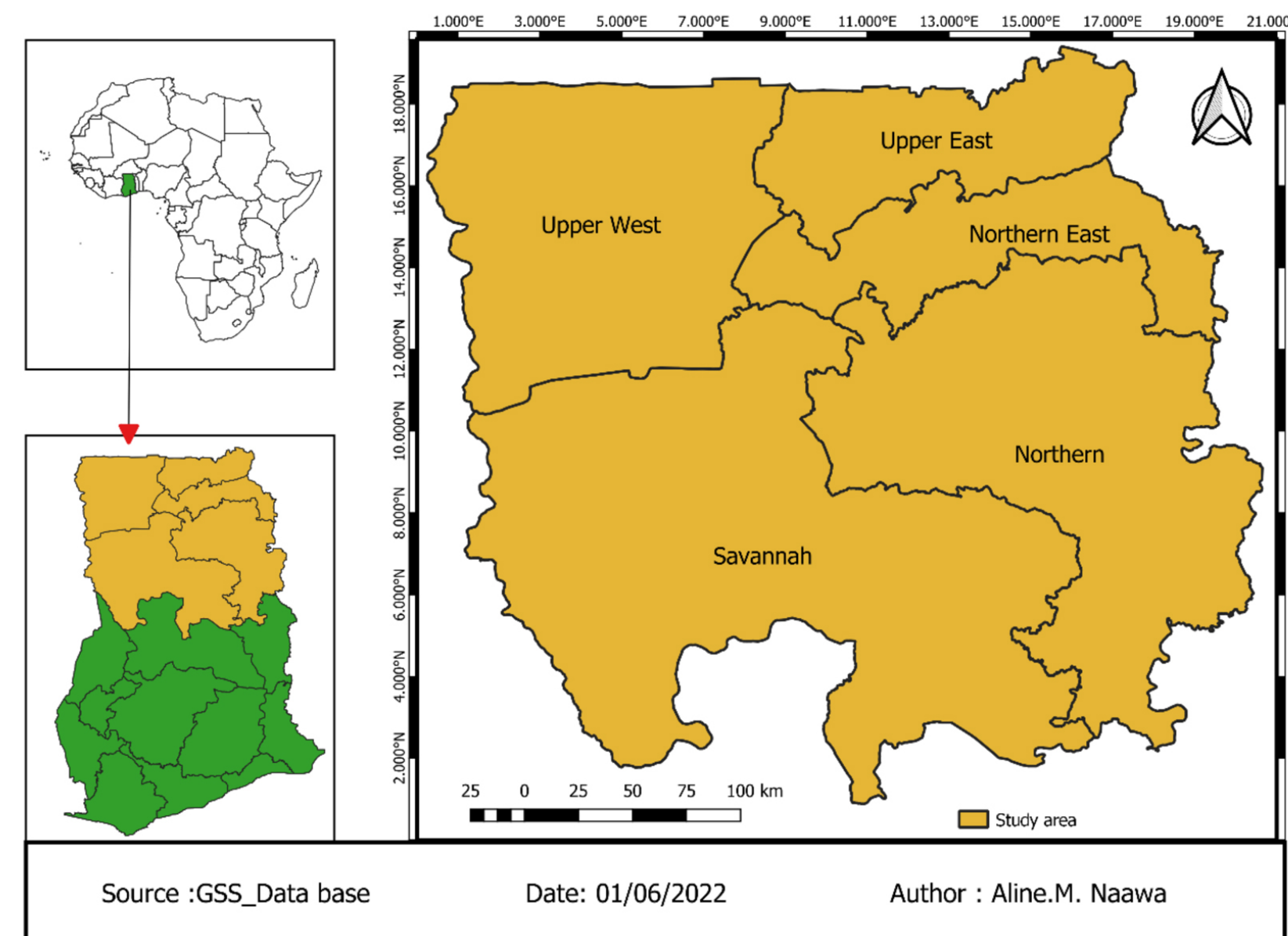


Examining Wildfire Drivers and Impacts on Ghana's Northern Savannah Ecological Zone

Introduction/Problem

Wildfires have been a natural part of savannah ecosystems for millennia, but the increasing frequency and intensity of these events, exacerbated by changing climatic conditions, have led to significant impacts on ecosystem services



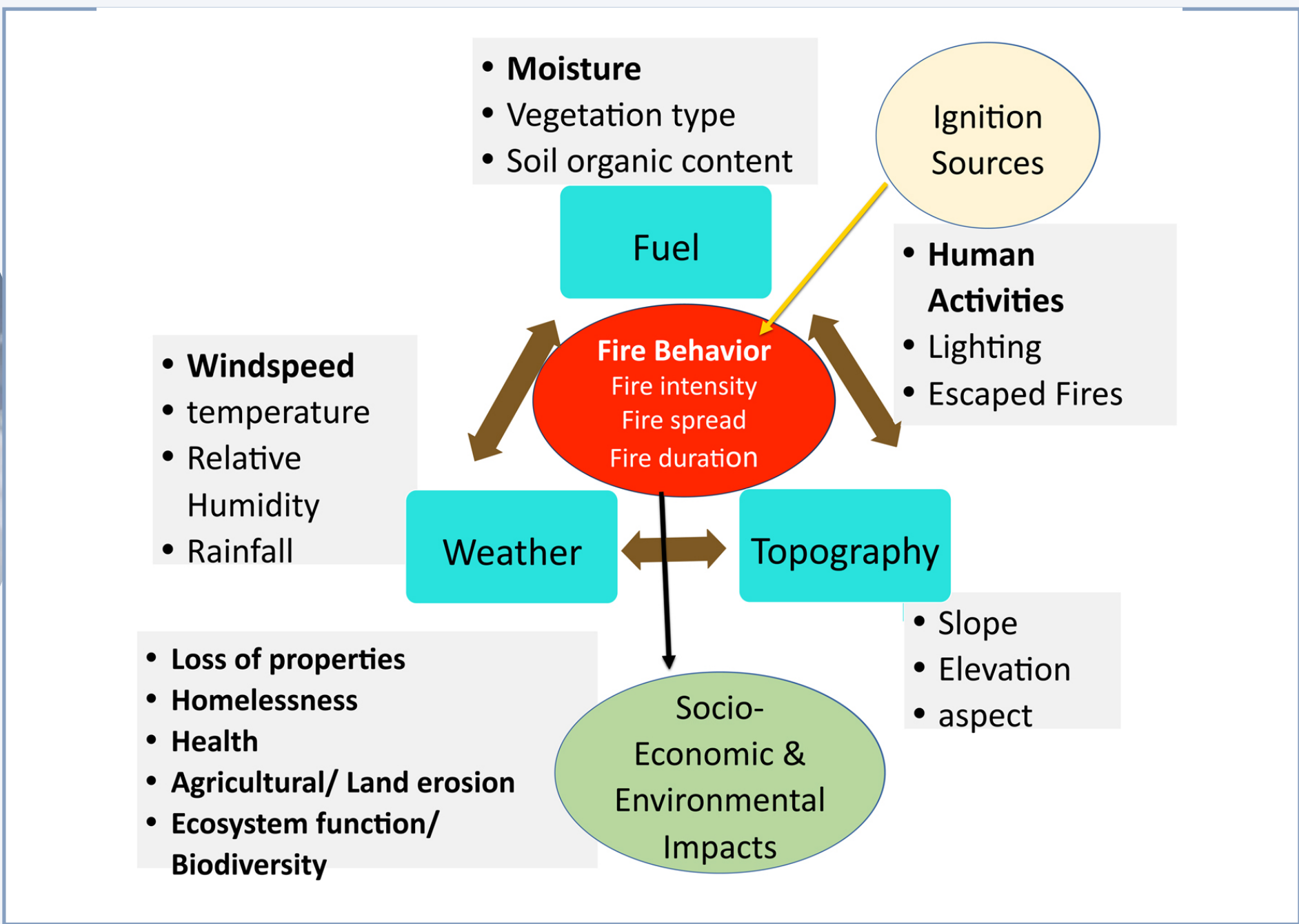
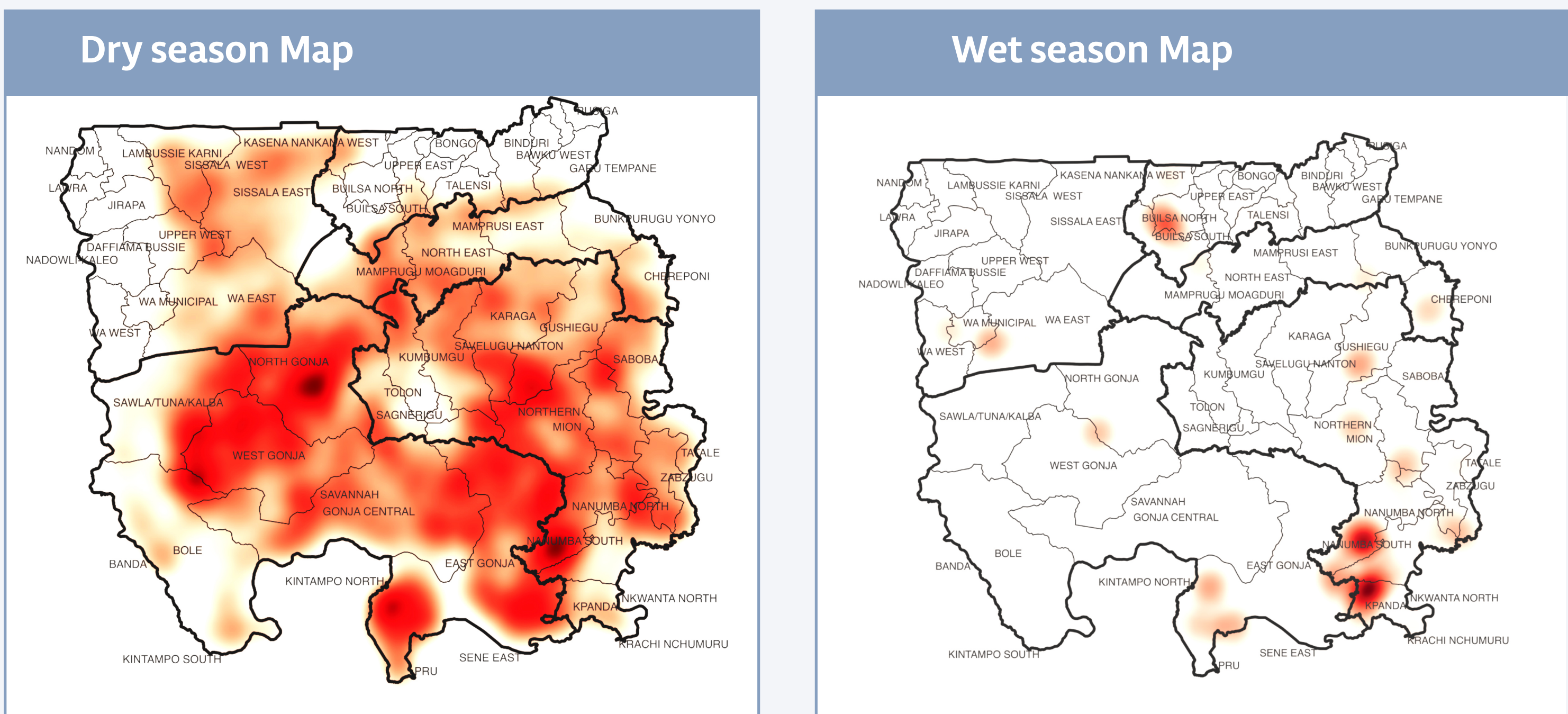
Objective

To identify the factors, direct and underlying causes, and impacts of wildfires on Ghana's Northern savannah belt

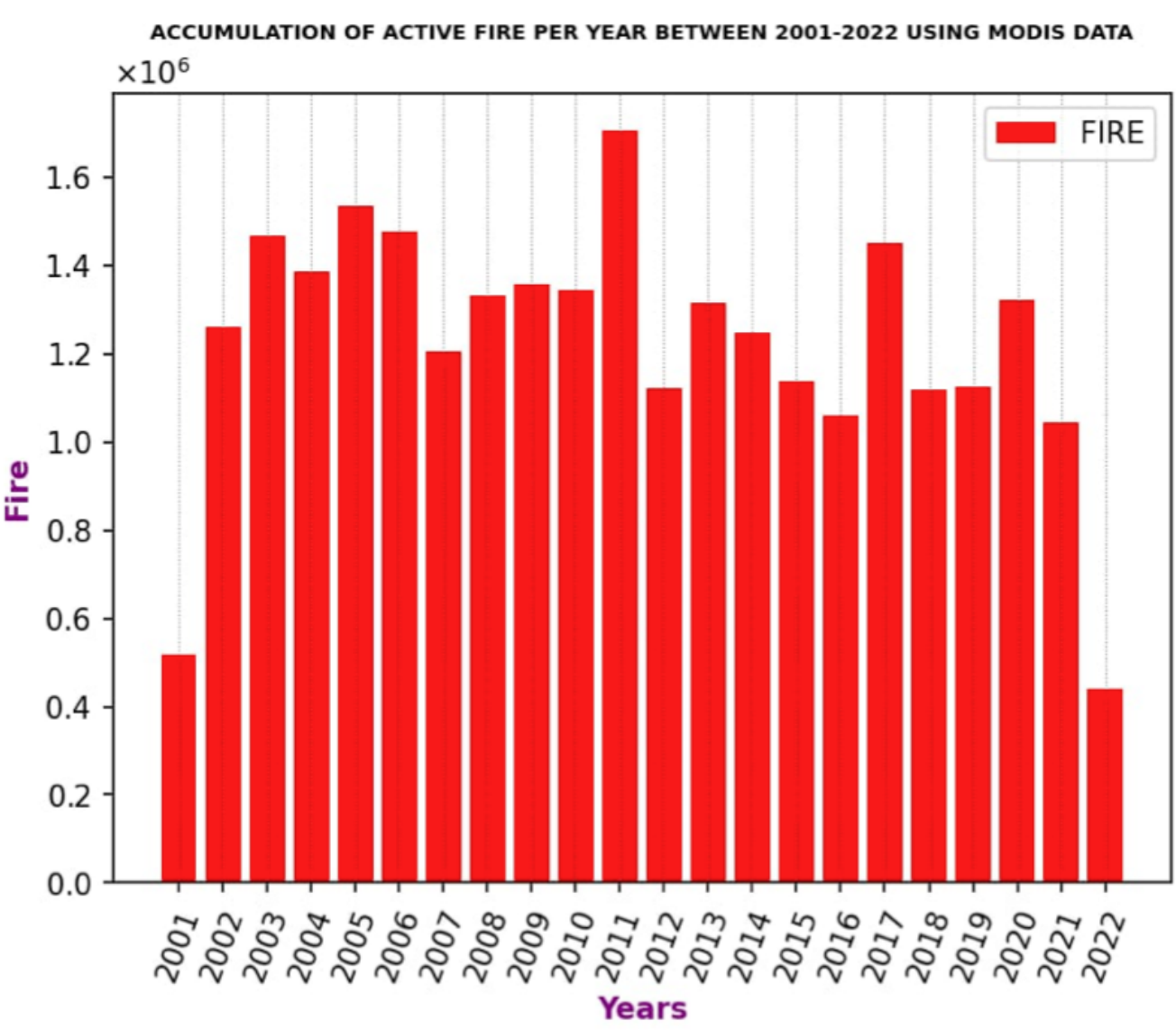
Methods

Study Design	Empirical Research Design
Data Collection	Field surveys Fire records, satellite images, climate data
Analysis and Presentation	Google Earth Engine, QGIS, to produce maps, Tables and charts generated from dataTab/ jupyter notebook

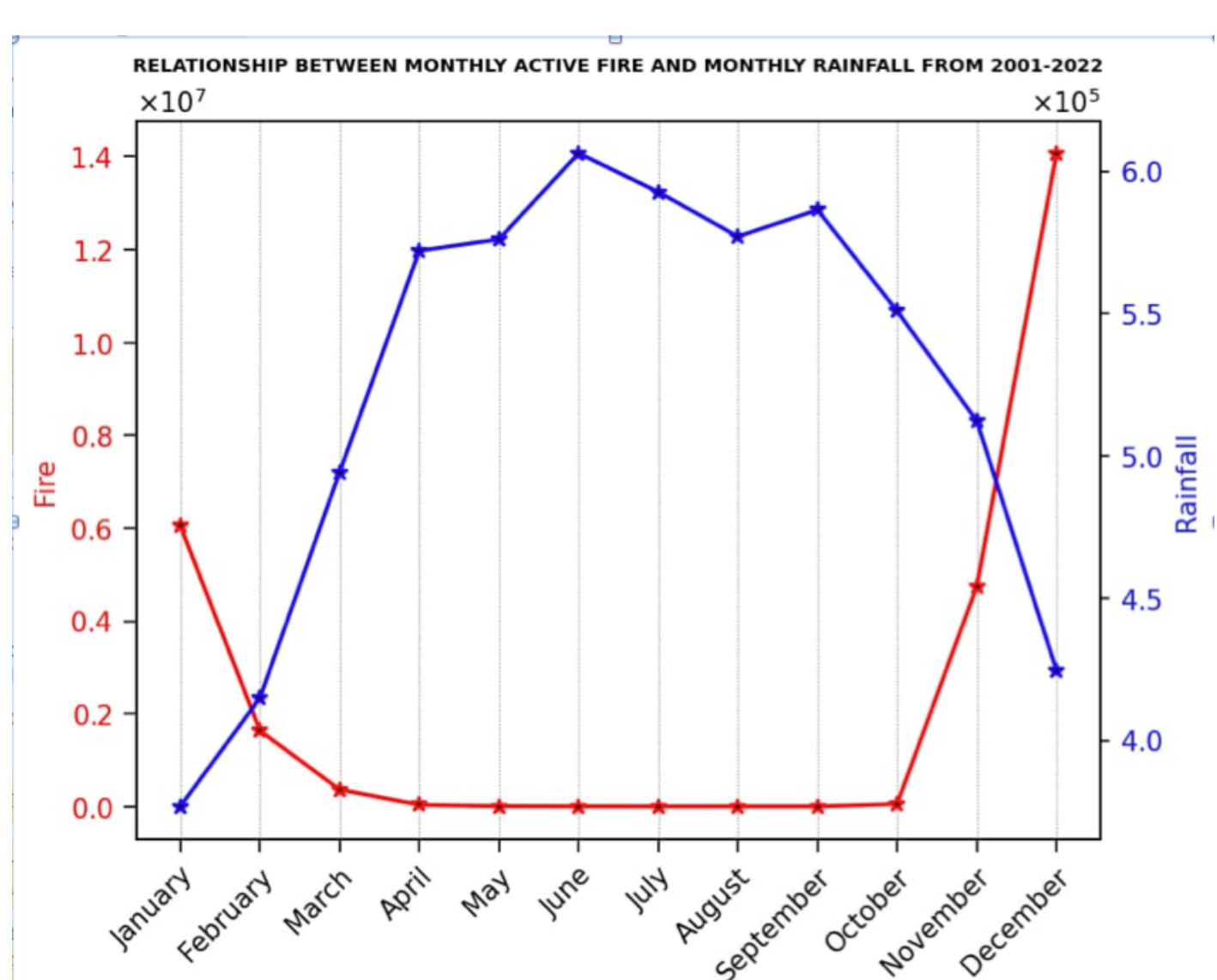
RESULTS



Active fires per year from 2001 to 2022 using MODIS data



Relationship between active fires and rainfall per Month from 2001-2022



CONCLUSION

- 1 The results of the direct socioeconomic factors revealed that human activities are the main factor influencing fire occurrences
- 2 The number of hotspots and the area burned tend to fluctuate temporally in the different seasons.
- 3 The relationship between rainfall and fire occurrence shows that most active fires, namely about 99.97 percent, were detected in the dry season from October to April
- 4 The study also revealed changes in climate (weather conditions) as the underlying causes of wildfires in the savannahs of Ghana



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