Exercise

Filtering, Sorting, and using simple formulas in Google Sheets

Summary

1. Module: Understanding Data[1]
2. Objective: Learn about filtering and sorting data, using simple formulas in Google Sheets
3. Time Allotment: 1 hour

Steps

Refresher Exercise

Related slide

Refer to this dataset on Forest Fires Damage, it informs about the damage from forest fires of each province in Thailand during 1999-2002. This exercise helps you refresh your knowledge about working with the spreadsheet and use basic formulas:

1. Calculate the percentage of forest fire damage each year compared to the forest area of each province.
2. Calculate the average of forest fire damage over the four years (1999-2002) of each province.
3. Convert the area value from hectares (ha) to other units. (1 hectare = 100 acres = 0.01 square kilometers = 10,000 square meters = 6.25 rai)
4. Calculate the median of total forest fire damage for each year.
5. Filters out provinces above median / below median

Using this sample dataset, let's refresh our basic spreadsheet skills by doing the following:

[1] This lesson was adapted from the World Bank's Introduction to Data Literacy training manual by Eva Constantaras, and adapted by Yan Naung Oak, Open Development Cambodia and Open Development Initiative, and is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. For full terms of use, see here.

1. Sort the dataset in ascending order, first by Type of Organisation, and then by Participant's name.
2. Filter for all the participants from CSOs.
3. Filter for all the participants from CSOs that have more than 1000 rows in their dataset.
4. Use the SUM formula to calculate the total number of rows of everyone's datasets combined.
5. Use the AVERAGE formula to calculate the mean number of rows in everyone's datasets.
6. Use the MEDIAN formula to calculate the median number of rows in everyone's datasets.
7. Make sure the data is sorted by Type of Organisation. Next, filter for CSOs, and then use the COUNT formula to calculate the number of participants from CSOs, and then use the MEDIAN formula to calculate the median number of rows for the datasets from CSOs.

Further Practice

Have a practice with other datasets such as GFW - Tree Cover Loss Dataset or other datasets to refresh basic functions such as filtering, sorting, and basic formulas in Google Sheets

Do the following:

1. Sort the provinces in alphabetical order (A to Z)
2. Use the SUM formula to calculate the total tree cover loss in each year
3. Calculate the average of tree cover loss (from 2010-2018) of each province
4. Use the MEDIAN formula to calculate the median number of tree cover loss in each year
5. Filters out provinces above median / below median each year