

Supplementary materials

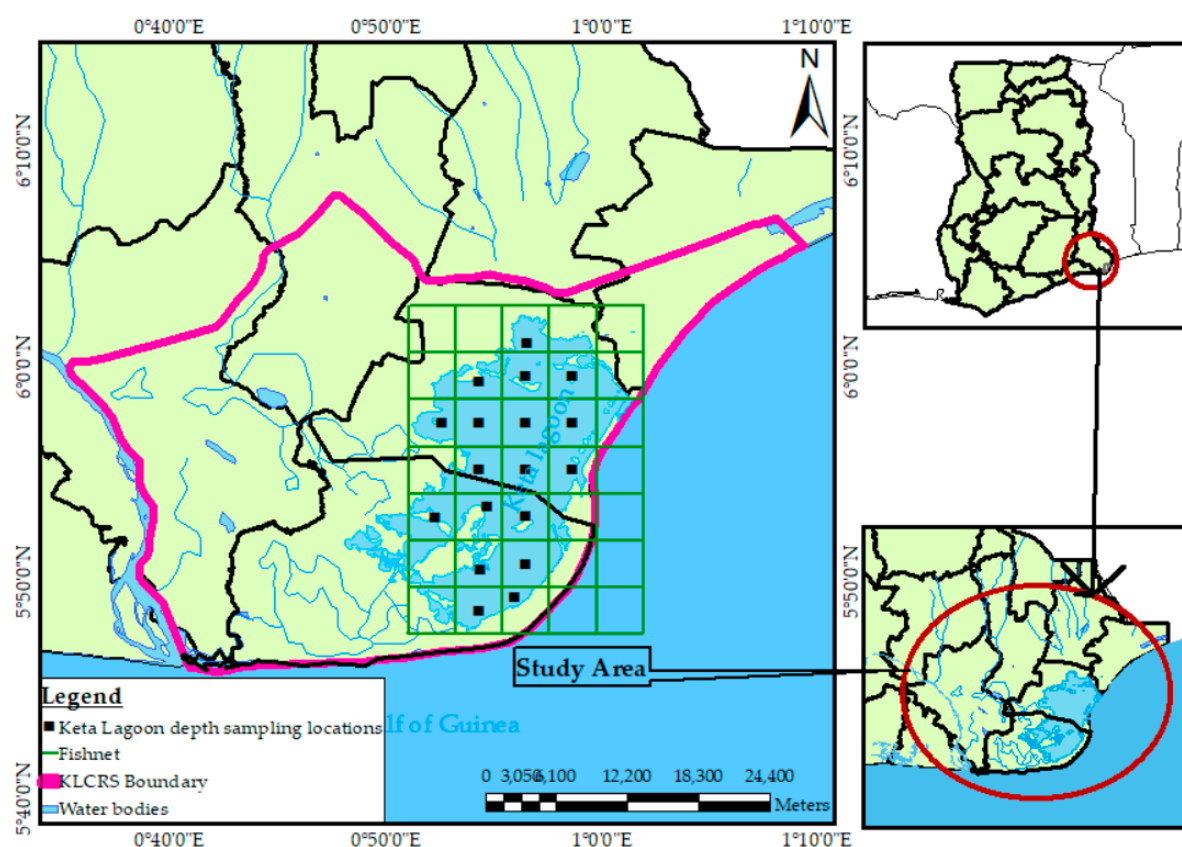


Figure S1: Map of the eastern coast of Ghana showing Keta Lagoon Complex and its surrounding floodplain, and Keta Lagoon's depth sampling locations

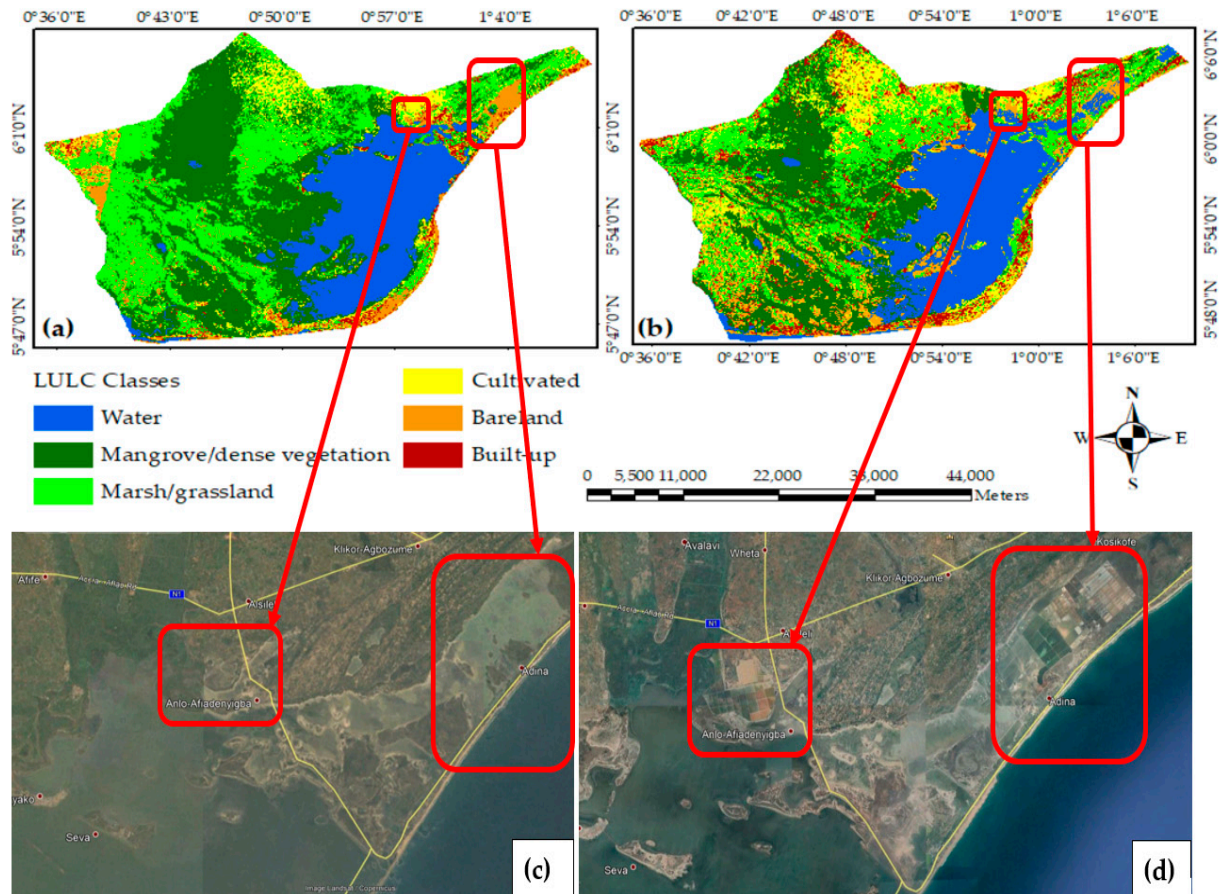


Figure S2: (a) 1991 and (b) 2020 classified Landsat satellite images in comparison to Google Earth Images acquired in (c) 1991 and 2020 (d) showing changes on the ground for land reclaimed for salt pans (classified as part of “Water” LULC category)

Table S1. Net gross gain and loss of LULC categories during 1991–2007, 2007–2020, and 1991–2020

LULC category	Net gain/loss		
	1991–2007	2007–2020	1991–2020
W	24.2	6.27	30.47
MDV	-151.37	34.41	-116.96
MGL	-2.44	-100.88	-103.32
CT	125.51	-50.18	75.33
BL	-40.58	82.95	42.37
BU	44.68	27.43	72.11

NB: Net gross gain/loss = gross gain in an interval year– gross loss in the same interval year or Net gross gain/loss = area of cover for a LULC category in the present year - area of cover for a LULC category in the previous year; negative (-) and positive (+) signs respectively show net loss and gain in area of LULC category

Table S2. Distribution of morphometric characteristics of KLCRS landscape

Parameter	Percentage (%) of Cover	Parameter	Number of segments	Total length (km)
Elevation (m)		Stream order		
0–12.39	69.35	1 st	360	584.05
12.4–20.0	18.58	2 nd	188	314.6

20.01--33	7.67	3 rd	68	121.52
33.01--49	3.40	4 th	24	54.32
49.01--108	1.01	5 th	13	6.21
		6 th	2	0.57
Slope		Parameter		Percentage (%) of Cover
0--3	69.04	Aspect		
3--5	14.03	Flat (-1)		23.94
5--10	12.36	North (0--22.5)		4.87
10--35	4.49	Northeast (22.5--67.5)		9.30
>35	0.08	East (67.5--112.5)		10.00
Flow		Southeast (112.5--		9.12
direction		157.5)		
East	28.17	South (157.5--202.5)		9.64
Southeast	4.69	Southwest (202.5--		9.31
South	16.32	247.5)		
Southwest	5.22	West (247.5--292.5)		9.90
West	17.47	Northwest (292.5--		9.20
Northwest	4.30	337.5)		
North	19.23	North (337.5--360)		4.71
Northeast	4.60			
Watershed				
1	63.54			
2	4.09			
3	1.79			
4	8.51			
5	22.07			