In these tasks, we focus on “Malnutrition”, as defined by World Health Organization, malnutrition includes overweight and undernutrition, like wasting, stunting and underweight.

**--Malnutrition, in all its forms, includes undernutrition (wasting, stunting, underweight), inadequate vitamins or minerals, overweight, obesity, and resulting diet-related noncommunicable diseases.**

<https://www.who.int/news-room/fact-sheets/detail/malnutrition>

Question 1

* In which countries has child malnutrition improved over the period and in which countries has malnutrition got worse?

I didn’t combine wasting and stunting together, because there may be overlaps in undernutrition, e.g. A child can be both wasting and stunting. Therefore, I plot each measurement separately to avoid overlap.

Colours are often used symbolically. Different colours have different meanings.

In western culture, red represents danger, heat, and stop; green represents go, safety, and renewal; blue represents cold; white represents purity, and so on.

In this experiment, measurements are bad things, like underweight, stunting…. So, I use red and orange colour. The larger malnutrition prevalence, the redder it is.

Question 2

* Is there a link between wealth and child malnutrition?

In this section, to match the symbolic meaning of the color, I use ‘green’ to represent ‘rich’, and ‘yellow’ to represent ‘poor’.

Conclusion can be drawn that, the wealth has a negative relationship with undernutrition like stunting, wasting and underweight, and has a positive correlation with overweight.

Question 3

* Show the values on a world map with information on both 0-1 years and 2-5 years appropriately presented.

To give an overview of malnutrition information on a world map, the average prevalence of each type of malnutrition are listed in the bar chart if you select a country.

But the average value can mask important details about the data, such as variability or trends over time. So details maps are drawn after the overview map.