

Conflict Vulnerability in the Central African Republic (CAR)

Introduction

In March 2013, the Seleka rebel group moved into CAR's capital, Bangui, and ousted President Francois Bozize. Soon afterwards, the group began looting the city. Its members were responsible for numerous rapes and killings.

A Christian militia soon emerged. Known as the Anti-Balaka, the group wanted to oust the newly installed president, Michel Djotodia, Seleka's Muslim leader. (Seleka is a predominantly Muslim militia group.) Both sides began committing heinous atrocities against one another's supporters.

International peacekeepers, since being deployed in late 2013, have quelled some of the unrest but tensions remain. This project aims to identify where those tensions are and where inter-communal conflict will most likely re-occur.

Methods

Grazing Variety: To find the variation in grazing area, the focal statistics tool was used to calculate the variety—if there was one—between the grazing area in one cell and those around it. If there was no variation, the cell was classified as 1 (low risk). If there was, it was classified as 5 (high risk).

Ethnic Boundaries: To analyze CAR's ethnic groupings, I converted the GREG polygon file on the country's ethnic make-up into a line file. Next, I manually selected the internal ethnic boundaries, so my analysis would not include the political borders. Afterwards, I used the Euclidean distance tool to measure the distances from the ethnic-division lines, and I reclassified the results 1-5 with 5 being the closest.

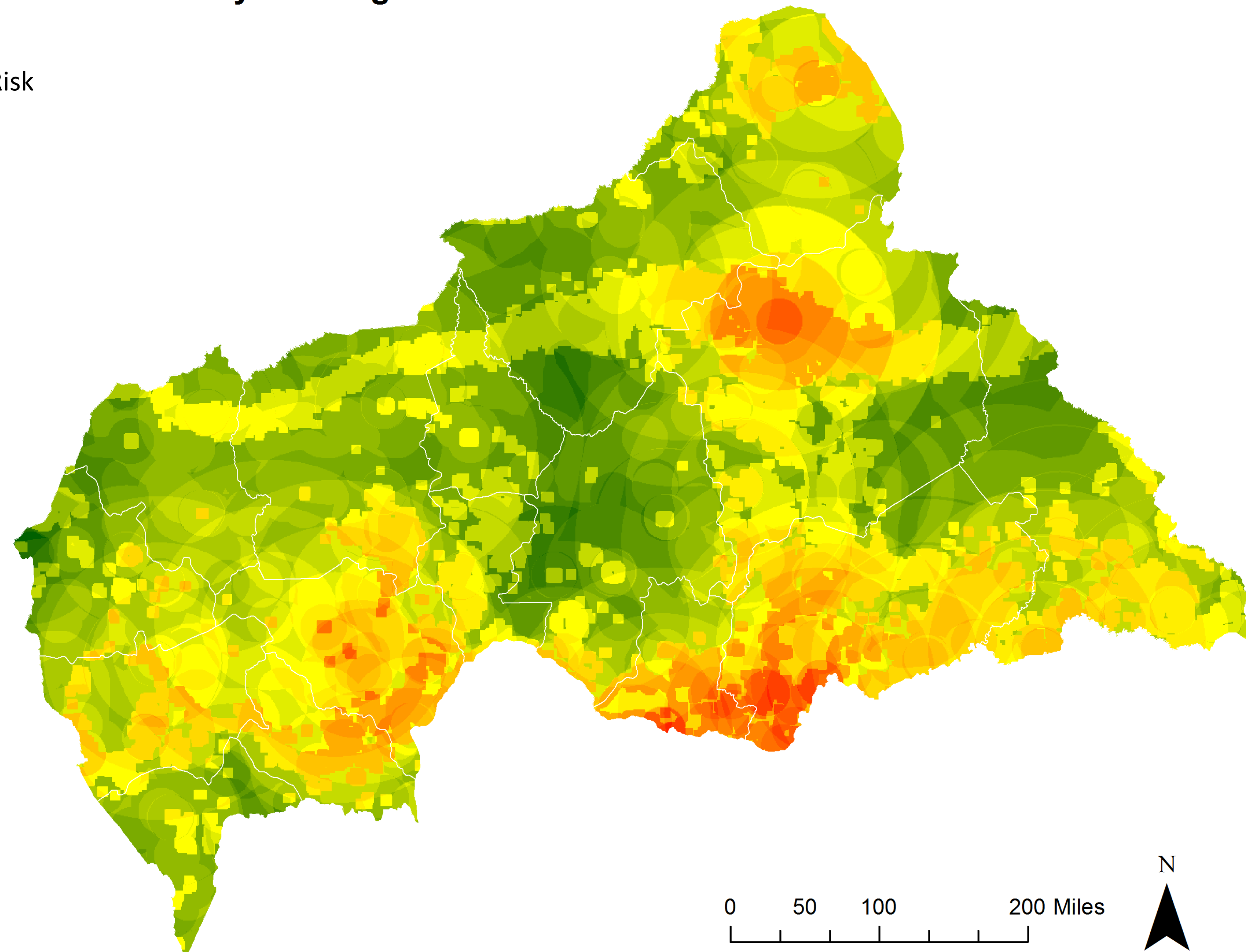
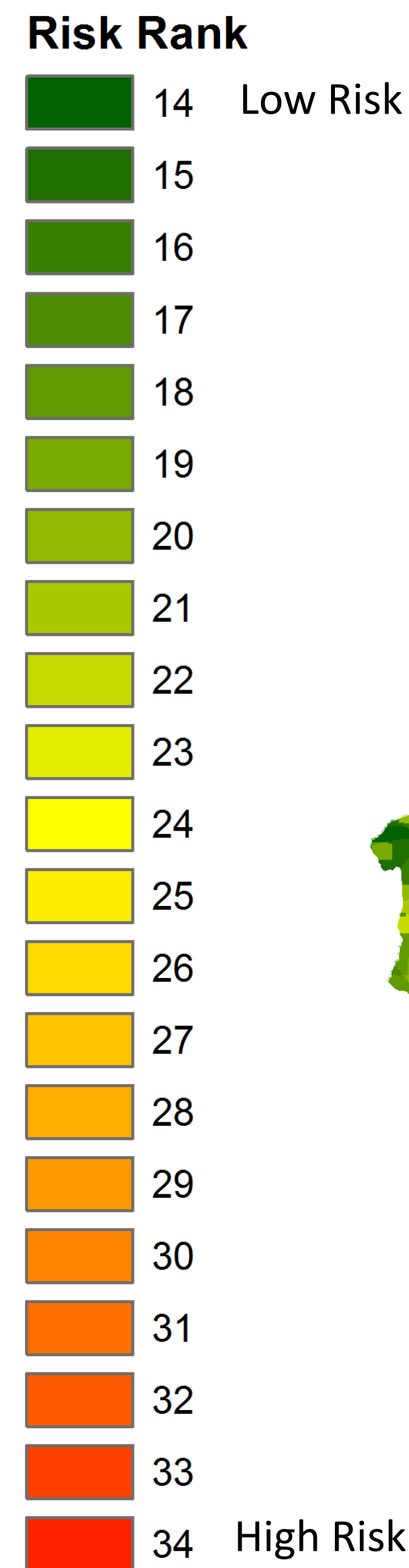
Previous Violent Events: Using ACLED data, I selected by location for CAR in Excel. Then, with the X,Y tool, I plotted the longitude and latitude of violent and non-violent events in CAR. Afterwards, I removed non-violent events, such as peaceful protests, and events that had occurred before 2004. I measured the distances, using the Euclidean distance tool, from the remaining values. Those distances were reclassified 1-5 with 5 being the closest.

Minerals and Government Facilities: To create the Minerals map, I calculated the Euclidean distance from gold and diamond mines and reclassified those distances 1-5 with 5 being the closest. For the government facilities map, I selected for government-funded health facilities, ignoring those funded by donors. I also selected for public primary and secondary schools. I merged the health facilities and schools layers, creating a new field for both variables. I used the Euclidean distance tool to measure the distances from those points, and I reclassified them 1-5 with 5 being the furthest away.

Intl. Peacekeepers and DRC Peacekeepers: Based on the attribute table, some of the peacekeepers were from the Congo (DRC). DRC peacekeepers have a

CAR: Areas Most Prone to Inter-Communal Conflict

Comprehensive Vulnerability Ranking



Methods Cont.

history of looting natural resources, so I created a new layer based on Congolese troops within 75 miles of mining operations. Then, after running the Euclidean distance tool on the resulting selection, I reclassified the distances 1-5 with 5 being the closest. After doing a reverse selection, I created a new layer of international peacekeepers, minus Congolese troops near mining operations, and used the Euclidean distance tool. The results were reclassified 1-5 with 5 being the furthest away.

Urban Centers: I found, using World Map, a point file listing all African cities with populations over 1,000 people. I selected for CAR, and with the Euclidean distance tool, I calculated the distances from the cities—as a proxy for population density—and reclassified those distances 1-5 with 5 being the closest.

Comprehensive Vulnerability Ranking: Using the Raster Calculator, I added the rankings together. The areas with the highest values are the most vulnerable to violent conflict breaking out; those with the lowest values are the least vulnerable.

Conclusion

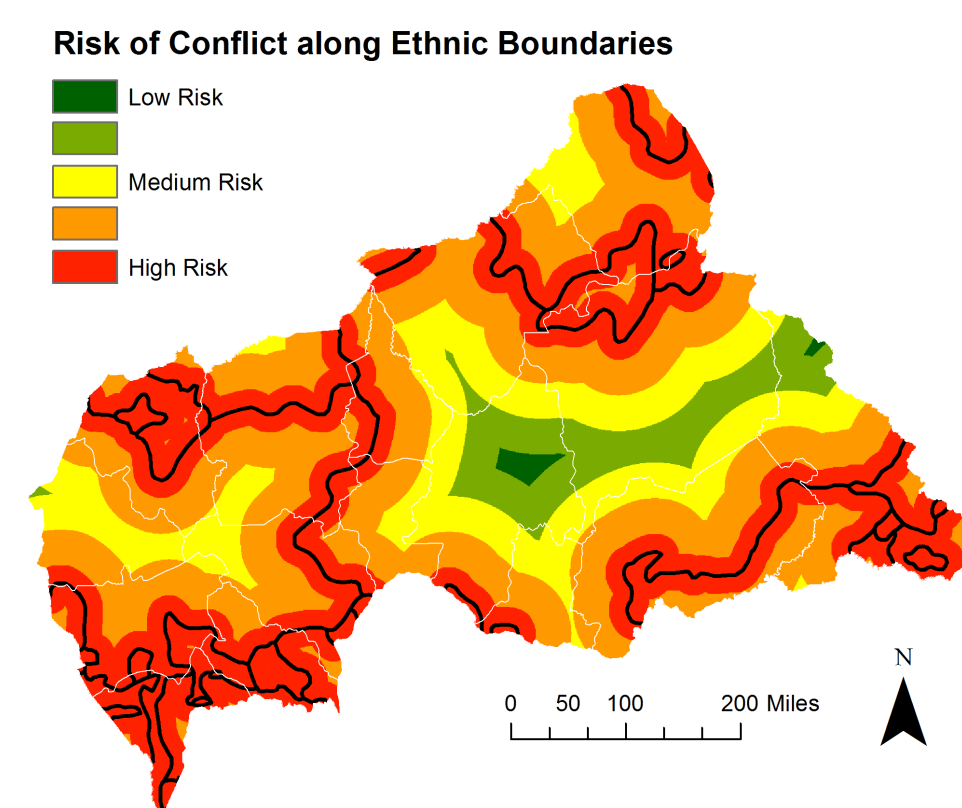
Unfortunately, there are several limitations to my study. For one, my population data is not comprehensive. Urban centers, while good indicators for population density, are not ideal. A raster data set would have been much better. But unfortunately all the CAR raster sets were incomplete. Just as worrisome, my study does not account for the security situations in neighboring countries and how they affect CAR's security environment.

Nevertheless, judging from the Comprehensive Vulnerability Ranking map, there are several areas that appear to be particularly prone to violent outbreaks. Along the southern border of the country, Basse-Kotto province is especially worrisome. It has a large concentration of red cells—indicating a high risk of violent conflict—and there are no international troop deployments nearby.

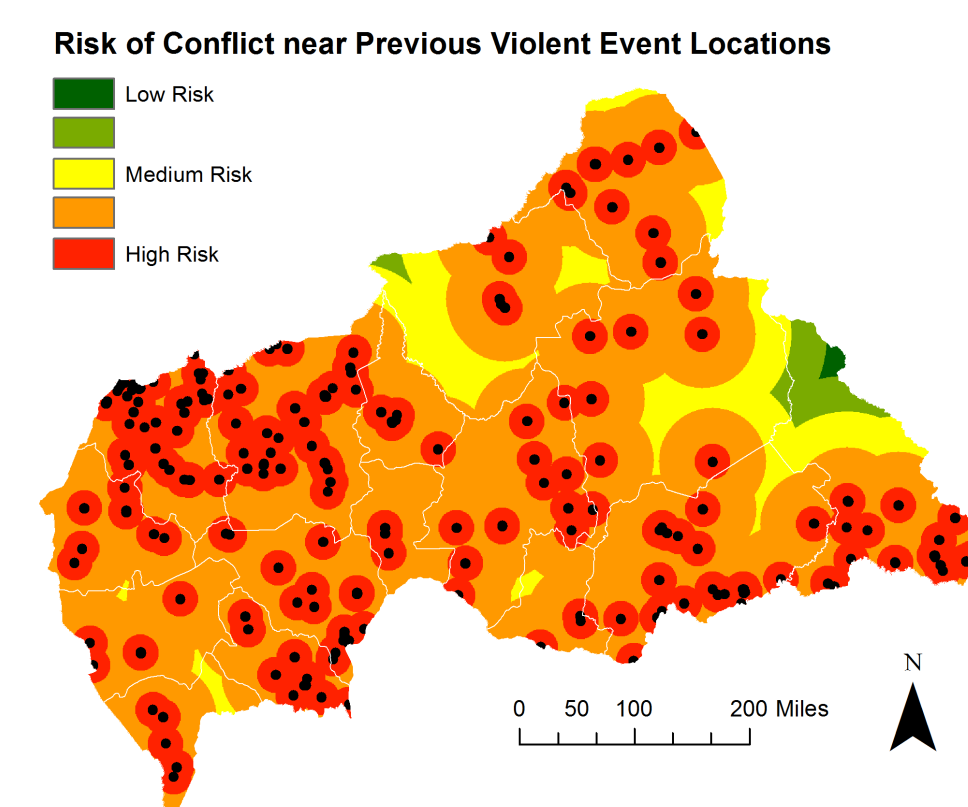
Sources

Data from: United States Agency for International Development, 2004; United Nations Office for the Coordination of Humanitarian Affairs, 2014; Harvard Library, 2012; World Map, 2012; Armed Conflict Event and Location Data Project, 2003-13; Humanitarian Response, 2014; GisDiva, Tufts M Drive
 Projection: Africa Albers Equal Area Conic
 Date: December 12, 2014
 Course: UEP 232
 Professor: Barbara Parmenter
 Cartographer: Wil Mackey

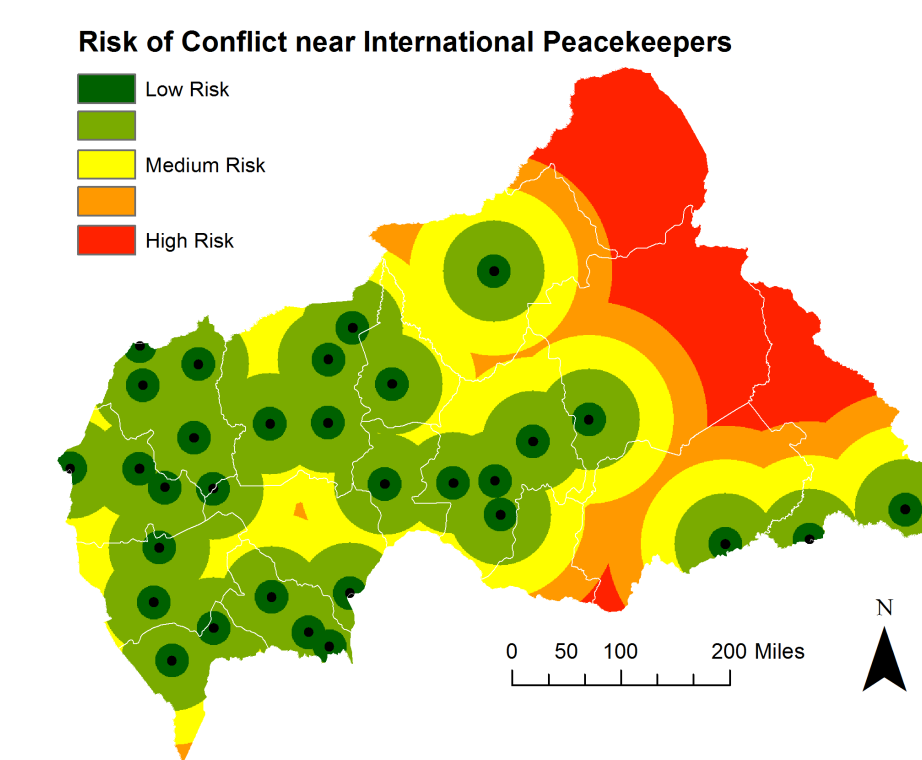
Ethnic Boundaries



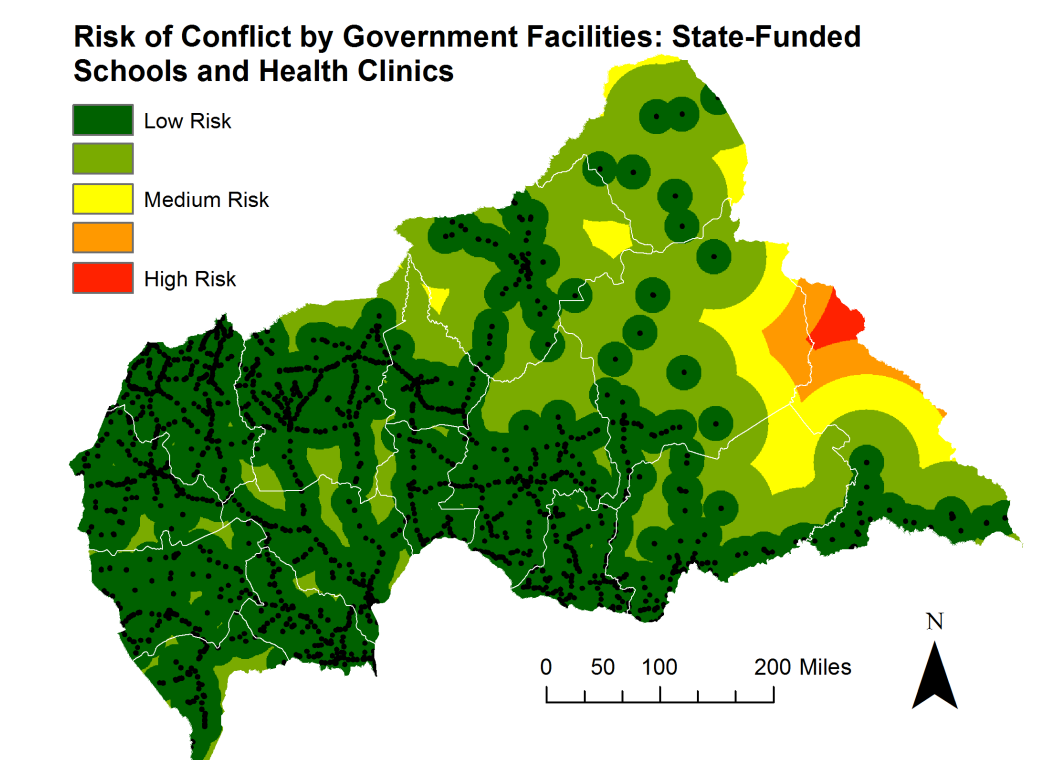
Previous Violent Events



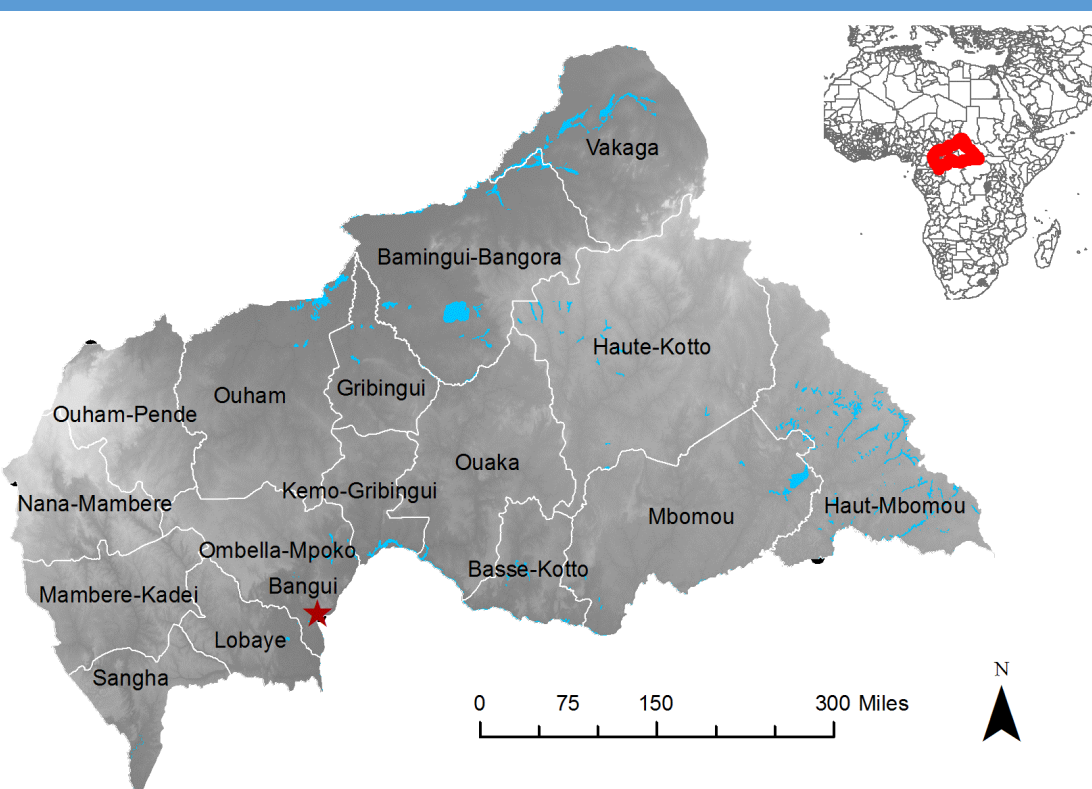
Intl. Peacekeepers



Government Facilities



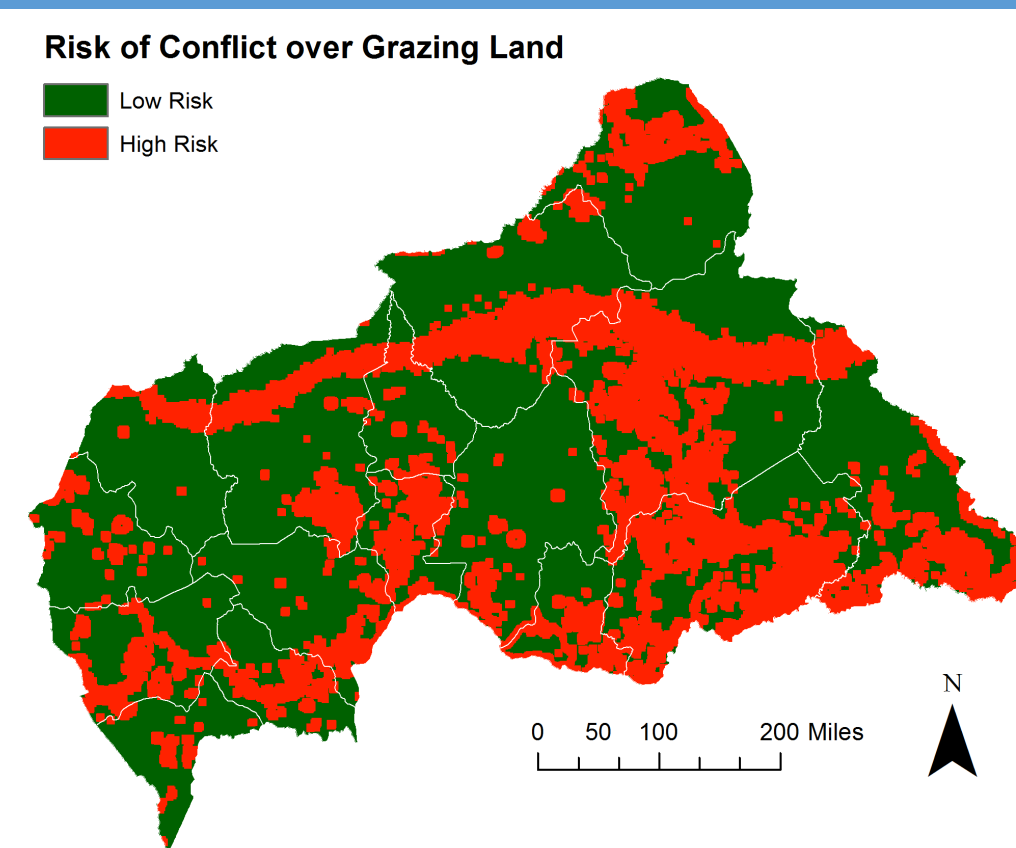
CAR Provinces



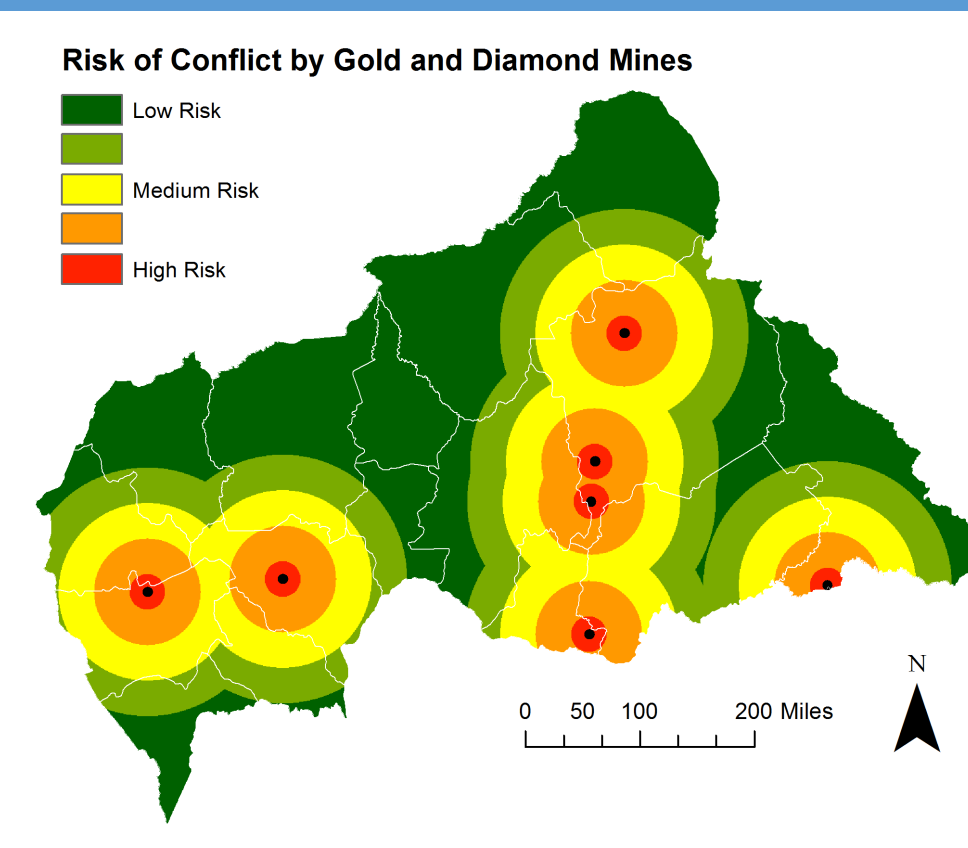
Risk Rank

Risk	Rank Value
Low Risk	1
	2
Medium Risk	3
	4
High Risk	5

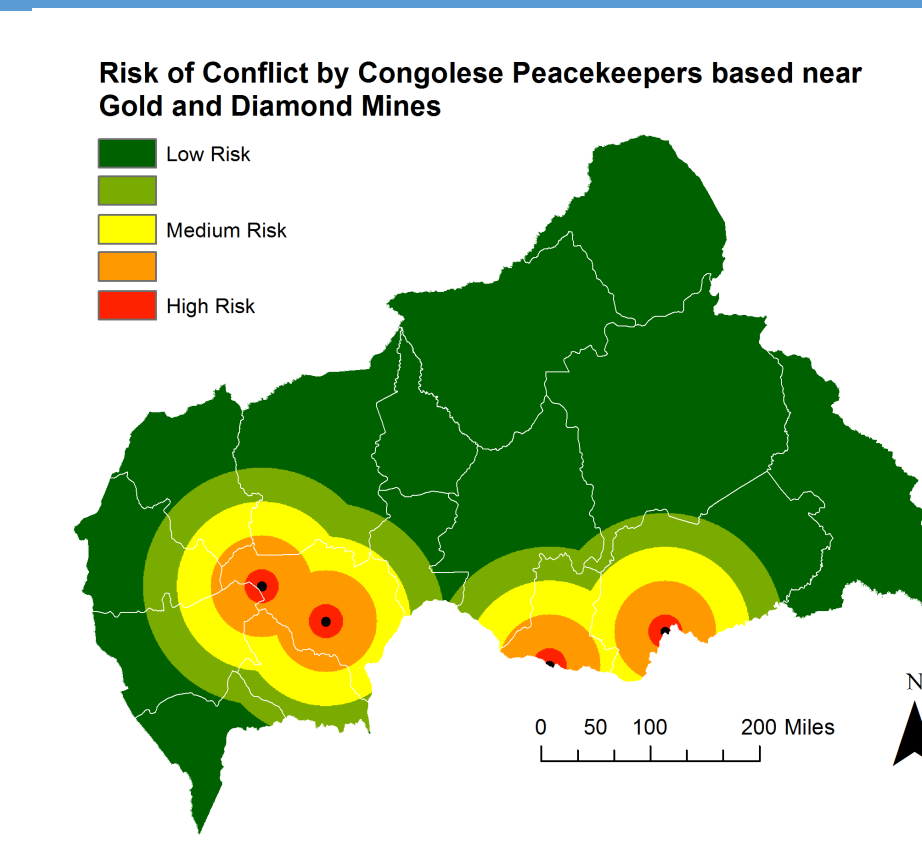
Land Cover Variation



Minerals



DRC Peacekeepers



Urban Centers

