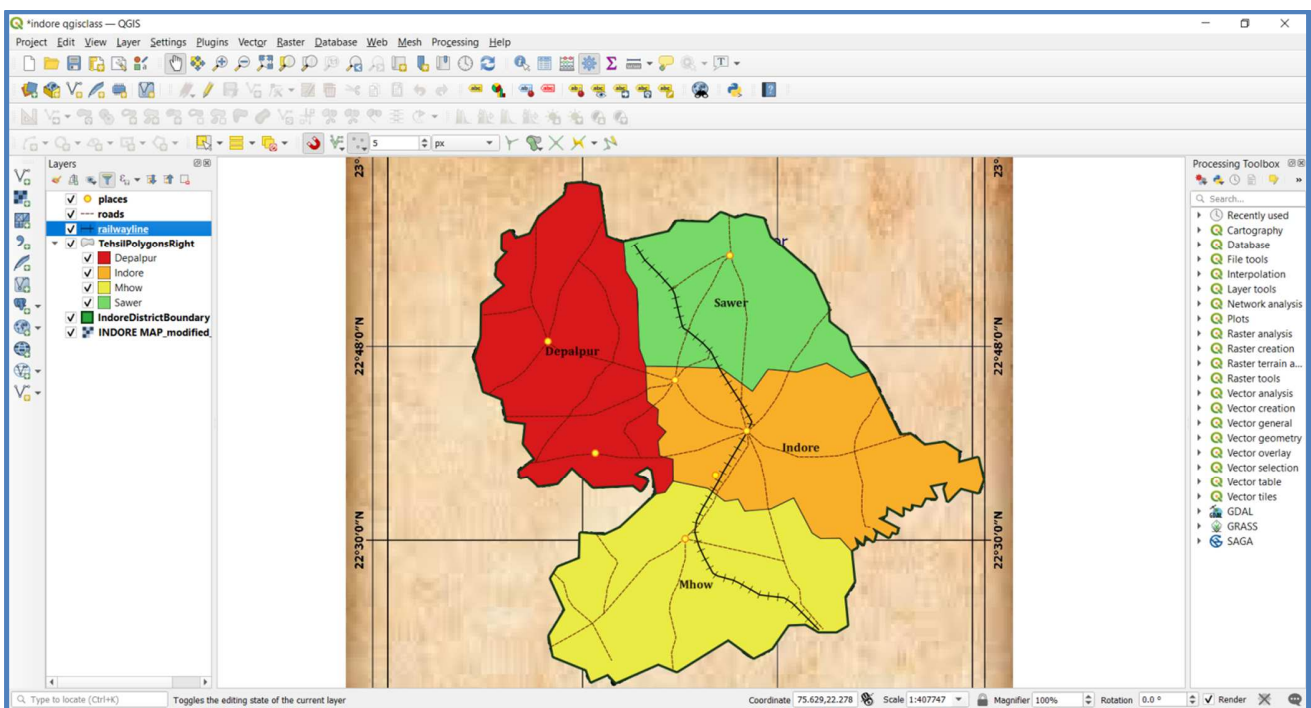


## How to Create a Map using Print Composer

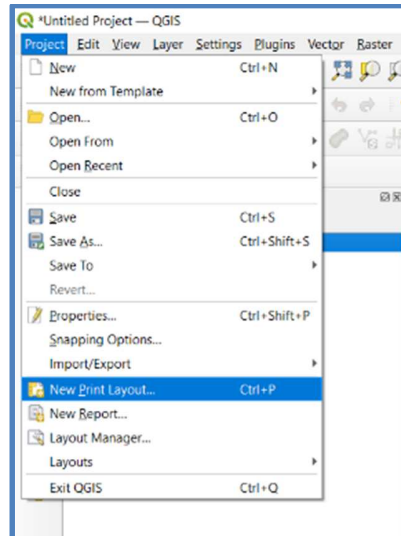
To create a map using Map Composer in QGIS follow the steps given below:

1. Open QIS project you want to work with.

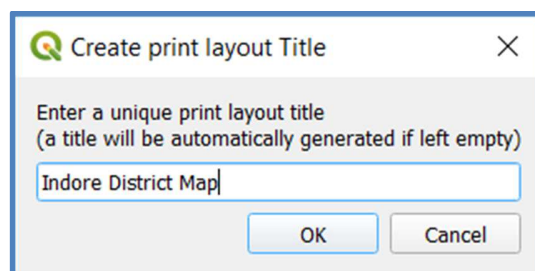


Note : Layers which you want to use or display in print layout keep them on and keep other layers off.

2. Now go to **Project** menu and select **New Print Layout** option.



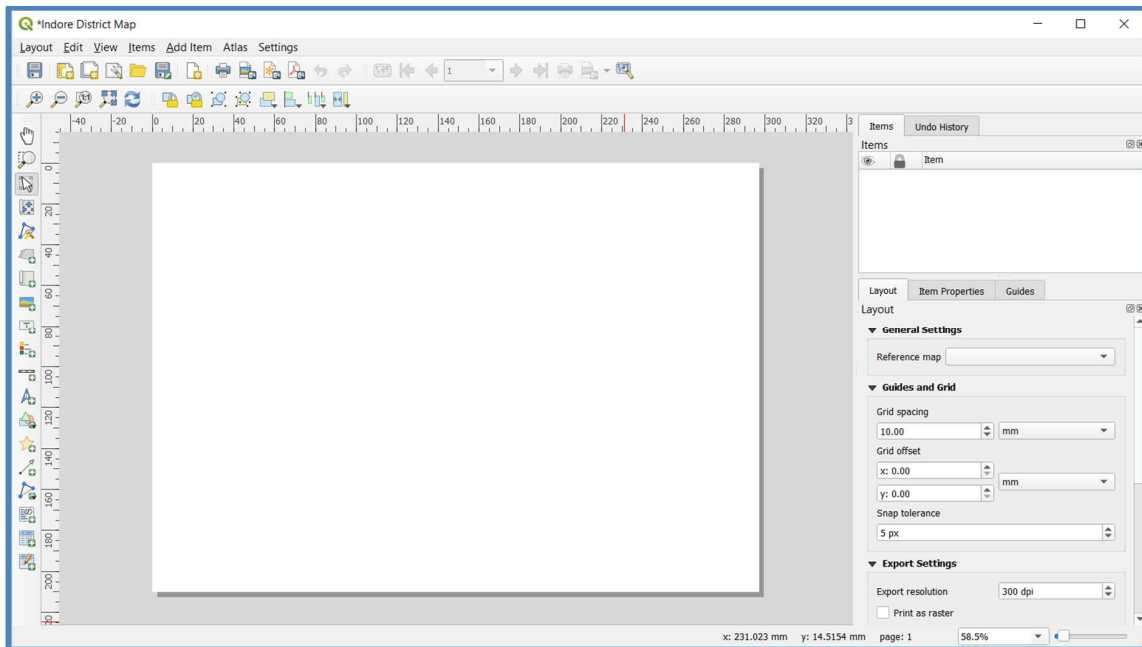
3. **Create Print Layout Title** dialog box opens. Give a suitable name and click on **OK** button.




4. A new **Map Composer** Window will appear. Inside this window you will get various options to edit the map.
  - 4.1 You can see **Atlas Toolbar** and **Action Toolbar** at the top of the screen and **Toolbox** on the left side of the screen.
  - 4.2 On the right side of the screen you can see some panels such as **Item**, **Layout**, **Item Property**, **Guide** etc.
  - 4.3 In the main window you can see a white page where you will see the results of the edition performed by you.

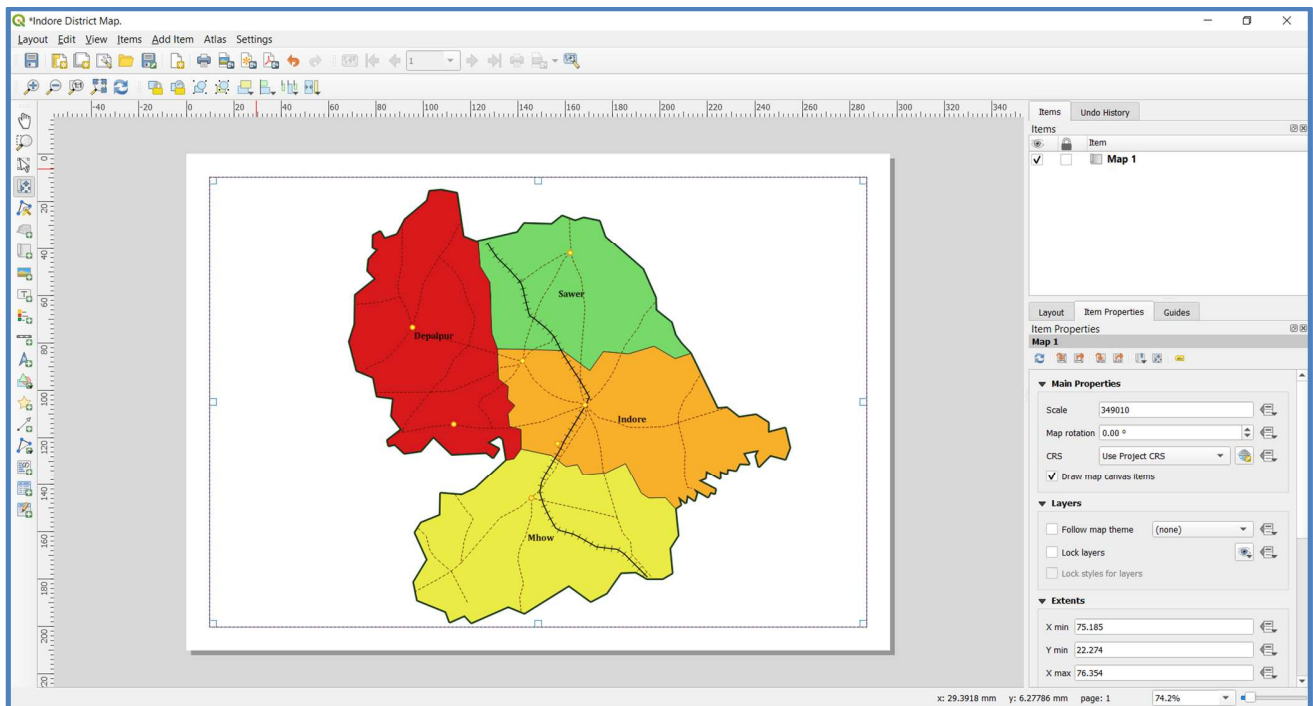
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4.4 In the main window you can see a **Scale Bar** at the top and left side of screen. As you move cursor in the main window the red line also moves in the scale bar.



5. Select the **Add Map** icon  from the **Toolbox** (left).
6. Move the cursor on the composer window and click & drag the plus sign from the upper left corner to the lower right corner of the white area/ page.
7. The map will now appear in the page.

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8. You can adjust the position and the zoom level of the map by using **Move Item Content**



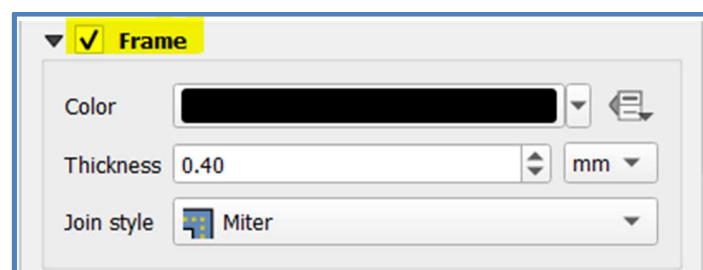
tool.

9. Adding frame to the map:

9.1 In **Item Properties** panel, scroll down to **Frame** menu.

9.2 Enable the Frame menu by checking the **check box** next to Frame.

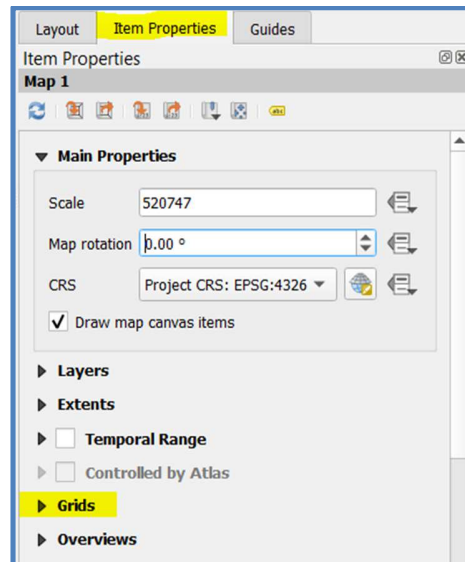
9.3 Select color of your choice. Adjust the thickness. And select joint style.




10. Adding Grids to the Map:

10.1 On the right side of the window go to **Item Properties** panel.

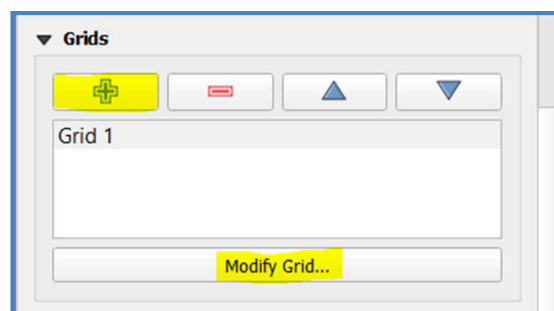
10.2 Now scroll down to **Grid** menu and extend the triangle ▶



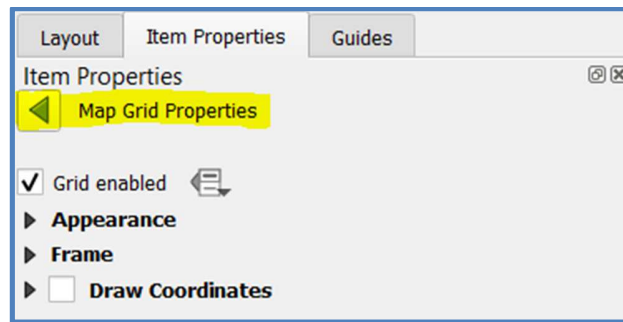
10.3 A popup box will appear.

10.4 Click on green plus sign . You will see an entry named **Grid 1** in the box.

Then click on **Modify Grid...** button.

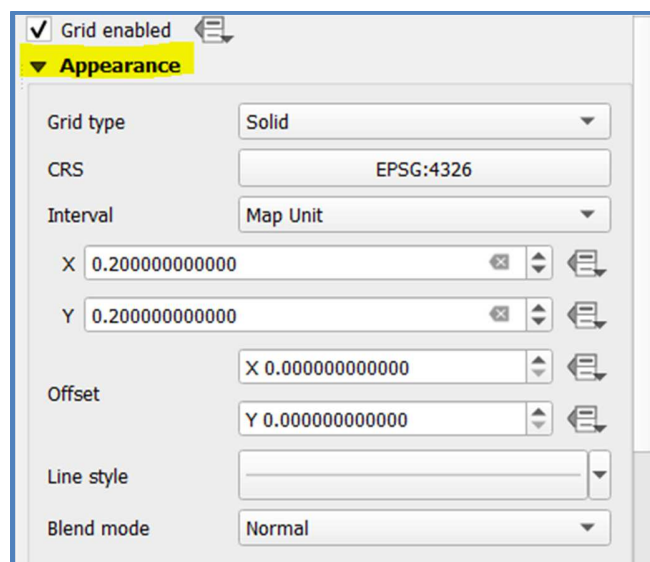


10.5 **Map Grid Properties** panel opens.




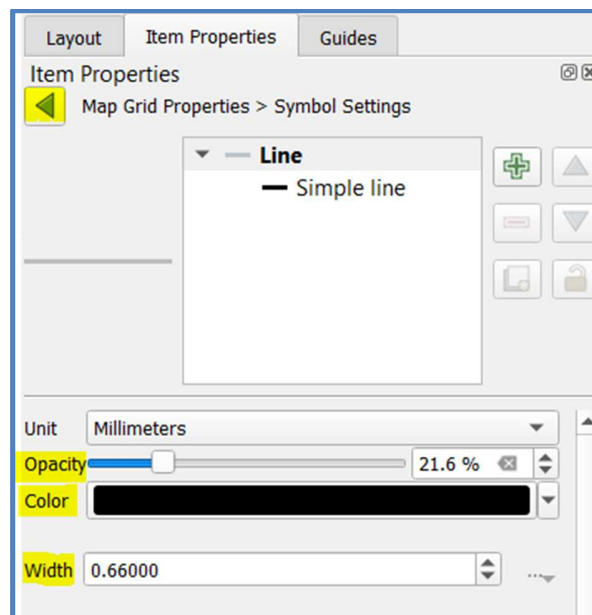
### 10.5.1 Appearance Menu:

- Extend the menu by clicking on the black triangle. ▾
- Select the Grid Type as **Solid** from the dropdown menu next to **Grid Type**.
- Select **CRS** same as the project CRS (**EPSG: 4326 – WGS 84**).
- Select the Interval between the grids as **Map Unit** from the dropdown menu next to **Interval**. And next to **X & Y** type the grid gap as **0.3** (Grids will now appear on the map).
- Leave the offset as such.




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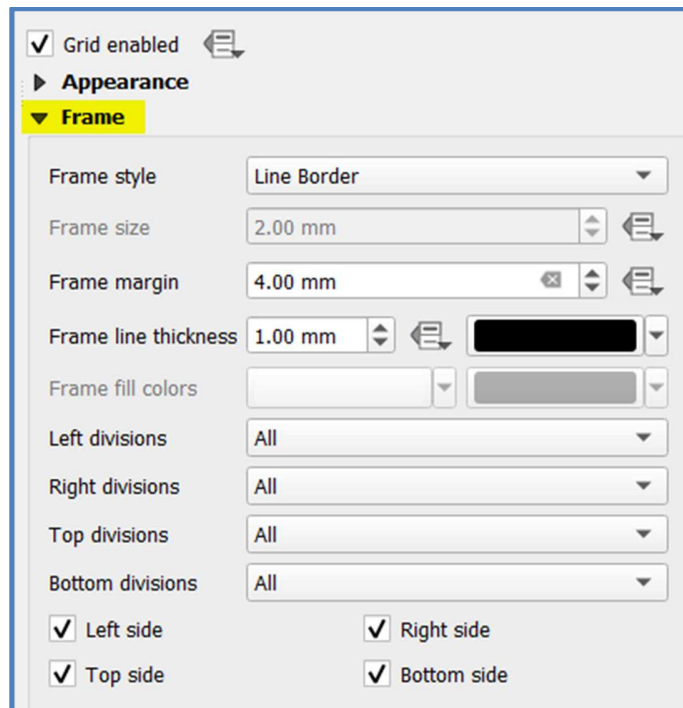
- Click on box next to **Line Style** and select the Line Style as **Simple Black Line**. You can also adjust the **Opacity** and the **Width** of the line. Now go back to the Grid menu by clicking on  icon.



- Select **Blend mode** as **Normal**.

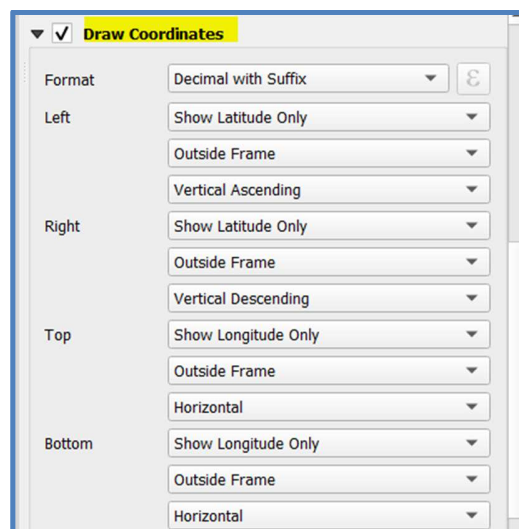
### 10.5.2 Frame Menu:

- Extend the menu by clicking on the black triangle. 
- Select the style of the frame of the map of your choice from the dropdown menu next to **Frame style**.
- Adjust **Frame size**, **Frame Margin** and **Frame line thickness** and choose the color for the frame of your choice. (explore other properties as well).



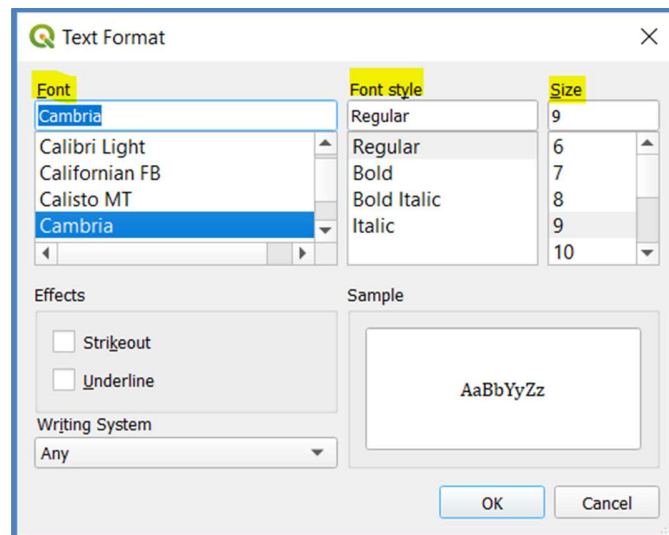
### 10.5.3 Draw Coordinates Menu:

- Extend the menu by clicking on the black triangle.
- Select the format of the coordinates of your choice from the dropdown menu next to **Format**. (Coordinates will now appear next to each grid in the map).
- Explore the styling of the coordinates in **Left**, **Right**, **Top** and **Bottom** menu.

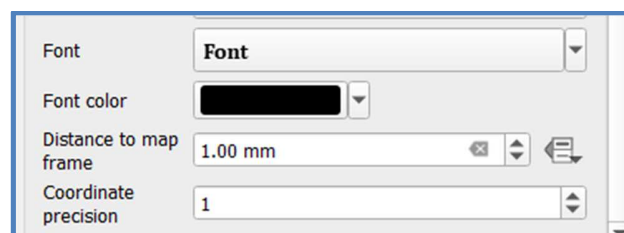


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- Click on the box next to **Font**. A pop up box will appear on your screen. Select **Font**, **Font style** and **Font size** of your choice and click **OK**.

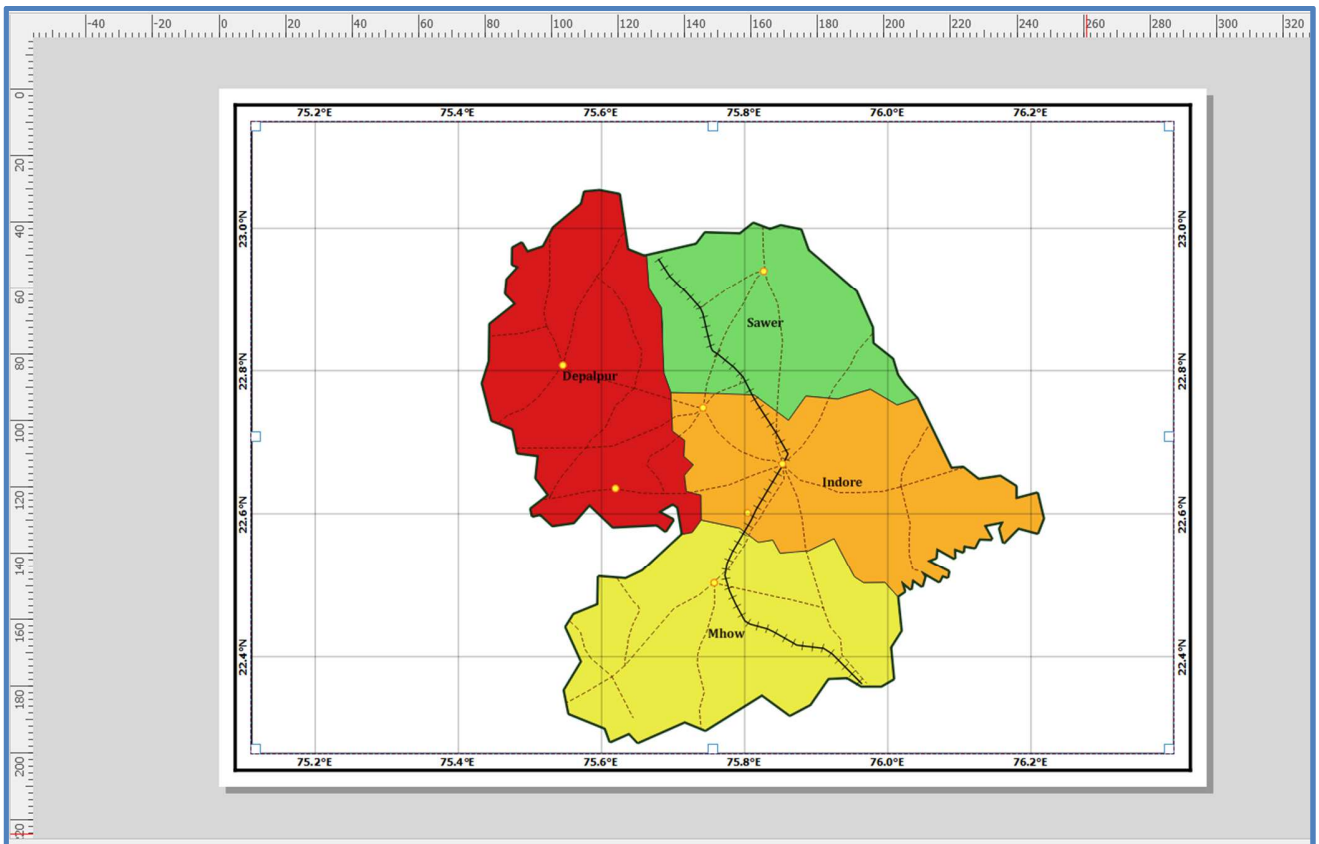


- Select the color of the font of your choice from **Font color** option.
- Adjust the distance of the coordinates from the map by scrolling up or down in the box next to **Distance to map frame**.
- Select precision of the coordinates in the **Coordinate precision** option.




**Notice the changes in the map in the main window after every edition you perform.**

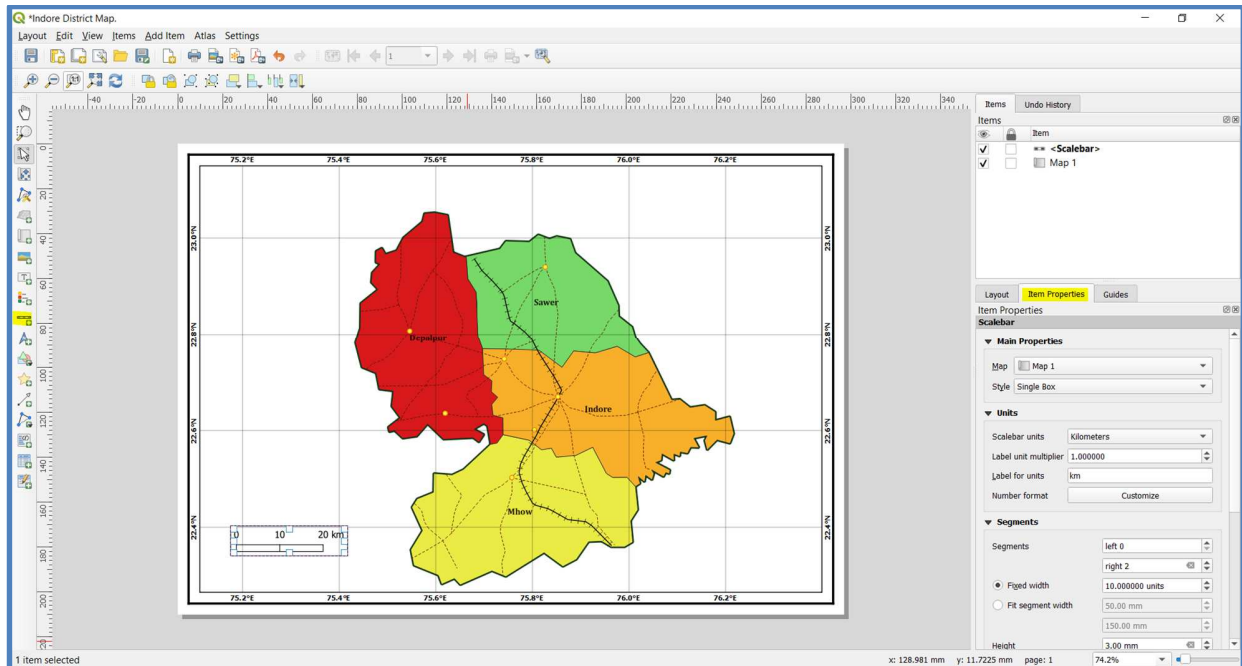
***Your map will look somewhat like this:***




### 11. Adding a Scale Bar to the map:

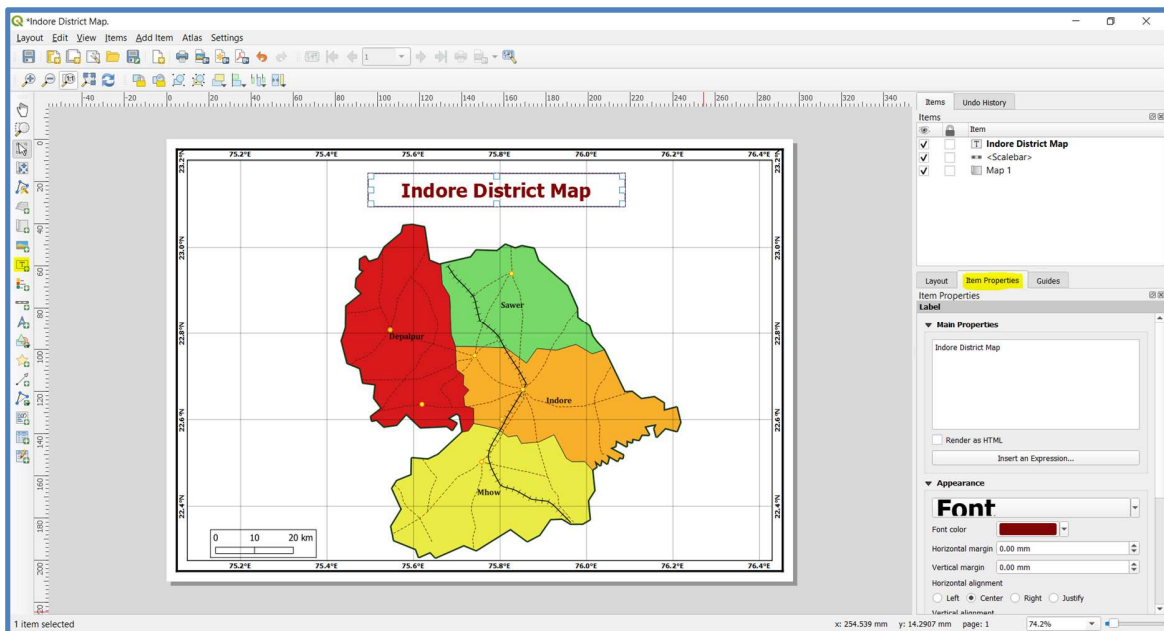
- Go to the **Toolbox** (left side of your screen) and select **Add Scale Bar**  option.
- Move the cursor to the map in the main window and click & drag the plus sign where you want to add the scale in the map.
- Scale bar will now appear in the map.
- Explore the properties of the scale bar in the **Item Properties** panel.

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### 12. Adding Title to the map:

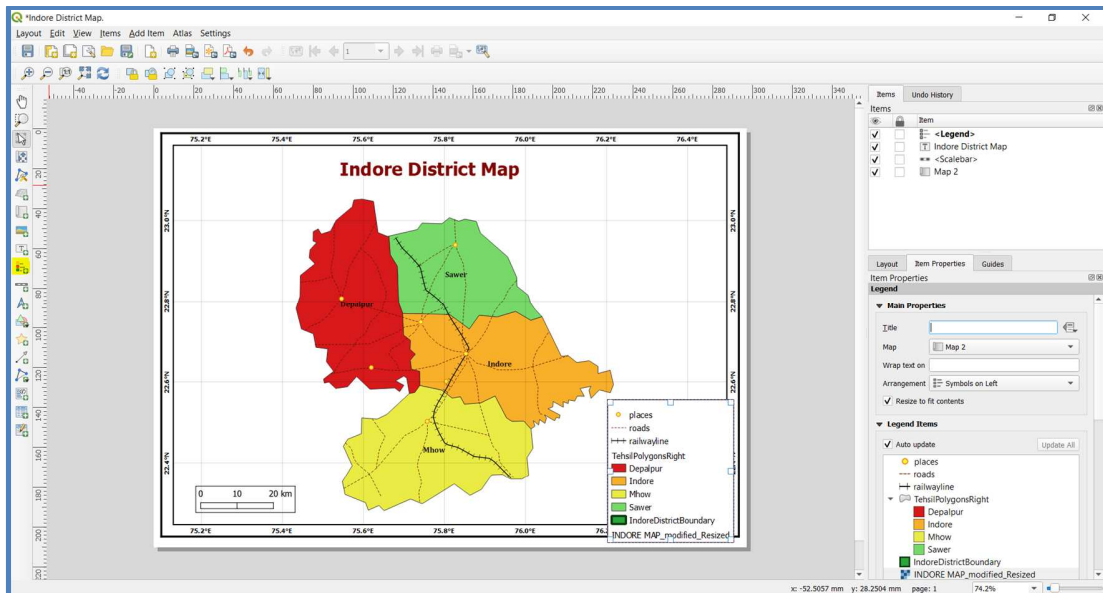
- Go to the **Toolbox** and select **Add Label**  tool.
- Drag a box on the top side of the map.
- Go to **Item Properties** panel.
- Give a suitable name to the map in the **Main Properties** box. In the **Appearance** menu select suitable styling for the map title.



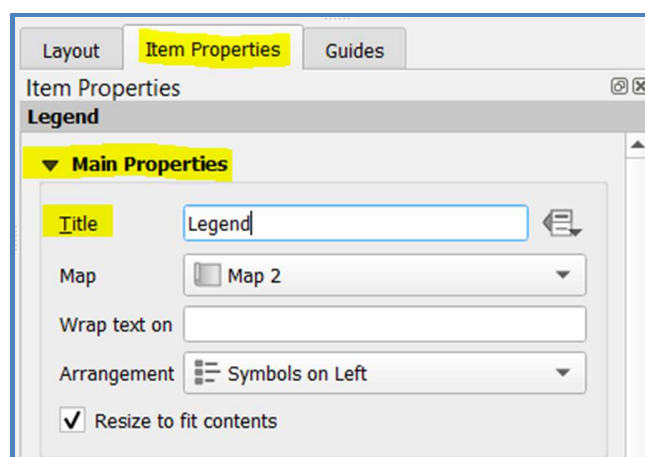
11

### 13. Adding a Legend to the main map:

- Go to the **Toolbox** and select **Add Legend**  tool.
- Move cursor to the main page and click & drag a rectangle at the right bottom corner of the page.
- Legend is now added to the map.




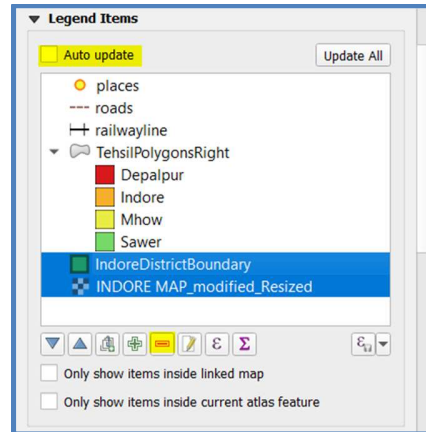
- Go to **Item Properties** panel.
- In **Main Properties** menu give a suitable title to the Legend next to **Title**.



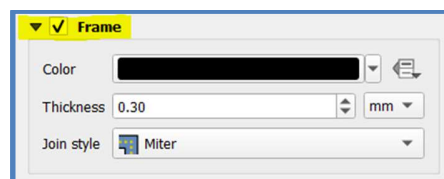
- Under **Legend Items** Menu disable the **Auto update** option.

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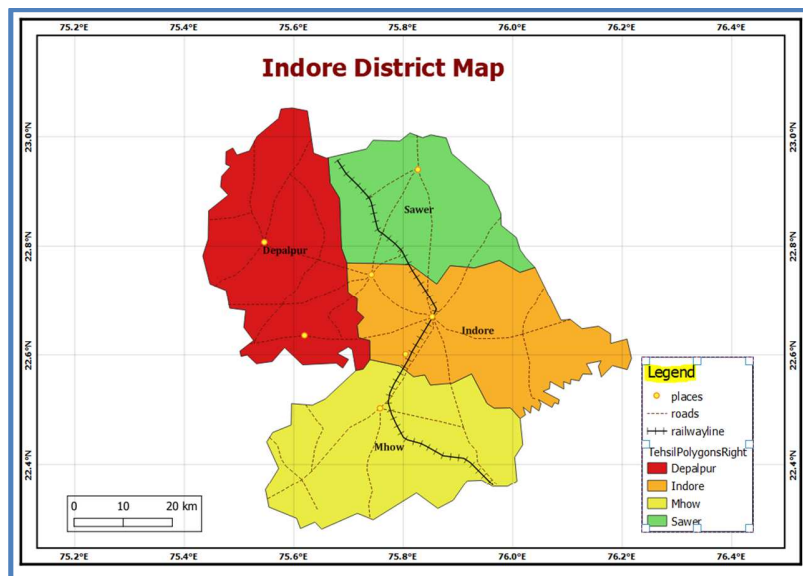
- Now select the layer you don't want to display in your legend and click on **delete**  button.



- Scroll down to **Frame** menu and enable it by checking the check box.
- Explore other properties also.



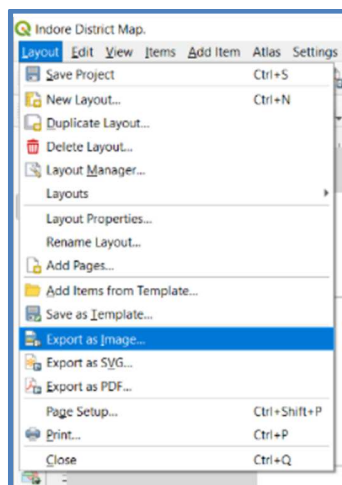
- This is how the **Legend** will look like.



## How to export the Map as an Image or PDF:

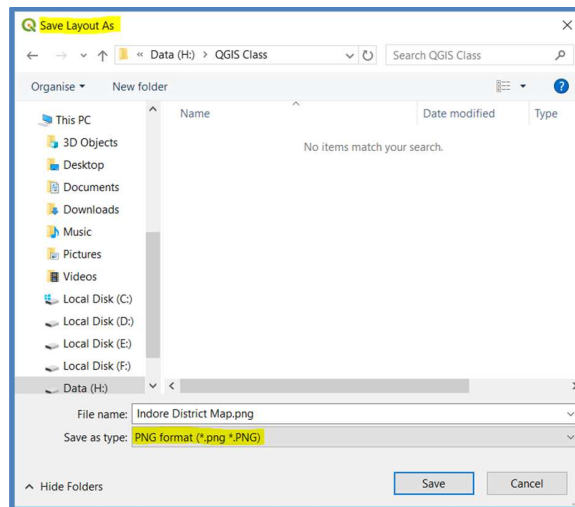
To export the map as an image or PDF format follow the steps given below:

1. Go to **Layout** menu in the upper left corner of the window.
2. Select **Export as Image...** option.



3. **Save Layout As dialog** box opens.
4. Navigate to the folder where you want to save the file. The Layout name will appear in the box next to **File name** (with **.png** extension).
5. Click on **Save** button.

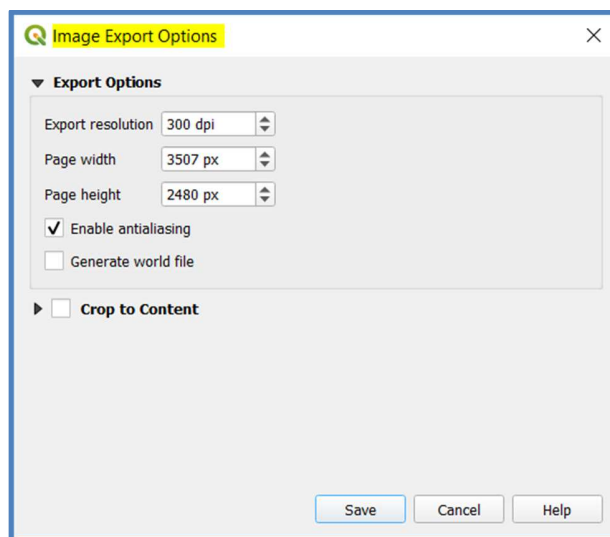
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6. **Image Export Option** dialog box opens.

- Export resolution: 300 dpi (*dots per inch*)
- Page width: 3507 px
- Page height: 2480 px

**(These are the dimensions of an A4 size page.)**



7. Click on **Save** button.

8. The map is now saved as an image.