

Bees at work: the impact of beekeeping on household agricultural income and the economy in Ethiopia

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Supplementary Appendix

Table A1. Effect of beekeeping on agricultural value (log) – pooled OLS at different cut-off points

Variables	(1)	(2)	(3)	(4)	(5)	(6)
HH lives within 0 km	0.118*** (0.036)					
HH lives within 2 km		0.118*** (0.036)				
HH lives within 3 km			0.116*** (0.037)			
HH lives within 5 km				0.118*** (0.037)		
HH lives within 7 km					0.078** (0.037)	
HH lives within 10 km						0.047 (0.038)
Constant	1.685*** (0.193)	1.681*** (0.193)	1.675*** (0.193)	1.672*** (0.193)	1.689*** (0.193)	1.703*** (0.194)
Observations	10,785	10,785	10,785	10,785	10,785	10,785
R-squared	0.362	0.362	0.362	0.362	0.361	0.361
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Household No	Yes	Yes	Yes	Yes	Yes	Yes
District FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The table presents results from pooled OLS models estimating the impact of beekeeping on agricultural income measured as the value of total harvest across all crops grown. We use different radii to define a household as living within a certain distance from a beekeeper. This is used to understand how the estimates attenuate as the distance increases. We find that 5 km radius is the optimal as the estimates generally fall after 5 km. All regressions include the same controls as those included in the main document.

*** p<0.01, ** p<0.05, * p<0.1. Standard errors clustered at the household level in parentheses.

Table A2. Full results of the main regression for pooled OLS

Variables	(1) Log of harvest value in US\$
Household lives within 5 km of a beekeeper	0.118*** (0.037)
Primary education (0/10)	0.005 (0.038)
Household age	0.004*** (0.001)
Livestock ownership (0/1)	0.913*** (0.059)
Use of agrochemicals (0/1)	0.422*** (0.057)
Temperature (x 10 deg Celsius)	-0.001* (0.001)
Rainfall (mm/annum)	0.000*** (0.000)
Use of improved seed varieties (0/1)	0.481*** (0.040)
Fertilizer quantity (kg) used	0.000*** (0.000)
Household size	0.139*** (0.008)
Household asset index	0.003 (0.028)
Tree cover (%) in 2000	0.001 (0.002)
Year=2013	1.648*** (0.105)
Year=2015	2.353*** (0.067)
Year=2018	1.687*** (0.096)
Year=2021	1.990*** (0.096)
Constant	1.672*** (0.193)
Observations	10,785
R-squared	0.362
Controls	Yes
District FE	Yes
Year FE	Yes

Notes: The table presents the full results from the pooled OLS model, which is column (2) in the main results table in the manuscript.

*** p<0.01, ** p<0.05, * p<0.1. Standard errors clustered at the household level in parentheses.