

## Appendix 1

**Table A1.1.** Difference-in-difference estimates of community welfare (standard errors in parentheses): low education group

	Food expenditure	Non-food expenditure	Agriculture input expenditure	Education expenditure	Income
<i>Socio-economic characteristics in 2009</i>					
Income	0.854*** (0.064)	0.792*** (0.058)	0.979*** (0.087)	0.859*** (0.072)	0.825*** (0.007)
Proportion with elementary & lower secondary	2.847*** (0.416)	3.313*** (0.376)	5.338*** (0.561)	5.013*** (0.464)	0.074+ (0.045)
Proportion with upper secondary & higher	8.061*** (1.251)	7.362*** (1.131)	6.405*** (1.686)	15.306*** (1.394)	0.328* (0.134)
Proportion with other education	0.097 (0.374)	0.808* (0.339)	-0.838+ (0.505)	1.893*** (0.417)	0.125** (0.040)
Proportion of female headed household	0.002 (0.259)	0.128 (0.234)	-0.874* (0.349)	0.509+ (0.289)	0.092*** (0.028)
Proportion aged 0-14 years	5.108*** (0.803)	3.218*** (0.726)	8.605*** (1.082)	7.897*** (0.894)	-0.489*** (0.086)
Proportion aged 60 years and over	3.410*** (0.907)	2.314** (0.820)	8.226*** (1.222)	3.896*** (1.011)	0.043 (0.097)
Proportion of households in agriculture	0.170*** (0.047)	0.069 (0.043)	0.344*** (0.064)	0.026 (0.053)	0.008 (0.005)
Proportion of households with insufficient water	-0.115 (0.107)	-0.040 (0.097)	-0.018 (0.145)	0.099 (0.120)	0.018 (0.011)
Proportion of households with no electricity	0.272 (0.549)	0.251 (0.496)	0.564 (0.739)	-0.525 (0.611)	0.116* (0.059)
<i>Δ (Difference between 2009 and 2011)</i>					
Proportion with disability	-1.691* (0.801)	-0.809 (0.724)	-0.459 (1.079)	-0.749 (0.893)	-0.383*** (0.086)
Proportion of sick people	0.365+ (0.192)	0.117 (0.174)	-0.903*** (0.259)	0.049 (0.214)	0.016 (0.021)
Proportion of deaths	-3.045 (1.904)	-1.375 (1.721)	1.490 (2.565)	-0.441 (2.122)	-0.540** (0.204)
Problem with poor soil	0.040 (0.068)	-0.013 (0.062)	0.010 (0.092)	0.037 (0.076)	-0.007 (0.007)
Problem with labor shortage	0.011 (0.084)	0.016 (0.076)	0.145 (0.113)	-0.014 (0.093)	-0.009 (0.009)
Problem with crop planted	0.140* (0.070)	0.152* (0.064)	0.290** (0.095)	0.106 (0.078)	0.006 (0.008)
Problem with lack of knowledge	-0.092 (0.075)	-0.132+ (0.068)	-0.214* (0.101)	-0.011 (0.083)	-0.014+ (0.008)

Problem with water shortage	0.145*	0.131*	0.249**	0.173*	0.013*
	(0.061)	(0.055)	(0.082)	(0.068)	(0.007)
Problem with inundation	-0.162*	-0.078	-0.033	-0.134	-0.003
	(0.078)	(0.071)	(0.105)	(0.087)	(0.008)
<i>Experience of floods and droughts in 2010</i>					
Log flood index	0.021*	0.002	0.049***	0.011	0.002+
	(0.010)	(0.009)	(0.014)	(0.011)	(0.001)
Log drought index	0.030***	0.024***	0.132***	0.048***	-0.002*
	(0.007)	(0.006)	(0.010)	(0.008)	(0.001)
Flood index x drought index	-0.011***	-0.008***	-0.011***	-0.012***	0.0001
	(0.002)	(0.002)	(0.003)	(0.002)	(0.0002)
Constant	-16.331***	-15.237***	-19.973***	-19.328***	-11.689***
	(0.996)	(0.901)	(1.342)	(1.110)	(0.107)
Observations	34,169	34,165	34,158	34,169	34,170
R-squared	0.02	0.02	0.03	0.02	0.32

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1

**Table A1.2.** Difference-in-difference estimates of community welfare (standard errors in parentheses): high education group

	Food expenditure	Non-food expenditure	Agriculture input expenditure	Education expenditure	Income
<i>Socio-economic characteristics in 2009</i>					
Income	0.984*** (0.060)	0.972*** (0.054)	0.765*** (0.084)	0.997*** (0.065)	0.881*** (0.006)
Proportion with elementary & lower secondary	2.102** (0.666)	2.576*** (0.601)	5.591*** (0.934)	3.069*** (0.726)	0.023 (0.069)
Proportion with upper secondary & higher	-0.383 (0.824)	1.470* (0.744)	-14.645*** (1.156)	0.376 (0.898)	0.234** (0.086)
Proportion with other education	-0.280 (0.658)	0.663 (0.594)	-2.785** (0.923)	0.209 (0.717)	0.104 (0.068)
Proportion of female headed household	0.532** (0.189)	0.486** (0.171)	0.527* (0.265)	0.245 (0.206)	0.112*** (0.020)
Proportion aged 0-14 years	9.351*** (1.029)	6.943*** (0.928)	13.611*** (1.442)	13.127*** (1.121)	-0.184+ (0.107)
Proportion aged 60 years and over	4.915*** (0.908)	2.474** (0.819)	12.902*** (1.273)	5.271*** (0.989)	-0.222* (0.094)
Proportion of households in agriculture	0.034+ (0.019)	0.013 (0.018)	0.072** (0.027)	-0.003 (0.021)	0.004+ (0.002)
Proportion of households with insufficient water	-0.268+ (0.141)	-0.103 (0.127)	0.454* (0.198)	-0.211 (0.154)	-0.005 (0.015)
Proportion of households with no electricity	0.090 (0.645)	0.382 (0.582)	-1.318 (0.905)	-0.079 (0.703)	-0.086 (0.067)
<i>Δ (Difference between 2009 and 2011)</i>					
Proportion with disability	-0.226 (0.748)	0.098 (0.675)	-1.065 (1.049)	-0.779 (0.815)	-0.442*** (0.078)
Proportion of sick people	0.020 (0.112)	-0.009 (0.101)	0.160 (0.157)	-0.179 (0.122)	0.015 (0.012)
Proportion of deaths	2.791 (1.811)	1.842 (1.634)	1.502 (2.539)	2.996 (1.973)	-0.222 (0.188)
Problem with poor soil	0.039 (0.075)	0.032 (0.068)	0.178+ (0.105)	-0.013 (0.082)	0.007 (0.008)
Problem with labor shortage	0.055 (0.089)	0.057 (0.080)	-0.267* (0.125)	0.034 (0.097)	0.004 (0.009)
Problem with crop planted	0.015 (0.075)	-0.001 (0.068)	0.227* (0.106)	0.047 (0.082)	-0.001 (0.008)
Problem with lack of knowledge	0.081 (0.081)	-0.007 (0.073)	0.154 (0.113)	0.066 (0.088)	0.006 (0.008)
Problem with water shortage	0.110+ (0.075)	0.150* (0.068)	0.334*** (0.106)	0.212** (0.082)	-0.009 (0.008)

	(0.066)	(0.060)	(0.093)	(0.072)	(0.007)
Problem with inundation	0.049	0.036	0.176	0.027	-0.008
	(0.083)	(0.074)	(0.116)	(0.090)	(0.009)
<i>Experience of floods and droughts in 2010</i>					
Log flood index	0.021+	0.008	0.074***	0.031*	0.001
	(0.012)	(0.011)	(0.016)	(0.013)	(0.001)
Log drought index	0.085***	0.071***	0.232***	0.109***	-0.001
	(0.006)	(0.006)	(0.009)	(0.007)	(0.001)
Flood index x drought index	-0.005**	-0.006***	-0.017***	-0.005**	-0.0002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.0002)
Constant	-17.243***	-17.041***	-15.303***	-18.767***	-12.469***
	(1.089)	(0.982)	(1.527)	(1.187)	(0.113)
Observations	34,169	34,165	34,164	34,169	34,170
R-squared	0.02	0.02	0.06	0.02	0.40

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1