



ICIMOD

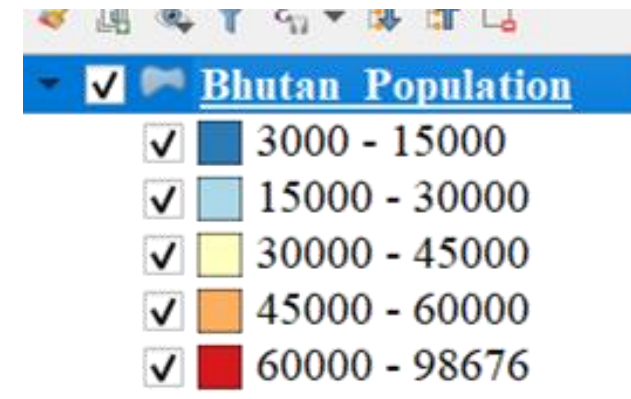
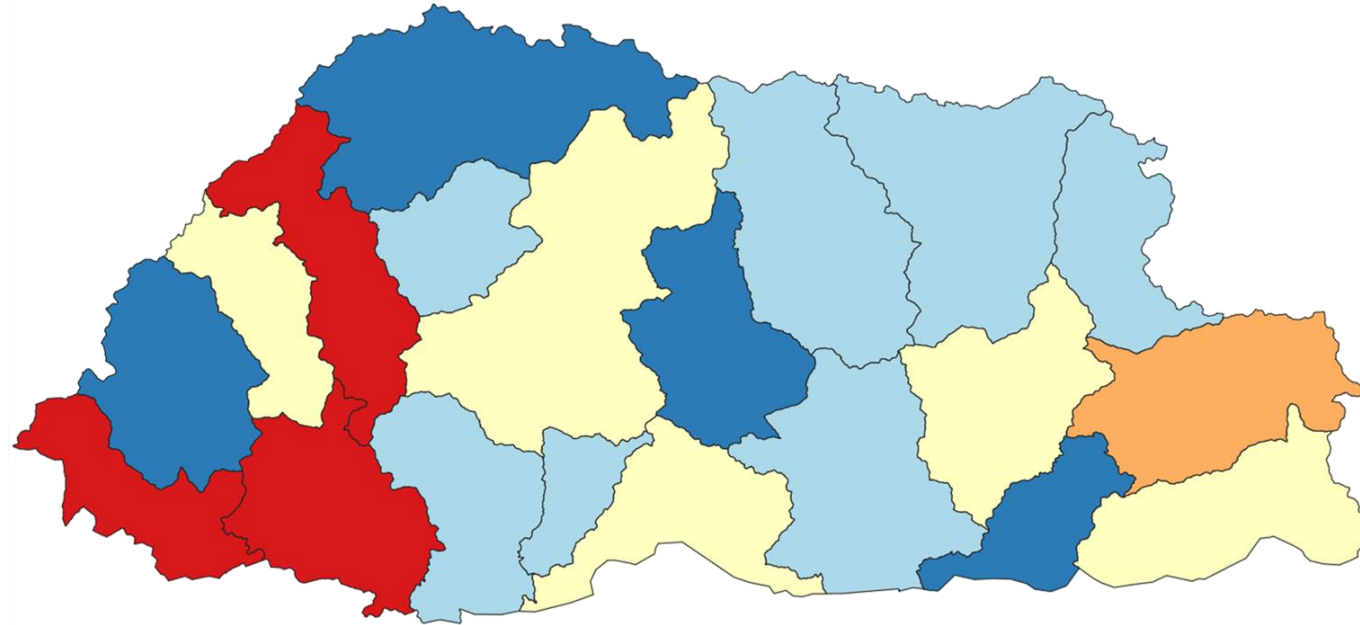
Empowering Women in Geospatial Information Technology

Map production


Poonam Tripathi

Map production in QGIS

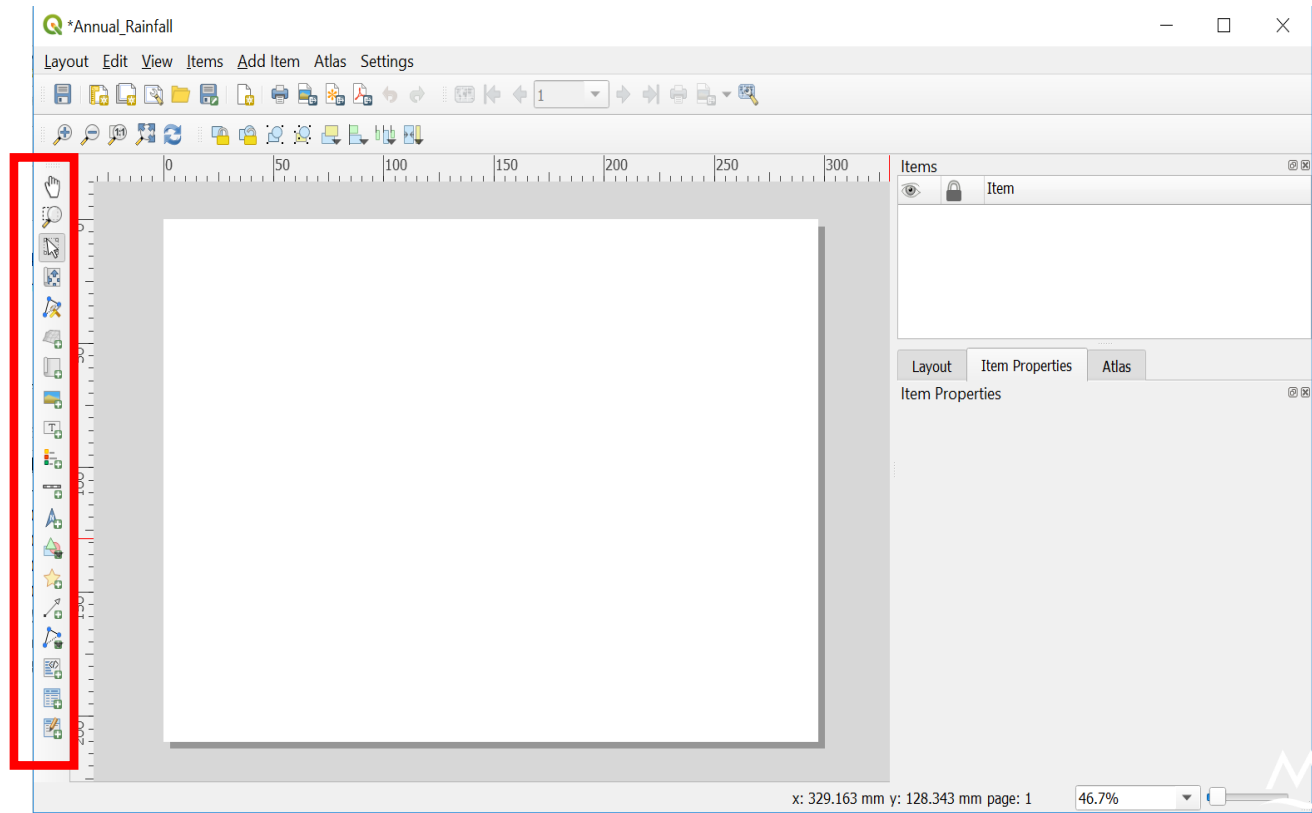
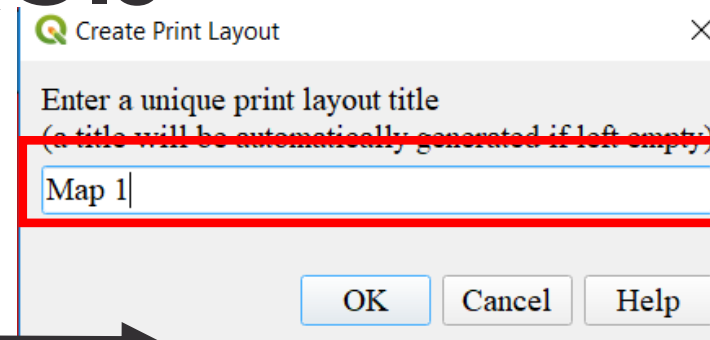
- Open the **Bhutan_Population.shp** file in QGIS from the folder **Day1 \Exercise 1**
- Select and edit the **Symbology** for the field you want to display in the Map
(In this case **Popul_2005**)



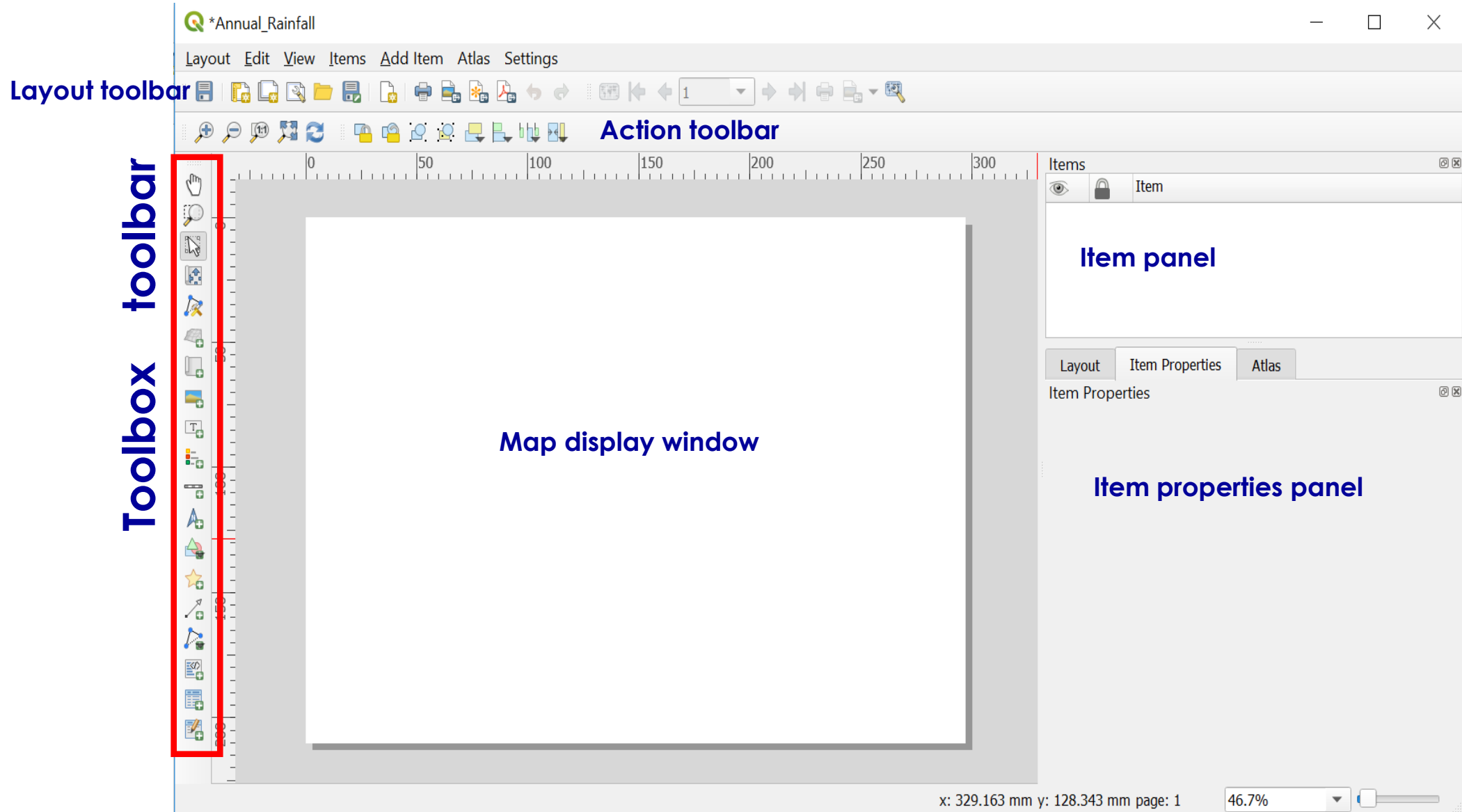
Map production in QGIS

- Click on the **New Print Layout** icon 
- A window **Create print layout** will appear
- Enter the title in the window and click **OK**
- A new **print layout** window opens


Toolbox toolbar

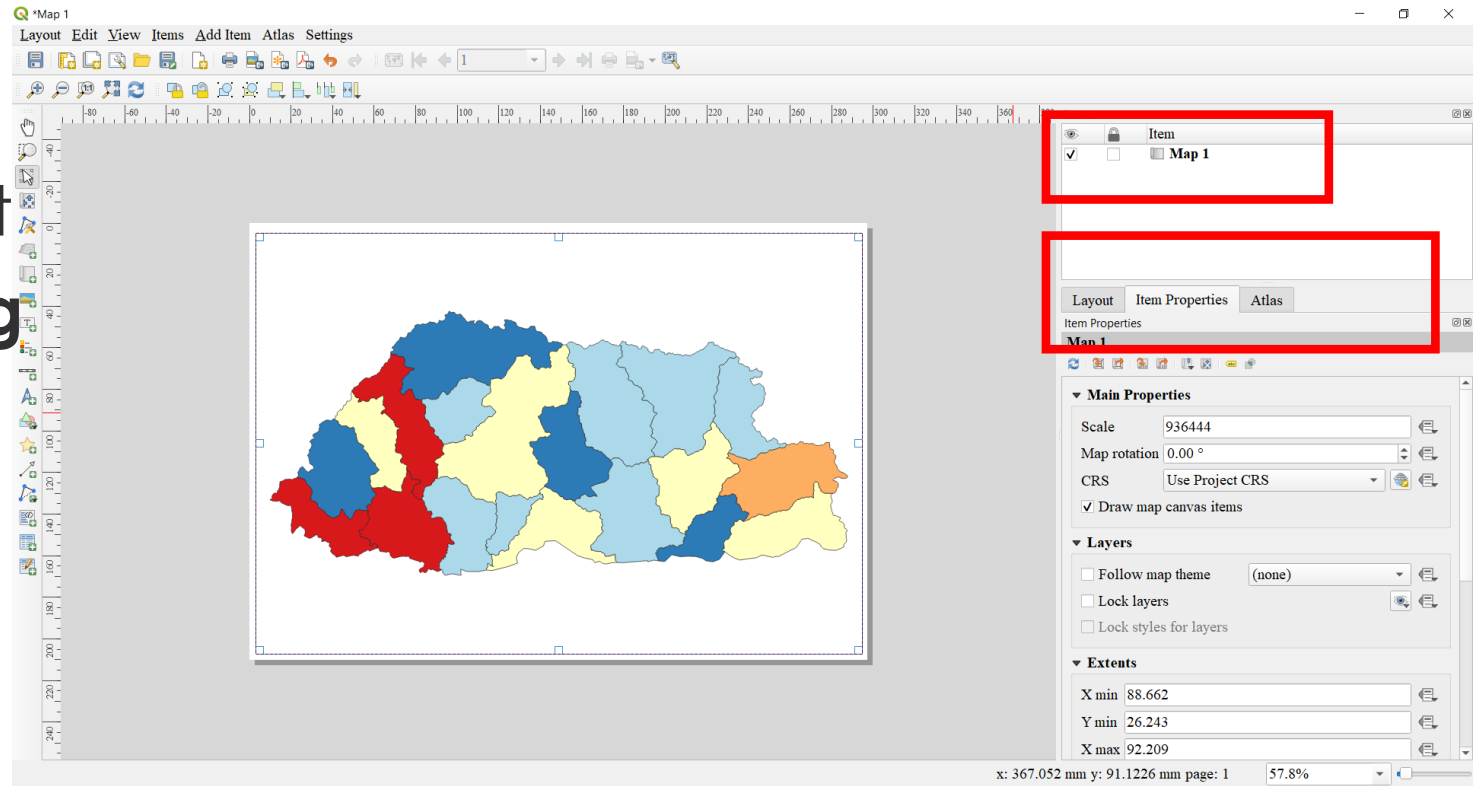


Map production in QGIS



Map production in QGIS

- Click on the **Add map** icon  from the toolbox toolbar
- A **+** sign arrow follows your mouse
- Place the mouse on the upper left corner of the print layout and **drag** towards lower right corner
- The map appears on the print layout screen
- Under the Item panel you will be able to see **Map 1** and **Item properties**



Map production in QGIS

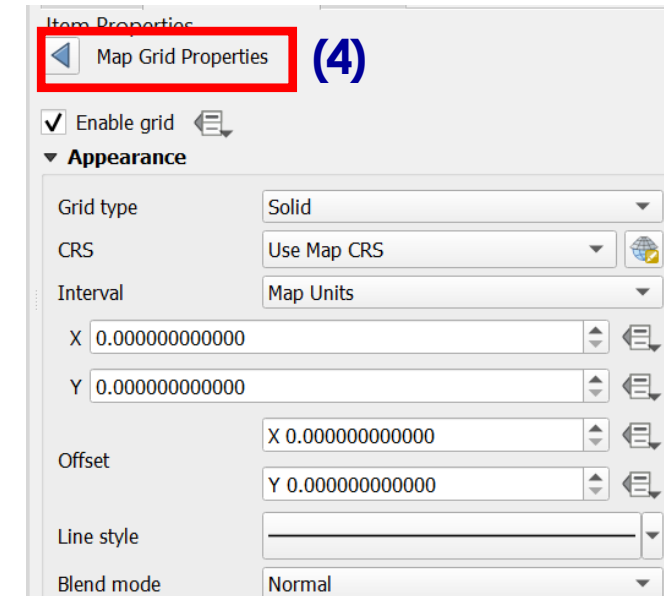
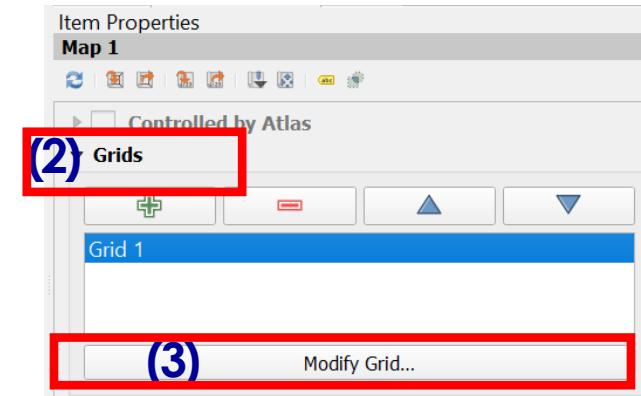
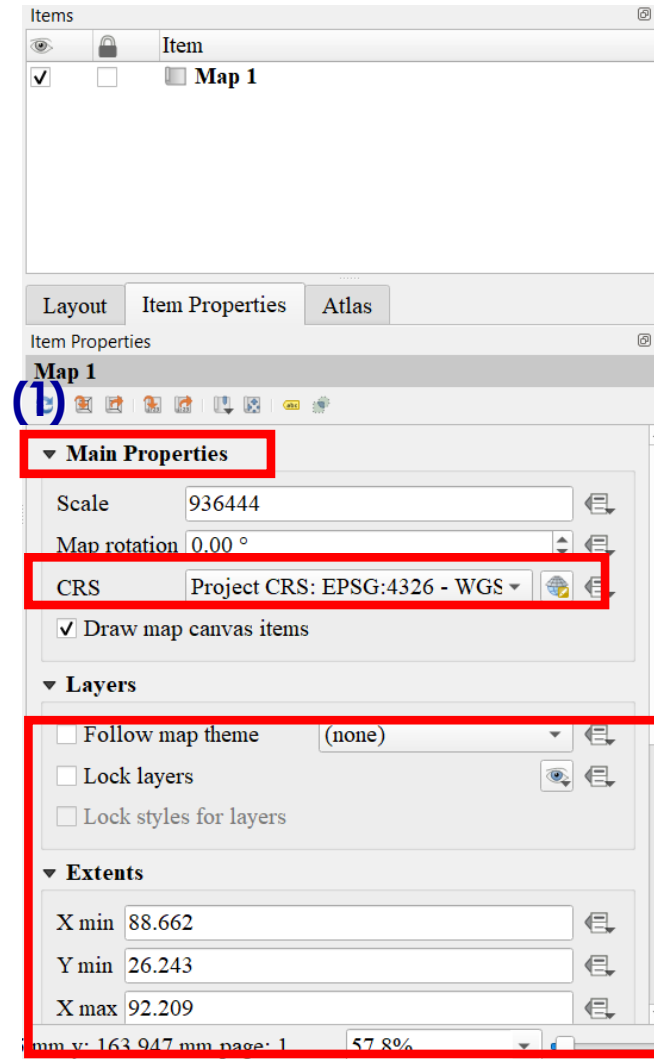
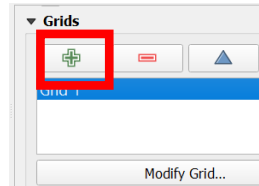
1. Under the **Main Properties** drop down the arrow under **CRS** and select **Project CRS: EPSG:4326-WGS 84**

➤ You will observe the extent is displayed in **lat/long**

2. Scroll down the Item Properties -> click on the **Grids** -> + sign

3. Click on **Modify Grid**

4. The Map Grid Properties will appear



Map production in QGIS

1. Set the **X** and **Y** values as **1** below
Interval

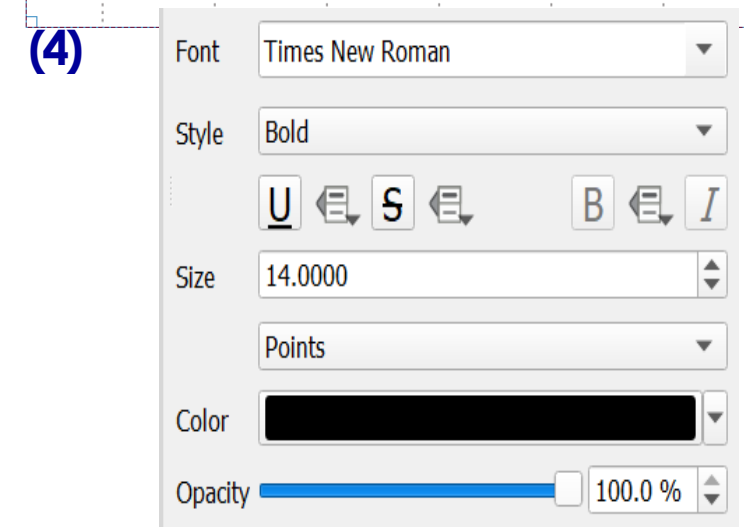
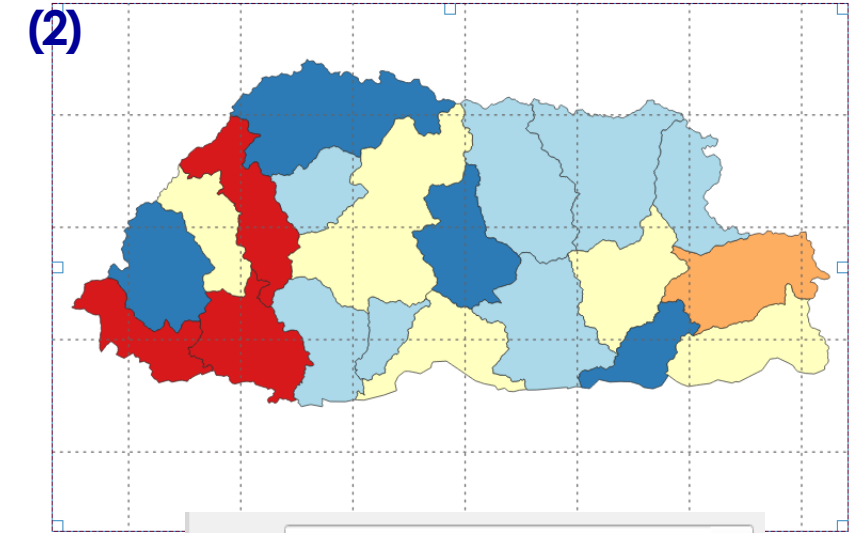
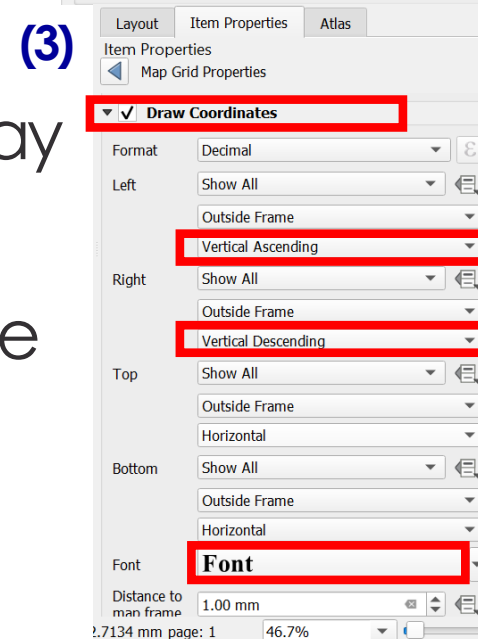
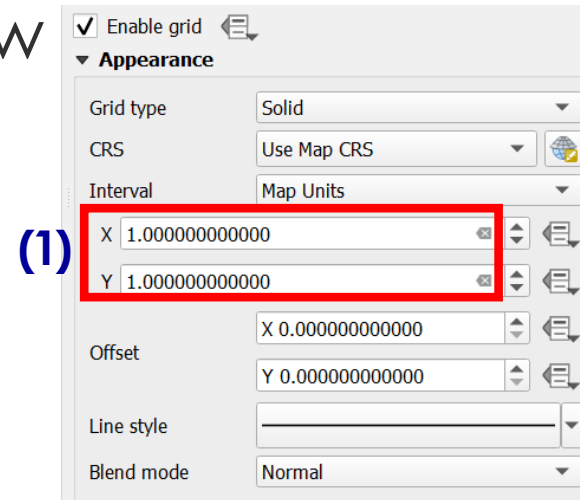
2. Grids appear on the Map

3. Scroll down the Map Grid Properties -> click on **Draw**

Coordinates

➤ Change the **Left** and **right** display of Coordinates

4. Change the **font** properties of the coordinates



Map production in QGIS

5. Set the **coordinate precision** as 0
6. Coordinates appear on the Map

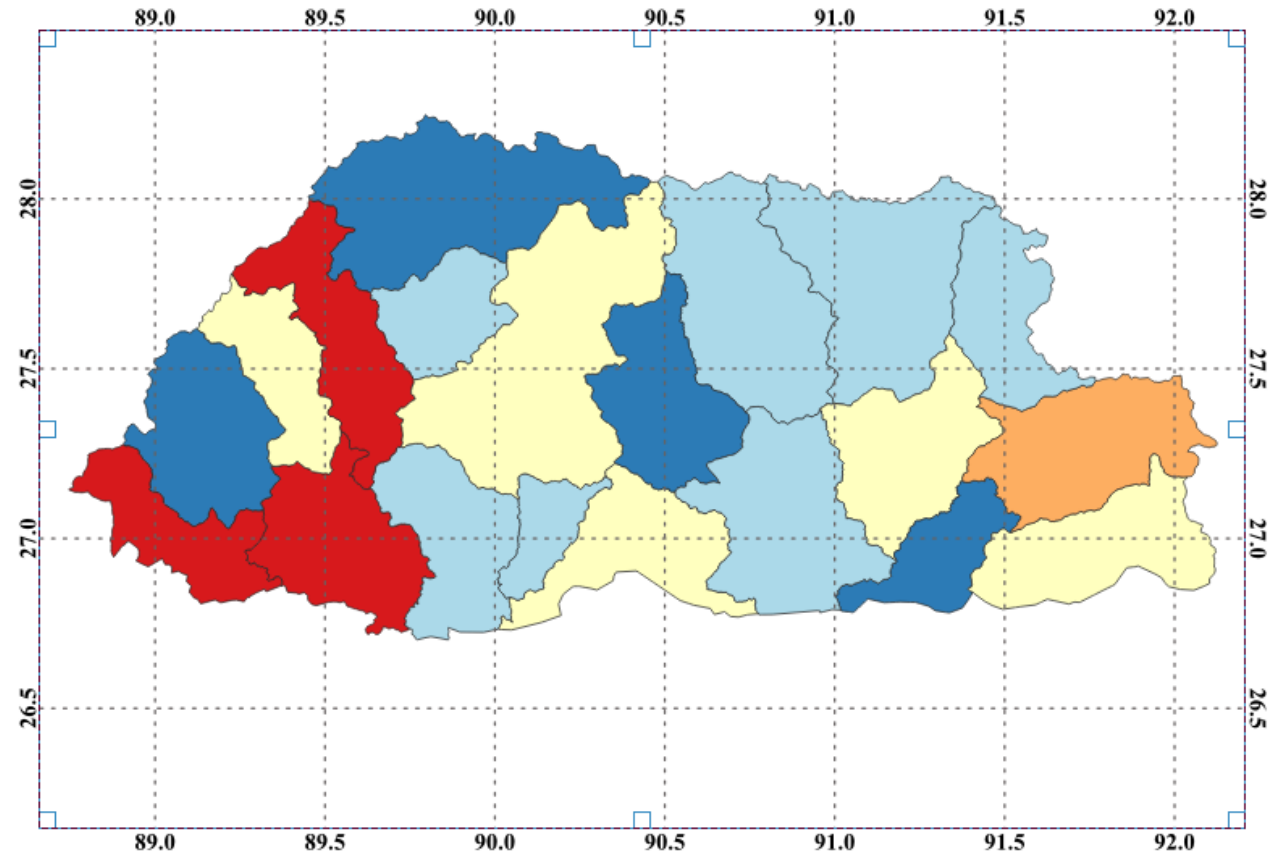
(5)

Font

Distance to map frame

Coordinate precision

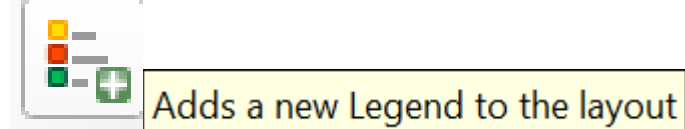
(6)



Map production in QGIS

1. Click on the **Frame** to add the frame of the Map and edit the properties i.e. Color, Thickness etc.

➤ Click on the icon

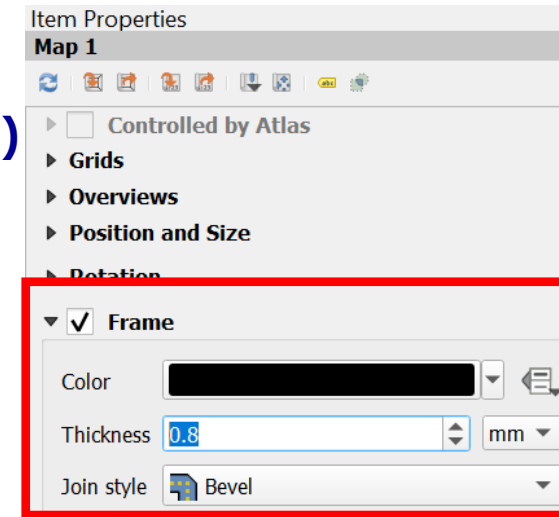


2. Place the mouse on the screen and drag down to place legend

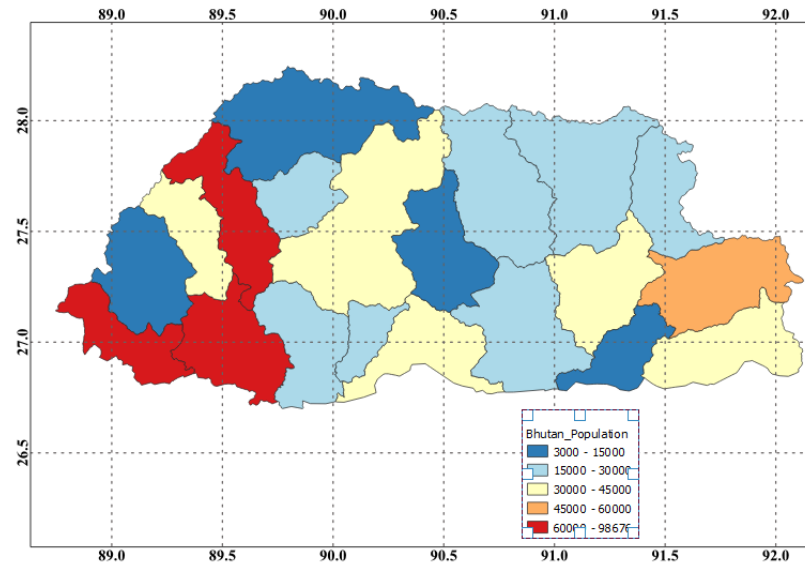
➤ The Legends appear on the print layout screen

3. Under the Item panel you will be able to see Legend

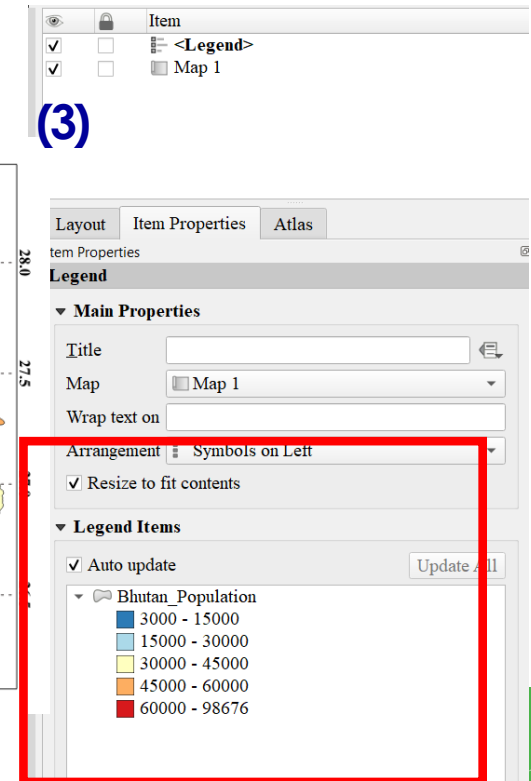
(1)



(2)

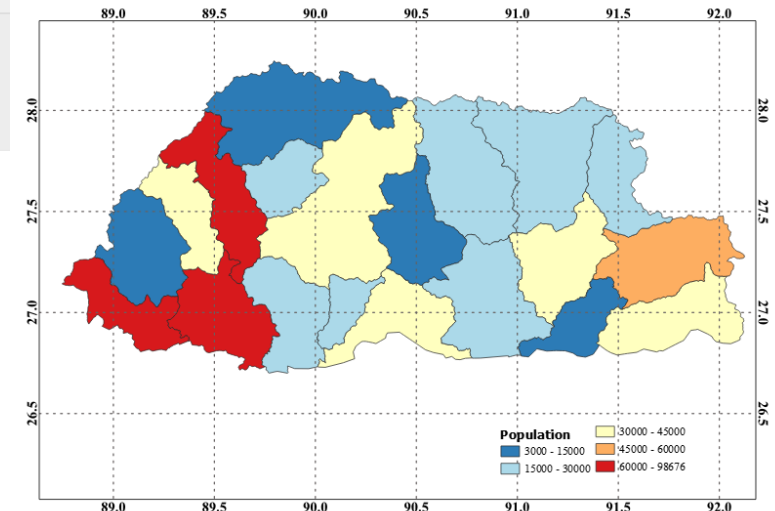
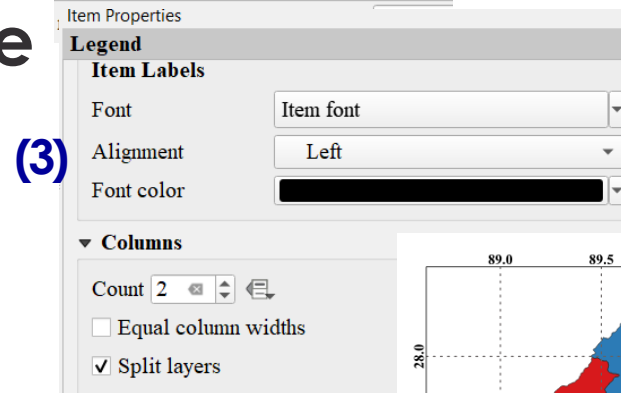
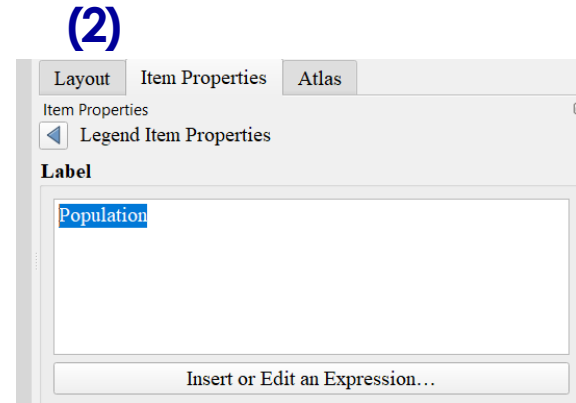
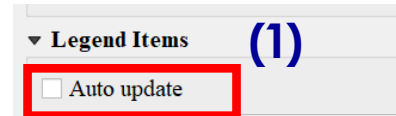


(3)




Map production in QGIS

1. Uncheck the **Auto update** box
2. Double Click on the **Legend Title** and edit the name
 - Check the box **Only show items inside linked map**
 - Click **OK**
3. Edit the font and text properties from Font and Text Formatting option
 - Scroll down and click on **Columns** select **count** and check **Split layers**



Map production in QGIS

- Click on the icon  Adds a new Scale Bar to the layout
- Place the mouse on the screen to place Scale and drag down
- The Scale appears on the print layout screen
- Under the Item panel you will be able to see Scalebar
- **Edit** the properties of Scalebar from Scalebar Main Properties i.e Units, Segments etc.



Scalebar

▼ **Units**

Scalebar units: Kilometers

Label unit multiplier: 1.000000

Label for units: km

Number format: Customize

▼ **Segments**

Segments: left 0, right 3

☒ Fixed width: 75.000000 units

☐ Fit segment width: 50.00 mm

150.00 mm

Height: 3.00 mm


Right segments subdivisions: 1

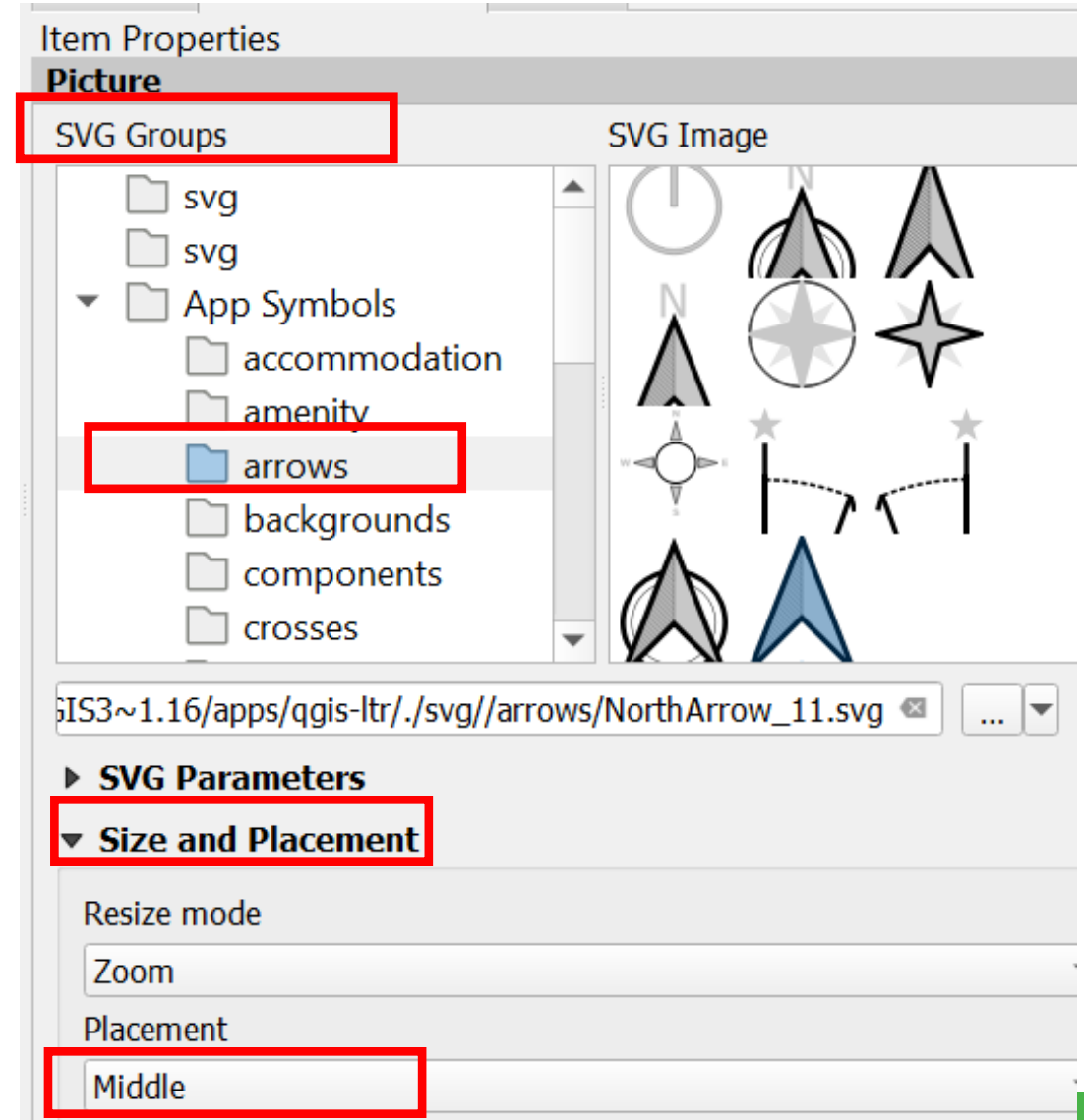
Subdivisions height: 1.50 mm

► **Display**


► **Position and Size**

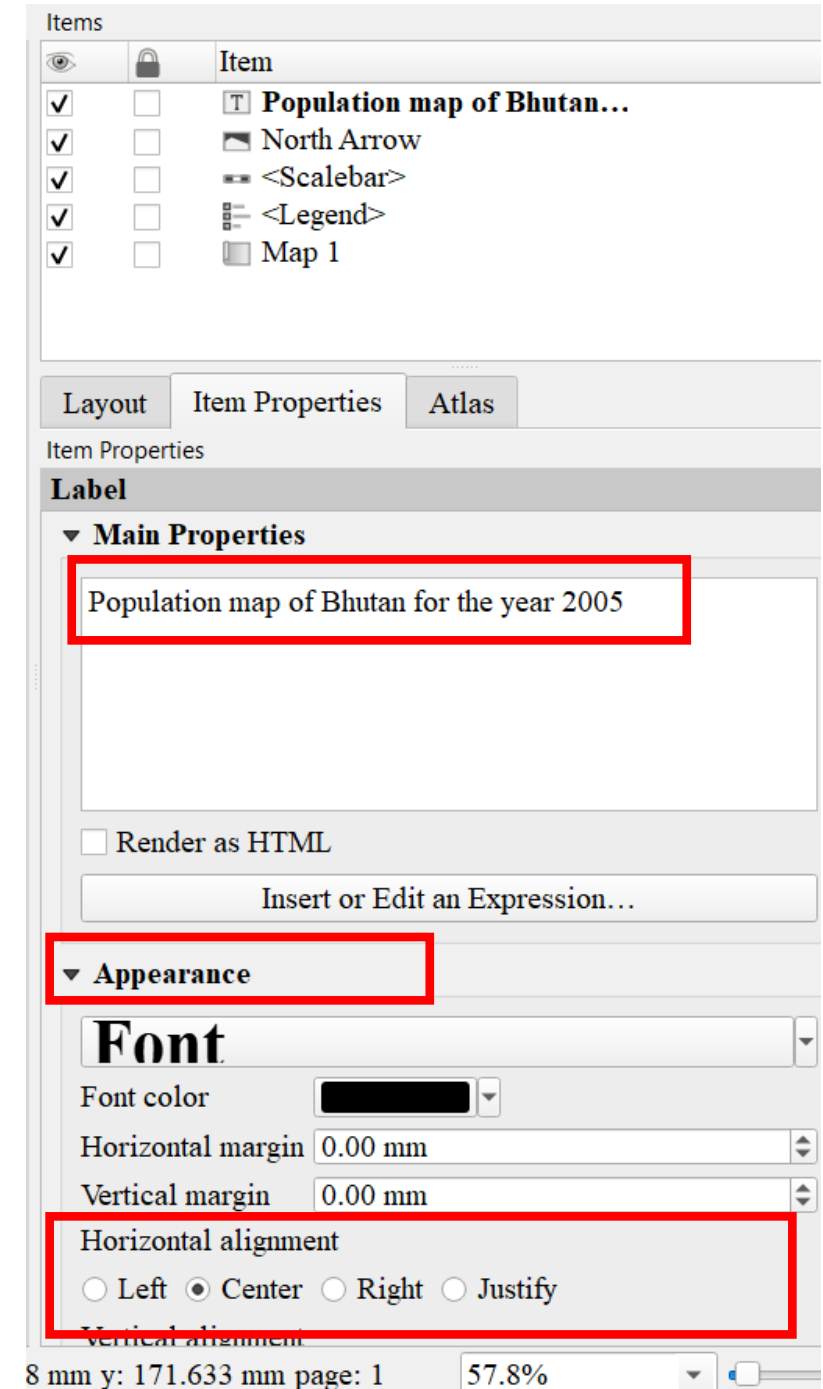
Map production in QGIS

- Click on the icon  Adds a new North Arrow to the layout
- Place the mouse on the screen to place North Arrow and drag down
- The Arrow appears on the print layout screen
- Under the Item panel you will be able to see North Arrow
- You may choose different North arrows from **arrows** under the **SVG groups**
- Edit the **size** and **placement**



Map production in QGIS

- Click on the icon  Adds a new Label to the layout
- Place the mouse on the screen to place Label on the screen and drag down
- Edit the Label from the Main Properties
- Edit the **Font** properties i.e. Type, style, size
- Set the **Horizontal** and **Vertical alignment**



The screenshot displays the QGIS interface with the 'Items' panel on the left and the 'Item Properties' panel on the right. The 'Items' panel lists several items: 'Population map of Bhutan...', 'North Arrow', '<Scalebar>', '<Legend>', and 'Map 1'. The 'Item Properties' panel is currently showing the 'Label' properties for the 'Population map of Bhutan...' item. The 'Main Properties' section shows the label text 'Population map of Bhutan for the year 2005'. The 'Appearance' section is expanded, showing the 'Font' properties. The 'Font' dropdown is set to 'Font'. The 'Font color' is black. The 'Horizontal margin' and 'Vertical margin' are both set to '0.00 mm'. The 'Horizontal alignment' is set to 'Center' (indicated by a selected radio button). The 'Vertical alignment' is partially visible at the bottom.

Items

Item
<input checked="" type="checkbox"/> <input type="checkbox"/> T Population map of Bhutan...
<input checked="" type="checkbox"/> <input type="checkbox"/> North Arrow
<input checked="" type="checkbox"/> <input type="checkbox"/> <Scalebar>
<input checked="" type="checkbox"/> <input type="checkbox"/> <Legend>
<input checked="" type="checkbox"/> <input type="checkbox"/> Map 1

Layout Item Properties Atlas

Item Properties

Label

▼ **Main Properties**

Population map of Bhutan for the year 2005

☐ Render as HTML

Insert or Edit an Expression...

▼ **Appearance**

Font

Font color

Horizontal margin 0.00 mm

Vertical margin 0.00 mm

Horizontal alignment

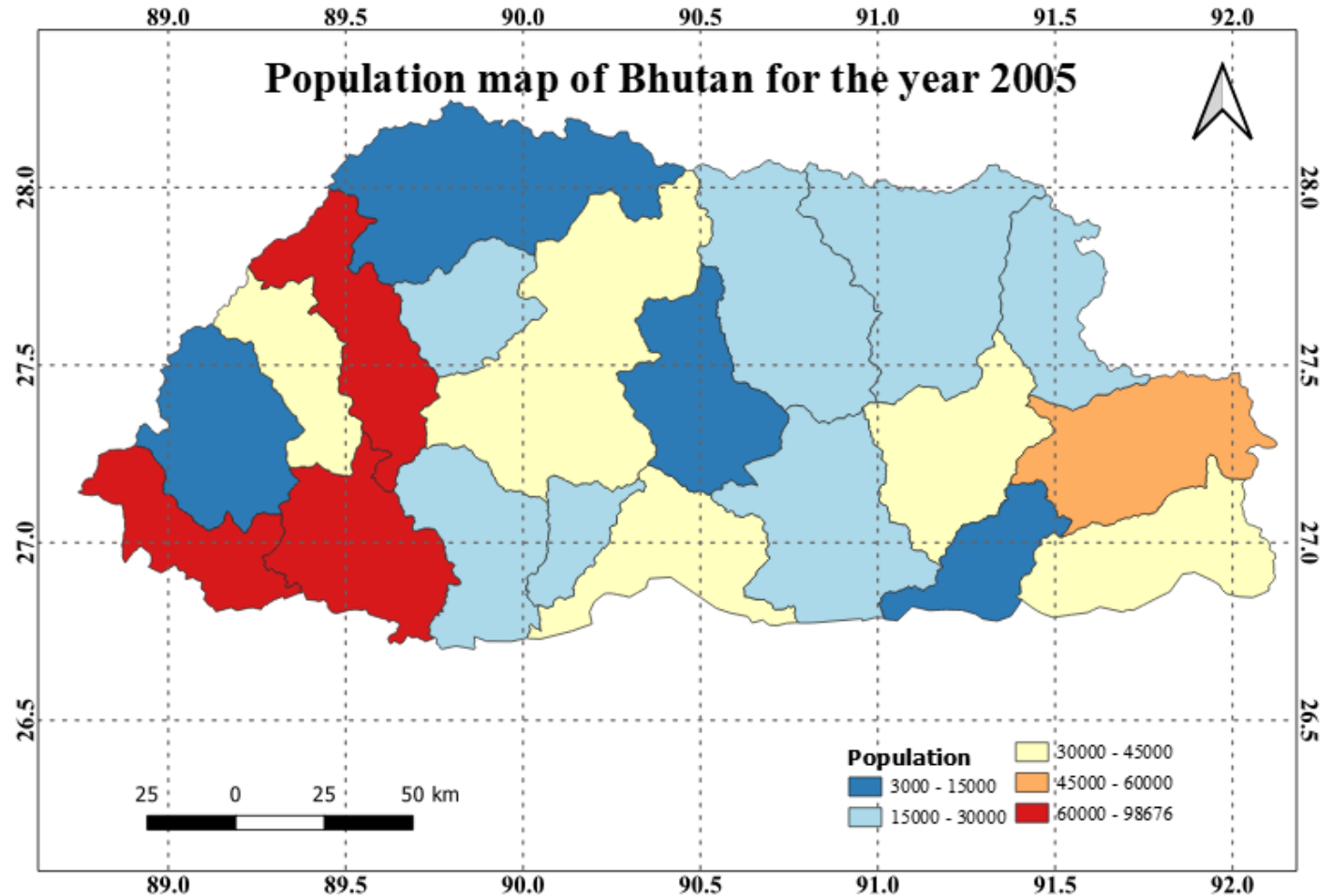
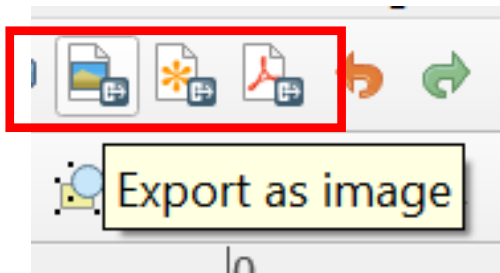
☐ Left ☒ Center ☐ Right ☐ Justify

Vertical alignment

8 mm y: 171.633 mm page: 1 57.8%

Map production in QGIS

- Export your Map as image or pdf
- Click on the icon **Export as image**





Thank you

Let's protect
the pulse.