

# Supplementary Materials: Tropical Forest Gain and Interactions amongst Agents of Forest Change

**Table S1.** Profile of mestizo and Emberá communities in the Bayano-Darién Region according to household survey data (2000–2006) and census data (2000/01). Ranges are denoted by brackets.

	Mestizo Communities		Emberá Communities	
<b>Household Survey Data</b>				
Mean annual income <sup>d</sup>	\$7,458		\$6,473 †	
Mean timber-extraction income <sup>d</sup>				
All households	\$4898 (23% total income)		\$3199 (27%) †	
Timbering households	\$16,738 (77% total income)		\$6219 (49%) †	
Mean income from cattle (\$)	<u>2001</u> <sup>a</sup>	<u>2005</u> <sup>a</sup>		
All households	1140 (0–13,500)	1510 (0–23,000)	-	
Households with cattle	3370 (0–13,500)	2740 (0–23,000)	-	
Mean no. cattle per household	<u>2001</u> <sup>a</sup>	<u>2006</u> <sup>a</sup>	<u>2004</u> <sup>b</sup>	
All households	17.1 (0–250)	24.7 (0–250)	1.2	
Households with cattle	41.37 (3–250)	43.9 (2–250)	14.7	
Mean landholdings (ha)	<u>2000</u> <sup>a</sup>	<u>2006</u> <sup>a</sup>	<u>2006</u> <sup>c</sup>	
	47.1 (1–295)	54.9 (1–578)	38.8 (0–140)	
Landholding division (%)	<u>2000</u> <sup>a</sup>	<u>2006</u> <sup>a</sup>	<u>1998</u> <sup>†,Δ</sup>	<u>2006</u> <sup>b,Δ</sup>
Forest	24	19	46	46
Forest fallow	16	14	15	26
Pasture	29	43	14	18
Annual crops	31	23	19	10 <sup>§</sup>
<b>Census Data</b>				
Percent agricultural households dependent on non-farm activity for majority of income	53% ( <i>n</i> = 341)		40% ( <i>n</i> = 111)	
Median monthly income (\$), males 18–64 years old engaged in agriculture and/or ranching (month of May) *	125 (5–2000) ( <i>n</i> = 261)		60 (7–870) ( <i>n</i> = 57)	
Mean annual cattle income (\$)				
All individuals	4067 (0–208,000)		168 (0–4000)	
Individuals with cattle	15,901 (240–208,000)		1866 (260–4000)	
Mean number of cattle per farm				
All farms	31.9 (0–671, <i>n</i> = 340)		4.5 (0–123, <i>n</i> = 111)	
Farms with cattle	87.6 (1–671, <i>n</i> = 124)		22.8 (1–123, <i>n</i> = 22)	
	40.31 (mean)		45.94 (mean)	
	4 (median)		30 (median)	
Landholdings (ha)	0.04–740		0.10–200	
	13,707 (total) <i>n</i> = 340		5099 (total) <i>n</i> = 111	
Landholding (% total area)				
Forest, tall fallow	4.7		32.5	
Young fallow	6.9		15.4	
Pasture	31.3		13.9	
Annual crops	14.3		10.9	
Mean number of household members	4.0 ( <i>n</i> = 455 households)		5.65 ( <i>n</i> = 124 households)	
Percent males aged 16–64 years *	61% ( <i>n</i> = 996 total males)		40% ( <i>n</i> = 324 total males)	
Percent farms using				
Fertiliser (for crops)	11		2.7	
Herbicide (for pasture)	14		10	

Sources: Household survey data are from either <sup>a</sup> the survey by the author; <sup>b</sup> Reference [1]; <sup>c</sup> Reference [2]; <sup>d</sup> Reference [3]; or <sup>e</sup> Reference [4]. Census data are from census microdata of the Population/Housing (2000) and Agricultural (2001) censuses. Notes: Census data encompass the Emberá communities of Ipetí Choco and Piriati as well as the Mestizo communities of Agua Fría No.1 (P), Cañazas, Higueronal, Ipetí Colono, Loma Bonita, Playa Chuzo, and Wacuco. Household survey data refer to the community of Ipetí Emberá, except data on annual income and timber income. Δ Figures for the Tierra Colectiva (Common Lands) of the Emberá community of Ipetí Emberá. Figures for 1998 do not sum to 100, as 5% of the Tierra Colectiva was allocated to the community proper. § Includes perennial crops, such as plantains, common amongst the Emberá but rare amongst Mestizo landholders. † Includes Kuna as well as Emberá indigenous. Kuna indigenous in the Bayano are generally poorer than the Emberá. ‡ Total household labour is estimated from the averages of male and female labour of poor, medium and richer household cohorts reported by Tschakert, Coomes, and Potvin [5]. \* For these census estimates, only Mestizos and ethnic Emberá were selected as respondents within Mestizo and Emberá communities, respectively. Ethnicity was as reported by census respondents.

## Reference

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