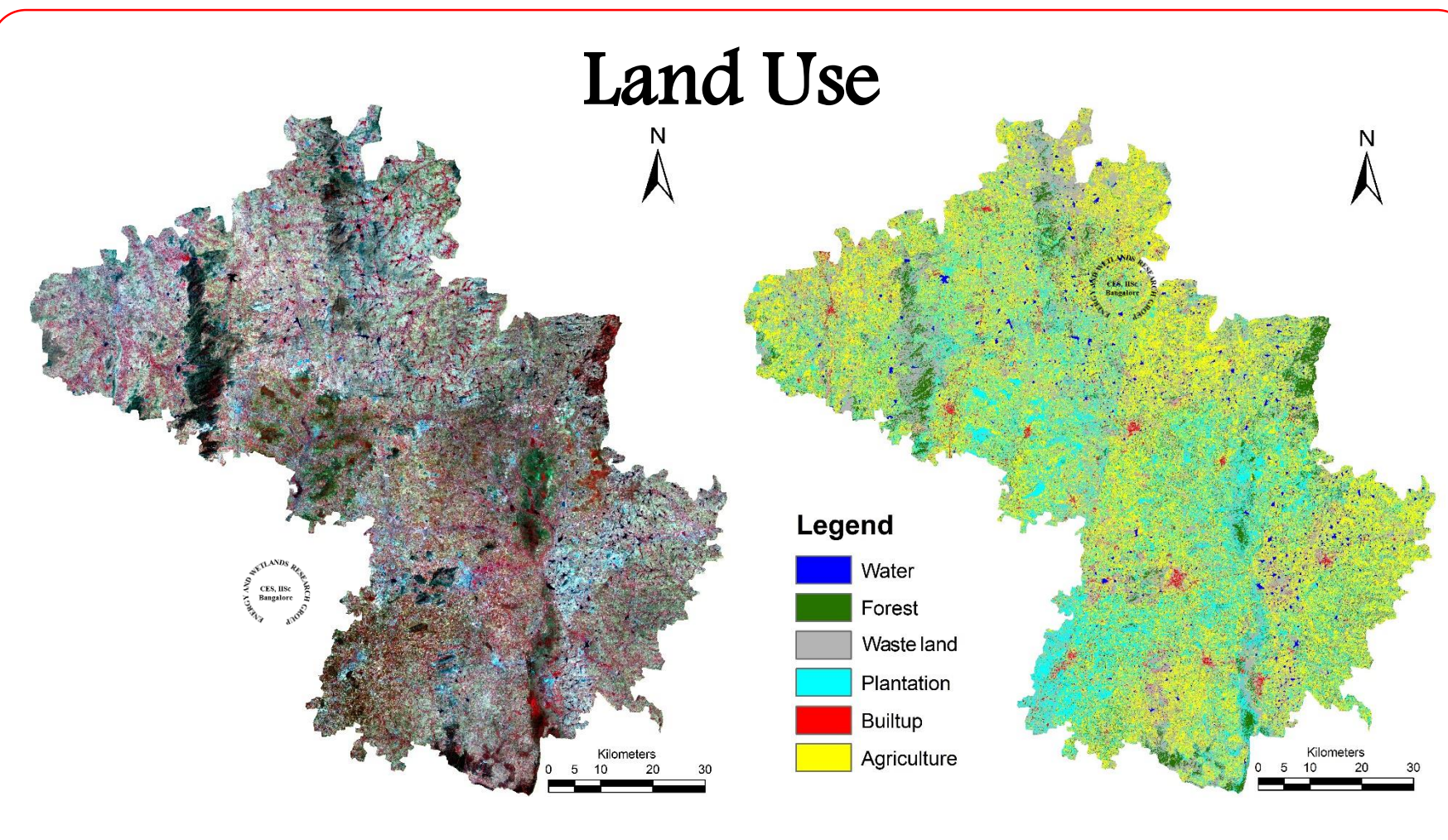
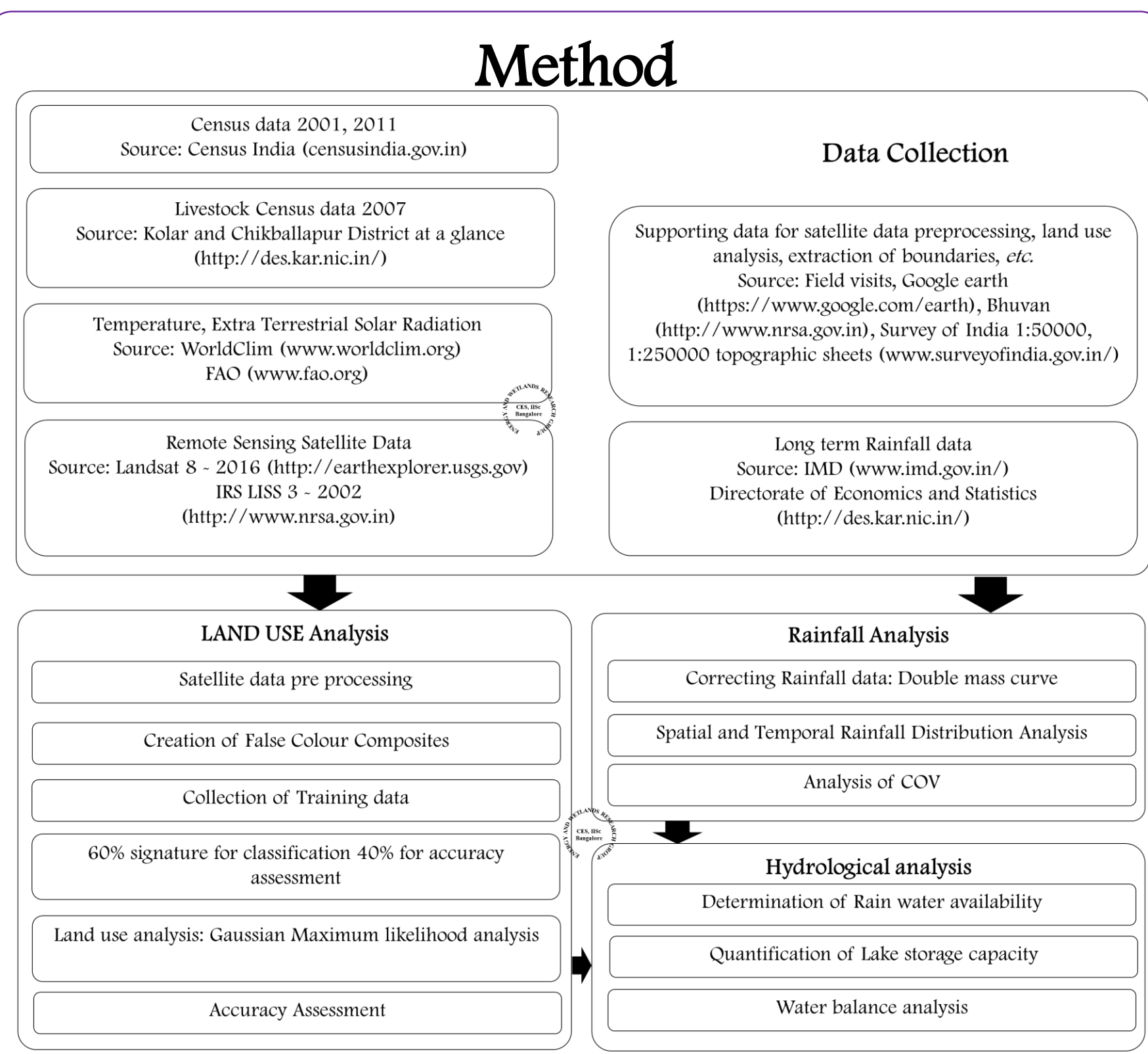
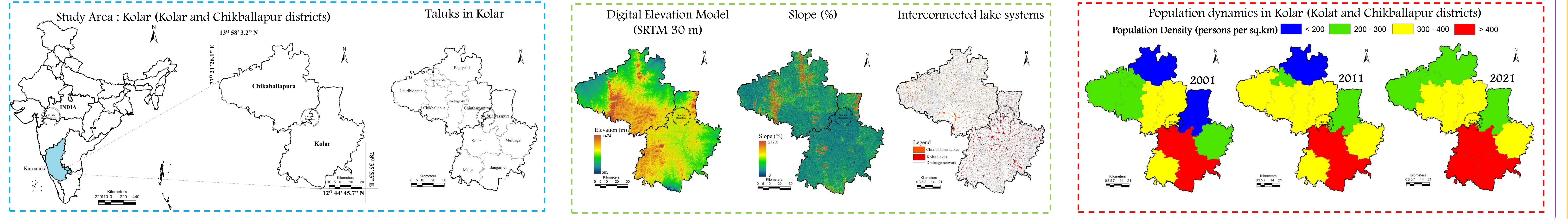


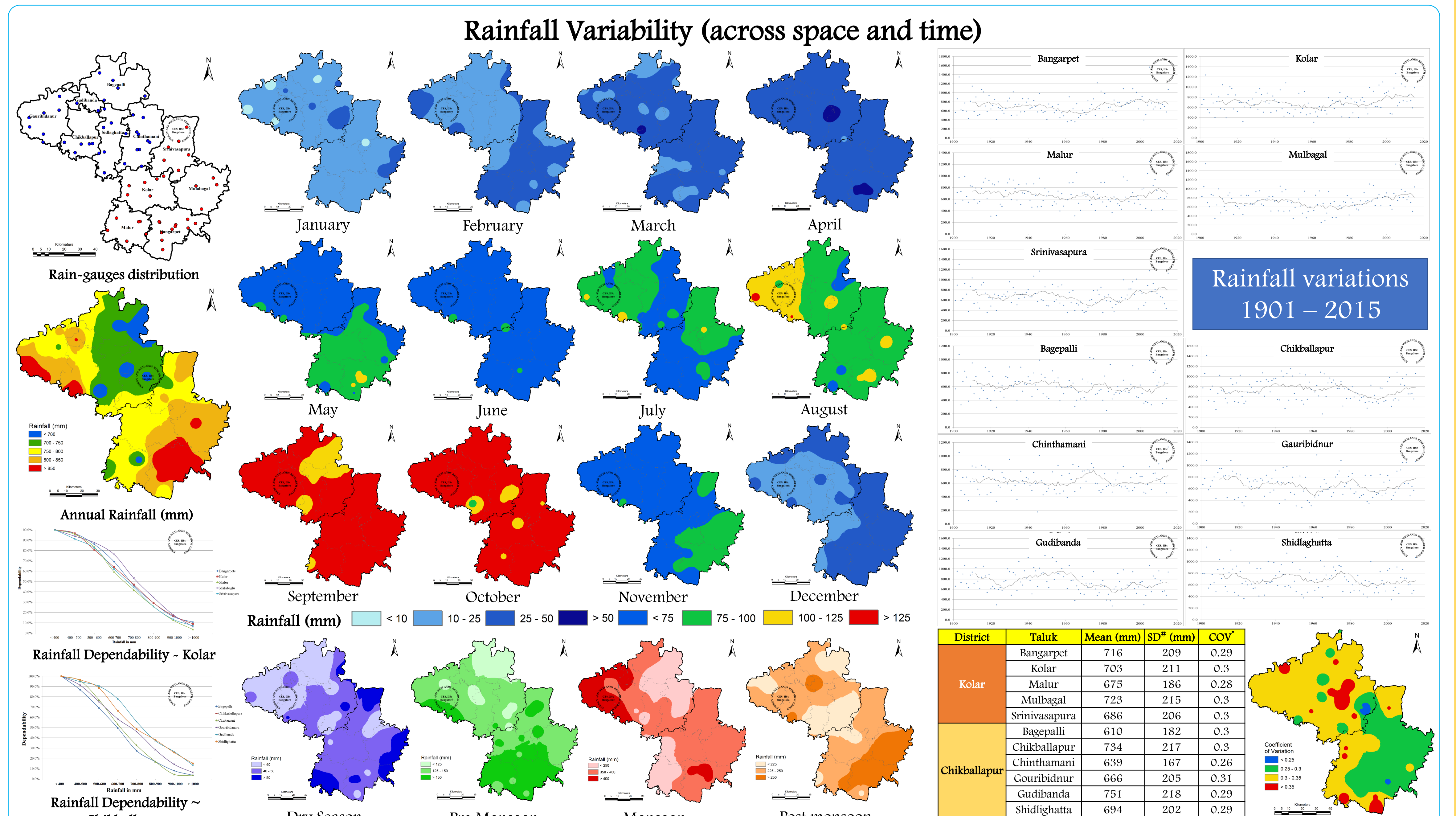
## DEDICATED TO KOLAR FARMERS, WHO ARE IN DISTRESS SINCE 1947, DUE TO WATER RESOURCE MISMANAGEMENT AND POOR GOVERNANCE

- Kolar and Chikaballapur districts are located in the south eastern part of Karnataka State, between 12°44'N to 13°45'N latitude and 77°12'E to 78°35'E longitude. Spatial extent of is 8213 sq.km (Chikaballapur: 4244 sq.km, Kolar: 3969 sq.km).
- Kolar and Chikballapur falls under the semi arid climatic zone, with average annual rainfall of about 690 ± 201 mm, temperature vary between 14.4°C (January) to 35.7°C (April).
- Terrain Topography varies between 595 m to 1474 m above Mean Sea Level. Slope is gentle across the plains and steep across the hill ranges. Kolar and Chikballapur together had over 4800 lakes (SOI 1:50000 topographic sheets 1970's) encompassing an area of 45085 hectares with current water holding capacity of ~15 TMC (with silt accumulation).
- Population has increased from 24,45,586 (2001 census) to 28,21,506 (2011 census) at a decadal rate of 15.3%. Population at the year 2021 is projected to be 32,53,196 persons. Considering domestic demand is about 135 lpcd, annual demand by 2021 would be ~5.27 TMC (~150 Million cubic meters).

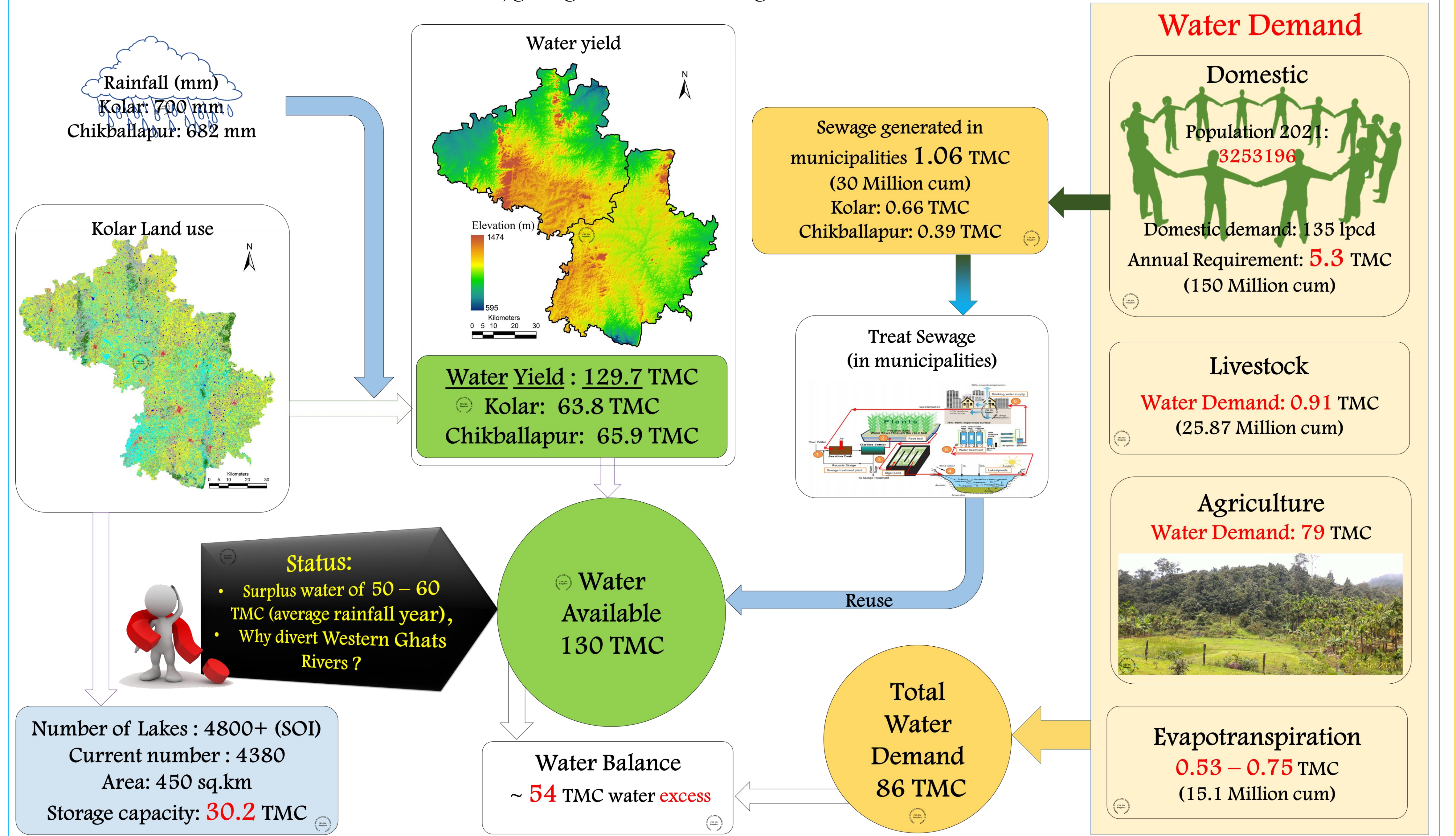


Land use - 2016	Area (%)
Water (Lakes, Rivers, Ponds)	1.8
Forest	6.5
Wastelands (Open/Quarries/Scrub lands)	33.0
Plantation (Horticulture/Forest plantations)	16.9
Built-up (Buildings, roads)	3.0
Agriculture (Fallow, Current sown)	38.9

- ### Recommendations
- Decentralized rain water harvesting through lakes
  - Catchment/watershed management for effective soil and water conservation.
  - Rejuvenation of existing lakes (desilting, catchment treatment through planting native saplings)
  - Incentive to create farm ponds in all agricultural field (this helps in ground water recharge, and also helps in fish rearing and hence local livelihood)
  - Phasing out monoculture plantations of exotic species (such as eucalyptus, etc.) with native species on priority.
  - Appropriate cropping pattern and restriction on crops that are water intensive.
  - Incentives to farmers growing crops suitable for semi arid region.
  - Greening/afforestation in the catchments of water bodies (lakes, rivers, etc.) with native species, ensure that at least 33% is maintained with native trees and grasses to enhance water retaining capacity of Catchment/watershed
  - Inclusions of concepts - watershed, environment, afforestation, reforestation in the education curriculum (Schools and Colleges).
  - Management of water bodies involving all stakeholders, and constitution of joint environment management committee at each village level to address the issue of forest as well as water bodies.
  - Restriction on sand mining beyond sustainable yield.
  - Kolar has distinction of having highest barren area (un-productive land) and is heralding towards desertification (next to Rajasthan). This requires immediate afforestation in the catchment through CAMPA. Auditing of these activities through independent and unbiased academic institutions.



Solutions to water crisis: Harvest Rainwater, Rejuvenate lakes, Watershed management, plant native samplings in the catchment, de-siltation of water bodies, good governance involving all sensible stake holders



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