

## APPENDICES

Appendix A. Local maize varieties sold as dry grain: Sensitivity analysis on enterprise gross margin with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price (Real/kg) of local varieties										
		238.6	286.3	334.0	381.7	429.4	477.1	524.8	572.5	620.2	667.9	715.7
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
852.4	-50%	-388,549	-347,884	-307,218	-266,553	-225,887	-185,221	-144,556	-103,890	-63,224	-22,559	18,107
1,022.8	-40%	-347,884	-299,085	-250,286	-201,488	-152,689	-103,890	-55,091	-6,293	42,506	91,305	140,104
1,193.3	-30%	-307,218	-250,286	-193,354	-136,423	-79,491	-22,559	34,373	91,305	148,237	205,169	262,100
1,363.8	-20%	-266,553	-201,488	-136,423	-71,358	-6,293	58,772	123,837	188,902	253,967	319,032	384,097
1,534.2	-10%	-225,887	-152,689	-79,491	-6,293	66,906	140,104	213,302	286,500	359,698	432,896	506,094
1,704.7	0%	-185,221	-103,890	-22,559	58,772	140,104	221,435	302,766	384,097	465,429	546,760	628,091
1,875.2	10%	-144,556	-55,091	34,373	123,837	213,302	302,766	392,230	481,695	571,159	660,624	750,088
2,045.6	20%	-103,890	-6,293	91,305	188,902	286,500	384,097	481,695	579,292	676,890	774,487	872,085
2,216.1	30%	-63,224	42,506	148,237	253,967	359,698	465,429	571,159	676,890	782,620	888,351	994,082
2,386.6	40%	-22,559	91,305	205,169	319,032	432,896	546,760	660,624	774,487	888,351	1,002,215	1,116,078
2,557.1	50%	18,107	140,104	262,100	384,097	506,094	628,091	750,088	872,085	994,082	1,116,078	1,238,075

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

Appendix B. Hybrid maize varieties sold as dry grain under rainfed condition: Sensitivity analysis on enterprise gross margin with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price (Real/kg)										
		196.3	235.5	274.8	314.0	353.3	392.5	431.8	471.0	510.3	549.5	588.8
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
2,056.5	-50%	-524,101	-443,383	-362,665	-281,948	-201,230	-120,512	-39,795	40,923	121,640	202,358	283,076
2,467.8	-40%	-443,383	-346,522	-249,661	-152,800	-55,938	40,923	137,784	234,645	331,506	428,367	525,229
2,879.1	-30%	-362,665	-249,661	-136,656	-23,651	89,353	202,358	315,363	428,367	541,372	654,377	767,381
3,290.4	-20%	-281,948	-152,800	-23,651	105,497	234,645	363,793	492,942	622,090	751,238	880,386	1,009,534
3,701.7	-10%	-201,230	-55,938	89,353	234,645	379,937	525,229	670,520	815,812	961,104	1,106,395	1,251,687
4,113.0	0%	-120,512	40,923	202,358	363,793	525,229	686,664	848,099	1,009,534	1,170,970	1,332,405	1,493,840
4,524.3	10%	-39,795	137,784	315,363	492,942	670,520	848,099	1,025,678	1,203,257	1,380,835	1,558,414	1,735,993
4,935.6	20%	40,923	234,645	428,367	622,090	815,812	1,009,534	1,203,257	1,396,979	1,590,701	1,784,424	1,978,146
5,346.9	30%	121,640	331,506	541,372	751,238	961,104	1,170,970	1,380,835	1,590,701	1,800,567	2,010,433	2,220,299
5,758.2	40%	202,358	428,367	654,377	880,386	1,106,395	1,332,405	1,558,414	1,784,424	2,010,433	2,236,442	2,462,452
6,169.5	50%	283,076	525,229	767,381	1,009,534	1,251,687	1,493,840	1,735,993	1,978,146	2,220,299	2,462,452	2,704,604

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

Appendix C. Hybrid maize varieties sold as dry grain in irrigated condition: Sensitivity analysis on enterprise gross margin with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price of hybrid maize (Real/kg)										
		220.0	264.0	308.0	352.0	396.0	440.0	484.0	528.0	572.0	616.0	660.0
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
3,497.4	-50%	-1,453,603	-1,299,720	-1,145,836	-991,953	-838,069	-684,186	-530,303	-376,419	-222,536	-68,652	85,231
4,196.8	-40%	-1,299,720	-1,115,059	-930,399	-745,739	-561,079	-376,419	-191,759	-7,099	177,561	362,221	546,881
4,896.3	-30%	-1,145,836	-930,399	-714,963	-499,526	-284,089	-68,652	146,784	362,221	577,658	793,095	1,008,532
5,595.8	-20%	-991,953	-745,739	-499,526	-253,312	-7,099	239,115	485,328	731,541	977,755	1,223,968	1,470,182
6,295.2	-10%	-838,069	-561,079	-284,089	-7,099	269,891	546,881	823,871	1,100,862	1,377,852	1,654,842	1,931,832
6,994.7	0%	-684,186	-376,419	-68,652	239,115	546,881	854,648	1,162,415	1,470,182	1,777,949	2,085,715	2,393,482
7,694.2	10%	-530,303	-191,759	146,784	485,328	823,871	1,162,415	1,500,958	1,839,502	2,178,045	2,516,589	2,855,132
8,393.6	20%	-376,419	-7,099	362,221	731,541	1,100,862	1,470,182	1,839,502	2,208,822	2,578,142	2,947,462	3,316,783
9,093.1	30%	-222,536	177,561	577,658	977,755	1,377,852	1,777,949	2,178,045	2,578,142	2,978,239	3,378,336	3,778,433
9,792.6	40%	-68,652	362,221	793,095	1,223,968	1,654,842	2,085,715	2,516,589	2,947,462	3,378,336	3,809,209	4,240,083
10,492.1	50%	85,231	546,881	1,008,532	1,470,182	1,931,832	2,393,482	2,855,132	3,316,783	3,778,433	4,240,083	4,701,733

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

Appendix D. Local maize varieties sold as dry grain: Sensitivity analysis on enterprise gross margin after including other income from corncob and thinned plants with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price (Real/kg)										
		238.6	286.3	334.0	381.7	429.4	477.1	524.8	572.5	620.2	667.9	715.7
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
852.4	-50%	-132,626	-91,960	-51,295	-10,629	30,037	70,702	111,368	152,034	192,699	233,365	274,030
1,022.8	-40%	-91,960	-43,161	5,637	54,436	103,235	152,034	200,832	249,631	298,430	347,228	396,027
1,193.3	-30%	-51,295	5,637	62,569	119,501	176,433	233,365	290,297	347,228	404,160	461,092	518,024
1,363.8	-20%	-10,629	54,436	119,501	184,566	249,631	314,696	379,761	444,826	509,891	574,956	640,021
1,534.2	-10%	30,037	103,235	176,433	249,631	322,829	396,027	469,225	542,423	615,622	688,820	762,018
1,704.7	0%	70,702	152,034	233,365	314,696	396,027	477,358	558,690	640,021	721,352	802,683	884,015
1,875.2	10%	111,368	200,832	290,297	379,761	469,225	558,690	648,154	737,618	827,083	916,547	1,006,012
2,045.6	20%	152,034	249,631	347,228	444,826	542,423	640,021	737,618	835,216	932,813	1,030,411	1,128,008
2,216.1	30%	192,699	298,430	404,160	509,891	615,622	721,352	827,083	932,813	1,038,544	1,144,275	1,250,005
2,386.6	40%	233,365	347,228	461,092	574,956	688,820	802,683	916,547	1,030,411	1,144,275	1,258,138	1,372,002
2,557.1	50%	274,030	396,027	518,024	640,021	762,018	884,015	1,006,012	1,128,008	1,250,005	1,372,002	1,493,999

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

Appendix E. Hybrid maize varieties sold as dry grain under rainfed condition: Sensitivity analysis on enterprise gross margin after including other income from corncob with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price (Real/kg)										
		196.3	235.5	274.8	314.0	353.3	392.5	431.8	471.0	510.3	549.5	588.8
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
2,056.5	-50%	-491,197	-410,479	-329,761	-249,044	-168,326	-87,608	-6,891	73,827	154,544	235,262	315,980
2,467.8	-40%	-410,479	-313,618	-216,757	-119,896	-23,034	73,827	170,688	267,549	364,410	461,271	558,133
2,879.1	-30%	-329,761	-216,757	-103,752	9,253	122,257	235,262	348,267	461,271	574,276	687,281	800,285
3,290.4	-20%	-249,044	-119,896	9,253	138,401	267,549	396,697	525,846	654,994	784,142	913,290	1,042,438
3,701.7	-10%	-168,326	-23,034	122,257	267,549	412,841	558,133	703,424	848,716	994,008	1,139,299	1,284,591
4,113.0	0%	-87,608	73,827	235,262	396,697	558,133	719,568	881,003	1,042,438	1,203,874	1,365,309	1,526,744
4,524.3	10%	-6,891	170,688	348,267	525,846	703,424	881,003	1,058,582	1,236,161	1,413,739	1,591,318	1,768,897
4,935.6	20%	73,827	267,549	461,271	654,994	848,716	1,042,438	1,236,161	1,429,883	1,623,605	1,817,328	2,011,050
5,346.9	30%	154,544	364,410	574,276	784,142	994,008	1,203,874	1,413,739	1,623,605	1,833,471	2,043,337	2,253,203
5,758.2	40%	235,262	461,271	687,281	913,290	1,139,299	1,365,309	1,591,318	1,817,328	2,043,337	2,269,346	2,495,356
6,169.5	50%	315,980	558,133	800,285	1,042,438	1,284,591	1,526,744	1,768,897	2,011,050	2,253,203	2,495,356	2,737,508

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

Appendix F. Hybrid maize varieties sold as dry grain under irrigated condition: Sensitivity analysis on enterprise gross margin after including other income from corncob with changing maize yields and prices

Yield (kg/ha)	% Change	Maize Price (Real/kg) of local varieties										
		220.0	264.0	308.0	352.0	396.0	440.0	484.0	528.0	572.0	616.0	660.0
		-50%	-0.40	-0.30	-0.20	-0.10	0.00	0.10	20%	30%	40%	50%
3,497.4	-50%	-1,392,050	-1,238,167	-1,084,283	-930,400	-776,516	-622,633	-468,750	-314,866	-160,983	-7,099	146,784
4,196.8	-40%	-1,238,167	-1,053,506	-868,846	-684,186	-499,526	-314,866	-130,206	54,454	239,114	423,774	608,434
4,896.3	-30%	-1,084,283	-868,846	-653,410	-437,973	-222,536	-7,099	208,337	423,774	639,211	854,648	1,070,085
5,595.8	-20%	-930,400	-684,186	-437,973	-191,759	54,454	300,668	546,881	793,094	1,039,308	1,285,521	1,531,735
6,295.2	-10%	-776,516	-499,526	-222,536	54,454	331,444	608,434	885,424	1,162,415	1,439,405	1,716,395	1,993,385
6,994.7	0%	-622,633	-314,866	-7,099	300,668	608,434	916,201	1,223,968	1,531,735	1,839,502	2,147,268	2,455,035
7,694.2	10%	-468,750	-130,206	208,337	546,881	885,424	1,223,968	1,562,511	1,901,055	2,239,598	2,578,142	2,916,685
8,393.6	20%	-314,866	54,454	423,774	793,094	1,162,415	1,531,735	1,901,055	2,270,375	2,639,695	3,009,015	3,378,336
9,093.1	30%	-160,983	239,114	639,211	1,039,308	1,439,405	1,839,502	2,239,598	2,639,695	3,039,792	3,439,889	3,839,986
9,792.6	40%	-7,099	423,774	854,648	1,285,521	1,716,395	2,147,268	2,578,142	3,009,015	3,439,889	3,870,762	4,301,636
10,492.1	50%	146,784	608,434	1,070,085	1,531,735	1,993,385	2,455,035	2,916,685	3,378,336	3,839,986	4,301,636	4,763,286

Source: Calculation

1US\$ = 4,075 Riel (March 2005)

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