Visualizing and Mapping of Environment and Geography

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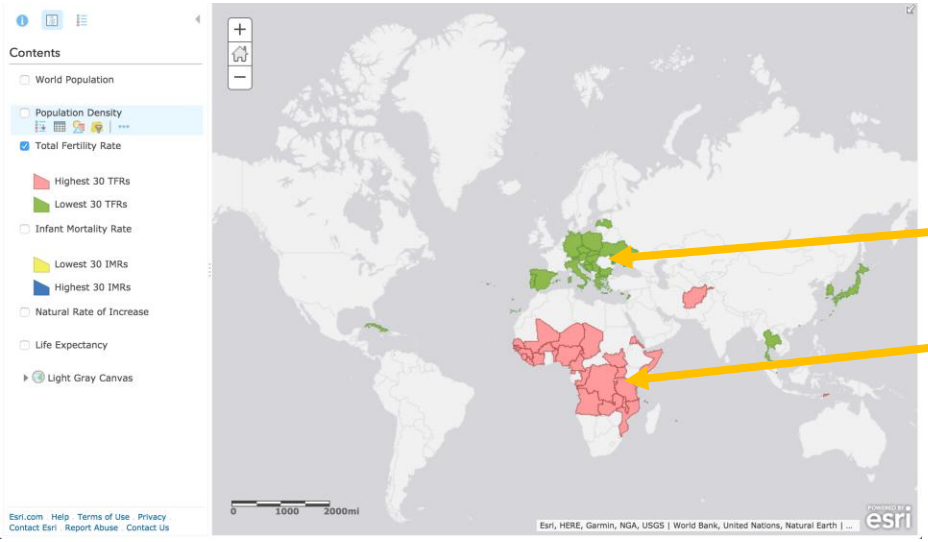
Class Contents

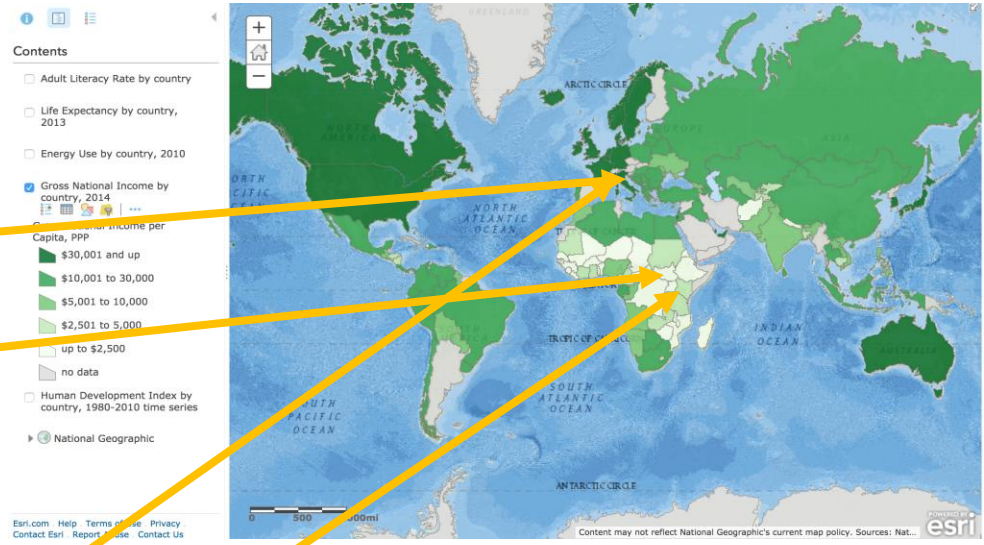
- Students learned how to map environment factors (climate, land cover etc.), human geography (world population and its dynamics/changes, USA population), economy (world gross income index etc.), and urban sprawl/growth through human interaction with environment.

- Through interactive mapping technology, students also learned to build up critical thinking skill by connecting different factors together to understand some social/economic/spatial patterns:
  - Relationship between country's population's growth rate with children maternity rate;
  - Relationship between children birth rate and country's economy;
  - Human's settlement (city) is related to relative environmental factors (i.e. easy to access water);
  - Temperature changes along with the changes of latitude and elevation;

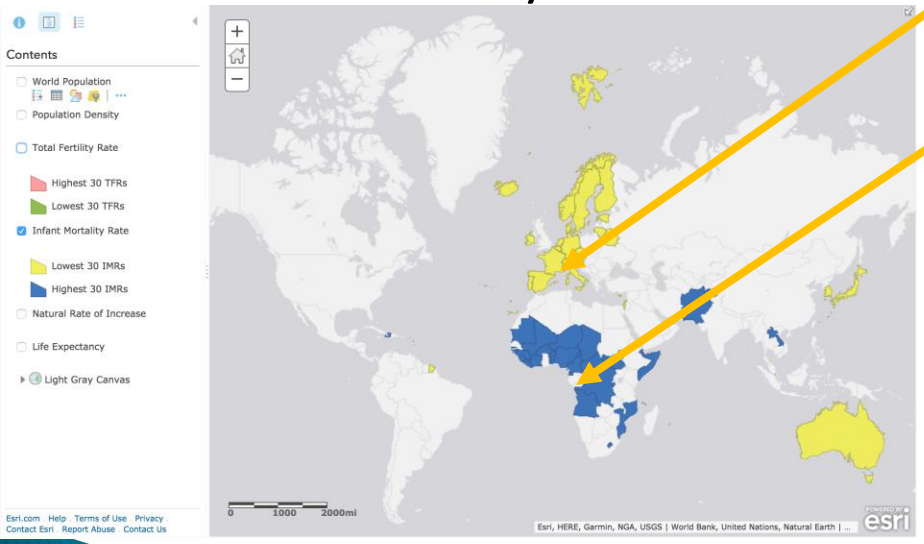
Mortality Rate



Gross Income

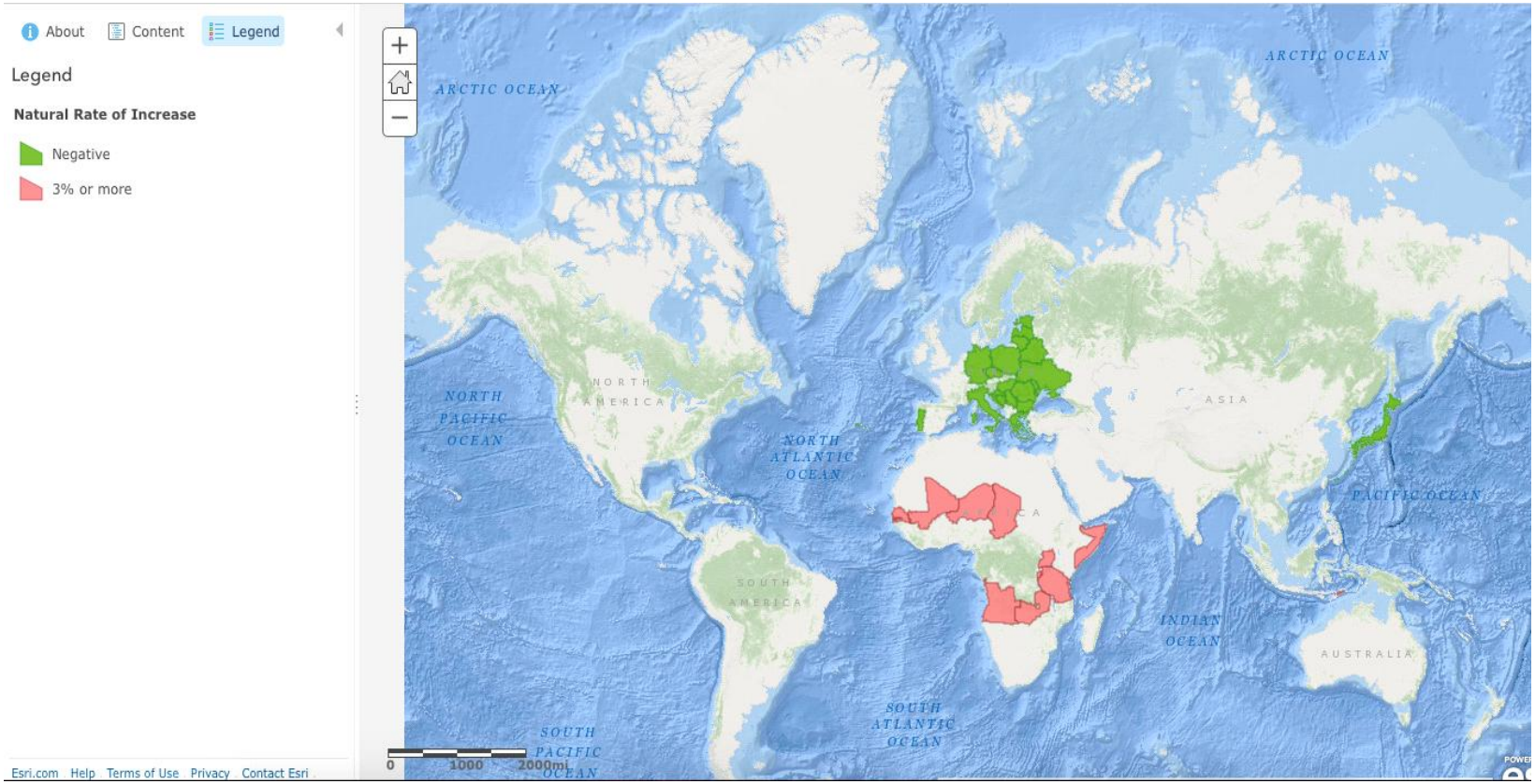


Fertility Rate

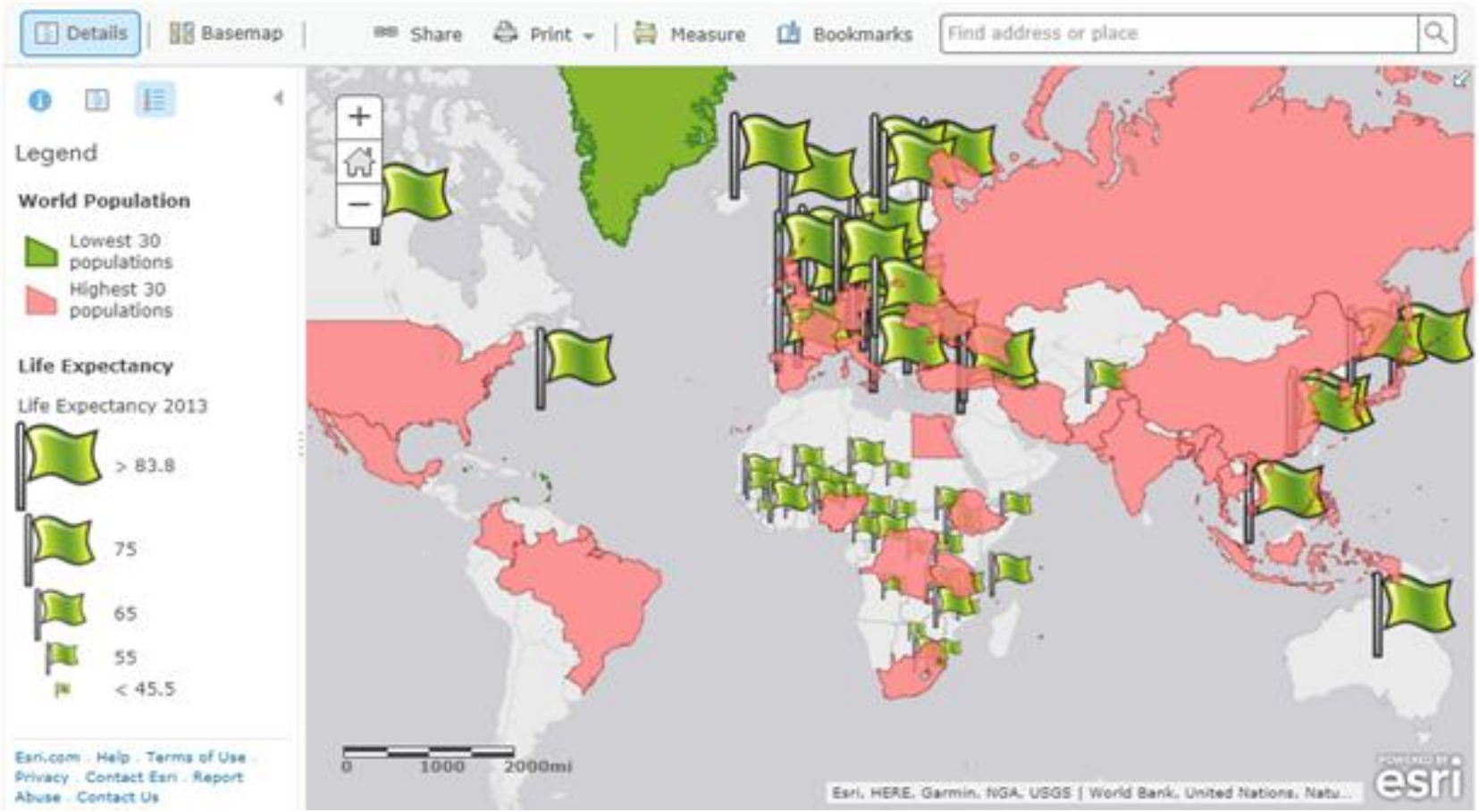


These maps show the mortality (above) and the fertility rate (below.) Africa has a high mortality rate and if you look at the map legend. Europe has a low mortality rate. As you see on the map on the bottom, the poorer countries (Africa) have a higher mortality and fertility rate. Developed countries has lower mortality/fertility rate (Europe)

Natural Growth Rate of Population



- In this map, I wanted to show the "Natural Rate of Increase," which means the natural rate of increase in the population of the whole world. As you can see here, in the legend, pink is 3% or more increase, and green is negative increase. Oh boy! As you can see, the solid green color is only on Europe, Libon, and Japan. That means the population in those places will decrease. Now you see that the pink is on Senegal, Mali, Niger, Chad, Angola, Zambia, Tanzania, and Somalia, and they're all in Africa! But wait, there's a tiny part of the map that also has the pink: East Timor. These places that have the pink on them always have an increase in their population.



I wanted to show two differ layers in this map, one is the life expectancy rate and one is the world population (both 2013) for the life expectancy rate I used the green flags the bigger the flag the higher the life expectancy and the smaller the flag the lower the life expectancy rate. And for the population I used the colors pink and green to make it simpler I only used two colors. In this map you can learn that in Africa the life expectancy rate is MUCH lower than the life expectancy rate of Europe! And in the population layer you can see that for green it is the lowest 30 populations, and pink shows the higher 30 populations in China there is a very high population. And for Greenland the population is MUCH lower. So that's the basic summary of my map hope you enjoy it!