

**The impact of seed market access and transaction costs on  
potato biodiversity and yields in Bolivia**

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**ONLINE APPENDIX**

**Table A.1. Summary Statistics**

	Total	Seed Mkt Participants	Non-Seed Mkt Participants	Test of diff
<b>Household-level variables</b>				
Female head (%)	14.1	13.6	15.0	1.62
Head age (years)	45.2	44.4	46.5	2.2**
Head no education (%)	15.0	58.0	42.0	2.21
Head primary education (%)	75.5	76.0	74.6	0.26
Head high school education (%)	9.3	10.1	7.9	1.29
Household size (No. members)	4.9	4.8	4.9	0.38
Catholic (%)	75.4	73.3	79.0	3.94**
Social capital (%)	48.2	52.5	40.7	12.96**
Non-agricultural income (\$Bolivianos)	1973.4	1848.8	2189.2	0.99
Credit rationed (%)	21.0	22.4	18.0	2.68**
Livestock (No.)	22.8	22.9	23.6	0.19
Number potato plots (No.)	2.3	2.4	2.1	3.26 **
Land cultivated in potato (ha)	1.6	1.6	1.6	0.02
Altitude (mts.)	3362	3303	3463	10.82***
Irrigation (%)	77	79	74	1.71*
Transportation costs of seed (\$B)	32.7	51.5	0	7.89***
Price of seed per unit bought(\$B)	87.9	138.7	0	33.64***
Distance to market (log/km.)	18.1	19.1	16.4	2.22***
Distance to paved road (km.)	8.1	8.1	8.1	0.06
Tiraque (%)	64.5	54.1	82.5	9.42***
<b>Measures of intracrop biodiversity</b>				
Varietal count (No.)	1.4	1.4	1.3	3.28**
One variety planted	71.70	67.82	78.42	12.82***
Two varieties planted	21.70	24.29	17.21	3.6***
Three varieties planted	5.00	5.99	3.28	6.84***
Four (+) varieties planted	1.60	1.89	1.09	0.94
Shannon	0.17	0.19	0.12	3.71***
Berger-Parker	1.15	1.17	1.09	3.5***
Simpson	0.11	0.13	0.07	3.68***
Share non-Waycha	0.13	0.15	0.10	2.69***
Observations	1000	634	366	
<b>Potato Yields and Input Use</b>				
Yield per plot (kg/hect)	7734.7	7825.8	7555.6	0.55
Seeds planted (kg/hect)	1131.0	1149.9	1094.0	0.97
Fungicides (kg/hect)	3.5	3.3	4.3	2.25**
Insecticides (kg/hect)	2.2	2.1	2.5	1.57*
Organic fertilizer (%)	89.2	89.7	88.3	1.08
Chemical fertilizer (%)	60.7	70.7	40.1	203.55**
Family labor (No. journals/hect)	75.5	72.0	82.3	2.49**
Non-family labor (No. journals/hect)	46.7	49.6	40.8	3.73***
Yunta hrs per plot (No.)	6.3	6.5	5.8	3.57**
Tractor hrs per plot (No.)	1.4	1.0	2.2	2.2**
Observations	2325	1541	784	

Notes: Test of difference between participants and non participants in the seeds market: t-test for means, chi-square for percentages. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

<b>Table A.2. Participation in the Seed Market</b>		
	dy/dx	z-stat
Female head	0.035	0.71
Age	-0.003	-0.44
Age sqr	0.000	0.03
Head primary education	-0.001	-0.03
Head high school education	-0.005	-0.06
HH size	-0.005	-0.57
Catholic	-0.061	-1.64
Social Capital	0.129	3.94***
Non-agric. income (log)	0.002	0.38
Credit rationed	0.042	1.06
HH Assets	0.007	0.33
Agricultural assets	-0.023	-0.96
Livestock	0.000	0.23
Land cultivated potatoes	0.038	2.05**
Altitude	-0.388	-3.72***
Irrigation	0.120	2.36**
Distance mkt (log)	-0.435	-5.53***
Distance mkt sqr (log)	0.095	6.07***
Distance paved road (log)	-0.022	-1.41
Tiraque	-0.192	-4.33***
Constant	-	5.82***
Observations	1000	
R2	0.15	

*Notes:* dy/dx is for discrete change of dummy variable from 0 to 1; the marginal effects are reported rather than coefficients with the corresponding p-values based on robust standard errors; \*significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

**Table A.3. Assessing biodiversity - Farmers integrated to the seed market**

	TOBIT mfx Shannon	OLS Shannon	TOBIT mfx Simpson	OLS Simpson	mfx Share non Waycha	OLS Share non Waycha	Ordered Probit No. Varieties
Female head	-0.043 (0.101)	-0.054 (0.069)*	-0.029 (0.097)*	-0.036 (0.064)*	-0.027 (0.146)	-0.038 (0.145)	-0.291 (0.144)
Age	0.003 (0.440)	0.002 (0.598)	0.002 (0.494)	0.001 (0.692)	0.002 (0.360)	0.002 (0.596)	0.022 (0.392)
Age squared	0.000 (0.352)	0.000 (0.549)	0.000 (0.402)	0.000 (0.649)	0.000 (0.232)	0.000 (0.436)	0.000 (0.286)
Head primary	-0.033 (0.253)	-0.022 (0.532)	-0.021 (0.261)	-0.013 (0.572)	-0.023 (0.193)	-0.026 (0.347)	-0.242 (0.210)
Head high school	-0.063 (0.030)**	-0.077 (0.100)	-0.042 (0.031)**	-0.053 (0.088)*	-0.024 (0.300)	-0.026 (0.556)	-0.413 (0.107)*
HH size	-0.001 (0.876)	-0.002 (0.689)	-0.001 (0.772)	-0.002 (0.538)	0.001 (0.816)	-0.001 (0.833)	0.006 (0.828)
Catholic	0.029 (0.138)	0.027 (0.287)	0.018 (0.189)	0.015 (0.389)	0.022 (0.111)	0.024 (0.246)	0.236 (0.131)
Social capital	0.036 (0.068)*	0.044 (0.083)*	0.026 (0.044)**	0.035 (0.037)**	0.014 (0.329)	0.023 (0.283)	0.09 (0.514)
Non-agric. income (Log)	0.004 (0.097)*	0.005 (0.176)	0.003 (0.103)	0.003 (0.174)	0.003 (0.124)	0.004 (0.172)	0.042 (0.027)**
Credit rationed	0.067 (0.001)***	0.096 (0.000)***	0.044 (0.001)***	0.063 (0.000)***	0.042 (0.001)***	0.072 (0.001)***	0.362 (0.006)***
HH assets	0.001 (0.880)	-0.001 (0.959)	0.002 (0.776)	0.001 (0.872)	0.006 (0.417)	0.01 (0.516)	-0.03 (0.662)
Agricultural assets	-0.006 (0.626)	-0.021 (0.251)	-0.005 (0.562)	-0.016 (0.182)	-0.008 (0.401)	-0.026 (0.070)*	-0.006 (0.952)

**Table A.3 (Cont'd). Assessing biodiversity - Farmers integrated to the seed market**

	TOBIT mfx Shannon	OLS Shannon	TOBIT mfx Simpson	OLS Simpson	TOBIT mfx Share non Waycha	OLS Share non Waycha	Ordered Probit No. Varieties
Livestock	0.001	0.001	0.001	0.001	0.001	0.001	-0.001
	(0.435)	(0.220)	(0.326)	(0.109)	(0.454)	(0.099)*	(0.850)
Land in potato (Log)	0.107	0.144	0.067	0.086	0.056	0.077	0.866
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Altitude	-0.399	-0.508	-0.267	-0.348	-0.317	-0.501	-2.128
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Irrigation	-0.045	-0.047	-0.028	-0.028	-0.05	-0.068	-0.334
	(0.102)	(0.202)	(0.115)	(0.263)	(0.007)***	(0.040)**	(0.052)*
Trans cost seeds (log)	-0.029	-0.042	-0.017	-0.024	-0.015	-0.019	-0.217
	(0.000)***	(0.001)***	(0.001)***	(0.003)***	(0.011)**	(0.058)*	(0.000)***
Average price seeds	0.022	0.036	0.014	0.021	0.023	0.056	0.145
	(0.064)*	(0.066)*	(0.081)*	(0.068)*	(0.010)**	(0.002)***	(0.098)*
Distance paved rd (log)	-0.005	-0.007	-0.002	-0.002	-0.003	-0.007	-0.063
	(0.557)	(0.514)	(0.676)	(0.698)	(0.531)	(0.368)	(0.262)
Tiraque	-0.035	-0.096	-0.023	-0.062	-0.003	-0.053	-0.187
	(0.181)	(0.002)***	(0.181)	(0.003)***	(0.879)	(0.059)*	(0.299)
Lambda (IMR)	0.088	0.148	0.062	0.108	0.04	0.111	0.282
	(0.146)	(0.014)**	(0.111)	(0.009)***	(0.310)	(0.031)**	(0.532)
Constant	4.654	1.879	3.104	1.263	4.463	1.745	
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	
Observations	634	634	634	634	634	634	634
R-squared	0.26	0.322	0.31	0.308	0.27	0.304	0.24

Notes: Bootstrap standard errors: 1000 repetitions. Robust p values in parentheses; \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

The variable altitude represents the average for the plots cultivated by the farmer

**Table A.4. Assessing biodiversity - Farmers not integrated to the seed market**

	TOBIT mfx Shannon	OLS Shannon	TOBIT mfx Simpson	OLS Simpson	mfx Share non Waycha	OLS Share non Waycha	Ordered Probit No. Varieties
Female head	-0.091 (0.331)	-0.047 (0.073)*	-0.061 (0.339)	-0.032 (0.076)*	-0.048 (0.023)**	-0.013 (0.640)	-0.815 (0.650)
Age	0.011 (0.029)**	0.005 (0.173)	0.007 (0.026)**	0.003 (0.172)	0.007 (0.045)**	0.002 (0.516)	0.103 (0.046)**
Age squared	0.000 (0.043)**	0.000 (0.272)	0.000 (0.042)**	0.000 (0.283)	0.000 (0.046)**	0.000 (0.417)	-0.001 (0.059)*
Head primary	0.025 (0.448)	0.038 (0.292)	0.016 (0.471)	0.024 (0.311)	-0.01 (0.628)	-0.018 (0.595)	0.23 (0.431)
Head high school	0.009 (0.923)	0.042 (0.427)	0.003 (0.939)	0.023 (0.519)	-0.014 (0.752)	-0.001 (0.982)	0.129 (0.877)
HH size	-0.005 (0.343)	-0.006 (0.273)	-0.003 (0.347)	-0.004 (0.262)	-0.005 (0.172)	-0.009 (0.065)*	-0.039 (0.407)
Catholic	0.017 (0.441)	0.027 (0.396)	0.012 (0.432)	0.018 (0.373)	-0.006 (0.789)	-0.022 (0.544)	0.152 (0.537)
Social capital	0.02 (0.502)	0.045 (0.155)	0.012 (0.461)	0.032 (0.138)*	0.024 (0.213)	0.069 (0.015)**	-0.079 (0.744)
Non-agric. income (Log)	0.007 (0.039)**	0.008 (0.039)**	0.004 (0.063)*	0.005 (0.064)*	0.004 (0.092)*	0.007 (0.020)**	0.075 (0.018)**
Credit rationed	0.015 (0.572)	0.001 (0.983)	0.01 (0.541)	0.001 (0.980)	0.021 (0.310)	0.011 (0.715)	0.11 (0.653)
HH assets	-0.004 (0.750)	-0.012 (0.511)	-0.003 (0.768)	-0.007 (0.540)	0.005 (0.632)	0.013 (0.489)	-0.093 (0.506)
Agricultural assets	0.023 (0.031)**	0.045 (0.004)***	0.014 (0.047)**	0.027 (0.015)**	0.008 (0.361)	0.008 (0.615)	0.379 (0.001)***

**Table A.4 (Cont'd). Assessing biodiversity - Farmers not integrated to the seed market**

	TOBIT mfx Shannon	OLS Shannon	TOBIT mfx Simpson	OLS Simpson	TOBIT mfx Share non Waycha	OLS Share non Waycha	Ordered Probit No. Varieties
Livestock	0 (0.748)	0 (0.571)	-0.001 (0.745)	0 (0.560)	0 (0.989)	0.001 (0.255)	-0.002 (0.785)
Land in potato (Log)	0.053 (0.000)***	0.064 (0.000)***	0.034 (0.000)***	0.04 (0.000)***	0.041 (0.000)***	0.059 (0.000)***	0.49 (0.000)***
Altitude	-0.176 (0.028)**	-0.28 (0.007)***	-0.116 (0.024)**	-0.194 (0.005)***	-0.171 (0.001)***	-0.377 (0.000)***	-0.774 (0.287)
Irrigation	-0.01 (0.708)	-0.031 (0.355)	-0.006 (0.734)	-0.019 (0.371)	-0.015 (0.512)	-0.029 (0.366)	-0.281 (0.358)
Trans cost seeds (log)	-0.058 (0.007)***	-0.073 (0.003)***	-0.037 (0.009)***	-0.045 (0.004)***	-0.044 (0.006)***	-0.066 (0.003)***	-0.483 (0.002)***
Average price seeds	0.013 (0.734)	-0.01 (0.817)	0.007 (0.726)	-0.007 (0.764)	0.019 (0.439)	0.008 (0.804)	0.275 (0.348)
Distance paved rd (log)	-0.012 (0.301)	-0.017 (0.215)	-0.007 (0.339)	-0.01 (0.277)	-0.003 (0.760)	-0.003 (0.813)	-0.082 (0.459)
Tiraque	-0.018 (0.713)	-0.071 (0.269)	-0.01 (0.722)	-0.048 (0.299)	-0.064 (0.068)*	-0.22 (0.000)***	0.079 (0.837)
Lambda (IMR-1)	-0.009 (0.806)	0.016 (0.860)	-0.009 (0.852)	0.016 (0.772)	0.023 (0.658)	0.145 (0.046)**	-0.796 (0.257)
Constant	1.878 (0.215)	1.269 (0.002)***	1.253 (0.224)	0.826 (0.002)***	3.106 (0.020)**	1.798 (0.000)***	
Observations	366	366	366	366	366	366	366
R-squared	0.25	0.3	0.31	0.28	0.29	0.36	0.26

Notes: Bootstrap standard errors: 1000 repetitions. Robust p values in parentheses; \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

The variable altitude represents the average for the plots cultivated by the farmer

**Table A.5. Assessing yields - Farmers integrated to the seed market**

	IV:Yields Shannon	OLS:Yields Shannon	IV:Yields Simpson	OLS:Yields Simpson	IV:Yields Share non Waycha	OLS:Yields Share non Waycha	# varieties
Biodiversity	0.058	0.072	0.098	0.094	0.097	0.076	
	(0.826)	(0.198)	(0.836)	(0.269)	(0.762)	(0.287)	
2 Varieties							0.095
							(0.018)**
3 Varieties							0.167
							(0.018)**
4 Varieties							0.015
							(0.851)
<i>Inputs</i>							
Seeds	0.713	0.713	0.713	0.713	0.713	0.712	0.717
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Fungicide	-0.084	-0.084	-0.084	-0.084	-0.084	-0.084	-0.088
	(0.010)***	(0.007)***	(0.010)**	(0.006)***	(0.007)***	(0.008)***	(0.004)***
Insecticide	0.023	0.023	0.024	0.024	0.024	0.024	0.021
	-0.593	-0.594	-0.604	-0.581	-0.583	-0.577	-0.622
Organic fertilizer	0.245	0.244	0.245	0.245	0.252	0.251	0.241
	(0.000)***	(0.000)***	(0.001)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Chemical fertilizer	-0.067	-0.068	-0.069	-0.069	-0.068	-0.067	-0.075
	-0.227	-0.202	-0.224	-0.222	-0.21	-0.197	-0.157
Family labor	0.096	0.096	0.097	0.097	0.097	0.097	0.091
	(0.001)***	(0.000)***	(0.001)***	(0.000)***	(0.001)***	(0.000)***	(0.000)***
Non-family labor	0.128	0.128	0.128	0.128	0.128	0.128	0.128
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Yunta hrs	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004	-0.004
	-0.356	-0.334	-0.383	-0.342	-0.306	-0.297	-0.333
Tractor hrs	0.004	0.004	0.004	0.004	0.005	0.005	0.004
	(0.024)**	(0.012)**	(0.017)**	(0.009)***	(0.012)**	(0.007)***	(0.027)**
<i>HH variables</i>							
Female head	-0.047	-0.046	-0.046	-0.046	-0.045	-0.046	-0.043
	-0.419	-0.407	-0.436	-0.408	-0.437	-0.396	-0.43
Age	0.011	0.011	0.011	0.011	0.011	0.011	0.011
	-0.22	-0.194	-0.236	-0.206	-0.229	-0.216	-0.238
Age squared	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.045)**	(0.034)**	(0.052)*	(0.040)**	(0.051)*	(0.042)**	(0.049)**
Head primary	-0.166	-0.165	-0.165	-0.165	-0.164	-0.165	-0.157
	(0.003)***	(0.002)***	(0.004)***	(0.002)***	(0.004)***	(0.002)***	(0.005)***
Head high school	-0.163	-0.162	-0.161	-0.161	-0.163	-0.164	-0.147
	(0.085)*	(0.066)*	(0.093)*	(0.078)*	(0.080)*	(0.072)*	-0.107

**Table A.5 (Cont'd). Assessing yields - Farmers integrated to the seed market**

	IV:Yields Shannon	OLS:Yields Shannon	IV:Yields Simpson	OLS:Yields Simpson	IV:Yields Share non Waycha	OLS:Yields Share non Waycha	# varieties
HH size	-0.009	-0.009	-0.009	-0.009	-0.009	-0.009	-0.01
	-0.397	-0.381	-0.398	-0.424	-0.401	-0.353	-0.373
Catholic	-0.024	-0.025	-0.024	-0.024	-0.026	-0.025	-0.033
	-0.541	-0.534	-0.54	-0.558	-0.552	-0.535	-0.401
Social capital	0.017	0.016	0.016	0.016	0.018	0.019	0.011
	-0.785	-0.781	-0.805	-0.788	-0.759	-0.749	-0.85
Non-agric. income (Log)	0.012	0.012	0.012	0.012	0.012	0.012	0.012
	(0.028)**	(0.026)**	(0.030)**	(0.028)**	(0.027)**	(0.029)**	(0.038)**
Credit rationed	0.055	0.053	0.054	0.054	0.053	0.055	0.04
	-0.302	-0.217	-0.324	-0.244	-0.296	-0.204	-0.347
HH assets	-0.031	-0.031	-0.031	-0.031	-0.033	-0.032	-0.035
	-0.337	-0.306	-0.315	-0.324	-0.311	-0.33	-0.266
Agricultural assets	0.138	0.139	0.138	0.138	0.14	0.139	0.141
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Livestock	0.003	0.003	0.003	0.003	0.003	0.003	0.003
	(0.008)***	(0.007)***	(0.011)**	(0.009)***	(0.008)***	(0.009)***	(0.009)***
Land in potato (Log)	-0.006	-0.009	-0.006	-0.005	-0.005	-0.002	-0.018
	-0.909	-0.743	-0.92	-0.843	-0.91	-0.93	-0.539
Altitude	-0.545	-0.535	-0.54	-0.542	-0.528	-0.541	-0.488
	(0.017)**	(0.000)***	(0.039)**	(0.000)***	(0.023)**	(0.001)***	(0.001)***
Irrigation	0.206	0.207	0.206	0.206	0.21	0.209	0.216
	(0.001)***	(0.001)***	(0.001)***	(0.001)***	(0.001)***	(0.001)***	(0.000)***
Distance paved rd (log)	0.061	0.061	0.061	0.061	0.062	0.061	0.064
	(0.001)***	(0.000)***	(0.001)***	(0.001)***	(0.001)***	(0.001)***	(0.000)***
Tiraque	-0.164	-0.163	-0.164	-0.164	-0.164	-0.166	-0.161
	(0.029)**	(0.009)***	(0.028)**	(0.015)**	(0.020)**	(0.011)**	(0.019)**
Lambda (IMR)	0.411	0.406	0.408	0.409	0.41	0.415	0.383
	(0.017)**	(0.002)***	(0.026)**	(0.003)***	(0.007)***	(0.002)***	(0.005)***
Constant	4.185	4.154	4.17	4.175	4.119	4.161	3.995
	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***	(0.000)***
Observations	1541	1541	1541	1541	1541	1541	1541
R-squared	0.48	0.48	0.48	0.48	0.48	0.46	0.48
F-Statistic	34.5		31.62		35.15		
Test of Underidentification	51.4		48.25		65.1		
Sargan Test	0.05		0.004		0.004		

Notes: Bootstrap standard errors: 1000 repetitions. Robust p values in parentheses; \* significant at 10%; \*\* significant at 5%.  
\*\*\* significant at 1%.

The variable altitude represents the average for the plots cultivated by the farmer.

**Table A.6 Assessing yields - Farmers not integrated to the seed market**

	IV:Yields Shannon	OLS:Yields Shannon	IV:Yields Simpson	OLS:Yields Simpson	IV:Yields Share non Waycha	OLS:Yields Share non Waycha	# varieties
Biodiversity	-1.052 (0.060)*	-0.454 (0.007)***	-1.655 (0.080)*	-0.652 (0.005)***	-1.074 (0.060)*	-0.308 (0.037)**	
2 Varieties							-0.079 (0.266)
3 Varieties							-0.732 (0.049)**
4 Varieties							0.074 (0.742)
<i>Inputs</i>							
Seeds	0.64 (0.000)***	0.625 (0.000)***	0.643 (0.000)***	0.626 (0.000)***	0.644 (0.000)***	0.623 (0.000)***	0.618 (0.000)***
Fungicide	-0.021 (0.707)	-0.048 (0.318)	-0.022 (0.715)	-0.05 (0.294)	-0.005 (0.932)	-0.05 (0.305)	-0.056 (0.243)
Insecticide	0.025 (0.705)	0.039 (0.539)	0.025 (0.707)	0.039 (0.523)	-0.003 (0.964)	0.034 (0.585)	0.037 (0.553)
Organic fertilizer	-0.141 (0.357)	-0.169 (0.273)	-0.148 (0.326)	-0.174 (0.275)	-0.195 (0.225)	-0.192 (0.239)	-0.136 (0.408)
Chemical fertilizer	-0.21 (0.030)**	-0.253 (0.005)***	-0.21 (0.026)**	-0.256 (0.006)***	-0.268 (0.006)***	-0.281 (0.004)***	-0.228 (0.015)**
Family labor	0.129 (0.009)***	0.126 (0.007)***	0.131 (0.008)***	0.126 (0.009)***	0.128 (0.006)***	0.124 (0.008)***	0.107 (0.020)**
Non-family labor	0.058 (0.041)**	0.066 (0.013)**	0.057 (0.051)*	0.066 (0.015)**	0.07 (0.009)***	0.071 (0.007)***	0.069 (0.010)***
Yunta hrs	-0.002 (0.710)	0.001 (0.900)	-0.003 (0.716)	0.001 (0.886)	0.004 (0.646)	0.003 (0.626)	0.003 (0.676)
Tractor hrs	0.000 (0.842)	0.000 (0.951)	0.000 (0.870)	0.000 (0.911)	0.000 (0.853)	0.000 (0.903)	0.000 (0.841)
<i>HH variables</i>							
Female head	-0.078 (0.514)	-0.044 (0.696)	-0.082 (0.499)	-0.044 (0.701)	-0.038 (0.744)	-0.024 (0.831)	-0.029 (0.798)
Age	-0.003 (0.875)	-0.009 (0.689)	-0.004 (0.851)	-0.009 (0.674)	-0.008 (0.705)	-0.011 (0.592)	-0.008 (0.698)
Age squared	0.000 (0.953)	0.000 (0.815)	0.000 (0.923)	0.000 (0.799)	0.000 (0.865)	0.000 (0.753)	0.000 (0.842)
Head primary	0.028 (0.790)	0.004 (0.967)	0.029 (0.778)	0.003 (0.978)	-0.046 (0.667)	-0.023 (0.817)	0.019 (0.856)
Head high school	0.127 (0.510)	0.082 (0.676)	0.121 (0.534)	0.076 (0.709)	0.008 (0.970)	0.036 (0.862)	0.128 (0.499)

**Table A.6 (Cont'd). Assessing yields - Farmers not integrated to the seed market**

	IV:Yields Shannon	OLS:Yields Shannon	IV:Yields Simpson	OLS:Yields Simpson	IV:Yields Share non Waycha	OLS:Yields Share non Waycha	# varieties
HH size	-0.006 (0.670)	-0.001 (0.920)	-0.007 (0.658)	-0.001 (0.924)	-0.008 (0.564)	-0.001 (0.952)	0.001 (0.937)
Catholic	0.014 (0.858)	-0.021 (0.768)	0.017 (0.837)	-0.023 (0.750)	-0.051 (0.498)	-0.049 (0.502)	-0.031 (0.677)
Social capital	0.099 (0.262)	0.064 (0.473)	0.108 (0.246)	0.065 (0.467)	0.109 (0.244)	0.057 (0.547)	0.077 (0.417)
Non-agric. income (Log)	0.01 (0.374)	0.003 (0.732)	0.009 (0.442)	0.002 (0.805)	0.009 (0.376)	0.002 (0.875)	0.005 (0.588)
Credit rationed	0.027 (0.800)	0.023 (0.844)	0.031 (0.788)	0.025 (0.830)	0.045 (0.707)	0.028 (0.804)	0.007 (0.955)
HH assets	0.021 (0.612)	0.036 (0.346)	0.02 (0.625)	0.037 (0.345)	0.046 (0.261)	0.047 (0.238)	0.045 (0.238)
Agricultural assets	0.141 (0.012)**	0.11 (0.007)***	0.14 (0.015)**	0.108 (0.011)**	0.098 (0.024)**	0.09 (0.028)**	0.092 (0.024)**
Livestock	0.001 (0.599)	0.001 (0.739)	0.001 (0.598)	0.001 (0.730)	0.001 (0.424)	0.001 (0.714)	0.001 (0.553)
Land in potato (Log)	-0.063 (0.358)	-0.107 (0.040)**	-0.063 (0.393)	-0.11 (0.040)**	-0.082 (0.191)	-0.123 (0.024)**	-0.129 (0.018)**
Altitude	-0.03 (0.941)	0.141 (0.695)	-0.075 (0.855)	0.134 (0.722)	-0.134 (0.750)	0.154 (0.697)	0.155 (0.690)
Irrigation	-0.081 (0.382)	-0.071 (0.424)	-0.081 (0.380)	-0.07 (0.435)	-0.082 (0.393)	-0.068 (0.452)	-0.063 (0.485)
Distance paved rd (log)	0.109 (0.005)***	0.131 (0.000)***	0.112 (0.008)***	0.134 (0.000)***	0.129 (0.000)***	0.142 (0.000)***	0.137 (0.000)***
Tiraque	-0.144 (0.450)	-0.147 (0.420)	-0.132 (0.482)	-0.142 (0.435)	-0.299 (0.079)*	-0.192 (0.305)	-0.151 (0.430)
lambda (IMR)	-0.135 (0.586)	-0.162 (0.509)	-0.129 (0.608)	-0.161 (0.532)	-0.041 (0.874)	-0.142 (0.596)	-0.142 (0.582)
Constant	3.994 (0.000)***	3.595 (0.000)***	4.135 (0.000)***	3.625 (0.000)***	4.693 (0.000)***	3.695 (0.000)***	3.538 (0.000)***
Observations	784	784	784	784	784	784	784
R-squared	0.39	0.4	0.38	0.4	0.38	0.4	0.41
F-Statistic	15.95		13.99		18.92		
Test of Underidentification	27.97		24.92		31.44		
Sargan Test	0.15		0.17		0.08		

Notes: Bootstrap standard errors: 1000 repetitions. Robust p values in parentheses; \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

The variable altitude represents the average for the plots cultivated by the farmer.