

South Africa's Primary Sector: Is It Contributing Enough?

Introduction

South Africa is one of the most resource-rich countries in the world and a top producer of numerous mineral commodities. Natural endowments are often associated with perverse developmental effects, which is more widely known as the resource curse. This project assesses from several socio-economic perspectives the development impacts of the primary sector in South Africa in the period 1996-2011.

Methodology

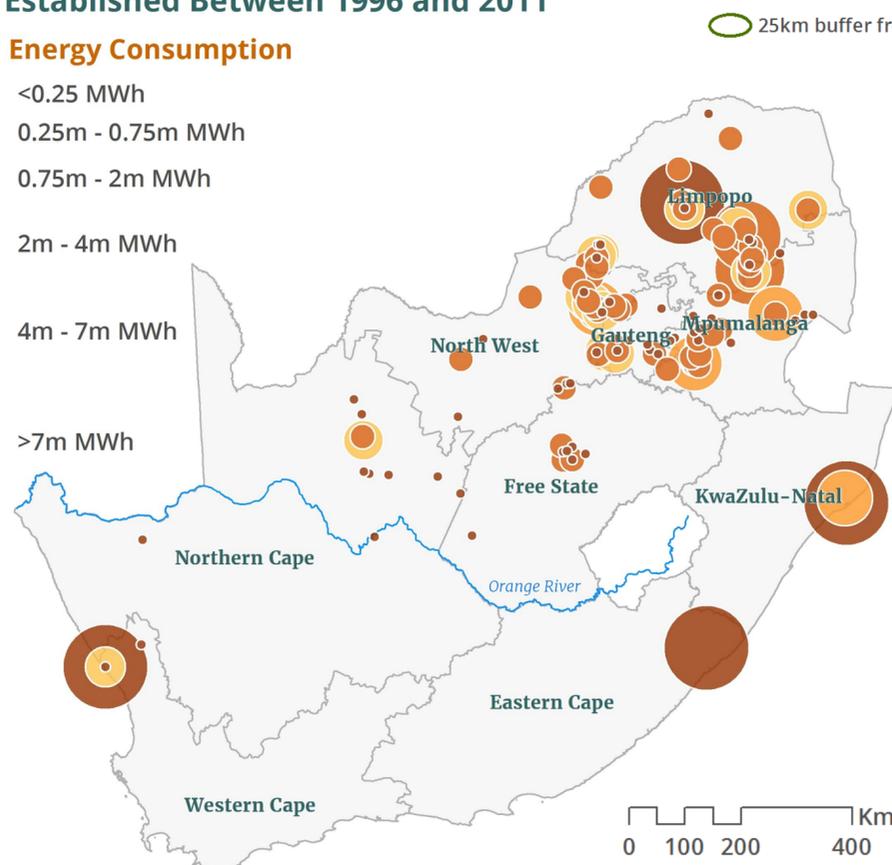
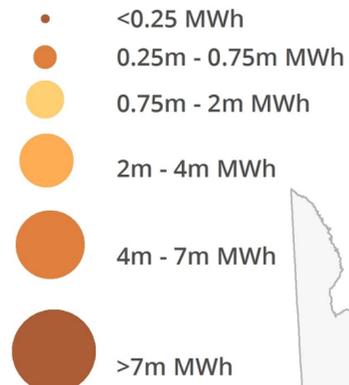
To answer the research question, I identify the location of mines established between 1996 and 2011 and a 25-km buffer zone around these mines.

To assess development impacts, I examine changes in population characteristics and living conditions during the 1996-2011 period. I also look at environmental and conflict vulnerability of population living near mines.

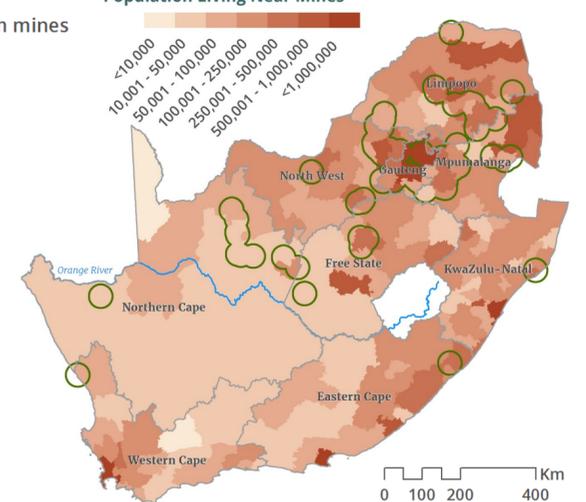
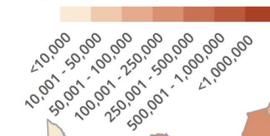
To complement spatial data, I also use survey responses from the Afrobarometer Surveys from the first to the fifth rounds (2001-2011). These answers can be interpreted as proxies for developmental needs. However, these data are only coded at the provincial level.

Mines Established Between 1996 and 2011

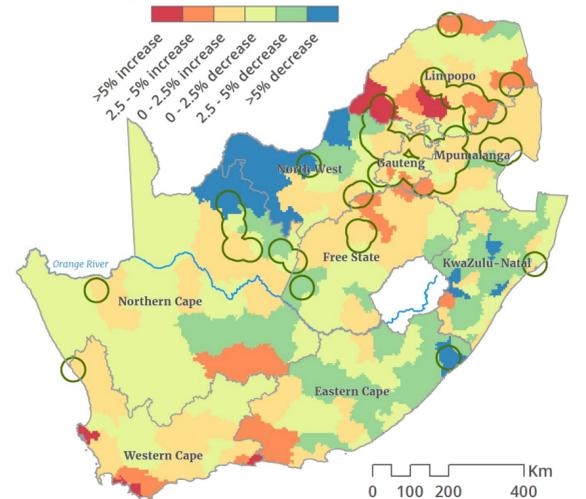
Annual Energy Consumption



Population Living Near Mines



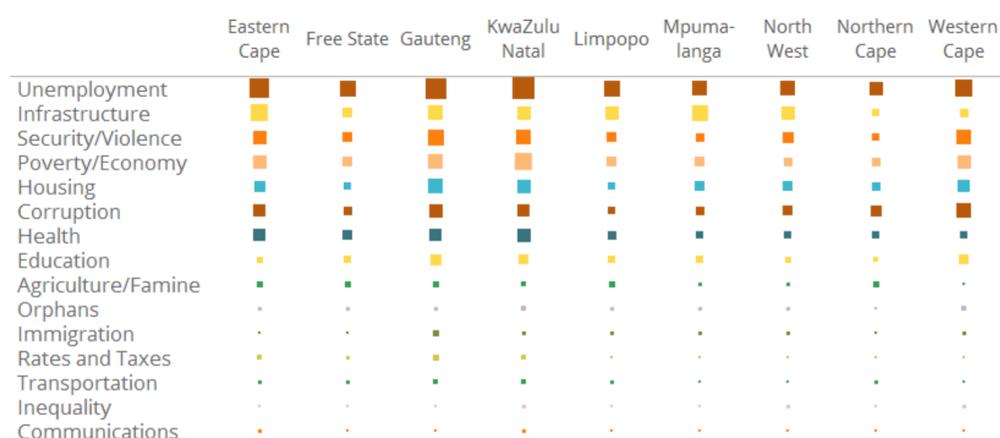
Change in Unemployment Level, 1996-2011



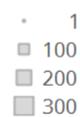
Share of Primary Sector in South Africa

Employment (2009)	0.5m people	5%
Gross Value Added (2009)	US\$137m	9%
Informal Settlements Near Mines (2011)	1.25m dwellings	18%

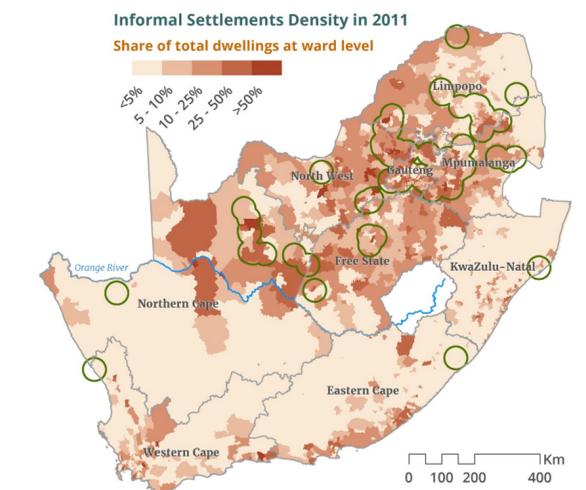
South Africans' Biggest Concerns in 2011 by Province



Number of respondents



Informal Settlements Density in 2011



South Africans' Biggest Concerns Over Time



Conclusions

Data from the 1996-2011 period suggest that despite its significant contribution to South Africa's economy, there are also areas where the primary sector appears to be associated with negative development effects. While it adds great values to the economy, the primary sector employs disproportionately few. In fact, mining locations

coincide with large increase in unemployment levels. Unemployment remains the top concern for respondents to the Afrobarometer surveys.

Population living near mines are also more vulnerable: most live in informal settlements and are prone to social conflicts. Indeed, housing, infrastructure and violence have emerged as top concerns for South Africans.

Cartographer: Andrea Tran

Projection System: Arc 1960 UTM Zone 35S

Date: May 10, 2016

Data Sources: Statistics South Africa, Afrobarometer, South Africa Council for Scientific and Industrial Research-Geospatial Analysis Platform, South African National Biodiversity Institute's BiodiversityGIS, Natura-Earth, World Bank's Energy & Extractives Open Data Platform