

Aim: - Apply Raster analysis on satellite images

Step 1: Open QGIS

Step 2: Click on and Select Add Layer and then Select Add Raster Layer

Step 3: Select Source Type File and then Click on Browse

Step 4: Select 2000 MIN TIFF File and Select 2010 MIN TIFF File and then Click on OK

- Click on Add

Step 5: Go To Layer Styling and Select Singleband Pseudocolor and Set Color Ramp to Reds and Set Max to 8047.

- Here you can copy and paste the style of one layer to another layer. Right Click on gpw_v4_population_count_rev11_2010_2pt5_min and Select Style and then Select Copy Style
- gpw_v4_population_count_rev11_2000_2pt5_min and Select Style and then Select Paste Style

Step 6: Now go to Raster and Select Raster Calculator.

- In Raster Calculator Double Click First 2010 Population then Select minus (-) from the operators

and then Double Click 2000 Population and give the Output Layer Name and Set the path and Click on Ok.

Step 7: Now Uncheck both the population layer and Select your new output layer.

- Now go to layer styling and Set Symbology to Singleband Pseudocolor and Color Ramp to Blues and Set Min and Max to -160 to 951

Step 8: Now Remove All the values.

- Now Add 5 Values Naming Label and Values, Discrete = -100, Neutral = 100, Growth = 1000, Medium Growth = 5000, High Growth =10000 and give each value different color.
- Here is the Final Output