**Population Dynamics Project**

For this project each of you will be comparing the population dynamics of 3 countries of your choice. I would recommend choosing countries that have some interest to you or that you have some general knowledge about.

This project will require the use of Excel/Google Sheets. We will spend time in class working on this. Please use this time to get help with using Excel properly.

**Step one** - you will be picking one of each type of country below:

* “More Developed”
* “Less Developed” (= LCDs without Least Developed Countries)
* “Least Developed”

To do this, go to [www.census.gov](http://www.census.gov). Once there, click on “Browse By Topic”, then “Population”, then “Population Main”. Next click on “International”. Then click on “International Data Base (IDB)”. On this page, scroll down until you see the “International Data Base (IDB)” link again. Click on it.

On this page, you will see a box on the lower right that has the categories you see above (more, less, least developed). You can go through that to select a country from each category.

* More Developed Countries\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* LDCs, without Least Developed Countries\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Least Developed Countries\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Before moving on, please verify with me your list of countries.

**Step two** – use the “Select Report” along with the years and country lists to find the following demographic information:

1. **Construct Your Own Pyramid Graphs for each country**
   1. Pick the year 2017 this.
   2. Select the “Population by Five Year Age Groups” report.
   3. Download data into Excel using button below the table
   4. Manipulate the data in order to create your graphs (I will guide you through this process in class)
2. **Fertility Rate (use Total Fertility Rate Per Woman)**
   1. Use the earliest date you can as your starting point.
   2. Collect all the data from that point forward (until 2050)
   3. Download data into Excel using button below table
   4. Create a graph with all 3 countries to compare their total fertility rates
3. **Population Pyramid Graphs**
   1. Use 2015 as a starting point
   2. Go backwards and forwards in 5 year increments
   3. View the population pyramids and document the changes you observe. The best way to do this is using the “Play” button if you highlight multiple years at one time.
   4. Create web links to each of these graphs by clicking on the “For a Bookmarkable Link” on the right side.
   5. Document what is happening to each country’s population moving forward in time – increasing, decreasing, stabilizing. Copy images of multiple graphs to document and support your claim.

**Step three** – compare the data for each country. Put your comparisons together in the form of a report comparing the issues faced by different types of countries. Design your report as attempting to plan out the future impacts for each country. Think about the issues each country will face in terms of:

* Population Change (use data collected above)
* Economic issues (jobs, taxes, welfare, for example)
* Social/Political issues (where will the people live – countryside or cities, transportation, education, government stability, for example)
* Environmental issues (what environmental issues will arise with a growing or declining population? Food resources, energy resources, pollution, for example)

This will require you to do some background research about your countries to get current data of the bulleted topics above. Examples of things to research would be: poverty levels, education levels, population location (cities vs. countryside), how much arable land is there, etc…

Two sites that could be useful for background data are:

* The Population Reference Bureau (PRB) website
* The International Monetary Fund (IMF) website: search the World Economic Outlook Database
* The World Bank website: search within the data tab

Also, please make use of the UConn Library Database

Your grade will be based on the following rubric. Your score can fall within the range between 0 and 10. Use these as a guide:

|  |  |  |  |
| --- | --- | --- | --- |
| Topic | 10 | 5 | 0 |
| Using excel and creating population pyramids | Data correctly manipulated and graphs created for all three countries | Half of the work completed manipulating data and creating graphs | None of the work completed manipulating data and creating graphs |
| Using excel and creating graphs for fertility rates | Data correctly manipulated and graphs created for all three countries | Half of the work completed manipulating data and creating graphs | None of the work completed manipulating data and creating graphs |
| Population pyramid graphs and future population | Data is used to document and support assertion of population change for all three countries | Half of the work completed for population pyramids and population change | None of the work completed for population pyramids and population change |
| Report on population and related issues (x4) | Report is complete with both population issues as well as related economic, political and environmental issues | Report is half complete with both population issues as well as related economic, political and environmental issues | None of the report is complete |