



# ESTUARINE BRD CONSERVATION IN UTTARAKANNADA DISTRICT

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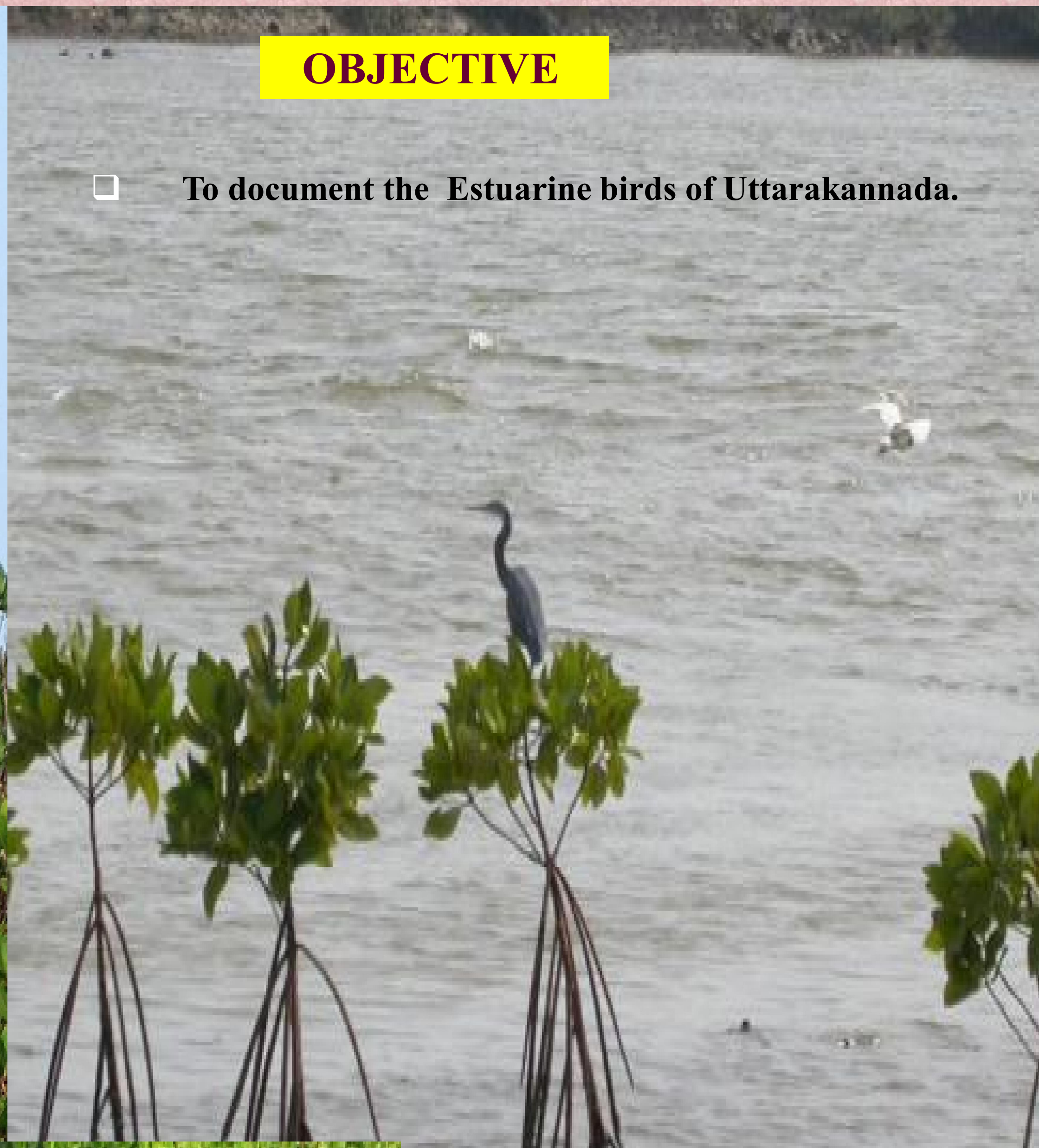
## INTRODUCTION

Birds are the best known group of animals and are arguably the easiest group of animals that can be used to monitor ecological changes. The birds which inhabit wetlands for nesting, feeding and roosting are broadly defined as water birds. Tropical estuaries are well known for their rich bird fauna.



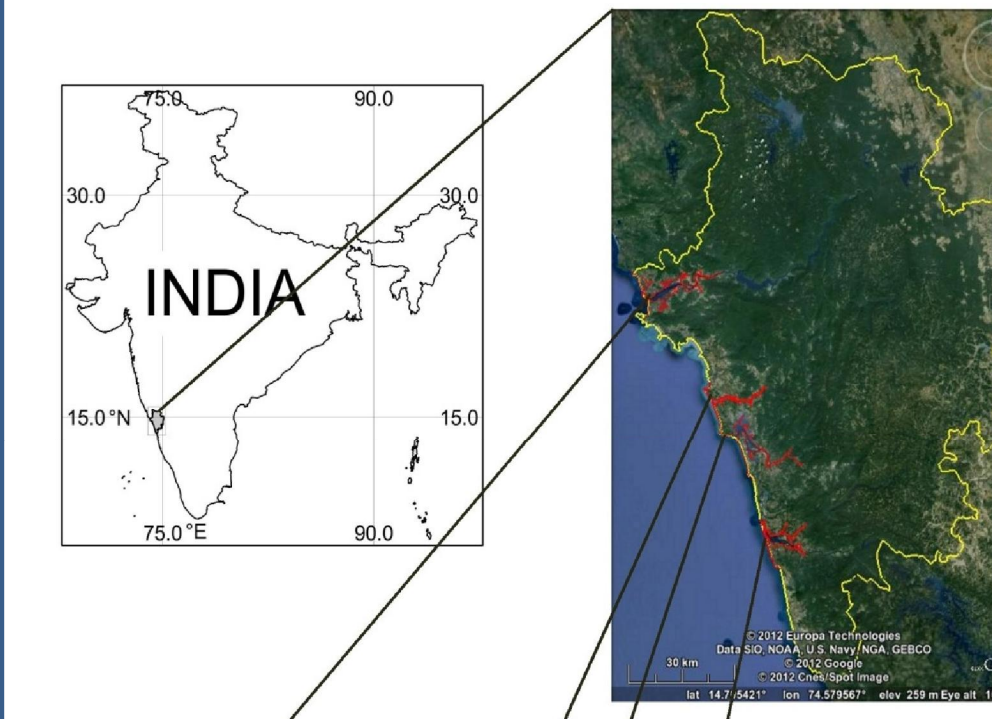
## OBJECTIVE

- To document the Estuarine birds of Uttarakannada.



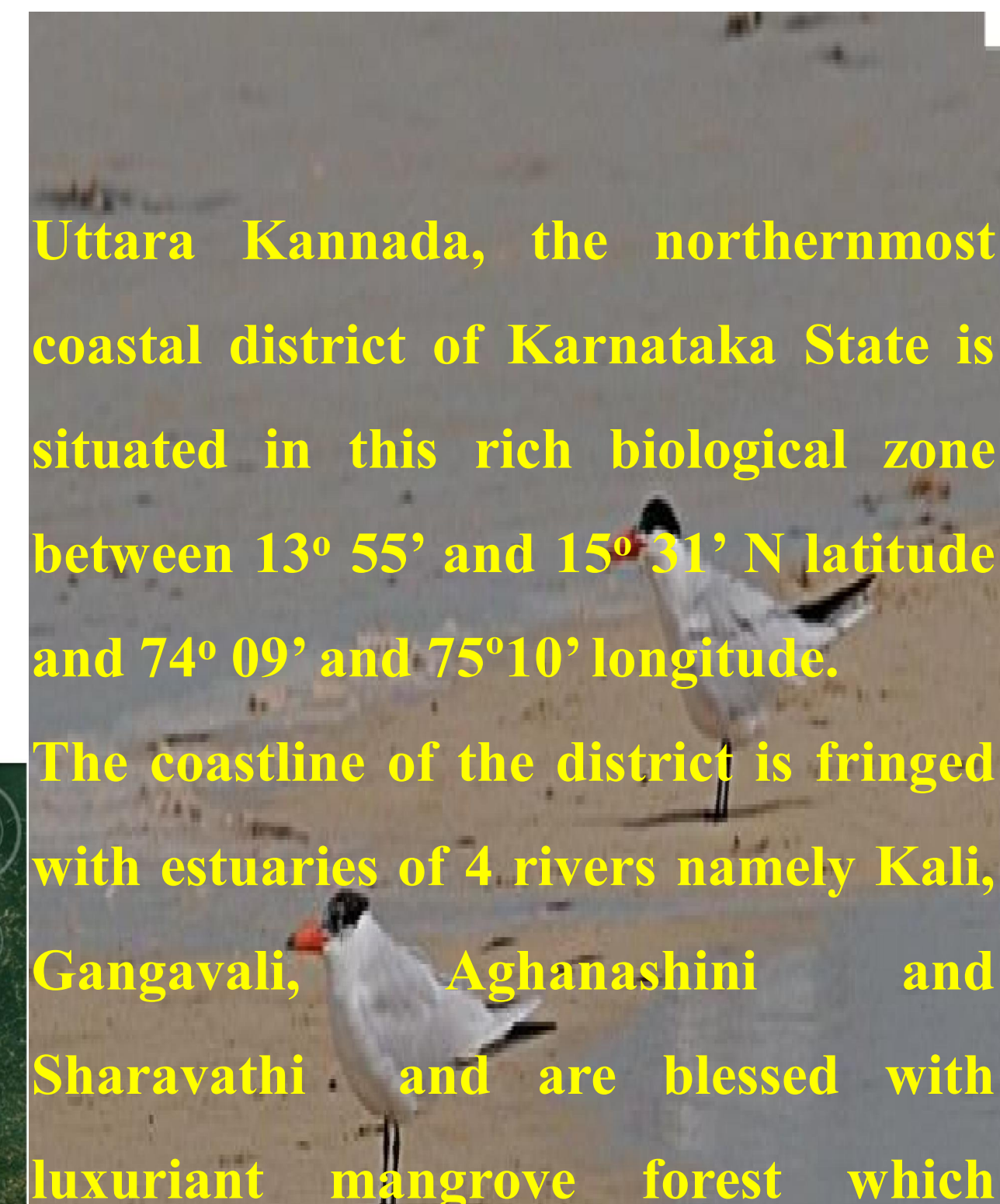
## METHODS

### STUDY AREA



Uttara Kannada, the northernmost coastal district of Karnataka State is situated in this rich biological zone between 13° 55' and 15° 31' N latitude and 74° 09' and 75° 10' longitude.

The coastline of the district is fringed with estuaries of 4 rivers namely Kali, Gangavali, Aghanashini and Sharavathi and are blessed with luxuriant mangrove forest which increases the productivity of the estuary and enable extensive breeding activity by many marine forms and supports a rich bird fauna.



❖ Opportunistic observations were made using binocular.

❖ Secondary data was also used.



## RESULTS



➤ Uttara Kannada estuaries are rich in nutrients due to inputs from Western Ghats. The mangroves enhance the nutrient supply and also make estuaries structurally complex to shelter birds of diverse habitats namely, marine, coastal and inland kinds. Marshes, mudflats, oyster beds, sand bars, etc. also provide additional habitats.

➤ 140 birds are associated with estuaries. Roughly half of them are migrants which over winter in the estuaries.

## THREATS



Shell mining



Cutting of mangroves

Shell mining, mangrove cuttings, shrimp farming, sand mining, etc. are notable threats.

Pollution is emerging as rising threat.

Threats from reclamation for human habitations are on the increase.

## CONSERVATION



Integrity of estuarine ecosystems which comprises of diverse elements need to be protected for conservation of bird fauna. Over harvesting of mussels and clams from mudflats and reefs has to be regulated because these provide food for bulk of estuarine birds. Kali and Aghanashini estuaries merit consideration as Conservation Reserves for birds.

## Ibis



White-necked Stork



Pond heron with nest



A view of waders high tide roost in mangroves



## RESIDENT MIGRANTS

Egret



Little cormorants



Small Blue Kingfisher



Black-crowned night heron



## RESIDENTS

Pond heron



White bellied sea eagle

