

Ecologically Sensitive Regions of Uttara Kannada district, Karnataka through Grid-based Inventorying, Mapping and Monitoring of Ecological Resources

Anirudh K, Bharath S, Vinay S and Ramachandra T V

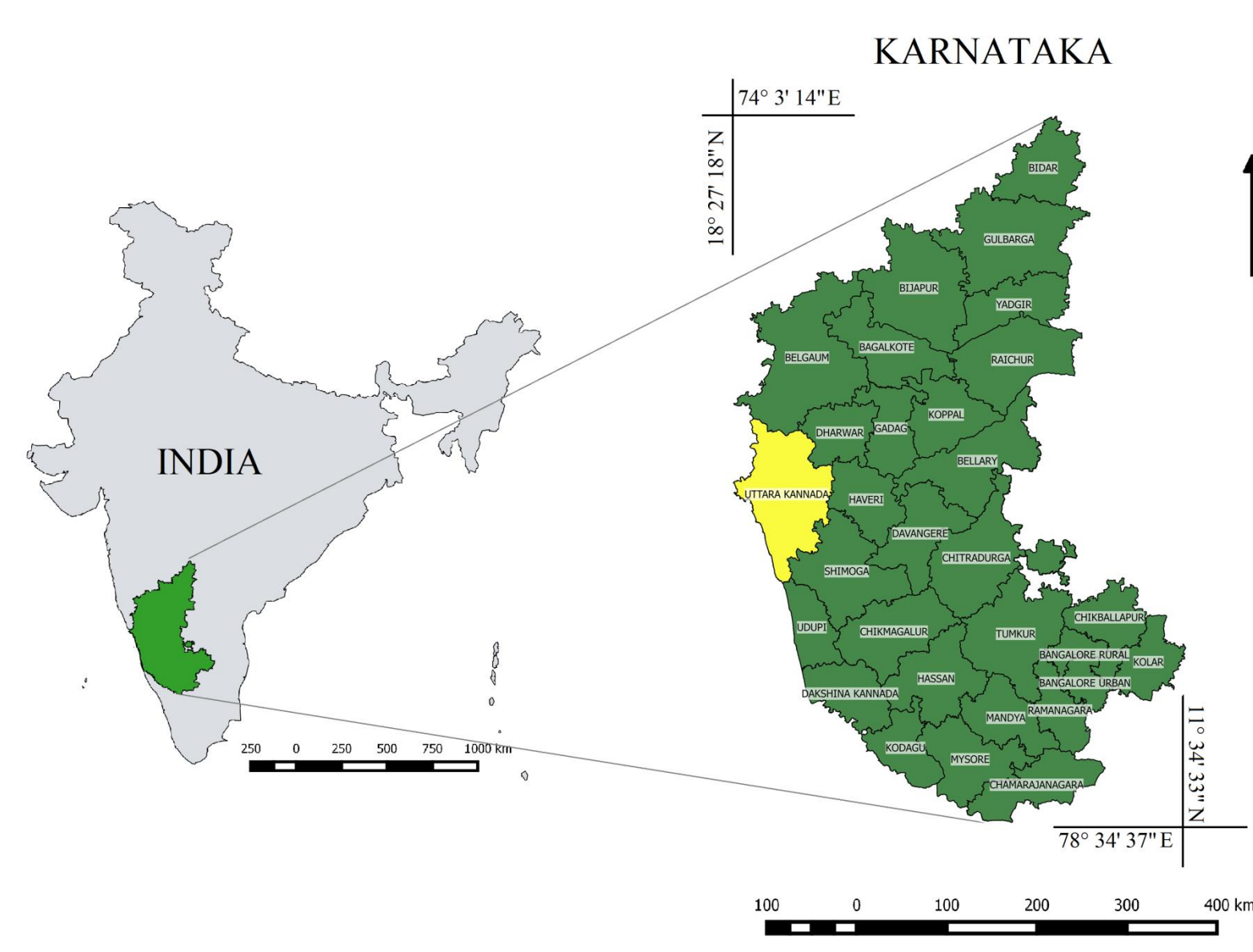
Energy and Wetlands Research Group, Centre for Ecological Sciences (CES), Indian Institute of Science, Bangalore, Karnataka 500012

ECOLOGICALLY SENSITIVE REGIONS

Ecological units with exceptional biotic and abiotic components are designated as Ecologically Sensitive Regions (ESRs)

INVENTORYING, MAPPING AND MONITORING of ecological resources helps in the delineation of grid-based ESRs by aiding in the aggregation of the contribution of all themes considered to the ecological sensitiveness of the study area

STUDY AREA



GRID-BASED STRATEGY

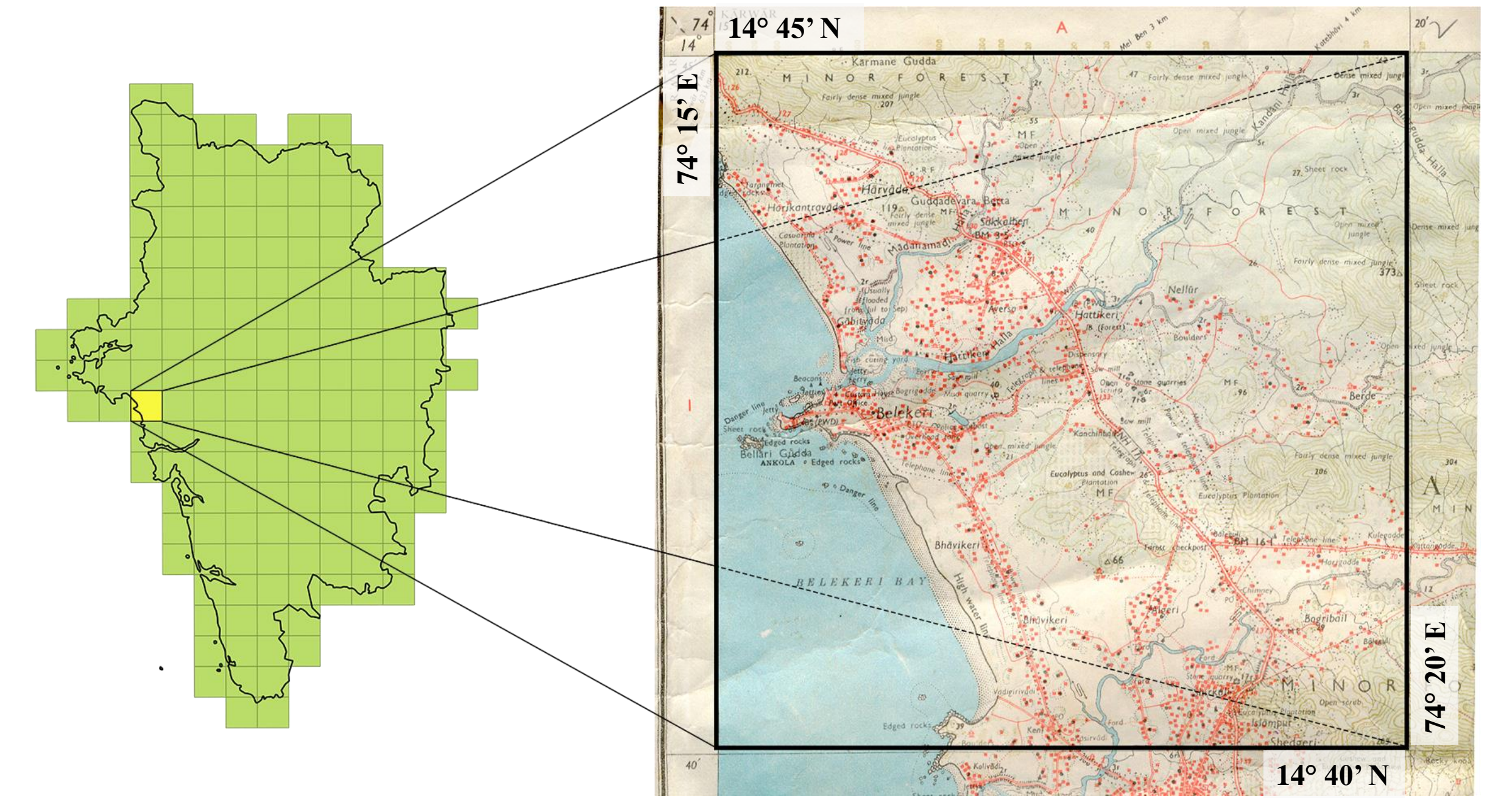
Exact overlay of grids with 1:50000 scale Survey of India topographic sheets for data validation and further co-relation with the available data

A	E	I	M	1	5	9	13
B	F	J	N	2	6	10	14
C	G	K	O	3	7	11	15
D	H	L	P	4	8	12	16

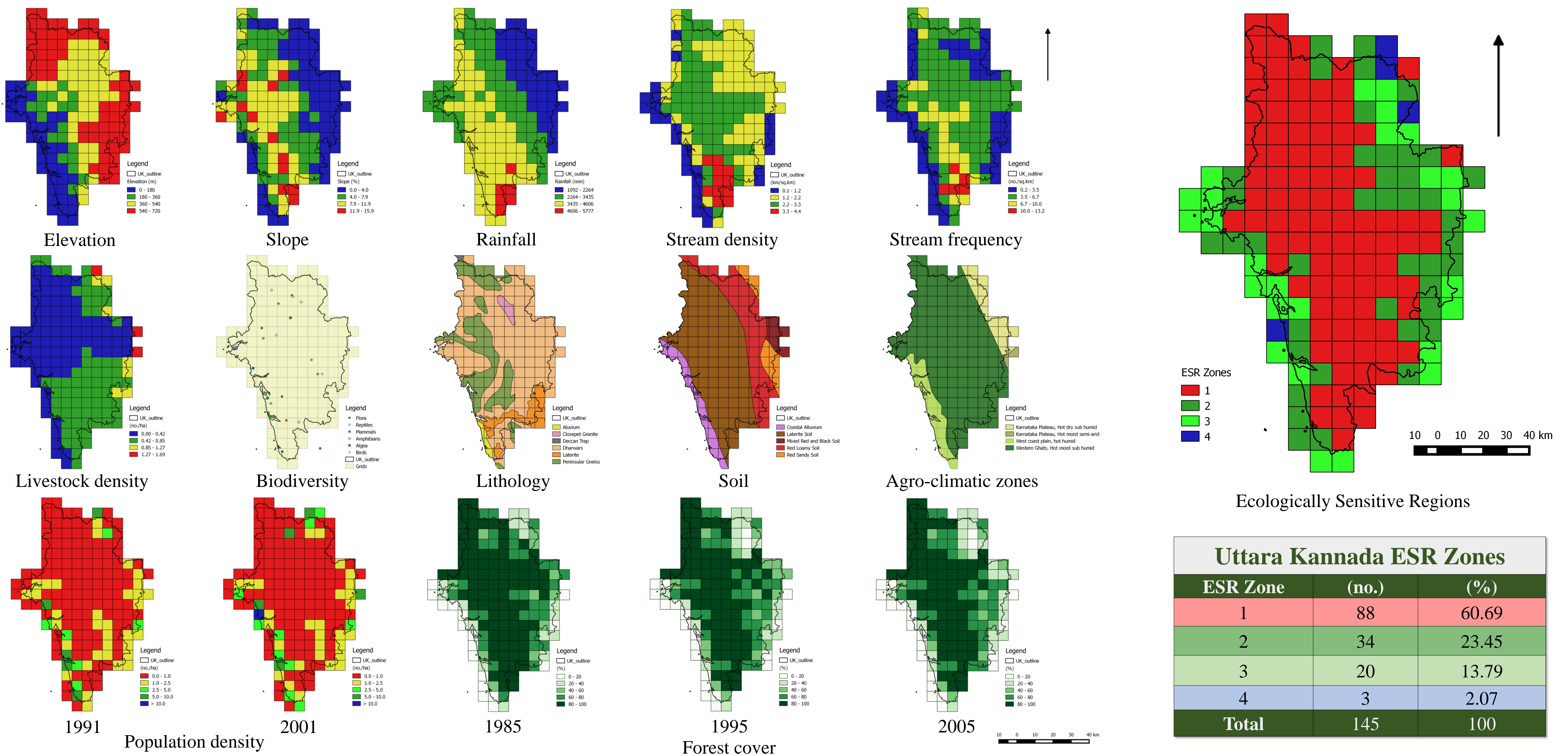
Each topographic sheet is marked with 5' X 5' Grids i.e., 9 km X 9 km (closer to equator)

4°x 4° grids 1°x 1° grids 15'x15' grids
 1:1,00,000 scale 1:250,000 scale 1:50,000 scale
 Sheet no.: 48 Sheet no.: 48N Sheet no.: 48N/14

OVERLAY



RESULTS



RESEARCH SIGNIFICANCE

Empowering tool for effective functioning of the Biodiversity Management Committees constituted for every local bodies under Chapter 10 of The Biological Diversity Act, 2002 with the purpose of promoting conservation, sustainable use and documentation of biological diversity

Ecologically disruptive activities such as road widening, river diversion, setting up of hydro-electric power plants etc. are not to be permitted in ESR Zone 1 and should be highly regulated in Zone 2; Human development activities can be permitted in Zone 3 (regulated) and Zone 4

Listing of various activities allowed in the four ESR zones aids the environment appraisal committees, constituted as per the Environmental Protection Act, 1986, towards the sensible decision making while evaluating EIAs and EMPs of developmental projects

