



## Worksheet: Analysing a large data set (open version)



2



30 min

You can explore 'ecological footprints' on: <https://www.footprintcalculator.org/>  
That website offers limited options for manipulating visualizations.

In this activity you will use Excel to find and compare the ecological footprint and biocapacity of countries. Use the excel data file presented to you by your educator or download it here: [Database in excel format](#)

Using excel make a combined line graph comparing the 'ecological footprint per person' and 'the biocapacity per person' over time for two countries (which you may select yourselves). The following questions may guide you in doing so.

### Exploration: understanding the data-file

- How many rows? How many columns? How many cells? What types of data?
- Why are some numbers big and others small (even in the same column)?
- What is meant by the headings of columns? What special columns are there? What is in them?
- How is the data organised in the table?  
HINT: use the codebook to further explore and understand

### Selecting the required data

- Which countries do you wish to compare overtime? Why these?
- Where can you find the variables you need (in which columns)?
- Filter the data to have just the ones you need to make your graph.  
HINT: paste these data in a new empty Excel file.

### Representing the data

- Use the tools in excel to make the combined line graph as indicated in the task (see top of page).
- What is the story for this graph?
- Can you adjust (manipulate) the graph in such a way that the story will be different?

### Reflection

Compare your graph to the two graphs of the countries you selected from the website.

- What are advantages of combining the graphs of two countries?
- What are drawbacks?