

# Mobile Data Collection using Open Data Toolkit

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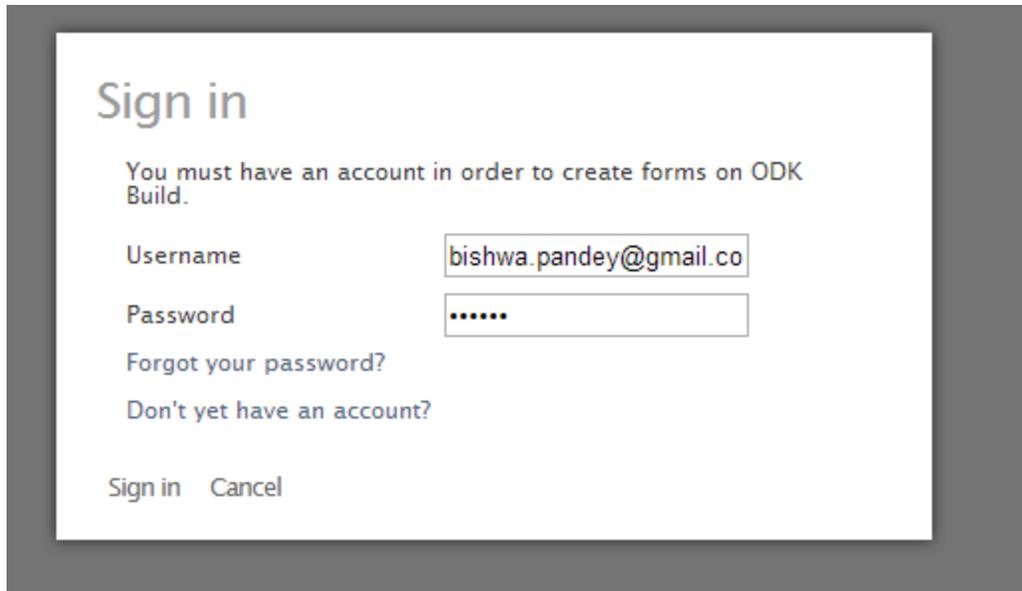
*The World Bank*

## *Steps:*

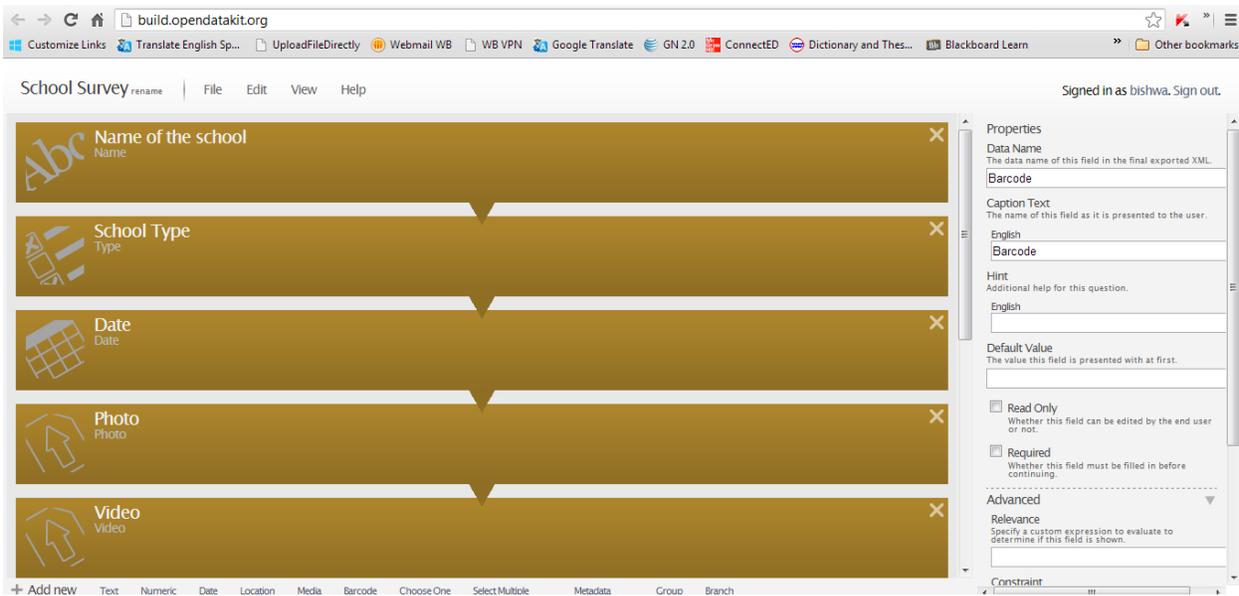
1. Create your own data collection form
2. Install ODK app in you mobile device from Google Play
3. Configure your app to repoint to geonode-mobile.appspot.com
4. Add form into your device
5. Collect (real time) data using smartphone
6. Store data (offline) on smartphone and/or send it to server for publishing/sharing

## ***Create your own data collection form:***

- a. Create a user account on <http://build.opendatakit.org/>
- b. Sign in to your account



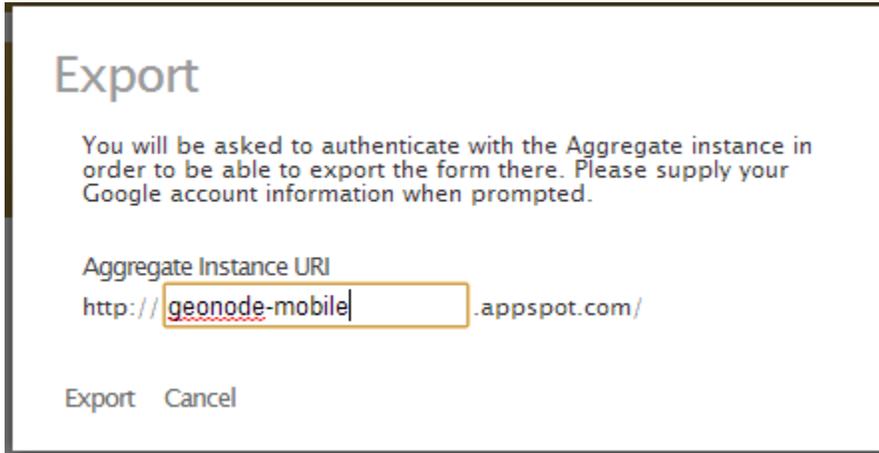
b. Use the web interface to build the custom form



c. Save the form as XML

Or

- d. Directly save the form on your server



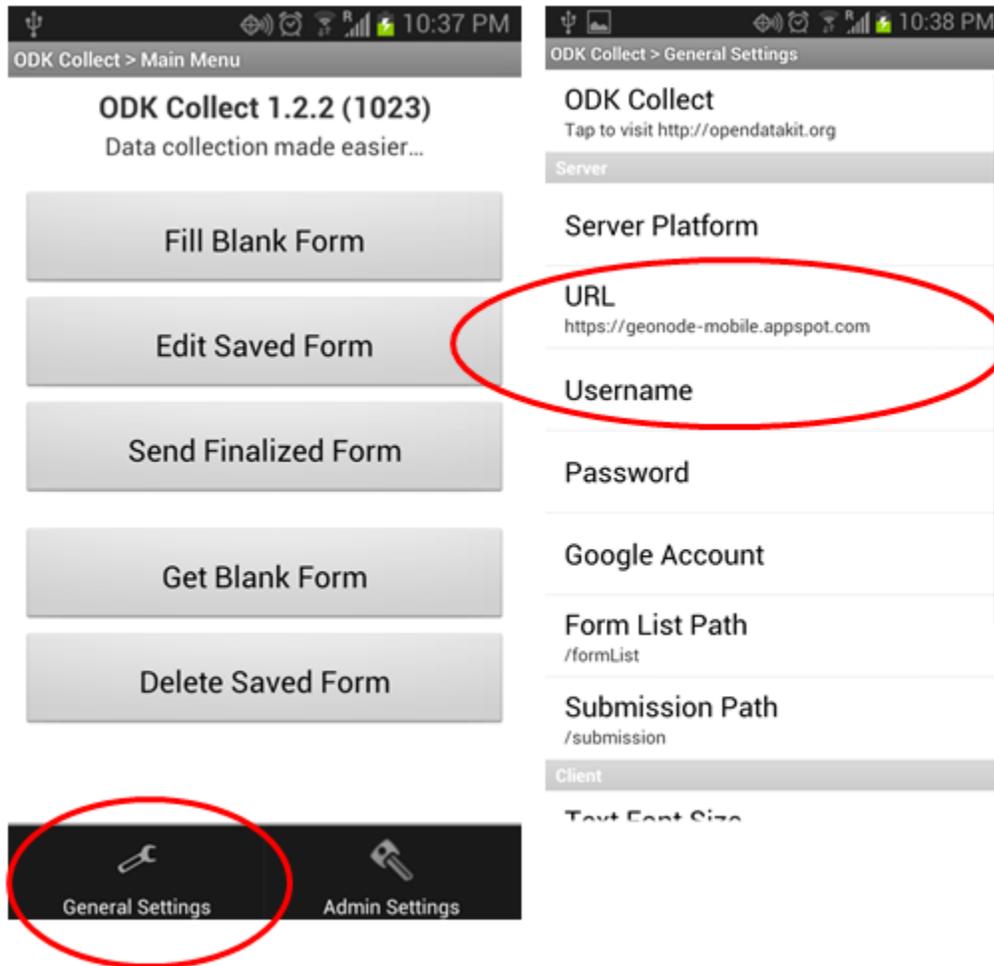
***Install ODK app in you mobile device from Google Play***

Playstore - ODK Collect

Or from the Web:

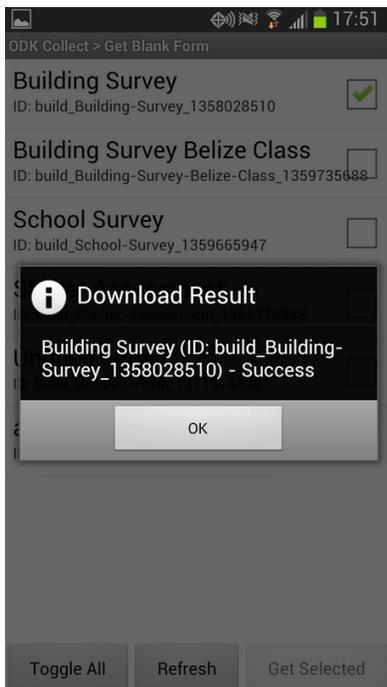
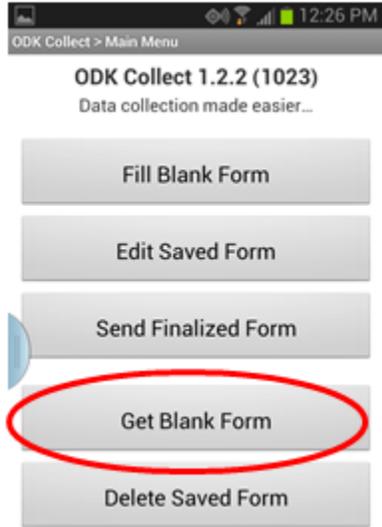
<http://code.google.com/p/opendatakit/downloads/list>

**Configure your app to repoint to your server of choice for example ( geonode-mobile.appspot.com)**

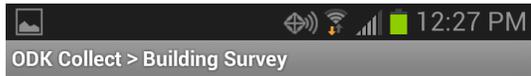


**Add the form into your device (by connecting to your server)**

Option - Get Blank form



*Collect (real time) data using smartphone*



**Today's Date**

+	+	+
Feb	17	2013
-	-	-



**Location**

Replace Location

Latitude: N 38°52'54"  
Longitude: W 77°24'9"  
Altitude: 85m  
Accuracy: 5m

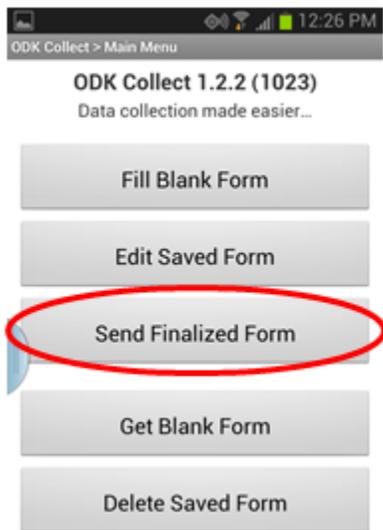
**Number of Stories**

<input type="radio"/> 1	<input type="radio"/> 4
<input type="radio"/> 2	<input type="radio"/> 5
<input checked="" type="radio"/> 3	<input type="radio"/> More than 5

***Store data (offline) on smartphone and/or send it to server for publishing/sharing***

Option Send Finalized form

Select the forms you want to send it to the server and hit “send selected”



For more information: use [www.opendatakit.org](http://www.opendatakit.org)

## Getting data out from Server:

1. Open the server location - <https://geonode-mobile.appspot.com/>
2. Select the form that you used for data collection. Note that the server may house several data collection forms

The screenshot shows the 'Submissions' page for the 'Shelter Sample Form'. The page includes a navigation bar with 'Submissions' and 'Form Management' tabs. Below the navigation bar, there are buttons for 'Filter Submissions' and 'Exported Submissions'. A dropdown menu for 'Form' is open, showing a list of forms, with 'Shelter Sample Form' selected. A 'Filter' dropdown is set to 'none'. The main content area displays a table of submissions with the following columns: meta instanceID, ShelterCode, ShelterName, and RoofS. The table contains several rows, each with a red 'X' icon in the first column, indicating errors or failed submissions. The data in the table is as follows:

meta instanceID	ShelterCode	ShelterName	RoofS
uuid:ec7cd2a2-5f3c-41cd-8959-1391636217e8	7	Bridge House	Othe
uuid:d6401bc7-c443-4c67-b103-787c5dac8de3	3	Physical Planning Building	
uuid:4aabb2c2-52b5-4ee5-a174-3f4dba7fb2a6	2	Seven Day Adventist Church	
uuid:6e2955a9-261d-4b04-999c-29ff06a493b2	8	Old Public Library	
uuid:471d26ae-63ad-4fc8-a286-2fda18ea68fb	9	Bank of svg	
uuid:1a9f5db4-ae48-4db7-		Ck graves &	

3. Click on Export button located at upper right hand side.

Visualize **Export** Publish

Previous Shelter Sample Form Next

Export the data

OpeningPercentage	WallMaterial	WallTypeOther	StoriesNumber	GPS Latitude	GPS Longitude	GPS Altitude	GPS Accuracy	FrontBuilding
10	Other	Concrete and brick and stone	2					
40	Concrete		2					
40	Stone		2					
10	Stone		2					
10	Concrete		4					

4. You now have three choices to export. It is recommended to export as CSV or KML.

Form: build\_Shelter-Sample-Form\_1384364011 Type: **CSV file** Filter: none **Export**

Geopoint: GPS Title: \*meta-instance-id\* Picture: FrontBuilding

CSV file  
KML file  
JSON file

Once you see this interface, click one more time on export button. You should now see the following interface.

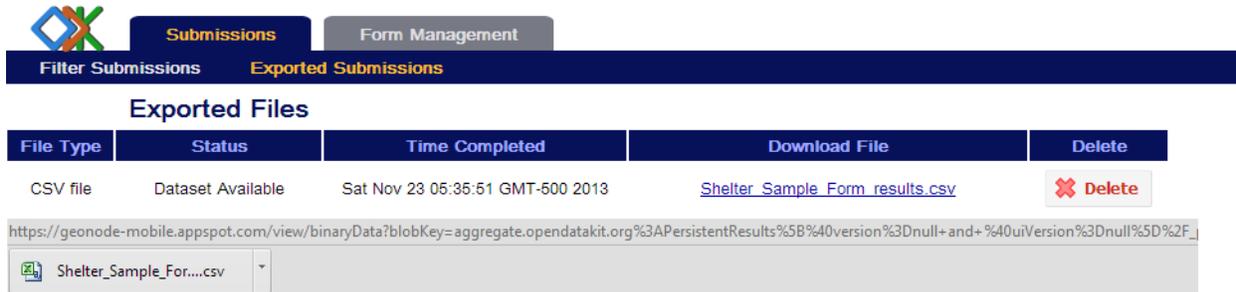
Submissions Form Management

Filter Submissions Exported Submissions

### Exported Files

File Type	Status	Time Completed	Download File	Delete
CSV file	Dataset Available	Sat Nov 23 05:35:51 GMT-500 2013	<a href="#">Shelter_Sample_Form_results.csv</a>	<b>Delete</b>
CSV file	Dataset Available	Thu Nov 14 22:49:16 GMT-500 2013	<a href="#">Shelter_Sample_Form_results.csv</a>	<b>Delete</b>
CSV file	Dataset Available	Thu Nov 14 12:31:55 GMT-500 2013	<a href="#">Shelter_Sample_Form_results.csv</a>	<b>Delete</b>
CSV file	Dataset Available	Thu Nov 14 11:50:07 GMT-500 2013	<a href="#">Shelter_Sample_Form_results.csv</a>	<b>Delete</b>
CSV file	Dataset Available	Wed Nov 13 15:49:11 GMT-500 2013	<a href="#">Shelter_Sample_Form_results.csv</a>	<b>Delete</b>

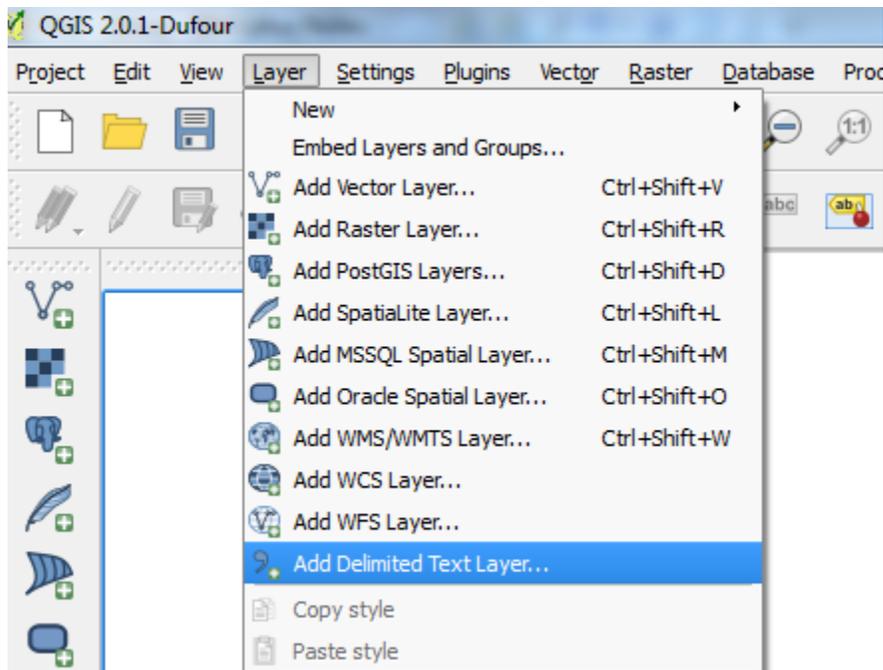
The first one in the list is normally the file that you just created. Click on the file name and download the file. You can save it in the directory of your choice.



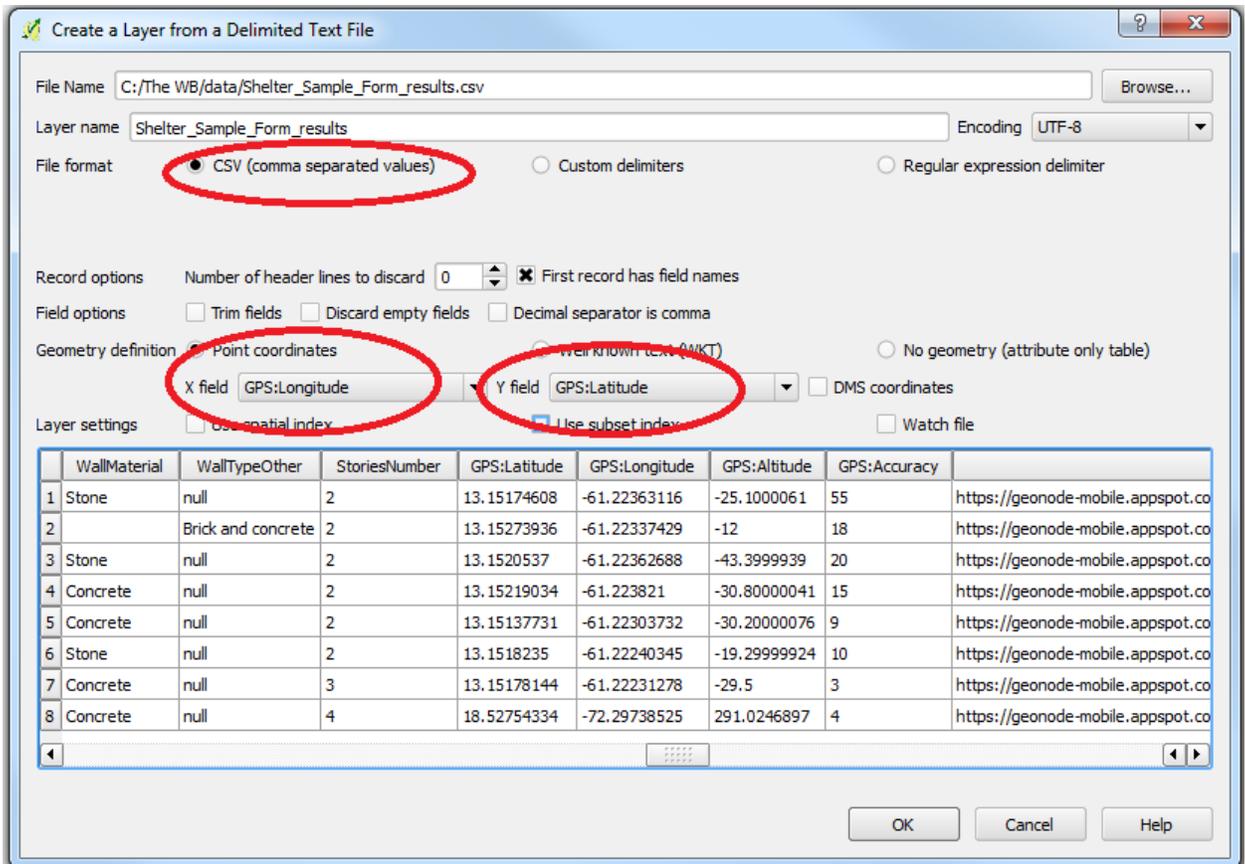
KML file can be directly opened on Google Earth or can be converted to Shapefile. CSV file can be opened using QGIS or ArcMap.

#### 5. Opening CSV file using QGIS:

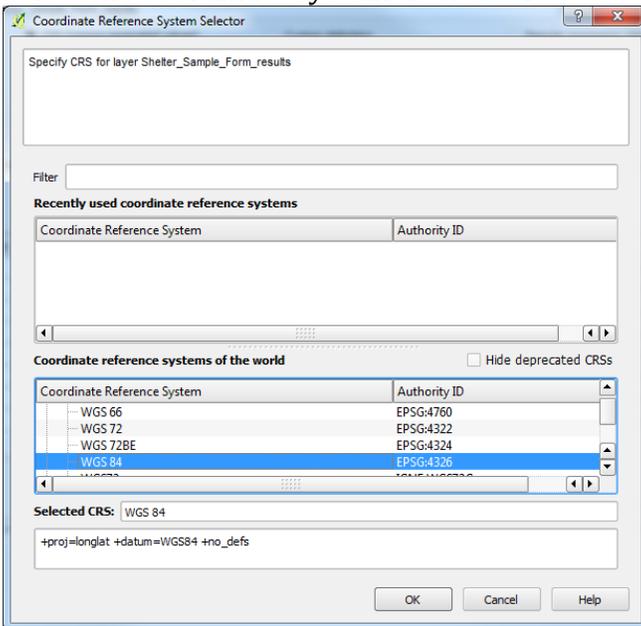
- a. Open QGIS
- b. Open the tab Add Delimited Text layer



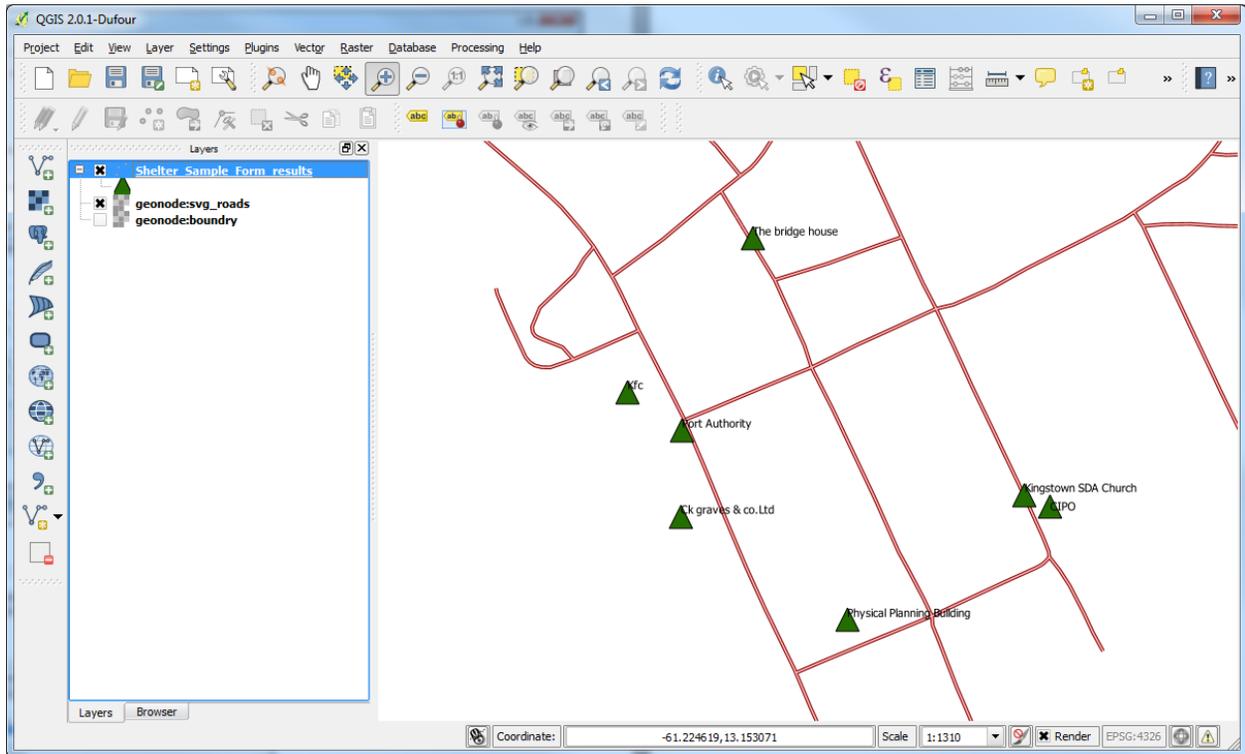
- c. Select CSV file that you have saved earlier, Remember to check CSV and review X field and Y filed are correctly read.



d. Select the coordinate system as WGS84



e. The feature should be displayed now.



Note: In this screenshot, the road network is pulled from SVG GeoNode <http://geonode.gov.vc/>