

The Impact of Food Security on Political Stability

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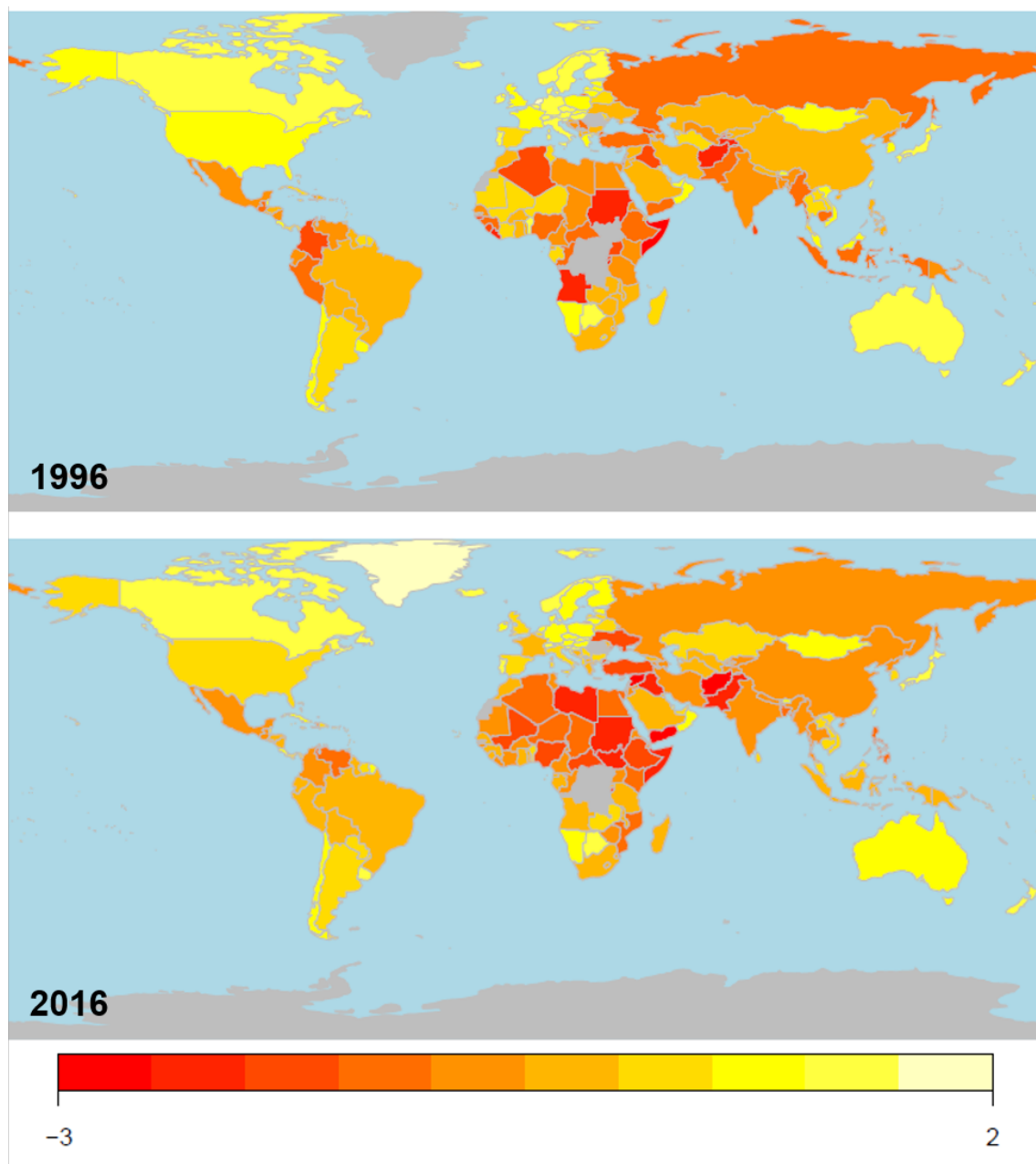


Figure 1: **Political Stability Heatmaps:** The above two figures indicate the political stability indices for the first and last years of our data, illustrating the overall change over twenty years. The political stability index is a measure of the likelihood of political instability or political violence, including terrorism. This World Governance Indicator is constructed by using a variety of variables and data sources, such as violent demonstrations, cost of terrorism, and external conflict. The values run approximately from -2.5 to 2.5, however, some values do fall outside of this range. Higher values correspond to greater stability. (Gray countries indicate incomplete data for those countries.)

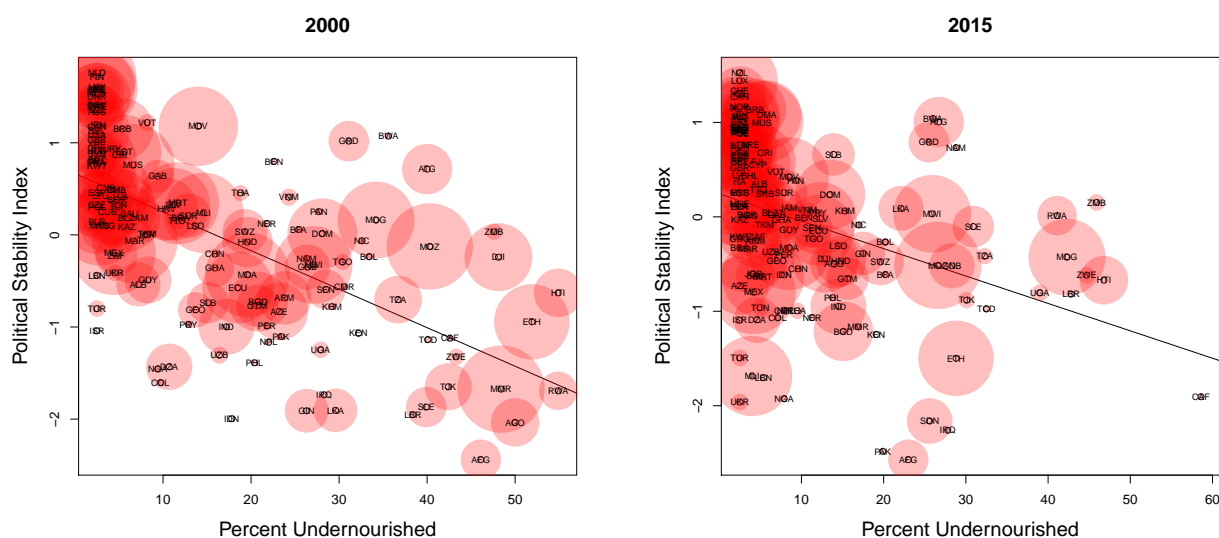


Figure 2: **Political Stability Index vs. Percent of Population Undernourished:** A linear regression of political stability index against the percent of a country's population that is undernourished for the years 2000 and 2015 is shown above. The size of each point is proportional to the population of the country it represents. We see a *negative* correlation between undernourishment and political stability in a country in both years, but a larger slope in 2000. Note that in 2015, many countries exhibit reduced undernourishment, but the relationship with Political Stability index remains similar.

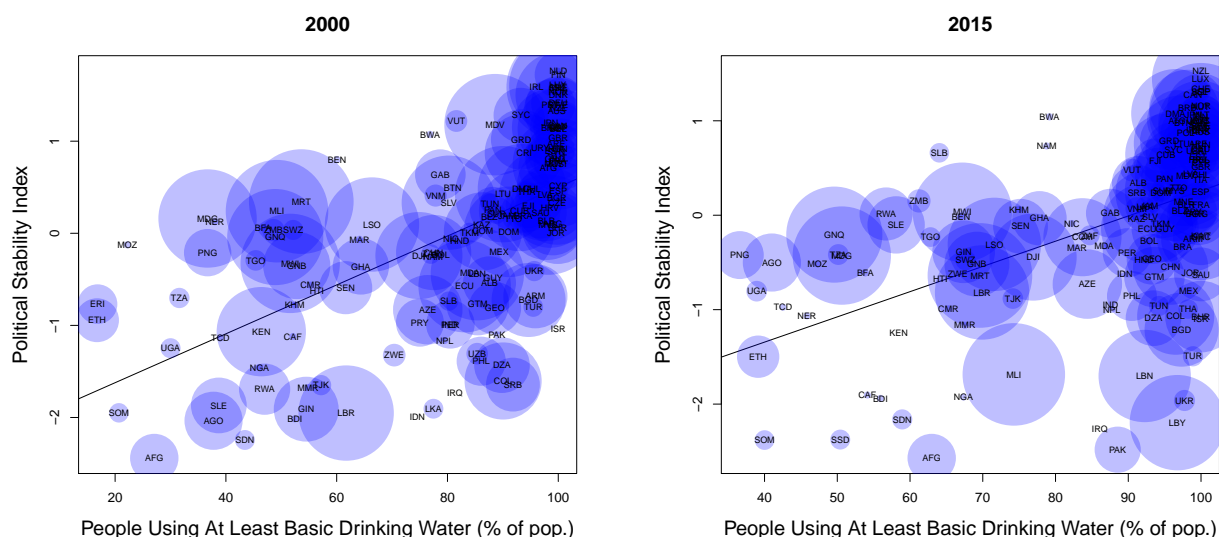


Figure 3: **Political Stability Index vs. Percent of Population With Basic Drinking Water Services:** A linear regression of political stability index against the percent of a country's population that has access to basic drinking water services for the years 2000 and 2015 is shown above. Point size is proportional to population. The World Health Organization defines a basic drinking water source as one that is available when needed, and free from contamination. There is a *positive* correlation between access to water and political stability in a country in both years, but there is a larger slope in 2000.

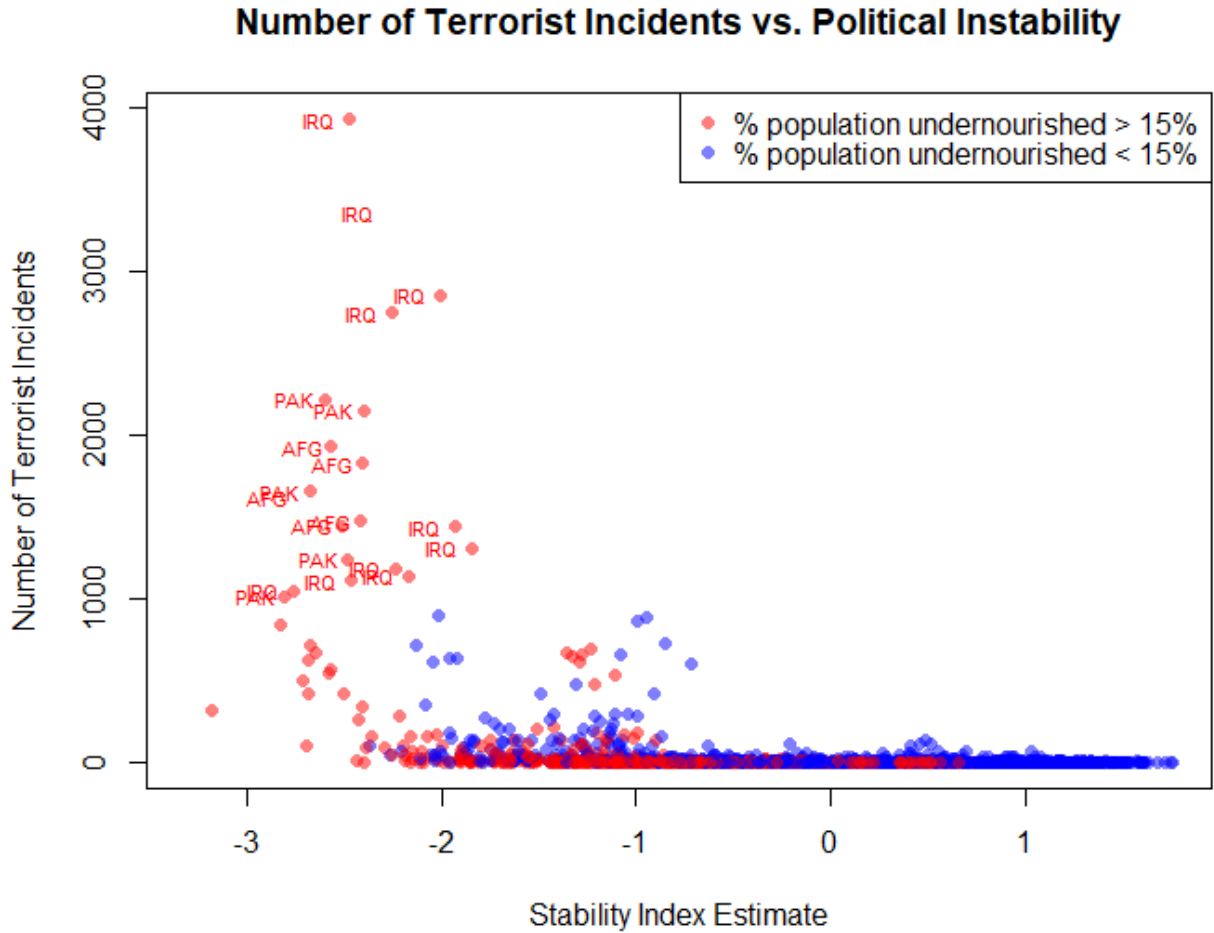


Figure 4: **Number of Terrorist Incidents vs. Political Instability Index:** This figure displays a scatter-plot of the number of terrorist incidents recorded against the political instability index estimate for one country in one year. Note that the political stability index does include terrorist threat as a parameter. Each point represents one country-year pair. The points in red are country-years in which the percent of the population that was undernourished was greater than 15%, which we found to be a natural threshold based on our results in Figure 2. The points in blue are country-years in which the percent of the population undernourished was less than 15%. This figure illustrates that countries with a higher political stability index record fewer terrorist incidents and tend to not have an undernourished population. Countries that have less political stability record more terrorist incidents. Not all of these countries have an undernourished population. However, countries like Iraq, Afghanistan, and Pakistan that have the lowest political stability and the most terrorist incidents do have undernourished populations.