

Land Cover Change in the Blue Nile River Headwaters: Farmers' Perceptions, Pressures, and Satellite-Based Mapping

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Supplementary Files

Table S1. Land use/land cover transition matrices of north Gojjam Basin.

1986/1994	CS	WB	BR	GL	FL	PL	BSL	Total	Loss
CS	46.74	0.01	0.22	7.07	0.22	0.59	3.37	58.22	11.48
WB	0.01	0.05	0.01	0.00	0.00	0.00	0.01	0.08	0.03
BR	1.74	0.02	0.68	0.22	0.00	0.00	0.49	3.16	2.48
GL	9.47	0.00	1.51	9.89	0.01	0.13	0.42	21.43	11.54
FL	0.22	0.00	0.00	0.40	1.13	0.19	0.96	2.91	1.78
PL	0.00	0.00	0.00	0.07	0.05	0.39	0.03	0.77	0.38
BSL	3.32	0.00	0.22	2.67	0.70	0.27	6.25	13.43	7.18
Total	61.71	0.09	2.65	20.33	2.11	1.58	11.54	100	34.87
Gain	14.97	0.04	1.97	10.44	0.98	1.19	5.29	34.88	
1994/2007									
CS	49.29	0.02	1.08	5.58	0.24	1.82	3.69	61.71	12.43
WB	0.03	0.04	0.01	0	0	0	0	0.09	0.05
BR	1.86	0.01	0.33	0.31	0	0	0.13	2.65	2.31
GL	9.47	0	0.17	8.15	0.2	0.76	1.58	20.33	12.18
FL	0.27	0	0	0.04	0.93	0	0.87	2.11	1.18
PL	0.39	0	0	0.24	0	0.62	0.33	1.58	0.96
BSL	5.22	0	0.05	0.77	0.76	0.27	4.46	11.54	7.07
Total	66.53	0.08	1.64	15.09	2.26	3.34	11.07	100	36.17
Gain	17.24	0.04	1.31	6.94	1.33	2.72	6.61	36.17	
2007/2017									
CS	55.26	0.01	2.02	4.84	0.29	1.14	2.97	66.53	11.27
WB	0.02	0.02	0.02	0	0.01	0	0	0.08	0.06
BR	1.19	0	0.41	0.02	0	0	0.01	1.64	1.23
GL	7.07	0	0.4	6.38	0.04	0.46	0.74	15.09	8.71
FL	0.46	0	0	0.13	0.56	0.48	0.62	2.26	1.7
PL	2.08	0	0	0.24	0.08	0.66	0.28	3.34	2.68
BSL	4.58	0	0.05	0.89	1.09	0.87	3.59	11.07	7.48
Total	70.67	0.04	2.91	12.5	2.07	3.61	8.21	100	33.13
Gain	15.62	0.02	2.5	6.12	1.51	2.74	4.62	33.13	

Note: CS= Cultivated & Settlement, WB= Waterbody, FL = Forest cover, BSL = Bush and shrub Land, GL = Grazing Land, PL=Plantation, BR = Bare Land.