# Storytelling Through **Data Visualization**

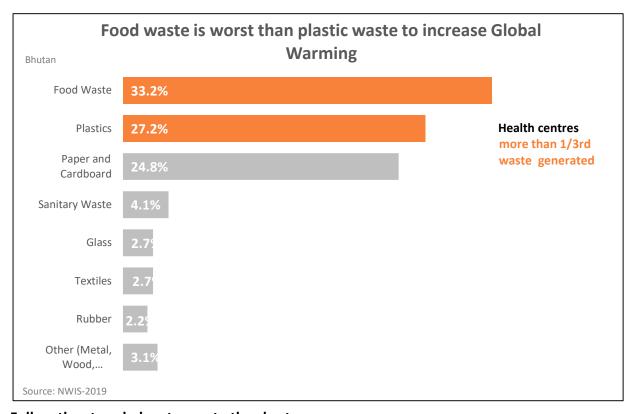
# **CREATE VISUALIZATIONS USING EXCEL**

User Manual



## **BAR CHART**

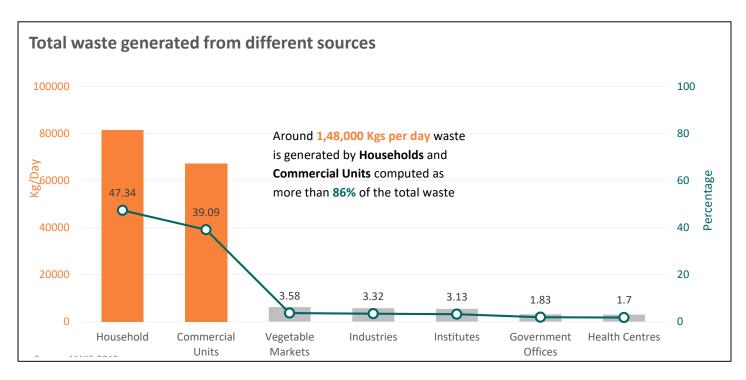
Create the bar chart shown below to present a story on "Composition of general waste from health centres".



- Step 1 Select the data.
- **Step 2** Click **Insert** > **Column Chart** icon, and select bar chart option of your choice.
- **Step 3** To apply a formatting option to a specific component of a chart (such as *Vertical (Value) Axis, Horizontal (Category) Axis, Chart Area*, to name a few), click **Format** > pick a component in the **Chart Elements** dropdown box, click **Format Selection**, and make any necessary changes. Repeat the step for each component you want to modify.
- Step 4 To associate "%" sign with data value, use concatenate function in excel to concatenate with the data values.
- Step 5 Click on the label option and check 'select range' and select % range so value can be show with % sign.
- Step 6 To change the bar colors to gray, go to Format tab and fill with gray color
- **Step 7** To assign different colors to highlight the bar, click on the desired bar twice to select and fill it with an appropriate color.
- Step 8 Add title and subtitle.
- Step 9 Add text box to present the source and narrative.

# **DUAL-AXIS CHART**

Create the dual axis chart shown below to present a story on "Total waste generated from different sources in kilograms per day".



- Step 1 Select a chart to open Chart Tools.
- Step 2 Select Design > Change Chart Type.
- Step 3 Select Combo > Cluster Column on Secondary Axis.
- **Step 4** Select **Secondary Axis** for the data series you want to show.
- Step 5 Ensure Cluster Column is selected or Select the drop-down arrow and choose the same.
- Step 6 Select OK.
- Step 7 Format chart as steps mentioned in the previous exercise
- **Step 8** Assign an appropriate heading to the visualization to interpret it well
- **Step 9** To add narrative to the visualization, select **Insert > Text box** and click inside the chart to make it a chart component.

# STACKED BAR

Create the stacked bar chart shown below to present a story on "Total waste generated from different sources in kilograms per day".



- **Step 1** Select the data.
- Step 2 Click Insert > select Column Chart icon, and select More Column Charts.
- Step 3 Click on Bar > Stacked Bar and click OK.
- Step 4 Right click on axis and select Format Axis
- Step 5 Go to Axis Options and adjust Minimum and Maximum ranges.
- **Step 6** Remove all non-required elements.
- Step 7 Right click on bars and select Add Data Labels and format them as required.

# **INFOGRAPHICS - FIGURES**



- Step 1 Select dataset and add another series with value 100 and name it as "Gray series".
- Step 2 Click Insert > Column Chart icon, and select Stacked Column Chart.
- Step 3 Select actual data series and select Series Options > Secondary Axis.
- **Step 4** Change both **vertical axis** and set **minimum** and **maximum** values to **0** and **100** respectively (to keep both axis of same size).
- **Step 5** Select Gray series and change the color to gray to indicate gray data.
- **Step 6** Insert pictures to be used in the visualizations by clicking **Insert** > **Pictures.**
- **Step 7** Make a copy of pictures and color them gray using **Format** > **Color**.
- **Step 8** Copy the gray pictures and select 'Gray series' and paste the pictures.
- **Step 9** Copy the colored pictures, select secondary series and Paste the pictures.
- Step 10 To change the image in other bar, select the individual bar and paste the desired picture.
- Step 11 Select Gray series, click Fill > Picture or Texture Fill > Stack and Scale with > Unit/Picture > 100
- **Step 12** Apply same settings for colored series.
- **Step 13** Give an appropriate title to visualization and applied desired formatting.