

Supporting Information

McSweeney and Coomes 10.1073/pnas.1014123108

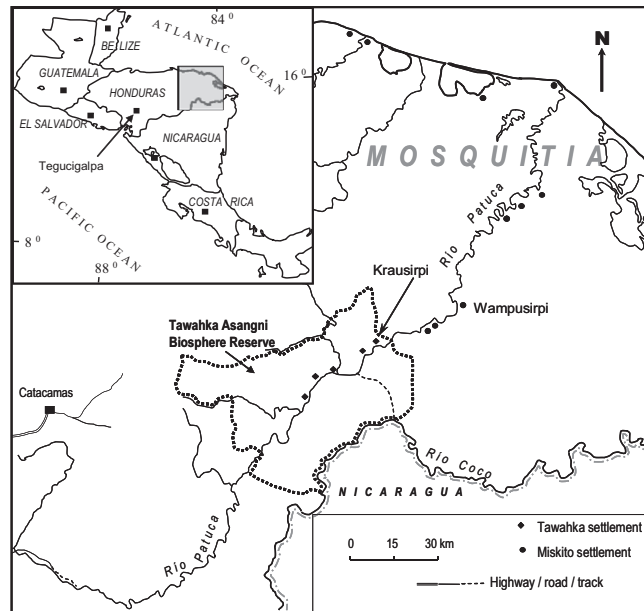


Fig. S1. Map showing the study community of Krausirpi within the Tawahka Asangni Biosphere Reserve in eastern Honduras. (Reprinted with modifications from ref. 40.)

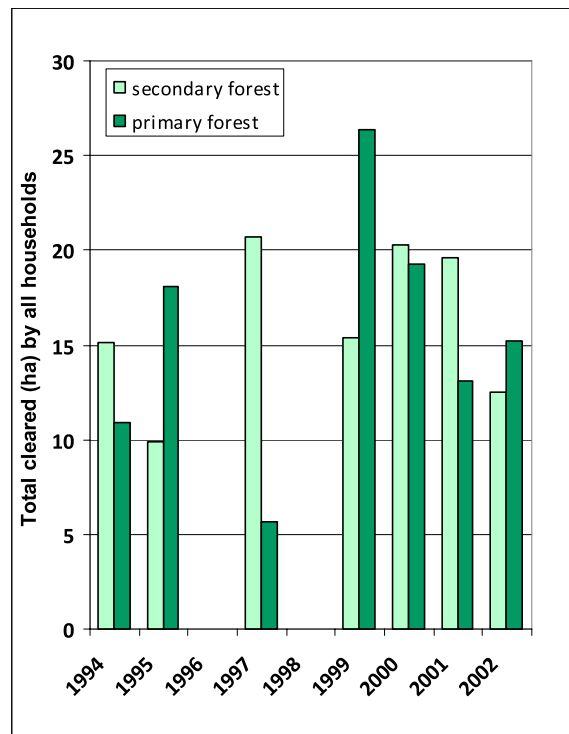


Fig. S2. Patterns of forest clearing for rice cultivation over time in Krausirpi. Note the spike in primary forest clearing in the year after Hurricane Mitch (1999). Data incomplete for 1996 and 1998.

Table S1. Household demographic characteristics in the sample from Krausirpi, Honduras, ca. 1998: Aggregate mean and by 1998 land wealth

	All (n = ~43)	Land poor (n = 15)	Land middle (n = 13)	Land rich (n = 15)	ANOVA, P > F
Founder status, 1–4 (1 = founder; 4 = newcomer)	2.6	3.0	2.9	1.9	**
Year of household formation	1981	1984	1980	1979	
Years lived in community	14.9	11.4	14.7	18.5	
Household size	7.8	6.7	8.1	8.6	
Age of household head, years	37.8	35.4	38.5	39.5	
Male workers (age 15–64 y)	1.6	1.5	1.8	1.7	
Female workers (age 15–64 y)	1.5	1.4	1.5	1.7	
Headed by single woman, %	23.0	47.0	7.0	13.0	*
Formal education of female head, years	3.9	4.3	3.8	3.7	

P > F = * < 0.1; ** < 0.01 (one-way ANOVA).

Table S2. Livelihood characteristics of households in Krausirpi before and after Hurricane Mitch, aggregated and by terciles of pre-Mitch land wealth (n = 43)

	Pre-Hurricane Mitch (1997–1998)			Post-Hurricane Mitch (2001–2002)		
	All (n = 43)	Land poor (n = 15)	Land rich (n = 15)	All (n = 43)	Land poor (n = 15)	Land rich (n = 15)
Land portfolio						
Total land holdings, ha*	13.9	3.4	25.9	41.8	13.8	59
Floodplain/upland [†]	43%/54%	38%/44%	45%/55%	60%	78%	62%
Primary forest	1%	3%	0%	40%	22%	38%
Household agricultural production						
Beans, kg [‡]	499	341.7	717.3	336.6	243.3	411.5
Rice, kg [‡]	1,043.3	562.5	1,469.7	909.5	707.6	1,147.6
Peach palms (ind.)	20.4	7.1	27.3	8.6	3.9	7.3
Cacao trees (ind.)	423	109	777	130	42.7	215
Cash income portfolio						
Total cash income, \$US [§]	1,104	601	1,991	460	555	688
Sale of crops	32%	16%	35%	2%	1%	5%
Forest product sales	14%	18%	11%	8%	2%	11%
Livestock	3%	1%	1%	4%	2%	7%
Placer gold	2%	2%	2%	0%	0%	0%
Business (self-employment)	11%	8%	18%	12%	17%	17%
Agricultural wages (local)	30%	44%	24%	20%	17%	6%
Non-agricultural wages (local)	8%	11%	9%	29%	39%	29%
Distant wage work	0%	0%	0%	16%	16%	22%
Remittances	0%	0%	0%	5%	2%	0%
Other	0%	0%	0%	4%	4%	3%
Tercile share of all cash income		18%	60%		41%	51%

*Comprising land currently cultivated, in fallow, in pasture, and in primary forest.

[†]After Mitch, the floodplain/upland land distinction was no longer used by respondents.

[‡]Bean (shelled) and rice (in husk) production data from 1997 (data incomplete for 1998).

[§]In 1998, 1 \$US = ca. 13.21 Lempiras; in 2001, 1 \$US = ca. 15.14 Lempiras.

Table S3. OLS regression models predicting ownership of cultivated land held in Krausirpi (in floodplain and upland fallow), for the same households before and after Hurricane Mitch

Independent variable	1998, Rreg	2002, Rreg
Founder household, 1–4 (1 = founder; 4 = stranger)	–2.76*	0.11*
Year of household formation	37.47	–165.06**
(Year of household formation) ²	–0.01	0.04**
Age of household head	–1.13	8.32**
(Age of household head) ²	0.01*	–0.12***
Number of male workers	4.33**	4.47*
Number of dependents (<15, >64 y)	–0.45	–0.97
Headed by single woman (0 = no; 1 = yes)	–0.32	–25.28**
Head of cattle owned	0.31	1.91*
Claimed primary forest (0 = no; 1 = yes)		–11.43**
Cultivated land held in 1995/1998	0.25**	–0.14
Constant	19,590.86	16,5196.6**
Observations	47	38
Adjusted <i>R</i> ²	0.56***	0.79***

Variables are household variables as of 1995 or 2001, lagging the dependent variable.
 *≤0.1; **≤0.01; ***≤0.001.

Table S4. Tobit regression model predicting gains in land wealth by 2001 in Krausirpi relative to total land held in 1998, for the same households before and after Hurricane Mitch

Independent variable	Land gained by 2001 relative to 1998 land
Years lived in Krausirpi	0.05
(Years lived in Krausirpi) ²	–0.001
Number of male workers	–1.83***
Number of dependents	0.63*
Number of adult brothers in village	–0.95***
Headed by single woman	3.92**
Share of cash income from sale of crops, %	0.08***
Total land held in floodplain, ha	–0.45***
(Total land held in floodplain) ²	0.01***
Number of peach palms owned	–0.12***
Claimed primary forest by 2001 (no = 0; yes = 1)	5.36***
Constant	–0.43
Number of observations	35
Number of observations ≤0	9
Number of observations >0	26
Pseudo- <i>R</i> ²	0.32***

Variables are household variables as of 1998 unless stated otherwise.
 *≤0.1; **≤0.01; ***≤0.001.