

## Appendix D: Additional results and descriptive statistics

Table D-1: WTP sample summary statistics

	(1) Full sample	(2) BDM	(3) RLIS	(4) Networks	(5) BDM vs. RLIS Difference (p-value)
	Mean (Std. Dev.)	Mean (Std. Dev.)	Mean (Std. Dev.)	Mean (Std. Dev.)	
Maize land	0.78 (0.57)	0.83 (0.65)	0.71 (0.47)	0.81 (0.56)	0.04**
Education (years)	6.79 (3.94)	6.82 (4.14)	6.23 (3.79)	7.36 (3.79)	0.13
Male	0.41 (0.49)	0.33 (0.47)	0.4 (0.49)	0.52 (0.5)	0.16
Age	42.87 (13.21)	42.66 (13.38)	43.33 (13.56)	42.62 (12.66)	0.61
Can read	0.73 (0.45)	0.7 (0.46)	0.7 (0.46)	0.78 (0.41)	0.96
Wears shoes	0.52 (0.5)	0.47 (0.5)	0.5 (0.5)	0.59 (0.49)	0.47
Knows Innovations for Poverty Action test plots	0.77 (0.42)	0.72 (0.45)	0.72 (0.45)	0.86 (0.34)	0.95
Used fertilizer before	0.72 (0.45)	0.69 (0.46)	0.69 (0.46)	0.8 (0.4)	0.95
<i>N</i>	600	210	205	185	

Note: This table shows summary statistics for the sample of farmers from which we elicited WTP. Columns (2) and (3) show farmers in Group 1 by elicitation method. Column (4) shows farmers in the Network group (all WTP elicited was through BDM). Column (5) reports the p-value of the differences between BDM and RLIS sample. The variable Maize Land, is the size of the land in which they plant maize, wears shoes is an indicator if the respondent was wearing shoes (and proxies for income), knows about Innovations for Poverty Action test plots asks respondents whether they knew about the individual plots Innovations for Poverty Action helped set up. Statistical significance is indicated at the 1 percent (\*\*\*), 5 percent (\*\*) and 10 percent (\*) levels.

**Table D-2: Correlates of WTP (RLIS)**

Variables	(1) WTP	(2) WTP	(3) WTP	(4) WTP	(5) WTP	(6) WTP	(7) WTP	(8) WTP	(9) WTP	(10) WTP
Land devoted to maize last season	-120** (51.7)									-148*** (51.18)
Years of education		12.9* (6.75)								17.2* (8.92)
Male			98.2* (52.40)							142.2** (62.90)
Age				0.5 (1.94)						0.2 (2.06)
Can read					77.9 (58.34)					8.6 (77.30)
Wears shoes						-4.3 (52.39)				-85.9 (62.49)
Knows of households with Innovations for Poverty Action test plots							15.3 (57.31)			-9.6 (59.54)
Other land different								12.4 (52.56)		6.2 (55.12)
Used fertilizer last season									-8.5 (57.08)	-79.4 (62.32)
Observations	185	199	199	199	199	199	199	199	199	185
R-squared	0.024	0.018	0.017	0.000	0.009	0.000	0.000	0.000	0.000	0.086
Mean WTP	150	150	150	150	150	150	150	150	150	150

Note: This table shows regression in which the dependent variable is the willingness to pay (elicited through RLIS) for one soil test result within 10 km of a close landmark. Statistical significance is indicated at the 1 percent (\*\*\*), 5 percent (\*\*) and 10 percent (\*) levels.

**Table D-3: Heterogeneous treatment effects: KALRO**

	Acres Owned	Raven Score	Reading Score	Female	Knowledge input index	Heard about NPK
<b>Panel A: Dependent Variable: Purchased Fertilizer (coupon redeemed)</b>						
[X]*Field Day	0.010 (0.010)	-0.182 (0.152)	-0.081** (0.038)	-0.058 (0.074)	-0.002 (0.017)	0.122* (0.071)
[X]*SMS	0.001 (0.016)	0.121 (0.148)	-0.074** (0.037)	-0.096 (0.072)	0.006 (0.017)	0.084 (0.070)
Field Day	0.109*** (0.039)	0.212*** (0.080)	0.122*** (0.038)	0.163*** (0.059)	0.126*** (0.035)	0.064 (0.050)
SMS	0.023 (0.043)	-0.034 (0.076)	0.024 (0.037)	0.084 (0.058)	0.023 (0.035)	-0.020 (0.048)
[X]	-0.002 (0.002)	0.060 (0.140)	0.033 (0.028)	0.083 (0.053)	0.004 (0.013)	-0.064 (0.051)
R-squared	0.106	0.109	0.109	0.107	0.106	0.108
Observations	1,138	1138	998	1,138	1,138	1,138
<b>Panel B: Dependent Variable: Purchased Lime (coupon redeemed)</b>						
[X]*Field Day	0.020* (0.011)	0.055 (0.098)	0.033 (0.027)	0.044 (0.051)	-0.009 (0.011)	0.046 (0.047)
[X]*SMS	0.000 (0.013)	0.017 (0.100)	-0.006 (0.025)	0.060 (0.048)	0.003 (0.010)	0.082* (0.044)
Field Day	0.001 (0.027)	0.010 (0.047)	0.032 (0.025)	0.008 (0.043)	0.036 (0.023)	0.017 (0.031)
SMS	-0.009 (0.029)	-0.018 (0.048)	-0.014 (0.024)	-0.048 (0.041)	-0.008 (0.022)	-0.042 (0.029)
[X]	-0.000 (0.001)	-0.071 (0.093)	0.003 (0.021)	-0.038 (0.037)	0.010 (0.008)	-0.037 (0.031)
R-squared	0.090	0.086	0.100	0.087	0.089	0.086
Observations	1,138	1,138	998	1,138	1,138	1,138

Note: The dependent variable in Panel A is redemption of the fertilizer coupon. Each column shows the coefficient from the interaction between the corresponding treatment (FFD or SMS) with the variable noted in the column and denoted by [X]. Reading and raven scores are standardized. Knowledge of inputs is an index constructed based on 12 possible variables. Significance indicated at 1% \*\*\*, 5% \*\*, and 10% \* level.

**Table D-4: Attrition checks**

	<b>Attrition</b>
Field Day	0.024 (0.017)
SMS	-0.019 (0.017)
R-squared	0.002
Observations	1,250

Note: This table shows a regression of an attrition indicator on treatment indicators. Statistical significance is indicated at the 1 percent (\*\*\*) , 5 percent (\*\* ) and 10 percent (\* ) levels.

**Table D-5: Instrumental variable results for SMS**

	<b>First-Stage Regression (1)</b>	<b>Lime Coupon (2)</b>	<b>Lime Quantity (kg) (3)</b>	<b>Lime Expenditures (KES) (4)</b>	<b>Fert. Coupon (5)</b>
SMS treatment	0.553*** (0.029)				
SMS received (self-reported)		-0.019 (0.039)	-4.150 (4.576)	-24.899 (39.457)	0.053 (0.062)
R-squared		0.072	0.109	0.109	0.083
Observation		1,166	1,166	1,166	1,166
Y mean		0.11	16.97	59.79	0.41
	<b>Fert. Quantity (kg) (6)</b>	<b>Fert. Expenditures (KES) (7)</b>	<b>DAP Quantity (kg)</b>	<b>CAN Quantity (kg)</b>	<b>Mavuno Quantity (kg)</b>
FFD participation	2.646 (1.619)	195.964*** (109.943)	2.511*** (1.371)	0.136 (0.777)	-0.001 (0.012)
R-squared	0.048	0.049	0.045	0.059	0.016
Observation	1,166	1,166	1,166	1,166	1,166
Y mean	6.91	513.60	5.61	5.61	0.00

Note: Each test includes demographic characteristics and baseline input use that were used as randomization strata. The dependent variable mean is displayed for the control group. Column (1) includes the first stage regression of reporting receiving SMS messages on an indicator of whether farmers had been assigned to the SMS group. All regressions control for FFD participation. The standard errors in each regression are robust. Statistical significance is indicated at the 1 percent (\*\*\*) , 5 percent (\*\* ) and 10 percent (\* ) levels.