

## Reports, Graphs and Queries

### A. Reports

Reports produce tabular outputs of data contained in the database. Reports may be viewed, saved to file, printed or copied to the clipboard. Reports can also be viewed in standard, time-series and sectoral formats.

*Reports may be made using simple data selection or by using a query. The report contains header, logo and footer as well as the data. These can be updated in Report Settings.*

**Standard reports** consist of a table of columns containing the attributes for the selected features. **Time-series reports** consist of columns containing the selected dates with rows containing the feature name and the corresponding values. **Sectoral reports** contain all data for the selected feature names and for its child features for the currently active sectors.

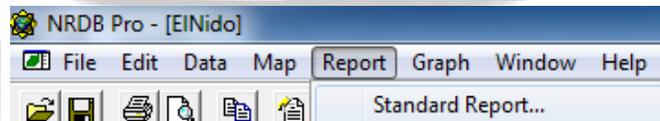
*The report is an html document. Links to files and hotlinks to files, websites and email address may be opened by clicking on the name. The left and right arrows at the top left of the window are used for navigating between links.*

*Note: File links and hotlinks are created by adding an attribute of type File or Hotlink respectively in the Data Dictionary and then importing to file name in the Time-series Editor dialog.<sup>1</sup>*

To show all the data on Education and Literacy in all villages in Santa Elena, here are the following steps:

From the *Report* menu, select **Standard Report**.

The *Standard Report* dialog is displayed.

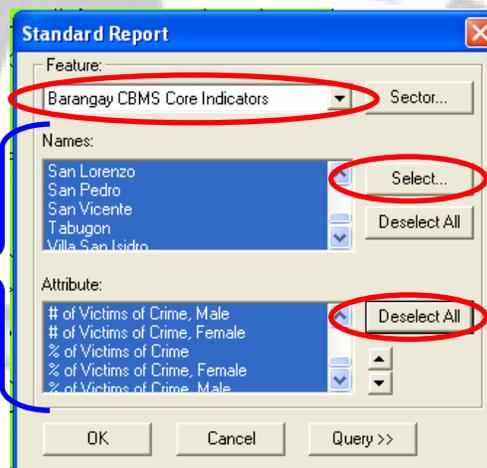


The standard report window will appear.

Choose the following  
Feature:  
***Barangay CBMS Core Indicators***

Names:  
Click the button ***Select All*** to select  
*all barangays*

and for the Attribute  
Click the button ***Select All*** to select  
*all indicators*



Here is the sample output:

<sup>1</sup> NRDB Help

NRDB Pro - [Report - Barangay CBMS Core Indicators, El Nido]

File Edit Data Map Report Graph Window Help

Barangay CBMS Core Indicators, El Nido

Barangay	Date	# of members 0-5	# of members 0-5, Male	# of members 0-5, Female	# of child death	# of Child death, Male	# of Child death, Female	% of Child death	% of Child death, Male	% of Child death, Female	# of Child Births (less than 1 year old)	# of women who died due to pregnancy causes	% of women who died due to pregnancy causes	# of malnourished children	# of malnourished children, Male	# of malnourished children, Female	% of malnourished children	% of malnourished children, Male	% of malnourished children, Female
Aberawan	19 Mar 2009	218	113	105	3	3	0	1.4	2.6	0	30	0	0	30	14	16	13.8	12.4	15.2
Sagong Bayan	11 Mar 2009	181	93	88	1	1	0	0.5	1.1	0	43	0	0	18	8	10	9.9	8.6	11.4
Barotuan	11 Mar 2009	282	139	143	4	2	2	1.4	1.4	1.4	50	0	0	11	5	6	3.9	3.6	4.2
Bebeladan	11 Mar 2009	306	162	144	0	0	0	0	0	0	61	0	0	1	0	1	0.3	0	0.7

Done NUM

## B. Graphs

Graphs enable the graphical output of numerical data. There are three types of graphs available in the CBMS-NRDB – Histograms, Time-Series and Pie Charts.

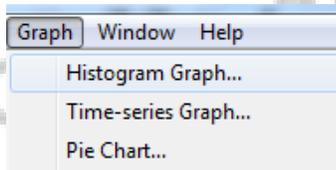
The **Histogram Graph View** outputs the results of a standard graph or query as a histogram graph. The numerical attributes selected are plotted on the graph. The label attributes selected are displayed on the x axis.

The **Time-Series Graph View** outputs the results of a standard time-series graph or query as a time-series graph. The graph consists of numerical values plotted against a range of dates.

The **Pie Chart** outputs the results of a standard selection or a query as a pie chart. The area of each slice of the pie is proportional to its share of the total.<sup>2</sup>

As an example, use histogram to show proportion of households with income below poverty threshold for all the villages. Here are the steps:

Select **Histogram Graph** from the *Graph* menu.

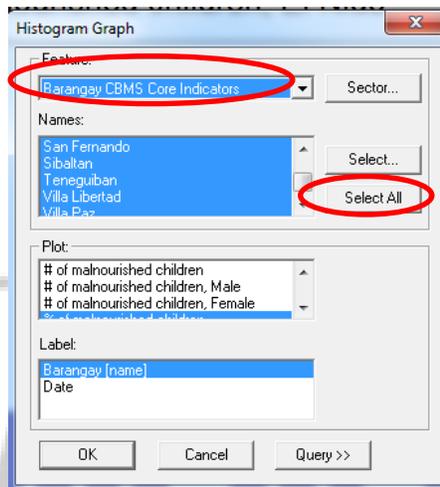


Choose the following  
Feature:  
**Barangay CBMS Core Indicators**

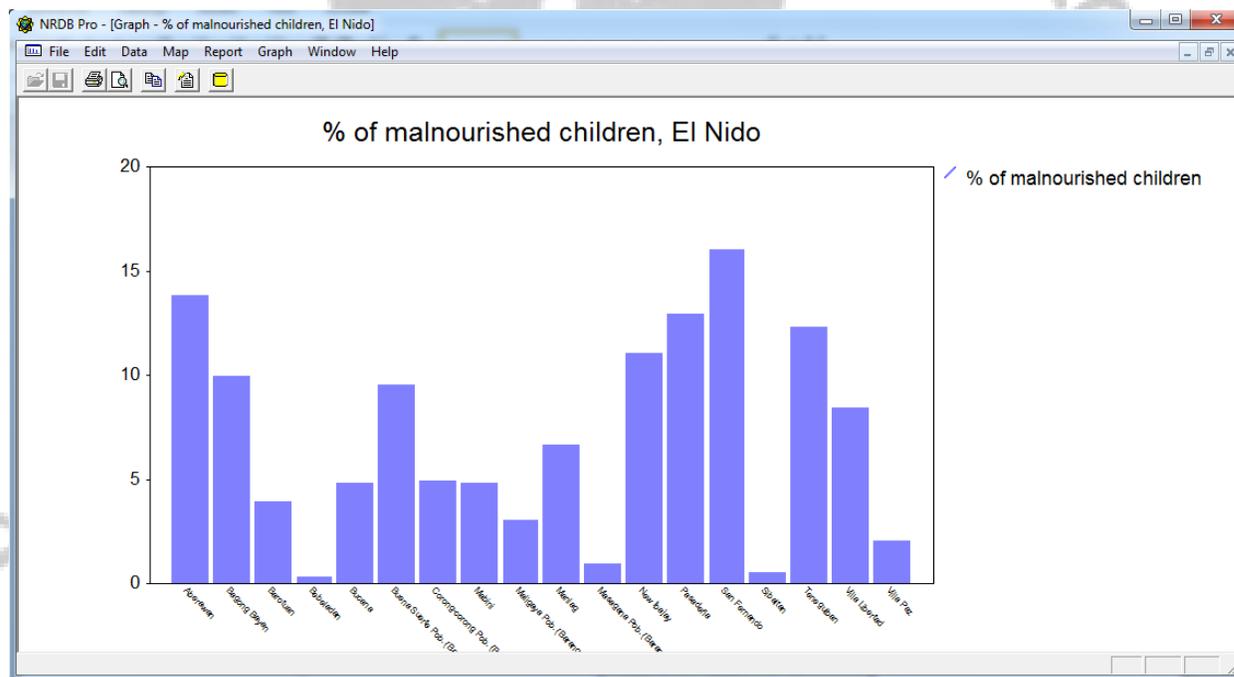
Names:  
Click the button **Select All** to select  
all barangays

Plot:  
**% of malnourished children**

Label:  
**Village (Barangay) [name]**



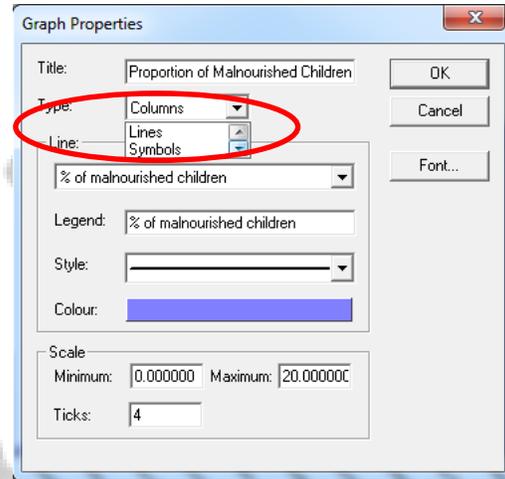
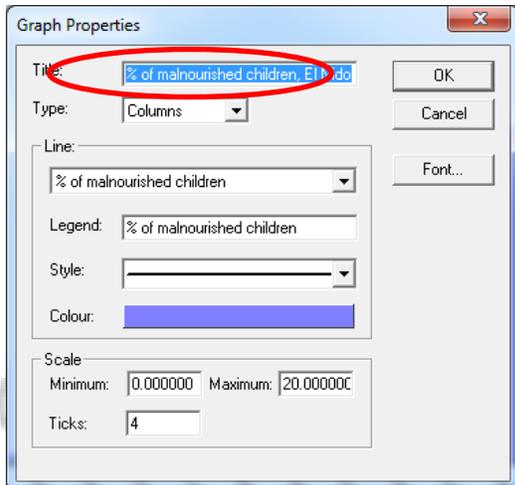
Here is the sample graph of proportion of malnourished children in Municipality of El Nido, Palawan:



To modify colors, type, font, legend and others, double-click on the chart to show the graph properties.

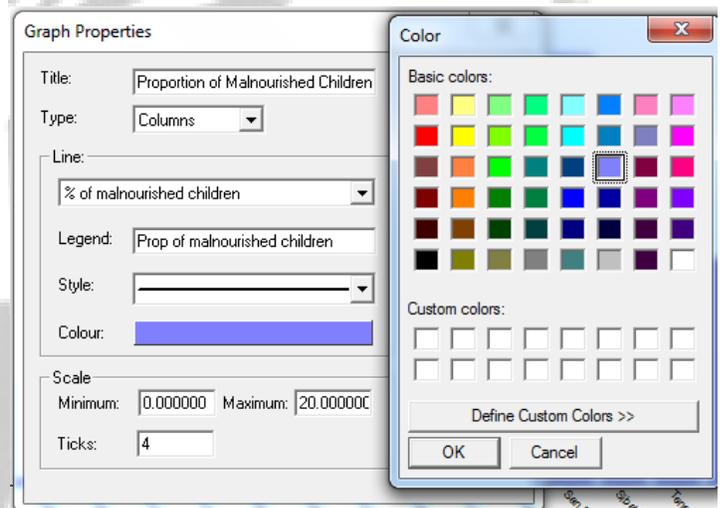
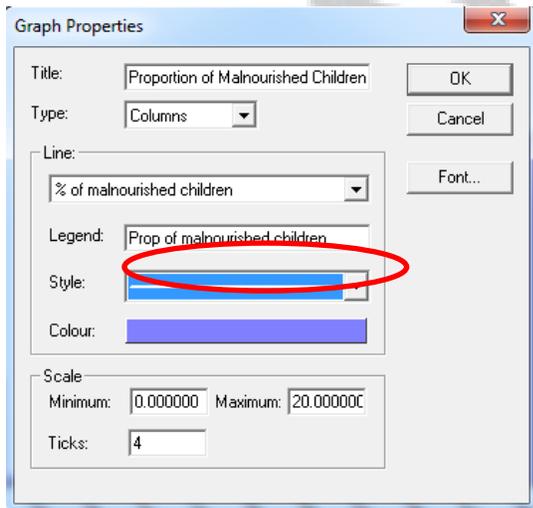
The title of the graph can be easily  
or  
edited as shown below:

Type of graph can either be Columns, Lines,  
Symbols

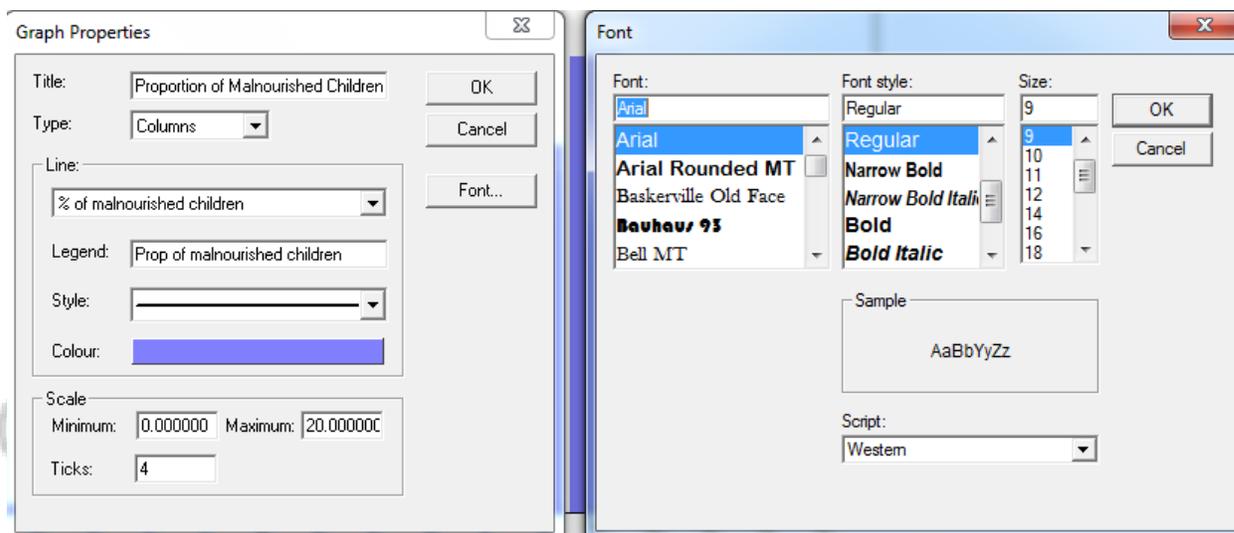


Text that appears in the legend can also be edited  
Colour field

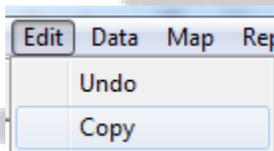
Select desired color by changing the color in the



To change the font, font style and size, click Font button



To copy the generated graphs and transfer to MS word or Powerpoint, click Edit in the main toolbar and select Copy.



### C. Queries

By using queries, users have more control over what is displayed. With queries you can **apply conditions**. For example, only select and display data for a particular year in a time-series database or display only households which are education poor.

*The query dialog allows for retrieval of data to be displayed as reports, graphs or as a map layer.*

*The basic functionality of the query dialog is similar to the Add Layer dialog for maps and the report and graph dialogs. For maps you should select the feature, names of features, one attribute of type polylines, polygons, coordinates or image and one attribute for the label. For reports and graphs the attributes will include numeric and text values.*

*Queries also allow data to be retrieved according to conditions such as the value of their attributes or the selection of data for a specific period. Attributes for parent features may also be selected. Queries may include calculations and also the production of statistics.*

**Feature**      *Select the feature to be used in the query.*

**Attributes** Check the box to left of the attributes to appear in the graph, map or report. For attributes of type Boolean or Link, expand the attribute by clicking on the small plus [+] to the left of the name. A list of values will appear. By default all values are checked. Selecting specific values will result in only features with those values being retrieved. Attributes belonging to parent features can also be selected. To view the attributes of parent features click on the small plus [+] to the left of the bottom-most attribute. For maps, one attribute of type Coordinates or Polylines/Polygons must be selected. Text or numerical attributes will be used as labels.

**Sector** Enables the selection of a type of feature by sector.

**Select** Enables the selection of features by parent feature.

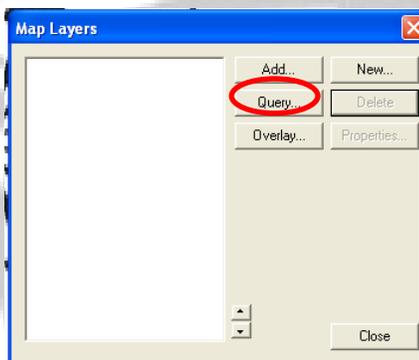
**Select All** Selects / deselects all the child attributes of the currently selected attribute.

### 1. Map query

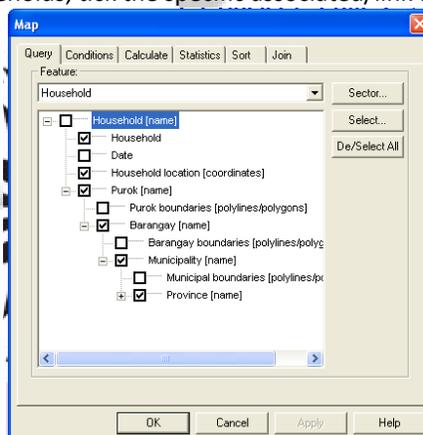
For instance, selecting “Map layers” will display only the attributes directly owned by the feature selected. On the other hand, using “Query>>”, variables that can be generated in a single layer can select certain conditions from other associated/linked tables. In the map layer add button, only data for the feature Barangay CBMS Core indicators was shown. Using query, the user can also tick parent features and its attributes which can be shown in the map.

One specific use of map query is in transporting data from NRDB to another program, say GIS software. By using query, the user can export names, parent features and other specific data. Here are the steps:

From the *Map layers* window, select **Query...**



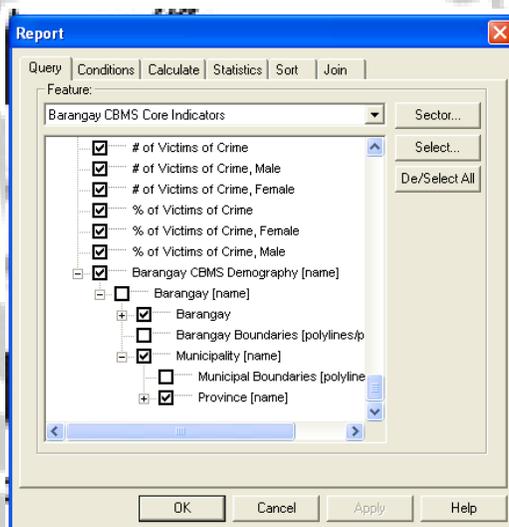
To show the parent features of Households, tick the specific associated/link data user want to show.



The other tabs could also be explored and left as exercises. “Conditions” will just filter the data, “Calculate” will perform some common computations, “Statistics” will generate some common statistics such as mean, count, etc., “Sort” will order the data by user specified variables and Join can perform basic spatial queries.

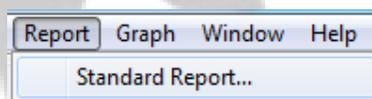
## 2. Reports Query<sup>3</sup>

Selecting “Standard Report” will display only the attributes directly owned by the feature selected. On the other hand, using “Query>>”, variables that can be generated in a single report can come from other associated/linked tables. In the previous example, only data for the feature Barangay CBMS Core indicators was shown. Using query, the user can also tick parent features and its attributes which can be shown in the report.



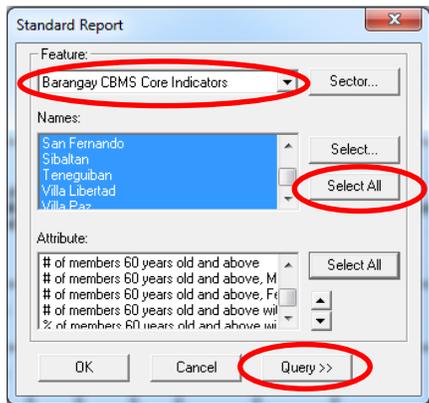
As shown above, selecting the feature “Barangay CBMS Core Indicators” in the “Query” tab will show in a tree the genealogy of the feature. Hence, since there are pre-defined relationships, the user could display the attributes under the feature where the selected feature is nested (parented) until the grandest parent.

For example, we want to identify the waterless villages (or villages with more than 50% no access to safe water supply) in Municipality of El Nido, Palawan. Follow the steps below:



1. Go to Report and click Standard Report

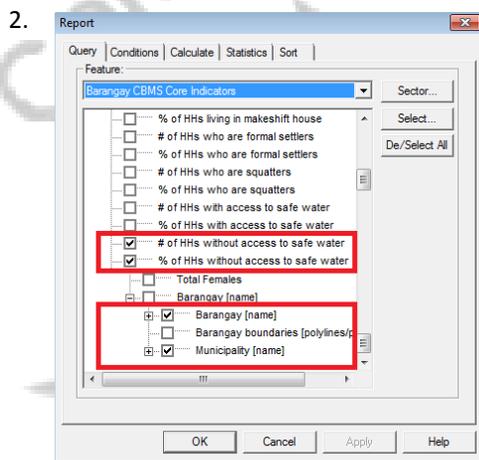
<sup>3</sup> NRDB Help



Choose the following Feature:  
**Barangay CBMS Core Indicators**

Names:  
Click the button **Select All** to select all barangays

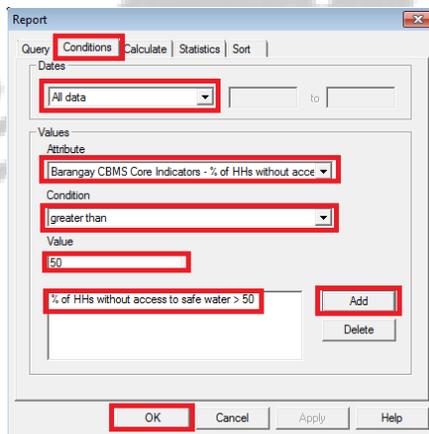
and for the Attribute  
Click the button **Select All** to select all indicators



Check boxes adjacent to the following features:

- b. # of HHs without access to safe water
- c. % of HHs without access to safe water
- d. Barangay name
- e. Municipality name

3. Click Conditions Tab



Choose the following Dates:  
**All data**

Attribute:  
**Barangay CBMS Core Indicator - %HHs without access to safe water**

Condition:  
**Greater than**

Value:  
**50**

Click **Add** then **OK**