

APPENDIX

Table A1. Crop Inputs Estimation: Summary of First-Stage CRE Probit Results

| Endogenous variable: | borrowed plot | | | maize plot | |
|---------------------------------|-------------------|-------------------|---------------------|-------------------|-------------------|
| | Plots: | all | borrowers' plots | maize | all |
| Second-stage specification: | Table 3, (1) | Table 3, (2) | Table 3, (3) | Table 3, (1) | Table 3, (2) |
| Observations: | 19,374 | 2,969 | 6,621 | 19,374 | 2,969 |
| Instrumental variables: | | | | | |
| children | -0.007 [-0.30] | 0.030 [0.92] | -0.035 [-1.34] | -0.026 [-2.51] | -0.068 [-2.95] |
| landless household (bin.) | 1.803 [26.63] | 1.642 [18.00] | 1.826 [20.26] | 0.143 [5.01] | 0.161 [2.54] |
| livestock, village-year average | -0.042 [-0.63] | -0.102 [-0.98] | -0.127 [-1.67] | 0.022 [0.61] | -0.123 [-1.81] |
| recently acquired plot (bin.) | 0.073 [1.14] | 0.085 [0.71] | 0.077 [0.95] | -0.140 [-4.91] | -0.075 [-1.10] |
| Control variables: | | | | | |
| head attended prim. school | + | | | + | |
| head female | ++ | | + | -- | -- |
| head age | | | | | |
| head experienced with credit | | | | | |
| head member of veg. coop. | | | | | |
| total cultivated land | ++ | | ++ | | |
| non-farm income | | -- | | + | |
| household size | | -- | | ++ | ++ |
| household livestock | | | | | |
| plot is collectively farmed | | -- | | | |
| years under management | -- | -- | -- | -- | -- |
| sloped plot | | | | -- | - |
| lowland plot | ++ | | ++ | | |
| remote plot | ++ | ++ | + | -- | -- |
| plot area | -- | | -- | -- | -- |
| rainfall | | | | - | |
| number of agro-dealers | - | ++ | | ++ | ++ |
| population density | | | | | |
| Regression Wald Chi-sq. | 1063.86 | 522.08 | 603.82 | 1277.35 | 343.15 |
| IV joint significance Chi-sq. | 726.13 | 331.18 | 416.11 | 59.77 | 25.26 |

Source: Authors' calculations based on EPA dataset.

Notes: z-statistics are in brackets below average marginal effects.

++(+) and --(-) signs indicate coefficients with p-values smaller than 0.05 (0.10).

Region dummies, year- fixed effects and time-averages of time-invariant household characteristics included in specification; these results not shown.

Table A2. Plot Investments Estimation: Summary of First-Stage Probit Results

| Endogenous variable: | borrowed plot | | |
|---------------------------------|----------------------|------------------|------------------------|
| Plots: | all | borrowers' plots | all, managed 16+ years |
| Second-stage specification: | Table 4, (1) | Table 4, (2) | Table 4, (3) |
| Observations: | 6,222 | 876 | 3,472 |
| Instrumental variables: | | | |
| children | -0.013 | 0.063 | 0.064 |
| | [-0.65] | [1.36] | [2.01] |
| landless household (bin.) | 1.961 | 1.842 | 2.63 |
| | [29.02] | [12.24] | [18.00] |
| livestock, village-year average | -0.108 | -0.181 | -0.222 |
| | [-1.75] | [-1.28] | [-2.05] |
| recently acquired plot (bin.) | -0.009 | 0.098 | -0.071 |
| | [-0.13] | [0.66] | [-0.57] |
| Control variables: | | | |
| head attended prim. school | ++ | | |
| head female | ++ | | ++ |
| head age | | ++ | ++ |
| head experienced with credit | | | |
| head member of veg. coop. | ++ | + | ++ |
| total cultivated land | ++ | | ++ |
| non-farm income | | -- | -- |
| household size | | - | -- |
| household livestock | | + | |
| plot is collectively farmed | | -- | |
| years under management | -- | -- | -- |
| sloped plot | -- | | |
| lowland plot | | | -- |
| remote plot | | + | -- |
| plot area | | | |
| rainfall | -- | | -- |
| number of agro-dealers | ++ | ++ | ++ |
| population density | + | - | ++ |
| Regression Wald Chi-sq. | 1534.16 | 316.61 | 937.98 |
| IV joint significance Chi-sq. | 846.27 | 152.44 | 325.71 |

Source: Authors' calculations based on EPA dataset.

Notes: z-statistics are in brackets below average marginal effects.

++(+) and – (-) signs indicate coefficients with p-values smaller than 0.05 (0.10).

Region dummies included in specification; these results not shown.