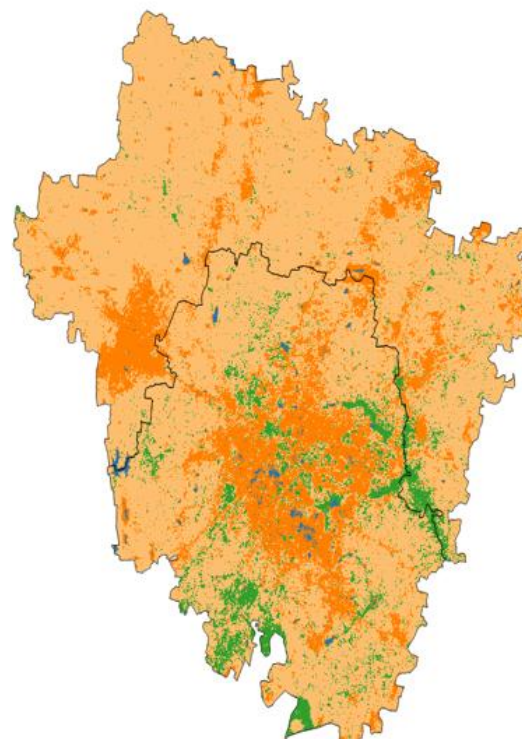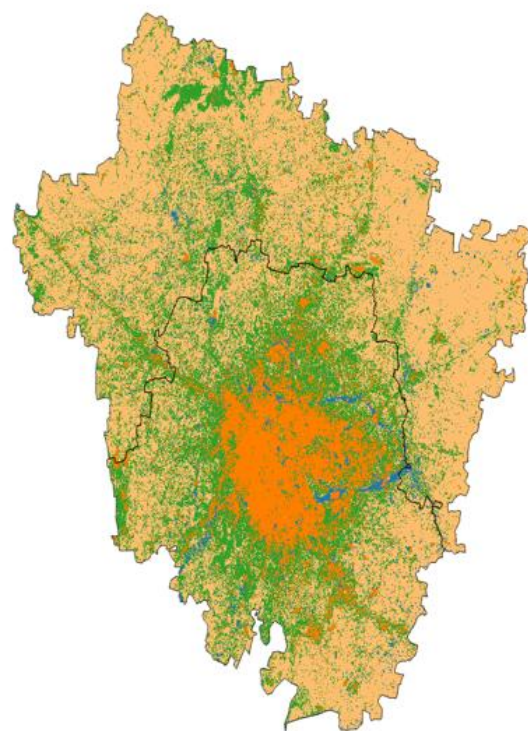# TITLE: LAND COVER ANALYSIS OF BENGALURU DISTRICT, KARNATAKA USING AWIFS DATA

MAP DESCRIPTION AND ANALYSIS
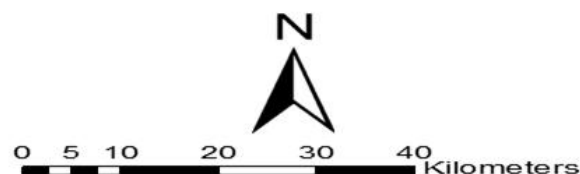
16th February 2009

2nd May 2018

1 - Water Body
2 - Buildings
3 - Vegetation
4 - Bareland

1 - Water Body
2 - Buildings
3 - Vegetation
4 - Bareland

N

0 5 10   20   30   40 Kilometers

Data courtesy: BHUVAN, ISRO

INTRODUCTION:
Land Use and Land Cover Land—cover has become crucial basis work to carry the prediction to carry the dynamical changes of the land use, prevention of natural disaster, environment protection, land management and planning.

STUDY AREA:
Bengaluru, formerly Bangalore, city capital of Karnataka state, southern India. Bengaluru is the third India's largest city. It is located at 12.97°N 77.56°E and covers an area of 741 km2 (286 sq mi). It lies 3,113 feet (949 metres) above sea level. Bangalore is known for its pleasant climate throughout the year. Its elevation is the highest among the major cities of India.

STEPS IN QGIS:
- Awifs raw data (DN pixels) > Radiance > Reflectance > FCC >Shapefile delineation > SMA classification.

SMA CLASSIFICATION:
- Spectral mixture analysis (SMA) determines the component parts of mixed pixels by predicting the proportion of a pixel that belongs to a particular class or feature based on the spectral characteristics of its endmembers. Four training inputs to classify Water bodies, buildings, Vegetation and Bare land.
- The comparative study between two data's over a period of 10 years shows the decline in vegetation and increase in residential blocks to accommodate the growing population.

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	Team member/lead: Chandhana G

Organization: CIIRC, Jyothy Institute of Technology

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