

# METHODOLOGY

 **IMAGE PROPERTIES:** The images downloaded from [bhuvan.nrsc.gov.in/bhuvan\\_links.php](http://bhuvan.nrsc.gov.in/bhuvan_links.php).

SATELLITE	SENSOR	DATE	RESOLUTION	ROW/PATH
RESOURCESAT-2	LISS-III	06/01/2018	23.5	005/106
RESOURCESAT-2	LISS-III	06/01/2018	23.5	055/106
RESOURCESAT-2	LISS-III	06/01/2018	23.5	055/106
RESOURCESAT-2	LISS-III	06/01/2018	23.5	055/106
RESOURCESAT-2	LISS-III	04/02/2018	23.5	055/107
RESOURCESAT-2	LISS-III	04/02/2018	23.5	055/107
RESOURCESAT-2	LISS-III	04/02/2018	23.5	055/107

## **STEPS:**

- In QGIS software LAYER STACK the 7 images → MOSAIC all images → Mask the mosaic image by paschim bardhaman shapefile → by using “RS&GIS” plugin calculate NDVI → by using “MAP ALGEBRA” for showing vegetation above 0.6.
- For collecting Mining, Railway station, Stadium, Hospitals, Tourist places, Airport, River, Rail line, National highway, Dam and Reservoir open <https://bhuvanapp1.nrsc.gov.in/bhuvan2d/bhuvan/bhuvan2d.php>.
- In bhuvan 2D → choose satellite view → Tools → Draw tool → click “draw a point”/”draw a polygon”/”draw a line” → in search box search the feature or place → put a points/polygon/line on this feature or place → export as shape file.
- In QGIS we merge all the shapefile by group such as Mining, Stadium etc. from vector tool → Geoprocessing tool → Union.
- All the features open in qgis → put label on block, National highway, Dam and use various symbol on all the features by using properties.
- In QGIS → project → new print layout → Design our map → export as JPEG.

## **COMPLEXITIES:**

- We are not proper identify the different type of object for reduce the number of band and resolution of LISS-III images.
- 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 give us the basic information about paschim bardhaman district that which area has under Railway connectivity and which place are tourism places and also which areas has hospital facilities for better live. This map also gives us information about which areas are Stadium, Mining, and Airport.

This map use for identifying the forest coverage in paschim bardhaman and block wise facilities.