



Social vulnerability – Locating South Africa’s vulnerable people

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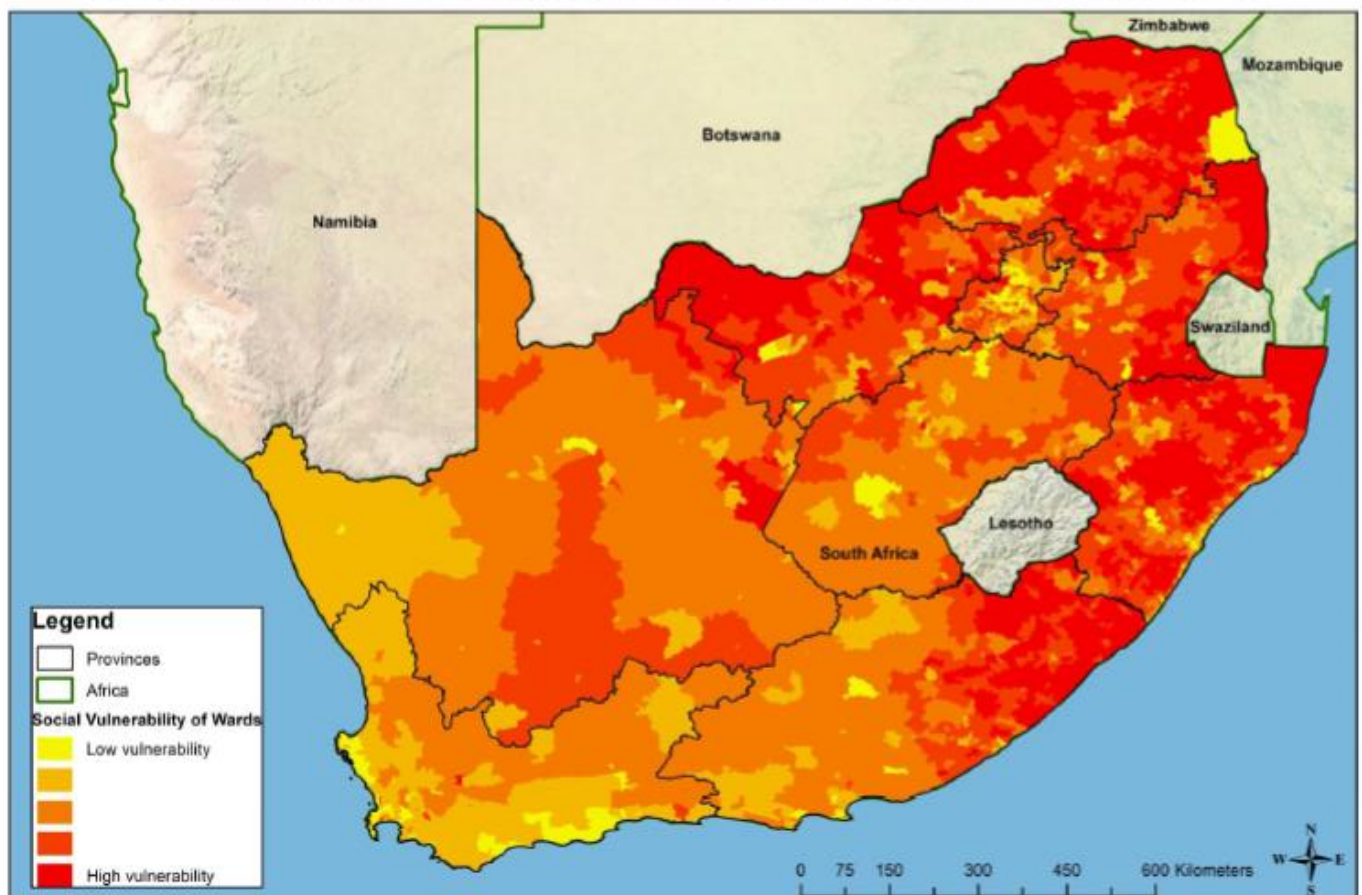
Date: May 2014

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Citation: le Roux, A., Naude, A.2014. CSIR Regional Dynamics and Interactions Analyses Note: *Social Vulnerability – Locating South Africa’s vulnerable people*. Available on www.Stepsa/regionaldynamics.org.za

Social vulnerability in South Africa is a growing concern within well connected metros, cities and towns as well as isolated rural-hinterlands. Social vulnerability is defined as the inability of people, settlements and societies to cope with, withstand or adapt to the impact of multiple stressors such as disruptive natural or manmade events. The social vulnerability index is based on 14 indicators highlighting South Africa’s most vulnerable communities.

Social Vulnerability of South Africa on Wards level based on 14 indicators



DATA SOURCES: Index created by Andreas Naude (Bsc Honours Student @ UP, 2013).





Social vulnerability can be considered as the inability of people, settlements and societies to cope with, withstand or adapt to the impact of multiple stressors such as disruptive natural or manmade events. Profiling social vulnerability of people and communities are the first step in starting to plan for resilient communities. Creating thus a social vulnerability indicator is a good solution for measuring and identifying the location of vulnerable communities. The social vulnerability index can be used to differentiate vulnerable communities from more resilient communities. The index was derived from a Principal component analyses (PCA) on a ward level using the South African 2011 national census data. The PCA was based on 14 variables (household size average, age dependency ratio, percentage unemployed, percentage people below property line, percentage rural population, percentage shacks, percentage education, percentage disabled people, percentage female head of households, percentage population without electricity, percentage households without telephone lines, percentage people without a car, percentage people without public water, percentage immigrants) each representing an aspect of social vulnerability within a community.

The composite index created is a multi-dimensional approach toward understanding the social vulnerability of communities. High levels of social vulnerability are indicated in red in the map above. As could be expected, at a broad regional level, the areas under the biggest pressure, as indicated in the map above, include:

- The former homeland areas and densely settled rural areas in the northern and eastern parts of the country
- Isolated communities in the north-west and northern cape and

Isolated pockets of communities within metropolitan areas, these areas are also the location of most of the poorer urban dwellers.

Collaborators/Acknowledgements:

South African Risk and Vulnerability Atlas (SARVA) - www.rvatlas.org

Related sources:

Le Roux, A., Eksteen, S., Naude, A. & De Beer, E. 2014. Compiling a high resolution social vulnerability map for South Africa: An evaluation of different variables in composite spatial indicators. Unpublished paper.

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