

## Appendix E: Sensitivity Results

Scenario One

<b>Without IPM and without risk restrictions</b>					
Returns = \$JM1,054,520	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	10.00	0.00	-5000	564586.4666	15739.99988
Grow Pepper - IPM	0.00	-71301.97	-105099	71301.97002	1E+30
Grow corn	0.00	0.00	-6222.00002	107913.66	1E+30
Grow Pumpkin	0.00	0.00	-8260.00001	84150.29995	1E+30
Grow Sweet	0.00	0	-6500.00002	54670	68050.36153
Grow Sweet - IPM	0.00	-88465.47	-106999	88465.46999	1E+30
Grow Callaloo	0.00	-525.00	-4000	524.9999999	1E+30
Grow Callaloo	0.00	0	-4000	30269.99998	65144.59231
Grow Callaloo - IPM	0.00	-84687.97	-105499	84687.97001	1E+30
Grow Callaloo	0.00	0	-4000	20194.99997	524.9999999
Grow Callaloo - IPM	0.00	-85160.47	-105499	85160.47001	1E+30
Grow Cassava	0.00	0	-12000	7869.999941	1E+30
Grow Sugar	0.00	0.00	-32200	75203.50002	1E+30
Credit	50000.00	0.00	-0.03	0.712314509	0.195100014
Unsub Credit	0.00	-0.20	-0.2551	0.195100014	1E+30
Water	2080.00	0.00	-19.394375	1.84718E+16	190.4613942
Water Unit	2080.00	0.00	-8	7.03687E+16	201.8557692
Fert - Pepper	10.00	0.00	-750	564586.4666	15739.99988
Insect - Pepper	20.00	0.00	-2000	282293.2333	7869.999941
Herb - Pepper	5.00	0.00	-2000	1129172.933	31479.99976
Fert - Corn	0.00	0.00	-3400	107913.66	1E+30
Insect - Corn	0.00	0.00	-1400	107913.66	1E+30
Herb - Corn	0.00	0.00	-100	107913.66	1E+30
Fert - Pump	0.00	0.00	-2600	84150.29995	1E+30
Insect - Pump	0.00	0.00	-1600	84150.29995	1E+30
Herb - Pump	0.00	0.00	-480	84150.29995	1E+30
Fung-pump	0.00	0.00	-800	84150.29995	1E+30
Fert-Sweet	0.00	0.00	-2000	54670	294884.9
Herb-Sweet	0.00	0.00	-1800	54670	294884.9
Fert - Callaloo	0.00	0.00	-800	20194.99997	282293.2334
Insect - Callaloo	0.00	0.00	-1700	20194.99997	105859.9625
Fung - Callaloo	0.00	0.00	-1300	20194.99997	282293.2334
Fert - Cassava	0.00	0.00	-2350	7869.999941	1E+30
Insect - Cassava	0.00	0.00	-600	7869.999941	1E+30
Herb - Cassava	0.00	-7870.00	-450	7869.999941	1E+30
Fert - Sugar	0.00	0.00	-2400	75203.50002	1E+30
Herb - Sugar	0.00	0.00	-1900	75203.50002	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	45.00	0.00	400	100	400
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	30.00	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	35.00	0.00	400	100	72.41379309
HL-8	45.00	0.00	-500	69.99999999	3147.999977
SL-8	0.00	-100.00	400	100	1E+30
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	20.00	0.00	400	100	95.45454543
HL-10	20.00	0.00	-500	100	2421.538443



Scenario One

Insect - Pump	0.0	1600.0	0	0	1E+30
Herb - Pump	0.0	480.0	0	0	1E+30
Fung-pump	0.0	800.0	0	0	1E+30
Fert-Sweet	0.0	2000.0	0	0	1E+30
Herb-Sweet	0.0	1800.0	0	0	1E+30
Fert - Callaloo	0.0	800.0	0	0	1E+30
Insect - Callaloo	0.0	1700.0	0	0	1E+30
Fung - Callaloo	0.0	1300.0	0	0	1E+30
Fert - Cassava	0.0	2350.0	0	0	1E+30
Insect - Cassava	0.0	600.0	0	0	1E+30
Herb - Cassava	0.0	-7420.0	0	0	0
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	45
June Labor	45.0	400.0	45	1E+30	30
July Labor	45.0	400.0	45	1E+30	35
August Labor	45.0	500.0	45	45	5.85468E+17
September	45.0	400.0	45	1E+30	20
October Labor	45.0	500.0	45	20	8.75401E+17
November Labor	45.0	400.0	45	1E+30	10
December Labor	45.0	500.0	45	60	8.79609E+17
January Labor	45.0	500.0	45	10	8.83859E+17
February Labor	45.0	500.0	45	0	1E+30
March Labor	45.0	400.0	45	1E+30	35
April Labor	45.0	400.0	45	1E+30	45
Harvest -Pepper	0.0	-12.0	0	100000	1E+30
Harvest - Corn	0.0	-44.0	0	0	0
Harvest Pump	0.0	-20.02147143	0	0	0
Harvest-Sweet	0.0	-33.0	0	0	0
Harvest-Callaloo	0.0	-7.3	0	0	0
Harvet-Cal. Winter	0.0	-7.5	0	0	0
Harvest - Cassava	0.0	-6.0	0	0	1E+30
Harvest - Sugar	0.0	-3348.7	0	0	0
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	0.0	0.0	1.1	1E+30	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	0.0	0.0	2.4	1E+30	2.4
Sweet Potato	0.0	0.0	1.8	1E+30	1.8
Callaloo	0.0	0.0	0.2	1E+30	0.2
Casava	0.0	0.0	1.7	1E+30	1.7
Sugar	0	0	4.9	1E+30	4.9
Harvest -Pepper	0	0	0	0	1E+30
Harvest Pump	0	0	0	0	1E+30
Harvest-Sweet	0	0	0	0	1E+30
Harvest-Callaloo	0	0	0	0	1E+30
Harvet-Cal. Winter	0	-4.000000004	0	0	1E+30
Harvest - Cassava	0	0	0	0	1E+30

Scenario Two

<b>Without IPM and with risk restrictions</b>					
Returns = \$JM435,481	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.10	0.00	-5000	1E+30	70701.96998
Grow Pepper - IPM	0.00	-70701.97	-105099	70701.96998	1E+30
Grow corn	0.00	0.00	-6221.999996	8963.734973	1E+30
Grow Pumpkin	2.40	0.00	-8260.000008	1E+30	14467.12505
Grow Sweet	1.80	0	-6499.999994	1E+30	5853.955034
Grow Sweet - IPM	0.00	-95162.48	-106999	95162.47749	1E+30
Grow Callaloo	0.20	0.00	-4000.000004	303563.2333	750.0000006
Grow Callaloo	0.00	0	-4000.000004	8750.000008	70053.05384
Grow Callaloo - IPM	0.00	-91068.97	-105499	91068.96999	1E+30
Grow Callaloo	0.00	-750.0000006	-4000.000004	750.0000006	1E+30
Grow Callaloo - IPM	0.00	-91768.97	-105499	91768.96999	1E+30
Grow Cassava	1.70	0	-12000.00001	1E+30	29945.97006
Grow Sugar	0.00	0.00	-32199.99999	5925.552492	1E+30
Credit	58224.00	0.00	-0.03	0.184023369	0.195099991
Unsub Credit	0.00	-0.20	-0.2551	0.195099991	1E+30
Water	582.40	0.00	-19.394375	11.394375	18.76267639
Water Unit	2080.00	0.00	-8.000000001	1.06234E+17	11.394375
Fert - Pepper	1.10	0.00	-750	1E+30	82831.94
Insect - Pepper	2.20	0.00	-2000	1E+30	41415.97
Herb - Pepper	0.55	0.00	-2000	1E+30	165663.88
Fert - Corn	0.00	0.00	-3400	8963.734973	1E+30
Insect - Corn	0.00	0.00	-1400	8963.734973	1E+30
Herb - Corn	0.00	-8963.73	-100	8963.734973	1E+30
Fert - Pump	2.40	0.00	-2600	1E+30	14467.12505
Insect - Pump	2.40	0.00	-1600	1E+30	14467.12505
Herb - Pump	2.40	0.00	-480	1E+30	14467.12505
Fung-pump	2.40	0.00	-800	1E+30	14467.12505
Fert-Sweet	1.80	0.00	-2000	1E+30	5853.955034
Herb-Sweet	1.80	0.00	-1800	1E+30	5853.955034
Fert - Callaloo	0.20	0.00	-800	1E+30	19995.97004
Insect - Callaloo	0.20	0.00	-1700	1E+30	19995.97004
Fung - Callaloo	0.20	0.00	-1300	1E+30	19995.97004
Fert - Cassava	1.70	0.00	-2350	1E+30	29945.97006
Insect - Cassava	1.70	0.00	-600	1E+30	29945.97006
Herb - Cassava	1.70	0.00	-450	1E+30	29945.97006
Fert - Sugar	0.00	0.00	-2400	5925.552492	1E+30
Herb - Sugar	0.00	-5925.55	-1900	5925.552492	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	18.21	0.00	400	100	333.3333336
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	8.75	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	6.57	0.00	400	100	400
HL-8	0.00	-100.00	-500	100	1E+30
SL-8	11.18	0.00	400	100	400
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	27.73	0.00	400	100	400
HL-10	0.00	-100.00	-500	100	1E+30



Scenario Two

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1E+30
Herb-Sweet	0.0	1800.0	0	1.8	1E+30
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.2	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	1E+30
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	-4025.6	0	0.7	0
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	2.07076E+17
Harvest -Pepper	0.0	-12.0	0	11000	1E+30
Harvest - Corn	0.0	-8.0	0	0	1E+30
Harvest Pump	0.0	-8.000000007	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	4680	1E+30
Harvest-Callaloo	0.0	-5.0	0	1750	1E+30
Harvet-Cal. Winter	0.0	-5.0	0	1750	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	82831.9	1.1	0	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	14467.1	2.4	0	1.12
Sweet Potato	1.8	5854.0	1.8	0	1.8
Callaloo	0.2	19996.0	0.2	0.906206897	0
Casava	1.7	29946.0	1.7	0	0.7064
Sugar	0	0	4.9	1E+30	4.9
Harvest -Pepper	0	0	0	0	1E+30
Harvest Pump	0	0	0	0	1E+30
Harvest-Sweet	0	0	0	0	1E+30
Harvest-Callaloo	0	0	0	0	1E+30
Harvet-Cal. Winter	0	-4.000000004	0	0	1E+30
Harvest - Cassava	0	0	0	0	1E+30

Scenario Three

<b>With IPM and without risk restrictions</b>					
Returns = \$JM1,195,703	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.00	-14118.37	-5000	14118.37242	1E+30
Grow Pepper - IPM	8.51	0.00	-5100	1E+30	16589.08759
Grow corn	1.19	0.00	-6222	147534.91	118493.4828
Grow Pumpkin	0.00	-101798.27	-8260	101798.2655	1E+30
Grow Sweet	0.00	-12265.644	-6500	12265.64404	1E+30
Grow Sweet - IPM	0.00	0.00	-7000	68891.07587	15945.33725
Grow Callaloo	0.00	-15875.97	-4000	15875.96606	1E+30
Grow Callaloo	0.00	-15714.4276	-4000	15714.42759	1E+30
Grow Callaloo - IPM	0.00	0.00	-5500	28099.18625	20428.75587
Grow Callaloo	0.00	-15350.9661	-4000	15350.96606	1E+30
Grow Callaloo - IPM	0.00	0.00	-5500	15474.18621	19956.25587
Grow Cassava	0.00	0	-12000	14929.18621	1E+30
Grow Sugar	0.00	0.00	-32200	87557.07588	1E+30
Credit	50817.70	0.00	-0.03	1.578285747	0.195100003
Unsub Credit	0.00	-0.20	-0.2551	0.195100003	1E+30
Water	2080.00	0.00	-19.394375	8.76885E+17	224.3997895
Water Unit	2080.00	0.00	-8	1.40737E+16	235.7941645
Fert - Pepper	8.51	0.00	-750	94794.78617	35083.5876
Insect - Pepper	4.26	0.00	-2000	8967.074373	70167.1752
Herb - Pepper	4.26	0.00	-2000	189589.5723	70167.1752
Fert - Corn	1.19	0.00	-3400	147534.91	118493.4828
Insect - Corn	1.19	0.00	-1400	147534.91	118493.4828
Herb - Corn	1.19	0.00	-100	147534.91	118493.4828
Fert - Pump	0.00	0.00	-2600	101798.2655	1E+30
Insect - Pump	0.00	0.00	-1600	101798.2655	1E+30
Herb - Pump	0.00	0.00	-480	101798.2655	1E+30
Fung-pump	0.00	0.00	-800	101798.2655	1E+30
Fert-Sweet	0.00	0.00	-2000	53151.12415	1E+30
Herb-Sweet	0.00	0.00	-1800	53151.12415	1E+30
Fert - Callaloo	0.00	0.00	-800	15474.18621	1E+30
Insect - Callaloo	0.00	0.00	-1700	24945.31984	1E+30
Fung - Callaloo	0.00	0.00	-1300	15474.18621	1E+30
Fert - Cassava	0.00	-14929.19	-2350	14929.18621	1E+30
Insect - Cassava	0.00	0.00	-600	14929.18621	1E+30
Herb - Cassava	0.00	0.00	-450	14929.18621	1E+30
Fert - Sugar	0.00	0.00	-2400	87557.07588	1E+30
Herb - Sugar	0.00	0.00	-1900	87557.07588	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	29.71	0.00	400	100	400
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	27.81	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	29.80	0.00	400	100	400
HL-8	36.36	0.00	-500	100	3803.801004
SL-8	0.00	-100.00	400	100	1E+30
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	21.34	0.00	400	100	400
HL-10	10.32	0.00	-500	100	5397.475016



Scenario Three

Insect - Pump	0.0	1600.0	0	0	1E+30
Herb - Pump	0.0	480.0	0	0	1E+30
Fung-pump	0.0	800.0	0	0	1E+30
Fert-Sweet	0.0	2000.0	0	0	1E+30
Herb-Sweet	0.0	1800.0	0	0	6.31202E+16
Fert - Callaloo	0.0	800.0	0	0	1E+30
Insect - Callaloo	0.0	1700.0	0	0	1E+30
Fung - Callaloo	0.0	1300.0	0	0	1E+30
Fert - Cassava	0.0	-12579.2	0	0.578512397	0
Insect - Cassava	0.0	600.0	0	0	55.65217391
Herb - Cassava	0.0	450.0	0	0	35.55555556
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	29.71489362
June Labor	45.0	400.0	45	1E+30	27.80851064
July Labor	45.0	400.0	45	1E+30	29.8
August Labor	45.0	500.0	45	36.36170213	5.03062E+17
September	45.0	400.0	45	1E+30	21.34042553
October Labor	45.0	500.0	45	10.31914894	1E+30
November Labor	45.0	400.0	45	1E+30	6.702127659
December Labor	45.0	500.0	45	78.40425532	5.75177E+17
January Labor	45.0	500.0	45	27.34042553	2.63864E+17
February Labor	45.0	500.0	45	10.31914894	160064
March Labor	45.0	400.0	45	1E+30	19.46808511
April Labor	45.0	400.0	45	5.85424E+17	13.62978723
Harvest -Pepper	0.0	-12.0	0	110638.2979	1E+30
Harvest - Corn	0.0	-8.0	0	3574.468085	1.31279E+19
Harvest Pump	0.0	-8	0	0	1E+30
Harvest-Sweet	0.0	-32.4	0	6664.788732	0
Harvest-Callaloo	0.0	-6.4	0	6580.578512	0
Harvet-Cal. Winter	0.0	-6.5	0	6580.578513	0
Harvest - Cassava	0.0	-6.0	0	0	1E+30
Harvest - Sugar	0.0	-3701.6	0	62.02401357	0
Hot/Corn	0.0	-125561.6	0	1.492307692	1.4
Hot Pepper	0.0	0.0	1.1	1E+30	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	0.0	0.0	2.4	1E+30	2.4
Sweet Potato	0.0	0.0	1.8	1E+30	1.8
Callaloo	0.0	0.0	0.2	1E+30	0.2
Casava	0.0	0.0	1.7	1E+30	1.7
Sugar	1.874E-16	0	4.9	1E+30	4.9
Harvest -Pepper	0	0	0	0	1E+30
Harvest Pump	0	0	0	0	1E+30
Harvest-Sweet	0	0	0	0	1E+30
Harvest-Callaloo	0	0	0	0	1E+30
Harvet-Cal. Winter	0	-4	0	0	1E+30
Harvest - Cassava	0	0	0	0	1E+30

Scenario Four

<b>With IPM and with risk restrictions</b>					
Returns = \$JM485,764	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.00	-30842.08	-5000	30842.0771	1E+30
Grow Pepper - IPM	1.10	0.00	-5100	1.97769E+19	30842.0771
Grow corn	0.15	0.00	-6222	8963.734991	220300.5507
Grow Pumpkin	2.40	0.00	-8260	1E+30	14467.125
Grow Sweet	0.00	-7836.49251	-6500	7836.492505	1E+30
Grow Sweet - IPM	1.80	0.00	-7000	1E+30	7836.492505
Grow Callaloo	0.00	-10555.00	-4000	10555	1E+30
Grow Callaloo	0.00	-11612.6923	-4000	11612.69231	1E+30
Grow Callaloo - IPM	0.00	0.00	-5500	10000.00002	15096.50001
Grow Callaloo	0.00	-12030	-4000	12030	1E+30
Grow Callaloo - IPM	0.20	0.00	-5500	1E+30	10000.00002
Grow Cassava	1.70	0	-12000	1E+30	27445.97
Grow Sugar	0.00	0.00	-32200	6125.552493	1E+30
Credit	60492.19	0.00	-0.03	0.190234549	0.195099997
Unsub Credit	0.00	-0.20	-0.2551	0.195099997	1E+30
Water	756.08	0.00	-19.394375	11.394375	27.82139423
Water Unit	2080.00	0.00	-8	7.88458E+16	11.394375
Fert - Pepper	1.10	0.00	-750	1E+30	113574.0171
Insect - Pepper	0.55	0.00	-2000	20561.38473	227148.0342
Herb - Pepper	0.55	0.00	-2000	1E+30	227148.0342
Fert - Corn	0.15	0.00	-3400	8963.734991	220300.5507
Insect - Corn	0.15	0.00	-1400	8963.734991	220300.5507
Herb - Corn	0.15	0.00	-100	8963.734991	220300.5507
Fert - Pump	2.40	0.00	-2600	1E+30	14467.125
Insect - Pump	2.40	0.00	-1600	1E+30	14467.125
Herb - Pump	2.40	0.00	-480	1E+30	14467.125
Fung-pump	2.40	0.00	-800	1E+30	14467.125
Fert-Sweet	1.80	0.00	-2000	1E+30	13690.44751
Herb-Sweet	1.80	0.00	-1800	1E+30	13690.44751
Fert - Callaloo	0.20	0.00	-800	1E+30	30550.97001
Insect - Callaloo	0.10	0.00	-1700	21110.00001	61101.94001
Fung - Callaloo	0.20	0.00	-1300	1E+30	30550.97001
Fert - Cassava	1.70	0.00	-2350	1E+30	27445.97
Insect - Cassava	1.70	0.00	-600	1E+30	27445.97
Herb - Cassava	1.70	0.00	-450	1E+30	27445.97
Fert - Sugar	0.00	0.00	-2400	6125.552493	1E+30
Herb - Sugar	0.00	0.00	-1900	6125.552493	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	15.78	0.00	400	100	400
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	7.83	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	7.16	0.00	400	100	400
HL-8	0.00	-100.00	-500	100	1E+30
SL-8	12.06	0.00	400	100	400
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	27.62	0.00	400	100	400
HL-10	0.00	-100.00	-500	100	1E+30



Scenario Four

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	6.65119E+16
Herb-Sweet	0.0	1800.0	0	1.8	3.27605E+16
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	1E+30
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.827999999
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	2.00973E+17
April Labor	45.0	500.0	45	23.1146	1.47774E+17
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1375.0	0	42.94327391	0
Hot/Corn	0.0	-8963.7	0	0.966945946	0.154
Hot Pepper	1.1	113574.0	1.1	1.261924686	0.716666667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	14467.1	2.4	0.84627027	1.454
Sweet Potato	1.8	13690.4	1.8	0.795044444	1.8
Callaloo	0.2	30551.0	0.2	1.841882352	0.2
Casava	1.7	27446.0	1.7	1.118285714	0.086
Sugar	0	0	4.9	1E+30	4.9
Harvest -Pepper	0	0	0	0	1E+30
Harvest Pump	0	0	0	0	1E+30
Harvest-Sweet	0	0	0	0	1E+30
Harvest-Callaloo	0	0	0	0	1E+30
Harvet-Cal. Winter	0	-4	0	0	1E+30
Harvest - Cassava	0	0	0	0	1E+30

Scenario Five

<b>No IPM and preclearance</b>					
Returns = \$JM482,120	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-5000	1E+30	67011.97
Grow Pepper - IPM	0.0	-67012.0	-105099	67011.97	1E+30
Grow corn	0.0	-8963.7	-6222	8963.735	1E+30
Grow Pumpkin	2.4	0.0	-8260	1E+30	19027.125
Grow Sweet	1.8	0.0	-6500	1E+30	9031.955
Grow Sweet - IPM	0.0	-93869.1	-106999	93869.078	1E+30
Grow Callaloo	0.2	0.0	-4000	297818.44	1187.5
Grow Callaloo	0.0	0.0	-4000	11078.125	68727.333
Grow Callaloo - IPM	0.0	-89345.5	-105499	89345.533	1E+30
Grow Callaloo	0.0	-1187.5	-4000	1187.5	1E+30
Grow Callaloo - IPM	0.0	-90545.5	-105499	90545.533	1E+30
Grow Cassava	1.7	0.0	-12000	1E+30	38627.57
Grow Sugar	0.0	0.0	-32200	5925.5525	1E+30
Credit	58224.0	0.0	-0.03	0.1840234	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	582.4	0.0	-19.394375	11.394375	28.948574
Water Unit	2080.0	0.0	-8	1E+30	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	96081.94
Insect - Pepper	2.2	0.0	-2000	1E+30	44674.647
Herb - Pepper	0.6	0.0	-2000	1E+30	192163.88
Fert - Corn	0.0	0.0	-3400	8963.735	1E+30
Insect - Corn	0.0	0.0	-1400	8963.735	1E+30
Herb - Corn	0.0	0.0	-100	8963.735	1E+30
Fert - Pump	2.4	0.0	-2600	1E+30	19027.125
Insect - Pump	2.4	0.0	-1600	1E+30	19027.125
Herb - Pump	2.4	0.0	-480	1E+30	19027.125
Fung-pump	2.4	0.0	-800	1E+30	19027.125
Fert-Sweet	1.8	0.0	-2000	1E+30	9031.955
Herb-Sweet	1.8	0.0	-1800	1E+30	9031.955
Fert - Callaloo	0.2	0.0	-800	1E+30	23199.095
Insect - Callaloo	0.2	0.0	-1700	1E+30	23199.095
Fung - Callaloo	0.2	0.0	-1300	1E+30	23199.095
Fert - Cassava	1.7	0.0	-2350	1E+30	38627.57
Insect - Cassava	1.7	0.0	-600	1E+30	38627.57
Herb - Cassava	1.7	0.0	-450	1E+30	38627.57
Fert - Sugar	0.0	-5925.6	-2400	5925.5525	1E+30
Herb - Sugar	0.0	0.0	-1900	5925.5525	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	16.1	0.0	400	100	327.58621
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	0.2	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	1.3	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	7.4	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	24.1	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Five

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.7265743	1.169E+16
Herb-Sweet	0.0	1800.0	0	1.8	1E+30
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.2	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	3.136E+16
Fert - Sugar	0.0	-3525.6	0	0.45	0
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	16.085
June Labor	45.0	400.0	45	1E+30	0.225
July Labor	45.0	400.0	45	1E+30	1.2875
August Labor	45.0	400.0	45	1E+30	7.45
September	45.0	400.0	45	1E+30	24.1
October Labor	45.0	400.0	45	1E+30	36.975
November Labor	45.0	400.0	45	1E+30	36.65
December Labor	45.0	400.0	45	1E+30	22.6625
January Labor	45.0	400.0	45	1E+30	27.8375
February Labor	45.0	400.0	45	1E+30	34.3125
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	3.293E+17
Harvest -Pepper	0.0	-12.3	0	11000	1E+30
Harvest - Corn	0.0	-8.0	0	0	1E+30
Harvest Pump	0.0	-8.2	0	16800	1E+30
Harvest-Sweet	0.0	-12.3	0	4680	1E+30
Harvest-Callaloo	0.0	-5.1	0	1750	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	-6.2	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	96081.9	1.1	0.15	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	19027.1	2.4	0.0194595	1.12
Sweet Potato	1.8	9032.0	1.8	0.1430556	1.8
Callaloo	0.2	23199.1	0.2	0.09	0.2
Casava	1.7	38627.6	1.7	0.0257143	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	-12.3	0	1100	1E+30
Harvest Pump	0.0	-8.2	0	1680	1E+30
Harvest-Sweet	0.0	-12.3	0	468	1E+30
Harvest-Callaloo	0.0	-5.1	0	175	1E+30
Harvet-Cal. Winter	0.0	-16.7	0	175	0
Harvest - Cassava	0.0	-6.2	0	2284.8	1E+30

Scenario Six

<b>IPM and preclearance</b>					
Returns = \$JM538,910	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-34480.1	-5000	34480.077	1E+30
Grow Pepper - IPM	1.1	0.0	-5100	1E+30	34480.077
Grow corn	0.15	0.0	-6222	9513.735	246286.27
Grow Pumpkin	2.4	0.0	-8260	1E+30	17870.875
Grow Sweet	0.0	-9129.9	-6500	9129.8925	1E+30
Grow Sweet - IPM	1.8	0.0	-7000	1E+30	9129.8925
Grow Callaloo	0.0	-11328.4	-4000	11328.438	1E+30
Grow Callaloo	0.0	-13059.2	-4000	13059.207	1E+30
Grow Callaloo - IPM	0.0	0.0	-5500	11826.562	16976.969
Grow Callaloo	0.0	-13609.7	-4000	13609.688	1E+30
Grow Callaloo - IPM	0.2	0.0	-5500	1E+30	11328.438
Grow Cassava	1.7	0.0	-12000	1E+30	35252.57
Grow Sugar	0.0	0.0	-32200	6175.5525	1E+30
Credit	60492.2	0.0	-0.03	0.1917873	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	756.1	0.0	-19.394375	11.394375	34.367067
Water Unit	2080.0	0.0	-8	1.146E+18	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	130312.02
Insect - Pepper	0.5	0.0	-2000	22986.718	260624.03
Herb - Pepper	0.6	0.0	-2000	1E+30	260624.03
Fert - Corn	0.2	0.0	-3400	9513.735	246286.27
Insect - Corn	0.2	0.0	-1400	9513.735	246286.27
Herb - Corn	0.2	0.0	-100	9513.735	246286.27
Fert - Pump	2.4	0.0	-2600	1E+30	17870.875
Insect - Pump	2.4	0.0	-1600	1E+30	17870.875
Herb - Pump	2.4	0.0	-480	1E+30	17870.875
Fung-pump	2.4	0.0	-800	1E+30	17870.875
Fert-Sweet	1.8	0.0	-2000	1E+30	18161.848
Herb-Sweet	1.8	0.0	-1800	1E+30	18161.848
Fert - Callaloo	0.2	0.0	-800	1E+30	34277.533
Insect - Callaloo	0.1	0.0	-1700	22656.875	68555.065
Fung - Callaloo	0.2	0.0	-1300	1E+30	34277.533
Fert - Cassava	1.7	0.0	-2350	1E+30	35252.57
Insect - Cassava	1.7	0.0	-600	1E+30	35252.57
Herb - Cassava	1.7	0.0	-450	1E+30	35252.57
Fert - Sugar	0.0	0.0	-2400	6175.5525	1E+30
Herb - Sugar	0.0	0.0	-1900	6175.5525	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	13.4	0.0	400	100	400
HL-6	0.9	0.0	-500	100	1545.5892
SL-6	0.0	-100.0	400	100	1E+30
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	2.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	8.7	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	24.3	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Six

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.07E+16
Herb-Sweet	0.0	1800.0	0	1.8	1E+30
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	2.965E+16
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	13.3844
June Labor	45.0	500.0	45	0.9095	6.677E+16
July Labor	45.0	400.0	45	1E+30	2.2354
August Labor	45.0	400.0	45	1E+30	8.709
September	45.0	400.0	45	1E+30	24.267
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	32.175
December Labor	45.0	400.0	45	1E+30	13.7875
January Labor	45.0	400.0	45	1E+30	27.3625
February Labor	45.0	400.0	45	1E+30	35.3125
March Labor	45.0	500.0	45	2.4875	4.256E+17
April Labor	45.0	500.0	45	23.4646	3.475E+17
Harvest -Pepper	0.0	-12.3	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.2	0	16800	1E+30
Harvest-Sweet	0.0	-12.3	0	6084	1E+30
Harvest-Callaloo	0.0	-5.1	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	-6.2	0	22848	1E+30
Harvest - Sugar	0.0	-1376.4	0	42.943274	0
Hot/Corn	0.0	-9513.7	0	0.3020811	0.154
Hot Pepper	1.1	130312.0	1.1	0.7606897	0.4502475
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	17870.9	2.4	0.2180878	0.0786595
Sweet Potato	1.8	18161.8	1.8	0.2483778	1.8
Callaloo	0.2	34277.5	0.2	1.9468218	0.1712
Casava	1.7	35252.6	1.7	2.141504	0.0995
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	-12.3	0	1430	1E+30
Harvest Pump	0.0	-8.2	0	1680	2.224E+19
Harvest-Sweet	0.0	-12.3	0	608.4	2.146E+19
Harvest-Callaloo	0.0	-5.1	0	227.5	1E+30
Harvet-Cal. Winter	0.0	-14.4	0	194.74	0
Harvest - Cassava	0.0	-6.1	0	2284.8	1E+30

Scenario Seven

<b>No IPM and no water subsidy</b>					
Returns = \$JM411,781	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.10	0.00	-5000	2.563E+19	70701.97
Grow Pepper - IPM	0.00	-70701.97	-105099	70701.97	1E+30
Grow corn	0.00	0.00	-6222	8963.735	1E+30
Grow Pumpkin	2.40	0.00	-8260	3.98E+19	14467.125
Grow Sweet	1.80	0.00	-6500	1E+30	5853.955
Grow Sweet - IPM	0.00	-95162.48	-106999	95162.477	1E+30
Grow Callaloo	0.20	0.00	-4000	303563.23	750
Grow Callaloo	0.00	0.00	-4000	8750	70053.054
Grow Callaloo - IPM	0.00	-91068.97	-105499	91068.97	1E+30
Grow Callaloo	0.00	-750.00	-4000	750	1E+30
Grow Callaloo - IPM	0.00	-91768.97	-105499	91768.97	1E+30
Grow Cassava	1.70	0.00	-12000	1E+30	29945.97
Grow Sugar	0.00	0.00	-32200	5925.5525	1E+30
Credit	58224.00	0.00	-0.03	0.1840234	0.1951
Unsub Credit	0.00	-0.20	-0.2551	0.1951	1E+30
Water	2080.00	0.00	-19.394375	7.391E+16	0
Water Unit	582.40	0.00	-19.394375	0	18.762676
Fert - Pepper	1.10	0.00	-750	2.563E+19	82831.94
Insect - Pepper	2.20	0.00	-2000	1E+30	41415.97
Herb - Pepper	0.55	0.00	-2000	5.127E+19	165663.88
Fert - Corn	0.00	0.00	-3400	8963.735	1E+30
Insect - Corn	0.00	0.00	-1400	8963.735	1E+30
Herb - Corn	0.00	0.00	-100	8963.735	1E+30
Fert - Pump	2.40	0.00	-2600	3.032E+19	14467.125
Insect - Pump	2.40	0.00	-1600	3.032E+19	14467.125
Herb - Pump	2.40	0.00	-480	3.032E+19	14467.125
Fung-pump	2.40	0.00	-800	3.032E+19	14467.125
Fert-Sweet	1.80	0.00	-2000	1E+30	5853.955
Herb-Sweet	1.80	0.00	-1800	1E+30	5853.955
Fert - Callaloo	0.20	0.00	-800	2.679E+19	19995.97
Insect - Callaloo	0.20	0.00	-1700	1.827E+19	19995.97
Fung - Callaloo	0.20	0.00	-1300	2.679E+19	19995.97
Fert - Cassava	1.70	0.00	-2350	1E+30	29945.97
Insect - Cassava	1.70	0.00	-600	1E+30	29945.97
Herb - Cassava	1.70	0.00	-450	1E+30	29945.97
Fert - Sugar	0.00	-5925.55	-2400	5925.5525	1E+30
Herb - Sugar	0.00	0.00	-1900	5925.5525	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	18.21	0.00	400	100	333.33333
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	8.75	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	6.57	0.00	400	100	400
HL-8	0.00	-100.00	-500	100	1E+30
SL-8	11.18	0.00	400	100	400
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	27.73	0.00	400	100	400
HL-10	0.00	-100.00	-500	100	1E+30



Scenario Seven

Insect - Pump	0.00	1600.00	0	2.4	1E+30
Herb - Pump	0.00	480.00	0	2.4	1E+30
Fung-pump	0.00	800.00	0	2.4	1E+30
Fert-Sweet	0.00	2000.00	0	1.8	1.667E+15
Herb-Sweet	0.00	1800.00	0	1.8	9.621E+14
Fert - Callaloo	0.00	800.00	0	0.2	1E+30
Insect - Callaloo	0.00	1700.00	0	0.2	1E+30
Fung - Callaloo	0.00	1300.00	0	0.2	1E+30
Fert - Cassava	0.00	2350.00	0	1.7	1E+30
Insect - Cassava	0.00	600.00	0	1.7	1E+30
Herb - Cassava	0.00	450.00	0	1.7	1E+30
Fert - Sugar	0.00	-3525.55	0	0.7	0
Herb - Sugar	0.00	1900.00	0	0	1E+30
May Labor	45.00	400.00	45	1E+30	18.21
June Labor	45.00	400.00	45	1E+30	8.75
July Labor	45.00	400.00	45	1E+30	6.57
August Labor	45.00	400.00	45	1E+30	11.18
September	45.00	400.00	45	1E+30	27.73
October Labor	45.00	400.00	45	1E+30	37.15
November Labor	45.00	400.00	45	1E+30	37.55
December Labor	45.00	400.00	45	1E+30	26.45
January Labor	45.00	400.00	45	1E+30	30.25
February Labor	45.00	400.00	45	1E+30	36.45
March Labor	45.00	400.00	45	1E+30	1.4
April Labor	45.00	500.00	45	17.66	1E+30
Harvest -Pepper	0.00	-12.00	0	11000	1.673E+19
Harvest - Corn	0.00	-10.99	0	2663.5135	0
Harvest Pump	0.00	-8.00	0	16800	1E+30
Harvest-Sweet	0.00	-12.00	0	4680	1E+30
Harvest-Callaloo	0.00	-5.00	0	1750	1E+30
Harvet-Cal. Winter	0.00	-5.00	0	1750	0
Harvest - Cassava	0.00	-6.00	0	22848	1E+30
Harvest - Sugar	0.00	-1200.00	0	0	1E+30
Hot/Corn	0.00	0.00	0	0	1E+30
Hot Pepper	1.10	82831.94	1.1	1.2422222	1.1
Corn	0.00	0.00	1.2	1E+30	1.2
Pumpkin	2.40	14467.12	2.4	0.8012195	1.12
Sweet Potato	1.80	5853.95	1.8	0.73	1.8
Callaloo	0.20	19995.97	0.2	0.9062069	0.2
Casava	1.70	29945.97	1.7	0.056	0.7064
Sugar	0.00	0.00	4.9	1E+30	4.9
Harvest -Pepper	0.00	0.00	0	0	1E+30
Harvest Pump	0.00	0.00	0	0	1E+30
Harvest-Sweet	0.00	0.00	0	0	1E+30
Harvest-Callaloo	0.00	0.00	0	0	1E+30
Harvet-Cal. Winter	0.00	-4.00	0	0	1E+30
Harvest - Cassava	0.00	0.00	0	0	1E+30

Scenario Eight

<b>IPM and no water subsidy</b>					
Returns = \$JM462,064	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.00	-30842.08	-5000	30842.077	1E+30
Grow Pepper - IPM	1.10	0.00	-5100	1E+30	30842.077
Grow corn	0.15	0.00	-6222	8963.735	220300.55
Grow Pumpkin	2.40	0.00	-8260	1E+30	14467.125
Grow Sweet	0.00	-7836.49	-6500	7836.4925	1E+30
Grow Sweet - IPM	1.80	0.00	-7000	1E+30	7836.4925
Grow Callaloo	0.00	-10555.00	-4000	10555	1E+30
Grow Callaloo	0.00	-11612.69	-4000	11612.692	1E+30
Grow Callaloo - IPM	0.00	0.00	-5500	10000	15096.5
Grow Callaloo	0.00	-12030.00	-4000	12030	1E+30
Grow Callaloo - IPM	0.20	0.00	-5500	1E+30	10000
Grow Cassava	1.70	0.00	-12000	1E+30	27445.97
Grow Sugar	0.00	0.00	-32200	6125.5525	1E+30
Credit	60492.19	0.00	-0.03	0.1902345	0.1951
Unsub Credit	0.00	-0.20	-0.2551	0.1951	1E+30
Water	2080.00	0.00	-19.394375	4.167E+16	0
Water Unit	756.08	0.00	-19.394375	0	27.821394
Fert - Pepper	1.10	0.00	-750	1E+30	113574.02
Insect - Pepper	0.55	0.00	-2000	20561.385	227148.03
Herb - Pepper	0.55	0.00	-2000	1E+30	227148.03
Fert - Corn	0.15	0.00	-3400	8963.735	220300.55
Insect - Corn	0.15	0.00	-1400	8963.735	220300.55
Herb - Corn	0.15	0.00	-100	8963.735	220300.55
Fert - Pump	2.40	0.00	-2600	1E+30	14467.125
Insect - Pump	2.40	0.00	-1600	1E+30	14467.125
Herb - Pump	2.40	0.00	-480	1E+30	14467.125
Fung-pump	2.40	0.00	-800	1E+30	14467.125
Fert-Sweet	1.80	0.00	-2000	1E+30	13690.447
Herb-Sweet	1.80	0.00	-1800	1E+30	13690.447
Fert - Callaloo	0.20	0.00	-800	1E+30	30550.97
Insect - Callaloo	0.10	0.00	-1700	21110	61101.94
Fung - Callaloo	0.20	0.00	-1300	1E+30	30550.97
Fert - Cassava	1.70	0.00	-2350	1E+30	27445.97
Insect - Cassava	1.70	0.00	-600	1E+30	27445.97
Herb - Cassava	1.70	0.00	-450	1E+30	27445.97
Fert - Sugar	0.00	0.00	-2400	6125.5525	1E+30
Herb - Sugar	0.00	-6125.55	-1900	6125.5525	1E+30
HL-5	0.00	-100.00	-500	100	1E+30
SL - 5	15.78	0.00	400	100	400
HL-6	0.00	-100.00	-500	100	1E+30
SL-6	7.83	0.00	400	100	400
HL-7	0.00	-100.00	-500	100	1E+30
SL-7	7.16	0.00	400	100	400
HL-8	0.00	-100.00	-500	100	1E+30
SL-8	12.06	0.00	400	100	400
HL-9	0.00	-100.00	-500	100	1E+30
SI-9	27.62	0.00	400	100	400
HL-10	0.00	-100.00	-500	100	1E+30



Scenario Eight

Insect - Pump	0.00	1600.00	0	2.4	1E+30
Herb - Pump	0.00	480.00	0	2.4	1E+30
Fung-pump	0.00	800.00	0	2.4	1E+30
Fert-Sweet	0.00	2000.00	0	1.8	1E+30
Herb-Sweet	0.00	1800.00	0	1.8	1.844E+14
Fert - Callaloo	0.00	800.00	0	0.2	1E+30
Insect - Callaloo	0.00	1700.00	0	0.1	1E+30
Fung - Callaloo	0.00	1300.00	0	0.2	1E+30
Fert - Cassava	0.00	2350.00	0	1.7	1E+30
Insect - Cassava	0.00	600.00	0	1.7	1E+30
Herb - Cassava	0.00	450.00	0	1.7	1.572E+16
Fert - Sugar	0.00	2400.00	0	0	1E+30
Herb - Sugar	0.00	-4225.55	0	1.2269507	0
May Labor	45.00	400.00	45	1E+30	15.7844
June Labor	45.00	400.00	45	1E+30	7.828
July Labor	45.00	400.00	45	1E+30	7.1554
August Labor	45.00	400.00	45	1E+30	12.064
September	45.00	400.00	45	1E+30	27.622
October Labor	45.00	400.00	45	1E+30	36.95
November Labor	45.00	400.00	45	1E+30	33.75
December Labor	45.00	400.00	45	1E+30	19.35
January Labor	45.00	400.00	45	1E+30	29.7
February Labor	45.00	400.00	45	1E+30	37.25
March Labor	45.00	500.00	45	2.15	6.289E+16
April Labor	45.00	500.00	45	23.1146	1.048E+17
Harvest -Pepper	0.00	-12.00	0	14300	1E+30
Harvest - Corn	0.00	-8.00	0	462	1E+30
Harvest Pump	0.00	-8.00	0	16800	1E+30
Harvest-Sweet	0.00	-12.00	0	6084	1E+30
Harvest-Callaloo	0.00	-5.00	0	2275	1E+30
Harvet-Cal. Winter	0.00	-4.88	0	2275	0
Harvest - Cassava	0.00	-6.00	0	22848	1E+30
Harvest - Sugar	0.00	-1200.00	0	0	1E+30
Hot/Corn	0.00	-8963.73	0	0.9669459	0.154
Hot Pepper	1.10	113574.02	1.1	1.2619247	0.7166667
Corn	0.15	0.00	1.2	1E+30	1.046
Pumpkin	2.40	14467.12	2.4	0.8462703	1.454
Sweet Potato	1.80	13690.45	1.8	0.7950444	1.8
Callaloo	0.20	30550.97	0.2	1.8418824	0.2
Casava	1.70	27445.97	1.7	1.1182857	0.086
Sugar	0.00	0.00	4.9	1E+30	4.9
Harvest -Pepper	0.00	0.00	0	0	1E+30
Harvest Pump	0.00	0.00	0	0	1E+30
Harvest-Sweet	0.00	0.00	0	0	1E+30
Harvest-Callaloo	0.00	0.00	0	0	1E+30
Harvet-Cal. Winter	0.00	-4.00	0	0	1E+30
Harvest - Cassava	0.00	0.00	0	0	1E+30

Scenario Nine

<b>No IPM and no credit subsidy</b>					
Returns = \$JM424,121	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-5000	1E+30	81856.44
Grow Pepper - IPM	0.0	-90231.3	-105099	90231.285	1E+30
Grow corn	0.0	-10177.6	-6222	10177.647	1E+30
Grow Pumpkin	2.4	0.0	-8260	1E+30	12855.599
Grow Sweet	1.8	0.0	-6500	1E+30	4585.805
Grow Sweet - IPM	0.0	-114769.8	-106999	114769.83	1E+30
Grow Callaloo	0.2	0.0	-4000	369571.42	750
Grow Callaloo	0.0	0.0	-4000	8750	85285.711
Grow Callaloo - IPM	0.0	-110871.4	-105499	110871.42	1E+30
Grow Callaloo	0.0	-750.0	-4000	750	1E+30
Grow Callaloo - IPM	0.0	-111571.4	-105499	111571.42	1E+30
Grow Cassava	1.7	0.0	-12000	1E+30	27604.77
Grow Sugar	0.0	0.0	-32200	12207.772	1E+30
Credit	58224.0	0.0	-0.2551	0.3791234	0
Unsub Credit	0.0	0.0	-0.2551	0	1E+30
Water	582.4	0.0	-19.394375	11.394375	14.698093
Water Unit	2080.0	0.0	-8	1.042E+16	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	81856.44
Insect - Pepper	2.2	0.0	-2000	1E+30	40928.22
Herb - Pepper	0.6	0.0	-2000	1E+30	163712.88
Fert - Corn	0.0	0.0	-3400	10177.647	1E+30
Insect - Corn	0.0	0.0	-1400	10177.647	1E+30
Herb - Corn	0.0	0.0	-100	10177.647	1E+30
Fert - Pump	2.4	0.0	-2600	1E+30	12855.599
Insect - Pump	2.4	0.0	-1600	1E+30	12855.599
Herb - Pump	2.4	0.0	-480	1E+30	12855.599
Fung-pump	2.4	0.0	-800	1E+30	12855.599
Fert-Sweet	1.8	0.0	-2000	1E+30	4585.805
Herb-Sweet	1.8	0.0	-1800	1E+30	4585.805
Fert - Callaloo	0.2	0.0	-800	1E+30	19215.57
Insect - Callaloo	0.2	0.0	-1700	1E+30	19215.57
Fung - Callaloo	0.2	0.0	-1300	1E+30	19215.57
Fert - Cassava	1.7	0.0	-2350	1E+30	27604.77
Insect - Cassava	1.7	0.0	-600	1E+30	27604.77
Herb - Cassava	1.7	0.0	-450	1E+30	27604.77
Fert - Sugar	0.0	-12207.8	-2400	12207.772	1E+30
Herb - Sugar	0.0	0.0	-1900	12207.772	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	18.2	0.0	400	100	333.33333
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	8.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	6.6	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	11.2	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.7	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Nine

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.847E+16
Herb-Sweet	0.0	1800.0	0	1.8	1.209E+16
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.2	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	4.971E+15
Fert - Sugar	0.0	-9807.8	0	0.7	0
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	2.767E+17
Harvest -Pepper	0.0	-12.0	0	11000	1E+30
Harvest - Corn	0.0	-8.0	0	0	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	4680	4.428E+19
Harvest-Callaloo	0.0	-5.0	0	1750	1E+30
Harvet-Cal. Winter	0.0	-5.0	0	1750	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	81856.4	1.1	1.2422222	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	12855.6	2.4	0.8012195	1.12
Sweet Potato	1.8	4585.8	1.8	0.73	1.8
Callaloo	0.2	19215.6	0.2	0.9062069	0.2
Casava	1.7	27604.8	1.7	0.056	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Ten

<b>IPM and no credit subsidy</b>					
Returns = \$JM473,962	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-30652.6	-5000	30652.619	1E+30
Grow Pepper - IPM	1.1	0.0	-5100	1E+30	30652.619
Grow corn	0.15	0.0	-6222	10177.647	218947.28
Grow Pumpkin	2.4	0.0	-8260	1E+30	12855.599
Grow Sweet	0.0	-7738.9	-6500	7738.9425	1E+30
Grow Sweet - IPM	1.8	0.0	-7000	1E+30	7738.9425
Grow Callaloo	0.0	-10262.4	-4000	10262.35	1E+30
Grow Callaloo	0.0	-11320.0	-4000	11320.042	1E+30
Grow Callaloo - IPM	0.0	0.0	-5500	10000	14716.055
Grow Callaloo	0.0	-11737.4	-4000	11737.35	1E+30
Grow Callaloo - IPM	0.2	0.0	-5500	1E+30	10000
Grow Cassava	1.7	0.0	-12000	1E+30	25104.77
Grow Sugar	0.0	0.0	-32200	12407.773	1E+30
Credit	60492.2	0.0	-0.2551	0.3853345	0
Unsub Credit	0.0	0.0	-0.2551	0	1E+30
Water	756.1	0.0	-19.394375	11.394375	24.722306
Water Unit	2080.0	0.0	-8	5.306E+16	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	112409.06
Insect - Pepper	0.5	0.0	-2000	20435.08	224818.12
Herb - Pepper	0.6	0.0	-2000	1E+30	224818.12
Fert - Corn	0.2	0.0	-3400	10177.647	218947.28
Insect - Corn	0.2	0.0	-1400	10177.647	218947.28
Herb - Corn	0.2	0.0	-100	10177.647	218947.28
Fert - Pump	2.4	0.0	-2600	1E+30	12855.599
Insect - Pump	2.4	0.0	-1600	1E+30	12855.599
Herb - Pump	2.4	0.0	-480	1E+30	12855.599
Fung-pump	2.4	0.0	-800	1E+30	12855.599
Fert-Sweet	1.8	0.0	-2000	1E+30	12324.747
Herb-Sweet	1.8	0.0	-1800	1E+30	12324.747
Fert - Callaloo	0.2	0.0	-800	1E+30	29477.92
Insect - Callaloo	0.1	0.0	-1700	20524.7	58955.84
Fung - Callaloo	0.2	0.0	-1300	1E+30	29477.92
Fert - Cassava	1.7	0.0	-2350	1E+30	25104.77
Insect - Cassava	1.7	0.0	-600	1E+30	25104.77
Herb - Cassava	1.7	0.0	-450	1E+30	25104.77
Fert - Sugar	0.0	0.0	-2400	12407.773	1E+30
Herb - Sugar	0.0	-12407.8	-1900	12407.773	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Ten

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	5.541E+15
Fert-Sweet	0.0	2000.0	0	1.8	1.452E+16
Herb-Sweet	0.0	1800.0	0	1.8	6.916E+14
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	3.931E+15
Fert - Sugar	0.0	2400.0	0	0	2.7783101
Herb - Sugar	0.0	-10507.8	0	1.2269507	0
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	4.191E+17
April Labor	45.0	500.0	45	23.1146	5.855E+17
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	-10177.6	0	0.9669459	0.154
Hot Pepper	1.1	112409.1	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	12855.6	2.4	0.8462703	1.454
Sweet Potato	1.8	12324.7	1.8	0.7950444	1.8
Callaloo	0.2	29477.9	0.2	1.8418824	0.2
Casava	1.7	25104.8	1.7	1.1182857	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Eleven

<b>No IPM and lowered real interest rate</b>					
Returns = \$JM435,918	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-5000	1E+30	69951.227
Grow Pepper - IPM	0.0	-69951.2	-105099	69951.227	1E+30
Grow corn	0.0	0.0	-6222	8917.07	1E+30
Grow Pumpkin	2.4	0.0	-8260	1E+30	14529.075
Grow Sweet	1.8	0.0	-6500	1E+30	5902.705
Grow Sweet - IPM	0.0	-94408.7	-106999	94408.735	1E+30
Grow Callaloo	0.2	0.0	-4000	301025.76	750
Grow Callaloo	0.0	0.0	-4000	8750	69467.483
Grow Callaloo - IPM	0.0	-90307.7	-105499	90307.727	1E+30
Grow Callaloo	0.0	-750.0	-4000	750	1E+30
Grow Callaloo - IPM	0.0	-91007.7	-105499	91007.727	1E+30
Grow Cassava	1.7	0.0	-12000	1E+30	30035.97
Grow Sugar	0.0	0.0	-32200	5684.0525	1E+30
Credit	58224.0	0.0	-0.0225	0.1765234	0.1706
Unsub Credit	0.0	-0.2	-0.1931	0.1706	1E+30
Water	582.4	0.0	-19.394375	11.394375	18.918926
Water Unit	2080.0	0.0	-8	1.407E+16	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	82869.44
Insect - Pepper	2.2	0.0	-2000	1E+30	41434.72
Herb - Pepper	0.6	0.0	-2000	1E+30	165738.88
Fert - Corn	0.0	0.0	-3400	8917.07	1E+30
Insect - Corn	0.0	0.0	-1400	8917.07	1E+30
Herb - Corn	0.0	0.0	-100	8917.07	1E+30
Fert - Pump	2.4	0.0	-2600	1E+30	14529.075
Insect - Pump	2.4	0.0	-1600	1E+30	14529.075
Herb - Pump	2.4	0.0	-480	1E+30	14529.075
Fung-pump	2.4	0.0	-800	1E+30	14529.075
Fert-Sweet	1.8	0.0	-2000	1E+30	5902.705
Herb-Sweet	1.8	0.0	-1800	1E+30	5902.705
Fert - Callaloo	0.2	0.0	-800	1E+30	20025.97
Insect - Callaloo	0.2	0.0	-1700	1E+30	20025.97
Fung - Callaloo	0.2	0.0	-1300	1E+30	20025.97
Fert - Cassava	1.7	0.0	-2350	1E+30	30035.97
Insect - Cassava	1.7	0.0	-600	1E+30	30035.97
Herb - Cassava	1.7	0.0	-450	1E+30	30035.97
Fert - Sugar	0.0	-5684.1	-2400	5684.0525	1E+30
Herb - Sugar	0.0	0.0	-1900	5684.0525	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	18.2	0.0	400	100	333.33333
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	8.7	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	6.6	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	11.2	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.7	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Eleven

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.847E+16
Herb-Sweet	0.0	1800.0	0	1.8	1.97E+14
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.2	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	3.941E+14
Fert - Sugar	0.0	-3284.1	0	0.7	0
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	2.01E+17
Harvest -Pepper	0.0	-12.0	0	11000	1E+30
Harvest - Corn	0.0	-11.0	0	2663.5135	0
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	4680	4.034E+19
Harvest-Callaloo	0.0	-5.0	0	1750	1E+30
Harvet-Cal. Winter	0.0	-5.0	0	1750	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	82869.4	1.1	1.2422222	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	14529.1	2.4	0.8012195	1.12
Sweet Potato	1.8	5902.7	1.8	0.73	1.8
Callaloo	0.2	20026.0	0.2	0.9062069	0.2
Casava	1.7	30036.0	1.7	0.056	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Twelve

<b>IPM and lowered real interest rate</b>					
Returns = \$JM486,218	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-30849.4	-5000	30849.36	1E+30
Grow Pepper - IPM	1.1	0.0	-5100	1E+30	30849.36
Grow corn	0.15	0.0	-6222	8917.07	220352.57
Grow Pumpkin	2.4	0.0	-8260	1E+30	14529.075
Grow Sweet	0.0	-7840.2	-6500	7840.2425	1E+30
Grow Sweet - IPM	1.8	0.0	-7000	1E+30	7840.2425
Grow Callaloo	0.0	-10566.3	-4000	10566.25	1E+30
Grow Callaloo	0.0	-11623.9	-4000	11623.942	1E+30
Grow Callaloo - IPM	0.0	0.0	-5500	10000	15111.125
Grow Callaloo	0.0	-12041.3	-4000	12041.25	1E+30
Grow Callaloo - IPM	0.2	0.0	-5500	1E+30	10000
Grow Cassava	1.7	0.0	-12000	1E+30	27535.97
Grow Sugar	0.0	0.0	-32200	5884.0525	1E+30
Credit	60492.2	0.0	-0.0225	0.1827345	0.1706
Unsub Credit	0.0	-0.2	-0.1931	0.1706	1E+30
Water	756.1	0.0	-19.394375	11.394375	27.940529
Water Unit	2080.0	0.0	-8	1.035E+17	11.394375
Fert - Pepper	1.1	0.0	-750	1E+30	113618.8
Insect - Pepper	0.5	0.0	-2000	20566.24	227237.6
Herb - Pepper	0.6	0.0	-2000	1E+30	227237.6
Fert - Corn	0.2	0.0	-3400	8917.07	220352.57
Insect - Corn	0.2	0.0	-1400	8917.07	220352.57
Herb - Corn	0.2	0.0	-100	8917.07	220352.57
Fert - Pump	2.4	0.0	-2600	1E+30	14529.075
Insect - Pump	2.4	0.0	-1600	1E+30	14529.075
Herb - Pump	2.4	0.0	-480	1E+30	14529.075
Fung-pump	2.4	0.0	-800	1E+30	14529.075
Fert-Sweet	1.8	0.0	-2000	1E+30	13742.948
Herb-Sweet	1.8	0.0	-1800	1E+30	13742.948
Fert - Callaloo	0.2	0.0	-800	1E+30	30592.22
Insect - Callaloo	0.1	0.0	-1700	21132.5	61184.44
Fung - Callaloo	0.2	0.0	-1300	1E+30	30592.22
Fert - Cassava	1.7	0.0	-2350	1E+30	27535.97
Insect - Cassava	1.7	0.0	-600	1E+30	27535.97
Herb - Cassava	1.7	0.0	-450	1E+30	27535.97
Fert - Sugar	0.0	-5884.1	-2400	5884.0525	1E+30
Herb - Sugar	0.0	0.0	-1900	5884.0525	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Twelve

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.847E+16
Herb-Sweet	0.0	1800.0	0	1.8	3.099E+15
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	1.735E+16
Fert - Sugar	0.0	-3484.1	0	1.2269507	0
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	1.572E+16
April Labor	45.0	500.0	45	23.1146	2.927E+17
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	-8917.1	0	0.9669459	0.154
Hot Pepper	1.1	113618.8	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	14529.1	2.4	0.8462703	1.454
Sweet Potato	1.8	13742.9	1.8	0.7950444	1.8
Callaloo	0.2	30592.2	0.2	1.8418824	0.2
Casava	1.7	27536.0	1.7	1.1182857	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Thirteen

<b>No IPM and no duty concession</b>					
Returns = \$JM434,799	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-5092	2.679E+19	70701.97
Grow Pepper - IPM	0.0	-70702.0	-105191	70701.97	1E+30
Grow corn	0.0	-9058.5	-6314	9058.495	1E+30
Grow Pumpkin	2.4	0.0	-8352	1E+30	14372.365
Grow Sweet	1.8	0.0	-6592	1E+30	5759.195
Grow Sweet - IPM	0.0	-95162.5	-107091	95162.477	1E+30
Grow Callaloo	0.2	0.0	-4092	303563.23	750
Grow Callaloo	0.0	0.0	-4092	8750	70053.054
Grow Callaloo - IPM	0.0	-91069.0	-105591	91068.97	1E+30
Grow Callaloo	0.0	-750.0	-4092	750	1E+30
Grow Callaloo - IPM	0.0	-91769.0	-105591	91768.97	1E+30
Grow Cassava	1.7	0.0	-12092	2.55E+18	29851.21
Grow Sugar	0.0	0.0	-32292	6020.3125	1E+30
Credit	58886.4	0.0	-0.03	0.1864336	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	582.4	0.0	-19.394375	11.394375	18.458958
Water Unit	2080.0	0.0	-8	7.968E+16	11.394375
Fert - Pepper	1.1	0.0	-750	2.679E+19	82737.18
Insect - Pepper	2.2	0.0	-2000	1E+30	41368.59
Herb - Pepper	0.6	0.0	-2000	1E+30	165474.36
Fert - Corn	0.0	0.0	-3400	9058.495	1E+30
Insect - Corn	0.0	0.0	-1400	9058.495	1E+30
Herb - Corn	0.0	0.0	-100	9058.495	1E+30
Fert - Pump	2.4	0.0	-2600	1E+30	14372.365
Insect - Pump	2.4	0.0	-1600	1E+30	14372.365
Herb - Pump	2.4	0.0	-480	1E+30	14372.365
Fung-pump	2.4	0.0	-800	1E+30	14372.365
Fert-Sweet	1.8	0.0	-2000	1E+30	5759.195
Herb-Sweet	1.8	0.0	-1800	1E+30	5759.195
Fert - Callaloo	0.2	0.0	-800	1E+30	19901.21
Insect - Callaloo	0.2	0.0	-1700	1E+30	19901.21
Fung - Callaloo	0.2	0.0	-1300	1E+30	19901.21
Fert - Cassava	1.7	0.0	-2350	2.55E+18	29851.21
Insect - Cassava	1.7	0.0	-600	2.55E+18	29851.21
Herb - Cassava	1.7	0.0	-450	2.632E+18	29851.21
Fert - Sugar	0.0	0.0	-2400	6020.3125	1E+30
Herb - Sugar	0.0	-6020.3	-1900	6020.3125	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	18.2	0.0	400	100	333.33333
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	8.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	6.6	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	11.2	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.7	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Thirteen

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.029E+16
Herb-Sweet	0.0	1800.0	0	1.8	4.618E+15
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.2	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	2.485E+15
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	-4120.3	0	0.7	0
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	1.478E+17
Harvest -Pepper	0.0	-12.0	0	11000	1E+30
Harvest - Corn	0.0	-8.0	0	0	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	4680	1.615E+19
Harvest-Callaloo	0.0	-5.0	0	1750	1E+30
Harvet-Cal. Winter	0.0	-5.0	0	1750	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	82737.2	1.1	1.2422222	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	14372.4	2.4	0.8012195	1.12
Sweet Potato	1.8	5759.2	1.8	0.73	1.8
Callaloo	0.2	19901.2	0.2	0.9062069	0.2
Casava	1.7	29851.2	1.7	0.056	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Fourteen

<b>IPM and no duty concession</b>					
Returns = \$JM485,067	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-30828.8	-5092	30828.811	1E+30
Grow Pepper - IPM	1.1	0.0	-5192	2.334E+18	30828.811
Grow corn	0.15	0.0	-6314	9058.495	220205.79
Grow Pumpkin	2.4	0.0	-8352	1E+30	14372.365
Grow Sweet	0.0	-7836.5	-6592	7836.4925	1E+30
Grow Sweet - IPM	1.8	0.0	-7092	1E+30	7836.4925
Grow Callaloo	0.0	-10555.0	-4092	10555	1E+30
Grow Callaloo	0.0	-11612.7	-4092	11612.692	1E+30
Grow Callaloo - IPM	0.0	0.0	-5592	10000	15096.5
Grow Callaloo	0.0	-12030.0	-4092	12030	1E+30
Grow Callaloo - IPM	0.2	0.0	-5592	1E+30	10000
Grow Cassava	1.7	0.0	-12092	1E+30	27351.21
Grow Sugar	0.0	0.0	-32292	6220.3125	1E+30
Credit	61168.8	0.0	-0.03	0.192627	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	756.1	0.0	-19.394375	11.394375	27.639163
Water Unit	2080.0	0.0	-8	7.395E+15	11.394375
Fert - Pepper	1.1	0.0	-750	3.502E+18	113465.99
Insect - Pepper	0.5	0.0	-2000	20552.54	226931.98
Herb - Pepper	0.6	0.0	-2000	1E+30	226931.98
Fert - Corn	0.2	0.0	-3400	9058.495	220205.79
Insect - Corn	0.2	0.0	-1400	9058.495	220205.79
Herb - Corn	0.2	0.0	-100	9058.495	220205.79
Fert - Pump	2.4	0.0	-2600	1E+30	14372.365
Insect - Pump	2.4	0.0	-1600	1E+30	14372.365
Herb - Pump	2.4	0.0	-480	1E+30	14372.365
Fung-pump	2.4	0.0	-800	1E+30	14372.365
Fert-Sweet	1.8	0.0	-2000	1E+30	13595.687
Herb-Sweet	1.8	0.0	-1800	1E+30	13595.687
Fert - Callaloo	0.2	0.0	-800	1E+30	30456.21
Insect - Callaloo	0.1	0.0	-1700	21110	60912.42
Fung - Callaloo	0.2	0.0	-1300	1E+30	30456.21
Fert - Cassava	1.7	0.0	-2350	1E+30	27351.21
Insect - Cassava	1.7	0.0	-600	1E+30	27351.21
Herb - Cassava	1.7	0.0	-450	1E+30	27351.21
Fert - Sugar	0.0	0.0	-2400	6220.3125	1E+30
Herb - Sugar	0.0	-6220.3	-1900	6220.3125	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Fourteen

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	1.33E+16
Herb-Sweet	0.0	1800.0	0	1.8	1.614E+15
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	1.076E+15
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	-4320.3	0	1.2025035	0
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	5.911E+17
April Labor	45.0	500.0	45	23.1146	3.137E+17
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	-9058.5	0	0.9669459	0.154
Hot Pepper	1.1	113466.0	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	14372.4	2.4	0.8462703	1.454
Sweet Potato	1.8	13595.7	1.8	0.7950444	1.8
Callaloo	0.2	30456.2	0.2	1.8418824	0.2
Casava	1.7	27351.2	1.7	1.1182857	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Fifteen

<b>No IPM and CET reduction</b>					
Returns = \$JM438,536	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-4809.5767	1E+30	70851.97
Grow Pepper - IPM	0.0	-70852.0	-104908.58	70851.97	1E+30
Grow corn	0.0	0.0	-6031.5767	8522.599	1E+30
Grow Pumpkin	2.4	0.0	-8069.5767	1E+30	14937.261
Grow Sweet	1.8	0.0	-6309.5767	1E+30	6240.091
Grow Sweet - IPM	0.0	-95162.5	-106808.58	95162.478	1E+30
Grow Callaloo	0.2	0.0	-3809.5767	303704.9	750
Grow Callaloo	0.0	0.0	-3809.5767	8750	70085.746
Grow Callaloo - IPM	0.0	-91111.5	-105308.58	91111.47	1E+30
Grow Callaloo	0.0	-750.0	-3809.5767	750	1E+30
Grow Callaloo - IPM	0.0	-91811.5	-105308.58	91811.47	1E+30
Grow Cassava	1.7	0.0	-11809.577	1E+30	30312.106
Grow Sugar	0.0	0.0	-32009.577	5514.4165	1E+30
Credit	56853.0	0.0	-0.03	0.172274	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	582.4	0.0	-19.394375	11.394375	20.000292
Water Unit	2080.0	0.0	-8	8.87E+16	11.394375
Fert - Pepper	1.1	0.0	-712.5	1E+30	83315.576
Insect - Pepper	2.2	0.0	-1900	1E+30	41657.788
Herb - Pepper	0.6	0.0	-1900	1E+30	166631.15
Fert - Corn	0.0	0.0	-3230	8522.599	1E+30
Insect - Corn	0.0	0.0	-1330	8522.599	1E+30
Herb - Corn	0.0	0.0	-95	8522.599	1E+30
Fert - Pump	2.4	0.0	-2470	1E+30	14937.261
Insect - Pump	2.4	0.0	-1520	1E+30	14937.261
Herb - Pump	2.4	0.0	-456	1E+30	14937.261
Fung-pump	2.4	0.0	-760	1E+30	14937.261
Fert-Sweet	1.8	0.0	-1900	1E+30	6240.091
Herb-Sweet	1.8	0.0	-1710	1E+30	6240.091
Fert - Callaloo	0.2	0.0	-760	1E+30	20382.106
Insect - Callaloo	0.2	0.0	-1615	1E+30	20382.106
Fung - Callaloo	0.2	0.0	-1235	1E+30	20382.106
Fert - Cassava	1.7	0.0	-2232.5	1E+30	30312.106
Insect - Cassava	1.7	0.0	-570	1E+30	30312.106
Herb - Cassava	1.7	0.0	-427.5	1E+30	30312.106
Fert - Sugar	0.0	0.0	-2280	5514.4165	1E+30
Herb - Sugar	0.0	0.0	-1805	5514.4165	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	18.2	0.0	400	100	333.33333
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	8.7	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	6.6	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	11.2	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.7	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Fifteen

Insect - Pump	0.0	1520.0	0	2.4	1E+30
Herb - Pump	0.0	456.0	0	2.4	1E+30
Fung-pump	0.0	760.0	0	2.4	1E+30
Fert-Sweet	0.0	1900.0	0	1.8	3.699E+15
Herb-Sweet	0.0	1710.0	0	1.8	2.623E+16
Fert - Callaloo	0.0	760.0	0	0.2	1E+30
Insect - Callaloo	0.0	1615.0	0	0.2	1E+30
Fung - Callaloo	0.0	1235.0	0	0.2	1E+30
Fert - Cassava	0.0	2232.5	0	1.7	1E+30
Insect - Cassava	0.0	570.0	0	1.7	1E+30
Herb - Cassava	0.0	427.5	0	1.7	1E+30
Fert - Sugar	0.0	2280.0	0	0	1E+30
Herb - Sugar	0.0	1805.0	0	0	1.186E+16
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	1.541E+17
Harvest -Pepper	0.0	-12.0	0	11000	1E+30
Harvest - Corn	0.0	-10.8	0	2663.5135	0
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	4680	1E+30
Harvest-Callaloo	0.0	-5.0	0	1750	1E+30
Harvet-Cal. Winter	0.0	-5.0	0	1750	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1357.6	0	24.5	0
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	83315.6	1.1	1.2422222	1.1
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	14937.3	2.4	0.8012195	1.12
Sweet Potato	1.8	6240.1	1.8	0.73	1.8
Callaloo	0.2	20382.1	0.2	0.9062069	0.2
Casava	1.7	30312.1	1.7	0.056	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Sixteen

<b>IPM and CET reduction</b>					
Returns = \$JM488,713	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-30753.8	-4809.5767	30753.836	1E+30
Grow Pepper - IPM	1.1	0.0	-4909.5767	1E+30	30753.836
Grow corn	0.15	0.0	-6031.5767	8522.599	219670.26
Grow Pumpkin	2.4	0.0	-8069.5767	1E+30	14937.261
Grow Sweet	0.0	-7836.5	-6309.5767	7836.4925	1E+30
Grow Sweet - IPM	1.8	0.0	-6809.5767	1E+30	7836.4925
Grow Callaloo	0.0	-10512.5	-3809.5767	10512.5	1E+30
Grow Callaloo	0.0	-11570.2	-3809.5767	11570.192	1E+30
Grow Callaloo - IPM	0.0	0.0	-5309.5767	10000	15041.25
Grow Callaloo	0.0	-11987.5	-3809.5767	11987.5	1E+30
Grow Callaloo - IPM	0.2	0.0	-5309.5767	1E+30	10000
Grow Cassava	1.7	0.0	-11809.577	1E+30	27812.106
Grow Sugar	0.0	0.0	-32009.577	5714.4165	1E+30
Credit	59091.8	0.0	-0.03	0.1785221	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	756.1	0.0	-19.394375	11.394375	28.725502
Water Unit	2080.0	0.0	-8	7.497E+16	11.394375
Fert - Pepper	1.1	0.0	-712.5	1E+30	113969.41
Insect - Pepper	0.5	0.0	-1900	20502.557	227938.82
Herb - Pepper	0.6	0.0	-1900	1E+30	227938.82
Fert - Corn	0.2	0.0	-3230	8522.599	219670.26
Insect - Corn	0.2	0.0	-1330	8522.599	219670.26
Herb - Corn	0.2	0.0	-95	8522.599	219670.26
Fert - Pump	2.4	0.0	-2470	1E+30	14937.261
Insect - Pump	2.4	0.0	-1520	1E+30	14937.261
Herb - Pump	2.4	0.0	-456	1E+30	14937.261
Fung-pump	2.4	0.0	-760	1E+30	14937.261
Fert-Sweet	1.8	0.0	-1900	1E+30	14076.584
Herb-Sweet	1.8	0.0	-1710	1E+30	14076.584
Fert - Callaloo	0.2	0.0	-760	1E+30	30894.606
Insect - Callaloo	0.1	0.0	-1615	21025	61789.212
Fung - Callaloo	0.2	0.0	-1235	1E+30	30894.606
Fert - Cassava	1.7	0.0	-2232.5	1E+30	27812.106
Insect - Cassava	1.7	0.0	-570	1E+30	27812.106
Herb - Cassava	1.7	0.0	-427.5	1E+30	27812.106
Fert - Sugar	0.0	0.0	-2280	5714.4165	1E+30
Herb - Sugar	0.0	0.0	-1805	5714.4165	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Sixteen

Insect - Pump	0.0	1520.0	0	2.4	1E+30
Herb - Pump	0.0	456.0	0	2.4	1E+30
Fung-pump	0.0	760.0	0	2.4	1E+30
Fert-Sweet	0.0	1900.0	0	1.8	1E+30
Herb-Sweet	0.0	1710.0	0	1.8	3.276E+16
Fert - Callaloo	0.0	760.0	0	0.2	1E+30
Insect - Callaloo	0.0	1615.0	0	0.1	1E+30
Fung - Callaloo	0.0	1235.0	0	0.2	1E+30
Fert - Cassava	0.0	2232.5	0	1.7	1E+30
Insect - Cassava	0.0	570.0	0	1.7	1E+30
Herb - Cassava	0.0	427.5	0	1.7	1E+30
Fert - Sugar	0.0	2280.0	0	0	1E+30
Herb - Sugar	0.0	1805.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	2.399E+17
April Labor	45.0	500.0	45	23.1146	1.478E+17
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1363.3	0	44.729941	0
Hot/Corn	0.0	-8522.6	0	0.9669459	0.154
Hot Pepper	1.1	113969.4	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	14937.3	2.4	0.8462703	1.454
Sweet Potato	1.8	14076.6	1.8	0.7950444	1.8
Callaloo	0.2	30894.6	0.2	1.8418824	0.2
Casava	1.7	27812.1	1.7	1.1182857	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30

Scenario Seventeen

<b>No IPM and exchange rate appreciation</b>					
Returns = \$JM415,116	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	1.1	0.0	-4809.5767	3.104E+18	72651.97
Grow Pepper - IPM	0.0	-72652.0	-104908.58	72651.97	1E+30
Grow corn	0.0	-8522.6	-6031.5767	8522.599	1E+30
Grow Pumpkin	2.4	0.0	-8069.5767	1E+30	12137.261
Grow Sweet	1.8	0.0	-6309.5767	1E+30	4680.091
Grow Sweet - IPM	0.0	-95630.5	-106808.58	95630.478	1E+30
Grow Callaloo	0.2	0.0	-3809.5767	305892.4	750
Grow Callaloo	0.0	0.0	-3809.5767	6562.5	70590.554
Grow Callaloo - IPM	0.0	-91767.7	-105308.58	91767.72	1E+30
Grow Callaloo	0.0	-750.0	-3809.5767	750	1E+30
Grow Callaloo - IPM	0.0	-92467.7	-105308.58	92467.72	1E+30
Grow Cassava	1.7	0.0	-11809.577	1E+30	26280.106
Grow Sugar	0.0	0.0	-32009.577	5514.4165	1E+30
Credit	56853.0	0.0	-0.03	0.172274	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	582.4	0.0	-19.394375	11.394375	15.000292
Water Unit	2080.0	0.0	-8	1.068E+17	11.394375
Fert - Pepper	1.1	0.0	-712.5	2.045E+19	77315.576
Insect - Pepper	2.2	0.0	-1900	3.104E+18	38657.788
Herb - Pepper	0.6	0.0	-1900	5.139E+19	154631.15
Fert - Corn	0.0	0.0	-3230	8522.599	1E+30
Insect - Corn	0.0	0.0	-1330	8522.599	1E+30
Herb - Corn	0.0	0.0	-95	8522.599	1E+30
Fert - Pump	2.4	0.0	-2470	1E+30	12137.261
Insect - Pump	2.4	0.0	-1520	1E+30	12137.261
Herb - Pump	2.4	0.0	-456	1E+30	12137.261
Fung-pump	2.4	0.0	-760	1E+30	12137.261
Fert-Sweet	1.8	0.0	-1900	1E+30	4680.091
Herb-Sweet	1.8	0.0	-1710	1E+30	4680.091
Fert - Callaloo	0.2	0.0	-760	1E+30	18194.606
Insect - Callaloo	0.2	0.0	-1615	1E+30	18194.606
Fung - Callaloo	0.2	0.0	-1235	1E+30	18194.606
Fert - Cassava	1.7	0.0	-2232.5	1E+30	26280.106
Insect - Cassava	1.7	0.0	-570	1E+30	26280.106
Herb - Cassava	1.7	0.0	-427.5	1E+30	26280.106
Fert - Sugar	0.0	-5514.4	-2280	5514.4165	1E+30
Herb - Sugar	0.0	0.0	-1805	5514.4165	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	18.2	0.0	400	100	333.33333
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	8.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	6.6	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	11.2	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.7	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Seventeen

Insect - Pump	0.0	1520.0	0	2.4	1E+30
Herb - Pump	0.0	456.0	0	2.4	1E+30
Fung-pump	0.0	760.0	0	2.4	1E+30
Fert-Sweet	0.0	1900.0	0	1.8	3.699E+15
Herb-Sweet	0.0	1710.0	0	1.8	1.271E+16
Fert - Callaloo	0.0	760.0	0	0.2	1E+30
Insect - Callaloo	0.0	1615.0	0	0.2	1E+30
Fung - Callaloo	0.0	1235.0	0	0.2	1E+30
Fert - Cassava	0.0	2232.5	0	1.7	1E+30
Insect - Cassava	0.0	570.0	0	1.7	1E+30
Herb - Cassava	0.0	427.5	0	1.7	4.098E+15
Fert - Sugar	0.0	-3234.4	0	0	0
Herb - Sugar	0.0	1805.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	18.21
June Labor	45.0	400.0	45	1E+30	8.75
July Labor	45.0	400.0	45	1E+30	6.57
August Labor	45.0	400.0	45	1E+30	11.18
September	45.0	400.0	45	1E+30	27.73
October Labor	45.0	400.0	45	1E+30	37.15
November Labor	45.0	400.0	45	1E+30	37.55
December Labor	45.0	400.0	45	1E+30	26.45
January Labor	45.0	400.0	45	1E+30	30.25
February Labor	45.0	400.0	45	1E+30	36.45
March Labor	45.0	400.0	45	1E+30	1.4
April Labor	45.0	500.0	45	17.66	2.01E+17
Harvest -Pepper	0.0	-11.4	0	11000	1E+30
Harvest - Corn	0.0	-8.0	0	0	1E+30
Harvest Pump	0.0	-7.6	0	16800	1E+30
Harvest-Sweet	0.0	-11.4	0	4680	2.254E+19
Harvest-Callaloo	0.0	-4.8	0	1750	1E+30
Harvet-Cal. Winter	0.0	-4.7	0	1750	0
Harvest - Cassava	0.0	-5.7	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	0.0	0	0	1E+30
Hot Pepper	1.1	77315.6	1.1	0	0.0384295
Corn	0.0	0.0	1.2	1E+30	1.2
Pumpkin	2.4	12137.3	2.4	0.8012195	0.2690063
Sweet Potato	1.8	4680.1	1.8	0	1.8
Callaloo	0.2	18194.6	0.2	0.0774927	0
Casava	1.7	26280.1	1.7	0	0.7064
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	-11.4	0	0	1E+30
Harvest Pump	0.0	-7.6	0	0	1E+30
Harvest-Sweet	0.0	-11.4	0	0	1E+30
Harvest-Callaloo	0.0	-4.7	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	-5.7	0	0	1E+30

Scenario Eighteen

<b>IPM and exchange rate appreciation</b>					
Returns = \$JM462,340	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-28953.8	-4809.5767	28953.836	1E+30
Grow Pepper - IPM	1.1	0.0	-4909.5767	1E+30	28953.836
Grow corn	0.15	0.0	-6031.5767	8522.599	206813.12
Grow Pumpkin	2.4	0.0	-8069.5767	1E+30	12137.261
Grow Sweet	0.0	-7368.5	-6309.5767	7368.4925	1E+30
Grow Sweet - IPM	1.8	0.0	-6809.5767	1E+30	7368.4925
Grow Callaloo	0.0	-9856.2	-3809.5767	9856.25	1E+30
Grow Callaloo	0.0	-10913.9	-3809.5767	10913.942	1E+30
Grow Callaloo - IPM	0.0	0.0	-5309.5767	7156.25	14188.125
Grow Callaloo	0.0	-11331.2	-3809.5767	11331.25	1E+30
Grow Callaloo - IPM	0.2	0.0	-5309.5767	1E+30	7156.25
Grow Cassava	1.7	0.0	-11809.577	1E+30	23780.106
Grow Sugar	0.0	0.0	-32009.577	5714.4165	1E+30
Credit	59091.8	0.0	-0.03	0.1785221	0.1951
Unsub Credit	0.0	-0.2	-0.2551	0.1951	1E+30
Water	756.1	0.0	-19.394375	11.394375	23.340887
Water Unit	2080.0	0.0	-8	5.629E+16	11.394375
Fert - Pepper	1.1	0.0	-712.5	1E+30	106169.41
Insect - Pepper	0.5	0.0	-1900	19302.557	212338.82
Herb - Pepper	0.6	0.0	-1900	1E+30	212338.82
Fert - Corn	0.2	0.0	-3230	8522.599	206813.12
Insect - Corn	0.2	0.0	-1330	8522.599	206813.12
Herb - Corn	0.2	0.0	-95	8522.599	206813.12
Fert - Pump	2.4	0.0	-2470	1E+30	12137.261
Insect - Pump	2.4	0.0	-1520	1E+30	12137.261
Herb - Pump	2.4	0.0	-456	1E+30	12137.261
Fung-pump	2.4	0.0	-760	1E+30	12137.261
Fert-Sweet	1.8	0.0	-1900	1E+30	12048.584
Herb-Sweet	1.8	0.0	-1710	1E+30	12048.584
Fert - Callaloo	0.2	0.0	-760	3.255E+18	28050.856
Insect - Callaloo	0.1	0.0	-1615	19712.5	56101.712
Fung - Callaloo	0.2	0.0	-1235	3.255E+18	28050.856
Fert - Cassava	1.7	0.0	-2232.5	1E+30	23780.106
Insect - Cassava	1.7	0.0	-570	1E+30	23780.106
Herb - Cassava	1.7	0.0	-427.5	1E+30	23780.106
Fert - Sugar	0.0	-5714.4	-2280	5714.4165	1E+30
Herb - Sugar	0.0	0.0	-1805	5714.4165	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Eighteen

Insect - Pump	0.0	1520.0	0	2.4	1E+30
Herb - Pump	0.0	456.0	0	2.4	1E+30
Fung-pump	0.0	760.0	0	2.4	1E+30
Fert-Sweet	0.0	1900.0	0	1.8	1E+30
Herb-Sweet	0.0	1710.0	0	1.8	2.329E+16
Fert - Callaloo	0.0	760.0	0	0.2	1E+30
Insect - Callaloo	0.0	1615.0	0	0.1	1E+30
Fung - Callaloo	0.0	1235.0	0	0.2	1E+30
Fert - Cassava	0.0	2232.5	0	1.7	1E+30
Insect - Cassava	0.0	570.0	0	1.7	1E+30
Herb - Cassava	0.0	427.5	0	1.7	4.504E+14
Fert - Sugar	0.0	-3434.4	0	1.2779983	0
Herb - Sugar	0.0	1805.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	7.197E+17
April Labor	45.0	500.0	45	23.1146	5.239E+17
Harvest -Pepper	0.0	-11.4	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-7.6	0	16800	1E+30
Harvest-Sweet	0.0	-11.4	0	6084	1E+30
Harvest-Callaloo	0.0	-4.7	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.6	0	2275	0
Harvest - Cassava	0.0	-5.7	0	22848	1E+30
Harvest - Sugar	0.0	-1200.0	0	0	1E+30
Hot/Corn	0.0	-8522.6	0	0.9669459	0.154
Hot Pepper	1.1	106169.4	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	12137.3	2.4	0.8462703	0.0105376
Sweet Potato	1.8	12048.6	1.8	0.0064923	1.8
Callaloo	0.2	28050.9	0.2	0.0110817	0.2
Casava	1.7	23780.1	1.7	0.0162648	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	-11.4	0	0	1E+30
Harvest Pump	0.0	-7.6	0	0	1E+30
Harvest-Sweet	0.0	-11.4	0	0	1E+30
Harvest-Callaloo	0.0	-4.7	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	-5.7	0	0	1E+30

Scenario Nineteen

<b>IPM and no subsidies available</b>					
Returns = \$JM446,948	<b>Final</b>	<b>Reduced</b>	<b>Objective</b>	<b>Allowable</b>	<b>Allowable</b>
<b>Name</b>	<b>Value</b>	<b>Cost</b>	<b>Coefficient</b>	<b>Increase</b>	<b>Decrease</b>
Grow Pepper	0.0	-30589.5	-5368	30589.502	1E+30
Grow Pepper - IPM	1.1	0.0	-5468	1E+30	30589.502
Grow corn	0.15	0.0	-6590	10628.484	218496.44
Grow Pumpkin	2.4	0.0	-8628	1E+30	12404.762
Grow Sweet	0.0	-7738.9	-6868	7738.9425	1E+30
Grow Sweet - IPM	1.8	0.0	-7368	1E+30	7738.9425
Grow Callaloo	0.0	-10262.3	-4368	10262.35	1E+30
Grow Callaloo	0.0	-11320.0	-4368	11320.042	1E+30
Grow Callaloo - IPM	0.0	0.0	-5868	10000	14716.055
Grow Callaloo	0.0	-11737.3	-4368	11737.35	1E+30
Grow Callaloo - IPM	0.2	0.0	-5868	1E+30	10000
Grow Cassava	1.7	0.0	-12368	1E+30	24653.933
Grow Sugar	0.0	0.0	-32568	12858.609	1E+30
Credit	0.0	0.0	-0.2551	0	1E+30
Unsub Credit	63198.5	0.0	-0.2551	0	0
Water	2080.0	0.0	-19.394375	5.629E+16	0
Water Unit	756.1	0.0	-19.394375	0	23.855312
Fert - Pepper	1.1	0.0	-750	1E+30	111895.11
Insect - Pepper	0.6	0.0	-2000	20393.001	223790.21
Herb - Pepper	0.6	0.0	-2000	1E+30	223790.21
Fert - Corn	0.2	0.0	-3400	10628.484	218496.44
Insect - Corn	0.2	0.0	-1400	10628.484	218496.44
Herb - Corn	0.2	0.0	-100	10628.484	218496.44
Fert - Pump	2.4	0.0	-2600	1E+30	12404.762
Insect - Pump	2.4	0.0	-1600	1E+30	12404.762
Herb - Pump	2.4	0.0	-480	1E+30	12404.762
Fung-pump	2.4	0.0	-800	1E+30	12404.762
Fert-Sweet	1.8	0.0	-2000	1E+30	11873.911
Herb-Sweet	1.8	0.0	-1800	1E+30	11873.911
Fert - Callaloo	0.2	0.0	-800	1E+30	29027.083
Insect - Callaloo	0.1	0.0	-1700	20524.7	58054.166
Fung - Callaloo	0.2	0.0	-1300	1E+30	29027.083
Fert - Cassava	1.7	0.0	-2350	1E+30	24653.933
Insect - Cassava	1.7	0.0	-600	1E+30	24653.933
Herb - Cassava	1.7	0.0	-450	1E+30	24653.933
Fert - Sugar	0.0	0.0	-2400	12858.609	1E+30
Herb - Sugar	0.0	0.0	-1900	12858.609	1E+30
HL-5	0.0	-100.0	-500	100	1E+30
SL - 5	15.8	0.0	400	100	400
HL-6	0.0	-100.0	-500	100	1E+30
SL-6	7.8	0.0	400	100	400
HL-7	0.0	-100.0	-500	100	1E+30
SL-7	7.2	0.0	400	100	400
HL-8	0.0	-100.0	-500	100	1E+30
SL-8	12.1	0.0	400	100	400
HL-9	0.0	-100.0	-500	100	1E+30
SI-9	27.6	0.0	400	100	400
HL-10	0.0	-100.0	-500	100	1E+30



Scenario Nineteen

Insect - Pump	0.0	1600.0	0	2.4	1E+30
Herb - Pump	0.0	480.0	0	2.4	1E+30
Fung-pump	0.0	800.0	0	2.4	1E+30
Fert-Sweet	0.0	2000.0	0	1.8	4.028E+15
Herb-Sweet	0.0	1800.0	0	1.8	1E+30
Fert - Callaloo	0.0	800.0	0	0.2	1E+30
Insect - Callaloo	0.0	1700.0	0	0.1	1E+30
Fung - Callaloo	0.0	1300.0	0	0.2	1E+30
Fert - Cassava	0.0	2350.0	0	1.7	1E+30
Insect - Cassava	0.0	600.0	0	1.7	1E+30
Herb - Cassava	0.0	450.0	0	1.7	6.99E+16
Fert - Sugar	0.0	2400.0	0	0	1E+30
Herb - Sugar	0.0	1900.0	0	0	1E+30
May Labor	45.0	400.0	45	1E+30	15.7844
June Labor	45.0	400.0	45	1E+30	7.828
July Labor	45.0	400.0	45	1E+30	7.1554
August Labor	45.0	400.0	45	1E+30	12.064
September	45.0	400.0	45	1E+30	27.622
October Labor	45.0	400.0	45	1E+30	36.95
November Labor	45.0	400.0	45	1E+30	33.75
December Labor	45.0	400.0	45	1E+30	19.35
January Labor	45.0	400.0	45	1E+30	29.7
February Labor	45.0	400.0	45	1E+30	37.25
March Labor	45.0	500.0	45	2.15	2.01E+17
April Labor	45.0	500.0	45	23.1146	1E+30
Harvest -Pepper	0.0	-12.0	0	14300	1E+30
Harvest - Corn	0.0	-8.0	0	462	1E+30
Harvest Pump	0.0	-8.0	0	16800	1E+30
Harvest-Sweet	0.0	-12.0	0	6084	1E+30
Harvest-Callaloo	0.0	-5.0	0	2275	1E+30
Harvet-Cal. Winter	0.0	-4.9	0	2275	0
Harvest - Cassava	0.0	-6.0	0	22848	1E+30
Harvest - Sugar	0.0	-1567.4	0	92.61	0
Hot/Corn	0.0	-10628.5	0	0.9669459	0.154
Hot Pepper	1.1	111895.1	1.1	1.2619247	0.7166667
Corn	0.2	0.0	1.2	1E+30	1.046
Pumpkin	2.4	12404.8	2.4	0.8462703	1.454
Sweet Potato	1.8	11873.9	1.8	0.7950444	1.8
Callaloo	0.2	29027.1	0.2	1.8418824	0.2
Casava	1.7	24653.9	1.7	1.1182857	0.086
Sugar	0.0	0.0	4.9	1E+30	4.9
Harvest -Pepper	0.0	0.0	0	0	1E+30
Harvest Pump	0.0	0.0	0	0	1E+30
Harvest-Sweet	0.0	0.0	0	0	1E+30
Harvest-Callaloo	0.0	0.0	0	0	1E+30
Harvet-Cal. Winter	0.0	-4.0	0	0	1E+30
Harvest - Cassava	0.0	0.0	0	0	1E+30