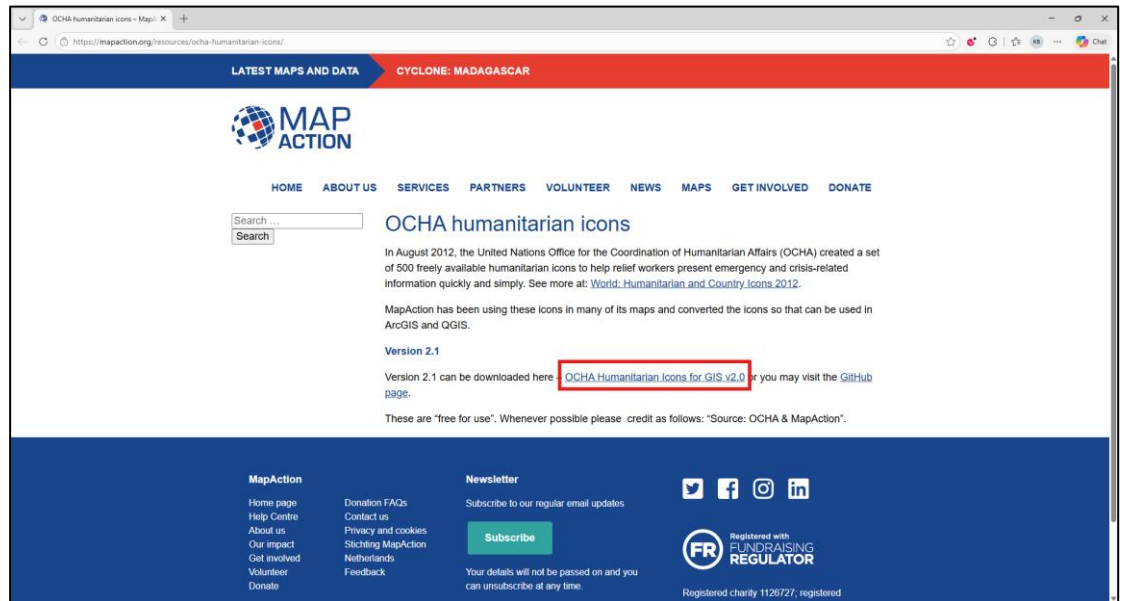


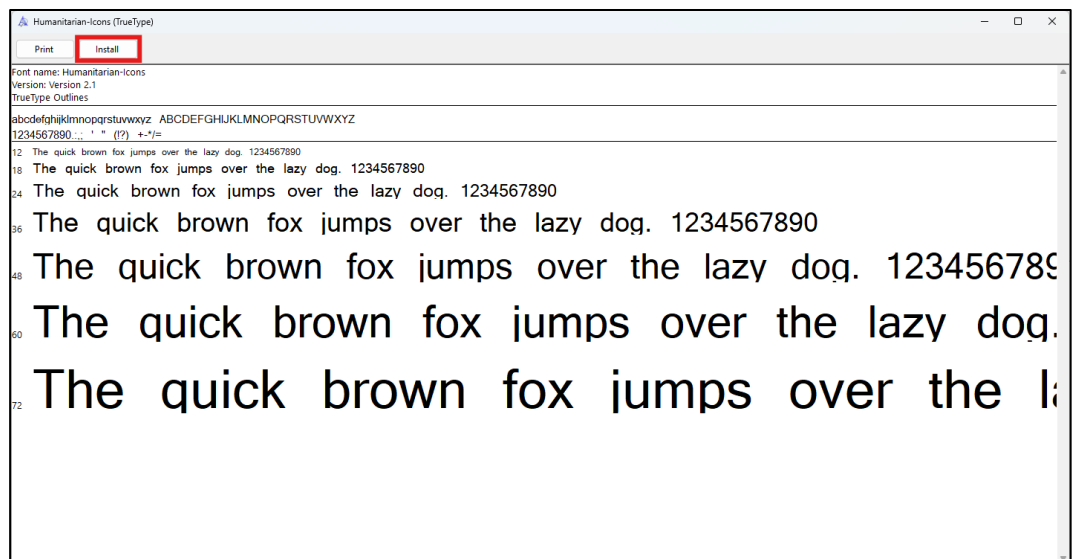
## 4.4 GIS Map Styling and Layout

### 4.4.1 Installation of OCHA symbols in system

- Download the OCHA symbols library, at the following link <https://mapaction.org/resources/ocha-humanitarian-icons/>

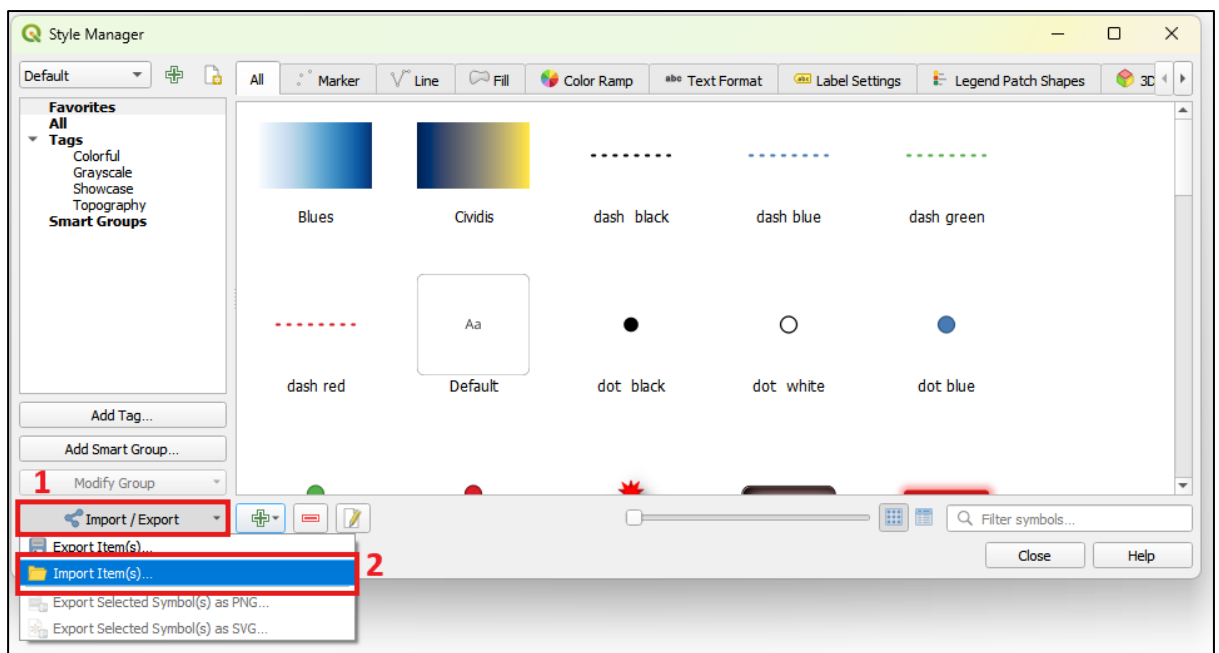
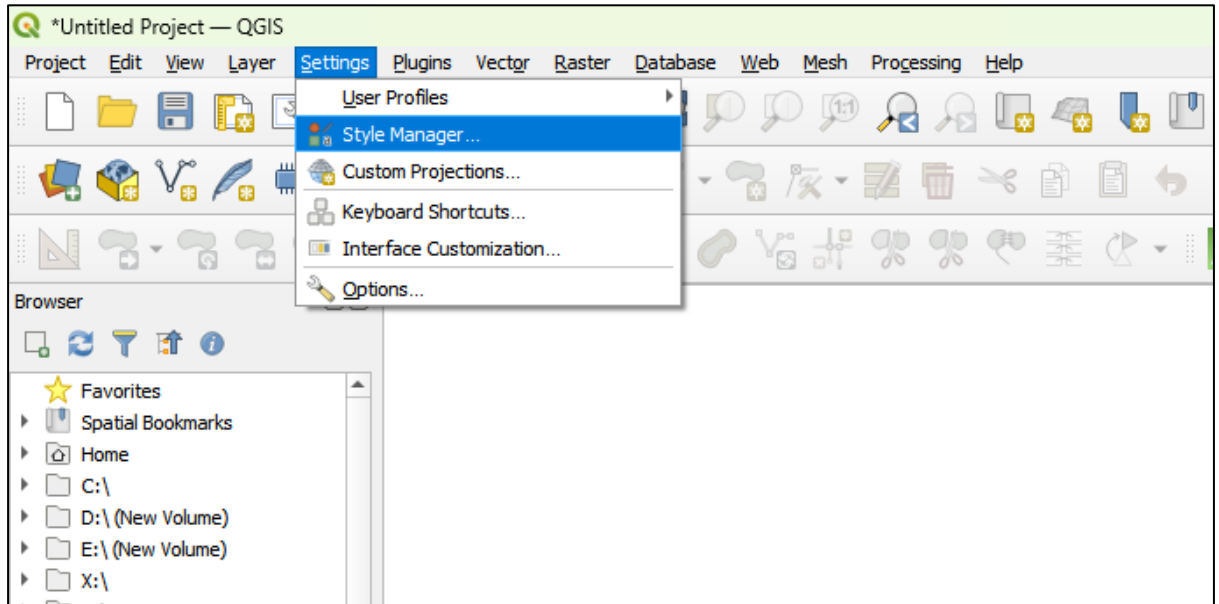


- Click OCHA **Humanitarian Icons for GIS v2.0** and **humanitarian-icons-v2-1.zip** will get downloaded.
- After unzipping go inside **“humanitarian-icons-v2-1-font”** folder and double click on **“Humanitarian-Icons.ttf”** and click install.

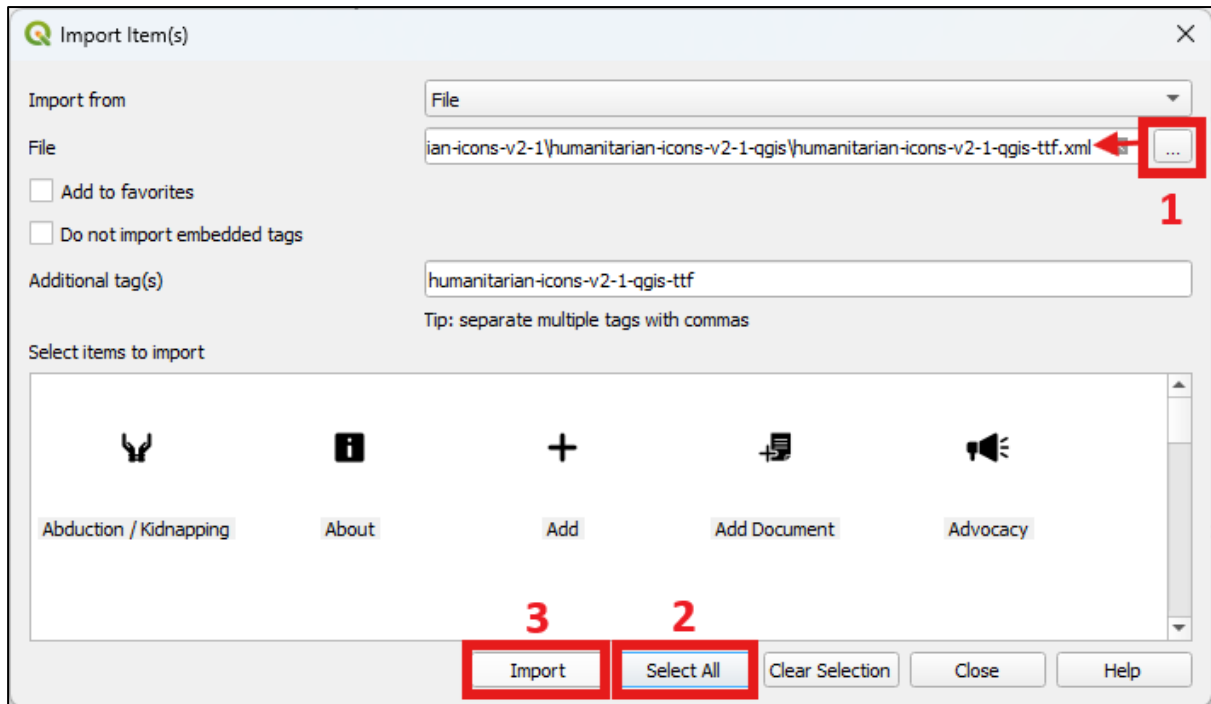


#### 4.4.2 Installation of OCHA symbols in QGIS

- Open QGIS.
- Go to Settings > Style Manager > Import/ Export > Import Items(s)

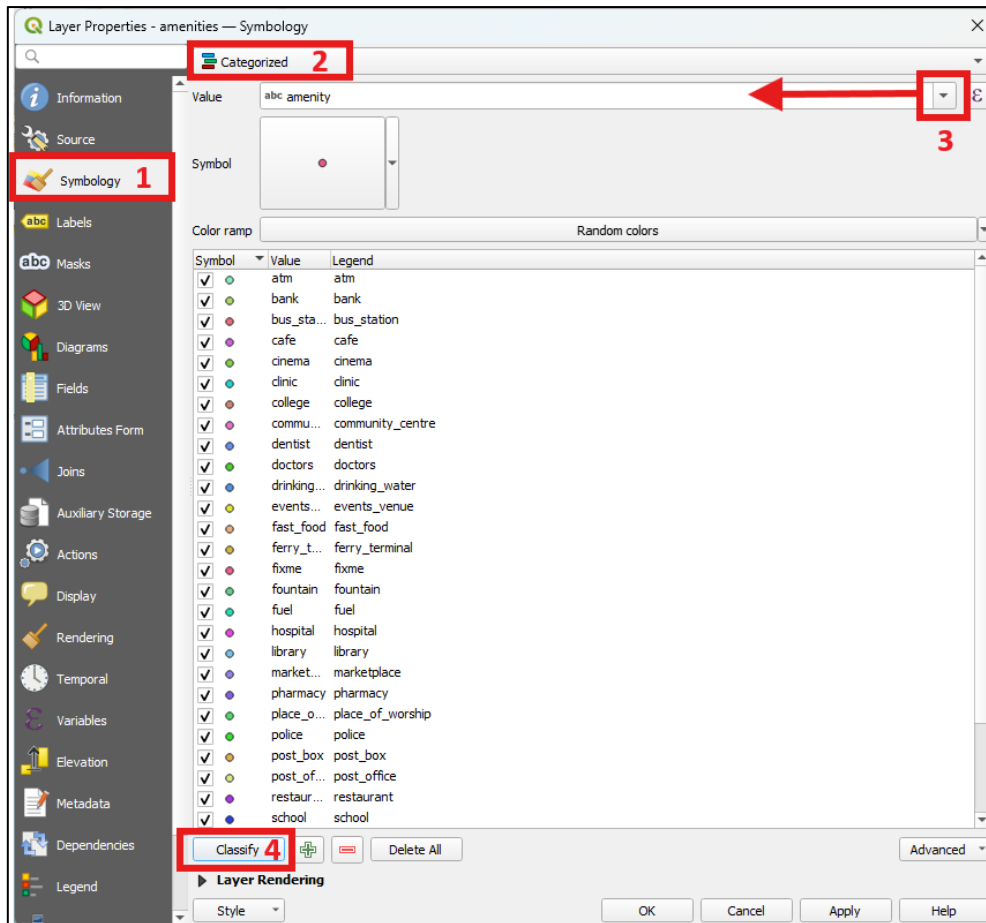


4. Navigate to the **humanitarian-icons-v2-1/ humanitarian-icons-v2-1-qgis/humanitarian-icons-v2-1-qgis-ttf.xml** file and click OK.
5. On doing so the icons will appear in the dialogue box.
6. Click Select All or click on the individual icons you want. In either case the icons will be highlighted.

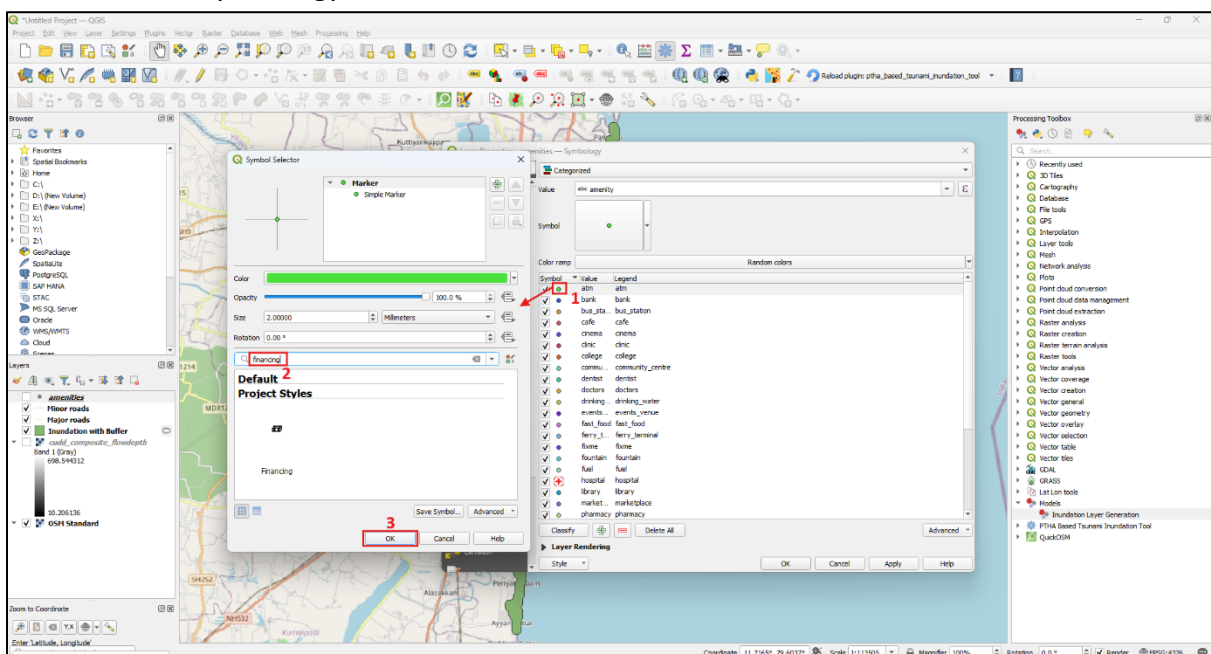


7. If required, add tags in 'Additional Tag(s)' - but note that all symbols already have specific tags as well as the tag 'humanitarian icons'.
8. When ready click Import.
9. Click 'yes' to overwrite any existing symbols with the same name.
10. They will be loaded in and you can then check that they have correctly loaded in the Style Manager dialogue box.



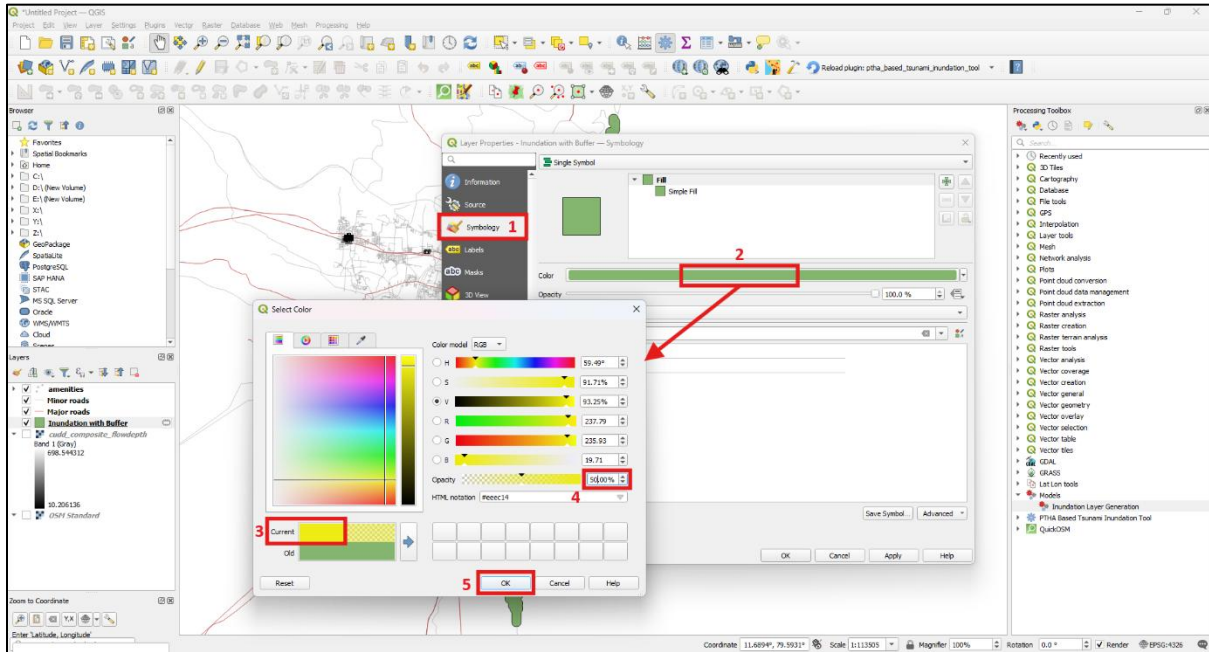


7. Double clicks on the first symbol 'atm' and you will get the following dialog and enter financing in search box and select the currency symbol. Repeating the same exercise for important amenities.
8. Once symbology for amenities are over select the items which are not assigned the standard symbology and click remove

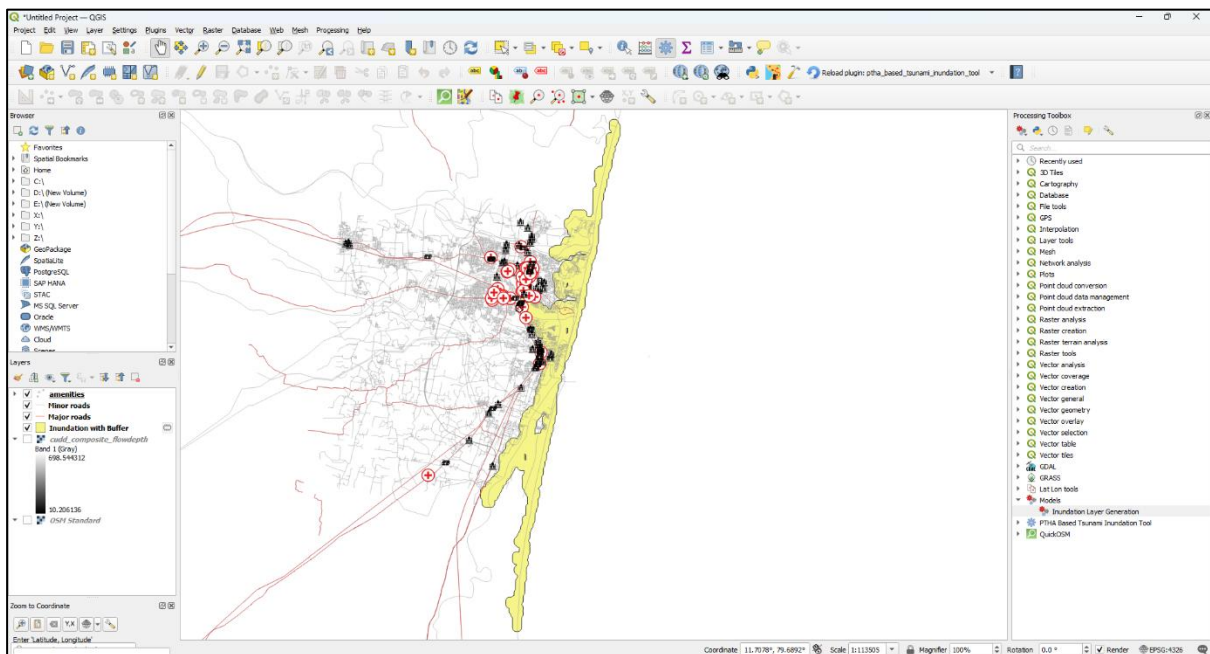


9. Adjust the size of the symbols.

10. To change colour of the tsunami hazard zone right click on the layer and select properties click on symbology click on fill colour pellet is appearing, select appropriate colour (yellow elected here) and make opacity by 50% so that the feature of the base map/image are visible on the map as these details may be useful for the map users.

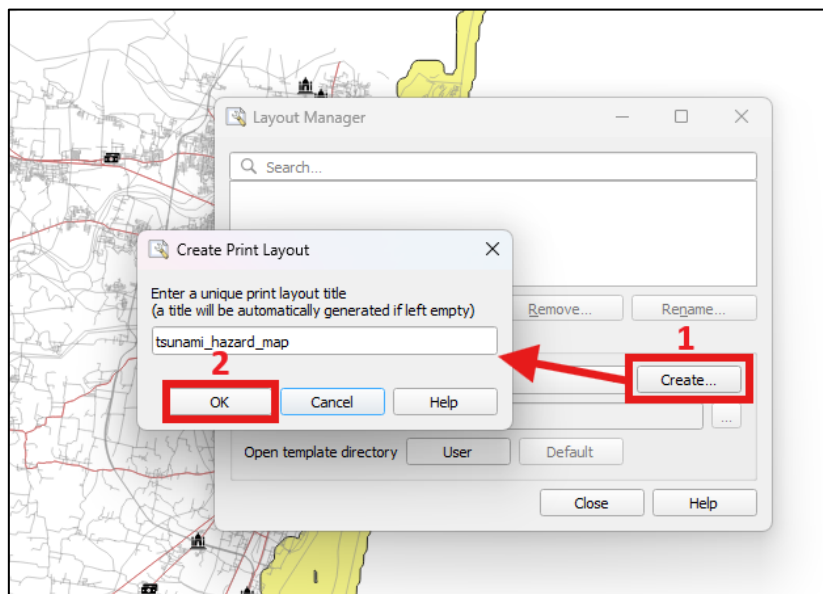
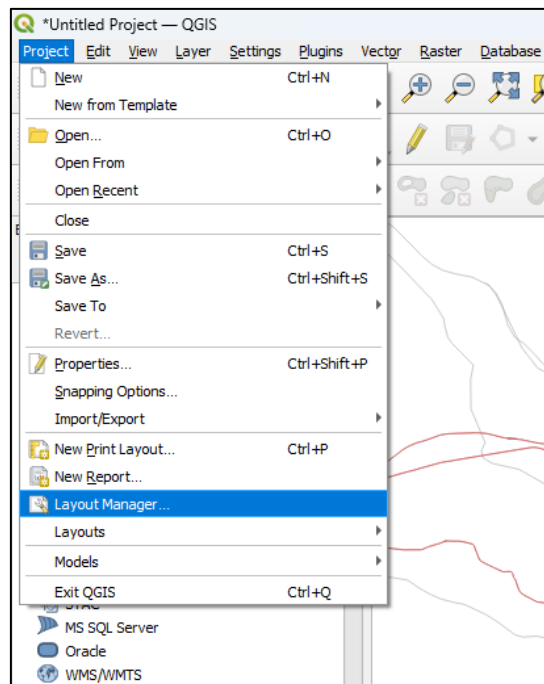


After changing and assigning symbols you will see the following layer

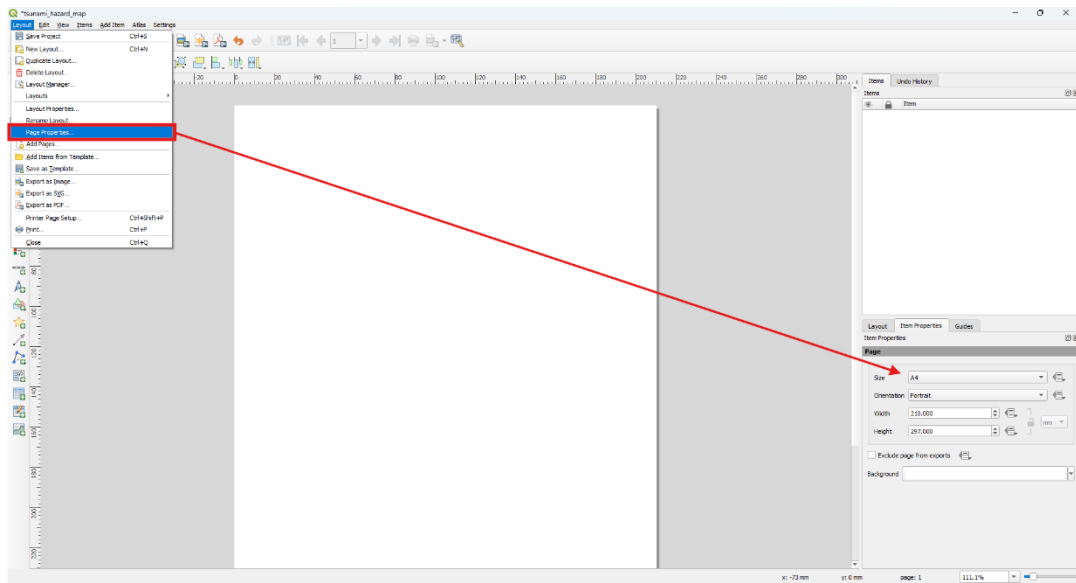


#### 4.4.3 Map Composing and generation of tsunami hazard maps

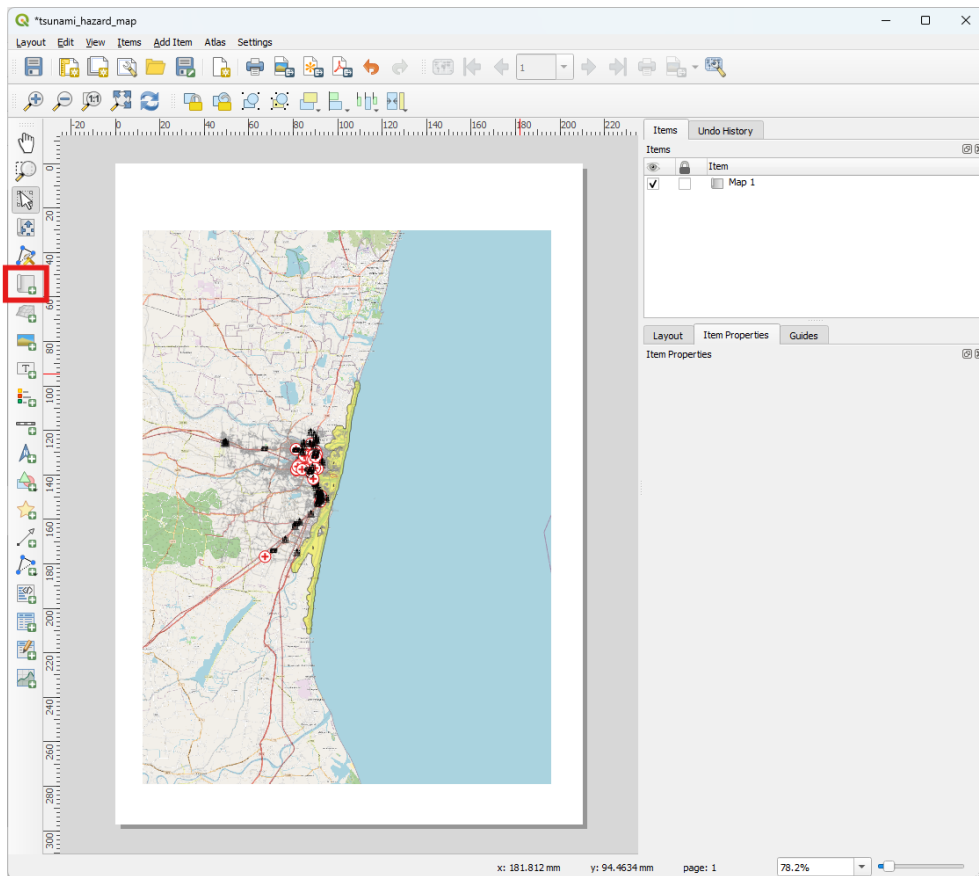
1. Go to Project- New Print Layout. Enter name as “tsunami\_hazard\_map” click ok.



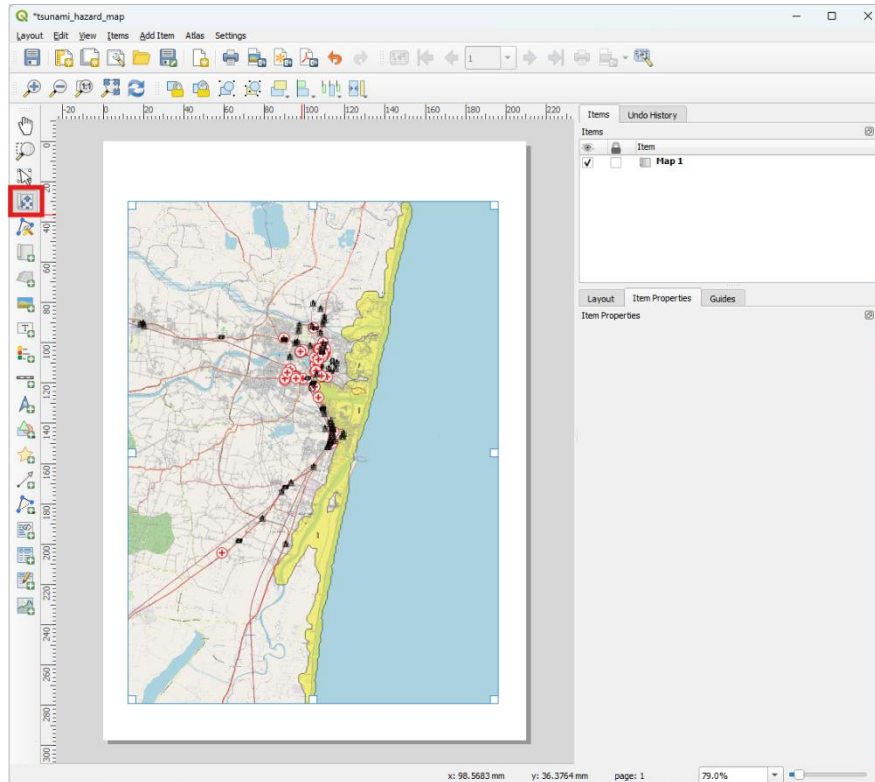
2. New window will open containing blank canvas. You may have to fix the size and orientation of the layout, depending on the purpose of the map is used. If it is for the publication and reports, normally A4 size will be used. Orientation portraits or landscape can be decided on the best fit of the hazard area. If you wish you can have your own choices of the layout sizes. Here we will use the A4 size with portrait orientation. Use the following steps to set the layout sizing and orientation.



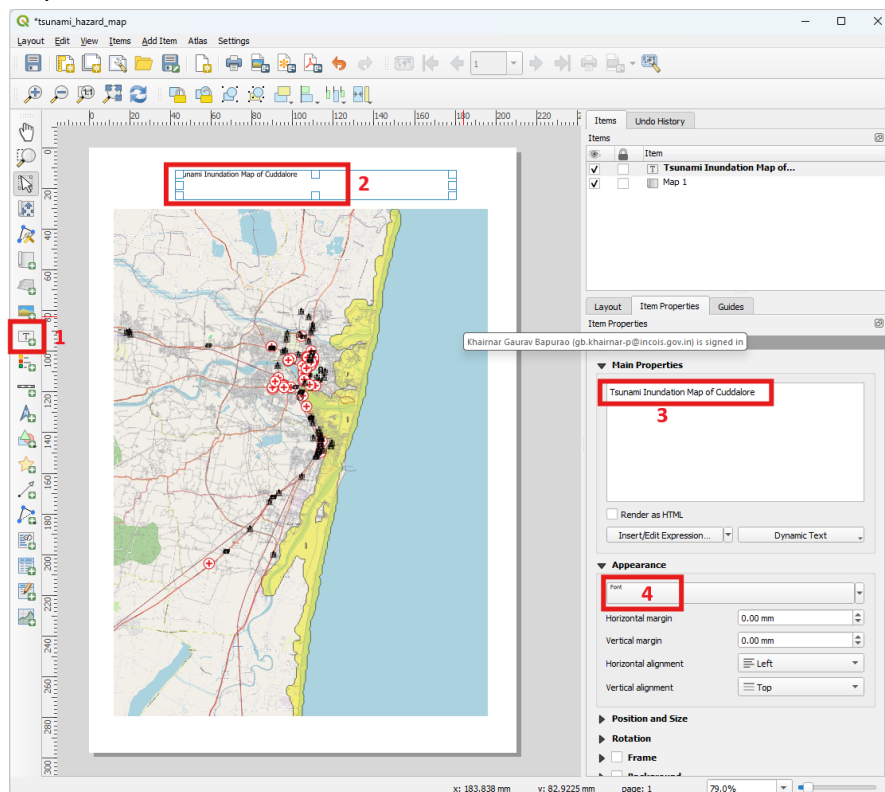
3. Use Add Map (  ) for adding Map into Layout



4. Use Move item content (  ) for moving the map



5. Adding a map title click on the add text tool in the left panel and draw on the top of the map where you want to place map title. On the right panel the text item is listed and type “Tsunami Inundation Map of Cuddalore” under main properties. Click on the font and select font and size according to your requirements.




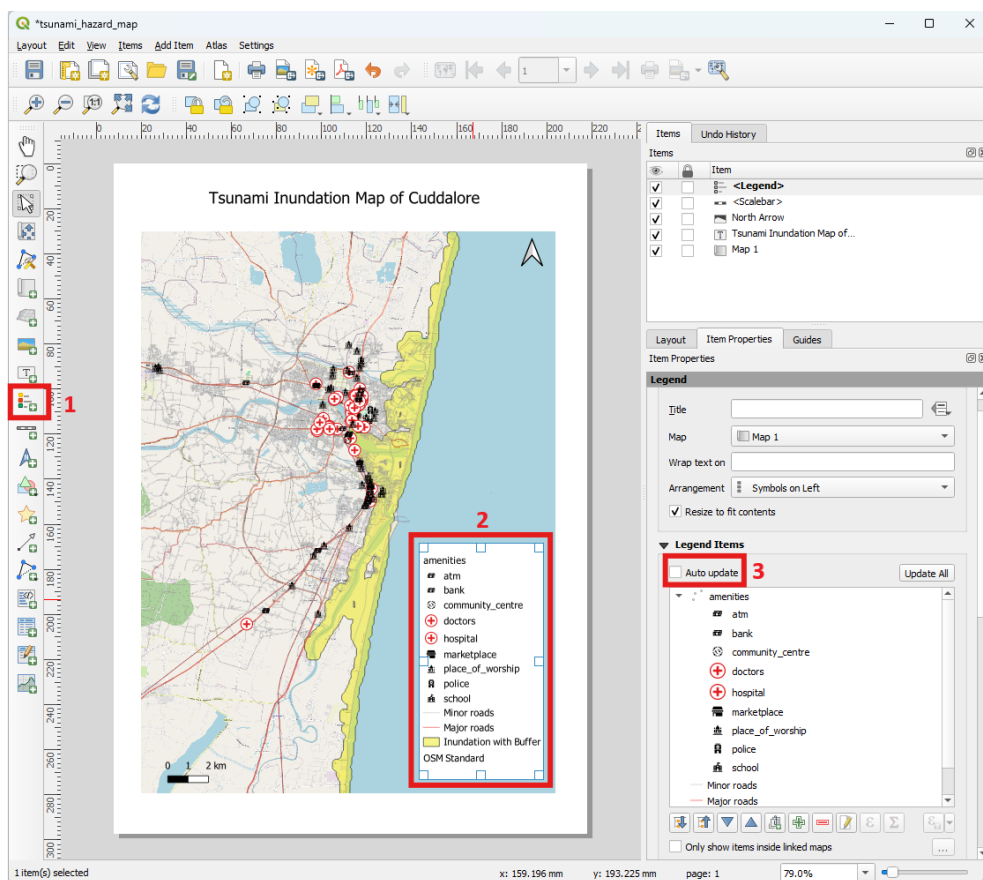
6. Add North arrow click on add items → add north arrow → draw a box in map window.


7. Add scale bar by clicking → Add scale bar

8. Add Legend:



- Click Add Legend (  ) for adding legends of the map
- You can change the legend properties in item properties section
- Uncheck 'Auto update' for changing legend names inside legends and removing unnecessary legends.

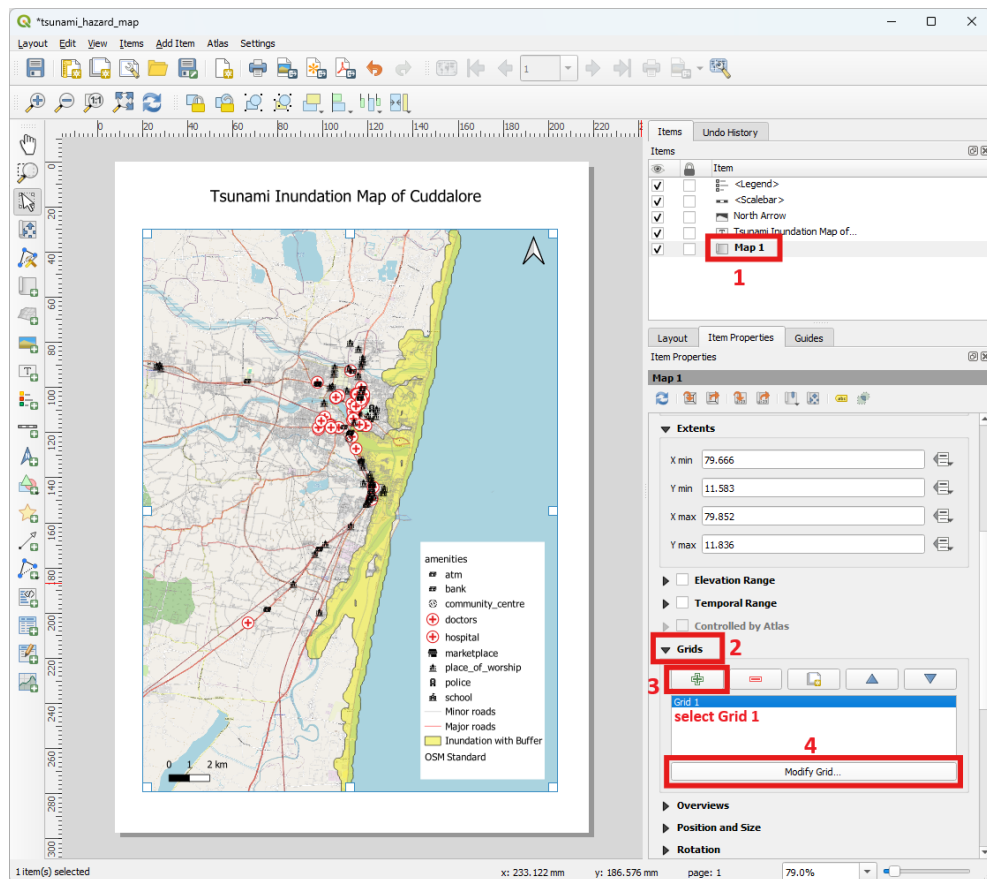


- By double clicking on legend name you can rename it
- For removing you can click on (  )
- There are To break legends in to several columns → select Legend in Items → Item properties → Columns → count → change the count according to your requirement.
- To change Font type, size and colour → select Legend in Items → Item properties → Fonts and Text Formatting → Legend items → font →

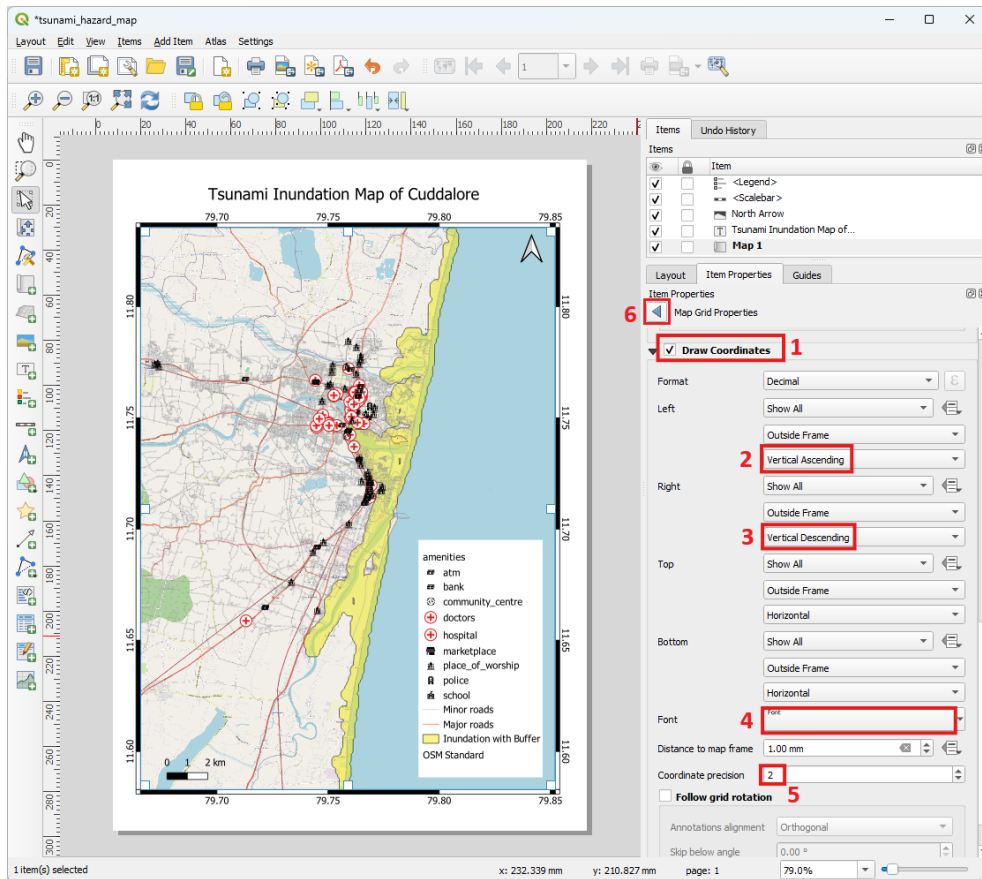
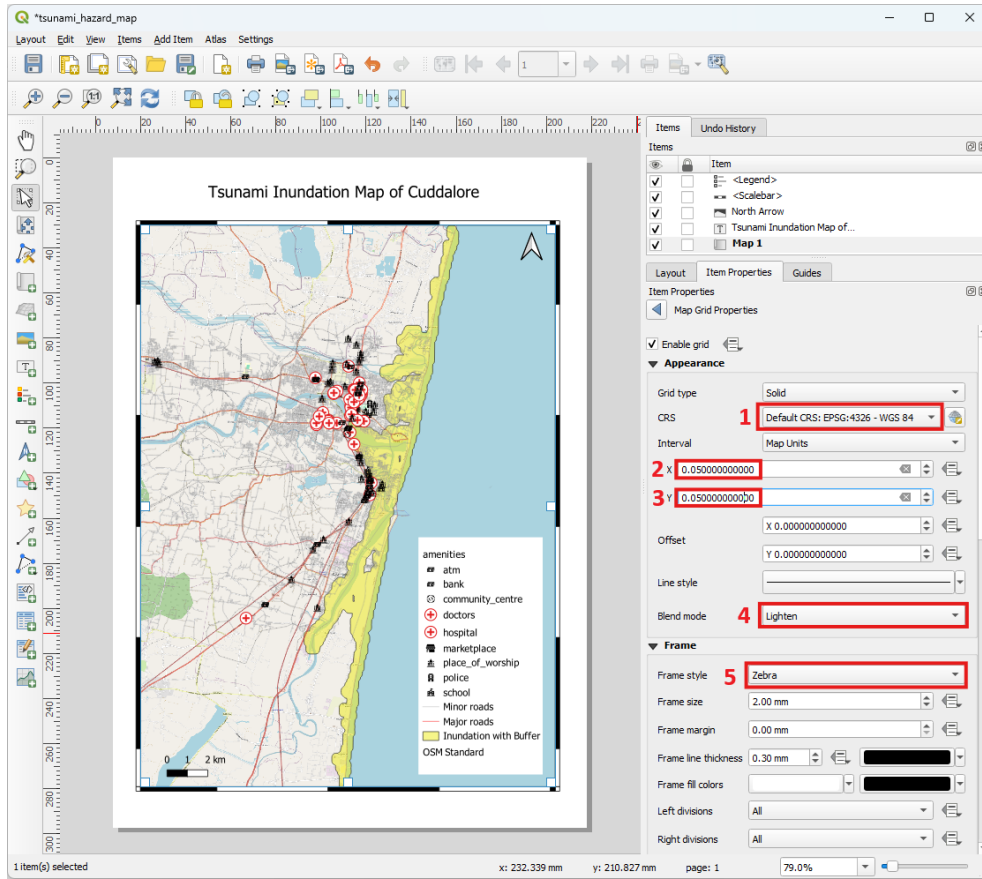
click on title font → now change font, font style, size and colour. After completing all click on go back

## 9. Add Grids:

- Go to Items → Select Map → Item properties → Main properties → CRS: WGS84
- Go to Grids → click on add grid → Select Grid1 → Modify Grid

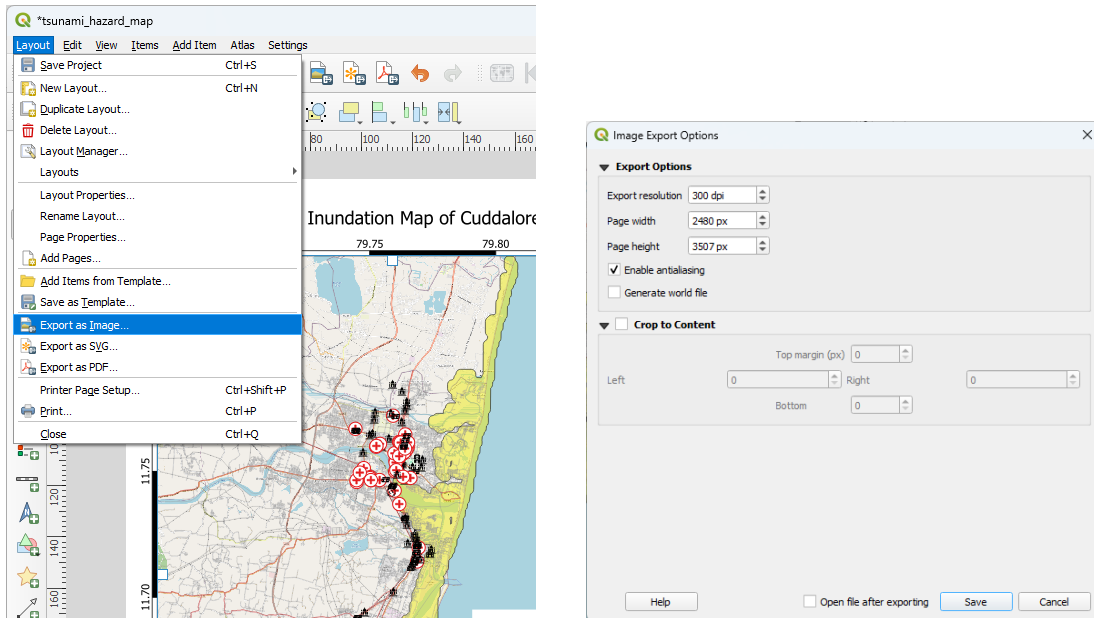


- Appearance → CRS: choose WGS 84 (click on select CRS [?] in search bar type 4326 → select EPSG: 4326 → click on go back → Interval: Map Units → X: 0.05 and Y: 0.05 → Blend mode: Lighten.
- Go to Frame: Frame style: Zebra (Choose as per your requirement)
- Go to Draw Coordinates → left: select Vertical Ascending and Right: select Vertical Descending, Font: Change font Style, Size and colour.



## 10. Exporting Map

- Go to layout → export as Image (if want in other formats SVG or PDF choose that format) → Browse path and give output name (save as type: choose format) → save → Export resolution choose DPI (ex:300 or 500 etc.) → Save



- Final Map :

