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1 Balance

1.1 RD

1.1.1 Household

Table A1: RD balance (Household)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
HHH female	0.235 (0.424) 1,409	0.283 (0.451)	0.049 (0.026) [0.059]	0.050 (0.026) [0.056]
HHH age	46.6 (14.5) 1,407	48.4 (14.3)	1.8 (0.7) [0.014]	1.7 (0.7) [0.022]
HHH completed primary	0.316 (0.466) 1,402	0.327 (0.469)	0.011 (0.026) [0.682]	0.018 (0.027) [0.507]
HHH worked off farm	0.439 (0.497) 1,409	0.389 (0.488)	-0.050 (0.031) [0.108]	-0.053 (0.031) [0.082]
# of plots	4.77 (2.98) 1,409	5.16 (3.11)	0.39 (0.17) [0.024]	0.14 (0.16) [0.379]
# of HH members	4.77 (2.13) 1,409	4.90 (2.04)	0.13 (0.12) [0.272]	0.10 (0.12) [0.413]
# who worked off farm	0.82 (0.87) 1,409	0.81 (0.91)	-0.01 (0.06) [0.862]	-0.02 (0.06) [0.722]
Housing expenditures	46.5 (123.2) 1,402	51.7 (132.3)	5.3 (7.0) [0.450]	4.7 (7.0) [0.500]
Asset index	-0.02 (0.99) 1,407	0.03 (1.00)	0.05 (0.06) [0.323]	0.09 (0.05) [0.112]

Notes: Coefficient for balance is estimated controlling for site dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

1.1.2 Plot

Table A2: RD balance (Sample plot)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
log area	-2.506 (1.153) 1,409	-2.196 (1.226)	0.310 (0.070) [0.000]	0.373 (0.070) [0.000]
Own plot	0.902 (0.297) 1,409	0.889 (0.314)	-0.013 (0.018) [0.464]	-0.016 (0.018) [0.364]
Owned plot >5 years	0.885 (0.320) 1,066	0.928 (0.258)	0.044 (0.020) [0.032]	0.041 (0.021) [0.046]
Rented out to farmer	0.021 (0.142) 1,409	0.039 (0.193)	0.018 (0.010) [0.063]	0.015 (0.010) [0.113]

Notes: Coefficient for balance is estimated controlling for site dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

1.2 Minikit

1.2.1 Household

Table A3: Minikit balance (Household)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
HHH female	0.322 (0.469) 485	0.272 (0.445)	-0.051 (0.042) [0.229]	-0.053 (0.046) [0.250]
HHH age	49.2 (14.6) 484	50.7 (13.4)	1.5 (1.3) [0.236]	2.8 (1.4) [0.048]
HHH completed primary	0.385 (0.488) 482	0.393 (0.489)	0.009 (0.050) [0.861]	0.018 (0.053) [0.737]
HHH worked off farm	0.448 (0.499) 485	0.387 (0.488)	-0.061 (0.049) [0.213]	-0.066 (0.051) [0.200]
# of plots	5.99 (3.48) 485	6.37 (3.83)	0.38 (0.33) [0.249]	-0.16 (0.29) [0.580]
# of HH members	5.07 (1.99) 485	5.32 (2.12)	0.25 (0.18) [0.165]	-0.01 (0.21) [0.950]
# who worked off farm	0.88 (0.89) 485	0.85 (0.97)	-0.03 (0.09) [0.722]	-0.03 (0.10) [0.771]
Housing expenditures	54.0 (130.8) 482	53.3 (141.0)	-0.7 (11.6) [0.949]	-8.2 (14.1) [0.563]
Asset index	-0.02 (0.99) 483	0.07 (0.98)	0.09 (0.09) [0.277]	-0.01 (0.09) [0.940]

Notes: Coefficient for balance is estimated controlling for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.2.2 Plot

Table A4: Minikit balance (Sample plot)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
log area	-2.516 (1.276) 485	-2.416 (1.171)	0.100 (0.119) [0.401]	0.080 (0.119) [0.505]
Own plot	0.847 (0.361) 485	0.904 (0.295)	0.057 (0.034) [0.090]	0.063 (0.037) [0.091]
Owned plot >5 years	0.926 (0.263) 324	0.975 (0.155)	0.050 (0.026) [0.056]	0.039 (0.027) [0.147]
Rented out to farmer	0.066 (0.248) 485	0.040 (0.196)	-0.026 (0.021) [0.224]	-0.026 (0.022) [0.241]

Notes: Coefficient for balance is estimated controlling for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.2.3 Plot-by-season

Table A5: Minikit balance (Sample plot, 2014 Dry)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
Cultivated	0.110 (0.314) 442	0.115 (0.320)	0.005 (0.031) [0.861]	0.014 (0.033) [0.666]
Irrigated	0.055 (0.228) 442	0.047 (0.212)	-0.008 (0.021) [0.699]	-0.005 (0.023) [0.822]
Horticulture	0.061 (0.240) 442	0.050 (0.219)	-0.011 (0.022) [0.631]	-0.011 (0.022) [0.615]
Banana	0.037 (0.188) 442	0.050 (0.219)	0.014 (0.019) [0.461]	0.014 (0.022) [0.522]
HH labor/ha	20.5 (80.9) 442	35.0 (181.6)	14.5 (12.1) [0.230]	21.9 (15.1) [0.148]
Inputs/ha	2.6 (20.6) 442	4.2 (27.1)	1.6 (2.3) [0.481]	1.1 (2.4) [0.638]
Hired labor exp./ha	3.2 (29.0) 442	1.4 (12.7)	-1.8 (2.4) [0.449]	-2.0 (2.3) [0.383]
Yield	11.8 (49.3) 431	25.6 (171.6)	13.8 (11.2) [0.221]	12.7 (10.9) [0.243]
Sales/ha	10.2 (44.4) 442	29.9 (167.8)	19.8 (10.2) [0.052]	25.3 (14.0) [0.072]

Notes: Coefficient for balance is estimated controlling for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A6: Minikit balance (Sample plot, 2015 Rainy 1 & 2)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
Cultivated	0.742 (0.438) 776	0.761 (0.427)	0.019 (0.037) [0.618]	0.015 (0.036) [0.683]
Irrigated	0.047 (0.211) 776	0.048 (0.215)	0.002 (0.018) [0.926]	0.001 (0.018) [0.939]
Horticulture	0.118 (0.324) 776	0.141 (0.348)	0.023 (0.027) [0.405]	0.038 (0.030) [0.206]
Banana	0.039 (0.195) 776	0.068 (0.253)	0.029 (0.022) [0.189]	0.033 (0.023) [0.161]
HH labor/ha	257.0 (354.1) 773	238.1 (301.1)	-18.9 (32.4) [0.560]	-42.5 (35.1) [0.225]
Inputs/ha	15.1 (40.6) 776	12.4 (30.7)	-2.7 (3.3) [0.417]	-3.5 (3.8) [0.354]
Hired labor exp./ha	30.1 (74.9) 776	28.8 (69.5)	-1.3 (6.1) [0.825]	-0.7 (6.5) [0.920]
Yield	223.2 (361.9) 755	252.3 (409.6)	29.1 (36.1) [0.420]	25.6 (38.4) [0.505]
Sales/ha	60.4 (206.0) 776	89.3 (228.5)	28.9 (18.0) [0.110]	40.9 (20.8) [0.050]

Notes: Coefficient for balance is estimated controlling for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.3 Subsidy

1.3.1 Household

Table A7: Subsidy balance (Household, 1)

	Control mean	Treatment mean			Difference			Coefficient		
	(Std. dev.) # of obs.	(Std. dev.)			(SE)	[p-value]		(SE)	[p-value]	
		(FF)	(FN)	(HN)	(FF - NN)	(FN - NN)	(HN - NN)	(FF - NN)	(FN - NN)	(HN - NN)
Full fees owed (17A)	4.88 (5.74) 217	7.93 (10.44)	9.40 (11.34)	6.95 (8.26)	3.05 (1.09) [0.006]	4.52 (1.30) [0.001]	2.07 (1.08) [0.057]	-0.04 (0.91) [0.964]	1.76 (0.96) [0.067]	0.94 (1.04) [0.364]
Full fees owed (17B)	4.32 (5.37) 300	8.05 (12.45)	9.58 (13.64)	6.45 (13.89)	3.73 (1.10) [0.001]	5.25 (1.42) [0.000]	2.13 (1.38) [0.125]	0.38 (1.01) [0.707]	2.01 (0.88) [0.023]	1.29 (1.13) [0.252]

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Coefficient for balance is estimated controlling for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A8: Subsidy balance (Household, 2)

	Control mean	Treatment mean			Difference			Coefficient		
	(Std. dev.)	(Std. dev.)			(SE)			(SE)		
	# of obs.	(FF)	(FN)	(HN)	(FF - NN)	(FN - NN)	(HN - NN)	(FF - NN)	(FN - NN)	(HN - NN)
HHH female	0.315 (0.466) 310	0.267 (0.444)	0.260 (0.440)	0.271 (0.446)	-0.048 (0.049) [0.327]	-0.055 (0.054) [0.302]	-0.044 (0.057) [0.437]	-0.052 (0.062) [0.397]	-0.044 (0.063) [0.479]	-0.049 (0.069) [0.483]
HHH age	51.2 (14.5) 310	48.2 (13.4)	50.3 (13.9)	49.3 (13.8)	-3.0 (1.5) [0.049]	-0.9 (1.6) [0.560]	-1.9 (1.5) [0.204]	-1.8 (1.7) [0.286]	0.3 (1.6) [0.824]	-1.1 (1.7) [0.510]
HHH completed primary	0.293 (0.457) 309	0.372 (0.485)	0.409 (0.494)	0.448 (0.499)	0.079 (0.047) [0.097]	0.116 (0.057) [0.043]	0.155 (0.055) [0.005]	0.076 (0.054) [0.158]	0.129 (0.069) [0.061]	0.112 (0.061) [0.067]
HHH worked off farm	0.397 (0.491) 310	0.452 (0.499)	0.433 (0.497)	0.441 (0.499)	0.055 (0.052) [0.292]	0.036 (0.053) [0.490]	0.044 (0.057) [0.445]	0.070 (0.061) [0.247]	0.009 (0.061) [0.882]	0.004 (0.064) [0.955]
# of plots	6.11 (3.63) 310	6.83 (3.68)	6.22 (3.50)	6.14 (3.87)	0.72 (0.39) [0.069]	0.11 (0.41) [0.786]	0.03 (0.42) [0.950]	0.51 (0.49) [0.297]	0.15 (0.49) [0.764]	0.03 (0.43) [0.949]
# of HH members	4.92 (2.00) 310	5.23 (1.98)	5.26 (2.02)	5.33 (2.03)	0.31 (0.22) [0.153]	0.34 (0.26) [0.195]	0.41 (0.25) [0.105]	0.17 (0.25) [0.504]	0.32 (0.29) [0.277]	0.29 (0.29) [0.310]
# who worked off farm	0.81 (0.96) 310	0.88 (0.93)	0.85 (0.87)	0.92 (0.88)	0.07 (0.11) [0.527]	0.04 (0.11) [0.704]	0.11 (0.11) [0.347]	0.04 (0.13) [0.764]	-0.01 (0.12) [0.910]	0.03 (0.13) [0.843]
Housing expenditures	57.9 (144.3) 307	61.0 (153.2)	35.7 (117.2)	62.9 (150.7)	3.1 (14.3) [0.829]	-22.2 (15.3) [0.146]	5.0 (16.6) [0.761]	-8.2 (17.9) [0.645]	-23.3 (20.7) [0.262]	0.1 (19.8) [0.994]
Asset index	-0.07 (1.01) 310	0.06 (1.04)	-0.03 (0.85)	0.14 (0.95)	0.13 (0.11) [0.217]	0.04 (0.10) [0.677]	0.20 (0.10) [0.050]	0.04 (0.12) [0.730]	0.04 (0.12) [0.762]	0.15 (0.13) [0.248]

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Coefficient for balance is estimated controlling for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.3.2 Plot

Table A9: Subsidy balance (Sample plot)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)			Difference (SE) [p-value]			Coefficient (SE) [p-value]		
		(FF)	(FN)	(HN)	(FF - NN)	(FN - NN)	(HN - NN)	(FF - NN)	(FN - NN)	(HN - NN)
log area	-2.597 (1.152) 310	-2.621 (1.184)	-2.483 (1.277)	-2.304 (1.031)	-0.025 (0.134) [0.855]	0.114 (0.152) [0.455]	0.293 (0.132) [0.027]	0.012 (0.140) [0.934]	0.015 (0.158) [0.922]	0.143 (0.140) [0.309]
Own plot	0.902 (0.298) 310	0.890 (0.313)	0.882 (0.324)	0.847 (0.361)	-0.012 (0.037) [0.750]	-0.020 (0.033) [0.544]	-0.055 (0.042) [0.198]	0.011 (0.040) [0.794]	-0.010 (0.040) [0.795]	-0.109 (0.046) [0.019]
Owned plot >5 years	0.928 (0.260) 206	0.936 (0.246)	0.938 (0.244)	0.921 (0.271)	0.008 (0.035) [0.814]	0.010 (0.037) [0.796]	-0.007 (0.035) [0.841]	0.050 (0.042) [0.234]	0.047 (0.042) [0.266]	0.035 (0.043) [0.421]
Rented out to farmer	0.092 (0.290) 310	0.021 (0.142)	0.039 (0.195)	0.017 (0.130)	-0.072 (0.023) [0.002]	-0.053 (0.027) [0.049]	-0.075 (0.025) [0.002]	-0.055 (0.028) [0.048]	-0.046 (0.030) [0.119]	-0.069 (0.033) [0.037]

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Coefficient for balance is estimated controlling for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.3.3 Plot-by-season

Table A10: Subsidy balance (Sample plot, 2014 Dry)

	Control mean	Treatment mean			Difference			Coefficient		
	(Std. dev.)	(Std. dev.)			(SE)			(SE)		
	# of obs.	(FF)	(FN)	(HN)	(FF - NN)	(FN - NN)	(HN - NN)	(FF - NN)	(FN - NN)	(HN - NN)
Cultivated	0.093 (0.291) 277	0.104 (0.307)	0.123 (0.330)	0.142 (0.350)	0.012 (0.032) [0.711]	0.030 (0.039) [0.441]	0.049 (0.040) [0.219]	-0.009 (0.038) [0.820]	0.005 (0.046) [0.914]	0.003 (0.051) [0.946]
Irrigated	0.043 (0.204) 277	0.037 (0.190)	0.090 (0.288)	0.071 (0.258)	-0.006 (0.021) [0.777]	0.047 (0.032) [0.145]	0.028 (0.030) [0.352]	-0.012 (0.027) [0.649]	0.014 (0.035) [0.693]	-0.004 (0.040) [0.919]
Horticulture	0.049 (0.217) 277	0.052 (0.223)	0.074 (0.262)	0.080 (0.272)	0.003 (0.022) [0.897]	0.024 (0.031) [0.436]	0.030 (0.031) [0.336]	-0.012 (0.030) [0.695]	-0.011 (0.034) [0.755]	-0.020 (0.040) [0.617]
Banana	0.025 (0.156) 277	0.045 (0.208)	0.041 (0.199)	0.053 (0.225)	0.020 (0.021) [0.351]	0.016 (0.022) [0.457]	0.028 (0.022) [0.197]	0.015 (0.019) [0.442]	0.031 (0.029) [0.285]	0.030 (0.027) [0.253]
HH labor/ha	30.2 (149.3) 277	20.3 (94.4)	44.1 (209.5)	34.1 (171.3)	-9.9 (14.0) [0.479]	13.9 (21.8) [0.523]	3.9 (20.5) [0.849]	-15.3 (18.8) [0.418]	7.7 (28.3) [0.786]	-10.4 (32.6) [0.751]
Inputs/ha	4.6 (29.3) 277	0.6 (5.8)	5.0 (25.6)	6.8 (34.6)	-4.0 (2.4) [0.097]	0.4 (3.3) [0.906]	2.2 (4.0) [0.577]	-5.2 (3.5) [0.134]	-1.7 (4.5) [0.713]	-3.1 (5.7) [0.593]
Hired labor exp./ha	1.7 (16.5) 277	0.9 (9.2)	1.0 (7.8)	7.7 (40.7)	-0.8 (1.5) [0.596]	-0.7 (1.5) [0.633]	6.0 (4.1) [0.143]	-1.4 (1.1) [0.193]	-1.2 (2.1) [0.571]	1.3 (3.8) [0.729]
Yield	35.1 (219.0) 273	15.6 (67.1)	29.6 (226.9)	36.3 (205.1)	-19.5 (18.8) [0.302]	-5.5 (28.3) [0.846]	1.2 (26.9) [0.964]	-37.2 (26.1) [0.156]	-23.2 (37.4) [0.536]	-45.0 (34.2) [0.189]
Sales/ha	23.9 (141.4) 277	13.6 (52.4)	39.7 (208.5)	45.2 (208.2)	-10.4 (12.9) [0.421]	15.7 (22.0) [0.475]	21.2 (23.3) [0.364]	-18.0 (18.0) [0.317]	12.4 (30.7) [0.686]	-5.2 (32.0) [0.872]

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Coefficient for balance is estimated controlling for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A11: Subsidy balance (Sample plot, 2015 Rainy 1 & 2)

	Control mean	Treatment mean			Difference			Coefficient		
	(Std. dev.)	(Std. dev.)			(SE)			(SE)		
	# of obs.	(FF)	(FN)	(HN)	(FF - NN)	(FN - NN)	(HN - NN)	(FF - NN)	(FN - NN)	(HN - NN)
Cultivated	0.775 (0.419) 494	0.823 (0.383)	0.792 (0.407)	0.744 (0.437)	0.048 (0.039) [0.219]	0.017 (0.047) [0.717]	-0.030 (0.044) [0.494]	0.066 (0.050) [0.187]	0.052 (0.060) [0.379]	-0.014 (0.055) [0.803]
Irrigated	0.055 (0.228) 494	0.043 (0.204)	0.046 (0.211)	0.042 (0.201)	-0.011 (0.022) [0.602]	-0.008 (0.023) [0.719]	-0.013 (0.021) [0.543]	-0.002 (0.021) [0.909]	-0.036 (0.026) [0.159]	-0.027 (0.023) [0.241]
Horticulture	0.113 (0.317) 494	0.165 (0.372)	0.116 (0.321)	0.144 (0.352)	0.053 (0.034) [0.125]	0.003 (0.034) [0.930]	0.031 (0.038) [0.405]	0.035 (0.034) [0.298]	-0.029 (0.036) [0.423]	0.011 (0.040) [0.792]
Banana	0.025 (0.158) 494	0.059 (0.236)	0.051 (0.220)	0.074 (0.263)	0.034 (0.024) [0.165]	0.025 (0.028) [0.356]	0.049 (0.027) [0.074]	0.015 (0.020) [0.471]	0.046 (0.036) [0.204]	0.057 (0.037) [0.124]
HH labor/ha	266.4 (350.6) 494	283.7 (320.1)	265.9 (341.4)	184.2 (253.1)	17.3 (36.0) [0.630]	-0.5 (38.7) [0.991]	-82.2 (32.8) [0.013]	1.5 (38.8) [0.970]	31.9 (48.0) [0.506]	-32.8 (38.0) [0.389]
Inputs/ha	12.7 (35.0) 494	17.9 (39.0)	17.3 (41.1)	15.7 (35.3)	5.2 (3.6) [0.141]	4.7 (4.5) [0.298]	3.1 (4.0) [0.446]	3.8 (4.3) [0.378]	6.0 (6.3) [0.337]	3.2 (4.3) [0.461]
Hired labor exp./ha	28.4 (69.0) 494	40.1 (82.5)	20.4 (57.7)	32.4 (72.2)	11.7 (9.3) [0.207]	-8.1 (8.4) [0.337]	4.0 (8.7) [0.649]	3.1 (9.8) [0.752]	-0.5 (8.4) [0.949]	4.6 (7.3) [0.532]
Yield	273.0 (424.5) 482	283.6 (412.3)	210.0 (352.5)	222.5 (352.9)	10.6 (37.8) [0.780]	-63.0 (44.0) [0.153]	-50.5 (42.0) [0.229]	-4.5 (40.9) [0.913]	-33.7 (52.0) [0.517]	-30.5 (42.4) [0.472]
Sales/ha	77.8 (230.7) 494	103.1 (244.3)	48.4 (154.5)	94.1 (258.1)	25.2 (22.4) [0.261]	-29.4 (25.1) [0.242]	16.2 (27.1) [0.550]	-4.3 (27.1) [0.875]	-25.2 (30.5) [0.410]	5.8 (23.9) [0.809]

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Coefficient for balance is estimated controlling for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

1.4 O&M

1.4.1 Plot

Table A12: O&M balance (Sample plot)

	Control mean		Treatment mean		Difference				Coefficient		
	(Std. dev.)	(Std. dev.)	(SE)				(SE)				
	# of obs.	(T1)	(T2)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)
log area	-2.548 (1.143) 882	-2.415 (1.214) 882	-2.617 (1.305) 882	0.038 (0.125) [0.763]	0.134 (0.141) [0.342]	-0.069 (0.149) [0.646]	-0.202 (0.147) [0.170]	0.080 (0.083) [0.336]	0.149 (0.098) [0.127]	-0.052 (0.116) [0.654]	-0.192 (0.140) [0.169]
Own plot	0.884 (0.320) 882	0.840 (0.367) 882	0.891 (0.312) 882	-0.020 (0.027) [0.457]	-0.044 (0.031) [0.152]	0.007 (0.030) [0.821]	0.051 (0.030) [0.088]	-0.003 (0.029) [0.923]	-0.024 (0.037) [0.515]	0.019 (0.028) [0.505]	0.083 (0.030) [0.005]
Owned plot >5 years	0.944 (0.230) 606	0.913 (0.283) 606	0.916 (0.279) 606	-0.030 (0.021) [0.145]	-0.032 (0.022) [0.156]	-0.029 (0.030) [0.344]	0.003 (0.033) [0.925]	-0.035 (0.020) [0.077]	-0.036 (0.023) [0.112]	-0.032 (0.027) [0.251]	0.016 (0.029) [0.581]
Rented out to farmer	0.069 (0.254) 882	0.058 (0.235) 882	0.052 (0.223) 882	-0.014 (0.017) [0.418]	-0.011 (0.019) [0.563]	-0.017 (0.021) [0.422]	-0.006 (0.021) [0.779]	-0.009 (0.016) [0.584]	0.004 (0.018) [0.838]	-0.028 (0.020) [0.164]	0.018 (0.023) [0.432]

Notes: T1+2 refers to the “Farmer monitor” treatment arms, where the Water User Group of the household’s sample plot was assigned to a Farmer Monitor treatment arm. T2 refers to the “Farmer monitor, reserved for the top of the secondary pipe” treatment arm, where the Water User Group of the household’s sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain), while T1 refers to the “Farmer monitor” treatment arm without any reservation. Regressions control for the minikit saturation of the household’s sample plot’s Water User Group and the zone of the household’s sample plot’s Water User Group. Standard errors clustered at the household’s sample plot’s Water User Group are in parentheses, and p-values are in brackets.

1.4.2 Plot-by-season

Table A13: O&M balance (Sample plot, 2014 Dry)

	Control mean	Treatment mean		Difference				Coefficient			
	(Std. dev.)	(Std. dev.)		(SE)				(SE)			
	# of obs.	(T1)	(T2)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)
Cultivated	0.103 (0.304) 796	0.073 (0.260) 796	0.105 (0.307) 796	-0.015 (0.024) [0.527]	-0.030 (0.027) [0.267]	0.002 (0.029) [0.957]	0.032 (0.029) [0.268]	-0.004 (0.022) [0.871]	-0.017 (0.024) [0.494]	0.024 (0.031) [0.425]	0.030 (0.025) [0.227]
Irrigated	0.060 (0.237) 796	0.016 (0.126) 796	0.064 (0.245) 796	-0.021 (0.019) [0.266]	-0.043 (0.018) [0.015]	0.004 (0.025) [0.872]	0.047 (0.021) [0.022]	-0.014 (0.016) [0.389]	-0.030 (0.014) [0.034]	0.021 (0.026) [0.416]	0.058 (0.018) [0.001]
Horticulture	0.051 (0.221) 796	0.040 (0.197) 796	0.064 (0.245) 796	-0.000 (0.020) [0.996]	-0.011 (0.022) [0.617]	0.012 (0.025) [0.629]	0.023 (0.023) [0.323]	0.010 (0.017) [0.566]	0.006 (0.017) [0.737]	0.026 (0.025) [0.308]	0.016 (0.019) [0.404]
Banana	0.038 (0.191) 796	0.032 (0.177) 796	0.032 (0.176) 796	-0.006 (0.014) [0.668]	-0.006 (0.016) [0.731]	-0.006 (0.016) [0.697]	-0.001 (0.017) [0.973]	-0.003 (0.014) [0.813]	-0.011 (0.017) [0.491]	0.007 (0.016) [0.644]	0.009 (0.018) [0.608]
HH labor/ha	30.8 (160.4) 794	13.8 (89.0) 794	46.8 (231.4) 794	-1.4 (12.3) [0.910]	-17.0 (11.5) [0.139]	16.0 (17.8) [0.370]	33.0 (16.9) [0.051]	4.9 (11.0) [0.655]	0.9 (8.8) [0.920]	13.1 (17.5) [0.452]	21.8 (14.9) [0.145]
Inputs/ha	3.6 (23.9) 796	2.3 (18.8) 796	4.9 (29.1) 796	-0.1 (1.7) [0.945]	-1.3 (1.7) [0.435]	1.3 (2.3) [0.585]	2.6 (2.3) [0.256]	0.7 (1.5) [0.621]	-0.0 (1.5) [0.997]	1.8 (2.1) [0.378]	1.1 (1.9) [0.570]
Hired labor exp./ha	3.3 (27.3) 796	2.3 (21.0) 796	1.8 (16.3) 796	-1.2 (1.8) [0.510]	-1.0 (2.1) [0.634]	-1.5 (1.9) [0.454]	-0.5 (1.7) [0.776]	-1.2 (1.5) [0.411]	0.4 (1.3) [0.740]	-2.5 (2.2) [0.257]	-0.6 (0.8) [0.449]
Yield	29.3 (201.9) 780	15.3 (86.2) 780	23.6 (183.2) 780	-10.1 (13.6) [0.459]	-13.9 (13.3) [0.295]	-5.6 (17.3) [0.744]	8.3 (13.8) [0.550]	4.7 (9.8) [0.631]	1.1 (7.7) [0.882]	12.6 (16.0) [0.434]	-2.1 (10.7) [0.845]
Sales/ha	31.0 (184.0) 796	14.2 (66.1) 796	29.1 (162.7) 796	-9.7 (12.2) [0.424]	-16.7 (11.6) [0.151]	-1.9 (15.5) [0.903]	14.8 (12.2) [0.224]	-0.0 (9.8) [0.999]	-1.2 (7.0) [0.866]	7.2 (15.8) [0.649]	12.2 (13.0) [0.350]

Notes: T1+2 refers to the “Farmer monitor” treatment arms, where the Water User Group of the household’s sample plot was assigned to a Farmer Monitor treatment arm. T2 refers to the “Farmer monitor, reserved for the top of the secondary pipe” treatment arm, where the Water User Group of the household’s sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain), while T1 refers to the “Farmer monitor” treatment arm without any reservation. Regressions control for the minikit saturation of the household’s sample plot’s Water User Group and the zone of the household’s sample plot’s Water User Group. Standard errors clustered at the household’s sample plot’s Water User Group are in parentheses, and p-values are in brackets.

Table A14: O&M balance (Sample plot, 2015 Rainy 1 & 2)

	Control mean	Treatment mean		Difference				Coefficient			
	(Std. dev.)	(Std. dev.)		(SE)				(SE)			
	# of obs.	(T1)	(T2)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)	(T1+2 - C)	(T1 - C)	(T2 - C)	(T2 - T1)
Cultivated	0.715 (0.452) 1,413	0.770 (0.421) 1,413	0.763 (0.426) 1,413	0.051 (0.033) [0.119]	0.055 (0.036) [0.125]	0.047 (0.042) [0.255]	-0.007 (0.040) [0.859]	0.045 (0.027) [0.098]	0.051 (0.029) [0.082]	0.040 (0.038) [0.297]	-0.027 (0.037) [0.471]
Irrigated	0.047 (0.211) 1,413	0.032 (0.176) 1,413	0.046 (0.209) 1,413	-0.008 (0.012) [0.488]	-0.015 (0.014) [0.290]	-0.001 (0.015) [0.954]	0.014 (0.016) [0.379]	-0.003 (0.013) [0.837]	-0.007 (0.016) [0.684]	-0.002 (0.013) [0.847]	0.004 (0.016) [0.799]
Horticulture	0.120 (0.326) 1,413	0.112 (0.315) 1,413	0.127 (0.333) 1,413	-0.002 (0.025) [0.936]	-0.009 (0.030) [0.764]	0.006 (0.031) [0.843]	0.015 (0.036) [0.676]	-0.003 (0.018) [0.876]	-0.012 (0.023) [0.602]	0.018 (0.027) [0.512]	0.013 (0.035) [0.709]
Banana	0.041 (0.198) 1,413	0.064 (0.245) 1,413	0.024 (0.154) 1,413	0.005 (0.015) [0.739]	0.023 (0.020) [0.251]	-0.016 (0.015) [0.271]	-0.040 (0.020) [0.046]	-0.002 (0.017) [0.926]	0.008 (0.021) [0.683]	-0.021 (0.015) [0.164]	-0.043 (0.019) [0.020]
HH labor/ha	227.7 (309.3) 1,406	245.0 (323.9) 1,406	266.8 (355.0) 1,406	27.2 (24.6) [0.268]	17.3 (27.3) [0.526]	39.1 (31.9) [0.222]	21.8 (32.9) [0.508]	24.6 (22.2) [0.269]	20.3 (23.4) [0.387]	47.9 (36.3) [0.188]	29.6 (43.4) [0.496]
Inputs/ha	13.3 (35.1) 1,413	15.0 (38.0) 1,413	20.1 (46.5) 1,413	4.0 (2.5) [0.102]	1.7 (2.7) [0.530]	6.8 (3.4) [0.047]	5.1 (3.7) [0.165]	2.3 (2.5) [0.346]	0.6 (2.7) [0.815]	4.2 (3.3) [0.203]	1.6 (3.8) [0.667]
Hired labor exp./ha	31.8 (73.3) 1,413	28.2 (68.4) 1,413	24.4 (63.6) 1,413	-5.4 (5.8) [0.351]	-3.6 (6.6) [0.579]	-7.4 (6.7) [0.272]	-3.8 (6.7) [0.573]	-6.2 (4.5) [0.173]	1.1 (4.9) [0.818]	-12.9 (6.5) [0.047]	-11.8 (4.9) [0.016]
Yield	204.5 (349.1) 1,380	229.1 (371.3) 1,380	257.1 (420.6) 1,380	37.2 (28.4) [0.190]	24.6 (31.7) [0.438]	52.6 (35.5) [0.139]	28.0 (36.0) [0.437]	31.4 (19.2) [0.103]	30.4 (23.8) [0.202]	44.5 (26.4) [0.093]	-22.6 (34.4) [0.512]
Sales/ha	72.6 (228.8) 1,413	68.8 (198.2) 1,413	89.2 (249.0) 1,413	5.5 (15.5) [0.722]	-3.8 (17.7) [0.829]	16.6 (18.0) [0.357]	20.4 (18.2) [0.263]	1.5 (13.1) [0.912]	-5.7 (15.7) [0.719]	13.4 (19.8) [0.498]	-9.2 (20.5) [0.654]

Notes: T1+2 refers to the “Farmer monitor” treatment arms, where the Water User Group of the household’s sample plot was assigned to a Farmer Monitor treatment arm. T2 refers to the “Farmer monitor, reserved for the top of the secondary pipe” treatment arm, where the Water User Group of the household’s sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain), while T1 refers to the “Farmer monitor” treatment arm without any reservation. Regressions control for the minikit saturation of the household’s sample plot’s Water User Group and the zone of the household’s sample plot’s Water User Group. Standard errors clustered at the household’s sample plot’s Water User Group are in parentheses, and p-values are in brackets.

2 Baseline outcomes

2.1 RD

2.1.1 Plot

Table A15: RD baseline outcomes (Sample plot)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
Terraced	0.454 (0.498) 1,409	0.879 (0.326)	0.425 (0.028) [0.000]	0.413 (0.029) [0.000]
Rented out to commercial farmer	0.011 (0.106) 1,409	0.145 (0.352)	0.134 (0.022) [0.000]	0.122 (0.021) [0.000]

Notes: Coefficient is estimated controlling for site dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

2.1.2 Plot-by-season

Table A16: RD baseline outcomes (Sample plot, 2014 Dry)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
Cultivated	0.452 (0.498) 1,334	0.317 (0.466)	-0.136 (0.031) [0.000]	-0.093 (0.025) [0.000]
Irrigated	0.006 (0.075) 1,334	0.045 (0.206)	0.039 (0.009) [0.000]	0.036 (0.009) [0.000]
Horticulture	0.013 (0.115) 1,334	0.050 (0.217)	0.036 (0.011) [0.001]	0.033 (0.011) [0.002]
Banana	0.238 (0.426) 1,334	0.071 (0.256)	-0.167 (0.024) [0.000]	-0.154 (0.023) [0.000]
HH labor/ha	86.6 (201.5) 1,330	65.6 (185.0)	-20.9 (12.0) [0.081]	-15.3 (11.6) [0.187]
Inputs/ha	6.9 (28.0) 1,334	9.0 (31.6)	2.0 (1.7) [0.228]	2.9 (1.7) [0.080]
Hired labor exp./ha	6.8 (29.1) 1,334	10.6 (39.7)	3.8 (2.0) [0.061]	5.0 (2.0) [0.013]
Yield	165.2 (378.6) 1,299	102.7 (283.1)	-62.5 (19.7) [0.002]	-45.6 (18.7) [0.015]
Sales/ha	70.8 (232.4) 1,334	67.1 (207.7)	-3.7 (11.9) [0.754]	3.6 (12.0) [0.762]

Notes: Coefficient is estimated controlling for site dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A17: RD baseline outcomes (Sample plot, 2015 Rainy 1 & 2)

	Control mean (Std. dev.) # of obs.	Treatment mean (Std. dev.)	Difference (SE) [p-value]	Coefficient (SE) [p-value]
Cultivated	0.687 (0.464) 2,510	0.657 (0.475)	-0.031 (0.024) [0.206]	-0.048 (0.023) [0.038]
Irrigated	0.009 (0.093) 2,510	0.056 (0.231)	0.048 (0.008) [0.000]	0.050 (0.008) [0.000]
Horticulture	0.034 (0.181) 2,510	0.115 (0.319)	0.081 (0.012) [0.000]	0.075 (0.012) [0.000]
Banana	0.228 (0.420) 2,510	0.073 (0.261)	-0.155 (0.022) [0.000]	-0.144 (0.022) [0.000]
HH labor/ha	173.0 (281.0) 2,499	174.7 (287.9)	1.7 (14.6) [0.907]	-11.7 (13.8) [0.400]
Inputs/ha	8.9 (30.0) 2,510	11.8 (34.5)	2.9 (1.6) [0.070]	1.6 (1.5) [0.291]
Hired labor exp./ha	9.9 (37.4) 2,510	16.5 (50.2)	6.5 (2.1) [0.002]	5.7 (2.0) [0.005]
Yield	190.5 (383.0) 2,439	177.4 (343.1)	-13.1 (18.1) [0.469]	-21.9 (17.6) [0.213]
Sales/ha	53.1 (173.1) 2,510	76.2 (230.6)	23.1 (9.1) [0.011]	21.5 (8.9) [0.015]

Notes: Coefficient is estimated controlling for site dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3 Regression

3.1 RD

3.1.1 Household

Table A18: Household RD (2016 and 2017 and 2018)

	# of HH members worked off farm (1)	Housing expenditures (2)	Asset index (3)
CA	-0.04 (0.04) [0.280]	7.2 (4.5) [0.112]	0.11 (0.06) [0.064]
# of observations	3,210	3,201	3,206
# of clusters	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.1.2 Household (Difference-in-differences)

Table A19: Household RD (2015 and 2016 and 2017 and 2018)

	# of HH members worked off farm (1)	Housing expenditures (2)	Asset index (3)
CA	-0.02 (0.06) [0.722]	4.7 (7.0) [0.500]	0.09 (0.05) [0.112]
CA * Post	-0.02 (0.06) [0.675]	2.4 (7.1) [0.733]	0.03 (0.04) [0.545]
# of observations	4,619	4,603	4,613
# of clusters	246	246	246

Notes: CA is an indicator for the household's sample plot being located in the command area, Post is an indicator for after the baseline. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.1.3 Household (O&M Control)

Table A20: Household RD (2016 and 2017 and 2018)

	# of HH members worked off farm (1)	Housing expenditures (2)	Asset index (3)
CA	-0.03 (0.05) [0.480]	2.1 (5.4) [0.705]	0.08 (0.07) [0.219]
# of observations	3,210	3,201	3,206
# of clusters	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area, Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm (set to 0 for sample plots outside the command area). Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.1.4 Plot-by-season

Table A21: Plot RD (2016 Dry and 2017 Dry and 2018 Dry, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	0.021 (0.028) [0.458]	0.202 (0.017) [0.000]	0.188 (0.017) [0.000]	-0.153 (0.022) [0.000]
# of observations	2,858	2,858	2,857	2,857
# of clusters	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A22: Plot RD (2016 Dry and 2017 Dry and 2018 Dry, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	61.8 (12.3) [0.000]	6.7 (1.1) [0.000]	4.9 (1.6) [0.002]	40.1 (18.0) [0.026]	40.6 (11.7) [0.000]
# of observations	2,850	2,858	2,858	2,722	2,858
# of clusters	245	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A23: Plot RD (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	-0.039 (0.019) [0.044]	0.043 (0.006) [0.000]	0.047 (0.010) [0.000]	-0.177 (0.023) [0.000]
# of observations	4,919	4,919	4,917	4,917
# of clusters	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A24: Plot RD (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	-5.0 (15.0) [0.737]	2.8 (1.7) [0.094]	6.5 (2.1) [0.002]	-42.4 (18.6) [0.023]	2.6 (9.3) [0.778]
# of observations	4,907	4,919	4,919	4,756	4,919
# of clusters	245	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.1.5 Plot-by-season (Difference-in-differences)

Table A25: Plot RD (2015 Dry and 2016 Dry and 2017 Dry and 2018 Dry, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	-0.102 (0.027) [0.000]	0.057 (0.011) [0.000]	0.058 (0.012) [0.000]	-0.134 (0.021) [0.000]
CA * Post	0.123 (0.031) [0.000]	0.145 (0.018) [0.000]	0.130 (0.018) [0.000]	-0.019 (0.021) [0.351]
# of observations	4,191	4,191	4,190	4,190
# of clusters	246	246	246	246

Notes: CA is an indicator for the household's sample plot being located in the command area, Post is an indicator for after the baseline. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A26: Plot RD (2015 Dry and 2016 Dry and 2017 Dry and 2018 Dry, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	-3.0 (10.4) [0.770]	2.3 (1.1) [0.033]	1.8 (0.8) [0.025]	-30.4 (16.6) [0.068]	5.0 (10.2) [0.622]
CA * Post	64.9 (13.7) [0.000]	4.5 (1.5) [0.003]	3.1 (1.6) [0.054]	70.5 (21.3) [0.001]	35.6 (14.3) [0.013]
# of observations	4,179	4,191	4,191	4,017	4,191
# of clusters	246	246	246	246	246

Notes: CA is an indicator for the household's sample plot being located in the command area, Post is an indicator for after the baseline. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A27: Plot RD (2015 Rainy 1 & 2 and 2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	-0.043 (0.023) [0.056]	0.040 (0.007) [0.000]	0.062 (0.012) [0.000]	-0.155 (0.023) [0.000]
CA * Post	0.004 (0.024) [0.854]	0.004 (0.008) [0.649]	-0.015 (0.013) [0.247]	-0.022 (0.022) [0.315]
# of observations	7,430	7,430	7,428	7,428
# of clusters	246	246	246	246

Notes: CA is an indicator for the household's sample plot being located in the command area, Post is an indicator for after the baseline. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A28: Plot RD (2015 Rainy 1 & 2 and 2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	-18.1 (14.6) [0.213]	1.9 (1.7) [0.286]	7.4 (2.4) [0.002]	-30.5 (19.5) [0.117]	20.9 (10.2) [0.040]
CA * Post	13.1 (15.0) [0.382]	1.0 (2.1) [0.654]	-0.8 (2.7) [0.756]	-11.8 (22.9) [0.607]	-18.2 (12.5) [0.145]
# of observations	7,407	7,430	7,430	7,199	7,430
# of clusters	246	246	246	246	246

Notes: CA is an indicator for the household's sample plot being located in the command area, Post is an indicator for after the baseline. Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.1.6 Plot-by-season (O&M Control)

Table A29: Plot RD (2016 Dry and 2017 Dry and 2018 Dry, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	-0.007 (0.034) [0.831]	0.189 (0.023) [0.000]	0.169 (0.023) [0.000]	-0.172 (0.025) [0.000]
Farmer monitor	0.059 (0.034) [0.077]	0.028 (0.030) [0.351]	0.041 (0.030) [0.173]	0.041 (0.022) [0.060]
# of observations	2,858	2,858	2,857	2,857
# of clusters	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area, Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm (set to 0 for sample plots outside the command area). Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A30: Plot RD (2016 Dry and 2017 Dry and 2018 Dry, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	51.8 (14.1) [0.000]	5.6 (1.3) [0.000]	2.2 (1.4) [0.100]	3.7 (17.6) [0.832]	25.3 (12.2) [0.039]
Farmer monitor	21.4 (21.7) [0.325]	2.4 (2.0) [0.233]	5.6 (2.7) [0.038]	77.3 (28.2) [0.006]	32.6 (18.8) [0.083]
# of observations	2,850	2,858	2,858	2,722	2,858
# of clusters	245	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area, Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm (set to 0 for sample plots outside the command area). Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A31: Plot RD (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
CA	-0.048 (0.022) [0.034]	0.043 (0.007) [0.000]	0.049 (0.012) [0.000]	-0.198 (0.026) [0.000]
Farmer monitor	0.020 (0.026) [0.448]	0.002 (0.011) [0.892]	-0.006 (0.017) [0.737]	0.046 (0.023) [0.049]
# of observations	4,919	4,919	4,917	4,917
# of clusters	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area, Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm (set to 0 for sample plots outside the command area). Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

Table A32: Plot RD (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)	Yield (4)	Sales/ha (5)
CA	-15.0 (16.3) [0.358]	1.1 (2.0) [0.606]	5.1 (2.8) [0.066]	-65.7 (19.0) [0.001]	-6.4 (9.5) [0.499]
Farmer monitor	21.9 (20.0) [0.274]	3.9 (2.4) [0.107]	3.2 (3.5) [0.358]	51.5 (23.9) [0.031]	20.0 (13.4) [0.138]
# of observations	4,907	4,919	4,919	4,756	4,919
# of clusters	245	245	245	245	245

Notes: CA is an indicator for the household's sample plot being located in the command area, Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm (set to 0 for sample plots outside the command area). Regressions control for site-by-season dummies. Standard errors clustered at the household's sample plot's nearest Water User Group are in parentheses, and p-values are in brackets.

3.2 Minikit

3.2.1 Household

Table A33: Minikit (Takeup)

	Minikit takeup (2017 Rainy 1)		Minikit takeup (2017 Dry)	
	(1)	(2)	(3)	(4)
Minikit	0.443 (0.040) [0.000]	0.434 (0.043) [0.000]	0.360 (0.043) [0.000]	0.361 (0.046) [0.000]
Saturation		0.011 (0.072) [0.875]		-0.105 (0.069) [0.128]
# of observations	475	457	471	453
# of clusters	194	187	193	186

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

3.2.2 Plot-by-season

Table A34: Minikit (2017 Dry and 2018 Dry, 1)

	Cultivated		Irrigated		Horticulture	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	-0.008 (0.041) [0.843]	0.000 (0.046) [0.999]	-0.040 (0.037) [0.273]	-0.034 (0.041) [0.417]	-0.010 (0.037) [0.792]	-0.003 (0.041) [0.943]
Saturation		-0.075 (0.069) [0.278]		-0.100 (0.063) [0.113]		-0.072 (0.058) [0.220]
# of observations	830	799	830	799	829	798
# of clusters	188	181	188	181	188	181

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A35: Minikit (2017 Dry and 2018 Dry, 2)

	Banana		HH labor/ha		Inputs/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	-0.028 (0.027) [0.305]	-0.029 (0.028) [0.299]	-49.5 (30.1) [0.100]	-37.5 (31.4) [0.233]	-0.3 (3.5) [0.937]	-3.2 (3.2) [0.315]
Saturation		0.005 (0.047) [0.923]		-61.6 (49.5) [0.214]		3.6 (6.6) [0.586]
# of observations	829	798	830	799	830	799
# of clusters	188	181	188	181	188	181

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A36: Minikit (2017 Dry and 2018 Dry, 3)

	Hired labor exp./ha		Yield		Sales/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	0.9 (5.2) [0.869]	-2.8 (4.6) [0.541]	-68.8 (44.6) [0.123]	-58.4 (48.3) [0.228]	-20.2 (29.7) [0.498]	-16.7 (32.5) [0.607]
Saturation		2.2 (10.5) [0.836]		13.5 (80.4) [0.867]		-4.8 (58.2) [0.934]
# of observations	830	799	778	748	830	799
# of clusters	188	181	186	179	188	181

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A37: Minikit (2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Cultivated		Irrigated		Horticulture	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	-0.023 (0.033) [0.482]	-0.031 (0.037) [0.397]	-0.007 (0.014) [0.626]	-0.014 (0.015) [0.373]	-0.002 (0.026) [0.941]	-0.002 (0.028) [0.945]
Saturation		-0.008 (0.053) [0.886]		0.044 (0.020) [0.028]		0.043 (0.036) [0.237]
# of observations	1,660	1,596	1,660	1,596	1,660	1,596
# of clusters	190	183	190	183	190	183

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A38: Minikit (2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	Banana		HH labor/ha		Inputs/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	-0.009 (0.025) [0.727]	-0.001 (0.024) [0.957]	-40.6 (30.7) [0.186]	-52.4 (29.5) [0.075]	-0.3 (3.1) [0.922]	-1.3 (3.0) [0.670]
Saturation		-0.058 (0.041) [0.156]		-6.9 (43.8) [0.876]		3.5 (5.0) [0.479]
# of observations	1,660	1,596	1,655	1,591	1,660	1,596
# of clusters	190	183	190	183	190	183

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A39: Minikit (2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 3)

	Hired labor exp./ha		Yield		Sales/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Minikit	-1.1 (5.0) [0.822]	-5.3 (4.9) [0.279]	-37.1 (33.5) [0.268]	-55.7 (30.7) [0.070]	-8.9 (16.6) [0.590]	-5.6 (16.9) [0.741]
Saturation		11.0 (6.4) [0.087]		9.7 (58.1) [0.867]		-31.1 (26.7) [0.244]
# of observations	1,660	1,596	1,595	1,534	1,660	1,596
# of clusters	190	183	189	182	190	183

Notes: Minikit is an indicator for whether or not the household was assigned to receive a minikit, and Saturation is the share of households that were assigned to receive a minikit in the Water User Group of that household's sample plot. Regressions control for the number of minikit lotteries the household was entered into, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

3.3 Subsidy

3.3.1 Household

Table A40: Subsidy, 1

	Fees paid, self report (17A) (1)	Fees paid, admin (17A) (2)	Fees owed, admin (17A) (3)
Subsidy FF	-0.49 (0.11) [0.000]	-0.33 (0.09) [0.000]	-4.34 (0.71) [0.000]
Subsidy FN	-0.27 (0.13) [0.041]	-0.30 (0.11) [0.006]	-4.99 (0.87) [0.000]
Subsidy HN	0.17 (0.24) [0.482]	-0.08 (0.13) [0.533]	-2.57 (0.76) [0.001]
# of observations	530	371	370
# of clusters	185	105	105

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A41: Subsidy, 2

	Fees paid, self report (17B) (1)	Fees paid, admin (17B) (2)	Fees owed, admin (17B) (3)
Subsidy FF	-0.56 (0.16) [0.001]	-0.06 (0.05) [0.248]	-6.74 (0.76) [0.000]
Subsidy FN	-0.15 (0.16) [0.324]	-0.03 (0.06) [0.620]	3.13 (0.94) [0.001]
Subsidy HN	0.24 (0.25) [0.330]	-0.05 (0.07) [0.489]	1.55 (1.26) [0.219]
# of observations	524	363	528
# of clusters	183	101	184

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

3.3.2 Plot-by-season

Table A42: Subsidy (2017 Dry and 2018 Dry, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
Subsidy FF	0.072 (0.048) [0.130]	0.041 (0.044) [0.345]	0.074 (0.043) [0.087]	0.014 (0.027) [0.606]
Subsidy FN	0.137 (0.048) [0.004]	0.097 (0.043) [0.026]	0.122 (0.044) [0.006]	0.019 (0.032) [0.557]
Subsidy HN	0.079 (0.052) [0.128]	0.047 (0.046) [0.305]	0.043 (0.049) [0.377]	0.000 (0.034) [0.999]
# of observations	961	961	960	960
# of clusters	179	179	179	179

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A43: Subsidy (2017 Dry and 2018 Dry, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)
Subsidy FF	9.8 (34.9) [0.778]	-1.3 (4.1) [0.748]	5.5 (6.3) [0.384]
Subsidy FN	63.4 (39.0) [0.104]	3.6 (4.2) [0.382]	5.4 (5.2) [0.302]
Subsidy HN	-22.0 (32.7) [0.502]	-2.1 (3.2) [0.514]	-1.4 (5.1) [0.784]
# of observations	961	961	961
# of clusters	179	179	179

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A44: Subsidy (2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Cultivated (1)	Irrigated (2)	Horticulture (3)	Banana (4)
Subsidy FF	0.022 (0.029) [0.441]	0.005 (0.016) [0.782]	0.018 (0.031) [0.560]	-0.005 (0.028) [0.861]
Subsidy FN	0.022 (0.031) [0.474]	0.015 (0.019) [0.419]	-0.001 (0.028) [0.980]	-0.002 (0.031) [0.942]
Subsidy HN	-0.013 (0.039) [0.744]	-0.007 (0.015) [0.648]	0.034 (0.035) [0.335]	0.001 (0.032) [0.971]
# of observations	1,920	1,920	1,920	1,920
# of clusters	181	181	181	181

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A45: Subsidy (2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	HH labor/ha (1)	Inputs/ha (2)	Hired labor exp./ha (3)
Subsidy FF	-1.7 (35.9) [0.963]	-4.0 (3.4) [0.250]	2.0 (5.7) [0.718]
Subsidy FN	45.3 (37.6) [0.228]	5.0 (4.1) [0.224]	-1.0 (5.5) [0.855]
Subsidy HN	-12.7 (37.3) [0.733]	-1.7 (3.8) [0.660]	-0.7 (5.3) [0.900]
# of observations	1,915	1,920	1,920
# of clusters	181	181	181

Notes: FF, FN, HN, and NN refer to treatment arms with a 100% subsidy for two seasons, a 100% subsidy for one season, a 50% subsidy for one season, and no subsidy, respectively. Regressions control for the number of subsidy lotteries the household was entered into, the minikit saturation of the household's sample plot's Water User Group, the O&M treatment status of the household's sample plot's Water User Group, and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

3.4 O&M

3.4.1 Plot-by-season

Table A46: O&M (2016 Dry and 2017 Dry and 2018 Dry, 1)

	Maintenance needed		Not enough water	
	(1)	(2)	(3)	(4)
Farmer monitor	-0.016 (0.025) [0.502]	-0.012 (0.029) [0.676]	-0.019 (0.042) [0.655]	-0.009 (0.057) [0.869]
Farmer monitor * Reserved top of SP		-0.010 (0.033) [0.770]		-0.019 (0.061) [0.750]
# of observations	878	878	643	643
# of clusters	171	171	145	145

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A47: O&M (2016 Dry and 2017 Dry and 2018 Dry, 2)

	Cultivated		Irrigated		Horticulture	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	0.044 (0.029) [0.125]	0.028 (0.032) [0.378]	0.025 (0.024) [0.299]	0.003 (0.026) [0.897]	0.043 (0.025) [0.085]	0.029 (0.027) [0.279]
Farmer monitor * Reserved top of SP		0.038 (0.038) [0.322]		0.051 (0.033) [0.121]		0.033 (0.034) [0.336]
# of observations	2,139	2,139	2,139	2,139	2,138	2,138
# of clusters	214	214	214	214	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A48: O&M (2016 Dry and 2017 Dry and 2018 Dry, 3)

	Banana		HH labor/ha		Inputs/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	0.013 (0.016) [0.427]	0.019 (0.020) [0.356]	21.9 (16.3) [0.180]	-7.5 (21.0) [0.721]	2.1 (1.8) [0.244]	1.0 (2.2) [0.648]
Farmer monitor * Reserved top of SP		-0.014 (0.020) [0.488]		68.6 (29.0) [0.018]		2.6 (2.9) [0.375]
# of observations	2,138	2,138	2,134	2,134	2,139	2,139
# of clusters	214	214	214	214	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A49: O&M (2016 Dry and 2017 Dry and 2018 Dry, 4)

	Hired labor exp./ha		Yield		Sales/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	4.4 (2.7) [0.106]	1.9 (2.9) [0.508]	47.2 (25.0) [0.059]	23.4 (30.0) [0.436]	19.5 (16.9) [0.250]	6.4 (19.3) [0.741]
Farmer monitor * Reserved top of SP		5.7 (4.1) [0.170]		56.4 (37.8) [0.136]		30.5 (25.5) [0.232]
# of observations	2,139	2,139	2,030	2,030	2,139	2,139
# of clusters	214	214	213	213	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A50: O&M (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 1)

	Maintenance needed		Not enough water	
	(1)	(2)	(3)	(4)
Farmer monitor	-0.003 (0.014) [0.803]	-0.003 (0.015) [0.868]	-0.002 (0.076) [0.983]	0.061 (0.108) [0.572]
Farmer monitor * Reserved top of SP		-0.002 (0.018) [0.916]		-0.115 (0.109) [0.293]
# of observations	2,663	2,663	193	193
# of clusters	205	205	97	97

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A51: O&M (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 2)

	Cultivated		Irrigated		Horticulture	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	0.017 (0.024) [0.475]	0.027 (0.029) [0.366]	-0.002 (0.010) [0.830]	-0.011 (0.012) [0.345]	0.007 (0.014) [0.611]	0.004 (0.018) [0.842]
Farmer monitor * Reserved top of SP		-0.023 (0.030) [0.455]		0.022 (0.014) [0.135]		0.009 (0.020) [0.668]
# of observations	3,566	3,566	3,566	3,566	3,566	3,566
# of clusters	214	214	214	214	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A52: O&M (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 3)

	Banana		HH labor/ha		Inputs/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	0.004 (0.017) [0.803]	0.008 (0.022) [0.706]	11.7 (18.6) [0.527]	-0.7 (21.7) [0.976]	1.1 (2.1) [0.613]	0.3 (2.5) [0.900]
Farmer monitor * Reserved top of SP		-0.009 (0.022) [0.672]		29.2 (28.6) [0.306]		1.8 (3.1) [0.571]
# of observations	3,566	3,566	3,558	3,558	3,566	3,566
# of clusters	214	214	214	214	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.

Table A53: O&M (2016 Rainy 2 and 2017 Rainy 1 & 2 and 2018 Rainy 1 & 2, 4)

	Hired labor exp./ha		Yield		Sales/ha	
	(1)	(2)	(3)	(4)	(5)	(6)
Farmer monitor	-6.6 (3.0) [0.028]	-6.5 (3.7) [0.080]	34.1 (23.2) [0.143]	23.7 (28.4) [0.403]	15.5 (12.8) [0.225]	18.3 (15.5) [0.240]
Farmer monitor * Reserved top of SP		-0.3 (4.1) [0.946]		24.5 (32.6) [0.452]		-6.5 (20.6) [0.753]
# of observations	3,566	3,566	3,435	3,435	3,566	3,566
# of clusters	214	214	214	214	214	214

Notes: Farmer monitor is an indicator for whether the Water User Group of the household's sample plot was assigned to a Farmer Monitor treatment arm, while Reserved top of SP is an indicator for whether the Water User Group of the household's sample plot had the Farmer Monitor position reserved for a household whose plot was near the top of the Water User Group (a plot location where water availability is more uncertain). Regressions control for the minikit saturation of the household's sample plot's Water User Group and the zone of the household's sample plot's Water User Group. Standard errors clustered at the household's sample plot's Water User Group are in parentheses, and p-values are in brackets.