



ICIMOD

Empowering Women in Geospatial Information Technology



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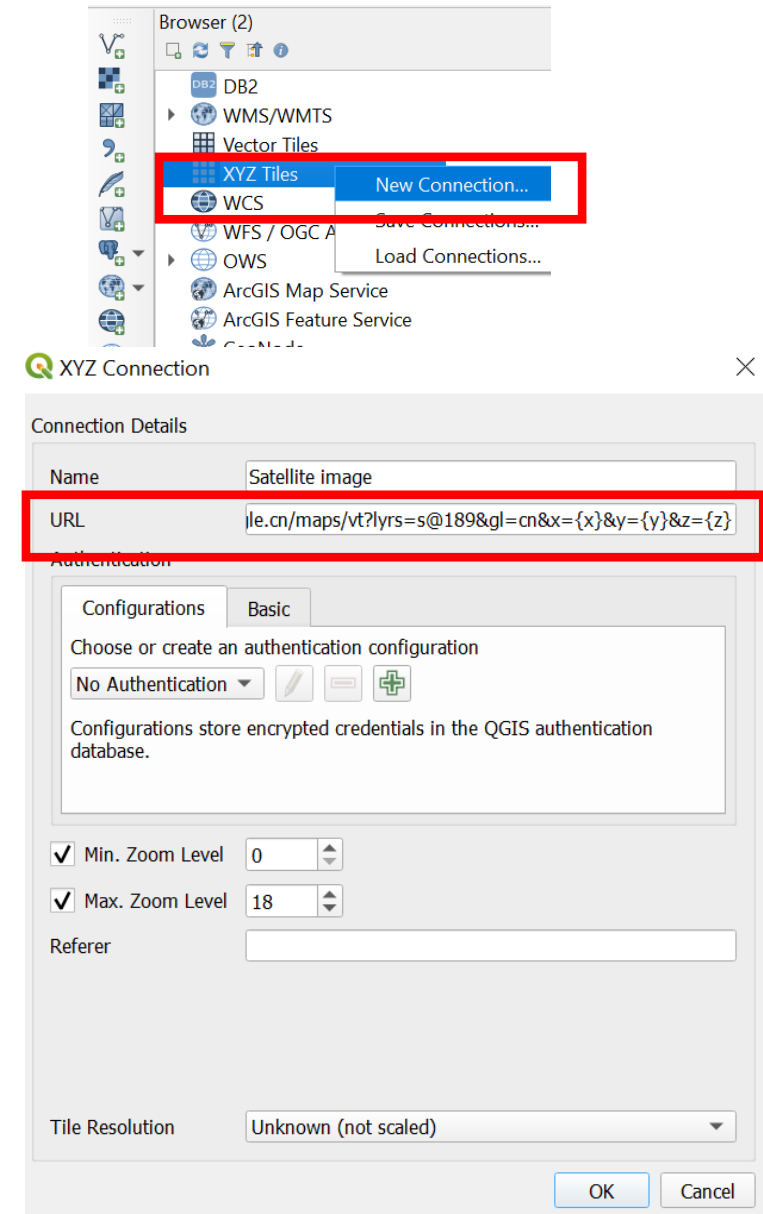
Create your own data with EO
datasets

Create your own data in QGIS

Adding Google satellite image

- Right click on **XYZ Tiles** in the **Browser** panel -> New Connection
- A **XYZ Connection** window appears
- Enter **Name**
- Paste the **URL** given below:
<http://www.google.cn/maps/vt?lyrs=s@189&gl=cn&x={x}&y={y}&z={z}>
- Click **OK**

*For other connections: <https://www.geodose.com/2018/03/how-to-add-google-maps-layer-QGIS-3.html>



Create your own data in QGIS

Adding Google satellite image

- New connection '**Satellite image**' appears in the Browser panel
- Double click on the **Satellite image**

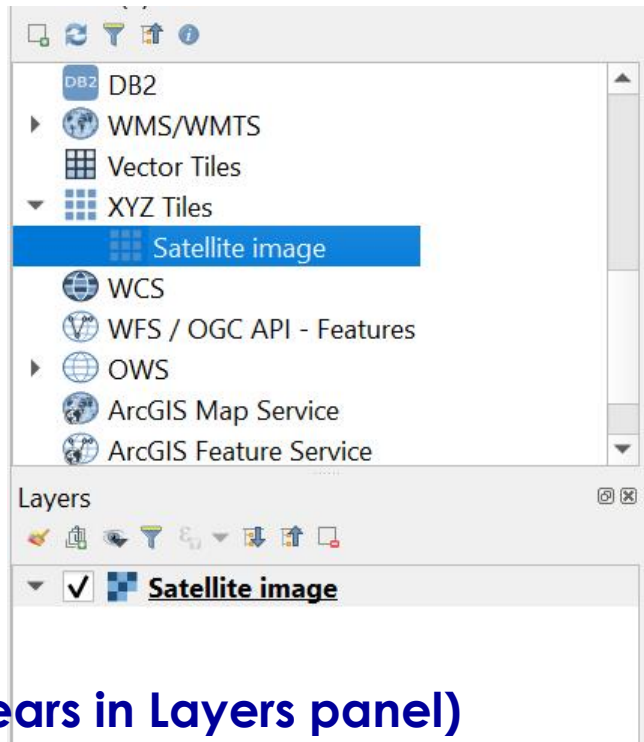


Image appears in Layers panel)



Create your own data in QGIS

Creating new shapefile (Point)

- Navigate to your target region
- Click on the **New Shapefile Layer** icon
- **Browse** the folder where you want to save the created Shapefile & **Name**
- Select **Geometry type** as **Point**
- Type LULC in the **Name** field under **New Field**
- Select **Type** as **Text**
- Click on **Add to Fields List** and **OK**
- Created layer appears in the Layers panel

New Shapefile Layer

File name: Capacity Building in Current Systems & General Training\Women GIT -June 2021\Day 3\LULC_.shp

File encoding: UTF-8

type: Point

dimensions: ☒ None ☐ Z (+ M values) ☐ M values

CRS: EPSG:32642 - WGS 84 / UTM zone 42N

New Field

Name: 123 Whole Number

Type: Integer

Length: 10 Precision:



Fields List

Name	Type	Length	Precision
id	Integer	10	
Name	String	80	
Class	Integer	10	

Buttons: Add to Fields List, Remove Field, OK, Cancel, Help

Create your own data in QGIS

Editing of newly built shapefile (Point)


- Select the layer from the Layer panel
- Click on the **toggle editing** icon 
- **Digitizing toolbars** is highlighted
- Click on the Add point feature icon 
- You will observe a circle cursor follows your mouse
- Start collecting point features

LULC	
<input checked="" type="checkbox"/>	BU
<input checked="" type="checkbox"/>	CL
<input checked="" type="checkbox"/>	Forest
<input checked="" type="checkbox"/>	Snow
<input checked="" type="checkbox"/>	Water



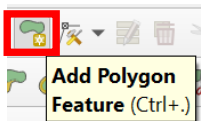
Create your own data in QGIS

Creating new shapefile (Polygon)

- Follow the same steps to create polygon shapefile
- Once the polygon layer is added in the Layer Panel, click on **toggle editing mode** 

- **Advanced Digitizing Toolbar** is highlighted 

- Click on the icon **Add Polygon feature**



Newly build polygon shapefile



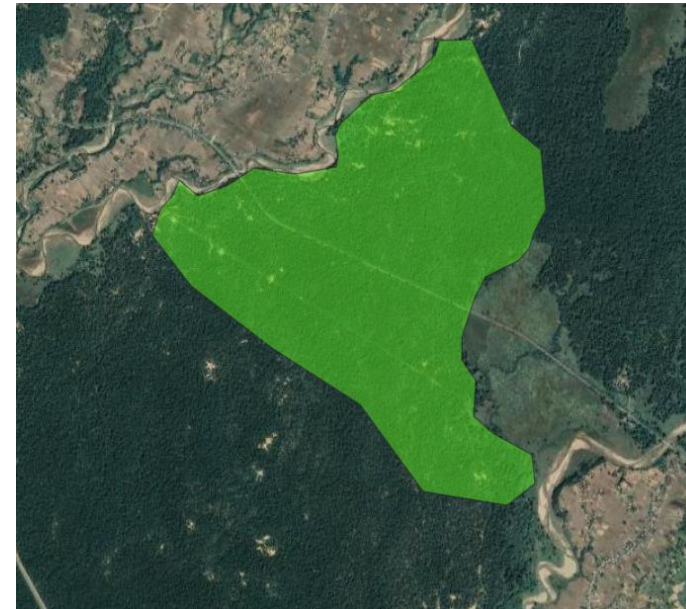
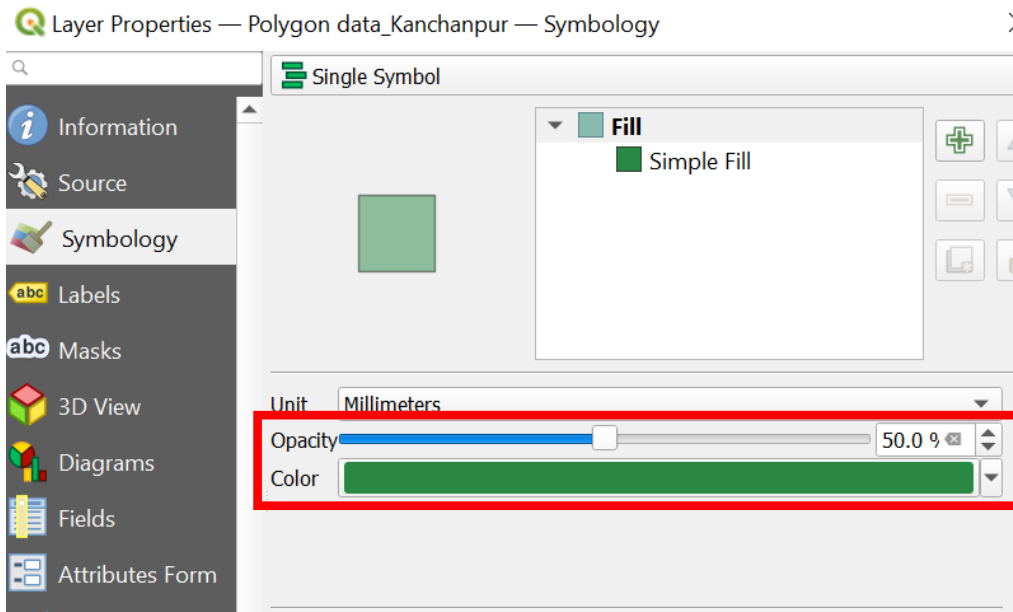
- Start digitization

Create your own data in QGIS

Editing of newly built shapefile (Polygon)

Setting transparent color to polygon


- Click on **Properties-> Symbolology**
- Change the **opacity** parameter from 100% to **50%**
- Click apply

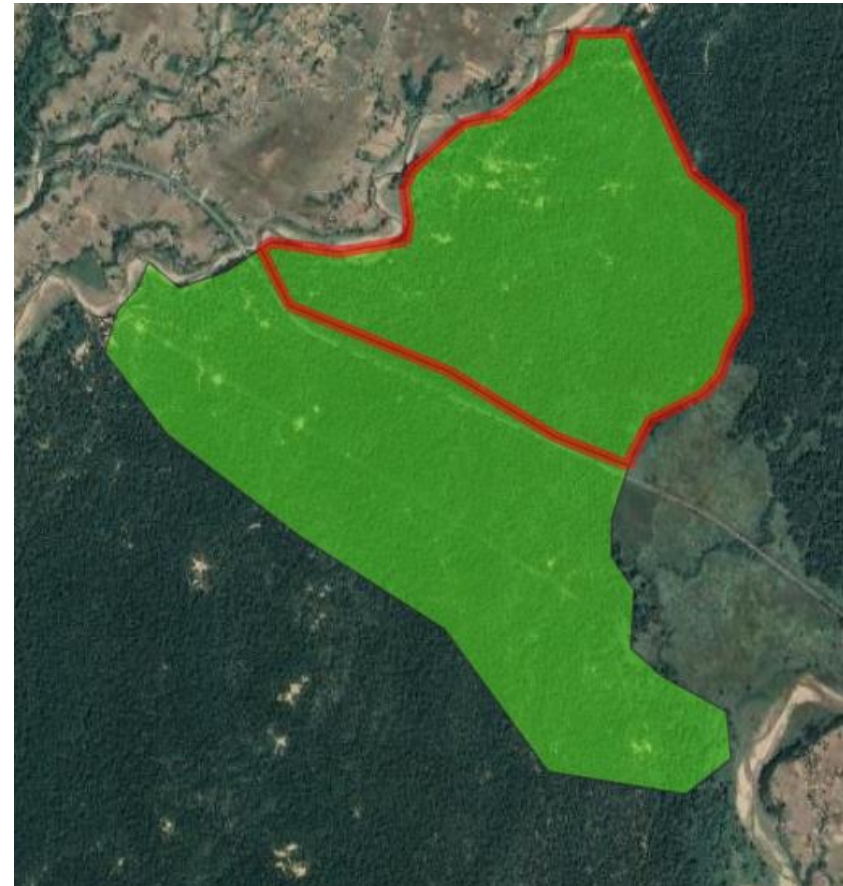


Create your own data in QGIS

Editing of newly built shapefile (Polygon)

Splitting polygon


- Select layer in the Layer Panel
- Click on the **Split Feature** icon 
- Place your mouse on the polygon (from where you want to split) and click outside the polygon
- Drag the mouse over the another end of the polygon (where you want to end the split) and click and then right click
- Polygon is splitted into two

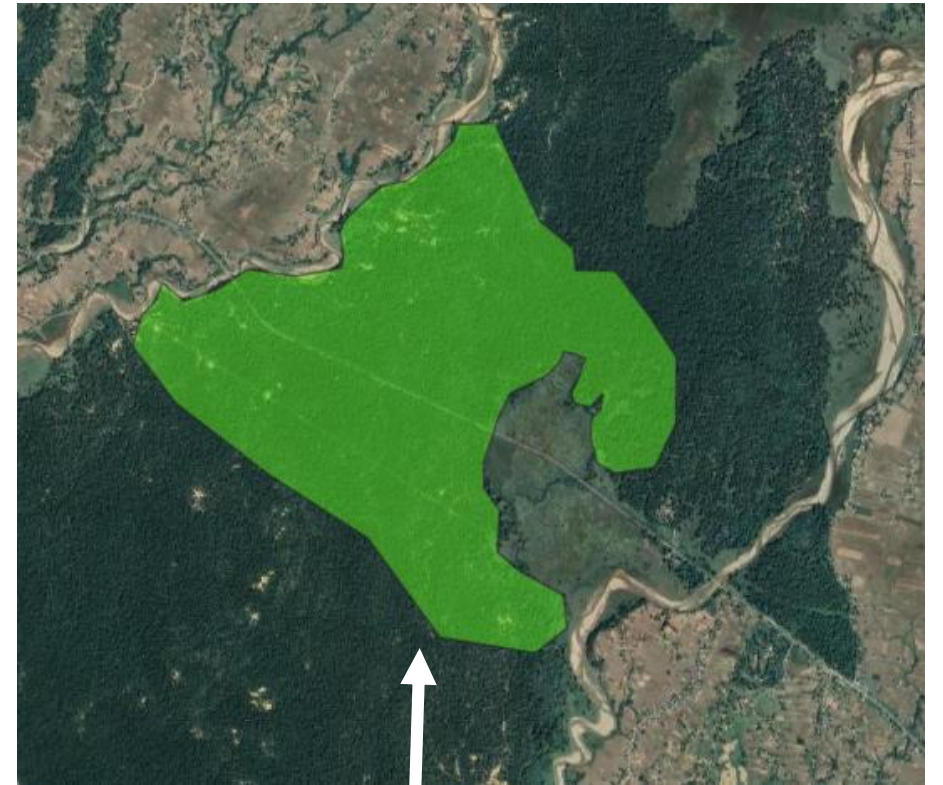


Create your own data in QGIS

Editing of newly built shapefile (Polygon)

Reshape polygon (helpful for adding or deleting certain region)

- Select your layer
- Click on the **Reshape Feature** icon 
- Place your mouse (where you want to add the part)
- Start digitizing from the inside of the polygon
- Come back to the inside of the polygon and click and then right click



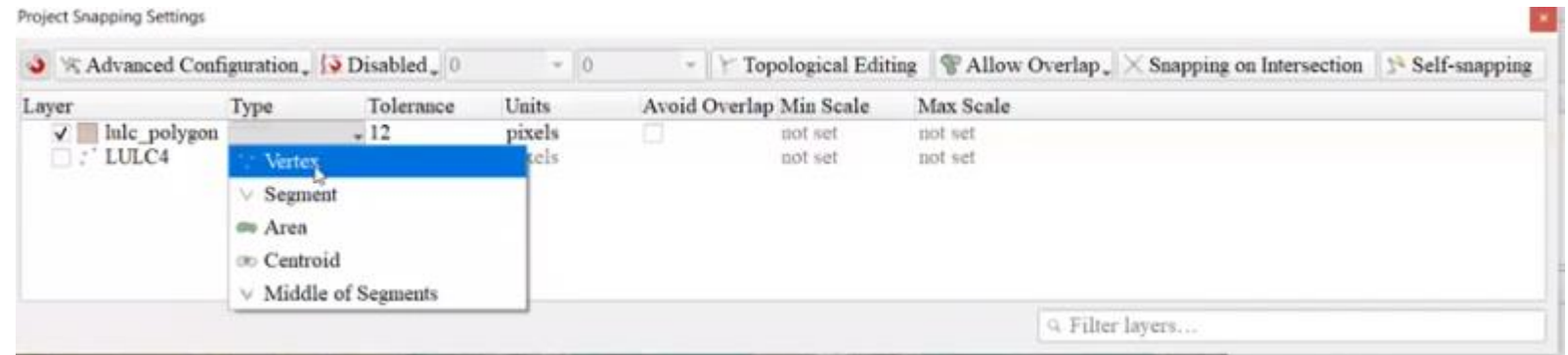
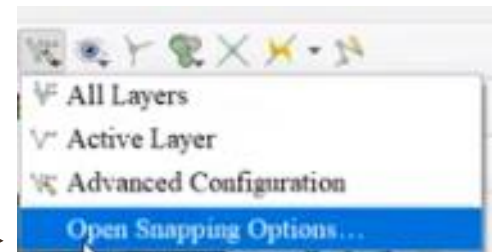
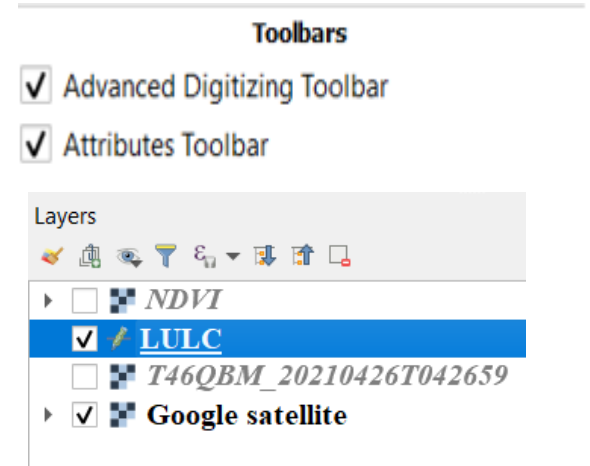
Reshaped feature

Create your own data in QGIS

Editing of newly built shapefile (Polygon)


Using Snapping tool (Helpful for tracing and snapping at intersection)

- Click on the **Enable Snapping** icon 
- Click on **Advanced Configuration**
- Edit **Advanced Configuration** and select the editable layer/layers in which you want to trace
- Select the **Open Snapping Options** and set your preferences



Create your own data in QGIS

Editing of newly built shapefile (Polygon)

- Select the Add polygon icon 
- Select the layer you want to trace
- You will notice a purple color icon snapping guideline follows your mouse cursor
- Start tracing
- Click on the polygon and finish the tracing



Can you create the line (road) data?



Thank you

Let's protect
the pulse.