

Supplement Table S2: Accuracy assessment for classified land use maps of the six study sites from 2020-2023.

Site 1: Elgon	2020		2021		2022		2023	
	P.A	U.A	P.A	U.A	P.A	U.A	P.A	U.A
Built-up area	81.82	90.00	80.95	85.00	75.00	75.00	90.48	95.00
Agriculture	90.91	100.00	97.96	96.00	90.57	96.00	82.69	86.00
Planted forest	96.15	83.33	96.30	86.67	93.10	90.00	83.33	83.33
Bushland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	80.00	80.00	72.73	80.00	63.64	70.00	100.00	80.00
Bare rock & surfaces	66.67	75.00	60.00	75.00	100.00	75.00	100.00	87.50
Tropical high forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open water	83.33	50.00	80.00	80.00	88.89	80.00	100.00	100.00
Overall accuracy	87.5		88.28		86.72		87.5	
Kappa coefficient	83.19		84.53		82.19		83.25	
Site 2: Ibookho								
Built-up area	76.92	100.00	72.73	80.00	80.00	80.00	88.89	80.00
Agriculture	74.00	92.50	90.48	95.00	95.12	97.50	90.48	95.00
Planted forest	95.24	66.67	93.10	90.00	96.30	86.67	89.66	86.67
Bushland	100.00	100.00	100.00	87.50	100.00	87.50	100.00	100.00
Grassland	72.73	80.00	69.23	90.00	83.33	100.00	83.33	100.00
Bare rock & surfaces	85.71	60.00	100.00	80.00	80.00	80.00	80.00	80.00
Tropical high forest	100.00	80.00	100.00	80.00	88.89	80.00	100.00	80.00
Open water	90.00	90.00	80.00	80.00	83.64	77.78	80.00	80.00
Overall accuracy	82.81		88.28		88.98		89.06	
Kappa coefficient	78.67		85.54		86.44		86.51	
Site 3: Muranga								
Built-up area	90.00	90.00	90.91	94.29	90.91	100.00	86.36	95.00
Agriculture	90.00	77.14	100.00	80.00	88.89	91.43	96.88	88.57
Planted forest	93.75	88.24	97.06	94.29	96.88	88.57	93.94	88.57
Bushland	100.00	87.50	88.89	100.00	87.50	87.50	88.89	100.00
Grassland	42.86	90.00	57.14	80.00	100.00	80.00	100.00	80.00
Bare rock & surfaces	100.00	70.00	100.00	70.00	87.50	70.00	66.67	80.00
Tropical high forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open water	100.00	100.00	71.43	100.00	64.29	90.00	75.00	90.00
Overall accuracy	85.04		89.06		89.06		89.06	
Kappa coefficient	81.66		86.58		86.42		86.50	
Site 4: Nabyoko								
Built-up area	76.92	100.00	80.00	80.00	90.91	90.00	95.00	95.00
Agriculture	97.87	92.00	94.23	98.00	97.78	88.00	97.73	86.00
Planted forest	90.32	93.33	93.75	100.00	90.91	100.00	90.63	96.67
Bushland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	72.73	80.00	88.89	80.00	72.73	80.00	83.33	100.00
Bare rock & surfaces	100.00	70.00	77.78	70.00	72.73	80.00	66.67	80.00
Tropical high forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open water	83.33	62.50	83.33	62.50	87.50	87.50	75.00	75.00
Overall accuracy	89.06		89.84		89.84		89.84	
Kappa coefficient	85.50		86.36		86.65		86.71	

Site 1: Elgon	2020		2021		2022		2023	
	P.A	U.A	P.A	U.A	P.A	U.A	P.A	U.A
Site 5: Nakhatore	2020		2021		2022		2023	
	P.A	U.A	P.A	U.A	P.A	U.A	P.A	U.A
Built-up area	80.00	100.00	83.33	100.00	80.00	80.00	80.00	80.00
Agriculture	92.16	94.00	91.84	90.00	100.00	87.50	92.68	95.00
Planted forest	91.43	84.21	94.29	86.84	100.00	96.67	89.66	86.67
Bushland	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	100.00	85.00	80.00	80.00	84.38	90.00	96.43	90.00
Bare rock & surfaces	0.00	0.00	0.00	0.00	58.33	87.50	88.89	100.00
Tropical high forest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Open water	0.00	0.00	0.00	0.00	90.00	90.00	72.73	80.00
Overall accuracy	90.63		89.06		89.84		89.84	
Kappa coefficient	86.83		84.72		87.06		86.95	
Site 6: Shiteka								
Built-up area	80.00	80.00	88.89	80.00	76.92	100.00	100.00	100.00
Agriculture	96.55	93.33	96.67	96.67	89.66	86.67	84.38	80.00
Planted forest	96.67	96.67	100.00	90.00	100.00	93.33	100.00	80.00
Bushland	75.00	90.00	91.54	80.00	75.00	90.00	71.43	100.00
Grassland	81.82	90.00	90.00	90.00	69.23	90.00	88.89	80.00
Bare rock & surfaces	81.82	90.00	90.00	90.00	100.00	55.56	88.89	100.00
Tropical high forest	94.12	80.00	90.48	95.00	90.48	95.00	90.00	90.00
Open water	87.50	87.50	80.00	90.00	100.00	80.00	100.00	100.00
Overall accuracy	89.84		90.00		88.37		89.84	
Kappa coefficient	87.92		88.14		86.18		87.94	