



Vulnerability & Access to Public Goods in Bolivia

Socioeconomic Risk of Indigenous Populations, 2012



Background

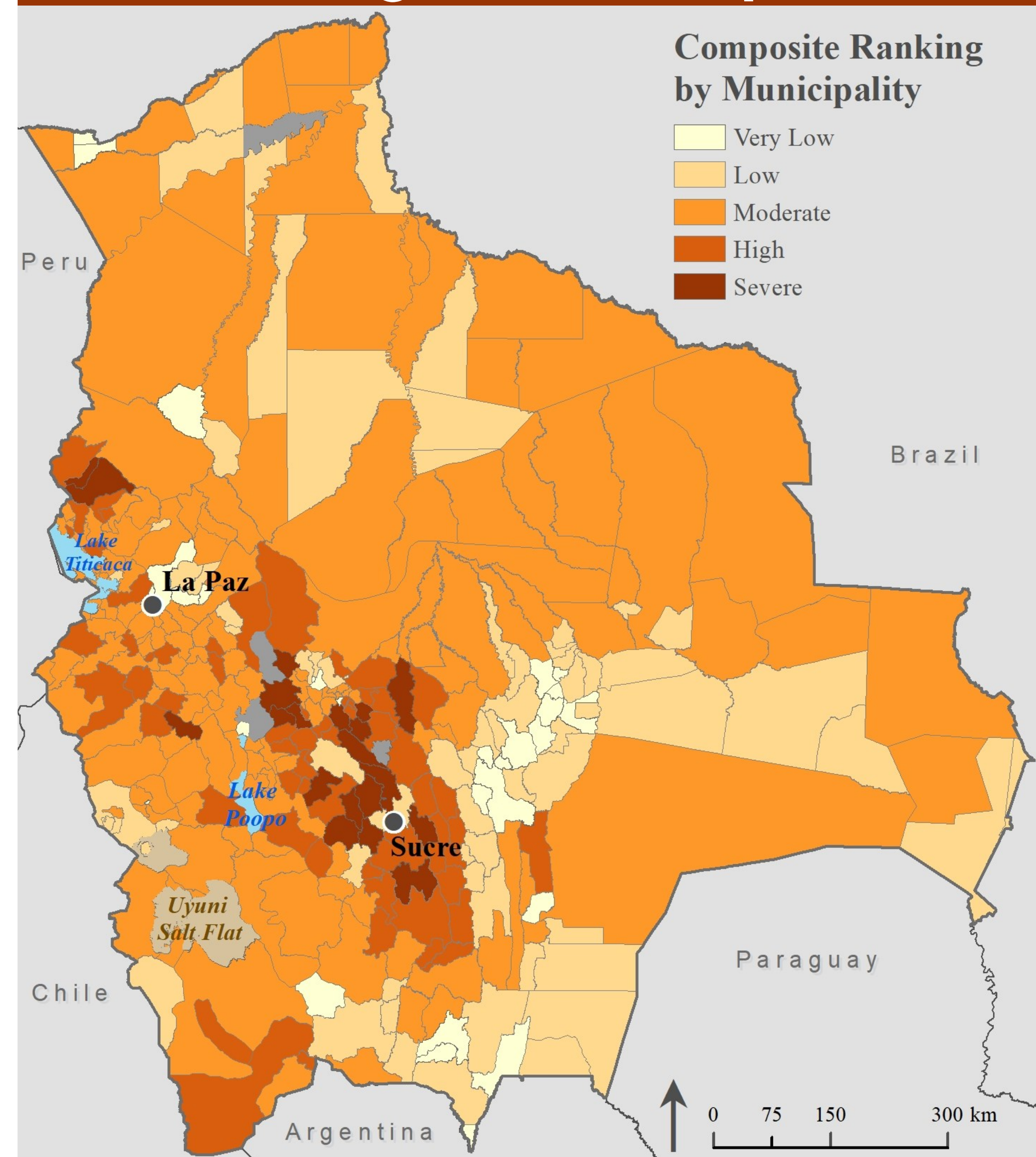
Bolivia has seen significant changes to its governance structure and resource allocation in the last 25 years. In 1994 the government decentralized state allocated funding, giving more autonomy to municipalities and in 2009 enacted a new constitution that recognized thirty six indigenous nations and their collective land rights.

Many people in the country face severe insecurity. Bolivia remains one of the most food-insecure nations in Latin America, and 39% of Bolivians live in poverty, while 15.9% are undernourished. More than half of Bolivia's population lives in rural areas where access to water and education are not consistent. Indigenous peoples are disproportionately affected by these insecurities.

The new Plurinational state is meant to enhance the rights and well-being of the indigenous population that constitutes 41% of the total population. Through a history of colonization and oppression, they have been underrepresented in or entirely marginalized from decision-making positions.

The 2012 census data used in this study will provide a baseline to compare against future socioeconomic information concerning the needs of indigenous peoples. This baseline will help to establish how effectively the governance changes have addressed indigenous needs. Determining where in the country vulnerability is the highest and where public resources are least allocated can provide crucial information about how the government needs to focus public resource distribution, especially to its most historically marginalized populations.

Socioeconomic Risk of Indigenous People



Conclusions

The proportion of indigenous people in each risk level was calculated to complement the spatial analysis that located the municipalities with the most indigenous people and the highest socioeconomic risk. This indicated that 25% of the indigenous population in Bolivia lives in 'high' or 'severe' socioeconomic risk. That is over half a million people, as seen in the table below. Not only is this a significant proportion of the indigenous population, but it is a large proportion of the total population as well.

This study, by determining where the highest concentration of indigenous people live in comparison to where the most people are at socioeconomic risk, will help to determine how well government is providing for the needs of indigenous people in the Plurinational state. The implication of these findings is that there remains municipalities that have poorly allocated public goods, high vulnerability, and a high density of indigenous people. The local and federal governments can use this information to better target both policy and resources.

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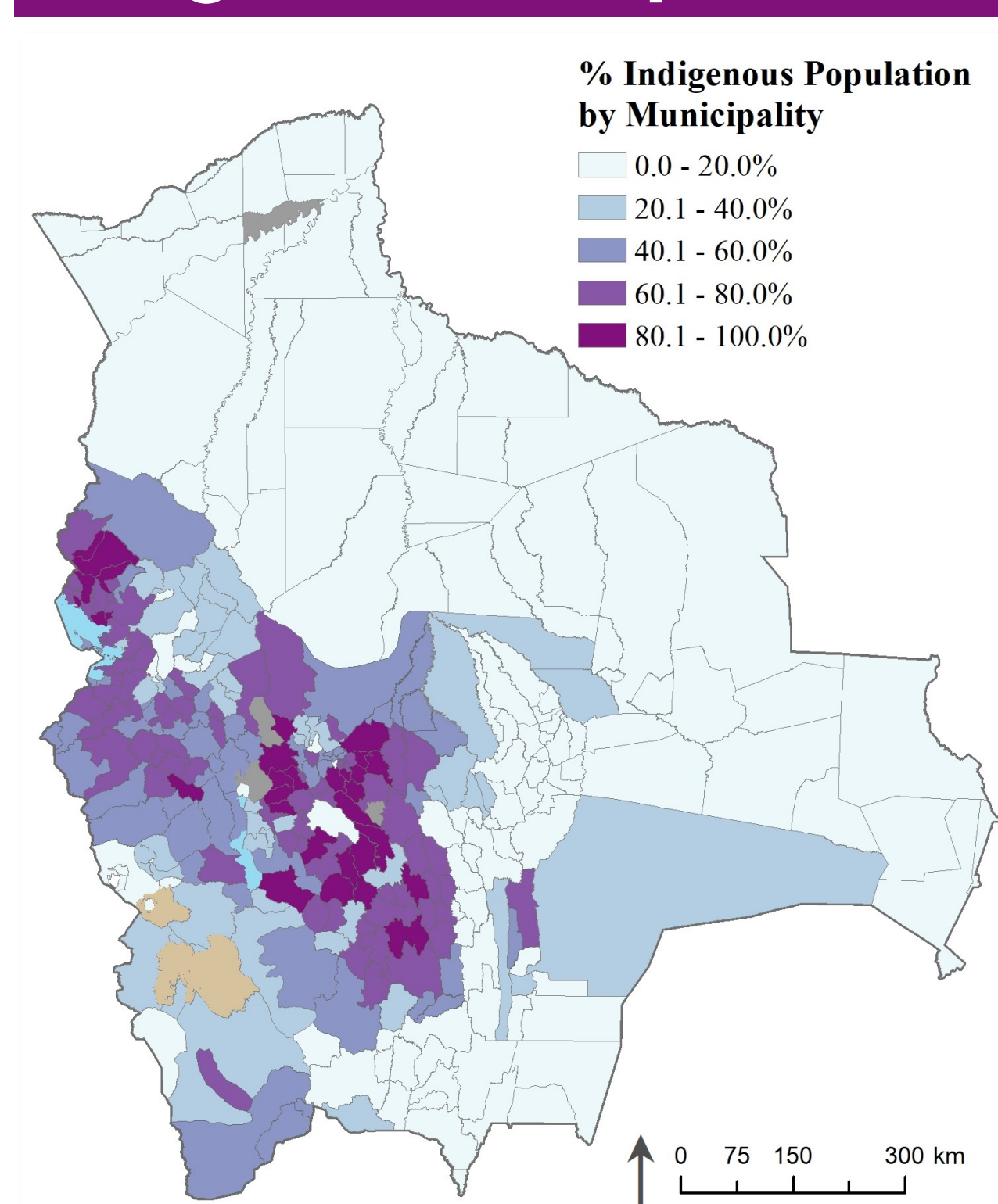
Limitations

This study uses the information from the 2012 census indicating primary languages spoken to collect indigenous demographic information. A more accurate measure would be the self-identification of indigenous ethnicity. Further, this study does not include natural disaster and climate risk which can impact food and economic vulnerability. Finally, women experience insecurity at higher rates than men due to gender inequality in Bolivia, which is not factored into this study.



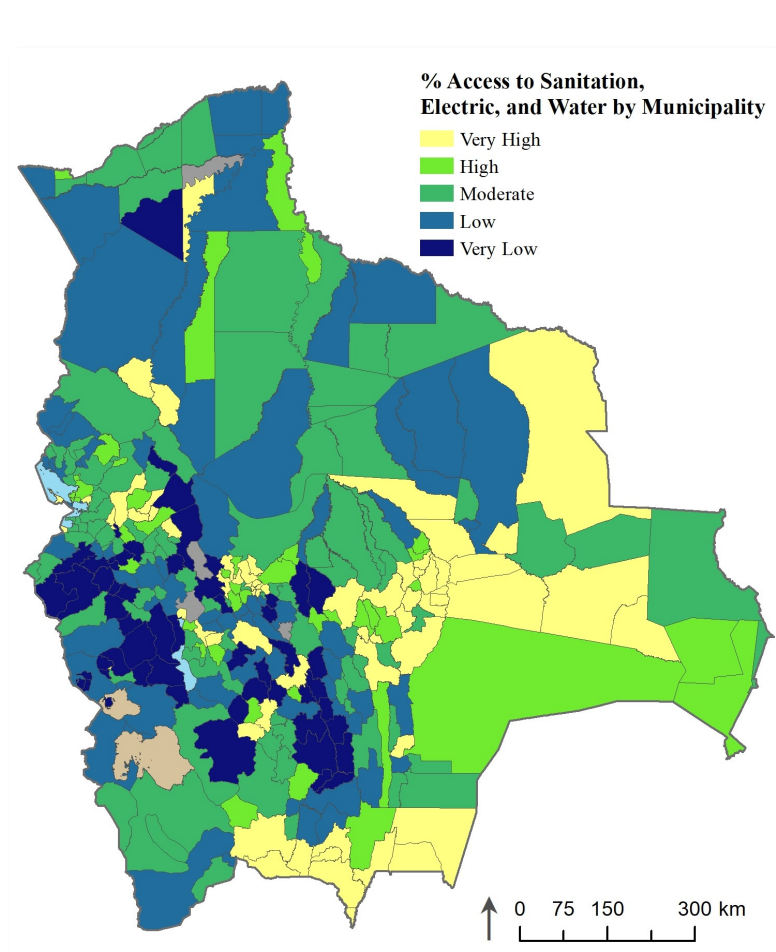
Cartographer: Alexandra Leveillee, May 2020
Sources: GeoBolivia; Instituto Nacional de Estadística; Ministerio de Salud y Deportes; Ministerio de Desarrollo Sostenibles; Administración Boliviana de Carreteras; US Department of State; Office of the Geographer
https://commons.wikimedia.org/wiki/File:Aymara_ceremony_copacabana_1.jpg
<https://www.dailysabah.com/americas/2016/05/03/indigenous-aymara-women-challenge-the-practice-of-patriarchy-in-bolivia>
Projection: South_America_Equidistant_Conic (custom)

Indigenous Population

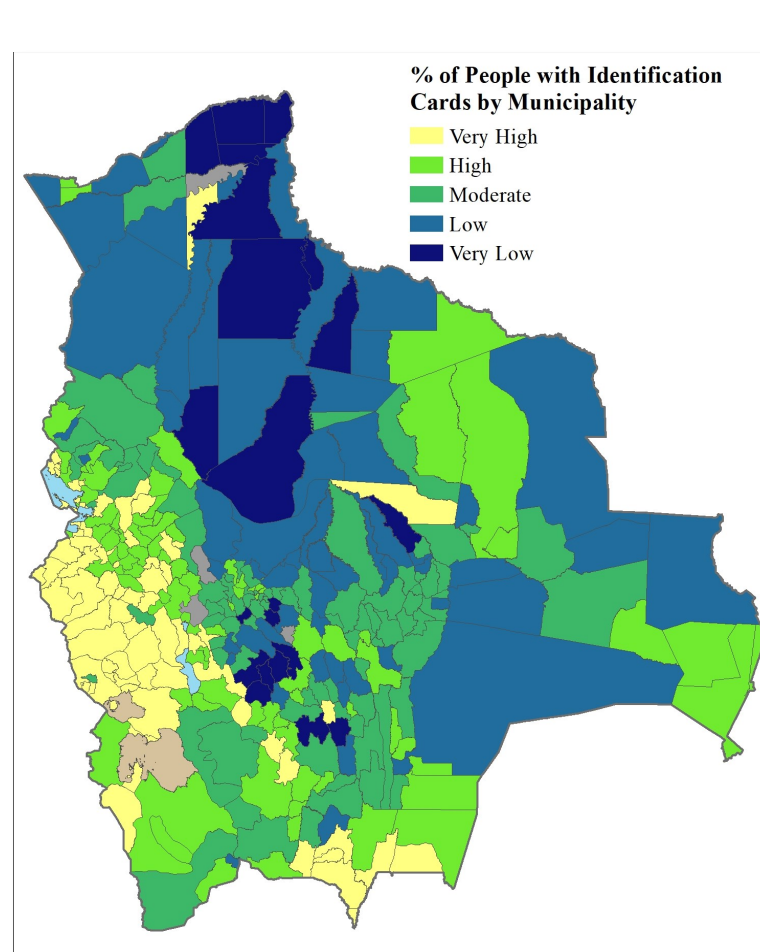


Access to Public Goods

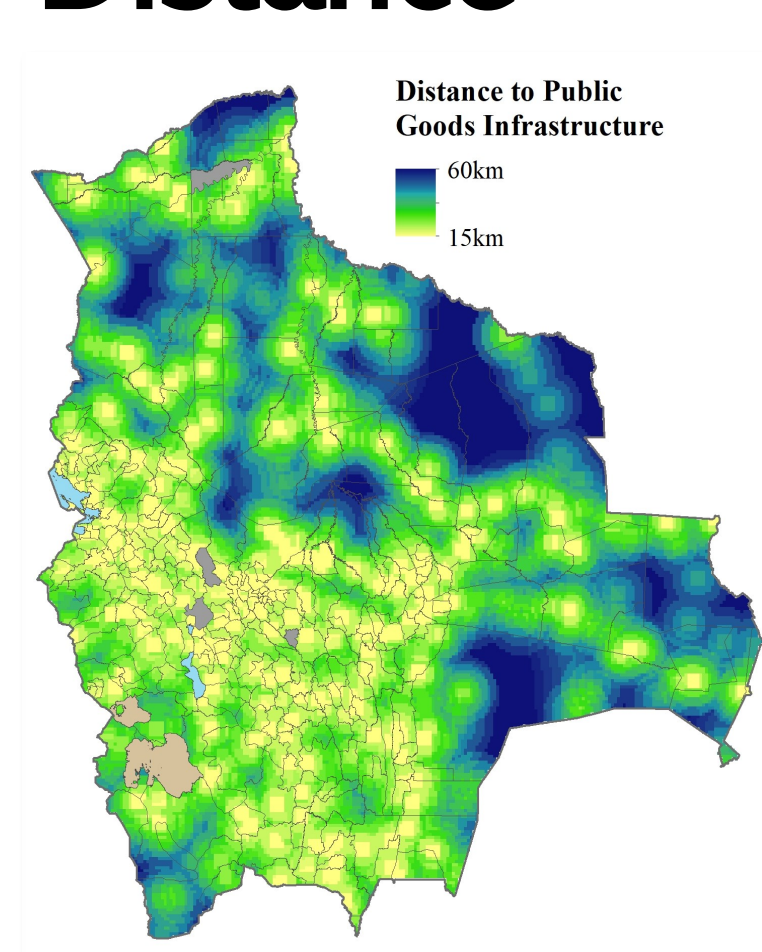
Home Services



ID Cards



Distance



Methods

This study assesses socioeconomic risk at the municipal level in two categories: access to public goods and vulnerability. Access was determined using seven variables: the % of people with water, sanitation, and electric in their homes, the % of people with ID cards, and distance to health and education facilities and roads (using a proximity analysis). These variables were grouped into home services, ID cards, and distance to public infrastructure and ranked from high to low access [0-4].

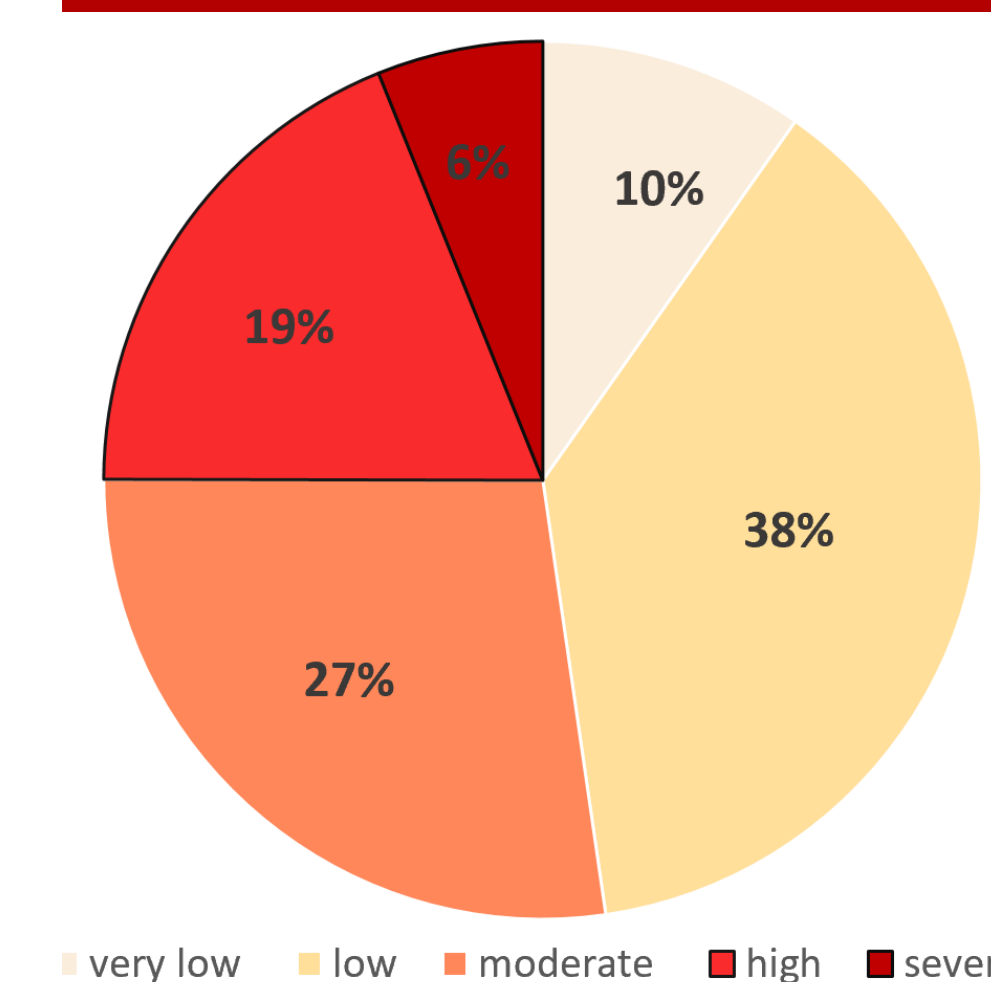
The levels of vulnerability were determined by using nine variables: % of people living in poverty, % employed, dependency index, literacy and school attendance rates, % of women who last gave birth in a health facility, % of people with straw or mud roofs, living in impoverished housing, and living in a structure not intended for housing. The variables were grouped into economic, education, health, and housing vulnerability and ranked in levels of very low to severe vulnerability [0-4].

Vulnerability and access were averaged together in order to determine overall socioeconomic risk, and those rankings were averaged with a ranking of indigenous population density in order to assess where indigenous populations most overlap with high socioeconomic risk.

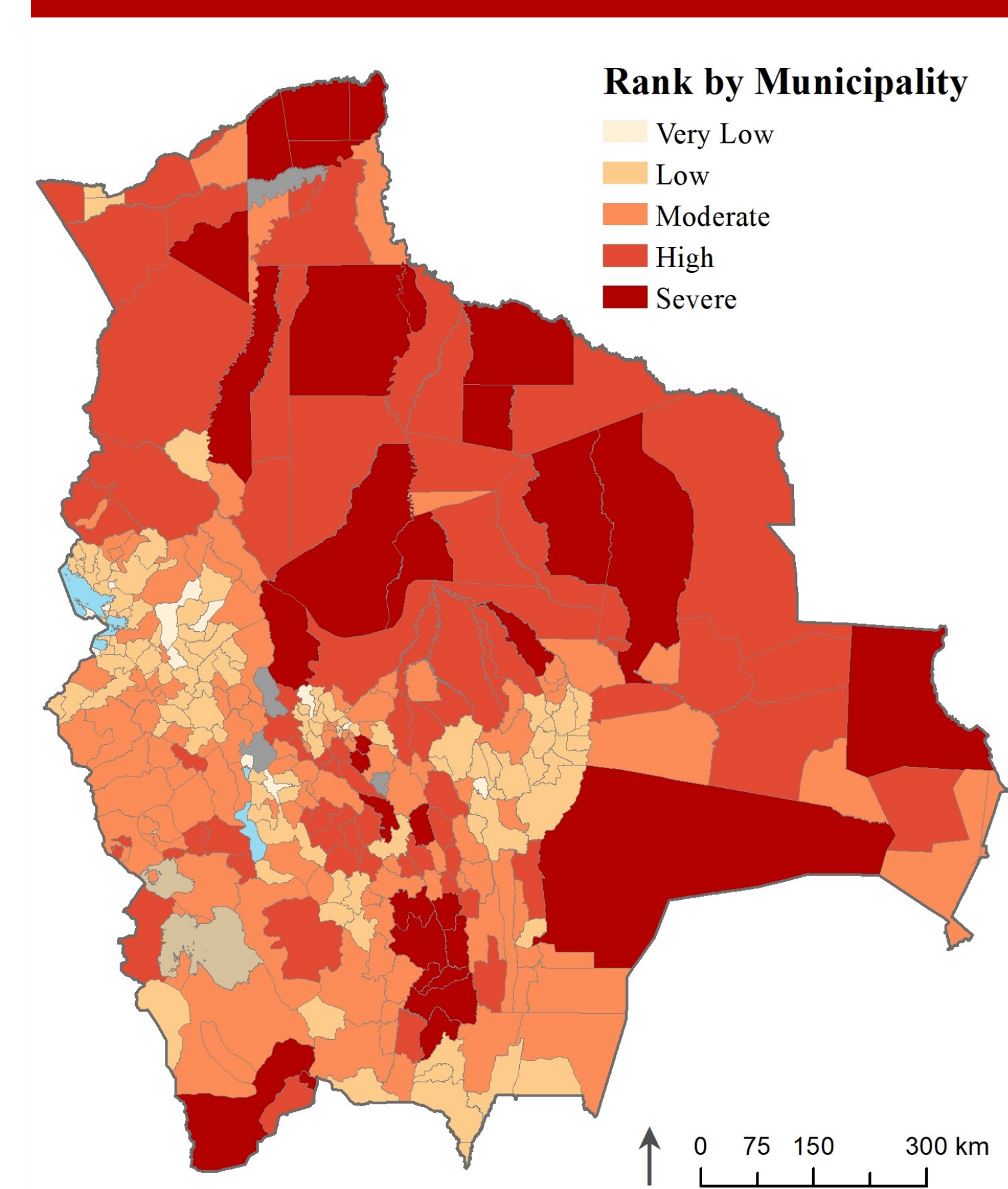
Number of Indigenous People Per Risk Level

Risk Level	Indigenous Population
Very Low	211,003
Low	820,510
Moderate	590,803
High	407,817
Severe	131,958

Percent of the Indigenous Population Per Risk Level

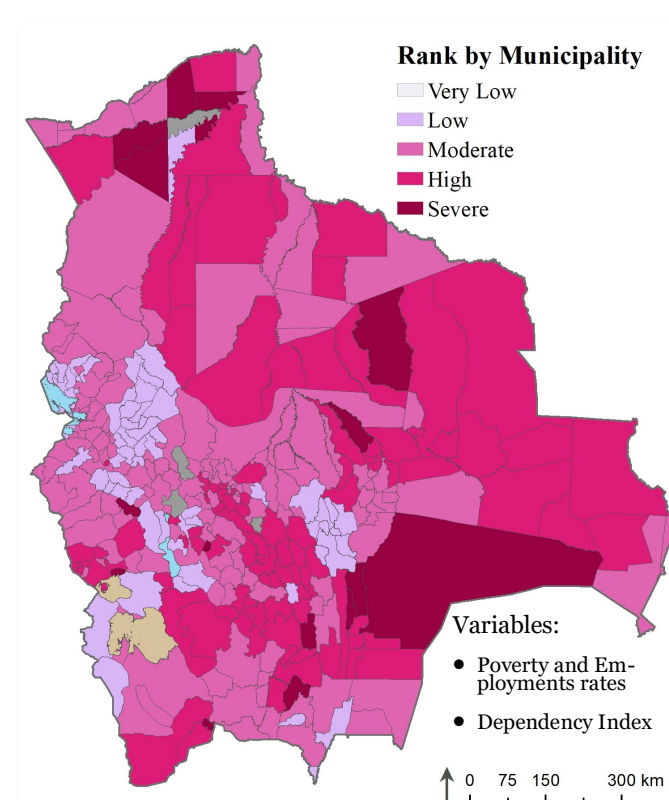


Socioeconomic Risk

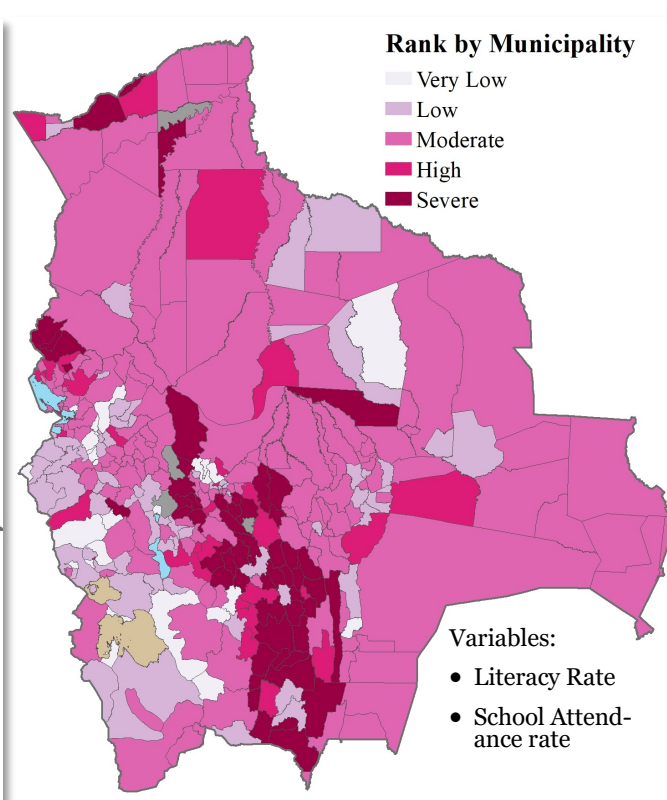


Vulnerability

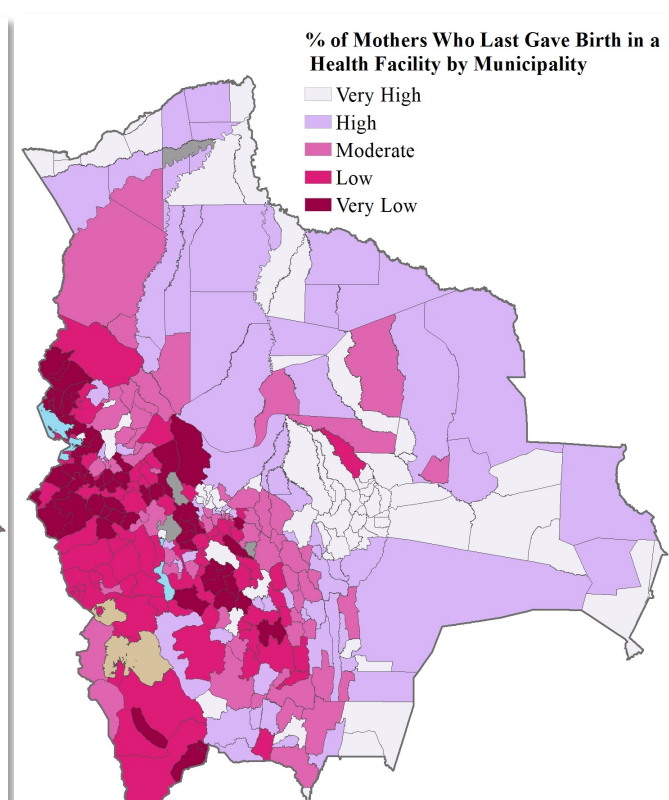
Economic



Education



Health



Housing

