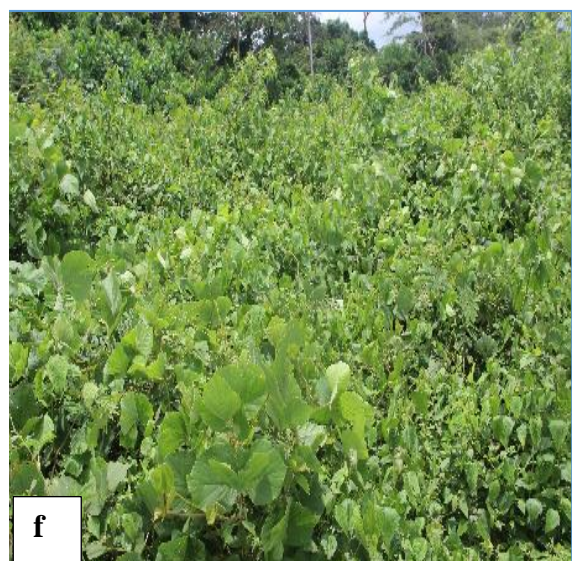
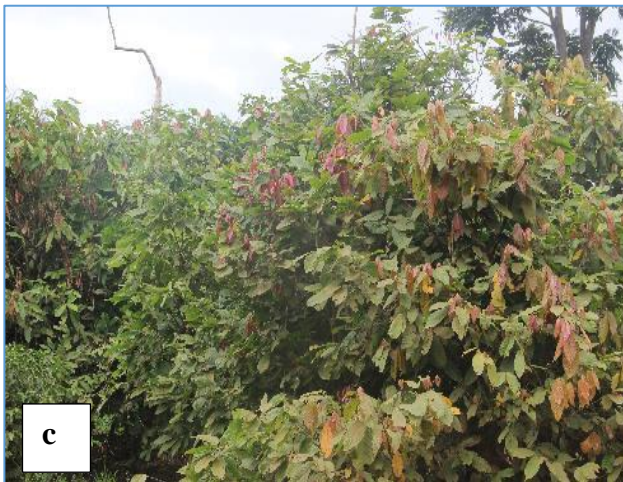


SUPPLEMENTARY MATERIAL





a) habited area, *b)* dirty road, *c* & *d)* cocoa plots, *e)* waterbody, *f)* fallow, *g)* rice plot, *h)* rubber plantation, *i)* oil palm, *j)* young rubber plantation, *k)* mixed food crops, *l)* degraded forest

Figure S1. Photographs of visited land uses in the Espace Tai

Table S1. LULC change trends in different forest management domains in the Upper Espace Tai Region over the period 1987-2015 in south-western Cote d'Ivoire

LULC type	1987		2015		Net change		Annual rate (%)
	Area (km ²)	%	Area (km ²)	%	km ²	km ² /year	
Protected area = 3,667.4 km ²							
Dense forests	3,503.02	95.52	3,503.58	95.53	0.56	0.02	0.00
Degraded forests	21.82	0.59	19.77	0.54	-2.05	-0.07	-0.35
Rubber plantations	0.00	0.00	1.69	0.05	1.69	0.06	26.55
Other cash crops	26.25	0.72	48.15	1.31	21.91	0.78	2.17
Food crops - fallows	30.84	0.84	14.11	0.38	-16.73	-0.60	-2.79
Waterbodies	84.46	2.30	78.70	2.15	-5.76	-0.21	-0.25
Settlements	1.00	0.03	1.16	0.03	0.16	0.01	0.53
Wetlands	0.02	0.00	0.23	0.01	0.21	0.01	9.48
Gazetted forest = 1,555.65 km ²							
Dense forests	1,459.01	93.79	588.53	37.85	-870.49	-31.09	-3.24
Degraded forests	20.99	1.35	202.35	13.01	181.36	6.48	8.09
Rubber plantations	0.68	0.04	8.04	0.52	7.36	0.26	8.81
Other cash crops	25.50	1.64	280.96	18.07	255.45	9.12	8.57
Food crops - fallows	47.54	3.06	468.38	30.12	420.83	15.03	8.17
Waterbodies	1.53	0.10	2.12	0.14	0.59	0.02	1.17
Settlements	0.37	0.02	4.46	0.29	4.09	0.15	8.87
Wetlands	0.02	0.00	0.81	0.05	0.79	0.03	13.25
Rural area = 5,528.23 km ²							
Dense forests	1,290.12	23.34	88.47	1.60	-1,201.65	-42.92	-9.57
Degraded forests	670.79	12.13	58.53	1.06	-612.26	-21.87	-8.71
Rubber plantations	25.54	0.46	175.47	3.17	149.93	5.35	6.88
Other cash crops	2,028.64	36.70	2,090.07	37.81	61.43	2.19	0.11
Food crops - fallows	1,056.00	19.10	2,445.82	44.24	1,389.82	49.64	3.00
Waterbodies	431.16	7.80	414.23	7.49	-16.93	-0.60	-0.14
Settlements	24.02	0.43	177.48	3.21	153.46	5.48	7.14
Wetlands	1.95	0.04	78.14	1.41	76.19	2.72	13.18

Table S2. Socioeconomic determinants affecting respondents good perception of the trend of cultivated lands

Explanatory variables	Model summary			Marginal effects		
	Estimate	Std Error	p-value	AME	Std Error	p-value
Constant	38.068***	0.997	0.000			
Age of respondent	1.071*	0.031	0.029	0.003*	0.002	0.040
Household head (1-Yes)	0.074*	1.118	0.020	-0.087**	0.03	0.004
Household head age (2- 30–60 years)	0.282	0.808	0.117	-0.044	0.024	0.070
Household head age (3- 60–90 years)	0.042*	1.417	0.025	-0.251	0.154	0.104
Pseudo R ² (Nagelkerke)	0.071					
Prob > Chi ²	0.043					

Number of observations: 359; AME = Average Marginal Effects, * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

Table S3. Socioeconomic determinants affecting respondents good perception of the trend of cultivated lands

Explanatory variables	Model summary			Marginal effects		
	Estimate	Std Error	p-value	AME	Std Error	p-value
Constant	4.908***	0.381	0.000			
Origin (1-Foreigners)	0.623	0.276	0.086	-0.088	0.05	0.078
Origin (2-Native)	9.853*	1.049	0.029	0.194***	0.045	0.000
Household head education (1-Primary)	0.562	0.333	0.084	-0.109	0.067	0.101
Household head education (2- Secondary)	0.562	0.421	0.171	-0.109	0.085	0.200
Household head education (3- University)	1.81×10 ⁶	582.90	0.980	0.227***	0.026	0.000
Household size	0.966	0.022	0.104	-0.006	0.004	0.100
Cultivated food crops	0.947	0.032	0.089	-0.01	0.006	0.085
Cultivated cash crops	1.256	0.131	0.083	0.04	0.023	0.078
Pseudo R ² (Nagelkerke)	0.001					
Prob > Chi ²	0.001					

Number of observations: 359; AME = Average Marginal Effects, * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

Table S4. Socioeconomic determinants affecting respondents good perception of the trend of grasslands

Explanatory variables	Model summary			Marginal effects		
	Estimate	Std Error	p-value	AME	Std Error	p-value
Constant	2.158*	0.371	0.038			
Age of household head (2- 30–60 years)	0.983	0.286	0.953	-0.004	0.067	0.953
Age of household head (3- 60–90 years)	2.127	0.448	0.092	0.16	0.09	0.076
Cultivated food crops	1.061*	0.029	0.040	0.014*	0.007	0.036
Holding cocoa farm (1-Yes)	0.447*	0.327	0.014	-0.172**	0.062	0.006
Pseudo R ² (Nagelkerke)	0.046					
Prob > Chi ²	0.015					

Number of observations: 359; AME = Average Marginal Effects, * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

Table S5. Socioeconomic determinants affecting respondents good perception of the trend of shrublands

Explanatory variables	Model summary			Marginal effects		
	Estimate	Std Error	p-value	AME	Std Error	p-value
Constant	0.329**	0.371	0.003			
Household size	0.932*	0.034	0.040	-0.009*	0.005	0.039
Cultivated food crops	1.093**	0.034	0.009	0.012**	0.004	0.009
Holding cocoa farm (1-Yes)	0.559	0.380	0.125	-0.086	0.062	0.164
Pseudo R ² (Nagelkerke)	0.053					
Prob > Chi ²	0.009					

Number of observations: 359; AME = Average Marginal Effects, * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

Table S6. Socioeconomic determinants affecting respondents good perception of the trend of woodlands

Explanatory variables	Model summary			Marginal effects		
	Estimate	Std Error	p-value	AME	Std Error	p-value
Constant	4.998**	0.545	0.003			
Household head (1-Yes)	2.467*	0.380	0.018	0.085*	0.04	0.035
Age of household head (2- 30–60 years)	1.126	0.504	0.813	0.011	0.049	0.818
Age of household head (3- 60–90 years)	7.833	1.149	0.073	0.101*	0.049	0.038
Household head education (1-Primary)	1.148	0.467	0.767	0.012	0.041	0.761
Household head education (2-Secondary)	5.929	1.060	0.093	0.09**	0.03	0.003
Household head education (3-University)	2.71×10 ⁶	946.892	0.988	0.113***	0.02	0.000
Household size	1.17	0.088	0.074	0.013	0.007	0.075
Number of men in the household	0.692*	0.152	0.016	-0.03*	0.013	0.016
Pseudo R ² (Nagelkerke)	0.135					
Prob > Chi ²	0.003					

Number of observations: 359; AME = Average Marginal Effects, * $p < 0.05$, ** $p < 0.01$ and *** $p < 0.001$

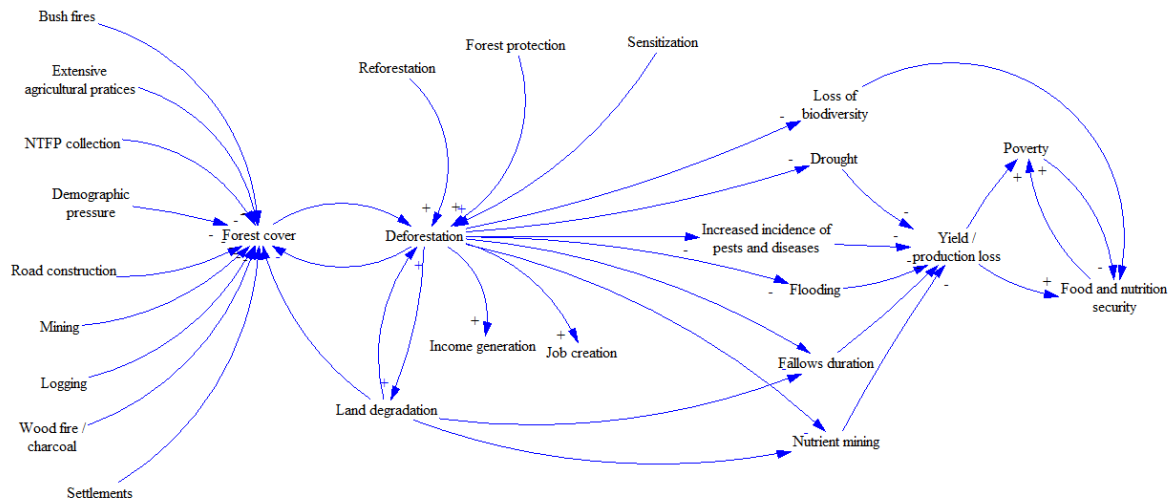


Figure S2. Causal loop diagram from focus group discussions examining drivers, consequences, control and mitigation strategies of deforestation and land degradation in south-western Cote d'Ivoire