



Analytical report

Results

Areas with high diversity but low funding

- South Sudan, Eritrea and Nigeria have a high ratio of diversity to funding. Which means they have relatively high diversity and low funding. It is important to note that Tunisia had high diversity and no funding

Areas with high intactness but low funding.

- South Sudan, Eritrea and Namibia have a high intactness to funding ratio. Which means that these countries have relatively high intactness but low funding. It is important to consider the Democratic Republic of Congo, with high intactness but no funding at all

Areas with high diversity and intactness but low funding.

- South Sudan, Eritrea and Namibia have a high diversity and intactness to funding ratio. Which means a relatively high diversity and intactness and low funding ratio.

Areas with high diversity, intactness and but low funding.

- I considered shape area when allocating funding for conservation. The logic is that prioritizing areas with high species richness and intactness within a smaller area can provide better ecological value and conservation potential. At the same time, we must take into account regions with little or no funding. Gambia, Eritrea, and Djibouti, for example, have relatively high diversity and intactness, combined with smaller area sizes and lower funding. This makes these areas easier to conserve due to their manageable size, while also highlighting their importance in conservation efforts

Recommendations

I recommend prioritizing funding for South Sudan, Eritrea, and Namibia, as these countries exhibit high biodiversity and intact ecosystems, yet currently receive relatively low funding—\$600k, \$800k, and \$1.5M, respectively. Additionally, countries such as Nigeria, Gambia, and Djibouti, which also show significant diversity and intactness but have limited funding, should also be considered for increased financial support.

Eritrea, in particular, represents a 'low-hanging fruit' opportunity due to its smaller size; an increase in funding could have a significant impact on preserving its biodiversity. It is also crucial to address regions like Tunisia, which, despite having high species richness, receive no funding. Providing support to these countries will help protect their biodiversity persist and sustain their ecological health.

Data processing

The data cleaning process and analysis is available on the Rmarkdown script GitHub repository (<https://github.com/KagisoNhlapo/Technical-Assessment-for-Data-and-GIS-Technician.git>)