

Supplementary tables

Table S1: Spectral bands, spectral indices, and ancillary layers used as covariates in the classification of drivers of forest loss within the pigmy hippopotamus distribution. Composite metrics were created only for the Sentinel 2 spectral bands and indices.

Covariate	Formula or version	Reference	Composite metrics for each band and index	Metrics and variables included in the final model
Green band	$Green\ reflectance = \rho_{Green}$	(European Spatial Agency, 2015)	Minimum value,	
Red band	$Red\ reflectance = \rho_{red}$		Maximum value,	
Red Edge band 1	$Red\ edge\ 1\ reflectance = \rho_{red\ edge\ 1}$		Median value,	Maximum value
Red Edge band 2	$Red\ edge\ 2\ reflectance = \rho_{red\ edge\ 2}$		Standard deviation,	Maximum value
Near Infrared band (NIR)	$NIR\ reflectance = \rho_{NIR}$		0-10 percentile mean,	Maximum value
Short-Wave Infrared band1 (SWIR1)	$SWIR1\ reflectance = \rho_{SWIR\ 1}$		11-25 percentile mean,	Minimum value, Maximum value
Normalized Difference Vegetation Index (NDVI)	$NDVI = \frac{(\rho_{NIR} - \rho_{red})}{(\rho_{NIR} + \rho_{red})}$	(Tucker, 1979)	26-50 percentile mean,	Minimum value, Maximum value
Moisture Stress Index (MSI)	$MSI = \frac{\rho_{SWIR}}{\rho_{NIR}}$	(Rock et al., 1986)	51-75 percentile mean,	Minimum value, Maximum value
Bare Soil Index (BSI)	$BSI = \frac{(\rho_{SWIR} + \rho_{red}) - (\rho_{NIR} + \rho_{blue})}{(\rho_{SWIR} + \rho_{red}) + (\rho_{NIR} + \rho_{blue})}$	(Rikimaru et al., 2002)	76-90 percentile mean,	Minimum value, Maximum value
Normalized Difference Moisture Index (NDMI)	$NDMI = \frac{(\rho_{green} - \rho_{SWIR})}{(\rho_{green} + \rho_{SWIR})}$	(McFeeters, 1996)	91-100 percentile mean,	Minimum value, Maximum value
Normalized Difference Red Edge (NDRE)	$NDRE = \frac{(\rho_{red\ edge\ 2} - \rho_{red\ edge\ 1})}{(\rho_{red\ edge\ 2} + \rho_{red\ edge\ 1})}$	(Barnes et al., 2000)	0-25 percentile mean,	Minimum value, Maximum value

Visible Atmospherically Resistant Index (VARI)	$VARI = \frac{(\rho_{green} - \rho_{red})}{(\rho_{green} + \rho_{red} + \rho_{blue})}$	(Gitelson et al., 2002)	26-75 percentile mean,	Minimum value, Maximum value
Modified Chlorophyll Absorption in Reflectance Index (MCARI)	$MCARI = ((\rho_{red\ edge\ 1} - \rho_{red}) - 0.2 * (\rho_{red\ edge\ 1} - \rho_{green})) * (\rho_{red\ edge\ 1} / \rho_{red})$	(Daughtry et al., 2000)	76-100 percentile mean.	Minimum value, Maximum value
Normalized Difference Water Index (NDWI)	$NDWI = \frac{(\rho_{green} - \rho_{NIR})}{(\rho_{green} + \rho_{NIR})}$	(Gao, 1996)		Minimum value, Maximum value,
Built-up areas	Version 1	(Pesaresi et al., 2015)	No composite metrics	Built-up areas
Human settlements	Version 1	(Pesaresi et al., 2015)		Degree of urbanization
Oil palm plantations	Version 1	(Descals et al., 2021)		Industrial and smallholder oil palm plantations

Table S2: Independent accuracy assessment of the classified image.

	Settlements and bare ground	Shifting agriculture	Intensive agriculture	User's accuracy
Urban Expansion	102	27	11	72%
Shifting agriculture	4	130	13	88%
Intensive agriculture	0	2	144	98%
Producer's accuracy	96%	81%	86%	87%

Table S3: Normalised area of forest loss for each driver per country within pygmy hippopotamus distribution. Normalised area of forest loss is calculated as the ratio between the Area of each driver in each country (km²) and area of each country within pygmy hippopotamus distribution.

	Intensive agriculture (%)	Urban Expansion (%)	Shifting agriculture (%)	Total (%)
Guinea	<0.1	0.7	7.3	8.1
Côte d'Ivoire	0.1	0.9	11.3	12.3
Liberia	0.1	0.3	9.3	9.6
Sierra Leone	<0.1	0.1	2.0	15.8