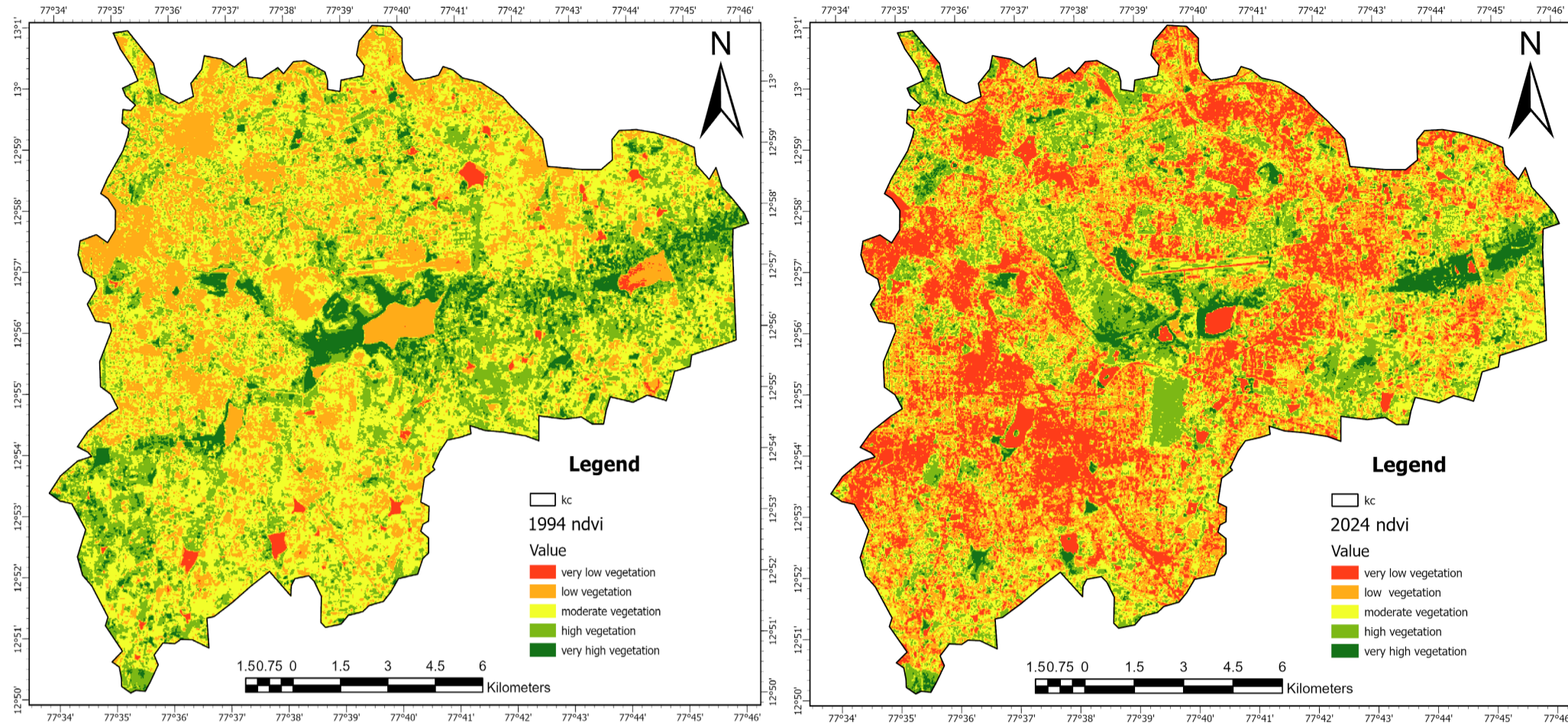


NDVI AND NDWI MAPS

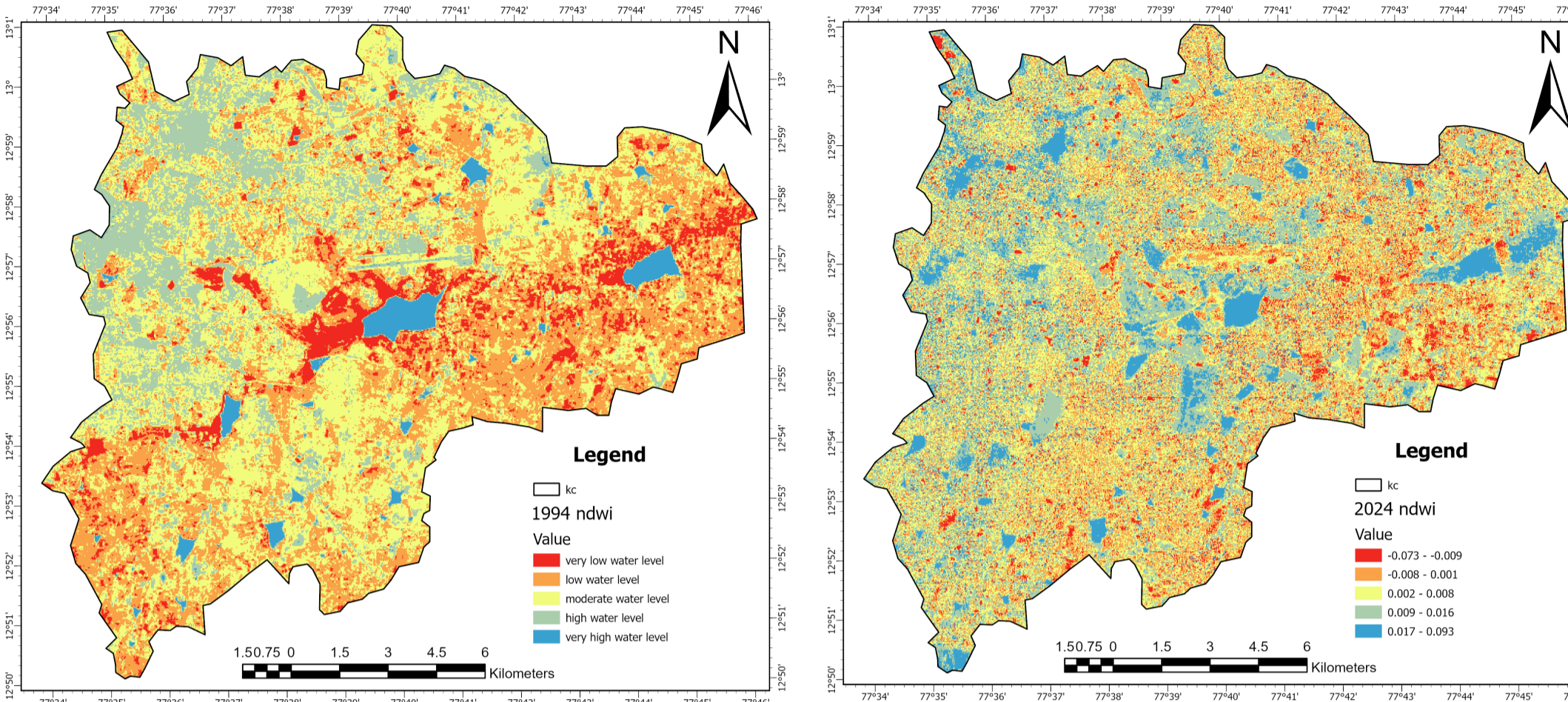
Normalized Difference Vegetation Index



1994

2024

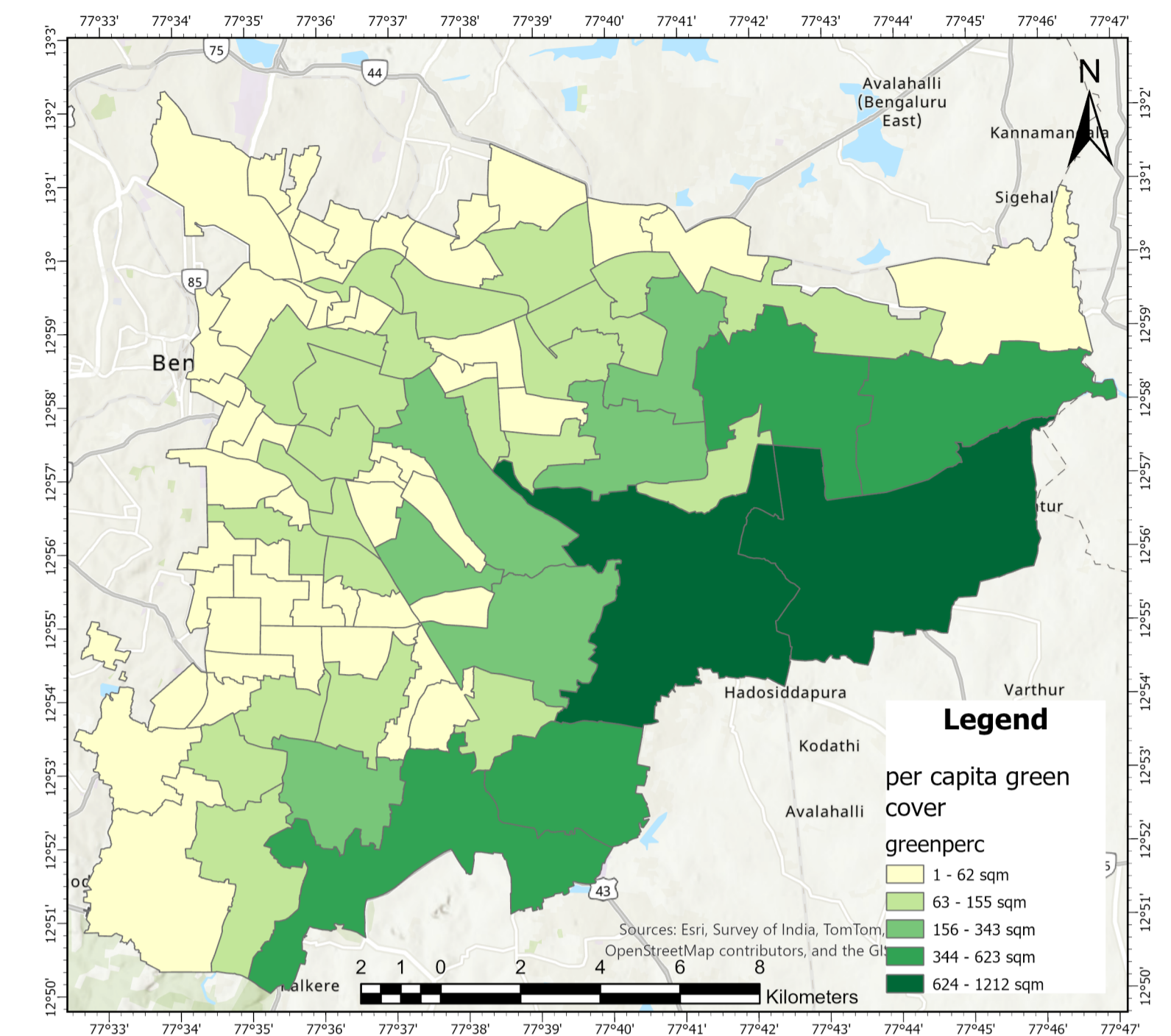
Normalized Difference Water Index



1994

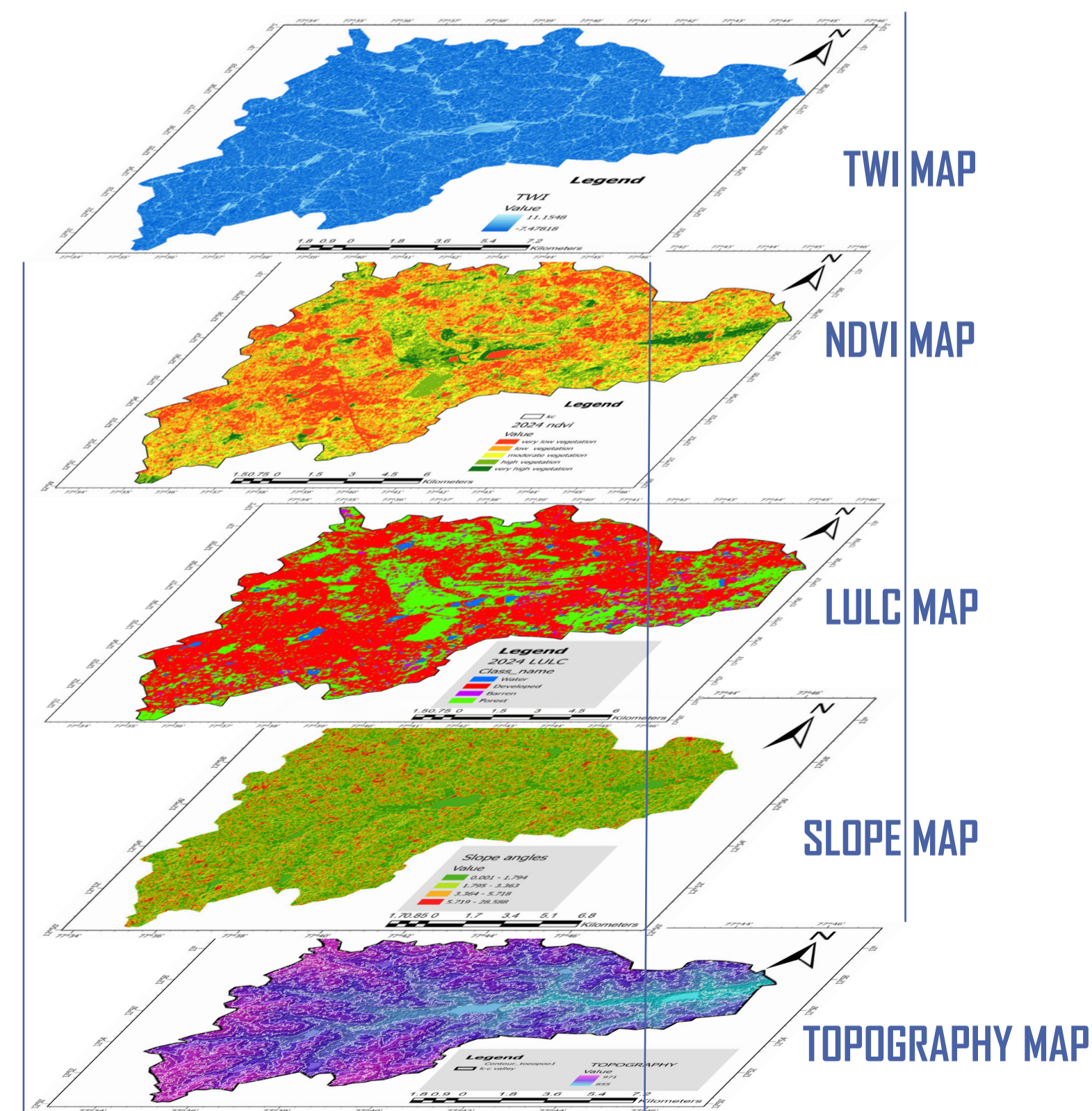
2024

PER CAPITA GREEN SPACE

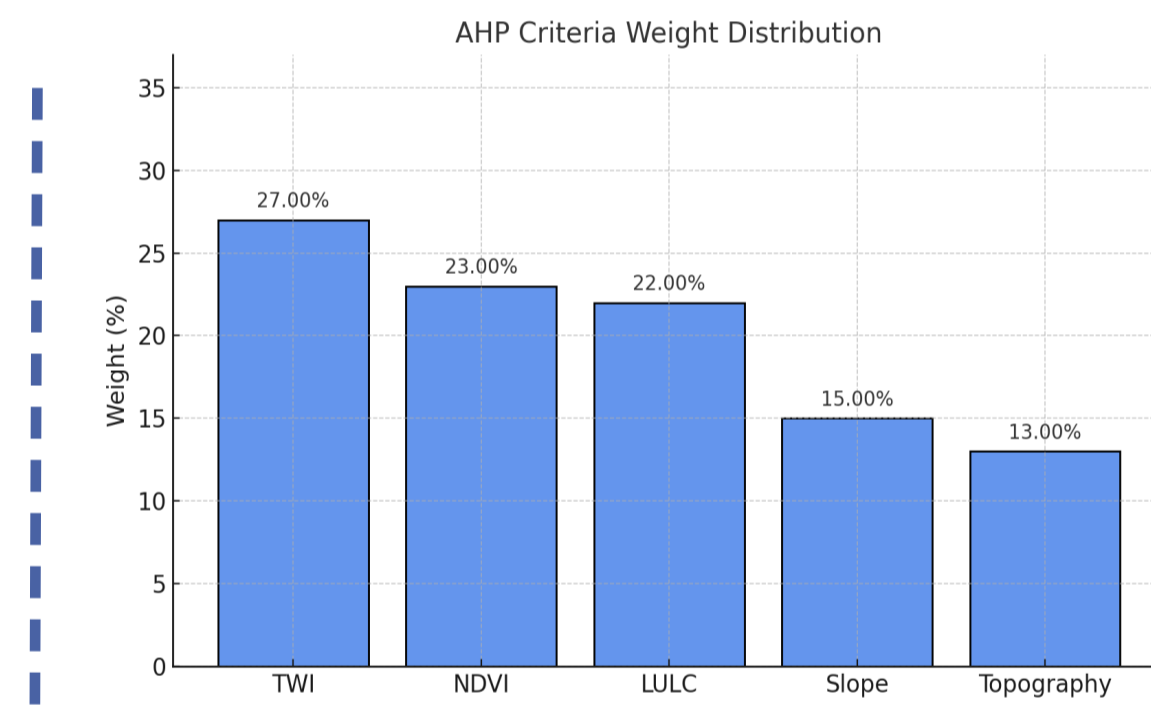


ANALYTICAL HIERARCHY PROCESS

ANALYSIS INPUTS

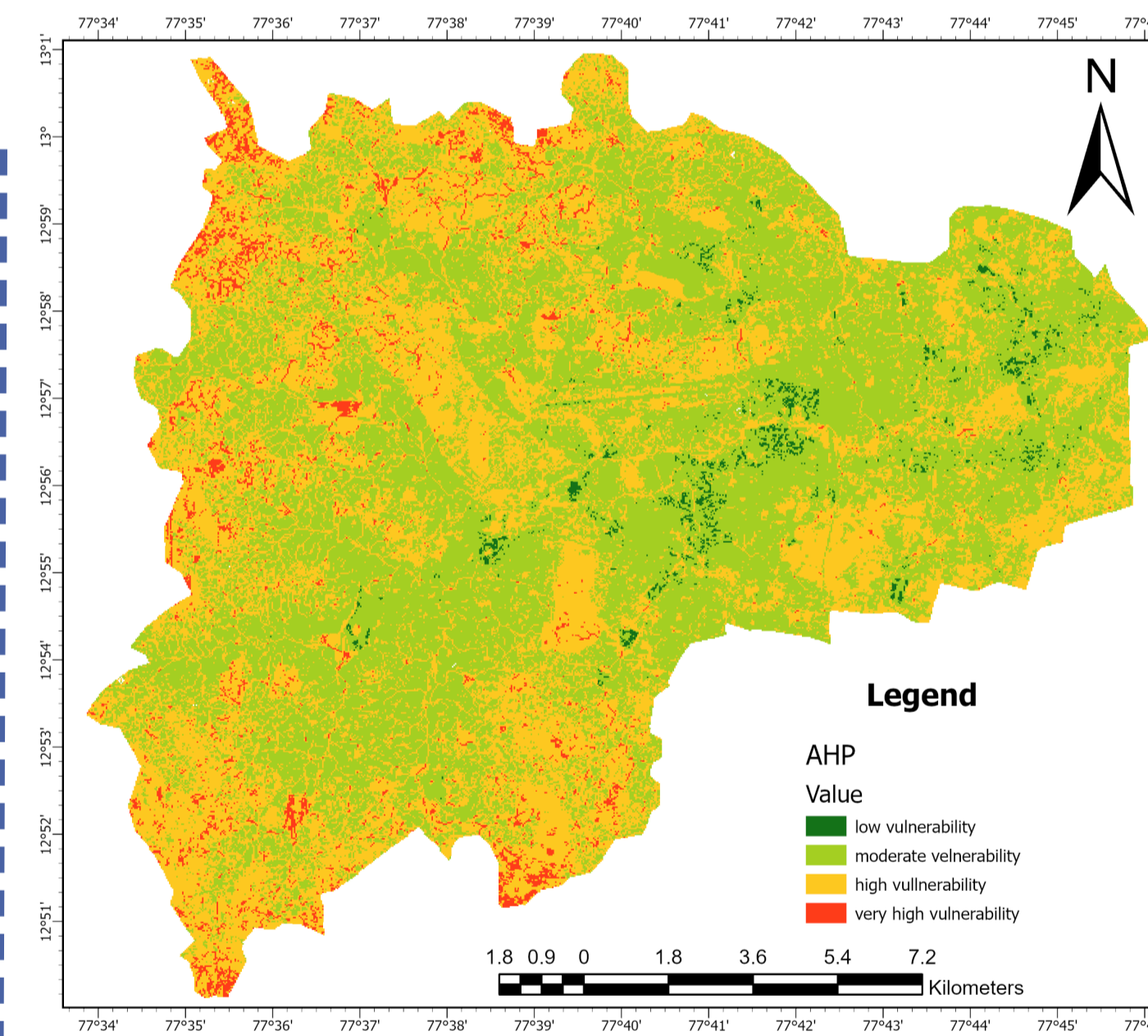


MATRIX ANALYSIS



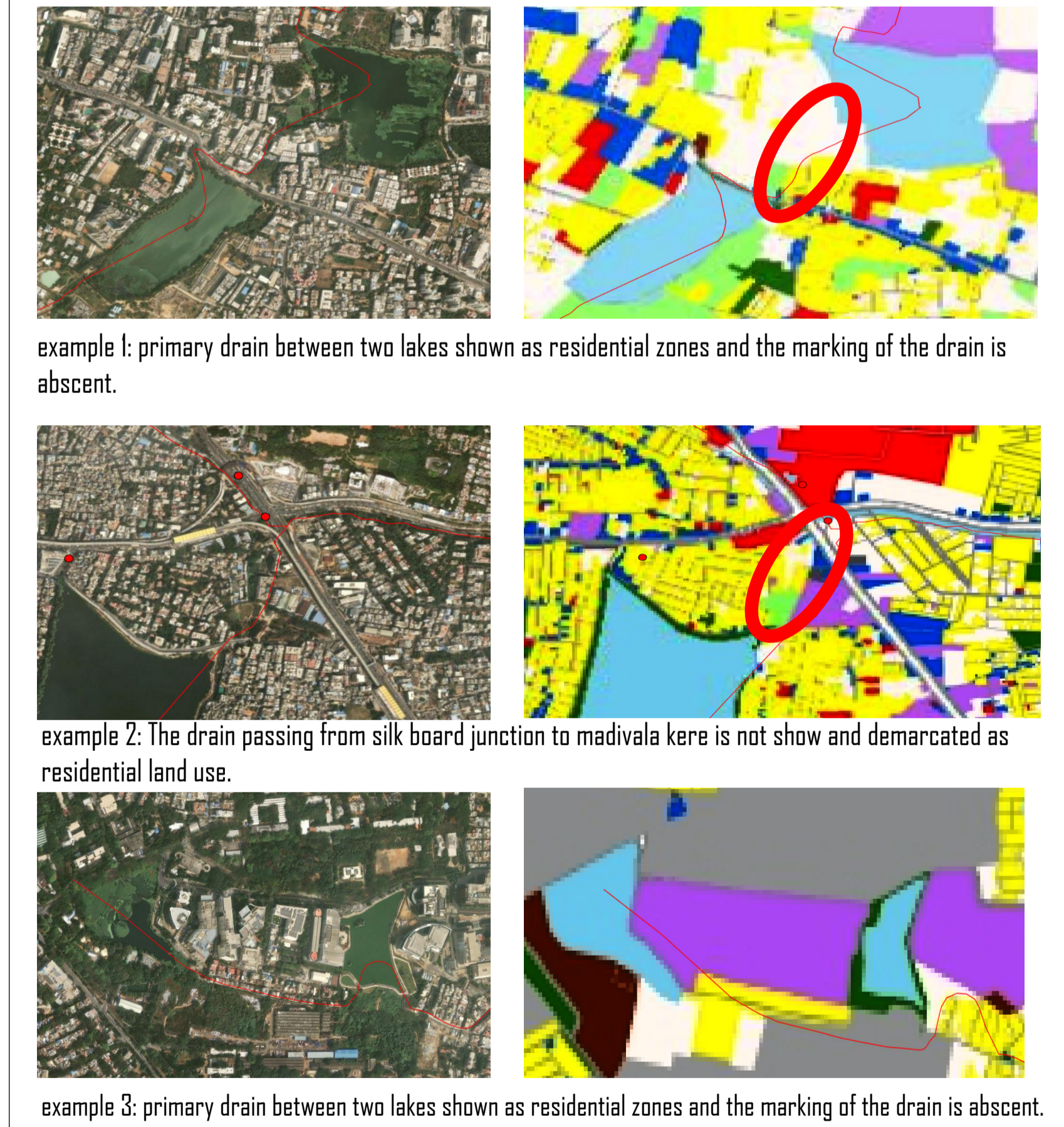
MATRIX						Normalized Principal Eigenvector (Weights)
	TWI	NDVI	LULC	Slope	Topo	
TWI	1	1.17	1.23	1.8	2.08	0.270 (27.0%)
NDVI	0.85	1	1.05	1.53	1.79	0.230 (23.0%)
LULC	0.81	0.95	1	1.46	1.72	0.220 (22.0%)
Slope	0.56	0.65	0.68	1	1.15	0.150 (15.0%)
Topography	0.48	0.56	0.58	0.87	1	0.130 (13.0%)

OUTPUT



AHP analysis is a type of multi-criteria analysis used to analyse various input factors, calculate its matrix weights and analyse the output. This AHP analysis for urban flooding includes mainly five inputs: TWI (Topographic wetness index), NDVI (Normalized difference vegetation index), LULC (Land use land cover), slope, and topography of the study area. Using these inputs, a matrix is created to calculate the weights for different inputs, and after the calculation, a weighted overlay analysis is conducted. The generated output infers the study area into four zones based on vulnerability (low, moderate, and high). These zones will help us understand the most vulnerable zones due to urban flooding in the study area.

INCORRECT ZONING IN KC VALLEY



MITIGATING URBAN FLOODS : A PLANNING STUDY ON CONNECTING BLUE-GREEN NETWORK IN KORAMANGALLA - CHALLAGHATTA VALLEY IN BENGALURU CITY

SCHOOL OF PLANNING AND ARCHITECTURE

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CLASS: 8th SEMESTER, B.PLANNING

DRAWING NO: 09