



## **Steps in Mapping CBMS Core Indicators**

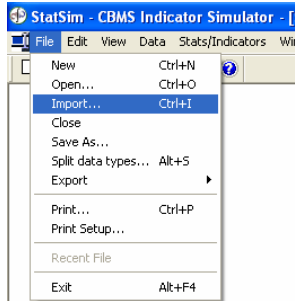
Prepared by the  
CBMS Network Coordinating Team of the  
Angelo King Institute for Economic and Business Studies

This work was carried out by the PEP-CBMS Network Coordinating Team with the financial support of the Government of Canada provided through the International Development Research Centre (IDRC) and the Canadian International Development Agency (CIDA)

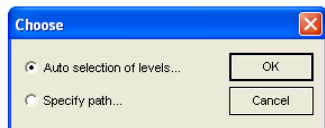
# Steps in Mapping CBMS Core Indicators

## Part 1. Statistics Simulator

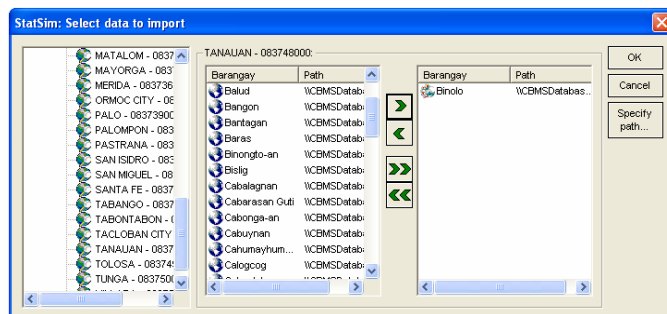
1. Click **File**.
2. Select **Import**.



3. Choose **Auto Selection of Levels**.



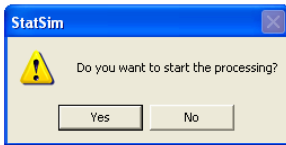
4. Select data to import. (In this example, we are using the text file of Bry. Binolo, Tanauan, Leyte.)



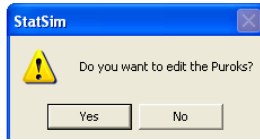
5. Click **OK**.
6. You will now be prompted if you want to import another set of files. Click **No**.



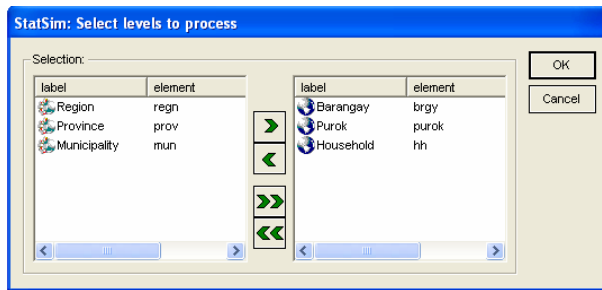
7. You will now be prompted if you want to start the processing. Click **Yes**.



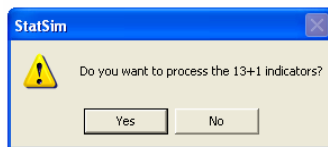
8. You will now be prompted if you want to edit the Puroks. Click **No**.



9. You will now be prompted to select levels to process. Double click on *Barangay*, *Purok*, *Household* and click **OK**.

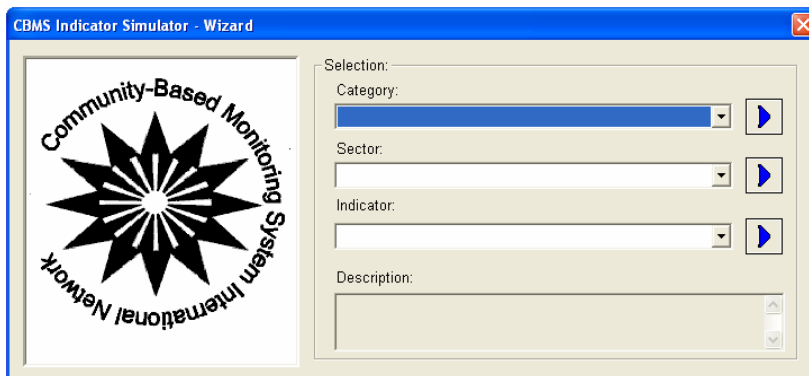


10. You will be asked if you want to process the 13+1 Indicators. Click **Yes**.



11. Wait until the data processing ends.

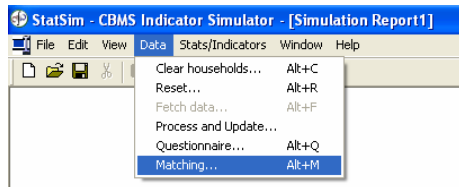
You are now ready to display the CBMS Core and other LGU-Specific Indicators Using the StatSim Indicator Wizard.



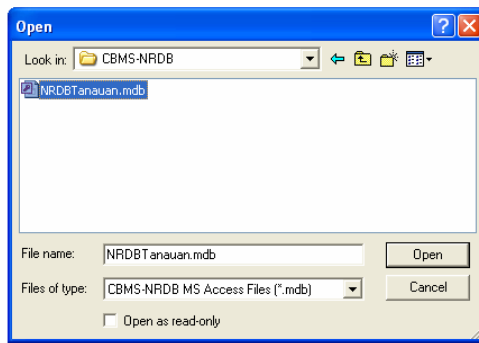
## Part 2. Matching your .txt and .mdb files.

Before you can map the CBMS Core Indicators at the barangay level, you have to ensure first that your encoded data (e.g., 009.txt) matches your digitized spotmap (NRDBTanauan.mdb). To do this, follow the following steps.

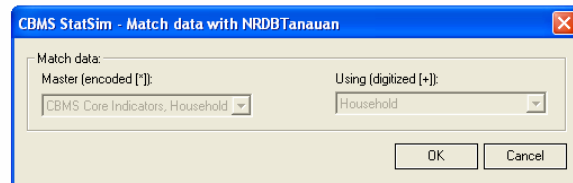
1. Click **Data** and then select **Matching**.



2. You will now be prompted to open your .mdb file (in this case, since we are using the case of Tanauan, Leyte, we will open NRDBTanauan.mdb).



3. The following box will appear. Click **OK**.



4. A report in an excel format will be displayed similar to the one shown below.

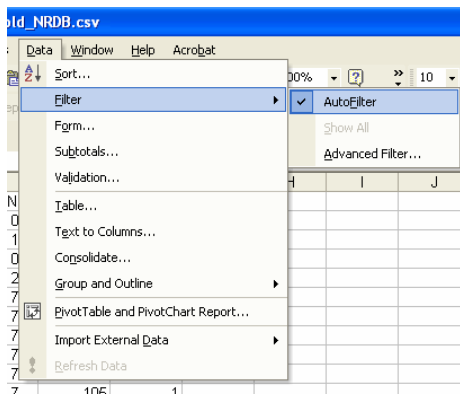
	A	B	C	D	E	F	G
1	Province	Municipal	Barangay	Purok	Nam hcn_NRDE~match		
2	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	1	-1	
3	LEYTE	TANAUAN	Atipolo	Purok 1;A	1	-1	
4	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	10	-1	
5	LEYTE	TANAUAN	Atipolo	Purok 2	10	-1	
6	LEYTE	TANAUAN	Atipolo	Purok 7	100	-1	
7	LEYTE	TANAUAN	Atipolo	Purok 7	101	-1	
8	LEYTE	TANAUAN	Atipolo	Purok 7	102	-1	
9	LEYTE	TANAUAN	Atipolo	Purok 7	103	-1	
10	LEYTE	TANAUAN	Atipolo	Purok 7	104	-1	
11	LEYTE	TANAUAN	Atipolo	Purok 7	105	-1	
12	LEYTE	TANAUAN	Atipolo	Purok 7	107	-1	
13	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	11	-1	
14	LEYTE	TANAUAN	Atipolo	Purok 2	11	-1	
15	LEYTE	TANAUAN	Atipolo	Purok 2	12	-1	
16	LEYTE	TANAUAN	Cabonga-a	Purok 03	13	-1	
17	LEYTE	TANAUAN	Atipolo	Purok 2	13	-1	
18	LEYTE	TANAUAN	Cabonga-a	Purok 03	14	-1	
19	LEYTE	TANAUAN	Atipolo	Purok 2	14	-1	
20	LEYTE	TANAUAN	Cabonga-a	Purok 03	15	-1	
21	LEYTE	TANAUAN	Atipolo	Purok 2	15	-1	
22	LEYTE	TANAUAN	Cabonga-a	Purok 03	16	-1	
23	LEYTE	TANAUAN	Atipolo	Purok 2	16	-1	
24	LEYTE	TANAUAN	Cabonga-a	Purok 03	17	-1	
25	LEYTE	TANAUAN	Atipolo	Purok 2	17	-1	
26	LEYTE	TANAUAN	Cabonga-a	Purok 03	18	-1	
27	LEYTE	TANAUAN	Atipolo	Purok 2	18	-1	
28	LEYTE	TANAUAN	Cabonga-a	Purok 03	19	-1	
29	LEYTE	TANAUAN	Atipolo	Purok 3	19	-1	
30	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	2	-1	
31	LEYTE	TANAUAN	Atipolo	Purok 1;A	2	-1	
32	LEYTE	TANAUAN	Cabonga-a	Purok 03	20	-1	
	hh_CoreInd_Household_NRDB/						

Take note of the following codes in the report: **-1**=Found in digitized but not in encoded; **1**=Found in encoded but not in digitized; **0**=Matched

Since you are only matching the text file of your barangay (in this case, Brgy. Binolo) with your .mdb file, you can disregard what the report is saying on the other barangays.

To do this, follow the following steps:

1. On your Excel file, click **Data**.
2. Click **Filter**.
3. Select **AutoFilter**.



4. Select the name of the barangay that you are processing (in this case, Barangay Binolo).

	A	B	C	D	E	F
1	Province	Municip	Barangay	PurokN:	hcn_NR	~match
2	LEYTE	TANAU	(All)	Purok 01;C	1	-1
3	LEYTE	TANAU	(Top 10...)	Purok 1; A	1	-1
4	LEYTE	TANAU	(Custom...)	Purok 01;C	10	-1
5	LEYTE	TANAU	Atipolo	Purok 2	10	-1
6	LEYTE	TANAU	Binolo	Purok 7	100	-1
7	LEYTE	TANAUAN	Cabonga-an	Purok 7	101	-1
8	LEYTE	TANAUAN	Atipolo	Purok 7	102	-1
9	LEYTE	TANAUAN	Atipolo	Purok 7	103	-1
10	LEYTE	TANAUAN	Atipolo	Purok 7	104	-1
11	LEYTE	TANAUAN	Atipolo	Purok 7	105	-1
12	LEYTE	TANAUAN	Atipolo	Purok 7	107	-1
13	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	11	-1
14	LEYTE	TANAUAN	Atipolo	Purok 2	11	-1
15	LEYTE	TANAUAN	Atipolo	Purok 2	12	-1
16	LEYTE	TANAUAN	Cabonga-a	Purok 03	13	-1
17	LEYTE	TANAUAN	Atipolo	Purok 2	13	-1
18	LEYTE	TANAUAN	Cabonga-a	Purok 03	14	-1
19	LEYTE	TANAUAN	Atipolo	Purok 2	14	-1
20	LEYTE	TANAUAN	Cabonga-a	Purok 03	15	-1
21	LEYTE	TANAUAN	Atipolo	Purok 2	15	-1
22	LEYTE	TANAUAN	Cabonga-a	Purok 03	16	-1
23	LEYTE	TANAUAN	Atipolo	Purok 2	16	-1
24	LEYTE	TANAUAN	Cabonga-a	Purok 03	17	-1
25	LEYTE	TANAUAN	Atipolo	Purok 2	17	-1
26	LEYTE	TANAUAN	Cabonga-a	Purok 03	18	-1
27	LEYTE	TANAUAN	Atipolo	Purok 2	18	-1
28	LEYTE	TANAUAN	Cabonga-a	Purok 03	19	-1
29	LEYTE	TANAUAN	Atipolo	Purok 3	19	-1
30	LEYTE	TANAUAN	Cabonga-a	Purok 01;C	2	-1
31	LEYTE	TANAUAN	Atipolo	Purok 1; A	2	-1
32	LEYTE	TANAUAN	Cabonga-a	Purok 03	20	-1

5. The last column labeled ~match shows 0 values indicating that your encoded data matches your digitized spotmap.

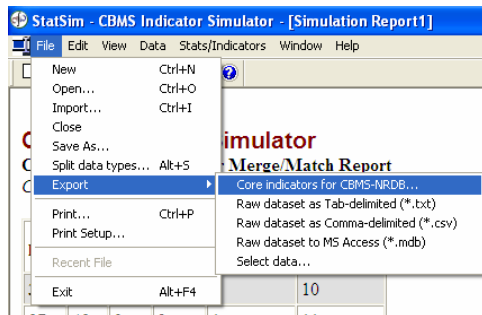
	A	B	C	D	E	F
1	Province	Municip	Barangay	PurokN	hcn_NR	~match
147	LEYTE	TANAUAN	Binolo	Zone 1; Bii	1	0
148	LEYTE	TANAUAN	Binolo	Zone 1; Bii	2	0
149	LEYTE	TANAUAN	Binolo	Zone 1; Bii	3	0
150	LEYTE	TANAUAN	Binolo	Zone 1; Bii	4	0
151	LEYTE	TANAUAN	Binolo	Zone 1; Bii	5	0
152	LEYTE	TANAUAN	Binolo	Zone 1; Bii	6	0
153	LEYTE	TANAUAN	Binolo	Zone 1; Bii	7	0
154	LEYTE	TANAUAN	Binolo	Zone 1; Bii	8	0
155	LEYTE	TANAUAN	Binolo	Zone 1; Bii	9	0
156	LEYTE	TANAUAN	Binolo	Zone 1; Bii	10	0
157	LEYTE	TANAUAN	Binolo	Zone 2	11	0
158	LEYTE	TANAUAN	Binolo	Zone 2	12	0
159	LEYTE	TANAUAN	Binolo	Zone 2	13	0
160	LEYTE	TANAUAN	Binolo	Zone 2	14	0
161	LEYTE	TANAUAN	Binolo	Zone 2	15	0
162	LEYTE	TANAUAN	Binolo	Zone 2	16	0
163	LEYTE	TANAUAN	Binolo	Zone 2	17	0
164	LEYTE	TANAUAN	Binolo	Zone 2	18	0
165	LEYTE	TANAUAN	Binolo	Zone 2	19	0
166	LEYTE	TANAUAN	Binolo	Zone 2	20	0
167	LEYTE	TANAUAN	Binolo	Zone 2	21	0
168	LEYTE	TANAUAN	Binolo	Zone 3	22	0
169	LEYTE	TANAUAN	Binolo	Zone 3	23	0
170	LEYTE	TANAUAN	Binolo	Zone 3	24	0
171	LEYTE	TANAUAN	Binolo	Zone 3	25	0
172	LEYTE	TANAUAN	Binolo	Zone 3	26	0
173	LEYTE	TANAUAN	Binolo	Zone 3	27	0
174	LEYTE	TANAUAN	Binolo	Zone 3	28	0
175	LEYTE	TANAUAN	Binolo	Zone 3	29	0
176	LEYTE	TANAUAN	Binolo	Zone 3	30	0
177	LEYTE	TANAUAN	Binolo	Zone 3	31	0

You are now ready to export the processed CBMS Core Indicators of your barangay to NRDB Pro for mapping.

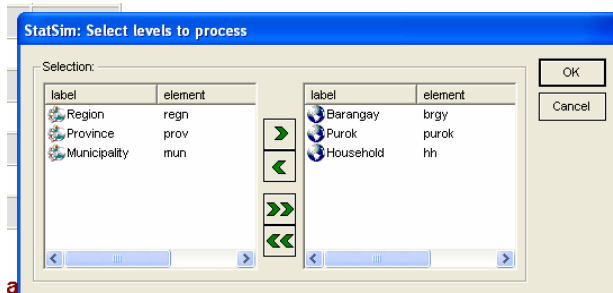
### Part 3. Exporting your Core Indicators to NRDB for Mapping

To export your processed data to NRDB for mapping, follow the following steps:

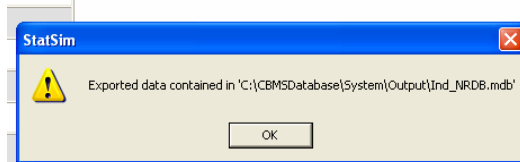
1. Click **File**.
2. Select **Export**.
3. Select **Core Indicators for CBMS-NRDB**.



4. You will now be prompted to select levels to process. Double click on *Barangay*, *Purok* and *Household*. Click on **OK**.



5. A dialog box similar to the one displayed below will be shown. This only indicates where the exported data was placed.

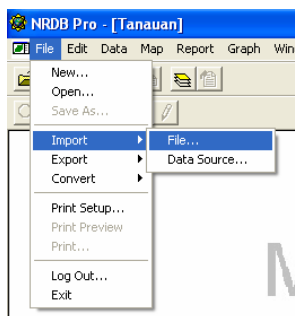


You can now close your StaSim and launch your NRDB Pro.

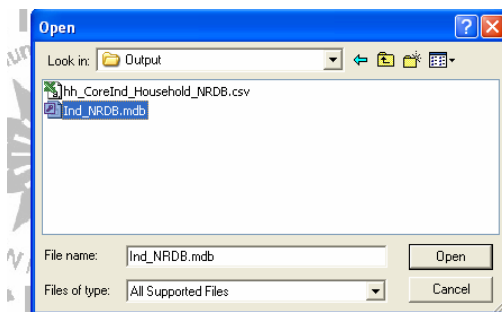
#### Part 4. Importing your Processed Data into the NRDB for Mapping

To import the data processed by StatSim earlier, follow the following steps:

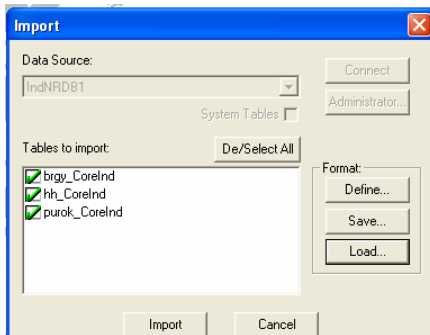
1. Click **File**.
2. Select **Import**.
3. Select **File**.



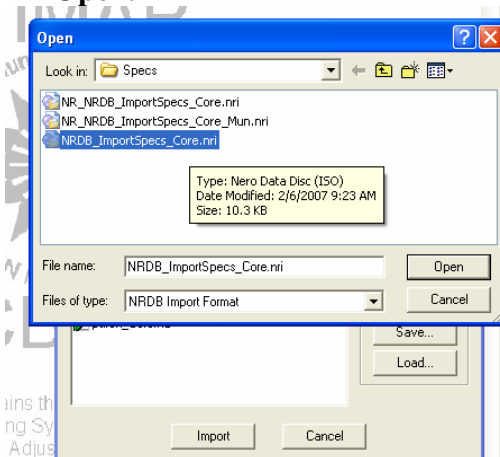
4. You will now be prompted to open the exported data from the StatSim which was stored in the following location:  
**C:\CBMSDatabase\System\Output\Ind\_NRDB.mdb**



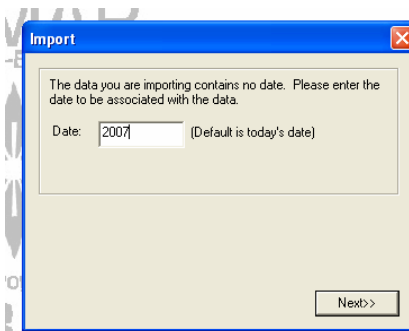
5. Select *Ind\_NRDB.mdb* and then click **Open**.
6. The following box will be displayed.



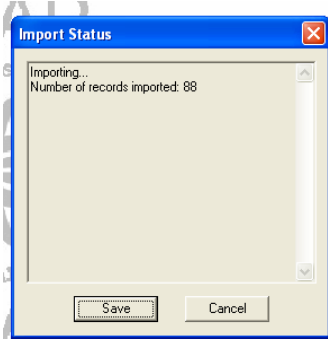
7. Highlight *brgy\_CoreInd* and then click **Load**.
8. Locate the following file in the Specs folder: *NRDB\_ImportSpecs\_Core.nri*. Click **Open**.



9. Click **Import**
10. You will now be prompted to enter a date which will be associated with the data. Just enter the year when the CBMS data was collected. You will do this 3 times.



11. The following dialog box will be displayed.



To verify whether you were able to import your data successfully, use the following formula:

**No. of Records Imported = No. of Barangay + No. of Puroks + No. of Households**

In this case, we have only imported one barangay (Brgy. Binolo), 7 puroks and 80 households. Thus, the number of records imported as shown above is 88.

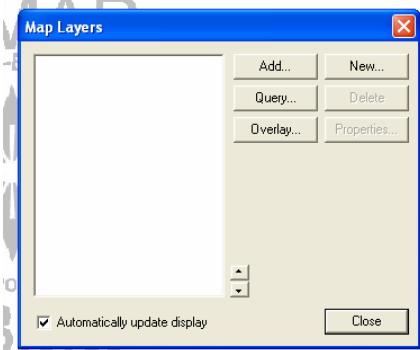
**12. Click Save.**

Congratulations! You are now ready to map the CBMS Core Indicators of your barangay.

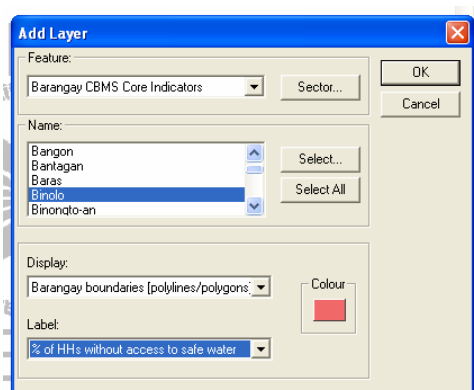
#### **Part 4. Importing your Processed Data into the NRDB for Mapping**

Let us say that you want to generate a map showing the proportion of households without access to safe water, then just follow the following steps:

1. Double click on the **Map Layer** icon. The following box will be displayed:

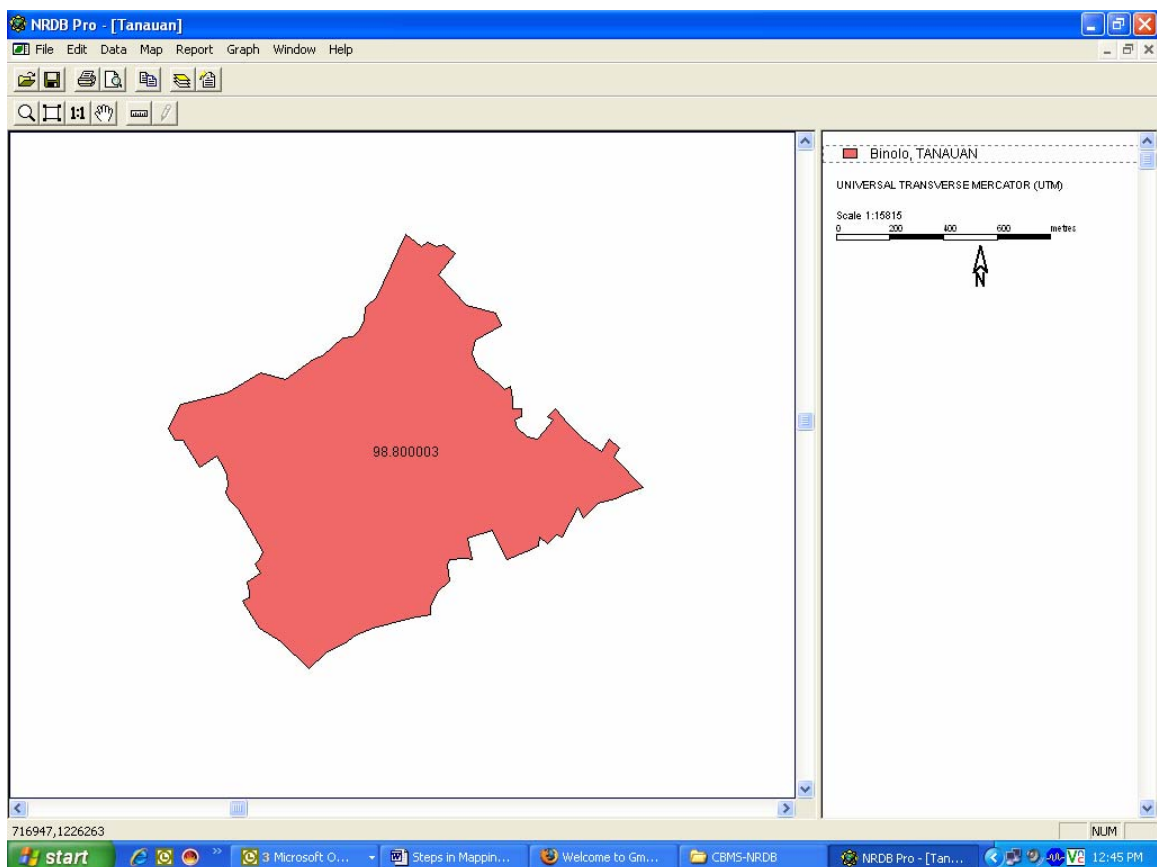


2. Click on **Add**. The following box will now be displayed:



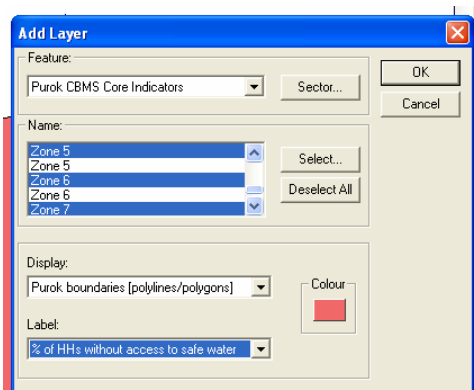
- Under *Feature*, select **Barangay CBMS Core Indicators**.
- Under *Name*, select **the name of your barangay** (in this case, Brgy. Binolo).
- Under *Display*, select **Barangay boundaries (polylines/polygons)**.
- Under *Label*, select **% of HHs without access to safe water**.

3. Click **OK**. The following map will now be displayed:



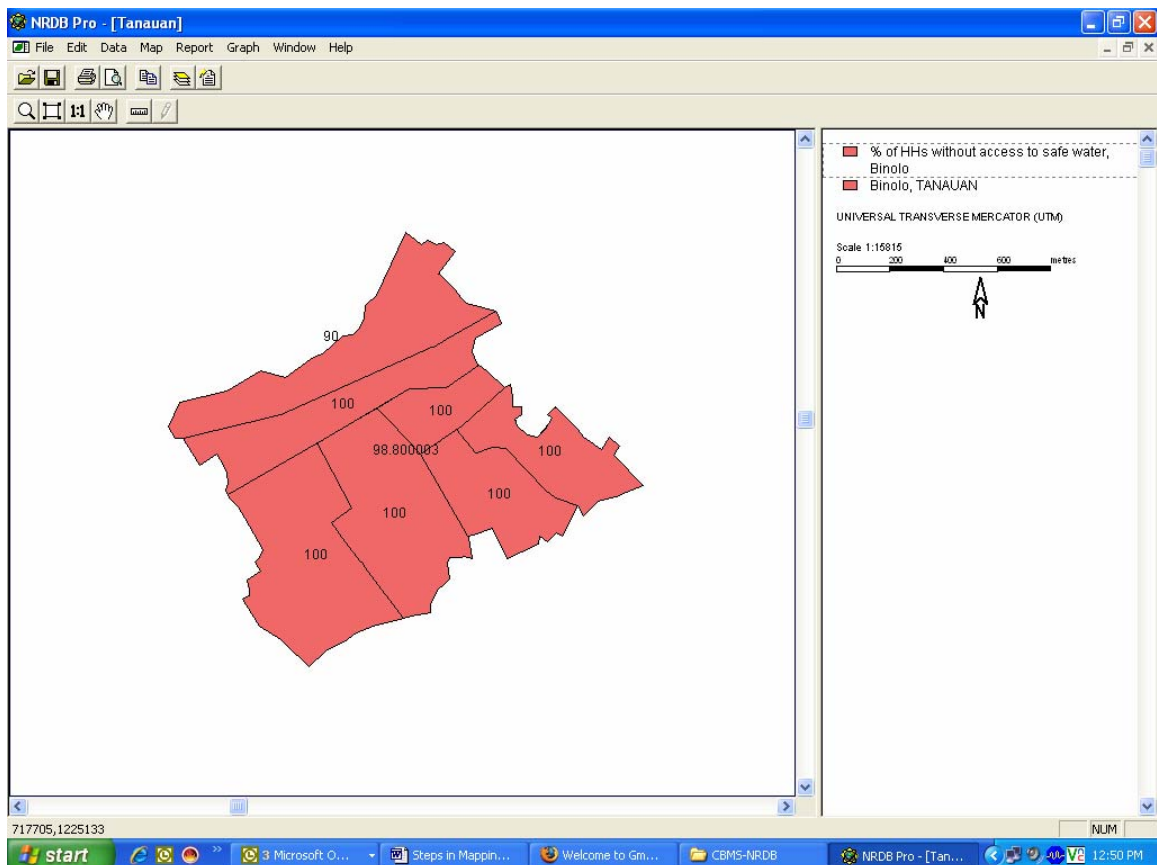
You can also display the access to safe water of each of the purok by clicking on the map layer icon.

4. Click on **Add**. The following box will now be displayed:

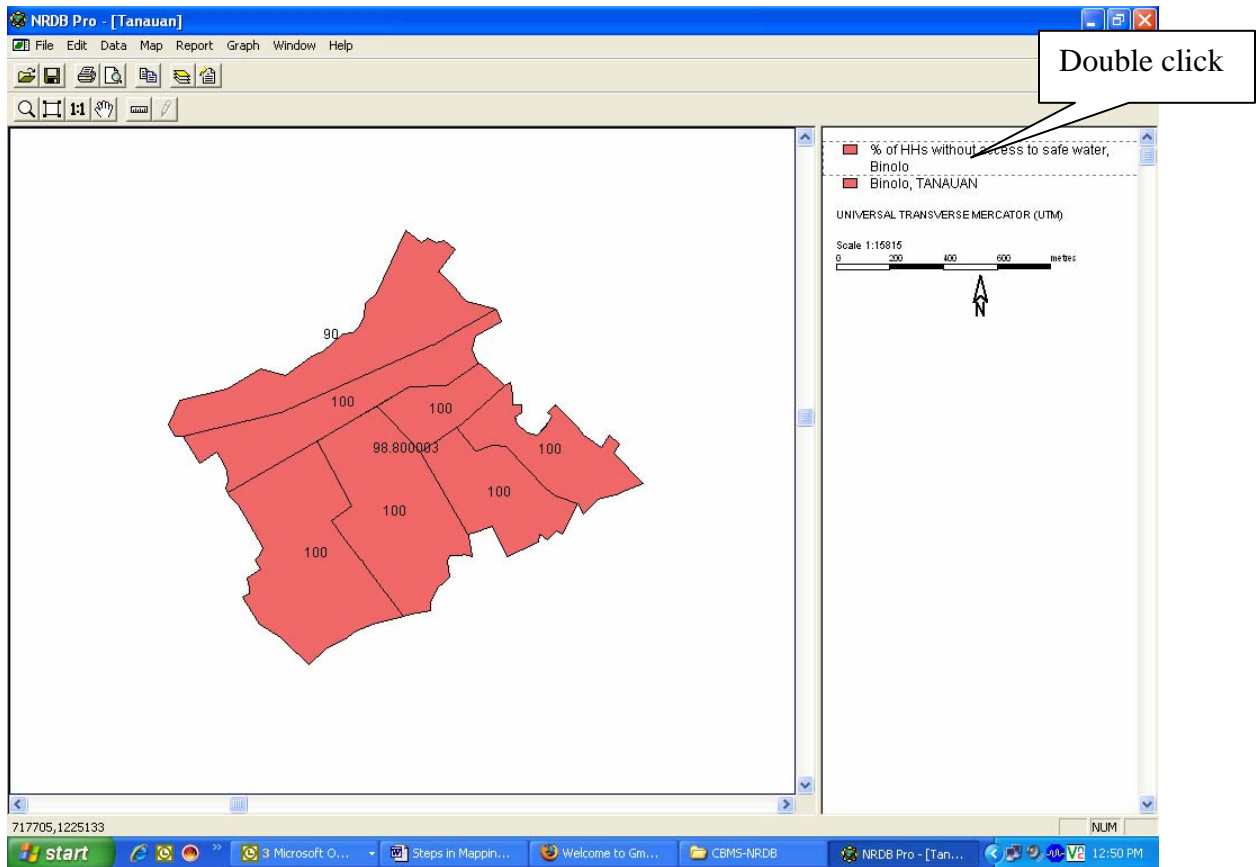


- Under *Feature*, select **Purok CBMS Core Indicators**.
- Under *Name*, select **the name of the puroks of the barangay** (in this case, Brgy. Binolo).
- Under *Display*, select **Purok boundaries (polylines/polygons)**.
- Under *Label*, select **% of HHs without access to safe water**.

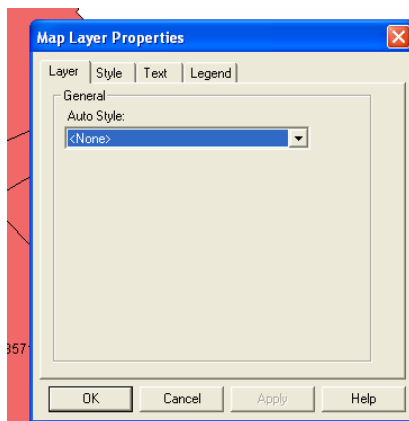
5. Click **OK**. The following map will now be displayed:



6. To show which Puroks are performing better or worse than the others, we always use the following color scheme: *shades of blue*. That is, the darker the shade of blue, the better the situation of the Purok vis-à-vis the indicator. To do this, double click on the **% of HHS without access to safe water** in the Map Layer View as shown below.



The properties of the map layer will now be displayed

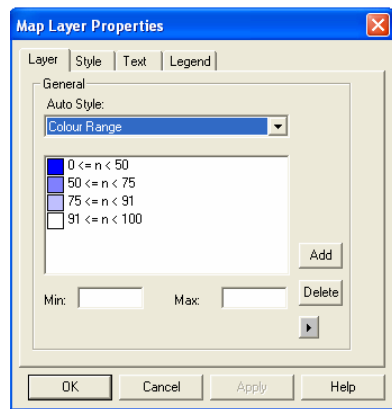


7. Select the **Layer** tab, click on the drop-down menu and select **Colour Range**. You can now set your colour ranges. (*Note: the following ranges may only apply in the case of Brgy. Binolo, Tanauan, Leyte*).

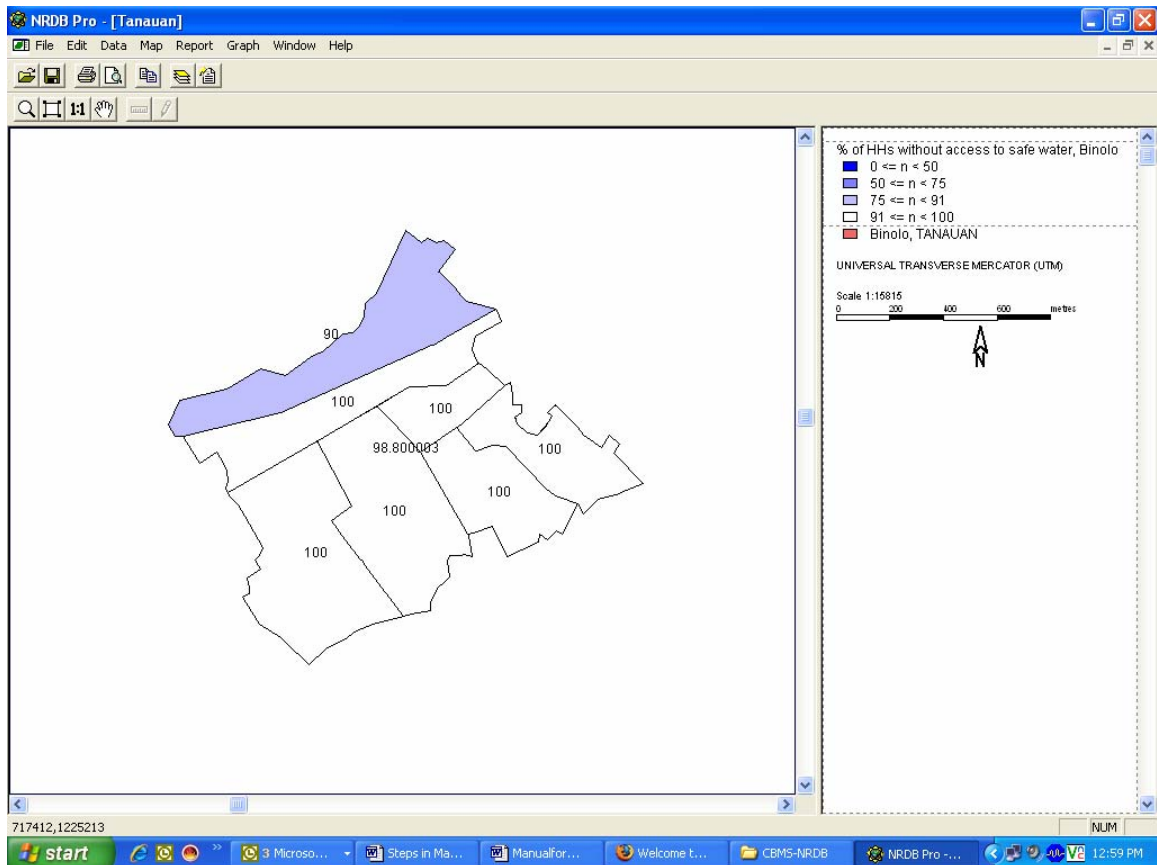
- **1<sup>st</sup> Range** - Minimum: 0 / Maximum: 50
- **2<sup>nd</sup> Range** - Minimum: 50 / Maximum: 75
- **3<sup>rd</sup> Range** - Minimum: 75 / Maximum: 91
- **4<sup>th</sup> Range** - Minimum: 91 / Maximum: 100

8. Next, double-click on each of the boxes adjacent to the ranges to apply our color scheme.

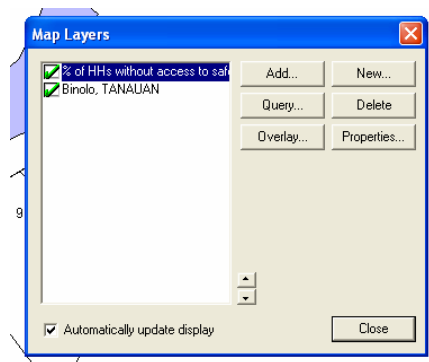
- **1<sup>st</sup> Range** - Hue: 160 / Saturation: 240 / Lumens: 120
- **2<sup>nd</sup> Range** - Hue: 160 / Saturation: 240 / Lumens: 180
- **3<sup>rd</sup> Range** - Hue: 160 / Saturation: 240 / Lumens: 210
- **4<sup>th</sup> Range** - Hue: 160 / Saturation: 240 / Lumens: 240



9. Click **OK**. The following map with our desired color scheme will now be displayed.

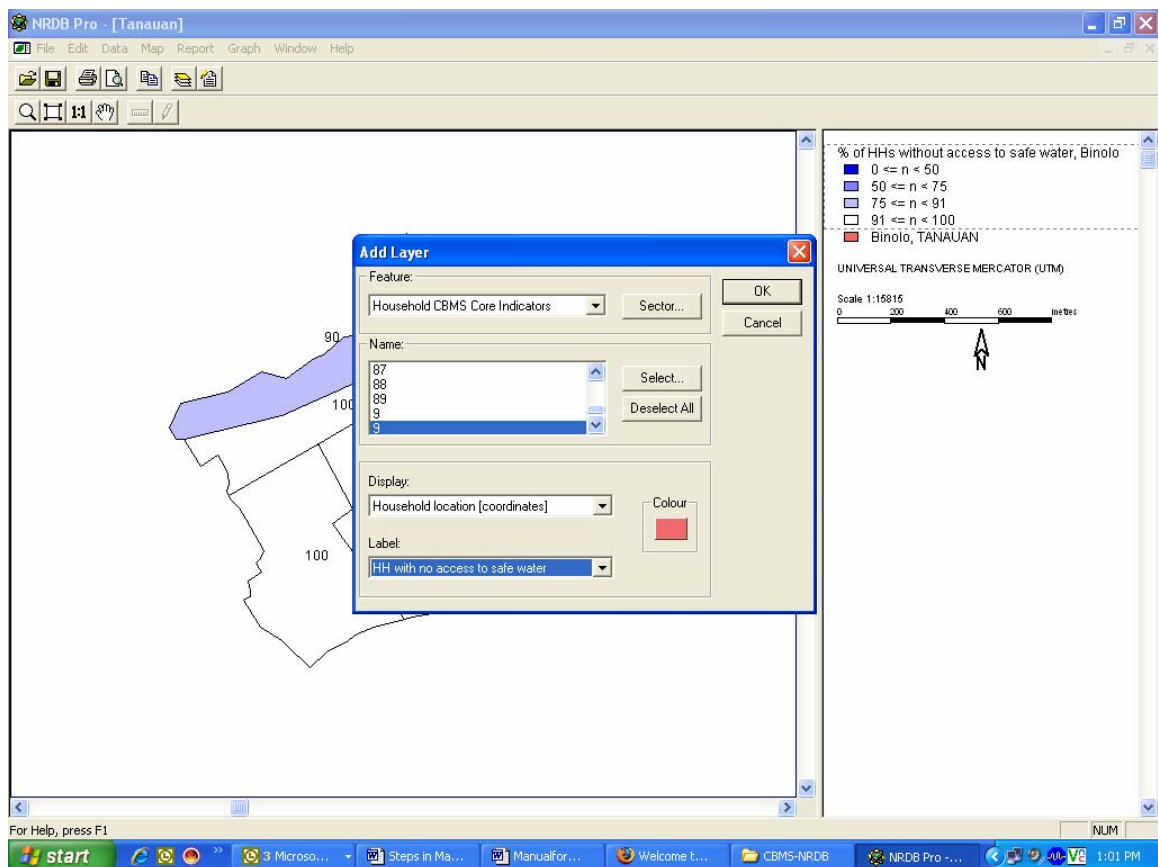


10. We are now ready to display another layer showing **% of HHs without access to safe water**. Click on **Map**, select **Map Layers**.

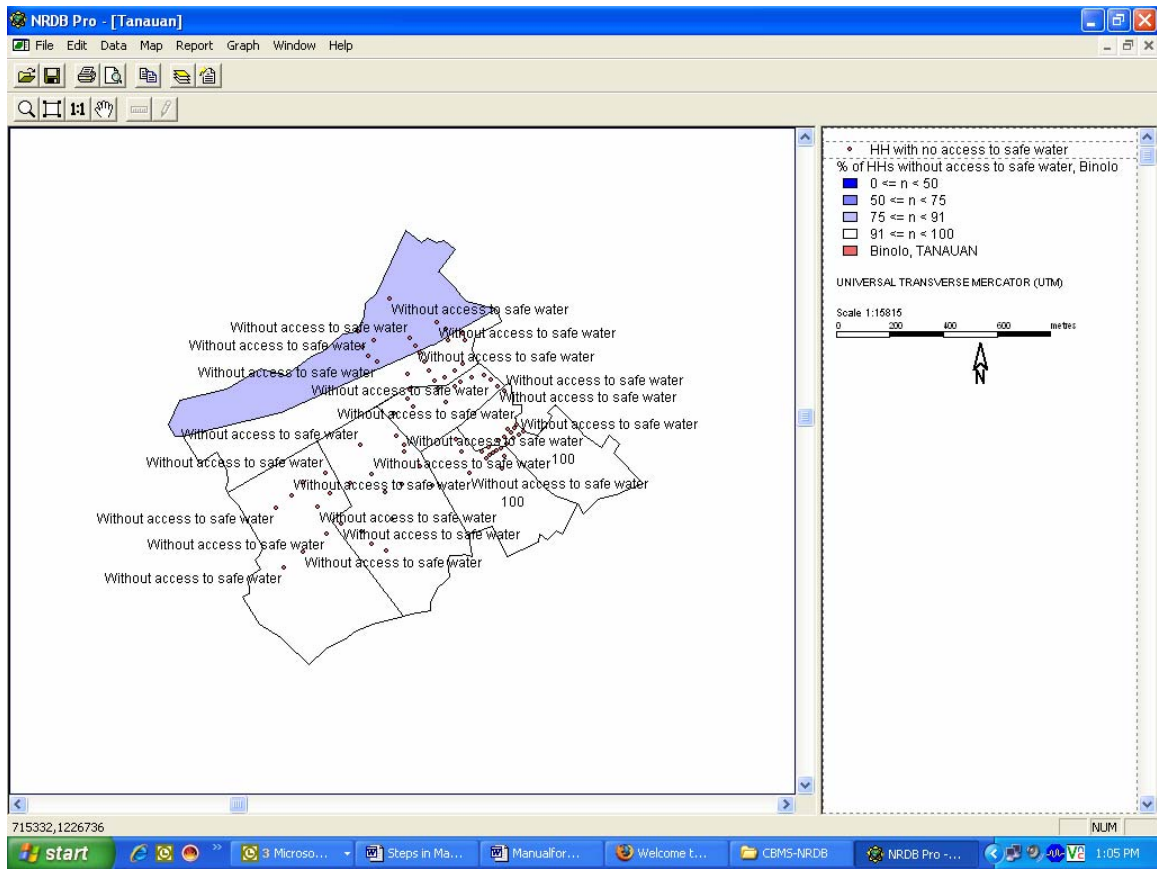


11. Click **Add**.

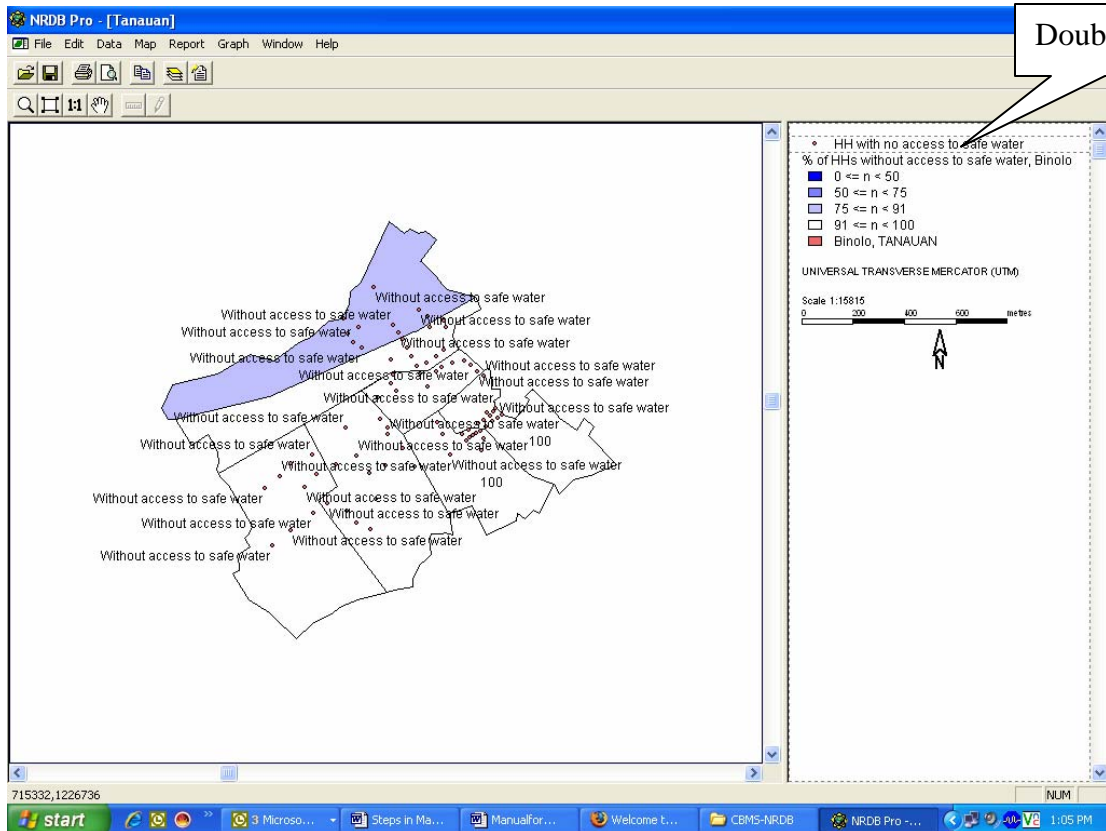
- Click on the drop-down menu under *Feature* and select **Household CBMS Core Indicators**.
- Under *Name*, select only the **Household IDs** in the barangay that you are currently processing.
- Under *Display*, select **Household Location (coordinates)**.
- Under *Label*, select **HH with no access to safe water**.



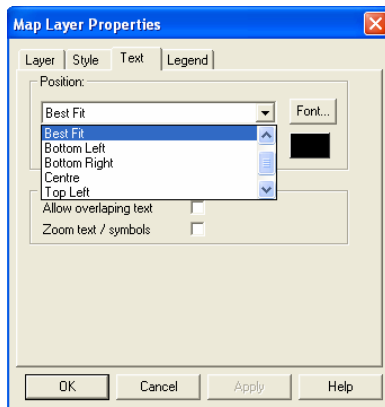
12. Click **OK**. The following map will now be displayed.



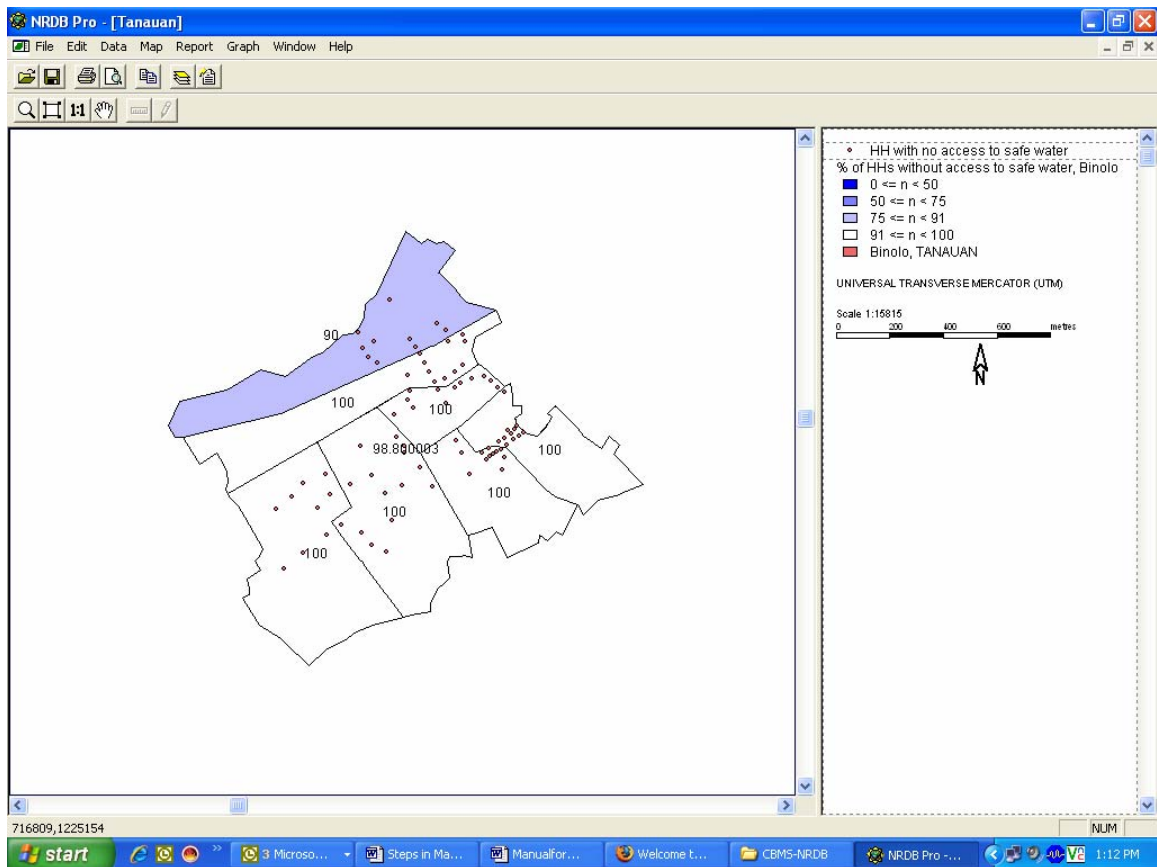
13. To remove the text adjacent to each household dot (e.g. with or without access to safe water), double click on the map layer: **HH with no access to safe water**.



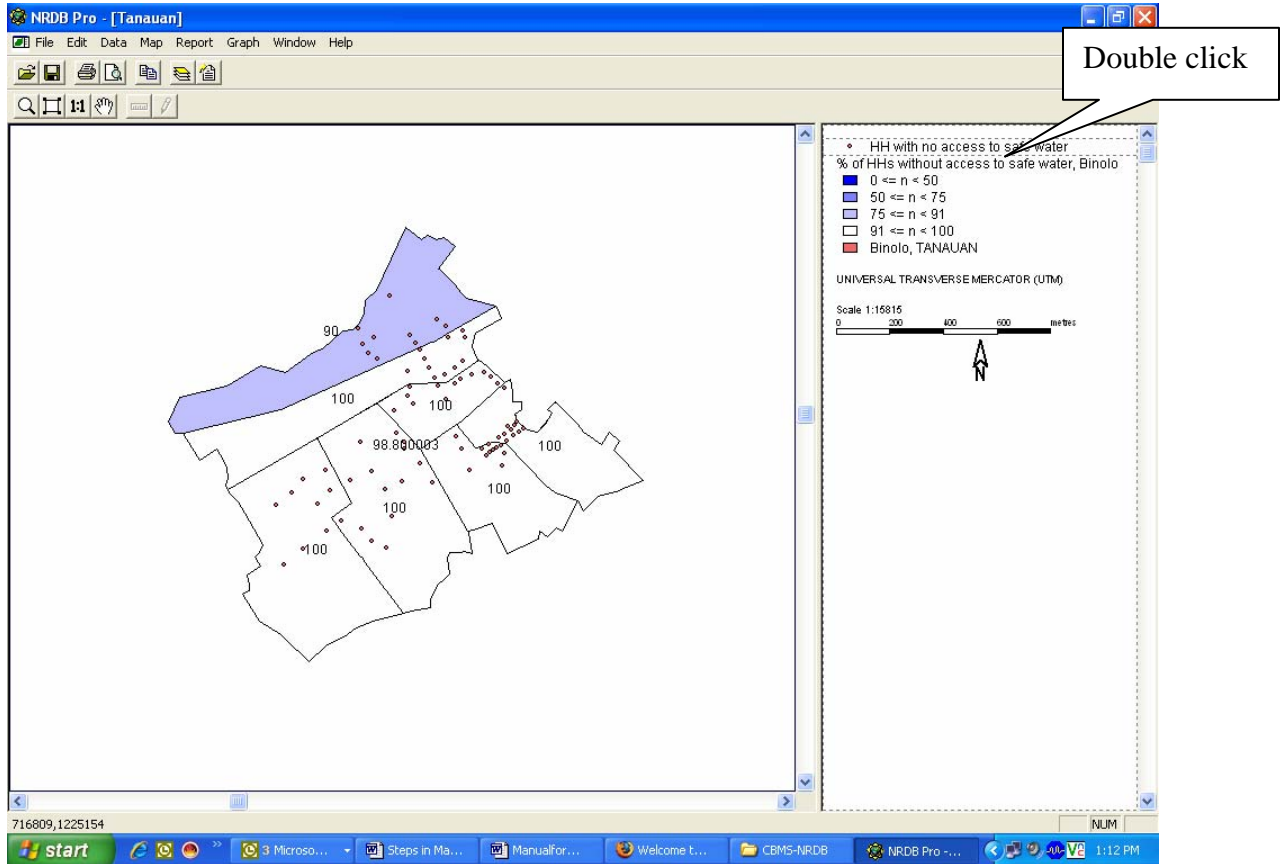
The map layer properties will now be displayed. Go to the **Text** tab, click on the drop down menu and select **None**.



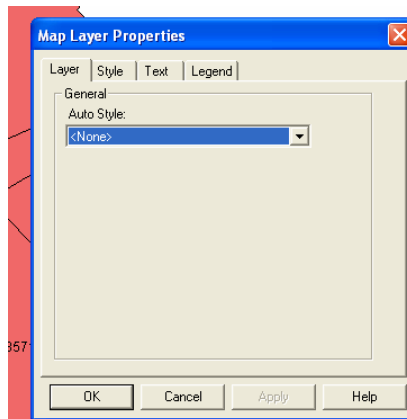
Click **OK**. The following map shall now be displayed:



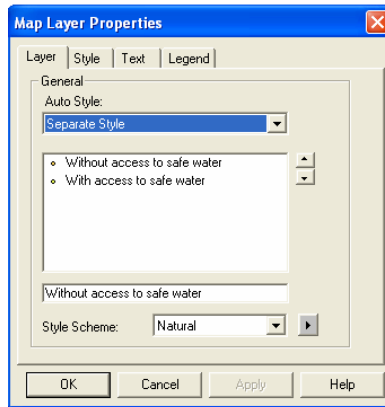
**14.** In order to show which households have access to safe water and which ones have no access, we will adopt another color scheme: **Green Dots** will represent households with access to safe water while **Red Dots** will represent households without access to safe water. To do this, double click again on the map layer: **HH with no access to safe water**.



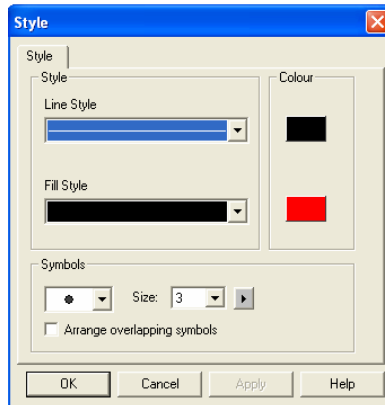
15. The properties of the map layer will now be displayed.



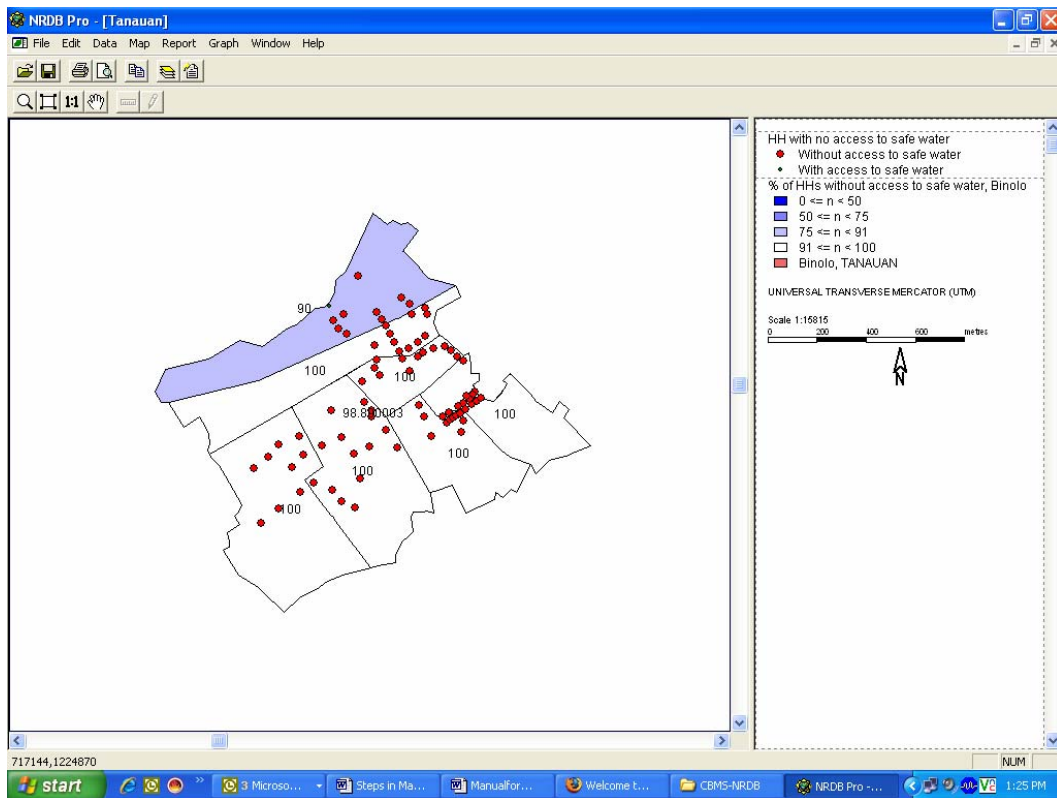
Select the **Layer** tab and then select **Separate Style**.



16. Double click on the dot adjacent to the text: **Without access to safe water**. Under Fill Style, select the **red** color. In order to emphasize the location of the households which do not have access to safe water, we will increase the size of the household dots to 3.



17. Next, double click on the dot adjacent to the text: **With access to safe water**. Under Fill Style, select the **green** color. Click **OK**. The following map will no be displayed.



18. **Save your map layer.** You can also copy your map to a powerpoint slide for presentation purposes similar to the one displayed below.

