

CUADRO 7.2.3.6 - ANALISIS DE SENSIBILIDAD - PERDIDAS ECONOMICAS OCASIONADAS POR EL FENOMENO DE LAS AGUAS CLARAS

Precio de la manzana y pera: 0,05 a 0,12 \$/kg
Tasa de interés: 10 % anual
Pérdida por fresática entre 0 y 1m.: 50%
Pérdida por fresática entre 1 y 1.5 m.: 10%
Incidencia de a. claras en salinidad: 25 %
Incidencia de a. claras en capa frática: 25 %

PERDIDAS ECONOMICAS POR SALINIDAD EN VID

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	1.733	1.018	0.0156	27.446	185.313
1980	1.733	1.018	0.0313	55.091	336.933
1981	1.733	1.018	0.0469	82.637	459.464
1982	1.649	1.048	0.0625	107.852	545.716
1983	1.565	1.079	0.0825	105.465	484.408
1984	1.481	1.110	0.0825	102.870	428.877
1985	1.386	1.141	0.0825	99.577	376.143
1986	1.312	1.173	0.0825	96.181	332.044
1987	1.228	1.205	0.0825	92.478	290.235
1988	1.144	1.237	0.0825	88.462	252.351
1989	1.060	1.269	0.0825	84.128	218.205
1990	976	1.302	0.0825	79.470	187.387
1991	892	1.336	0.0825	74.485	159.665
1992	808	1.369	0.0825	69.167	134.766
1993	724	1.403	0.0825	63.510	112.512
1994	696	1.412	0.0825	61.464	98.989
1995	669	1.421	0.0825	59.387	86.949
1996	641	1.430	0.0825	57.279	76.238
1997	613	1.439	0.0825	55.139	66.719
1998	585	1.448	0.0825	52.918	58.210
1999	557	1.456	0.0825	50.625	50.625
SUBTOTAL				4.977.104	

PERDIDAS ECONOMICAS POR SALINIDAD EN PERA Y MANZANA

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	6.722	2.760	0.0156	289.304	1.930.326
1980	6.722	2.760	0.0313	579.807	3.564.047
1981	6.722	2.760	0.0469	869.711	4.835.518
1982	6.703	2.777	0.0625	1.163.163	6.879.713
1983	6.683	2.793	0.0825	1.166.392	5.330.540
1984	6.663	2.808	0.0825	1.169.304	4.884.472
1985	6.643	2.823	0.0825	1.171.981	4.440.391
1986	6.623	2.837	0.0825	1.174.185	4.033.605
1987	6.603	2.850	0.0825	1.176.159	3.691.292
1988	6.583	2.863	0.0825	1.177.826	3.380.476
1989	6.563	2.875	0.0825	1.179.188	3.058.591
1990	6.543	2.886	0.0825	1.180.248	2.762.962
1991	6.523	2.897	0.0825	1.181.007	2.531.594
1992	6.504	2.917	0.0825	1.185.234	2.310.270
1993	6.484	2.936	0.0825	1.189.842	2.107.878
1994	6.507	3.000	0.0825	1.229.648	1.980.361
1995	6.631	3.064	0.0825	1.269.656	1.850.904
1996	6.704	3.126	0.0825	1.309.853	1.743.414
1997	6.778	3.188	0.0825	1.350.225	1.633.772
1998	6.851	3.169	0.0825	1.356.839	1.493.523
1999	6.925	3.150	0.0825	1.363.281	1.363.281
SUBTOTAL				64.874.210	

PERDIDAS ECONOMICAS POR FREATICA ALTA EN VID

CAPA FRATICA ENTRE 0 y 1 m.

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	1.386	1.018	0.0013	44.073	266.501
1980	1.386	1.018	0.0025	88.146	539.093
1981	1.386	1.018	0.0038	132.219	735.127
1982	1.310	1.048	0.0050	172.346	856.178
1983	1.252	1.079	0.0050	168.744	775.373
1984	1.184	1.110	0.0050	164.271	688.202
1985	1.117	1.141	0.0050	159.323	605.028
1986	1.050	1.173	0.0050	153.860	531.270
1987	983	1.205	0.0050	147.985	464.376
1988	915	1.237	0.0050	141.569	403.626
1989	848	1.269	0.0050	134.604	349.128
1990	781	1.302	0.0050	127.153	299.819
1991	714	1.336	0.0050	119.176	255.465
1992	647	1.369	0.0050	110.867	215.658
1993	579	1.403	0.0050	101.616	180.019
1994	557	1.412	0.0050	98.343	158.382
1995	535	1.421	0.0050	95.020	139.118
1996	513	1.430	0.0050	91.646	121.981
1997	490	1.439	0.0050	88.223	106.750
1998	468	1.448	0.0050	84.770	92.497
1999	446	1.456	0.0050	81.281	79.626
SUBTOTAL				7.963.368	

PERDIDAS ECONOMICAS POR FREATICA ALTA EN VID

CAPA FRATICA ENTRE 1 y 1.5 m.

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	4.332	1.018	0.0063	27.546	186.313
1980	4.332	1.018	0.0125	55.091	336.933
1981	4.332	1.018	0.0188	82.637	459.464
1982	4.121	1.048	0.0250	107.987	545.716
1983	3.911	1.079	0.0250	105.465	484.408
1984	3.701	1.110	0.0250	102.870	428.877
1985	3.491	1.141	0.0250	99.577	376.143
1986	3.281	1.173	0.0250	96.181	332.044
1987	3.071	1.205	0.0250	92.478	290.235
1988	2.861	1.237	0.0250	88.462	252.351
1989	2.651	1.269	0.0250	84.128	218.205
1990	2.441	1.302	0.0250	79.470	187.387
1991	2.231	1.336	0.0250	74.485	159.665
1992	2.021	1.369	0.0250	69.167	134.766
1993	1.811	1.403	0.0250	63.510	112.512
1994	1.741	1.412	0.0250	61.464	98.989
1995	1.672	1.421	0.0250	59.387	86.949
1996	1.602	1.430	0.0250	57.279	76.238
1997	1.533	1.439	0.0250	55.139	66.719
1998	1.463	1.448	0.0250	52.918	58.210
1999	1.394	1.456	0.0250	50.625	50.625
SUBTOTAL				4.977.104	

PERDIDAS ECONOMICAS POR FREATICA ALTA EN MANZANA Y PERA

CAPA FRATICA ENTRE 0 y 1 m.

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	5.378	2.760	0.0313	463.846	3.120.621
1980	5.378	2.760	0.0625	927.691	5.873.676
1981	5.378	2.760	0.0938	1.391.537	7.736.830
1982	5.362	2.777	0.1250	1.861.081	9.406.877
1983	5.346	2.793	0.1250	1.866.227	8.575.365
1984	5.330	2.808	0.1250	1.870.886	7.815.166
1985	5.314	2.823	0.1250	1.875.041	7.120.465
1986	5.298	2.837	0.1250	1.878.096	6.485.768
1987	5.282	2.850	0.1250	1.881.655	5.906.987
1988	5.266	2.863	0.1250	1.884.522	5.376.761
1989	5.251	2.875	0.1250	1.888.701	4.893.617
1990	5.235	2.886	0.1250	1.893.396	4.452.140
1991	5.219	2.897	0.1250	1.898.612	4.050.550
1992	5.203	2.917	0.1250	1.898.854	3.696.432
1993	5.187	2.936	0.1250	1.903.747	3.372.604
1994	5.166	3.000	0.1250	1.967.437	3.168.576
1995	5.304	3.064	0.1250	2.031.450	2.974.246
1996	5.363	3.126	0.1250	2.095.765	2.789.463
1997	5.422	3.188	0.1250	2.160.360	2.614.036
1998	5.481	3.169	0.1250	2.170.942	2.388.037
1999	5.540	3.150	0.1250	2.181.249	2.181.249
SUBTOTAL				103.798.735	

PERDIDAS ECONOMICAS POR FREATICA ALTA EN MANZANA Y PERA

CAPA FRATICA ENTRE 1 y 1.5 m.

AÑO	SUPERFICIE AFECTADA [ha]	INGRESO BRUTO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	18.608	2.760	0.0063	289.304	1.930.326
1980	18.608	2.760	0.0125	579.807	3.564.047
1981	18.608	2.760	0.0188	869.711	4.835.518
1982	18.596	2.777	0.0250	1.163.163	6.879.713
1983	18.707	2.793	0.0250	1.166.392	5.330.540
1984	18.657	2.808	0.0250	1.169.304	4.884.472
1985	18.607	2.823	0.0250	1.171.981	4.440.391
1986	18.557	2.837	0.0250	1.174.185	4.033.605
1987	18.508	2.850	0.0250	1.176.159	3.691.292
1988	18.458	2.863	0.0250	1.177.826	3.380.476
1989	18.408	2.875	0.0250	1.179.188	3.058.591
1990	18.358	2.886	0.0250	1.180.248	2.762.962
1991	18.309	2.897	0.0250	1.181.007	2.531.594
1992	18.259	2.917	0.0250	1.185.534	2.310.270
1993	18.209	2.936	0.0250	1.189.842	2.107.878
1994	18.393	3.000	0.0250	1.229.648	1.980.361
1995	18.577	3.064	0.0250	1.269.656	1.850.904
1996	18.760	3.126	0.0250	1.309.853	1.743.414
1997	18.944	3.188	0.0250	1.350.225	1.633.772
1998	17.128	3.169	0.0250	1.356.839	1.493.523
1999	17.312	3.150	0.0250	1.363.281	1.363.281
SUBTOTAL				64.874.210	

COSTO ADICIONAL EN OPERACIÓN Y MANTENIMIENTO DE CANALES

AÑO	SUPERFICIE AFECTADA [ha]	CANON DE REGO [\$/ha]	INFLUENCIA	ANUALIDAD [\$/]	ACTUALIZ. [\$/]
1979	58.500	65	0.0050	190.125	1.279.086
1980	58.500	65	0.0100	380.250	2.335.574
1981	58.500	65	0.0150	570.375	3.171.238
1982	58.500	65	0.0200	760.500	3.843.929
1983	58.500	65	0.0200	760.500	3.484.477
1984	58.500	65	0.0200	760.500	3.174.797
1985	58.500	65	0.0200	760.500	2.887.997
1986	58.500	65	0.0200	760.500	2.625.452
1987	58.500	65	0.0200	760.500	2.386.775
1988	58.500	65	0.0200	760.500	2.169.756
1989	58.500	65	0.0200	760.500	1.972.541
1990	58.500	65	0.0200	760.500	1.793.210
1991	58.500	65	0.0200	760.500	1.630.160
1992	58.500	65	0.0200	760.500	1.481.999
1993	58.500	65	0.0200	760.500	1.347.272
1994	58.500	65	0.0200	760.500	1.224.793
1995	58.500	65	0.0200	760.500	1.113.448
1996	58.500	65	0.0200	760.500	1.012.228
1997	58.500	65	0.0200	760.500	920.295
1998	58.500	65	0.0200	760.500	836.550
1999	58.500	65	0.0200	760.500	760.500
SUBTOTAL				41.454.040	

1 Tasa = 10
2 Precio Vid
3 1981 1993 1997 1999
4 0,11 0,14 0,14 0,2
Pérdidas fresática 0 - 1 = 50
Precio Manzana y otros
1981 1991 1999
0,12 0,11 0,05
Variación Precio
1

AÑO	SUPERFICIE VID SALINIDAD	SUPERFICIE Manz. Y PERA SALINIDAD	SUPERFICIE VID F. 0 - 1	SUPERFICIE Manz. Y PERA F. 0 - 1	SUPERFICIE VID F. 1 - 1.5	SUPERFICIE Manz. Y PERA F. 1 - 1.5	INGRESO BRUTO	INGRESO BRUTO Manz. Y PERA	SUPERFICIE CULTIVADA TOTAL	SUPERFICIE CULTIVADA
-----	--------------------------	-----------------------------------	-------------------------	----------------------------------	---------------------------	------------------------------------	---------------	----------------------------	----------------------------	----------------------