METHODOLOGY

IMAGE PROPERTIES:

All the images downloaded from **https://bhuvan.nrsc.gov.in/bhuvan_links.php**

SATELLITE	SENSORS	DATE	RESOLUTION	ROW/PATH
RESOURCESAT-2	LISS-III	23/11/2015	23.5	055/107
RESOURCESAT-2	LISS-III	25/11/2015	23.5	055/106
RESOURCESAT-2	LISS-III	24/10/2016	23.5	055/107
RESOURCESAT-2	LISS-III	19/10/2016	23.5	055/106
RESOURCESAT-2	LISS-III	16/05/2017	23.5	055/107
RESOURCESAT-2	LISS-III	04/05/2017	23.5	055/106
RESOURCESAT-2	LISS-III	04/02/2018	23.5	055/107
RESOURCESAT-2	LISS-III	06/01/2018	23.5	055/106

STEPS:

- All the work done by QGIS software.
- For composite 2015 year Image Open band images→ raster tool→Miscellaneous → build virtual raster→input band images→choose file location→ run. (similarly composite other year images)
- After composite 2015 year two images open for mosaic→ raster tool→Miscellaneous → build virtual raster→input band images→ uncheck the box of "place each input file in a separate band" →choose file location→ run.(similarly mosaic other year images)
- Than mask the mosaic image of 2015 by rectangle shape →layer→ create layer→ new shapefile layer→ put a name in a separate file location→select geometry type as a polygon→choose coordinate as a WGS1984→ ok→on taggle editing→draw a rectangle→save editing→off taggle editing→raster tool→extraction→extract by mask layer→put the raster layer→put the vector layer→choose a file location→run.(similarly mask the other year images).
- Right click on year of 2015 image→properties→symbology→choose render type as multiband color→ select the band as 3-2-1→ok.
- For supervised classification→install the plugin semi-automatic classification→right click on any place in toolbar→check the box of scp dock panel→scp→band set→select map→ok→training input→ create a new training input→save on particular file location→choose features by polygon from raster image→band set →band processing→classification→run→choose a particular file location→ save.(similarly classify other year images).
- After completing four year classification-->create a layout→export as JPG.

COMPLEXITIES:

- Clearness of LISS-III images is very poor, which is big issue for classification.
- After mosaicking the image tone was changed, for this reason we are facing object identification problem.
- LISS-III images data are not available in present year, so we cannot create a updated map.

USE OF MAP:

This map shows us how to change the area of Massanjore Dam and also how to look like. This type of map identifies the amount of increase and decrease features of land surface. here amount of water and agricultural land increases day by day, other hand vegetation is decreased.