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Impacts of large-scale forestry investments on neighboring small-scale agriculture in northern Mozambique

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Supplementary Information

1 Sensitivity analysis on productive outcomes, considering plantation presence

Table S1: Diff-in-Diff effects of exposure based on plantation share on productive outcomes

	Area total (Ha)	Area cultivated (Ha)	Area Perm (Ha)	Area measured (Ha)	Output value (PPP)	Yields (PPP/Ha)	Sales value (PPP)	Sales/Ha (PPP/Ha)	Seeds cost (PPP)
Dummy exposure	-0.03 (0.22)	0.06 (0.23)	-0.00 (0.01)	-0.18 (0.20)	-283.56 (179.81)	-124.53 (113.83)	-46.81 (30.28)	-19.76 (66.31)	1.97 (1.66)
Dummy post	-0.33*** (0.09)	-0.33*** (0.08)	-0.00 (0.01)	-0.26** (0.12)	235.57*** (48.78)	287.65*** (43.10)	173.33*** (57.26)	383.01 (268.53)	3.73*** (0.48)
ExposureXPost	-0.20 (0.26)	-0.39 (0.28)	0.00 (0.01)	-0.07 (0.24)	-6.31 (125.94)	-9.12 (111.60)	37.09 (72.17)	49.25 (111.88)	-0.30 (4.41)
Female HHhead	-0.39*** (0.05)	-0.38*** (0.04)	-0.01** (0.01)	-0.52*** (0.11)	-124.00*** (28.44)	-51.06** (24.17)	68.28 (129.53)	603.73 (640.28)	0.03 (0.84)
Age HHhead	0.01*** (0.00)	0.01*** (0.00)	0.00** (0.00)	0.01*** (0.00)	0.85 (0.58)	-0.04 (0.70)	-1.64** (0.75)	-3.90 (3.11)	0.01 (0.02)
Years ofEdu HHhead	0.01 (0.01)	0.01 (0.01)	0.00 (0.00)	-0.03 (0.02)	3.38 (4.15)	6.25 (3.89)	-3.46 (5.93)	-28.14 (26.92)	0.36*** (0.13)
Dummy wage employed	-0.01 (0.07)	-0.01 (0.07)	-0.01 (0.01)	0.11 (0.16)	11.60 (27.50)	29.65 (26.52)	105.31 (123.47)	628.65 (622.87)	0.62 (0.70)
Dummy self employed	0.11** (0.05)	0.08* (0.05)	0.01 (0.01)	-0.07 (0.11)	23.73 (22.00)	13.48 (25.42)	106.34 (69.63)	377.79 (340.38)	1.62*** (0.58)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.05	0.05	0.00	0.04	0.07	0.05	0.00	0.00	0.02
N	4637	4637	4637	1118	4763	4621	4664	4572	4664
Mean of dep. var control at baseline	1.66	1.56	0.02	1.51	87.55	53.43	26.68	14.66	0.63

Notes: Standard errors in parentheses
 * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table S2: Diff-in-Diff effects of exposure based on plantation share on productive outcomes

	Area total (Ha)	Area cultivated (Ha)	Area Perm (Ha)	Area measured (Ha)	Output value (PPP)	Yields (PPP/Ha)	Sales value (PPP)	Sales/Ha (PPP/Ha)	Seeds cost (PPP)
Dummy exposure	0.04 (0.17)	0.13 (0.18)	-0.00 (0.01)	-0.17 (0.19)	-290.21 (189.87)	-138.40 (119.16)	-47.36* (27.84)	-20.83 (66.41)	3.69** (1.41)
Dummy post	-0.35*** (0.09)	-0.34*** (0.08)	-0.00 (0.01)	-0.26** (0.12)	235.70*** (48.42)	289.48*** (42.92)	174.49*** (57.56)	385.14 (269.96)	3.63*** (0.45)
ExposureXPost	0.63 (0.38)	0.47 (0.36)	0.00 (0.01)	-0.19 (0.17)	40.99 (82.66)	-75.47 (67.60)	-19.30 (50.49)	-58.01 (120.75)	5.35 (8.74)
Female HHhead	-0.39*** (0.05)	-0.37*** (0.04)	-0.01** (0.01)	-0.52*** (0.11)	-123.40*** (28.21)	-50.90** (24.11)	68.20 (129.53)	603.53 (640.29)	0.03 (0.84)
Age HHhead	0.01*** (0.00)	0.01*** (0.00)	0.00** (0.00)	0.01*** (0.00)	0.90 (0.59)	-0.03 (0.70)	-1.64** (0.75)	-3.91 (3.11)	0.02 (0.02)
Years ofEdu HHhead	0.01 (0.01)	0.01 (0.01)	0.00 (0.00)	-0.03 (0.02)	3.67 (4.17)	6.48 (3.93)	-3.40 (5.91)	-28.09 (26.81)	0.35*** (0.13)
Dummy wage employed	-0.01 (0.07)	-0.01 (0.07)	-0.01 (0.01)	0.11 (0.16)	12.71 (27.95)	30.31 (26.72)	105.34 (123.50)	628.51 (623.00)	0.59 (0.69)
Dummy self employed	0.11** (0.05)	0.08* (0.05)	0.01 (0.01)	-0.07 (0.11)	25.12 (21.67)	14.58 (25.15)	106.70 (69.70)	378.18 (340.77)	1.58*** (0.56)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.05	0.05	0.00	0.04	0.07	0.06	0.00	0.00	0.03
N	4637	4637	4637	1118	4763	4621	4664	4572	4664
Mean of dep. var control at baseline	1.66	1.56	0.02	1.51	87.07	53.27	26.38	14.52	0.60

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

Table S3: Diff-in-Diff effects of exposure based on plantation share on productive outcomes

	Area total (Ha)	Area cultivated (Ha)	Area Perm (Ha)	Area measured (Ha)	Output value (PPP)	Yields (PPP/Ha)	Sales value (PPP)	Sales/Ha (PPP/Ha)	Seeds cost (PPP)
Dummy exposure	0.04 (0.17)	0.13 (0.18)	-0.00 (0.01)	-0.17 (0.19)	-290.21 (189.87)	-138.40 (119.16)	-47.36* (27.84)	-20.83 (66.41)	3.69** (1.41)
Dummy post	-0.35*** (0.09)	-0.34*** (0.08)	-0.00 (0.01)	-0.26** (0.12)	235.70*** (48.42)	289.48*** (42.92)	174.49*** (57.56)	385.14 (269.96)	3.63*** (0.45)
ExposureXPost	0.63 (0.38)	0.47 (0.36)	0.00 (0.01)	-0.19 (0.17)	40.99 (82.66)	-75.47 (67.60)	-19.30 (50.49)	-58.01 (120.75)	5.35 (8.74)
Female HHhead	-0.39*** (0.05)	-0.37*** (0.04)	-0.01** (0.01)	-0.52*** (0.11)	-123.40*** (28.21)	-50.90** (24.11)	68.20 (129.53)	603.53 (640.29)	0.03 (0.84)
Age HHhead	0.01*** (0.00)	0.01*** (0.00)	0.00** (0.00)	0.01*** (0.00)	0.90 (0.59)	-0.03 (0.70)	-1.64** (0.75)	-3.91 (3.11)	0.02 (0.02)
Years ofEdu HHhead	0.01 (0.01)	0.01 (0.01)	0.00 (0.00)	-0.03 (0.02)	3.67 (4.17)	6.48 (3.93)	-3.40 (5.91)	-28.09 (26.81)	0.35*** (0.13)
Dummy wage employed	-0.01 (0.07)	-0.01 (0.07)	-0.01 (0.01)	0.11 (0.16)	12.71 (27.95)	30.31 (26.72)	105.34 (123.50)	628.51 (623.00)	0.59 (0.69)
Dummy self employed	0.11** (0.05)	0.08* (0.05)	0.01 (0.01)	-0.07 (0.11)	25.12 (21.67)	14.58 (25.15)	106.70 (69.70)	378.18 (340.77)	1.58*** (0.56)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.05	0.05	0.00	0.04	0.07	0.06	0.00	0.00	0.03
N	4637	4637	4637	1118	4763	4621	4664	4572	4664
Mean of dep. var control at baseline	1.66	1.56	0.02	1.51	87.07	53.27	26.38	14.52	0.60

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

Table S4: Diff-in-Diff effects of exposure based on plantation share on productive outcomes

	Area total (Ha)	Area cultivated (Ha)	Area Perm (Ha)	Area measured (Ha)	Output value (PPP)	Yields (PPP/Ha)	Sales value (PPP)	Sales/Ha (PPP/Ha)	Seeds cost (PPP)
Dummy exposure	0.03 (0.18)	0.12 (0.18)	-0.00 (0.01)	-0.18 (0.19)	-306.58 (195.35)	-151.82 (121.30)	-51.26* (26.73)	-28.11 (67.97)	3.63** (1.39)
Dummy post	-0.35*** (0.09)	-0.34*** (0.08)	-0.00 (0.01)	-0.26** (0.12)	237.76*** (47.58)	291.15*** (42.52)	174.98*** (57.63)	386.07 (270.31)	3.65*** (0.45)
ExposureXPost	0.40 (0.35)	0.27 (0.34)	0.00 (0.01)	-0.21 (0.16)	9.29 (76.25)	-98.94* (58.61)	-25.64 (47.93)	-79.61 (113.23)	2.99 (7.76)
Female HHhead	-0.39*** (0.05)	-0.37*** (0.04)	-0.01** (0.01)	-0.52*** (0.12)	-123.30*** (28.13)	-50.74** (24.04)	68.29 (129.54)	603.66 (640.40)	0.02 (0.84)
Age									
HHhead	0.01*** (0.00)	0.01*** (0.00)	0.00** (0.00)	0.01*** (0.00)	0.94 (0.58)	0.01 (0.70)	-1.63** (0.75)	-3.90 (3.10)	0.01 (0.02)
Years ofEdu									
HHhead	0.01 (0.01)	0.01 (0.01)	0.00 (0.00)	-0.03 (0.02)	4.03 (4.27)	6.82* (3.96)	-3.30 (5.90)	-27.92 (26.70)	0.35** (0.13)
Dummy wage									
employed	-0.01 (0.07)	-0.01 (0.07)	-0.01 (0.01)	0.11 (0.16)	13.40 (28.09)	30.98 (26.78)	105.55 (123.53)	628.85 (623.24)	0.58 (0.68)
Dummy self employed	0.11** (0.05)	0.08* (0.05)	0.01 (0.01)	-0.07 (0.11)	25.34 (21.66)	14.73 (25.11)	106.78 (69.71)	378.36 (340.80)	1.58*** (0.57)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.05	0.05	0.00	0.04	0.07	0.06	0.00	0.00	0.03
N	4637	4637	4637	1118	4763	4621	4664	4572	4664
Mean of dep. var									
control at baseline	1.66	1.56	0.02	1.51	87.07	53.27	26.38	14.52	0.60

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

Table S5: Diff-in-Diff effects of exposure based on plantation share on productive outcomes

	Area total (Ha)	Area cultivated (Ha)	Area Perm (Ha)	Area measured (Ha)	Output value (PPP)	Yields (PPP/Ha)	Sales value (PPP)	Sales/Ha (PPP/Ha)	Seeds cost (PPP)
Dummy exposure	-0.06 (0.22)	0.03 (0.23)	-0.00 (0.01)	-0.25 (0.22)	-222.91** (105.96)	-92.89 (67.34)	-57.49* (30.91)	-43.67 (81.05)	2.99** (1.28)
Dummy post	-0.35*** (0.09)	-0.34*** (0.08)	-0.00 (0.01)	-0.26** (0.12)	241.67*** (43.60)	294.94*** (40.51)	174.95*** (57.50)	385.83 (269.65)	3.65*** (0.45)
ExposureXPost	0.49 (0.31)	0.35 (0.31)	0.00 (0.01)	-0.03 (0.22)	-89.10 (100.00)	-174.48** (77.67)	-28.38 (41.51)	-71.02 (92.54)	2.53 (7.17)
Female HHhead	-0.39*** (0.05)	-0.37*** (0.04)	-0.01** (0.01)	-0.52*** (0.11)	-123.09*** (28.10)	-51.20** (24.04)	68.45 (129.51)	603.67 (640.31)	0.02 (0.84)
Age									
HHhead	0.01*** (0.00)	0.01*** (0.00)	0.00** (0.00)	0.01*** (0.00)	0.95* (0.57)	0.03 (0.69)	-1.63** (0.75)	-3.89 (3.09)	0.01 (0.02)
Years ofEdu									
HHhead	0.01 (0.01)	0.00 (0.01)	0.00 (0.00)	-0.03 (0.02)	4.45 (4.34)	7.14* (3.97)	-3.20 (5.90)	-27.83 (26.69)	0.34** (0.13)
Dummy wage									
employed	-0.00 (0.07)	-0.01 (0.07)	-0.01 (0.01)	0.11 (0.16)	11.88 (26.98)	29.83 (26.11)	105.57 (123.58)	628.97 (623.40)	0.59 (0.68)
Dummy self employed	0.11** (0.05)	0.08* (0.05)	0.01 (0.01)	-0.07 (0.11)	26.53 (21.18)	15.66 (24.94)	107.20 (69.75)	378.84 (341.02)	1.57*** (0.57)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.05	0.05	0.00	0.04	0.07	0.06	0.00	0.00	0.03
N	4637	4637	4637	1118	4763	4621	4664	4572	4664
Mean of dep. var									
control at baseline	1.67	1.56	0.02	1.51	83.46	50.76	26.22	14.39	0.60

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

2 Sensitivity analysis on employment outcomes, considering plantation presence

Table S6: Diff-in-Diff effects of exposure based on plantation share on employment outcomes

	Employed fulltime (Yes/No)	Employed parttime (Yes/No)	Workers employed (N)	Male workers employed (N)	Female workers employed (N)	Wage Emp (Yes/No)	Self Emp (Yes/No)	Ag MainAct (Yes/No)	Ag Secondary Act (Yes/No)	Nonfarm (Yes/No)
Dummy exposure	-0.02 (0.03)	0.00 (0.06)	1.36 (1.07)	0.82 (0.61)	0.54 (1.00)	0.19** (0.09)	0.00 (0.07)	0.03 (0.02)	-0.02 (0.02)	-0.01 (0.01)
Dummy post	-0.01 (0.01)	-0.08*** (0.02)	-2.17* (1.16)	-0.90 (0.67)	-1.28 (0.81)	-0.02 (0.01)	-0.05*** (0.02)	0.08*** (0.02)	-0.07*** (0.01)	-0.01 (0.01)
ExposureXPost	0.02 (0.03)	-0.08 (0.08)	0.81 (3.37)	-0.14 (0.95)	0.95 (2.66)	-0.24** (0.09)	-0.01 (0.10)	0.01 (0.03)	-0.02 (0.02)	0.00 (0.01)
Female HHhead	-0.01** (0.00)	-0.05*** (0.01)	-1.30 (1.03)	-0.57 (0.67)	-0.73 (0.67)	-0.07*** (0.01)	-0.18*** (0.02)	0.02 (0.01)	-0.03*** (0.01)	0.02** (0.01)
Age										
HHhead	0.00*** (0.00)	0.00*** (0.00)	-0.04 (0.03)	-0.02 (0.02)	-0.01 (0.02)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Years ofEdu										
HHhead	0.00*** (0.00)	0.02*** (0.00)	0.06 (0.10)	0.09 (0.07)	-0.03 (0.05)	0.02*** (0.00)	0.01*** (0.00)	-0.04*** (0.00)	0.03*** (0.00)	0.01*** (0.00)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>R</i> ²	0.02	0.05	0.13	0.12	0.12	0.05	0.05	0.12	0.09	0.03
N	4763	4763	111	111	111	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.02	0.20	6.51	4.13	2.38	0.24	0.52	0.82	0.13	0.04

Notes: Standard errors in parentheses

p* < 0.10, *p* < 0.05, ****p* < 0.01.

Table S7: Diff-in-Diff effects of exposure based on plantation share on employment outcomes

	Employed fulltime (Yes/No)	Employed parttime (Yes/No)	Workers employed (N)	Male workers employed (N)	Female workers employed (N)	Wage Emp (Yes/No)	Self Emp (Yes/No)	Ag MainAct (Yes/No)	Ag Secondary Act (Yes/No)	Nonfarm (Yes/No)
Dummy exposure	-0.02 (0.02)	0.04 (0.07)	1.68* (0.99)	0.86 (0.64)	0.82 (0.93)	0.18** (0.08)	0.03 (0.06)	0.04 (0.02)	-0.03 (0.02)	-0.01 (0.01)
Dummy post	-0.01 (0.01)	-0.07*** (0.02)	-2.25* (1.16)	-0.88 (0.68)	-1.36* (0.80)	-0.02 (0.02)	-0.05*** (0.02)	0.08*** (0.02)	-0.07*** (0.01)	-0.02 (0.01)
ExposureXPost	0.04 (0.04)	-0.07 (0.09)	0.52 (1.67)	-0.56 (0.65)	1.08 (1.31)	-0.17** (0.08)	0.04 (0.06)	-0.02 (0.04)	-0.01 (0.02)	0.03 (0.03)
Female HHhead	-0.01** (0.00)	-0.05*** (0.01)	-1.51 (1.07)	-0.62 (0.69)	-0.89 (0.71)	-0.07*** (0.01)	-0.18*** (0.02)	0.01 (0.01)	-0.03*** (0.01)	0.02** (0.01)
Age										
HHhead	0.00*** (0.00)	0.00*** (0.00)	-0.04 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Years ofEdu										
HHhead	0.00*** (0.00)	0.02*** (0.00)	0.04 (0.10)	0.09 (0.07)	-0.05 (0.05)	0.02** (0.00)	0.01*** (0.00)	-0.04*** (0.00)	0.03*** (0.00)	0.01*** (0.00)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<i>R</i> ²	0.02	0.05	0.14	0.12	0.13	0.05	0.05	0.12	0.09	0.03
N	4763	4763	111	111	111	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.02	0.20	6.51	4.13	2.38	0.24	0.52	0.82	0.13	0.04

Notes: Standard errors in parentheses

p* < 0.10, *p* < 0.05, ****p* < 0.01.

Table S8: Diff-in-Diff effects of exposure based on plantation share on employment outcomes

	Employed fulltime (Yes/No)	Employed parttime (Yes/No)	Workers employed (N)	Male workers employed (N)	Female workers employed (N)	Wage Emp (Yes/No)	Self Emp (Yes/No)	Ag MainAct (Yes/No)	Ag Secondary Act (Yes/No)	Nonfarm (Yes/No)
Dummy exposure	-0.02 (0.02)	0.04 (0.07)	1.68* (0.99)	0.86 (0.64)	0.82 (0.93)	0.18** (0.08)	0.03 (0.06)	0.04 (0.02)	-0.03 (0.02)	-0.01 (0.01)
Dummy post	-0.01 (0.01)	-0.07*** (0.02)	-2.25* (1.16)	-0.88 (0.68)	-1.36* (0.80)	-0.02 (0.02)	-0.05*** (0.02)	0.08*** (0.02)	-0.07*** (0.01)	-0.02 (0.01)
ExposureXPost	0.04 (0.04)	-0.07 (0.09)	0.52 (1.67)	-0.56 (0.65)	1.08 (1.31)	-0.17** (0.08)	0.04 (0.06)	-0.02 (0.04)	-0.01 (0.02)	0.03 (0.03)
Female HHhead	-0.01** (0.00)	-0.05*** (0.01)	-1.51 (1.07)	-0.62 (0.69)	-0.89 (0.71)	-0.07*** (0.01)	-0.18*** (0.02)	0.01 (0.01)	-0.03*** (0.01)	0.02** (0.01)
Age HHhead	0.00*** (0.00)	0.00*** (0.00)	-0.04 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Years ofEdu										
HHhead	0.00*** (0.00)	0.02*** (0.00)	0.04 (0.10)	0.09 (0.07)	-0.05 (0.05)	0.02*** (0.00)	0.01*** (0.00)	-0.04*** (0.00)	0.03*** (0.00)	0.01*** (0.00)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.02	0.05	0.14	0.12	0.13	0.05	0.05	0.12	0.09	0.03
N	4763	4763	111	111	111	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.02	0.20	6.51	4.13	2.38	0.24	0.52	0.82	0.13	0.04

Notes: Standard errors in parentheses
*p < 0.10, **p < 0.05, ***p < 0.01.

Table S9: Diff-in-Diff effects of exposure based on plantation share on employment outcomes

	Employed fulltime (Yes/No)	Employed parttime (Yes/No)	Workers employed (N)	Male workers employed (N)	Female workers employed (N)	Wage Emp (Yes/No)	Self Emp (Yes/No)	Ag MainAct (Yes/No)	Ag Secondary Act (Yes/No)	Nonfarm (Yes/No)
Dummy exposure	-0.02 (0.02)	0.04 (0.07)	1.66 (1.01)	0.84 (0.65)	0.83 (0.94)	0.18** (0.08)	0.03 (0.06)	0.03 (0.02)	-0.02 (0.02)	-0.01 (0.01)
Dummy post	-0.01 (0.01)	-0.07*** (0.02)	-2.24* (1.17)	-0.87 (0.69)	-1.37* (0.80)	-0.02 (0.02)	-0.05*** (0.02)	0.08*** (0.02)	-0.07*** (0.01)	-0.02 (0.01)
ExposureXPost	0.04 (0.04)	-0.05 (0.09)	0.02 (1.28)	-0.74 (0.58)	0.76 (1.07)	-0.15* (0.08)	0.02 (0.06)	-0.08** (0.06)	0.06 (0.04)	0.03 (0.02)
Female HHhead	-0.01** (0.00)	-0.05*** (0.01)	-1.46 (1.06)	-0.60 (0.69)	-0.86 (0.70)	-0.07*** (0.01)	-0.18*** (0.02)	0.01 (0.01)	-0.03*** (0.01)	0.02** (0.01)
Age HHhead	0.00*** (0.00)	0.00*** (0.00)	-0.04 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Years ofEdu										
HHhead	0.00*** (0.00)	0.02*** (0.00)	0.04 (0.10)	0.09 (0.07)	-0.05 (0.05)	0.02*** (0.00)	0.01*** (0.00)	-0.04*** (0.00)	0.03*** (0.00)	0.01*** (0.00)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.02	0.05	0.13	0.12	0.13	0.05	0.05	0.12	0.09	0.03
N	4763	4763	111	111	111	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.02	0.20	6.51	4.13	2.38	0.24	0.52	0.82	0.13	0.04

Notes: Standard errors in parentheses
*p < 0.10, **p < 0.05, ***p < 0.01.

Table S10: Diff-in-Diff effects of exposure based on plantation share on employment outcomes

	Employed fulltime (Yes/No)	Employed parttime (Yes/No)	Workers employed (N)	Male workers employed (N)	Female workers employed (N)	Wage Emp (Yes/No)	Self Emp (Yes/No)	Ag MainAct (Yes/No)	Ag Secondary Act (Yes/No)	Nonfarm (Yes/No)
Dummy exposure	-0.01 (0.02)	0.01 (0.07)	0.21 (1.67)	-0.53 (1.60)	0.74 (0.82)	0.16** (0.07)	0.06 (0.07)	0.00 (0.03)	-0.02 (0.02)	0.02 (0.02)
Dummy post	-0.01 (0.01)	-0.08*** (0.02)	-2.34* (1.19)	-0.97 (0.73)	-1.36 (0.82)	-0.02 (0.02)	-0.05*** (0.02)	0.08*** (0.02)	-0.07*** (0.01)	-0.01 (0.01)
ExposureXPost	0.02 (0.03)	-0.04 (0.09)	1.38 (1.82)	0.52 (1.42)	0.86 (0.98)	-0.14** (0.07)	0.02 (0.06)	-0.07** (0.03)	0.06* (0.03)	0.01 (0.03)
Female HHhead	-0.01** (0.00)	-0.05*** (0.01)	-1.34 (1.06)	-0.49 (0.70)	-0.85 (0.70)	-0.07*** (0.01)	-0.18*** (0.02)	0.01 (0.01)	-0.03*** (0.01)	0.02** (0.01)
Age HHhead	0.00*** (0.00)	0.00*** (0.00)	-0.04 (0.03)	-0.02 (0.02)	-0.02 (0.02)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00** (0.00)	0.00 (0.00)	0.00** (0.00)
Years ofEdu										
HHhead	0.00*** (0.00)	0.02*** (0.00)	0.04 (0.11)	0.09 (0.07)	-0.06 (0.05)	0.02*** (0.00)	0.01*** (0.00)	-0.04*** (0.00)	0.03*** (0.00)	0.01*** (0.00)
Province fixed effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
R ²	0.02	0.05	0.13	0.12	0.13	0.05	0.05	0.12	0.09	0.03
N	4763	4763	111	111	111	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.02	0.20	6.59	4.20	2.39	0.24	0.52	0.82	0.13	0.04

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

3 Intensity of plantation exposure on crop choices, using distance to plantations and area share occupied with plantations

Table S11: Diff-in-Diff effects of exposure based on inverse of distance on crop choices

	Maize (Yes/No)	Rice (Yes/No)	Sorghum (Yes/No)	Groundnuts (Yes/No)	Beans (Yes/No)	Sesame (Yes/No)
Exposure	0.07** (0.03)	-0.06 (0.05)	0.14 (0.11)	0.03 (0.06)	0.04 (0.12)	0.01 (0.01)
Dummy post	0.08*** (0.02)	-0.11*** (0.03)	-0.11*** (0.02)	0.06* (0.03)	0.02 (0.03)	0.07*** (0.01)
ExposureXPostXInt	-10.29*** (3.13)	1.51 (6.57)	-9.69 (15.86)	-13.70** (5.89)	17.65 (15.42)	-7.11*** (2.02)
Female HHhead	-0.06*** (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.02 (0.02)	-0.05*** (0.02)	-0.02** (0.01)
Age HHhead	-0.00*** (0.00)	0.00*** (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00* (0.00)
Years ofEdu						
HHhead	-0.00 (0.00)	0.00* (0.00)	-0.01** (0.00)	-0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)
Dummy wage employed	-0.01 (0.02)	-0.00 (0.01)	0.02 (0.02)	-0.02 (0.02)	0.01 (0.02)	0.01 (0.01)
Dummy self employed	0.01 (0.02)	0.02 (0.01)	-0.01 (0.02)	0.00 (0.02)	-0.01 (0.01)	0.00 (0.01)
Province fixed effects	✓	✓	✓	✓	✓	✓
R ²	0.11	0.10	0.07	0.15	0.01	0.07
N	4763	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.68	0.27	0.29	0.41	0.62	0.00

Notes: Standard errors in parentheses

*p < 0.10, **p < 0.05, ***p < 0.01.

Table S12: Diff-in-Diff effects of exposure based on plantation share on crop choices

	Maize (Yes/No)	Rice (Yes/No)	Sorghum (Yes/No)	Groundnuts (Yes/No)	Beans (Yes/No)	Sesame (Yes/No)
Exposure	0.09*** (0.03)	-0.11** (0.05)	0.14 (0.13)	0.05 (0.06)	0.07 (0.15)	0.02 (0.01)
Dummy post	0.08*** (0.02)	-0.11*** (0.03)	-0.11*** (0.02)	0.06** (0.03)	0.02 (0.03)	0.07*** (0.01)
ExposureXPostXInt	-2.70*** (0.75)	4.45* (2.52)	-1.62 (4.76)	-3.46* (1.97)	0.22 (4.92)	-1.57** (0.77)
Female						
HHhead	-0.06*** (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.02 (0.02)	-0.05*** (0.02)	-0.02** (0.01)
Age						
HHhead	-0.00*** (0.00)	0.00*** (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00* (0.00)
Years ofEdu						
HHhead	-0.00 (0.00)	0.00* (0.00)	-0.01** (0.00)	-0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)
Dummy wage						
employed	-0.01 (0.02)	0.00 (0.01)	0.02 (0.02)	-0.02 (0.02)	0.01 (0.02)	0.01 (0.01)
Dummy self						
employed	0.01 (0.02)	0.02 (0.01)	-0.01 (0.02)	0.00 (0.02)	-0.00 (0.01)	0.00 (0.01)
Province fixed effects	✓	✓	✓	✓	✓	✓
<i>R</i> ²	0.11	0.10	0.07	0.15	0.01	0.07
N	4763	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.68	0.27	0.29	0.41	0.62	0.00

Notes: Standard errors in parentheses

p* < 0.10, *p* < 0.05, ****p* < 0.01.

4 Heterogenous impacts on crop choices

Table S13: Diff-in-Diff effects exposure on natural vegetation and cropland on crop choices

	Maize (Yes/No)	Rice (Yes/No)	Sorghum (Yes/No)	Peanuts (Yes/No)	Beans (Yes/No)	Sesame (Yes/No)
Dummy post	0.09*** (0.02)	-0.12*** (0.03)	-0.10*** (0.02)	0.06** (0.03)	0.02 (0.03)	0.07*** (0.01)
Exposure Only CL	0.11*** (0.03)	-0.08 (0.05)	0.38* (0.22)	-0.00 (0.05)	-0.05 (0.17)	0.03** (0.01)
Exposure Both CL-NV	0.11*** (0.03)	-0.17*** (0.03)	0.02 (0.12)	0.16*** (0.05)	0.22*** (0.08)	0.03** (0.01)
OnlyCL XPost	-0.08*** (0.02)	0.02 (0.04)	-0.37 (0.22)	-0.03 (0.04)	-0.18 (0.16)	-0.03** (0.01)
BothCL-NV XPost	-0.09*** (0.03)	0.19*** (0.06)	0.09 (0.13)	-0.23*** (0.03)	-0.07 (0.08)	-0.07*** (0.01)
Female HHhead	-0.06*** (0.02)	-0.00 (0.02)	-0.00 (0.02)	-0.02 (0.02)	-0.05*** (0.02)	-0.02** (0.01)
Age HHhead	-0.00*** (0.00)	0.00*** (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00* (0.00)	-0.00* (0.00)
Years ofEdu HHhead	-0.00 (0.00)	0.00* (0.00)	-0.01** (0.00)	-0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)
Dummy wage employed	-0.02 (0.02)	0.00 (0.01)	0.02 (0.02)	-0.03 (0.02)	0.00 (0.02)	0.01 (0.01)
Dummy self employed	0.01 (0.02)	0.02 (0.01)	-0.01 (0.02)	0.00 (0.02)	-0.01 (0.01)	0.00 (0.01)
Province fixed effects	✓	✓	✓	✓	✓	✓
R ²	0.11	0.10	0.08	0.15	0.01	0.07
N	4763	4763	4763	4763	4763	4763
Mean of dep. var control at baseline	0.68	0.27	0.29	0.41	0.62	0.00

Notes: Standard errors in parentheses
 $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.