						
<b>Berries</b>						
Mean Rank	1.2	3.8	2.3	2.6	4.2	2.3
Observations (n)	19	7	11	11	9	11
<b>Citrus</b>						
Mean Rank	1.3	3.4	1.9	2.5	3.4	1.3
Observations (n)	530	137	275	226	121	158
<b>Grapes</b>						
Mean Rank	1.2	3.5	2.6	2.6	2.6	1.5
Observations (n)	1,181	337	480	442	472	379
<b>Nuts</b>						
Mean Rank	1.2	3.4	2.2	2.5	2.6	1.4
Observations (n)	900	246	430	389	326	265
<b>Apples and Pears</b>						
Mean Rank	1.3	3.9	2.1	2.5	2.2	1.8
Observations (n)	81	22	31	31	35	20
<b>Stone Fruits</b>						
Mean ranking	1.2	3.8	2.0	2.8	2.6	1.8
Observations (n)	458	110	239	175	172	102
<b>Tropicals</b>						
Average Rank	1.4	2.7	2.1	2.7	3.8	1.6
Observations (n)	245	101	127	102	59	113

Table Fn.F4. Crop Insurance – Mean Ranking of Reasons for Not Purchasing Crop Insurance by Crop

	Not Available for My Crop	Major Source of Risk Not Insured Cause of Loss	Too Much Paper-work to Apply	Never Lost Enough Prod'n or Revenue to File Claim	Premium Cost Too High	Couldn't Find Know-ledgeable Insurance Agent	Do Not Understand Crop Insurance Program	Other
<b>All Fruit and Nut Crops</b>								
Mean Rank	2.3	2.8	3.2	1.7	1.8	4	2.7	1.5
No. of Obs. that Provided Ranks	1,850	1,279	1,248	2,291	2,453	936	1,772	1,748
<b>By Crop</b>								
<b>Berries</b>								
Mean Rank	1.5	3.6	4.4	2.7	2.1	3.7	2.8	3.7
Obs. (n)	73	26	22	38	41	25	36	25
<b>Citrus</b>								
Mean Rank	2.1	2.9	3.1	1.8	1.8	3.9	2.7	1.4
Obs. (n)	211	129	146	217	270	106	195	196
<b>Grapes</b>								
Mean Rank	3.2	2.8	3.3	1.6	1.8	4	2.9	1.4
Obs. (n)	435	454	408	827	830	322	564	591
<b>Nuts</b>								
Mean Rank	2.4	2.7	3.1	1.6	1.8	4.2	2.8	1.5
Obs. (n)	494	394	386	773	765	262	517	605
<b>Apples and Pears</b>								
Mean Rank	1.6	2.4	2.9	2.1	2.2	3.4	2.3	1.6
Obs. (n)	62	37	36	46	71	29	56	47
<b>Stone Fruits</b>								
Mean Rank	2.4	3.1	3.3	1.8	1.8	4.1	2.9	1.6
Obs. (n)	202	111	118	194	248	88	150	144
<b>Tropicals</b>								
Mean Rank	1.4	2.7	2.9	2	2.1	3.5	22.3	1.8
Obs. (n)	373	128	132	196	228	104	254	140

Table Fn.F5. Crop Insurance – Mean Ranking of Suggestions to Modify Crop Insurance by Crop

	Compensate for a Higher Level of Production Loss	Compensate for a Loss of Gross Sales	Compensate for a Loss of Profit	Guarantee Cash Production Costs	Guarantee Costs of Establishing Orchard or Vineyard	Guarantee Replace- ment Costs of a Crop Inventory	Other
<b>All Fruit and Nut Crops</b>							
Mean Ranking	2.0	2.3	2.1	2.4	3.6	3.5	1.5
Observations that Provided Ranks	3,447	2,889	3,133	2,907	2,106	2,208	2,216
<b>By Crop</b>							
<b>Berries</b>							
Mean Rank	2.2	2.4	2.0	2.3	4.5	3.2	2.0
Observations (n)	46	43	51	45	30	41	43
<b>Citrus</b>							
Mean Rank	2.2	2.2	2.1	2.4	4.0	3.6	1.4
Observations (n)	433	383	427	426	238	267	252
<b>Grapes</b>							
Mean Rank	2.0	2.3	2.2	2.5	3.4	3.4	1.6
Observations (n)	1,242	1,026	1,067	981	794	785	666
<b>Nuts</b>							
Mean Rank	2.0	2.4	2.1	2.4	3.5	3.5	1.3
Observations (n)	967	784	891	824	607	621	741
<b>Apples and Pears</b>							
Mean Rank	2.4	2.0	2.0	2.2	3.5	3.9	1.8
Observations (n)	77	76	80	84	55	50	61
<b>Stone Fruits</b>							
Mean Rank	2.0	2.2	2.0	2.4	3.8	3.7	1.7
Observations (n)	384	317	342	312	212	221	192
<b>Tropicals</b>							
Average Rank	1.9	2.2	2.1	2.7	3.7	3.0	1.4
Observations (n)	298	260	275	235	170	223	261

Table Fn.F6. Crop Insurance – Importance of Risk Management and Familiarity with Crop Insurance Compared with Five Years Ago

	Response	Risk Management Is Becoming More Important		Becoming More Familiar with Crop Insurance	
		Obs. (n)	Percent of Farms	Obs. (n)	Percent of Farms
<b>All Fruit and Nut Crops</b>					
	Yes	4,456	57%	4,670	59%
	No	3,386	43%	3,248	41%
<b>By Crop</b>					
Berries	Yes	79	63%	60	47%
	No	47	37%	68	53%
Citrus	Yes	593	64%	674	72%
	No	329	36%	266	28%
Grapes	Yes	1,468	57%	1,548	59%
	No	1,116	43%	1,065	41%
Nuts	Yes	1,235	50%	1,275	52%
	No	1,216	50%	1,183	48%
Apples and Pears	Yes	120	61%	115	58%
	No	76	39%	85	43%
Stone Fruits	Yes	546	74%	537	72%
	No	188	26%	208	28%
Tropicals	Yes	415	50%	461	55%
	No	414	50%	373	45%

**Fn.G1–G3. Financial Characteristics****Table Fn.G1. Financial Characteristics – Mean Values of Off-Farm Income Share (Percent), Gross Agricultural Sales, Assets, and Debts by Region and Crop**

	Off-Farm Income Share		Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (%)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
All Fruit/Nut Crops	6,240	64%	7,163	\$329,769	4,553	\$1,372,641	2,596	\$597,519
<b>By Region</b>								
Far North	24	65%	23	\$78,389	18	\$492,956	15	\$89,800
North Coast	608	64%	728	\$341,489	407	\$3,102,166	227	\$1,121,098
Central Coast – N.	158	65%	220	\$607,672	139	\$2,146,819	88	\$976,451
Central Coast – S.	404	69%	503	\$482,051	312	\$1,798,470	171	\$566,123
South Coast	336	71%	369	\$234,375	205	\$870,370	76	\$399,519
Sacramento Valley	868	61%	1,049	\$252,822	695	\$1,257,502	422	\$612,029
San Joaquin – N.	1,189	64%	1,417	\$237,255	925	\$994,750	530	\$372,344
San Joaquin – Cen.	1,138	63%	1,396	\$297,866	890	\$1,037,708	542	\$478,801
San Joaquin – S.	869	61%	1,088	\$525,404	733	\$1,410,843	436	\$767,603
Sierra Nevada	109	67%	133	\$99,992	78	\$769,812	35	\$179,079
Desert	208	71%	235	\$197,878	149	\$835,330	54	\$484,366
<b>By Crop</b>								
Berries	62	55%	108	\$943,724	66	\$660,609	46	\$487,725
Citrus	735	65%	867	\$384,775	561	\$1,373,662	272	\$836,360
Grapes	1,795	62%	2,242	\$432,251	1,397	\$2,176,232	845	\$887,724
Nuts	1,977	66%	2,306	\$217,954	1,481	\$922,464	841	\$356,301
Apples and Pears	151	70%	178	\$249,399	116	\$925,985	75	\$531,143
Stone Fruits	523	58%	697	\$384,057	471	\$1,205,851	303	\$488,491
Tropicals	669	67%	765	\$186,702	461	\$767,196	214	\$297,253

Table Fn.G2. **Financial Characteristics – Distributions of Off-Farm Income Shares and Gross Agricultural Sales**

	<b>Observations (n)</b>	<b>Distribution (Percent)</b>	<b>Cumulative Percent</b>
<b>Distribution of Off-Farm Income Shares – Off-Farm Income Share Class</b>			
0%	113	2%	2%
1-10%	571	9%	11%
11-20%	362	6%	17%
21-30%	405	6%	23%
31-40%	227	4%	27%
41-50%	808	13%	39%
51-60%	269	4%	44%
61-70%	303	5%	48%
71-80%	880	14%	62%
81-90%	716	11%	74%
91-100%	1,673	26%	100%
<b>Distribution of Gross Agricultural Sales – Gross Agricultural Sales Class (in \$1,000)</b>			
0-10	971	14%	14%
10-50	2,371	33%	47%
50-100	1,215	17%	64%
100-500	1,831	26%	89%
500-1,000	369	5%	95%
1,000-2,000	198	3%	97%
2,000-5,000	125	2%	99%
5,000 and Greater	60	1%	100%

Table Fn.G3. **Financial Characteristics – Mean Agricultural Sales, Mean Assets, and Mean Debts by Off-Farm Income-Share Class and by Fruit and Nut Acreage Class**

	Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
<b>By Off-Farm Income Share</b>						
0%	92	\$1,351,004	68	\$2,600,574	64	\$1,062,088
1–10%	496	\$631,486	370	\$2,361,199	241	\$850,794
11–20%	310	\$428,957	225	\$1,933,970	140	\$737,191
21–30%	359	\$262,856	237	\$1,865,528	157	\$1,106,204
31–40%	200	\$367,356	133	\$1,530,352	75	\$431,678
41–50%	711	\$195,045	484	\$947,314	272	\$339,425
51–60%	236	\$147,876	183	\$823,888	113	\$224,091
61–70%	269	\$120,161	184	\$830,865	99	\$180,369
71–80%	769	\$111,200	505	\$674,919	253	\$197,676
81–90%	630	\$65,096	422	\$525,995	188	\$158,035
91–100%	1,303	\$90,837	933	\$591,240	476	\$268,871
<b>By Acreage Class (Fruit and Nut Acres)</b>						
0–10	1,382	\$22,808	816	\$225,017	318	\$89,841
11–20	1,450	\$42,310	918	\$366,248	442	\$123,111
21–30	634	\$81,225	394	\$519,380	204	\$171,757
31–40	681	\$94,760	447	\$598,394	266	\$185,170
41–50	365	\$136,457	227	\$772,428	137	\$231,088
51–60	317	\$146,059	218	\$848,667	148	\$244,472
61–70	232	\$194,442	153	\$929,118	96	\$296,273
71–80	249	\$188,603	166	\$1,019,823	114	\$296,093
81–90	119	\$263,771	77	\$1,380,535	54	\$358,793
91–100	165	\$219,702	108	\$1,169,156	67	\$355,970
101–200	742	\$395,419	480	\$1,880,161	334	\$543,761
201–500	555	\$950,949	389	\$3,565,975	293	\$1,370,279
501–1,000	164	\$2,172,834	104	\$7,126,122	83	\$2,264,936
1,000 and Greater	105	\$6,840,450	53	\$24,888,016	39	\$11,257,006

**Vegetables**

**Vg.A1–A2. Size and Regional Profile**

Table Vg.A1. **Size and Regional Profile – Number of Farms and Average Vegetable Acres per Farm by Region and Crop and Distribution of Vegetable Acreage**

	No. of Farms (n)	Distribution	Mean Vegetable Acres	Standard Deviation
<b>By Region</b>				
Far North	17	4%	39	60
North Coast	31	7%	19	35
Central Coast – North	78	18%	650	1,170
Central Coast – South	58	13%	205	384
South Coast	26	6%	993	3,918
Sacramento Valley	54	12%	565	672
San Joaquin – North	63	14%	780	1,442
San Joaquin – Central	54	12%	513	1,133
San Joaquin – South	19	4%	317	348
Sierra Nevada	6	1%	64	140
Desert	37	8%	210	341
<b>By Crop</b>				
V1: Beans, peas, garlic, onions, leeks	51	12%	300	613
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	71	16%	755	1,204
V3: Melons, cucumbers, squash, other gourd family	67	15%	232	783
V4: Tomatoes, peppers, eggplants, tomatillos	137	31%	641	1,130
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	65	15%	222	451
V6: Other unspecified vegetables	52	12%	465	2,772
<b>By Acreage Class (Vegetable Acres)</b>				
By Acreage Class (Vegetable Acres)	No. (n)	Distribution	Cumulative Percent	
0–10	126	28%	28%	
11–20	46	10%	39%	
21–30	13	3%	42%	
31–40	10	2%	44%	
41–50	10	2%	46%	
51–60	7	2%	48%	
61–70	9	2%	50%	
71–80	12	3%	53%	
81–90	4	1%	53%	
91–100	10	2%	56%	
101–200	29	7%	62%	
201–500	60	14%	76%	
501–1,000	55	12%	88%	
1,000 and Greater	52	12%	100%	

Table Vg.A2. Size and Regional Profile – Distribution of Vegetable Crops by Crop and Region

	Far North	North Coast	Cen. Coast No.	Cen. Coast So.	South Coast	Sac. Valley	San Joaq. No.	San Joaq. Cen.	San Joaq. So.	Sierra Nevada	Desert
<b>V1: Beans, peas, garlic, onions, leeks</b>											
Observations	-	-	-	17	-	-	7	11	-	-	6
Row Distribution				33%			14%	22%			12%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>											
Observations	-	-	44	10	-	-	-	-	-	-	5
Row Distribution			62%	14%							7%
<b>V3: Melons, cucumbers, squash, other gourd family</b>											
Observations	-	7	5	5	8	5	10	10	5	-	7
Row Distribution		10%	7%	7%	12%	7%	15%	15%	7%		10%
<b>V4: Tomatoes, peppers, eggplants, tomatillos, parsley, other herbs</b>											
Observations	-	7	12	8	6	38	34	21	-	-	-
Row Distribution		5%	9%	6%	4%	28%	25%	15%			
<b>V5: Carrots, celery, asparagus, mushrooms</b>											
Observations	6	6	10	6	7	-	8	-	6	-	11
Row Distribution	9%	9%	15%	9%	11%		12%		9%		17%
<b>V6: Other unspecified vegetables</b>											
Observations	-	8	6	12	-	4	-	7	-	-	5
Row Distribution		15%	12%	23%		8%		13%			10%

Note: Cells with less than three observations are indicated by "-".

Table Vg.A3. Size and Regional Profile – Number of Farms and Average Vegetable Acres per Farm for Selected Major Crops

Primary Crop <sup>a</sup>	Observations (n)	Distribution	Mean Acres	Standard Deviation
<b>Total Observations</b>	281			
Asparagus	14	5%	426	665
Broccoli	5	2%	414	620
Cantaloupe	5	2%	318	333
Carrots	9	3%	172	196
Cauliflower	–	–	416	277
Garlic	–	–	244	239
Lettuce	33	12%	952	1,332
Mushrooms	12	4%	4	2
Onions	20	7%	367	526
Peppers	18	6%	298	496
Spinach	17	6%	1,084	1,400
Tomatoes (Fresh plus Processed)	148	52%	705	1,207

<sup>a</sup> The list of primary crops was selected using the state's crop revenue statistics. The revenue for each of these crops in California exceeded \$100 million in 2001. Note: Cells with less than five observations are indicated by "–".

**Vg.B1–B3. Crop Diversification****Table Vg.B1. Crop Diversification – Diversification Patterns across Crop Categories and Average Acres in Crop Diversification**

<b>Crops</b>	<b>Number of Farmers (n)</b>	<b>Share of Farmers</b>	<b>Crop Category</b>	<b>Mean Acres</b>
Total	437	100%		
Vegetables Only	228	52%	Vegetables	468
Vegetables and Field Crops	114	26%	Vegetables	547
			Field Crops	888
Vegetables and Fruits/Nuts	50	11%	Vegetables	144
			Fruits/Nuts	888
Vegetables, Field Crops, and Fruits/Nuts	38	9%	Vegetables	842
			Field Crops	663
			Fruits/Nuts	208
Vegetables, Ornamentals, and Other	7	2%	Vegetables	15
			Ornamentals	9

Table Vg.B2. Crop Diversification – Diversification Patterns (within Vegetables) of Vegetable-Only Farmers: Distribution of Farmers and Average Sales Share by the Number of Vegetable Crops Diversified

<b>Diversification Patterns</b>							
<b>Number of Farms Growing Vegetables Only Grouped by the Number of Vegetable Crops per Farm</b>							
	<b>Total Obs.</b>	<b>Number of Crops</b>					
		<b>One</b>	<b>Two</b>	<b>Three</b>	<b>Four</b>	<b>Five</b>	<b>Six or More</b>
<b>All Vegetable Crops</b>							
Observations (n)	228	112	40	21	22	12	21
Row Percent		49%	18%	9%	10%	5%	9%
Mean Acres		299	455	321	483	1,280	1,065
<b>Row Percent By Crop</b>							
V1: Beans, peas, garlic, onions, leeks	26	50%	31%	4%	8%	8%	0%
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	61	18%	18%	11%	21%	8%	23%
V3: melons, cucumbers, squash, other gourd family	26	58%	19%	12%	8%	0%	4%
V4: Tomatoes, peppers, eggplants, tomatillos	37	22%	38%	19%	5%	8%	8%
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	39	77%	3%	8%	3%	5%	5%
V6: Other unspecified vegetables	39	90%	3%	0%	5%	0%	3%
<b>Mean Crop Sales Shares</b>							
<b>Farmers Grouped by Number of Vegetables Being Grown</b>							
	<b>One</b>	<b>Two</b>	<b>Three</b>	<b>Four</b>	<b>Five</b>	<b>Six or More</b>	
First Vegetable	97%	65%	54%	46%	45%	30%	
Second Vegetable		35%	25%	19%	17%	20%	
Third Vegetable			22%	17%	16%	14%	
Fourth Vegetable				15%	10%	12%	
Fifth Vegetable					10%	10%	
Sixth Vegetable						10%	

Table Vg.B3. Crop Diversification – Number of Organic Farms and Average Vegetable Acres per Farm by Crop

	Total <i>Obs. (n)</i>	Number of Organic Farms		Mean Acres of Organic Farms				
				Total Vegetable Land <i>Acres</i>	Organic Vegetable Land		Transitional Organic Vegetable Land	
					<i>Obs. (n)</i>	<i>Acres</i>	<i>Obs. (n)</i>	<i>Acres</i>
<b>By Region</b>								
All Vegetable Crops	443	64	14%	153	49	61	18	27
<b>By Crop</b>								
V1: Beans, peas, garlic, onions, leeks	51	3	6%	13	–	–	–	–
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	71	15	21%	350	12	93	3	4
V3: Melons, cucumbers, squash, other gourd family	67	6	9%	18	6	20	–	–
V4: Tomatoes, peppers, eggplants, tomatillos	137	18	13%	395	14	58	5	73
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	65	8	12%	22	6	6	–	–
V6: Other unspecified vegetables	52	14	27%	120	9	177	7	10

Note: Cells with less than three observations are indicated by “–”.

## Vg.C1–C4. Marketing

Table Vg.C1. Marketing – Distribution of Use Type (Processing versus Fresh) and Average Volume Share Designated to Specific Use by Crop

	Total Obs.	Use Type <sup>a</sup> in Terms of Volume of Share Designated			Average Volume Share	
		To Mainly Processing	To Mainly Fresh	To Processing/Fresh	Mainly Processing Farms Designating to Processing Use	Mainly Fresh Farms Designating to Fresh Use
<b>All Vegetable Crops</b>						
Observations (n)	443	114	298	31	114	298
Percent		26%	67%	7%	99.4%	99.0%
<b>V1: Beans, peas, garlic, onions, leeks</b>						
Observations (n)	51	18	29	4	18	29
Percent		35%	57%	8%	92.5%	99.4%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>						
Observations (n)	71	2	54	15	2	54
Percent		3%	76%	21%	93%	99.0%
<b>V3: Melons, cucumbers, squash, other gourd family</b>						
Observations (n)	67	4	60	3	4	60
Percent		6%	90%	4%	100.0%	99.9%
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>						
Observations (n)	137	82	49	6	82	49
Percent		60%	36%	4%	99.5%	99.8%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>						
Observations (n)	65	7	55	3	7	55
Percent		11%	85%	5%	100.0%	99.8%
<b>V6: Other unspecified vegetables</b>						
Observations (n)	52	–	51	–	–	51
Percent		–	98%	–	–	99.7%

<sup>a</sup> Mainly processing (or Fresh) was indicated by an output volume share greater than 80 percent and Processing/Fresh included farmers that were not Mainly Processing or Mainly Fresh.

Note: Cells with less than three observations are indicated by “–”.

Table Vg.C2. Marketing – Marketing Channels for Processing-Use Crops: Number of Farms Using Specific Marketing Channels and Average Volume Share for Each Marketing Channel by Crop

	Marketing Channels						
	Total Obs.	Cooperative	Sold to Processor under Contract with Predetermined Price	Sold to Processor under Contract without Predetermined Price	Participation Plan	Spot Market	Other
<b>All Vegetable Crops</b>							
Observations (n)	153	17	104	30	15	7	17
Distribution (Percent) <sup>a</sup>		11%	68%	20%	10%	5%	11%
Avg Vol. Shares (Percent)		66%	93%	80%	62%	44%	74%
<b>V1: Beans, peas, garlic, onions, leeks</b>							
Observations (n)	23	5	8	9	2	–	2
Distribution (Percent)		22%	35%	39%	9%	–	9%
Avg Vol. Shares (Percent)		75%	100%	82%	95%	–	100%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>							
Observations (n)	20	3	16	5	6	3	3
Distribution (Percent)		15%	80%	25%	30%	15%	15%
Avg Vol. Shares (Percent)		33%	91%	52%	58%	33%	13%
<b>V3: Melons, cucumbers, squash, other gourd family</b>							
Observations (n)	5	–	2	3	–	–	–
Distribution (Percent)		–	40%	60%	–	–	–
Avg Vol. Shares (Percent)		–	100%	100%	–	–	–
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>							
Observations (n)	88	7	69	11	4	4	7
Distribution (Percent)		8%	78%	13%	5%	5%	8%
Avg Vol. Shares (Percent)		79%	94%	91%	39%	52%	73%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>							
Observations (n)	12	2	7	2	2	0	2
Distribution (Percent)		17%	58%	17%	17%	0%	17%
Avg Vol. Shares (Percent)		50%	82%	50%	65%		100%
<b>V6: Other unspecified vegetables</b>							
Observations (n)	5	–	2	–	–	–	2
Distribution (Percent)		–	40%	–	–	–	40%
Avg Vol. Shares (Percent)		–	100%	–	–	–	100%

<sup>a</sup> The sums over the marketing channels are greater than the total number of farmers in each category because some farmers use multiple channels.

Table Vg.C3. **Marketing – Grower/Shippers (Fresh-Use Only): Number of Grower/Shippers and Volume Sold at Predetermined Price by Crop**

	No. of Fresh-Crop Farmers	Grower/Shippers	Growers Only
<b>Distribution of Grower/Shippers versus Growers Only</b>			
<b>All Vegetable Crops</b>			
Observations (n)	310	41	269
Row Percent		13%	87%
<b>By Category</b>			
V1: Beans, peas, garlic, onions, leeks	32	6%	94%
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	65	18%	82%
V3: Melons, cucumbers, squash, other gourd family	59	15%	85%
V4: Tomatoes, peppers, eggplants, tomatillos	52	10%	90%
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	54	15%	85%
V6: Other unspecified vegetables	48	10%	90%
<b>Average Output Share Sold by Grower/Shippers at Predetermined Prices</b>			
Only one grower/shipper sold crops at a predetermined price and the share sold at the predetermined price was 100%.			

Table Vg.C4. **Marketing – Marketing Channels for Fresh-Use Crops (Growers Only): Number of Farmers Using Specific Marketing Channels and Average Volume Share by Crop**

	Distribution of Farmers Using Specific Marketing Channel <sup>a</sup>					
	Total Obs.	Direct to Consumers	Marketing Cooperative	Independent Shipper/Broker	Direct to Commercial Buyers	Other
<b>All Vegetable Crops</b>						
Observations (n)	327	101	19	103	90	14
Distribution (Percent) <sup>a</sup>		31%	6%	31%	28%	4%
Avg Vol. Shares (Percent)		79%	51%	90%	68%	57%
<b>V1: Beans, peas, garlic, onions, leeks</b>						
Observations (n)	33	–	–	13	6	–
Distribution (Percent)		–	–	39%	18%	–
Avg Vol. Shares (Percent)		–	–	99%	96%	–
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>						
Observations (n)	68	15	9	33	15	5
Distribution (Percent)		22%	13%	49%	22%	7%
Avg Vol. Shares (Percent)		63%	48%	89%	53%	64%
<b>V3: Melons, cucumbers, squash, other gourd family</b>						
Observations (n)	61	19	–	14	18	–
Distribution (Percent)		31%	–	23%	30%	–
Avg Vol. Shares (Percent)		90%	–	92%	80%	–
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>						
Observations (n)	57	27	–	12	20	–
Distribution (Percent)		47%	–	21%	35%	–
Avg Vol. Shares (Percent)		77%	–	79%	62%	–
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>						
Observations (n)	57	15	–	21	17	–
Distribution (Percent)		26%	–	37%	30%	–
Avg Vol. Shares (Percent)		72%	–	89%	60%	–
<b>V6: Other unspecified vegetables</b>						
Observations (n)	51	24	–	10	14	–
Distribution (Percent)		47%	–	20%	27%	–
Avg Vol. Shares (Percent)		89%	–	93%	75%	–

<sup>a</sup> The sums over the marketing channels can be greater than 100 percent because some farmers use multiple channels.  
Note: Cells with less than five observations are indicated by “–”.

### Vg.D1–D3. Yield, Price, and Profit Fluctuations

Table Vg.D1. Yield, Price, and Profit Fluctuation – Yield Deviation (Percent) from Individual Five-Year Averages: Sample Mean 1997–2001 and All-Year Sample Mean by Region and Crop

Sample Mean by Year (1997–2001)	Observations (n)	Yield Deviation from Five-Year Average
		Mean
2001	195	10%
2000	195	6%
1999	195	6%
1998	195	8%
1997	195	8%
All-Year Average	195	8%

  

All-Year Sample Mean By Region	Observations (n)	All-Year Mean
Far North	6	8%
North Coast	7	10%
Central Coast – North	39	6%
Central Coast – South	19	6%
South Coast	11	5%
Sacramento Valley	31	5%
San Joaquin – North	34	10%
San Joaquin – Central	26	10%
San Joaquin – South	7	11%
Sierra Nevada	–	–
Desert	13	8%

  

All-Year Sample Mean By Crop	Observations (n)	All-Year Mean
V1: Beans, peas, garlic, onions, leeks	19	9%
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	42	6%
V3: Melons, cucumbers, squash, other gourd family	20	9%
V4: Tomatoes, peppers, eggplants, tomatillos	77	7%
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	26	12%
V6: Other unspecified vegetables	11	6%

Table Vg.D2. Yield, Price, and Profit Fluctuation – Largest Yield, Price, and Profit Fluctuations: Number of Farms per Fluctuation Range by Crop

Fluctuation Range (Percent)	Yield		Price		Profit	
	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms
<b>All Vegetable Crops</b>						
0-9	166	46%	133	40%	108	34%
10-24	106	29%	95	29%	99	31%
25-49	39	11%	52	16%	55	17%
50-74	35	10%	37	11%	32	10%
75 or More	14	4%	15	5%	25	8%
Total	360	100%	332	100%	319	100%
<b>V1: Beans, peas, garlic, onions, leeks</b>						
0-9	11	28%	12	32%	11	30%
10-24	12	31%	8	22%	11	30%
25-49	8	21%	5	14%	8	22%
50-74	5	13%	12	32%	7	19%
75 or More	3	8%	-	0%	-	0%
Total	39	11%	37	11%	37	12%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>						
0-9	35	57%	23	43%	20	40%
10-24	20	33%	11	20%	12	24%
25-49	2	3%	10	19%	6	12%
50-74	3	5%	7	13%	6	12%
75 or More	1	2%	3	6%	6	12%
Total	61	17%	54	16%	50	16%
<b>V3: Melons, cucumbers, squash, other gourd family</b>						
0-9	22	41%	21	41%	13	26%
10-24	12	22%	15	29%	19	38%
25-49	5	9%	9	18%	7	14%
50-74	10	19%	3	6%	6	12%
75 or More	5	9%	3	6%	5	10%
Total	54	15%	51	15%	50	16%
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>						
0-9	59	52%	41	39%	30	30%
10-24	33	29%	42	40%	37	37%
25-49	15	13%	14	13%	22	22%
50-74	5	4%	7	7%	6	6%
75 or More	1	1%	2	2%	5	5%
Total	113	31%	106	32%	100	31%

*continued on following page*

Table Vg.D2. Continued

<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>						
0-9	22	41%	19	39%	16	34%
10-24	16	30%	11	22%	12	26%
25-49	4	7%	9	18%	8	17%
50-74	11	20%	6	12%	4	9%
75 or More	1	2%	4	8%	7	15%
Total	54	15%	49	15%	47	15%
<b>V6: Other unspecified vegetables</b>						
0-9	17	44%	17	49%	18	51%
10-24	13	33%	8	23%	8	23%
25-49	5	13%	5	14%	4	11%
50-74	1	3%	2	6%	3	9%
75 or More	3	8%	3	9%	2	6%
Total	39	11%	35	11%	35	11%

Table Vg.D3. Yield, Price, and Profit Fluctuation – Main Cause for Lowest Profit by Region, Crop, Use, and Processor Pricing Method (with and without Predetermined Price)

	Total No. Obs. that Answered	Main Cause for Lowest Profit (Percent of Farmers Who Answered)					
		Main Cause	Poor Yield	Poor Quality	High Input Cost	Low Market Price due to High Domestic Prod'n	Low Market Price due to Increased Imports
<b>All Vegetable Crops</b>							
Observations (n)	416	76	22	56	124	86	52
Row Percent		18%	5%	13%	30%	21%	13%
<b>By Region</b>							
Far North	16	31%	6%	13%	0%	13%	38%
North Coast	28	36%	7%	21%	7%	7%	21%
Central Coast – North	74	9%	5%	20%	41%	16%	8%
Central Coast – South	56	20%	9%	5%	27%	27%	13%
South Coast	26	4%	8%	12%	23%	42%	12%
Sacramento Valley	49	16%	4%	16%	37%	18%	8%
San Joaquin – North	59	19%	0%	14%	34%	27%	7%
San Joaquin – Central	49	24%	6%	10%	37%	12%	10%
San Joaquin – South	17	18%	6%	12%	29%	18%	18%
Sierra Nevada	6	67%	0%	17%	0%	0%	17%
Desert	36	11%	6%	8%	28%	28%	19%
<b>By Crop</b>							
V1: Beans, peas, garlic, onions, leeks	46	28%	9%	15%	17%	22%	9%
V2: Lettuce, cabbages, other leafy vegetables, broccoli cauliflower, artichokes, radishes	67	3%	9%	15%	51%	16%	6%
V3: Melons, cucumbers, squash, other gourd family	65	22%	5%	9%	22%	22%	22%
V4: Tomatoes, peppers, eggplants, tomatillos	127	23%	2%	17%	30%	19%	9%
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	63	19%	3%	10%	19%	35%	14%
V6: Other unspecified vegetables	48	13%	8%	13%	38%	10%	19%

continued on following page

Table Vg.D3. Continued

	Total No. Obs. that Answered Main Cause	Main Cause for Lowest Profit (Percent of Farmers Who Answered)					
		Poor Yield	Poor Quality	High Input Cost	Low Market Price due to High Domestic Prod'n	Low Market Price due to Increased Imports	Other
<b>By Processor Pricing Method</b>							
Predetermined Price	94	15%	6%	19%	34%	18%	7%
No Predetermined Price	24	21%	8%	8%	38%	25%	–
<b>By Use<sup>a</sup></b>							
Mainly Processing	109	19%	5%	17%	31%	21%	7%
Mainly Fresh	279	19%	5%	13%	27%	21%	16%

<sup>a</sup> Mainly Processing (or Fresh) was indicated by an output volume share greater than 80 percent and Processing/Fresh included farmers that were neither Mainly Processing nor Mainly Fresh.

**Vg.E1–E6. Risk Management**

Table Vg.E1. Risk Management – Ranking of Risk Sources (in Order of Importance): Mean Ranking by Crop

	Mean Ranking of Risk Sources									
	Adverse Temper- ature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctu- ation	Output Price Fluctu- ation	Pests	Quar- antine	Hail
<b>All Vegetable Crops</b>										
Mean Ranking	2.3	6.0	5.5	3.6	4.5	3.2	2.2	3.5	8.1	6.7
Total Obs. (n)	349	163	179	235	212	248	321	262	131	153
<b>By Crop</b>										
<b>V1: Beans, peas, garlic, onions, leeks</b>										
Mean Ranking	3.1	6.4	4.3	3.5	4.1	3.0	1.7	3.3	8.7	6.8
Observations (n)	31	13	19	27	22	25	33	20	7	9
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>										
Mean Ranking	2.6	5.1	5.5	3.5	4.7	3.2	1.9	3.5	7.2	7.2
Observations (n)	60	35	28	38	33	46	58	49	25	29
<b>V3: Melons, cucumbers, squash, other gourd family</b>										
Mean Ranking	2.5	6.2	4.6	3.4	4.1	3.6	2.3	2.7	7.9	6.7
Observations (n)	49	19	29	37	31	31	47	45	18	21
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>										
Mean Ranking	2.3	6.4	5.8	4.2	2.8	1.9	1.6	1.9	2.4	2.7
Observations (n)	117	61	67	79	80	88	104	88	54	59
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>										
Mean Ranking	2.0	6.2	7.0	3.7	5.0	3.2	2.7	4.4	8.1	6.8
Observations (n)	50	21	20	35	27	38	44	32	17	21
<b>V6: Other unspecified vegetables</b>										
Mean Ranking	1.9	6.1	5.4	2.8	4.5	3.5	2.4	2.9	8.1	6.4
Observations (n)	42	14	16	19	19	20	35	28	10	14

Table Vg.E2. Risk Management – Ranking of Risk Sources (in Order of Importance): Distribution of Ranks by Crop

Rank		Mean Ranking of Risk Sources									
		Adverse Temperature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctuation	Output Price Fluctuation	Pests	Quarantine	Hail
Total Responses		349	163	199	235	212	248	321	262	131	153
1	Obs. (n)	143	14	9	36	27	47	158	26	3	7
	Distribution	41%	9%	5%	15%	13%	19%	49%	10%	2%	5%
2	Obs. (n)	91	12	26	41	39	60	67	62	6	13
	Distribution	26%	7%	13%	17%	18%	24%	21%	24%	5%	8%
3	Obs. (n)	47	10	14	45	25	55	34	54	3	6
	Distribution	13%	6%	7%	19%	12%	22%	11%	21%	2%	4%
4	Obs. (n)	28	17	8	37	19	28	27	45	4	14
	Distribution	8%	10%	4%	16%	9%	11%	8%	17%	3%	9%
5	Obs. (n)	19	7	23	33	20	22	17	40	6	8
	Distribution	5%	4%	12%	14%	9%	9%	5%	15%	5%	5%
6	Obs. (n)	7	17	25	18	23	16	4	19	5	15
	Distribution	2%	10%	13%	8%	11%	6%	1%	7%	4%	10%
7–10	Obs. (n)	14	86	94	25	59	20	14	16	104	90
	Distribution	4%	53%	47%	11%	28%	8%	4%	6%	79%	59%

Table Vg.E3. Risk Management – Ranking of Selected Risk Sources That May Be Specific to Region: Mean Ranking by Region

Region		Mean Ranks of Risk Sources		
		Drought	Irrigation Water Supply Problems	Hail
Far North	Mean Rank	4.2	3.4	6.5
	Observations (n)	7	7	6
North Coast	Mean Rank	3.6	4.0	7.3
	Observations (n)	11	11	6
Central Coast – North	Mean Rank	5.4	4.4	7.6
	Observations (n)	29	36	30
Central Coast – South	Mean Rank	5.5	5.9	7.9
	Observations (n)	22	23	13
South Coast	Mean Rank	6.2	5.0	7.0
	Observations (n)	13	17	11
Sacramento Valley	Mean Rank	6.2	5.6	6.7
	Observations (n)	26	29	24
San Joaquin – North	Mean Rank	5.7	4.4	6.1
	Observations (n)	31	38	28
San Joaquin – Central	Mean Rank	5.2	3.6	5.3
	Observations (n)	22	28	18
San Joaquin – South	Mean Rank	6.7	5.2	6.5
	Observations (n)	9	9	8
Sierra Nevada	Mean Rank	3.3	1.7	–
	Observations (n)	3	3	–
Desert	Mean Rank	5.5	3.8	7.4
	Observations (n)	6	11	8

Table Vg.E4. Risk Management – Availability and Utilization of Risk Management Tools: Rates of Availability and Utilization and Mean Ranking of Preference by Crop

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Vegetable Crops (Total Observations = 443)</b>								
Obs. with Availability	128	66	175	89	31	95	112	13
Availability Rate <sup>a</sup>	29%	15%	40%	20%	7%	21%	25%	3%
Utilization Rate <sup>b</sup>	71%	47%	87%	67%	52%	77%	79%	62%
Mean Ranking	2.6	3.0	2.0	3.1	5.0	2.8	2.7	2.8
<b>By Crop</b>								
<b>V1: Beans, peas, garlic, onions, leeks (Total Observations = 51)</b>								
Obs. with Availability	16	7	23	16	7	11	10	1
Availability Rate	31%	14%	45%	31%	14%	22%	20%	2%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes (Total Obs. = 71)</b>								
Obs. with Availability	7	11	28	4	–	18	18	1
Availability Rate	10%	15%	39%	6%	–	25%	25%	1%
<b>V3: Melons, cucumbers, squash, other gourd family (Total Observations = 67)</b>								
Obs. with Availability	14	8	23	7	7	12	16	1
Availability Rate	21%	12%	34%	10%	10%	18%	24%	1%
<b>V4: Tomatoes, peppers, eggplants, tomatillos (Total Observations = 137)</b>								
Obs. with Availability	72	28	69	54	15	45	40	3
Availability Rate	53%	20%	50%	39%	11%	33%	29%	2%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs (Total Observations = 65)</b>								
Obs. with Availability	11	8	16	5	–	6	15	2
Availability Rate	17%	12%	25%	8%	–	9%	23%	3%
<b>V6: Other unspecified vegetables (Total Observations = 52)</b>								
Obs. with Availability	8	4	16	3	–	3	13	5
Availability Rate	15%	8%	31%	6%	0%	6%	25%	10%

<sup>a</sup> Availability rates were calculated as a ratio of the number of observations with availability to the total number of observations.

<sup>b</sup> Utilization rates were calculated based on the number of observations with availability. Utilization rates by crop are not provided due to too few number of observations that utilized the tool.

Table Vg.E5. Risk Management – Status of Receipt of Government Disaster Payments or Loans by Crop

	Total Obs.	Receipt of Government Disaster Payments or Loans		
		Received	Not Qualified	Unaware
<b>All Vegetable Crops</b>				
Observations (n)	414	145	154	115
Row Percent		35%	37%	28%
<b>By Crop</b>				
<b>V1: Beans, peas, garlic, onions, leeks</b>				
Observations (n)	48	27	16	5
Row Percent		56%	33%	10%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>				
Observations (n)	68	16	35	17
Row Percent		24%	51%	25%
<b>V3: Melons, cucumbers, squash, other gourd family</b>				
Observations (n)	62	23	18	21
Row Percent		37%	29%	34%
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>				
Observations (n)	129	60	42	27
Row Percent		47%	33%	21%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>				
Observations (n)	57	13	24	20
Row Percent		23%	42%	35%
<b>V6: Other unspecified vegetables</b>				
Observations (n)	50	6	19	25
Row Percent		12%	38%	50%

**Vg.F1–F6. Crop Insurance**

Table Vg.F1. **Crop Insurance: Purchase History and Average Number of Purchases for the Last Five Years by Crop**

Crop Insurance Purchase in Last Five Years		No. of Years Purchased	Observations	Distribution
<b>Yes</b>		1	10	7%
Observations	136	2	10	7%
Distribution	31%	3	17	13%
<b>No</b>		4 or 5	99	72%
Observations	30%			
Distribution	69%			

**Mean Number of Purchases by Crop for the Last Five Years by Vegetable Category**

	Observations	Average Years
V1: Beans, peas, garlic, onions, leeks	16	3.9
V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes	4	4.5
V3: Melons, cucumbers, squash, other gourd family	19	4.1
V4: Tomatoes, peppers, eggplants, tomatillos	79	4.4
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	12	4.0
V6: Other unspecified vegetables	6	3.0

Table Vg.F2. Crop Insurance – Number of Farmers Who Purchase Single-Peril Insurance against a Specific Peril by Crop

	Total Number of Farmers	Peril			
		Fire	Frost or Freeze	Rain	Hail
<b>All Vegetable Crops</b>					
Observations (n)	443	41	38	63	40
Percent		9%	9%	14%	9%
<b>By Crop Category</b>					
<b>V1: Beans, peas, garlic, onions, leeks</b>					
Observations (n)	51	5	–	3	–
Percent		10%	–	6%	–
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>					
Observations (n)	71	–	–	–	–
Percent		–	–	–	–
<b>V3: Melons, cucumbers, squash, other gourd family</b>					
Observations (n)	67	6	8	7	6
Percent		9%	12%	10%	9%
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>					
Observations (n)	137	21	23	46	25
Percent		15%	17%	34%	18%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>					
Observations (n)	65	6	3	5	5
Percent		9%	5%	8%	8%
<b>V6: Other unspecified vegetables</b>					
Observations (n)	52	–	–	–	–
Percent		–	–	–	–

Table Vg.F3. Crop Insurance – Mean Ranking and Distribution of Reasons for Purchasing Crop Insurance

		<b>Risk of Crop Loss Was High</b>	<b>Expected Water Supplies to Be Cut Back</b>	<b>Insurance Req'd to Qualify for Other USDA Programs</b>	<b>Expected to Receive Lower Prices for Crops</b>	<b>Bank or Other Lender Required Insurance</b>	<b>Other</b>
<b>Mean Ranking</b>							
Mean Ranking		1.5	3.4	2.3	2.9	3.2	2.0
Observations that Provided Ranks		112	56	78	60	63	31
<b>Ranking Distribution</b>							
<b>Ranking</b>	n =	112	56	78	60	63	31
1		69%	11%	44%	13%	13%	65%
2		19%	16%	19%	23%	32%	16%
3		7%	21%	17%	35%	10%	3%
4		3%	30%	8%	15%	19%	3%
5		1%	20%	13%	13%	27%	13%
6		2%	2%	0%	0%	0%	0%
Total		100%	100%	100%	100%	100%	100%

Table Vg.F4. Crop Insurance – Mean Ranking of Reasons for Not Purchasing Crop Insurance by Crop

	Not Available for My Crop	Major Source of Risk Not Insured Cause of Loss	Too Much Paper-work to Apply	Never Lost Enough Prod'n or Revenue to File Claim	Premium Cost Too High	Couldn't Find Know-ledgeable Insurance Agent	Do Not Understand Crop Insurance Program	Other
<b>All Vegetable Crops</b>								
Mean Rank	1.6	3.0	3.9	2.4	2.5	4.0	3.0	1.7
No. of Obs. that Provided Ranks	196	99	85	131	123	82	127	75
<b>By Crop Category</b>								
<b>V1: Beans, peas, garlic, onions, leeks</b>								
Mean Rank	1.5	3.6	3.4	1.9	1.8	3.3	2.2	1.0
Obs. (n)	17	10	9	14	11	6	10	3
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>								
Mean Rank	1.3	2.8	4.3	2.7	2.7	4.7	3.4	1.8
Obs. (n)	46	18	13	25	24	14	19	9
<b>V3: Melons, cucumbers, squash, other gourd family</b>								
Mean Rank	1.1	2.7	3.2	2.8	2.8	3.5	2.7	1.8
Obs. (n)	26	9	13	15	19	11	18	10
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>								
Mean Rank	2.3	3.0	4.2	2.5	2.2	4.2	3.1	1.3
Obs. (n)	43	33	25	41	37	29	42	29
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>								
Mean Rank	1.4	3.1	4.0	2.3	2.8	4.1	3.1	2.0
Obs. (n)	33	14	10	16	16	10	18	18
<b>V6: Other unspecified vegetables</b>								
Mean Rank	1.8	2.9	4.0	2.1	2.9	3.8	3.0	2.8
Obs. (n)	31	15	15	20	16	12	20	6

Table Vg.F5. Crop Insurance – Mean Ranking of Suggestions to Modify Crop Insurance by Crop

	Compensate for a Higher Level of Production Loss	Compensate for a Loss of Gross Sales	Compen- sate for a Loss of Profit	Guaran- tee Cash Production Costs	Guaran- tee Costs of Establishing Orchard or Vineyard	Guarantee Replace- ment Costs of a Crop Inventory	Other
<b>All Vegetable Crops</b>							
Mean Ranking	2.2	2.5	2.4	2.2	4.5	3.4	1.4
Observations that Provided Ranks	172	157	164	168	86	130	122
<b>By Crop Category</b>							
<b>V1: Beans, peas, garlic, onions, leeks</b>							
Mean Rank	1.6	2.2	2.6	2.0	4.6	3.5	1.0
Obs. (n)	22	17	17	18	5	11	5
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>							
Mean Rank	2.4	2.2	2.2	2.2	4.5	3.4	1.2
Obs. (n)	24	26	22	22	13	20	24
<b>V3: Melons, cucumbers, squash, other gourd family</b>							
Mean Rank	2.5	2.4	2.1	2.1	4.4	3.2	1.7
Obs. (n)	26	21	27	22	13	21	18
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>							
Mean Rank	1.8	2.6	2.7	2.3	4.6	3.6	1.3
Obs. (n)	66	58	55	68	34	45	41
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>							
Mean Rank	2.9	2.5	2.3	2.2	4.4	3.3	1.7
Obs. (n)	21	22	25	21	13	20	21
<b>V6: Other unspecified vegetables</b>							
Mean Rank	2.4	2.9	1.8	1.9	4.1	3.0	1.5
Obs. (n)	13	13	18	17	8	13	13

Table Vg.F6. Crop Insurance – Importance of Risk Management and Familiarity with Crop Insurance Compared with Five Years Ago

Response	Risk Management Is Becoming More Important		Becoming More Familiar with Crop Insurance	
	Obs. (n)	Percent of Farms	Obs. (n)	Percent of Farms
<b>All Vegetable Crops</b>				
Yes	261	63%	192	46%
No	152	37%	221	54%
<b>By Crop Category</b>				
<b>V1: Beans, peas, garlic, onions, leeks</b>				
Yes	30	65%	21	47%
No	16	35%	24	53%
<b>V2: Lettuce, cabbages, other leafy vegetables, broccoli, cauliflower, artichokes, radishes</b>				
Yes	39	57%	21	32%
No	29	43%	45	68%
<b>V3: Melons, cucumbers, squash, other gourd family</b>				
Yes	34	56%	28	44%
No	27	44%	35	56%
<b>V4: Tomatoes, peppers, eggplants, tomatillos</b>				
Yes	99	75%	82	63%
No	33	25%	48	37%
<b>V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs</b>				
Yes	37	59%	29	45%
No	26	41%	35	55%
<b>V6: Other unspecified vegetables</b>				
Yes	22	51%	11	24%
No	21	49%	34	76%

### Vg.G1–G3. Financial Characteristics

Table Vg.G1. Financial Characteristics – Off-Farm Income Share (Percent), Gross Agricultural Sales, Assets, and Debts: Mean Values by Region and Crop

	Off-Farm Income Share		Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (%)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
All Vegetable Crops	213	42%	382	\$1,111,873	237	\$1,888,527	166	\$939,828
<b>By Region</b>								
Far North	12	63%	16	\$62,066	9	\$955,000	4	\$75,000
North Coast	21	53%	26	\$161,842	18	\$689,145	10	\$76,100
Central Coast – N.	34	49%	67	\$1,231,198	37	\$685,135	25	\$175,920
Central Coast – S.	34	37%	47	\$970,371	32	\$976,203	23	\$208,043
South Coast	15	46%	22	\$1,559,639	11	\$2,124,091	7	\$836,429
Sacramento Valley	23	31%	48	\$1,794,027	32	\$2,053,125	21	\$524,048
San Joaquin – N.	23	29%	58	\$1,388,280	43	\$2,447,919	34	\$1,065,805
San Joaquin – Cen.	24	46%	43	\$730,930	22	\$1,458,136	16	\$321,719
San Joaquin – S.	7	25%	16	\$1,692,218	12	\$2,075,033	8	\$1,362,192
Sierra Nevada	3	42%	6	\$398,800	–	–	–	–
Desert	17	47%	33	\$887,301	20	\$5,909,400	17	\$4,495,588
<b>By Crop</b>								
V1: Beans, peas, garlic onions, leeks	28	44%	44	\$608,250	31	\$1,466,468	24	\$327,104
V2: Lettuce, cabbages, other leafy vegetables broccoli, cauliflower, artichokes, radishes	40	33%	60	\$1,618,613	29	\$1,204,034	26	\$303,385
V3: Melons, cucumbers, squash, other gourd family	38	48%	59	\$664,955	37	\$3,769,054	22	\$3,432,752
V4: Tomatoes, peppers, eggplants, tomatillos	54	39%	121	\$1,501,913	80	\$1,942,069	58	\$733,610
V5: Carrots, celery, asparagus, mushrooms, parsley, other herbs	26	45%	53	\$935,042	31	\$1,659,129	17	\$2,955,282
V6: Other unspecified vegetables	27	51%	45	\$667,170	29	\$722,414	19	\$372,263

Table Vg.G2. Financial Characteristics – Distributions of Off-Farm Income Shares and Gross Agricultural Sales

	Observations (n)	Distribution (Percent)	Cumulative Percent
<b>Range of Off-Farm Income Shares</b>			
0%	14	7%	7%
1-10%	47	22%	29%
11-20%	25	12%	40%
21-30%	18	8%	49%
31-40%	9	4%	53%
41-50%	31	15%	68%
51-60%	7	3%	71%
61-70%	8	4%	75%
71-80%	16	8%	82%
81-90%	13	6%	88%
91-100%	25	12%	100%
<b>Range of Gross Agricultural Sales (in \$1,000)</b>			
0-10	25	7%	7%
10-50	58	15%	22%
50-100	37	10%	31%
100-500	106	28%	59%
500-1,000	44	12%	71%
1,000-2,000	54	14%	85%
2,000-5,000	42	11%	96%
5,000 and Greater	16	4%	100%

Table Vg.G3. Financial Characteristics – Mean Agricultural Sales, Mean Assets, and Mean Debts by Off-Farm Income Share Class and by Vegetable Acreage Class

	Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
<b>By Off-Farm Income Share</b>						
0%	12	\$2,074,943	8	\$855,426	7	\$68,649
1-10%	47	\$1,834,331	31	\$2,374,258	27	\$494,815
11-20%	25	\$1,450,183	19	\$1,458,500	11	\$713,273
21-30%	18	\$369,111	16	\$489,875	7	\$195,714
31-40%	9	\$233,850	5	\$406,400	4	\$218,750
41-50%	29	\$293,362	20	\$696,400	17	\$214,765
51-60%	7	\$158,909	6	\$174,500	–	–
61-70%	8	\$82,625	6	\$417,000	4	\$81,250
71-80%	15	\$232,572	9	\$621,000	5	\$162,600
81-90%	12	\$53,190	6	\$729,167	4	\$20,125
91-100%	23	\$212,901	13	\$691,154	7	\$44,286
<b>By Acreage Class (Vegetable Acres)</b>						
0-10	100	\$84,562	59	\$489,542	32	\$136,500
11-20	44	\$143,713	27	\$610,815	19	\$222,000
21-30	11	\$239,031	9	\$595,956	6	\$185,833
31-40	10	\$222,348	6	\$235,000	6	\$60,500
41-50	9	\$284,530	–	–	–	–
51-60	6	\$475,032	5	\$464,000	5	\$184,000
61-70	7	\$275,834	8	\$985,875	4	\$134,500
71-80	12	\$277,050	8	\$718,750	5	\$56,400
81-90	3	\$118,333	3	\$550,000	3	\$40,000
91-100	9	\$720,000	4	\$487,500	4	\$131,250
101-200	27	\$612,080	17	\$1,098,706	14	\$357,214
201-500	53	\$1,675,760	29	\$2,014,137	19	\$770,947
501-1,000	49	\$2,104,033	34	\$2,311,247	26	\$871,252
1,000 and Greater	41	\$4,342,697	25	\$4,766,700	21	\$1,493,637

## Ornamentals

### Or.A1–A2. Size and Regional Profile

Table Or.A1. Size and Regional Profile – Number of Farms and Average Ornamental Acres per Farm by Region and Crop

	Observations (n)	Distribution	Mean Ornamental Acres	Standard Deviation
<b>By Region</b>				
Far North	33	4%	93	290
North Coast	85	9%	4	7
Central Coast – North	151	16%	14	60
Central Coast – South	101	11%	36	139
South Coast	319	34%	15	64
Sacramento Valley	51	5%	20	57
San Joaquin – North	31	3%	142	369
San Joaquin – Central	23	2%	9	14
San Joaquin – South	26	3%	86	209
Sierra Nevada	64	7%	10	16
Desert	52	6%	26	67
<b>By Crop</b>				
Floriculture	226	24%	14	38
Nursery	624	67%	30	141
Christmas Trees	86	9%	18	25

Table Or.A2. Size and Regional Profile – Distribution of Farms by Region/Crop and by Ornamental Acreage

	Floriculture		Nursery		Christmas Trees			
	Obs. (n)	Dist.	Obs. (n)	Dist.	Obs. (n)	Dist.		
<b>By Region</b>								
Far North	6	3%	21	3%	6	7%		
North Coast	12	5%	61	10%	12	14%		
Central Coast – North	59	26%	78	13%	14	16%		
Central Coast – South	32	14%	67	11%	–	–		
South Coast	82	36%	229	37%	8	9%		
Sacramento Valley	10	4%	36	6%	5	6%		
San Joaquin – North	5	2%	24	4%	–	–		
San Joaquin – Central	–	–	20	3%	–	–		
San Joaquin – South	3	1%	19	3%	4	5%		
Sierra Nevada	9	4%	26	4%	29	34%		
Desert	7	3%	43	7%	–	–		
	Obs. (n)	Dist.	Cumul. Percent	Obs. (n)	Dist.	Cumul. Percent	Obs. (n)	Dist.
<b>By Acreage Class (Acres of Ornamentals)</b>								
0–1	53	24%	24%	213	35%	35%	–	–
1–5	90	41%	64%	204	33%	68%	17	20%
5–10	28	13%	77%	60	10%	78%	35	41%
10–25	26	12%	89%	55	9%	87%	17	20%
25–50	12	5%	94%	31	5%	92%	10	12%
50–100	8	4%	98%	20	3%	95%	5	6%
100 and Greater	5	2%	100%	32	5%	100%	–	–
Total	222	100%		615	100%		86	100%

Note: Cells with less than three observations are indicated by “–”.

**Or.B1. Crop Diversification**

Table Or.B1. Crop Diversification – Crop Diversification Patterns and Number of Organic Farms by Crop

<b>Crop Diversification Patterns</b>	<b>Observations (n)</b>	<b>Percent</b>		
Floriculture Only	194	23%		
Nursery Only	573	67%		
Christmas Trees Only	74	9%		
Floriculture/Nursery	11	1%		
Nursery/Christmas Trees	–	–		
<b>Number of Organic Farms</b>	<b>Observations (n)</b>	<b>Number of Organic Farms</b>	<b>Percent Organic</b>	
Total	936	48	5%	
Floriculture	226	15	7%	
Nursery	624	25	4%	
Christmas Trees	86	8	9%	

## Or.C1. Marketing

Table Or.C1. Marketing – Number of Farms by Use (Processing versus Fresh) and Operation (Grower/Shipper versus Grower Only)

Number of Farms by Use	Observations (n)	Average Volume Share (Percent) Designated	
Processing	12	50.0%	
Fresh	910	99.9%	

  

Distribution of Grower/Shippers versus Growers Only	Total Number of Farms	Grower/Shippers	Growers Only
<b>All Ornamentals</b>			
Observations (n)	871	99	772
Row Percent		11%	89%
<b>Floriculture</b>			
Observations (n)	214	24	190
Row Percent		11%	89%
<b>Nursery</b>			
Observations (n)	578	75	503
Row Percent		13%	87%
<b>Christmas Trees</b>			
Observations (n)	79	0	79
Row Percent		0%	100%

  

Average Output Share Sold by Grower/Shippers at Predetermined Price
There were only two grower/shippers who sold crops at predetermined prices. Marketing channel information was very scanty and could not be presented.

**Or.D1–D2. Yield, Price, and Profit Fluctuations**

Table Or.D1. Yield, Price, and Profit Fluctuation – Largest Yield, Price, and Profit Fluctuations for Last Five Years: Number of Farms per Fluctuation Range by Crop

Fluctuation Range (Percent)	Yield		Price		Profit	
	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms	No. of Obs.	Percent of Farms
<b>All Ornamental Crops</b>						
0–9	351	51%	407	60%	328	49%
10–24	171	25%	159	24%	187	28%
25–49	79	11%	64	10%	96	14%
50–74	48	7%	26	4%	39	6%
75 or More	43	6%	18	3%	21	3%
Total	692	100%	674	100%	671	100%
<b>Floriculture</b>						
0–9	77	45%	83	51%	58	37%
10–24	43	25%	41	25%	42	27%
25–49	26	15%	24	15%	34	22%
50–74	14	8%	12	7%	15	9%
75 or More	10	6%	3	2%	9	6%
Total	170	25%	163	24%	158	24%
<b>Nursery</b>						
0–9	246	53%	289	63%	240	53%
10–24	114	25%	104	23%	130	28%
25–49	42	9%	36	8%	53	12%
50–74	33	7%	14	3%	23	5%
75 or More	27	6%	14	3%	11	2%
Total	462	67%	457	68%	457	68%
<b>Christmas Trees</b>						
0–9	28	47%	35	65%	30	54%
10–24	14	23%	14	26%	15	27%
25–49	11	18%	4	7%	9	16%
50–74	1	2%	0	0%	1	2%
75 or More	6	10%	1	2%	1	2%
Total	60	9%	54	8%	56	8%

Table Or.D2. Yield, Price, and Profit Fluctuations – Main Cause for Lowest Profit by Region and Crop

	Total No. Obs. that Answered	Main Cause for Lowest Profit (Percent of Farmers Who Answered)						
		Poor Yield	Poor Quality	High Input Cost	Low Market Price due to High Domestic Prod'n	Low Market Price due to Increased Imports	Inability to Market a Crop due to Quarantine	Other
<b>All Ornamental Crops</b>								
Observations (n)	823	101	46	156	121	121	5	273
Row Percent		12%	6%	19%	15%	15%	1%	33%
<b>By Region</b>								
Far North	28	21%	11%	14%	18%	4%	0%	32%
North Coast	75	17%	5%	23%	8%	5%	0%	41%
Central Coast – North	134	10%	1%	17%	13%	34%	0%	25%
Central Coast – South	90	18%	9%	20%	17%	17%	0%	20%
South Coast	283	8%	7%	20%	20%	15%	2%	27%
Sacramento Valley	45	7%	0%	22%	4%	4%	0%	62%
San Joaquin – North	28	14%	11%	11%	18%	7%	0%	39%
San Joaquin – Central	22	14%	5%	23%	14%	9%	0%	36%
San Joaquin – South	21	19%	14%	29%	0%	10%	0%	29%
Sierra Nevada	56	18%	2%	11%	9%	4%	0%	57%
Desert	41	15%	5%	15%	12%	5%	0%	49%
<b>By Crop</b>								
Floriculture	209	11%	6%	13%	15%	37%	0%	18%
Nursery	541	12%	5%	22%	15%	7%	1%	38%
Christmas Trees	73	21%	8%	12%	10%	4%	0%	45%

**Or.E1–E5. Risk Management****Table Or.E1. Risk Management – Ranking of Risk Sources (in Order of Importance): Mean Ranking by Crop and Distribution of Ranks by Risk Source**

	Mean Ranking of Risk Sources										
	Adverse Temper- ature	Floods	Drought	Disease	Irrig. Water Supply Problems	Input Price Fluctu- ation	Output Price Fluctu- ation	Pests	Quar- antine	Hail	
<b>All Ornamental Crops</b>											
Mean Ranking	2.2	6.7	4.1	3.2	4.3	3.5	3.0	3.1	7.2	6.8	
Observations that Provided Ranks	658	273	347	481	362	464	519	550	264	296	
<b>By Crop</b>											
<b>Floriculture</b>											
Mean Rank	2.2	6.5	4.7	3.1	4.3	3.1	2.3	3.0	7.8	6.4	
Obs. (n)	161	62	79	112	84	114	150	116	51	67	
<b>Nursery</b>											
Mean Rank	2.0	7.0	4.7	3.6	4.3	3.3	3.0	3.4	6.5	6.7	
Obs. (n)	439	184	224	320	243	312	336	381	191	207	
<b>Christmas Trees</b>											
Mean Rank	2.4	6.8	3.1	2.8	4.4	4.1	3.8	3.1	7.2	7.1	
Obs. (n)	58	27	44	49	35	38	33	53	22	22	
<b>Rank Distribution</b>											
<b>Rank</b>	n =	658	273	347	481	362	464	519	550	264	296
1	56%	4%	12%	14%	17%	22%	36%	17%	3%	5%	
2	18%	10%	18%	24%	13%	24%	22%	24%	6%	8%	
3	11%	4%	12%	22%	14%	15%	13%	22%	5%	8%	
4	6%	7%	10%	15%	12%	14%	9%	15%	8%	6%	
5	5%	7%	13%	9%	12%	8%	6%	12%	8%	6%	
6	2%	8%	9%	7%	12%	6%	5%	4%	9%	6%	
7 and Greater	3%	61%	26%	8%	20%	11%	10%	7%	61%	60%	
Total	100%	100%	100%	100%	100%	100%	101%	100%	100%	100%	

Table Or.E2. Risk Management – Ranking of Selected Risk Sources That May Be Specific to Region: Mean Ranking by Region

Region		Mean Ranking of Risk Sources		
		Drought	Irrigation Water Supply Problems	Hail
Far North	Mean Rank	5.1	3.9	6.9
	Observations (n)	12	13	11
North Coast	Mean Rank	3.7	4.0	6.6
	Observations (n)	36	42	30
Central Coast – North	Mean Rank	4.7	4.2	6.6
	Observations (n)	52	50	47
Central Coast – South	Mean Rank	5.0	5.1	8.0
	Observations (n)	39	43	36
South Coast	Mean Rank	4.1	4.0	6.4
	Observations (n)	111	114	92
Sacramento Valley	Mean Rank	4.8	5.1	6.0
	Observations (n)	21	20	23
San Joaquin – North	Mean Rank	6.7	4.4	7.6
	Observations (n)	8	11	8
San Joaquin – Central	Mean Rank	4.7	4.9	4.2
	Observations (n)	8	11	10
San Joaquin – South	Mean Rank	5.7	6.0	7.8
	Observations (n)	100	11	8
Sierra Nevada	Mean Rank	3.8	3.8	5.8
	Observations (n)	37	35	23
Desert	Mean Rank	5.0	3.9	9.2
	Observations (n)	13	12	8

Table Or.E3. Risk Management – Preference for Risk Management Tools: Mean Ranking by Region and Crop

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Ornamental Crops</b>								
Mean Ranking	3.4	3.7	2.1	4.7	6.0	3.8	2.4	2.1
Observations (n)	332	237	406	230	159	225	393	215
<b>By Region</b>								
<b>Far North</b>								
Mean Rank	4.3	3.5	2.4	4.2	6.3	3.4	2.3	1.2
Observations (n)	9	11	14	12	7	11	16	10
<b>North Coast</b>								
Mean Rank	2.9	4.1	2.1	5.6	6.7	3.8	2.6	2.1
Observations (n)	30	18	36	17	13	17	39	17
<b>Central Coast – North</b>								
Mean Rank	3.1	4.5	2.1	4.0	6.2	4.0	2.7	2.6
Observations (n)	66	37	72	43	28	43	73	39
<b>Central Coast – South</b>								
Mean Rank	2.8	2.8	1.8	5.0	5.8	3.9	2.7	3.0
Observations (n)	39	33	59	23	17	27	44	21
<b>South Coast</b>								
Mean Rank	3.6	3.2	1.9	4.7	5.9	3.8	2.2	1.9
Observations (n)	95	73	126	72	45	64	119	76
<b>Sacramento Valley</b>								
Mean Rank	4.2	4.6	1.8	4.8	5.8	4.5	2.5	1.5
Observations (n)	15	16	23	16	11	11	22	17
<b>San Joaquin – North</b>								
Mean Rank	2.8	4.3	2.3	5.6	5.6	3.2	2.3	4.0
Observations (n)	16	8	11	9	8	9	12	6
<b>San Joaquin – Central</b>								
Mean Rank	2.8	4.3	2.3	5.6	5.6	3.2	2.3	4.0
Observations (n)	16	8	11	9	8	9	12	6
<b>San Joaquin – South</b>								
Mean Rank	3.1	2.8	2.2	5.3	4.5	3.3	2.0	2.2
Observations (n)	9	4	9	3	2	4	9	6

*continued on following page*

Table Or.E3. Continued

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>By Region (continued)</b>								
<b>Sierra Nevada</b>								
Mean Rank	3.4	4.8	3.1	4.8	6.8	3.5	3.4	7.0
Observations (n)	17	11	14	11	10	13	15	2
<b>Desert</b>								
Mean Rank	3.0	3.8	2.8	4.9	5.6	3.4	2.0	1.3
Observations (n)	17	10	18	11	7	11	19	8
<b>By Crop</b>								
<b>Floriculture</b>								
Mean Rank	3.1	3.4	1.8	4.2	5.9	4.0	2.4	2.2
Observations (n)	85	62	113	63	38	53	100	49
<b>Nursery</b>								
Mean Rank	3.4	3.6	2.1	4.9	6.0	3.6	2.4	2.1
Observations (n)	225	162	268	152	109	159	267	143
<b>Christmas Trees</b>								
Mean Rank	4.2	5.9	2.4	5.0	6.7	5.9	2.6	2.3
Observations (n)	22	13	25	15	12	13	26	23

Table Or.E4. Risk Management – Availability and Utilization of Risk Management Tools: Rates of Availability and Utilization and Mean Ranking of Preference by Crop

	Mean Ranking of Risk Management Tools							
	Crop Insurance	Different Regions	Multiple Commodities	Government Programs	Hedging with Futures or Options	Forward Contracting	Diversified Marketing	Other
<b>All Ornamental Crops (Total Observations = 936)</b>								
Obs. with Availability	164	107	260	42	21	83	242	35
Availability Rate <sup>a</sup>	18%	11%	28%	4%	2%	9%	26%	4%
Utilization Rate <sup>b</sup>	37%	45%	78%	36%	19%	66%	73%	74%
Mean Ranking	3.0	3.0	1.6	3.9	4.9	2.8	2.1	2.1
<b>By Crop</b>								
<b>Floriculture (Total Observations = 226)</b>								
Obs. with Availability	33	31	83	8	4	19	67	7
Availability Rate	15%	14%	37%	4%	2%	8%	30%	3%
<b>Nursery (Total Observations = 624)</b>								
Obs. with Availability	122	70	165	31	16	64	160	26
Availability Rate	67%	11%	26%	5%	3%	10%	26%	4%
<b>Christmas Trees (Total Observations = 86)</b>								
Obs. with Availability	9	6	12	3	1	0	15	2
Availability Rate	10%	7%	14%	3%	1%	0%	17%	2%

<sup>a</sup> Availability rates were calculated as a ratio of the number of observations with availability to the total number of observations.

<sup>b</sup> Utilization rates were calculated based on the number of observations with availability. Utilization rates by crop are not provided due to too few number of observations that utilized the tool.

Table Or.E5. Risk Management – Status of Receipt of Government Disaster Payments or Loans by Crop

	Total Observations	Receipt of Government Disaster Payments or Loans		
		Received	Not Qualified	Unaware
<b>All Ornamental Crops</b>				
Observations (n)	839	58	405	376
Row Percent		7%	48%	45%
<b>By Crop</b>				
<b>Floriculture</b>				
Observations (n)	205	19	106	80
Row Percent		9%	52%	39%
<b>Nursery</b>				
Observations (n)	560	36	273	251
Row Percent		6%	49%	45%
<b>Christmas Trees</b>				
Observations (n)	74	3	26	45
Row Percent		4%	35%	61%

**Or.F1–F6. Crop Insurance**

Table Or.F1. Crop Insurance (Any) Purchase – Purchase History and Average Number of Purchases for the Last Five Years by Crop

Purchased Crop Insurance in Last Five Years		No. of Years Purchased	Observations	Distribution
<b>Yes</b>		1	16	13%
Observations	123	2	12	10%
Distribution	13%	3	25	21%
<b>No</b>		4	10	8%
Observations	797	5	58	48%
Distribution	87%			

**Mean Number of Purchases by Crop for the Last Five Years by Vegetable Category**

	Observations	Average Years
Floriculture	19	3.8
Nursery	99	3.6
Christmas Trees	3	4.3

Table Or.F2. Crop Insurance – Number of Farmers Who Purchase Single-Peril Insurance against a Specific Peril by Crop

	Total Number of Farmers	Peril			
		Fire	Frost or Freeze	Rain	Hail
<b>All Ornamental Crops</b>					
Observations (n)	936	39	29	26	24
Percent		4%	3%	3%	3%
<b>By Crop</b>					
<b>Floriculture</b>					
Observations (n)	226	9	3	4	4
Percent		4%	1%	2%	2%
<b>Nursery</b>					
Observations (n)	624	29	26	22	20
Percent		5%	4%	4%	3%
<b>Christmas Trees</b>					
Observations (n)	86	–	0	0	0
Percent		–	0%	0%	0%

Table Or.F3. Crop Insurance – Mean Ranking and Distribution of Reasons for Purchasing Crop Insurance

	Risk of Crop Loss Was High	Expected Water Supplies to Be Cut Back	Insurance Req'd to Qualify for Other USDA Programs	Expected to Receive Lower Prices for Crops	Bank or Other Lender Required Insurance	Other
<b>All Ornamental Crops<sup>a</sup></b>						
Mean Ranking	1.5	3.0	3.0	2.7	2.7	1.2
No. of Observations that Provided Ranks	73	27	25	31	32	80

<sup>a</sup> Due to too few observations, we do not provide the means for a further disaggregated level.

Table Or.F4. Crop Insurance – Mean Ranking of Reasons for Not Purchasing Crop Insurance by Crop

	Not Available for My Crop	Major Source of Risk Not Insured Cause of Loss	Too Much Paper-work to Apply	Never Lost Enough Prod'n or Revenue to File Claim	Premium Cost Too High	Couldn't Find Know-ledgable Insurance Agent	Do Not Understand Crop Insurance Program	Other
<b>All Ornamental Crops</b>								
Mean Rank	1.9	2.7	3.3	1.9	2.3	3.5	2.8	1.6
Total obs. (n)	366	187	164	297	268	147	264	182
<b>By Crop</b>								
<b>Floriculture</b>								
Mean Rank	1.7	2.7	3.1	2.1	2.0	3.3	2.6	1.7
Obs. (n)	101	38	42	64	64	37	75	39
<b>Nursery</b>								
Mean Rank	2.0	2.8	3.3	1.9	2.4	3.5	2.8	1.6
Obs. (n)	224	132	111	215	181	99	166	130
<b>Christmas Trees</b>								
Mean Rank	1.7	2.1	4.0	2.1	2.7	4.4	3.3	1.0
Obs. (n)	41	17	11	18	23	11	23	13

Table Or.F5. Crop Insurance – Mean Ranking of Suggestions to Modify Crop Insurance by Crop

	Compensate for a Higher Level of Production Loss	Compensate for a Loss of Gross Sales	Compen- sate for a Loss of Profit	Guaran- tee Cash Production Costs	Guaran- tee Costs of Establishing Orchard or Vineyard	Guarantee Replace- ment Costs of a Crop Inventory	Other
<b>All Ornamental Crops</b>							
Mean Ranking	2.7	2.3	2.5	3.0	3.8	2.3	1.2
Obs. (n) that Provided Ranks	213	228	210	204	148	261	307
<b>By Crop</b>							
<b>Floriculture</b>							
Mean Rank	2.7	2.2	2.5	2.9	3.8	2.7	1.2
Obs. (n)	56	64	57	56	36	60	83
<b>Nursery</b>							
Mean Rank	2.5	2.3	2.5	3.1	4.1	2.2	1.2
Obs. (n)	142	144	136	130	93	181	200
<b>Christmas Trees</b>							
Mean Rank	4.4	2.5	3.2	3.0	2.8	2.8	1.3
Obs. (n)	15	20	17	18	19	20	24

Table Or.F6. Crop Insurance – Importance of Risk Management and Familiarity with Crop Insurance Compared with Five Years Ago

	Response	Risk Management Is Becoming More Important		Becoming More Familiar with Crop Insurance	
		Obs. (n)	Percent of Farms	Obs. (n)	Percent of Farms
<b>All Ornamental Crops</b>					
	Yes	314	37%	244	29%
	No	536	63%	609	71%
<b>By Crop</b>					
Floriculture	Yes	81	39%	48	23%
	No	127	61%	162	77%
Nursery	Yes	213	37%	186	33%
	No	357	63%	384	67%
Christmas Trees	Yes	20	28%	10	14%
	No	52	72%	63	86%

**Or.G1–G3. Financial Characteristics****Table Or.G1. Financial Characteristics – Off-Farm Income Share (Percent), Gross Agricultural Sales, Assets, and Debts: Mean Values by Region and Crop**

	Off-Farm Income Share		Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (%)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
All Ornamental Crops	530	61%	815	\$814,287	512	\$1,574,914	529	\$394,742
<b>By Region</b>								
Far North	21	66%	28	\$2,070,078	17	\$2,882,587	17	\$204,269
North Coast	55	61%	68	\$219,222	39	\$422,661	41	\$42,740
Central Coast – North	75	48%	135	\$778,141	84	\$1,240,994	85	\$290,453
Central Coast – South	47	54%	87	\$1,787,237	54	\$3,632,727	55	\$1,109,930
South Coast	181	63%	284	\$661,278	167	\$1,124,109	176	\$277,226
Sacramento Valley	33	72%	43	\$416,638	26	\$382,143	26	\$39,584
San Joaquin – North	14	51%	26	\$1,933,373	19	\$7,546,150	20	\$1,180,731
San Joaquin – Central	12	63%	21	\$545,467	14	\$620,116	14	\$60,830
San Joaquin – South	15	59%	24	\$1,260,646	18	\$3,017,235	18	\$2,044,263
Sierra Nevada	51	74%	57	\$105,811	45	\$347,893	46	\$87,641
Desert	26	64%	42	\$631,146	29	\$716,276	31	\$88,500
<b>By Crop</b>								
Floriculture	133	64%	209	\$646,808	120	\$1,406,897	126	\$316,624
Nursery	325	58%	528	\$995,038	337	\$1,798,894	348	\$480,546
Christmas Trees	72	71%	78	\$39,500	55	\$569,115	55	\$30,796

Table Or.G2. **Financial Characteristics – Distribution of Off-Farm Income Shares and Gross Agricultural Sales**

	<b>Observations (n)</b>	<b>Distribution (Percent)</b>	<b>Cumulative Percent</b>
<b>Range of Off-Farm Income Shares</b>			
1-10%	62	12%	14%
11-20%	35	7%	21%
21-30%	30	6%	27%
31-40%	22	4%	31%
41-50%	67	13%	43%
51-60%	19	4%	47%
61-70%	20	4%	51%
71-80%	70	13%	64%
81-90%	60	11%	75%
91-100%	133	25%	100%
<b>Range of Gross Agricultural Sales (in \$1,000)</b>			
0-10	166	20%	20%
10-50	178	22%	42%
50-100	113	14%	56%
100-500	188	23%	79%
500-1,000	59	7%	86%
1,000-2,000	48	6%	92%
2,000-5,000	36	4%	97%
5,000 and Greater	27	3%	100%

Table Or.G3. Financial Characteristics – Mean Agricultural Sales, Mean Assets, and Mean Debts by Off-Farm Income Share Class and Ornamental Acreage Class

	Gross Agricultural Sales		Assets		Debts	
	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)	Obs. (n)	Mean (\$)
<b>By Off-Farm Income Share</b>						
0%	12	\$2,156,061	6	\$9,131,871	7	\$5,209,203
1-10%	57	\$1,738,435	43	\$3,240,704	44	\$957,232
11-20%	34	\$868,814	22	\$1,078,161	23	\$259,062
21-30%	30	\$490,219	20	\$698,502	21	\$87,037
31-40%	21	\$570,741	15	\$1,173,460	15	\$207,000
41-50%	64	\$1,036,283	44	\$1,874,909	46	\$218,087
51-60%	18	\$172,617	15	\$741,200	15	\$93,533
61-70%	20	\$67,499	16	\$331,563	16	\$15,000
71-80%	70	\$104,425	47	\$492,085	48	\$48,658
81-90%	55	\$30,892	32	\$424,545	34	\$75,015
91-100%	118	\$137,384	77	\$557,688	77	\$98,000
<b>By Acreage Class (Acres in Ornamentals)</b>						
0-10	220	\$45,917	138	\$245,089	146	\$24,928
11-20	276	\$223,414	173	\$619,154	181	\$94,627
21-30	113	\$370,110	67	\$916,362	68	\$97,242
31-40	82	\$1,104,444	56	\$1,476,823	58	\$431,466
41-50	47	\$2,091,670	29	\$2,696,724	29	\$853,552
51-60	31	\$2,891,679	18	\$2,084,061	18	\$596,507
61-70	34	\$7,734,728	24	\$16,079,326	24	\$4,860,786

## Aquaculture

Table Aq.1. **Profile and Marketing – Regional Distribution, Years of Farming, Organic Farms, Number of Farms by Use (Processing versus Fresh), and Marketing Channels**

<b>Regional Distribution</b>	<b>Observations (n)</b>	<b>Distribution</b>
Far North + North Coast + Sierra Nevada	9	22%
Central Coast North + Sacramento Valley	9	22%
San Joaquin Valley (North + Central + South)	15	37%
South Coast + Desert	8	20%
<b>Years of Farming</b>	<b>Observations (n)</b>	<b>Mean</b>
Average Years of Farming	40	18.4
<b>Number of Farms by Use</b>	<b>Observations (n)</b>	<b>Mean</b>
Processing	0	–
Fresh	41	100
<b>Marketing Channels</b>	<b>Observations (n)</b>	<b>Average Volume Share</b>
Direct to Consumers	6	64%
Marketing Cooperative	–	–
Independent Shipper/Broker	6	85%
Direct to Commercial Buyers	15	90%
Other	5	62%

Table Aq.2. **Largest Yield, Price, and Profit Fluctuations: Number of Farms by Fluctuation Range**

<b>Fluctuation Range (Percent)</b>	<b>Yield</b>		<b>Price</b>		<b>Profit</b>	
	<b>No. of Obs.</b>	<b>Percent of Farms</b>	<b>No. of Obs.</b>	<b>Percent of Farms</b>	<b>No. of Obs.</b>	<b>Percent of Farms</b>
0–9	11	48%	10	45%	6	30%
10–24	5	22%	8	36%	7	35%
25–49	–	–	3	14%	3	15%
50–74	4	17%	–	–	–	–
75 or More	–	–	–	–	–	–
Total	20		21		16	

Table Aq.3. **Risk Management and Crop Insurance – Risk Sources, Risk Management Tools, Government Disaster Payments and Loans, Reasons for Not Purchasing Crop Insurance, and Suggestions to Modify Crop Insurance**

	Observations (n)	Mean Ranking	Rate of Availability
<b>Risk Sources</b>			
Adverse Temperature	22	2.7	
Floods	12	5.1	
Drought	15	4.7	
Disease	21	2.3	
Irrigation Water Supply Problems	15	4.0	
Input Price Fluctuation	13	3.3	
Output Price Fluctuation	16	3.3	
Pests	20	2.6	
Quarantine	10	6.8	
Hail	9	8.7	
<b>Risk Management Tools</b>			
Crop Insurance	16	3.0	15%
Locating Production in Different Regions	12	3.3	15%
Diversification into Multiple Commodities	13	2.5	17%
Government Programs	12	5.4	< 5%
Hedging with Futures or Options	9	5.7	< 5%
Forward Contracting	11	4.5	< 5%
Diversified Marketing	13	2.9	< 5%
Other	15	2.5	< 5%
<b>Government Disaster Payments or Loans</b>			
Received	5	14%	
Not Qualified	12	34%	
Unaware	18	51%	
<b>Reasons for Not Purchasing Crop Insurance</b>			
Not Available for My Crop	17	1.3	
Major Source of Risk Not an Insured Cause of Loss	8	2.1	
Too Much Paperwork to Apply	5	4.8	
Never Lost Enough Production or Revenue to File Claim	6	3.8	
Premium Cost Too High	11	2.0	
Could Not Find Knowledgeable Insurance Agent	7	3.6	
Do Not Understand Crop Insurance Program	11	3.3	
Other	7	2.0	

*continued on following page*

Table Aq.3. **Continued**

	<b>Observations (n)</b>	<b>Mean Ranking</b>	<b>Rate of Availability</b>
<b>Ranking of Suggestions to Modify Crop Insurance</b>			
Compensate for a Higher Level of Production Loss	11	2.9	
Compensate for a Loss of Gross Sales	10	2.3	
Compensate for a Loss of Profit	9	2.0	
Guarantee Cash Production Costs	6	3.0	
Guarantee Costs of Establishing an Orchard or Vineyard	2	7.0	
Guarantee Replacement Costs of a Crop Inventory	11	1.6	
Other	17	1.6	

Table Aq.4. **Financial Characteristics – Off-Farm Income Share (Percent), Gross Agricultural Sales, Assets, and Debts**

	<b>Observations (n)</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Median</b>
<b>By Region</b>				
Off-Farm Income Share	25	56%	40	48%
Gross Sales of Agricultural Products (\$)	32	\$776,274	\$1,778,045	\$300,000
Assets (\$)	23	\$5,357,832	\$20,687,389	–
Debts (\$)	23	\$139,087	\$218,406	–



## APPENDIX 3 Survey Questionnaire

### Risk Management Survey of Specialty Crop Producers California – 2001 Crop Year

OMB No. 0563-0059  
Approval Expires 02/05

1. How many acres are in your current farming operation? 001  
(whole number) Acres

2. In what county was the largest value of your agricultural products produced? 002  
County

3. How many years have you been farming/ranching? 004  
Years

4. Please list MAJOR crops grown, acreage, and the approximate **percentage** of the total gross sales of each individual crop produced in 2001. (For nursery and greenhouse crops, please indicate if area is in square footage.)

Crop	Acreage	Percent of Total Sales
005	006	007 %
008	009	010 %
011	012	013 %
014	015	016 %
017	018	019 %
020	021	022 %

5. Did you produce any specialty crops as organic or transitional organic in 2001?

YES - *continue*       NO - *go to Question 6*

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023

a. Please list the MAJOR organic or transitional organic crops grown in 2001.

Crop	Total Crop Acres	Organic Acres	Transitional Acres
024	025	026	027
028	029	030	031
032	033	034	035
036	037	038	039
040	041	042	043
044	045	046	047

\*\*\* INSTRUCTIONS: \*\*\* Questions 6-11 concern your **primary specialty crop**.  
(The primary specialty crop is defined as the one with the highest percentage of sales.)

6. What is your primary specialty crop? 048

a. How much of your **primary specialty crop** is used for:

Processing 049 %  
 Fresh Market (include ornamentals) 050 %  
100%

b. What percentage of your primary **processed** specialty crop is marketed through the following outlets?

(If none, write zero.)

1. Marketing cooperative	051 %
2. Sold to a processor under contract with a predetermined price	052 %
3. Sold to a processor under contract without a predetermined price	053 %
4. Spot market	054 %
5. Participation Plan	055 %
6. Other (specify): _____	056 %

100%

7. If you produce for fresh market, are you a grower-shipper or a grower only?

- Grower-shipper - complete 7a, then go to Question 9  Grower only - go to Question 8

OFFICE USE	
057	

a. What percentage of your volume is sold with a predetermined price (negotiated with retail or food service buyers)? .....

058	%
-----	---

8. If you are a grower only and produce for the **fresh market**, what percentage of your volume is delivered to the following marketing channels?

- a. Directly to consumers (farmers markets, roadside stands, U-pick) .....
- b. Marketing cooperative .....
- c. Independent shipper/broker .....
- d. Directly to commercial buyers (wholesalers, retailers, restaurants) .....
- e. Other (specify): \_\_\_\_\_ .....

059	%
060	%
061	%
062	%
063	%
100%	

9. What was your actual yield per acre for your primary specialty crop for each of the last five years? (Please answer in whole numbers. If you do not remember exactly, provide approximate numbers.) **Nursery/Greenhouses, please skip to question 10.**

Year	Actual Yield Per Acre	Unit	Unit Weight in Pounds
2001	064	065	066
2000	067	068	069
1999	070	071	072
1998	073	074	075
1997	076	077	078

10. For your primary specialty crop over the last five years, please indicate the largest fluctuation from your five-year average.

Item	Check (✓) only 1 percentage range for each item.				
	Less than 10%	10-24%	25-49%	50-74%	75-100%
a. Annual yield per acre .....	079	080	081	082	083
b. Annual average price .....	084	085	086	087	088
c. Profit (after deducting production and marketing expenses from revenue) ..	089	090	091	092	093

11. What was the **main** cause of your lowest profit from your primary specialty crop over the last five years?

- a. Poor yield per acre .....
- b. Poor quality .....
- c. High input costs .....
- d. Low market price due to high domestic production .....
- e. Low market price due to increased imports .....
- f. Inability to market a crop due to quarantine .....
- g. Other (specify): \_\_\_\_\_ .....

(Please check (✓) only 1 box.)	
094	
095	
096	
097	
098	
099	
100	

\*\*\* REMAINDER OF THE QUESTIONS REFER TO YOUR ENTIRE FARM OPERATION \*\*\*

12. Please rank the following sources of risk in terms of their effect on your net farm income.

	(Rank according to: 1=most effect, 2=next in degree of effect, etc.)
a. Adverse temperature (heat, frost, etc.)	101
b. Floods	102
c. Drought	103
d. Disease	104
e. Irrigation water supply problems	105
f. Input price fluctuation	106
g. Output price fluctuation (low price/no market)	107
h. Pests (insects, wildlife, etc.)	108
i. Quarantine	109
j. Hail	110

13. Please rank the risk management tools in the order of your preference. Also, check the risk management tools available and those used.

Risk Management Tools	Preference Rank (Rank according to: 1=most preferred, 8=least preferred)	Available	Used
a. Crop insurance	111	112	113
b. Locating production in different regions	114	115	116
c. Diversification into multiple commodities	117	118	119
d. Government programs	120	121	122
e. Hedging with futures or options	123	124	125
f. Forward contracting	126	127	128
g. Diversified marketing	129	130	131
h. Other (specify): _____	132	133	134

14. Have you ever received government disaster payments or loans?

(Please check (✓) only 1 box.)

a. Yes	150
b. No, I wasn't qualified	151
c. No, I am not aware of such programs	152

15. Have you purchased any crop insurance within the past five years?

YES - continue       NO - go to Question 18

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a. How many of the last five years? \_\_\_\_\_ Years

154
-----

16. Have you purchased any private crop insurance for damage from:

(Please check (✓) all that apply.)

a. Fire	155
b. Frost or freeze	156
c. Rain	157
d. Hail	158
e. Other causes (specify): _____	159
f. None	160

17. Please rank the reasons why you purchased crop insurance.

Reasons	(Rank according to: 1=most important, 2=next most important, etc.)
a. Risk of crop loss was high .....	161
b. Expected water supplies to be cut back .....	162
c. Insurance was required to qualify for other USDA programs .....	163
d. Expected to receive lower prices for my crops .....	164
e. Bank or other lender required insurance .....	165
f. Other (specify): _____	166

18. In the most recent year that you did not purchase crop insurance, please rank the reasons for not participating in a crop insurance program?

	(Rank according to: 1=most important, 2=next most important, etc.)
a. Not available for my crop .....	167
b. Major source of risk is not an insured cause of loss .....	168
c. Too much paperwork to apply .....	169
d. Have never lost enough production or revenue to file a claim .....	170
e. Premium cost is too high .....	171
f. Could not find a knowledgeable insurance agent .....	172
g. Do not understand the crop insurance program .....	173
h. Other (specify): _____	175

19. How could the crop insurance program better serve your needs?

	(Rank according to: 1=most important, 2=next most important, etc.)
a. Compensate for a higher level of production loss ( <i>more than 75%</i> ) .....	176
b. Compensate for a loss of gross sales .....	177
c. Compensate for a loss of profit .....	178
d. Guarantee cash production costs .....	179
e. Guarantee costs of establishing an orchard or vineyard .....	180
f. Guarantee replacement costs of a crop inventory .....	181
g. Other (specify): _____	183

20. Has risk management become more important to your business in the last five years? .....

YES	NO
184	185
186	187

21. Are you more familiar with crop insurance than you were five years ago? .....

22. How many risk management education meetings or seminars have you attended over the last five years? .....

Number	188
--------	-----

23. What percentage of your household's total income in 2001 was from non-farm activities? .....

Percent	189
---------	-----

24. What was your total **GROSS** sales of all agricultural commodities in 2001? .....

Dollars	190
---------	-----

25. What is the approximate current value of your operation's:

a. Assets .....	Dollars	191
b. Debts .....	Dollars	192

Reported by: \_\_\_\_\_

Phone: \_\_\_\_\_ Date: \_\_\_\_\_

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