EWCE 464

LO1

16/06

Vector → point, line, polygon

Raster → cells

↓

DEM

Digital El. Model

	4		
		3	

LULC → Land Use Land Cover

- Vegetation
- Water body
- Open space
- Building
- Field

Extensions → check spatial analysis (on all)

Aspect → direction of slope

Hillshade:

Azimuth → hor. angle w.r.t true North

Spline, Trend for interpolation (apart from IDW)

L02

23/06

10/09

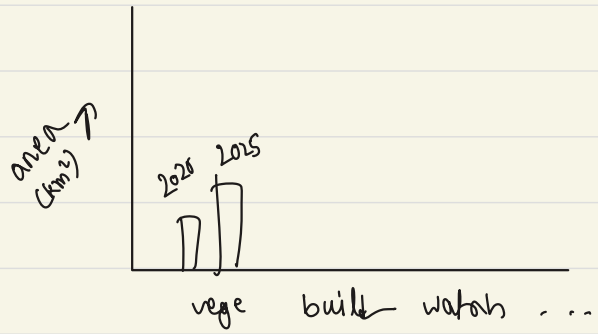
Assignment 2

LULC of own district (supervised)

~~2015~~ — 2020 — 2025

any 4 — agri
building
watah
vege
flood plain
bare land
...

Present (map x2)



Summary — no more than 150 words
change, why

Deadline : 14th wk, tuesday

Rough / Final 15/09

Remote sensing

Landsat 8 —	Band	Color
	1	Coastal . . .
	2	Blue
	3	Green
	4	Red
	5	NIR
	6	SWIR 1

NDVI (veg) : $\frac{B5 - B4}{B5 + B4}$ [NIR – Red]

NDWI (water) : $\frac{B3 - B5}{B3 + B5}$ [Green – NIR]

NDBI (built-up) : $\frac{B6 - B5}{B6 + B5}$ [SWIR – NIR]

NDMI (moisture) : $\frac{B5 - B6}{B5 + B6}$ [NIR – SWIR]

Defn — acquiring info about obj. of interest w/o being in contact.

EMR → Passive
Active

Interaction of EM Rad

- Scattering → redirection from original path
  Mie scattering → particles are of similar size to wave len
  Non-selective " → " " " " larger " " " "

- Absorption → absorbs energy at various wave len
  ozone — uv
  CO_2 — for IR
  water vapor — LWIR & SWMW

Transmission → Remaining energy after absorption

$$= \frac{\text{Transmitted energy}}{\text{input energy}}$$

Absorption, Transmission, Reflectance

Reflectance → specular, diffuse

$$\frac{\text{Reflected } (R_\lambda)}{\text{Incident } (I)}$$

