

Profiling the vulnerabilities and risks of South African settlements

Chapter in: Understanding the social & environmental implications of global change (South African Risk and Vulnerability Atlas), 2nd Edition

Le Roux, Alize

Mans, Gerbrand G

Van Huyssteen, Elsona

Van Niekerk, Cornelia W

ABSTRACT:

Cities, towns and settlements provide housing and livelihoods for a growing global population. Estimates indicate that in 2014, 54% of the world's population and 40% of the population on the African continent were considered urban. African city growth rates are amongst the highest in the world and it is estimated that by 2050, 56% of the population in Africa will be living in urban settlements (UN 2014). Aside from hosting the majority of the world's population, urban settlements generally provide a wide range of livelihoods and services for their residents and its surrounding areas, provide economies of scale in production, ease of information flow, large markets for goods and labour, and offer greater opportunities for education, healthcare, social cohesion and trade. It is, however, becoming increasingly difficult for people to find safe shelter, sustainable livelihoods and adequate services in many African cities. There is evidence of increasing social conflicts and environmental strains in African cities as a consequence of the inherent vulnerabilities associated with urbanism combined with political and institutional failures to plan effectively (UN-Habitat 2014). Thus, cities and towns are burdened with rising service delivery backlogs, poverty levels and unemployment. Yet anticipated migration, urbanisation and natural population growth will limit their ability even further to effectively respond to and mitigate risks associated with global change. This chapter builds on the first South African Risk and Vulnerability Atlas (SARVA) and extends the work by examining some of the multi-stressors¹ associated with global change that are affecting the vulnerability of urban settlements in South Africa. Some of the analyses have also featured in recently published articles that explore the methods and techniques used in this chapter (van Huyssteen et al. 2013; le Roux et al. 2015).

The chapter also serves as a plea to decision makers, officials and practitioners to have earnest consideration for spaces with high (and increasing) concentrations of socio-economic vulnerability combined with exposure to unique and complex environmental and human induced hazards, since they have critical implications for large numbers of the South African population, their livelihoods, and the infrastructure and networks supporting the country's economy. The chapter is structured as follows: The first section provides an overview of the importance of South African cities and towns and highlights some of the most critical settlement dynamics with regards to its demography and economy. In the second section the analysis of a number of multi-layered indicators provides an indication of the highly concentrated nature of socio-economic vulnerability, largely clustered within cities, towns and settlements. The third section illustrates first level attempts of identifying settlements at risk if exposed to hazards associated with global change. The chapter concludes by highlighting some implications of the findings and responses required.