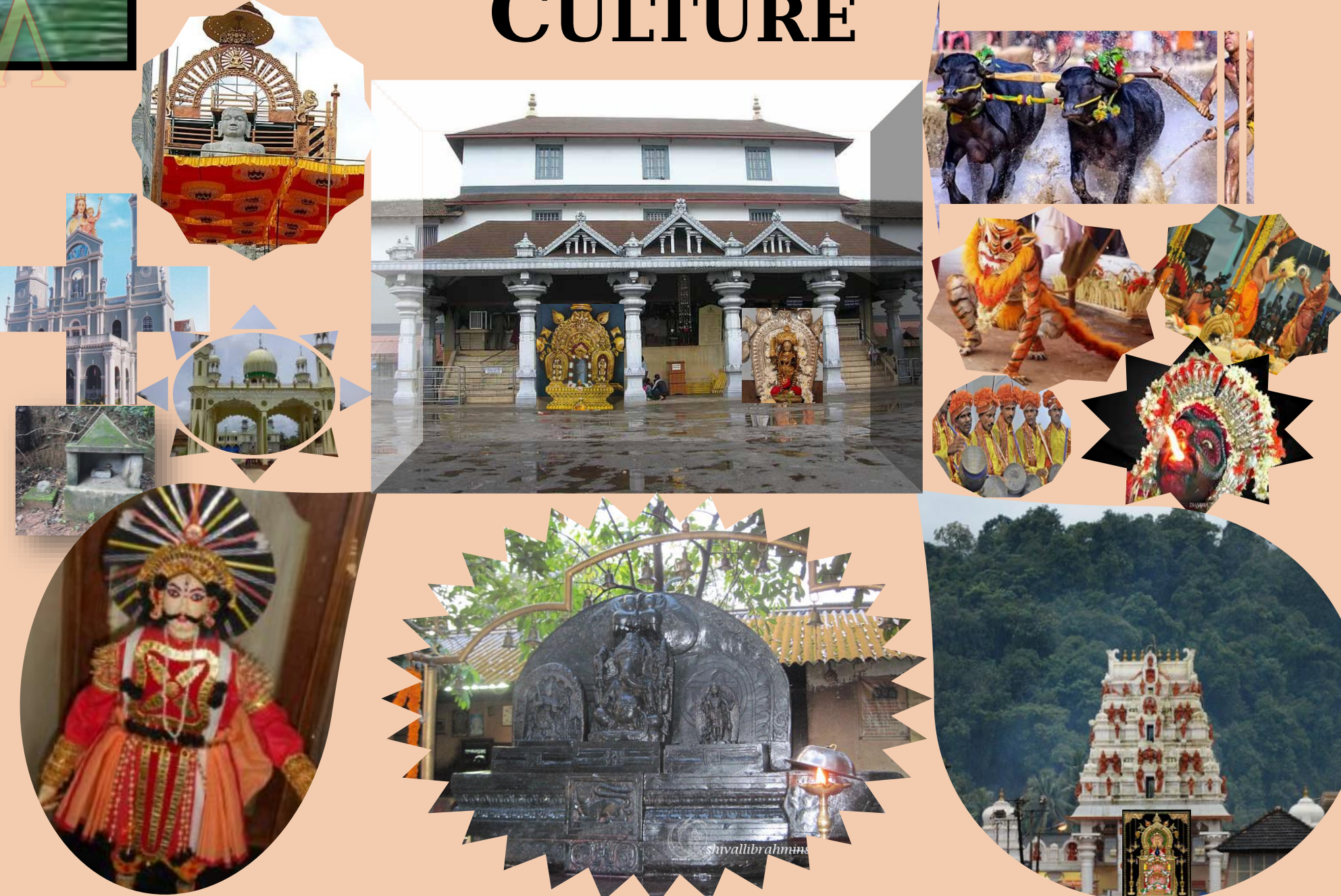


NETRAVATHI RIVER – A LIFE LINE OF DAKSHINA KANNADA IN PERIL

Bharat Setturu, Vinay S, Ramachandra T V



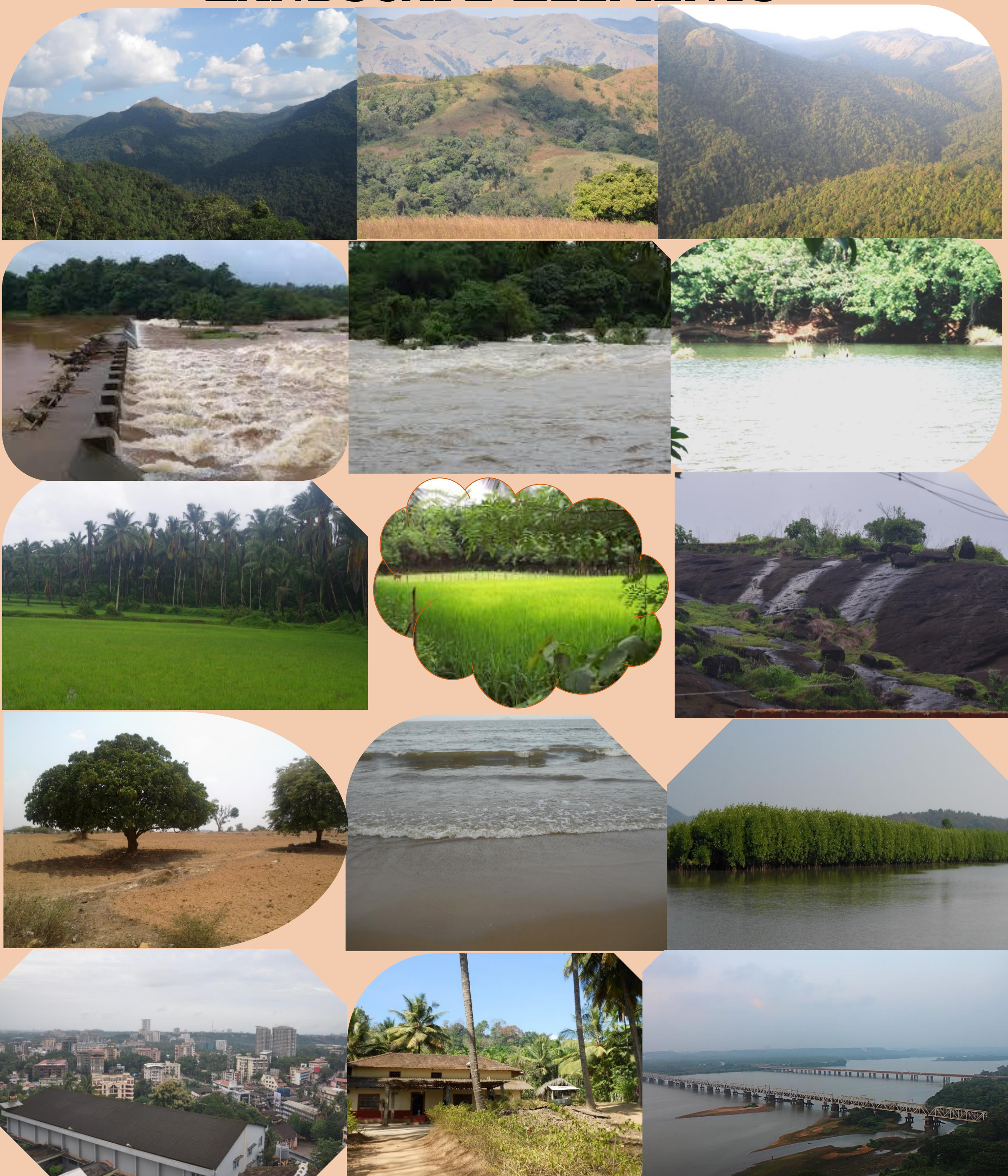
CULTURE



Netravathi River Basin:

- Netravathi river system has numerous perennial streams with typical tropical climax evergreen forested catchment areas of high conservation value with a catchment area of 4409 km².
- The significant floral species includes *Knema attenuata*, *Gymnacranthera canarica*, *Holigarna ferruginea*, *Myristica malabarica*, *Madhuca insignis*, *Syzygium travancoricum*, *Pandanus unipappilatus*, *Helminthostachys zeylanica*, *Hopea ponga*, *Vateria indica* etc., and many of them are under Critically Endangered, Vulnerable, Threatened categories.
- The river has an inextricable connection between culture and diversity, also acts as a major economic source.
- The river is supporting water bottling industries with 6 to 8 TMC of water per year.
- Supporting livelihood of 3.5 lakh fishermen.

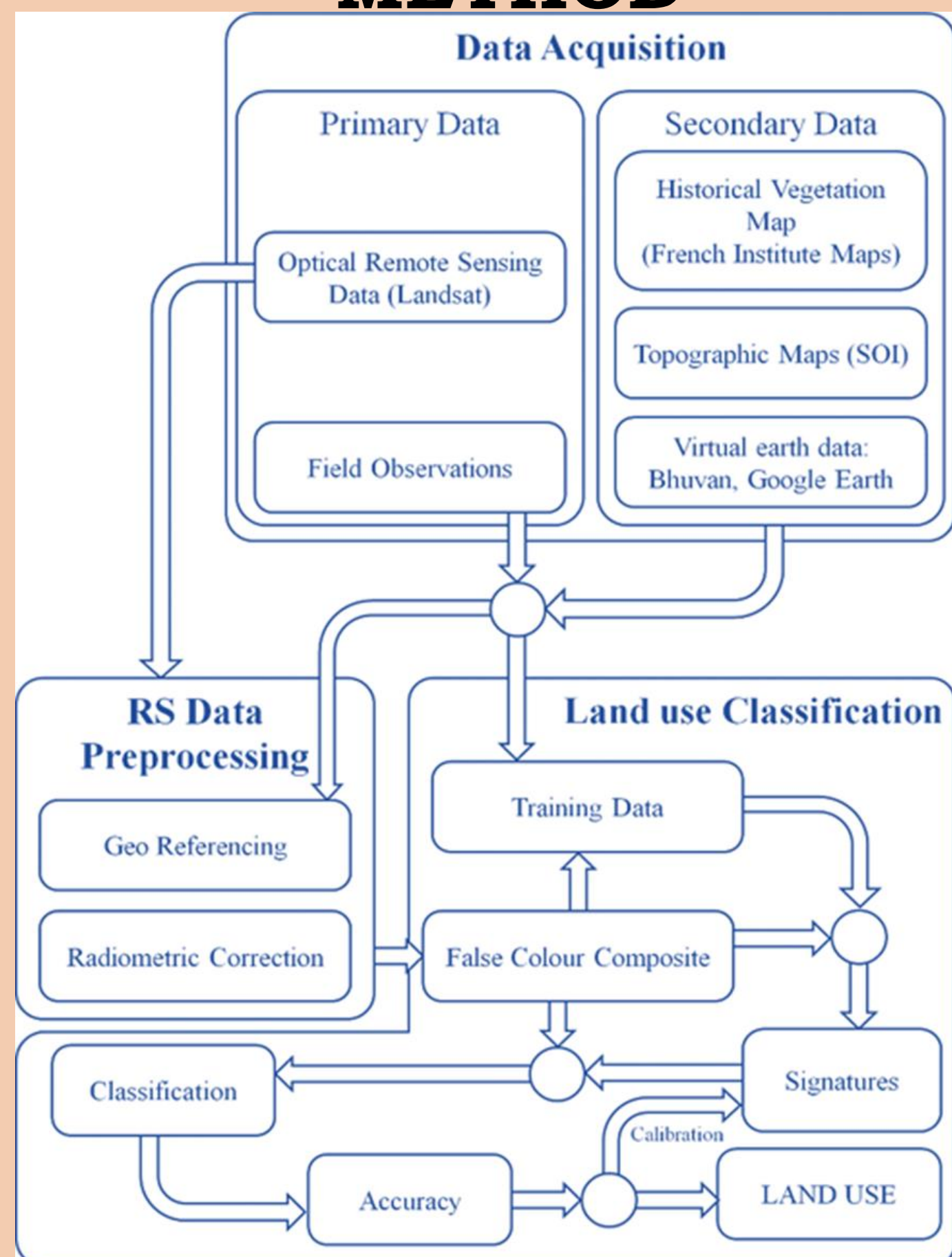
LANDSCAPE ELEMENTS



OBJECTIVES

- To understand land use status of Netravathi River Basin.
- Identifying ecological sensitive regions based on ecology, hydrology and bio-geo climatic variables.

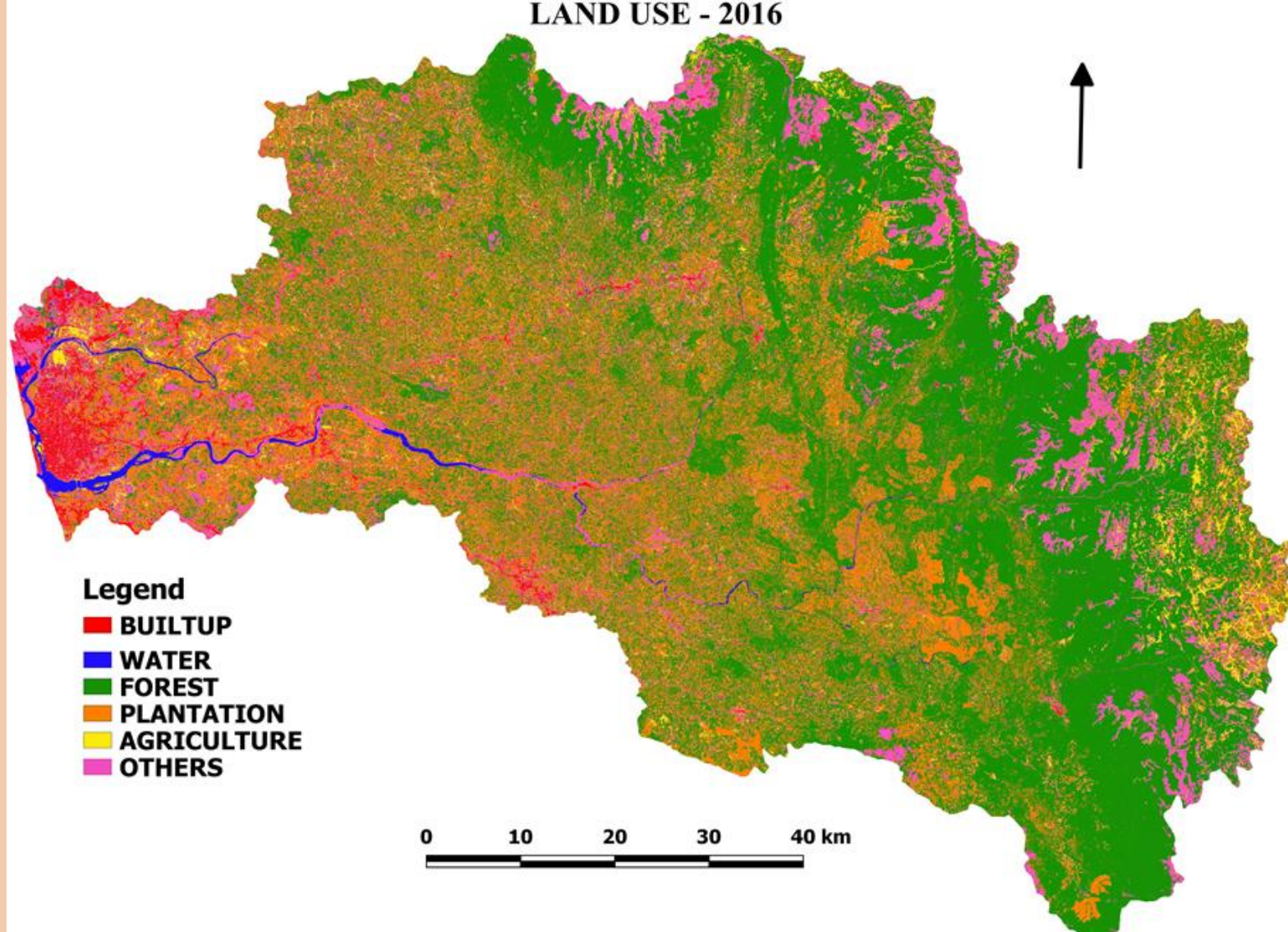
METHOD



BIODIVERSITY

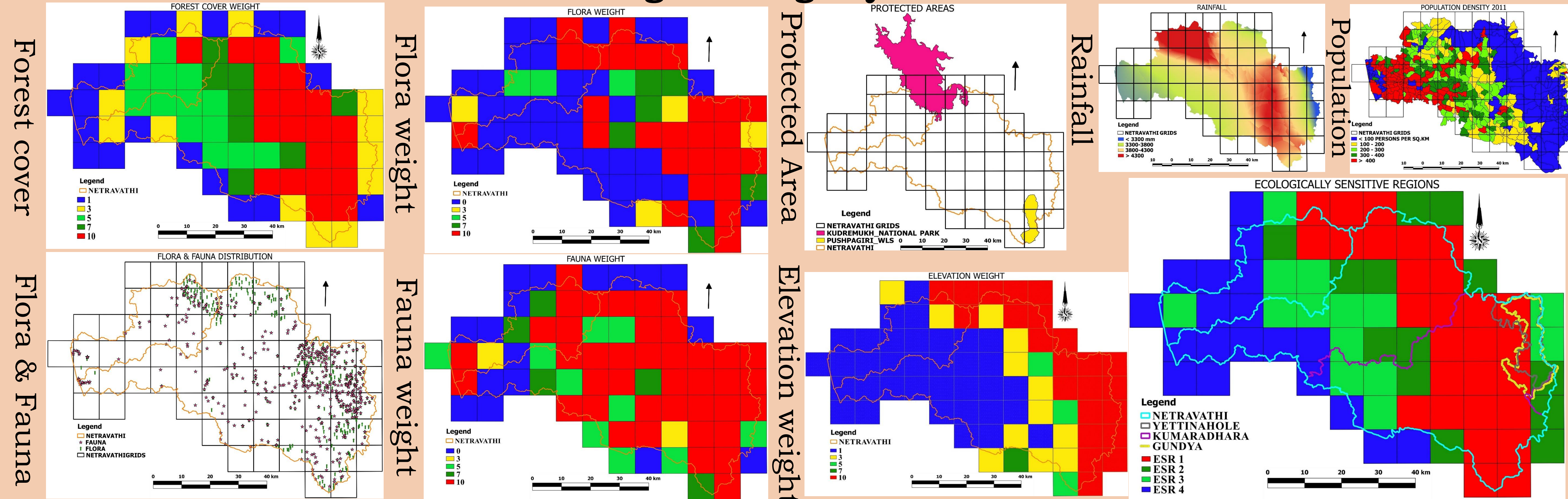


LAND USE



S	CATEGORY	DESCRIPTION	%
1	FOREST	Evergreen forests, deciduous forest, degraded forests, scrublands, Soppina betta	51.67
2	PLANTATIONS	Horticulture and Forest plantations	26.42
3	AGRICULTURE	Current Sown and Fallow Agricultural lands	5.01
4	BUILT-UP	Buildings, Roads and paved surfaces	2.16
5	OTHERS	Open area, Grasslands, Riverbed, Sand, Quarries, Cloud and Shadow	14.02
6	WATER	Rivers, Lakes, Ponds, Estuary	0.72
TOTAL AREA			435300 Hectare

Assessment of Ecological Fragility of Netravathi River Basin



Research highlights

- The land use analysis shows 51.67% area under forest after losing dense zones of forests for mini-hydroelectric, infrastructure projects and monoculture plantations. The plantations constitute 26.42 % of the basin.
- Ecological fragility analysis elucidates Netravathi river basin covers total 433 villages across five districts of 111 under high ecologically fragile, 69 shows ecologically fragile, 119 under moderate ecologically fragile.

Recommendations

- Ecological fragility of Netravathi river (high, moderate etc.) needs highest conservation without further degradation.
- River diversion projects should not be allowed in the name of drinking water projects as they are going to threaten the sustenance of the river and ecological fragility.
- Monoculture plantations are not allowed, existing exotics should be replaced by planting endemic species.
- The local bio resource based industry should be promoted. All should be strictly regulated and be subject to social audit.