

Web Appendix: Table 1
Additional Summary Statistics by Year

	1997-2004	
Households With an Adult Death over the period 1997-2004	0.1839 (0.3875)	
Households With a Death of the Head over the period 1997-2004	0.0083 (0.0909)	
	1997 Sample	2004 Sample
Total Household Size (all members)	7.109 (2.671)	8.409 (3.521)
Fraction of Children (age <16 years) in a Household	0.446 (0.228)	0.348 (0.210)
Fraction of Males in a Household Aged 16 to 39	0.177 (0.157)	0.210 (0.160)
Fraction of Females in a Household Aged 16 to 39	0.161 (0.127)	0.187 (0.126)
Fraction of Males in a Household Aged 40 Years or More	0.103 (0.114)	0.120 (0.109)
Fraction of Females in a Household Aged 40 Years or More	0.113 (0.130)	0.136 (0.135)
Distance to the Closest Fertilizer Seller (km)	6.288 (9.774)	3.469 (5.964)
Distance to the Closest Motorable Road (km)	1.026 (1.860)	1.011 (1.301)
Distance to the Closest Tarmac Road (km)	8.090 (9.304)	7.344 (7.383)
Distance to the Closest Extension Agent (km)	5.277 (4.765)	4.976 (4.997)

Notes: Standard deviations in parentheses.

Source: TAMPA Project data.

Web Appendix: Table 2
Additional Summary Statistics by Adoption History: Infrastructure

	Shortest Distance to the Following (Levels and Changes):					
	Fertilizer Seller		Motorable Road		Fertilizer Seller	Motorable Road
	1997	2004	1997	2004	Changes, 1997 to 2004	Changes, 1997 to 2004
Hybrid Stayers	3.869 (6.211)	2.352 (2.423)	0.793 (1.579)	0.732 (0.982)	-1.517 (6.221)	-0.060 (1.728)
Joiners	5.298 (6.204)	2.880 (2.364)	0.976 (1.123)	1.212 (1.283)	-2.418 (6.575)	0.241 (1.756)
Leavers	7.949 (12.36)	4.195 (8.636)	0.858 (1.409)	0.900 (1.116)	-3.754 (8.419)	0.045 (1.598)
Non-Hybrid Stayers	10.57 (12.90)	5.503 (8.802)	1.617 (2.542)	1.561 (1.707)	-5.063 (12.67)	-0.089 (2.706)

Notes: Standard deviations in parentheses.
Source: TAMPA Project data.

Web Appendix: Table 3
Additional Summary Statistics: Labor Use Across Non-Hybrid Plots (2004 Plot Level Data)

Activity	Labor Type (Hired in KShs and Family in Hours)	No Fertilizer (953 plots)	Some Fertilizer (473 plots)	Only Top Dressing (56 plots)	Only Basal (273 plots)	Both (144 plots)
Land Prep	Hired	413.16	477.58	464.36	503.02	434.48
	Family	98.12	86.44	83.25	76.22	107.07
Planting	Hired	87.38	233.72	646.76	234.08	72.42
	Family	37.42	42.17	30.41	41.89	47.26
Weeding	Hired	484.07	677.99	732.28	753.63	513.49
	Family	151.64	127.51	122.68	117.35	148.66
Harvest	Hired	82.06	220.82	267.31	271.04	107.52
	Family	47.33	53.48	40.86	47.60	69.53
Postharvest	Hired	34.69	141.19	189.34	109.54	182.48
	Family	36.02	59.32	40.43	54.10	76.58
Fertilizer Application	Hired	5.25	2.72	0.89	1.83	5.12
	Family	0.45	3.72	2.43	1.81	7.84
Other	Hired	15.94	2.03	0.00	0.55	5.63
	Family	5.62	3.54	0.07	5.27	1.62
Harvest (Kg/Acre)		452.92	699.12	571.97	675.00	794.29
Fertilizer (Shs/Acre)		0.00	1033.28	574.28	933.35	1401.22

Notes: The average maize price is KShs 13.16 and the average wage rate per day is KShs 84.85 (with the mean number of hours worked a day for this wage rate being 5.84). This varies by province. The province level numbers are respectively: for Coast Province, KShs 134.24 (6.95 hours), for Eastern Province KShs 97.55 (6.69 hours), for Nyanza Province KShs 56.40 (5.06 hours), for Western Province KShs 61.99 (5.63 hours), for Central Province KShs 104.68 (6.20 hours), and for Rift Valley Province KShs 91.70 (5.74 hours).

Source: TAMPA Project data.

Web Appendix: Table 4
Release of Hybrid Maize and Recommended Applications of Fertilizer By Agroclimatic Zone

Zone	Improved Maize Seed (Hybrid and/or OPV)			Recommendations		
	Recommended Variety	Year of Release	Expected Yield	Nitrogen	P ₂ O ₅	Alternatives
UM0-1, Upper Midlands	H614D	1986	75-100b/ha	60kg/ha	60kg/ha	130kg DAP +
	H624	-				141kg CAN or
	H625	1981				ASN + 130kg TSP
	H626	1989				
	H627	1996/7				
LM1-2, Lower Midlands	H614D	1986	37-50b/ha	40kg/ha	40kg/ha	110kg + 120kg
	H622	1963/5				CAN
	H512	1970				
	H511	1963/8				
Coastal Lowlands	Coast Composite	1974	3.8t/ha	60kg/ha	46kg/ha	
	Pwani Hybrid 1	1989	4.8t/ha			
	Pwani Hybrid 4	1997	5.4t/ha			
Coffee Dairy Zone (UM2-3)	H513	1996/7	1.8t/ha	50kg/ha	50kg/ha	
	C5222	1996/7	1.8t/ha			
	PAN5195	1996/7	1.8t/ha			
	PHB3253	1996/7	1.8t/ha			
	CG4141	1996/2000	1.4t/ha	Plus top dress fertilizer at the rate of 50kg/ha N and farmyard manure at the rate of 5t/ha		
	H512	1970	1.8t/ha			
	H511	1968	1.5t/ha			
	EMCO92SR	-	1.5t/ha			
	DH1 (dryland hybrid)	1996/7	1.2t/ha			
Maize Sunflower Zone (UM4/LM3-4)	DH2	1996/7	1.2t/ha			
	Makueni Composite	1989	1.1t/ha			
	Katumani Composite B	1968	1.1t/ha			
	CG4141	1996/2000	1.2t/ha			

Source: Ouma et al (2002), Hassan (1998), Salasya et al (1998), Wekesa et al (2003), Kamau (2002) and Karanja (1996).

Additional Varieties (Yr Released): Kitale Synthetic II (1961), Katumani Synthetic II (1963), Katumani Composite A (1966), H611 (1964), H621 (1964), H631 (1964), H611C (1971), H612C (1966), H613C (1972), H614C (1976), H612D (1986), H613D (1986), H632 (1965), H525 (1981), KTSP94 (2000), KH60011D (2000), KH634A (2001), KH60015A (2001), KH60016A (2001), CG5051 (2000), PAN5355 (2000), H623 (2000), FS650 (2001), H6212 (2001), H6211 (2001), PAN99 (2001), PAN5243 (2001), PAN67 (2001), PHB30A15 (2001), H516 (2001), DH04 (2001), DH05 (2001), H628 (2001), PAN691 (2001), KSH516 (2001)

Web Appendix: Table 5
Ranking of Farmers Perceptions of Constraints to Maize Production

Zone	Top Two Maize Production Problems, Ranked by Zone and Solutions Available to Farmers				Ranking of Pests (of 7)	
	Problem	Solution	Problem	Solution	Stalk Borer	Other
Lowland tropics	Weeds, not striga	Weeding, use of pesticides and roughing	Rain	None	5	4
Dry mid-altitude	Weeds, not striga		Rain	None	5	3
Moist mid-altitude	Striga	Some hybrids are resistant	Rain	None	5	6
Dry transitional	Head smut (disease)		Rain	None	5	6
Moist transitional	Stalk lodging (often due to severe rainfall)	None	Rain	None	4	NA
Highland tropics	Rain	None	Hail	None	5	NA

Source: Hassan, Onyango and Rutto (1998)