

# Examples of Student Projects

All examples are used with the written permission of the students. This student work includes both their reflections, and the link to the data visualization. We wish to thank Anna-Liza Victory, Roger Navarro, Laura Arens, and Brandon Waterman for allowing us to publish their work.

## **Anna-Liza Victory**

### **Data Visualization Reflection**

[Anna-Liza Victory final data visualization project](#)

This Data Visualization Project consists of two graphics. First, it features a map showcasing the top countries for the number of kilograms of opium seized in 2016. Second, it provides a supplemental line chart plotting Tajikistan's annual seizures of kilograms of opium in the period between 1996 and 2007. In conjunction, these two charts convey significant information about trends in opium seizures in Tajikistan.

In comparing the two data sets, it becomes apparent that the most recent 2016 seizure statistic is abnormal. In the first data set, the map, we see that Tajikistan ranked 9th in terms of overall global opium seizures in 2016. However, its total for that year (612 kilograms) is exceptionally low compared to the number of kilograms it seized each year between 1996 and 2007, shown in the second data set. Compared to an average of 2,426 kilograms seized per year in that time period, 612 kilograms in 2016 is a miniscule amount. How can we account for this

drop? Several of the sources I found while doing research posit that the Tajik state is heavily involved in opium trafficking, to the point that it has become economically dependent on the trade (Rahmani 2018). Moreover, it has been alleged that corruption is rampant among government employees and high-level political figures. Peyrouse (2018), in particular, asserts that the country's opium seizures are strategically targeted towards lower-level traffickers and others who are in direct competition with state-sanctioned opium trafficking. It is my intention in the final paper to explore this idea more in depth.

Another interesting fact I noticed when comparing these two data sets is that Uzbekistan, which ranked 7th globally in terms of overall kilograms of opium seized in 2016, remained fairly steady. Its total of 1,447 kilograms is comparable to its yearly average of 1,160 between 1996 and 2007. Further, in that same period, Tajikistan reported statistics consistently higher than its Central Asian neighbors. However, while Uzbekistan's 2016 statistic was fairly similar to its previous average, Tajikistan recorded only 25% of its annual average that same year. This suggests that the opium flow in Central Asia is not decreasing, and thus, is not the reason behind Tajikistan's drop in seizures. If, instead, we analyze this reduction in seizures as a strategy, as suggested by Peyrouse, we can effectively create a connection between corruption and Tajikistan's economic dependence on the opium trade. Overall, these data sets, in conjunction, convey significant information about Tajikistan's position in the global opium trade as well as its increased state-sanctioned drug trafficking, as evidenced by its decrease in opium seizures.

## References

Analysis of Drug Markets: Opiates, cocaine, cannabis, synthetic drugs. (2018). *World Drug Report 2018*. United Nations Office of Drugs and Crime. (3). Fig. 3. p.15. Retrieved from [https://www.unodc.org/wdr2018/prelaunch/WDR18\\_Booklet\\_3\\_DRUG\\_MARKETS.pdf](https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_3_DRUG_MARKETS.pdf)

Demirbüken , H., Mili , H., & Townsend, J. (2009). *Addiction, Crime and Insurgency: the transnational threat of Afghan opium*. United Nations Office on Drugs and Crime. Table 18. p.55. Retrieved from [https://www.unodc.org/documents/data-and-analysis/Afghanistan/Afghan\\_Opium\\_Trade\\_2009\\_web.pdf](https://www.unodc.org/documents/data-and-analysis/Afghanistan/Afghan_Opium_Trade_2009_web.pdf)

Peyrouse, S. (2018). Drug Trafficking in Tajikistan: A very deep but not incurable evil. *Georgetown Journal of International Affairs*. Retrieved from: <https://www.georgetownjournalofinternationalaffairs.org/online-edition/2018/3/1/drug-trafficking-in-tajikistan-a-very-deep-but-not-incurable-evil>

Rahmani, B. (2018). How the War on Drugs Is Making Tajikistan More Authoritarian. *The Diplomat*. Retrieved from <https://thediplomat.com/2018/07/how-the-war-on-drugs-is-making-tajikistan-more-authoritarian/>

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**Roger Navarro**

### **Data Visualization Reflection**

[Roger Navarro final data visualization project](#)

My project portrays the patterns of cocaine seizures across the world in 2016, and I believe that my project portrays some interesting points for discussion in regards to which countries have the most seizures, and also why certain countries have lower seizures than one

would think at first glance. I had to utilize data from 2016 as it was the most recent year I could access, however, the data still reflects many of the patterns that cocaine networks exhibit even in 2020. The most important thing I gathered from this data is how nations with large coastal populations on average saw more of an increase in cocaine seizures, and also, countries with a higher **decline** in seizures often neighboring countries that did not have an increase in cocaine seizures.

Looking at the interactive map it can be seen how countries with a stark decline in seizures happen to neighboring countries with already little to now change in seizures, and I do not think this is a simple coincidence. Doing some further research I came across what is now being called the “Cocaine Coast”, which refers to the sudden increase of cocaine trade in northwestern Africa. On the map it can be seen that Algeria has nearly a 90% decrease in cocaine seizures, and this is due to the government’s strong investment in mitigating incoming cocaine that is fueling both public health and social crises in the nation. Likewise, nearby coastal nations such as the Ivory Coast and Ghana also saw significant decreases in cocaine seizures, following the trend that coastal regions in Africa are experiencing heightened cocaine activity that either needs to be dealt with or is currently in the process of being addressed by governments.

My specific interest in this map is Panama, and according to the data, Panama saw only a small decrease in seizures. What is interesting to note about the difference between a country in Latin America versus a country in Africa is that Latin American countries have several centuries more of history involving coca trade and later cocaine alkaloid trade, whereas countries in Africa

have only in recent decades begun to operate in large cocaine networks to the levels of other countries such as Mexico or Columbia. Panama itself was invaded by the United States in 1989 due to the immense amount of narcotics trade coming out of the country, as Manuel Noriega successfully turned the country into a narco-state, and it makes sense in the data how countries who have had large-scale interventions from strong foreign powers, such as the US, do not see large shifts as they have already had their illegal drug trades “regulated”, or rather inhibited from growing past a certain point. I think in the future I would do this assignment with a different resource for data that pertains more to Panama itself, however, I still believe there is good value in the data and subsequent interactive map that can be used as points in my final paper or as supplemental information to reinforce other ideas.

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**Brandon Waterman**

**Data Visualization Reflection**

[Brandon Waterman final data visualization project](#)

Overall, I really did enjoy this data visualization project, and I learned about my topic more in depth. The data set I used showed the number of drug related deaths by region in the Philippines since Duterte’s presidency started in 2016. For me this project really helped conceptualize the number of killings in the Philippines since the start of Duterte’s war on drugs

through a visual chart. The data showed that almost half of the drug-related deaths in the first year of Duterte's presidency occurred in the Manila metro region alone, and this has only increased, with Human Rights Watch stating that over 12,000 have died due to the war on drugs; although there is debate about this figure. This information is incredibly important to my research topic because it shows the increase in violence since Duterte started his aggressive war on drugs.

However, I did find this project difficult when it came to hunting down a relevant data set. Because the war on drugs in the Philippines is relatively new, there were not a lot of data sets out there. There is an abundance of research on the topic, but not many statistics or data related to the war on drugs in the Philippines. Luckily, I had a source that I used for my annotated bibliography that had a few data sets, so I decided to go ahead and use one of these for this project. I did run into another problem with the fact that there is quite a debate on how many have died since the war on drugs in the Philippines began. While it seems that the general consensus is that around five thousand have died since the beginning of the war on drugs, there are others who say that the number is much greater than this. I did some quick googling just see why this is, and it appears that several figures have been used by the Filipino law enforcement, and there have been concerns of misinformation on the part of the Filipino government. While I did enjoy this project, the project was not as easy as I thought it would be.