**DATA VISUALIZATION AND ANALYSIS OF PREVALENCE OF HIV IN AFRICA USING TABLEAU**

**A close up of a map

Description automatically generated**

High: Botswana

Upper middle: South Africa

Lower middle: Eswatini

Low: Ethiopia

**Indicator:** Prevalence of HIV total population.

**Comparison Analysis:** I chose the continent of Africa for this assignment. The indicator I chose was prevalence of HIV. It is common knowledge that HIV is very prevalent in Africa. But Africa is huge continent and I wanted to find whether this fact is true across the entire continent or is it just some parts. From the 4 countries I selected, 3 of them were in the southern part of Africa and one relatively in the northern part. Using the geo-visualizations, it was revealed that HIV is prevalent mostly in the southern parts of Africa. Also, it is not at all related to the income status of the countries. The size of the colored dots shows the degree of prevalence of HIV in those countries. The difference in the sizes is quite significant and so is the prevalence. A similar trend is visible through theline graph as well. We can see the sudden percentage increase in southern countries of South Africa, Eswatini and Botswana from 1990 to 2000. The highlight table confirms the trend and indicates that Botswana and Eswatini had sudden increase in percentage from 1995 to 2003.

**Reflection:** I really think that the Geo-map was interesting, at least in this assignment as it was concerning countries of the world. Adding filters and marks was something that I discovered while fiddling with geo-maps. By adding more marks and assigning them, attributes of ‘color’, ‘detail’, ‘size’ made it easier to visualize the trend. I think that the ‘show me’ is a wild card. It plays around with the attributes and columns in the data source. Sometimes, it produces really good visualizations but other times, it fails miserably. In my case this feature failed in area charts and scatter plots. I must agree, it is fun to play around with the options, changing rows and columns and simultaneously see the visualizations change on screen!

A close up of a map

Description automatically generatedA] Visualization 1:

Compared 2 indicators:

1] Prevalence of HIV Total (%). 2] Cause of death by communicable diseases

A picture containing screenshot

Description automatically generatedB] Visualization 2: