

Smith, Helen. The relationship between settlement density and informal settlement fires: A case study: Imizamo Yethu, Hout Bay and Joe Slovo, Cape Town Metropolis. (BSc Honours thesis in Disaster Risk Science, 2004)

Informal settlements in South Africa bear witness to increasing levels of urban poverty, growing housing shortages, poor service delivery, as well as serious environmental and health risks. They are also environments for accumulating disaster risk in which repeated disaster occurrences leave many people homeless and destitute. The DiMP MANDISA database, established in 2000 to capture past and present fire incidents in the Cape Metropol, reveals a 120% increase in incidents but also a disproportionate increase in the frequencies of small events and the severity of disaster events to hazard intensity. Recent research has illustrated that urban risks such as fire are complex in nature reflecting the inherent physical, social, economic and political weaknesses of affected communities. These dynamics must therefore be considered in any comprehensive disaster risk assessment. This study investigates the relationship between settlement density and the increasing pattern of fire severity over time in two informal settlements, Imizamo Yethu and Joe Slovo in Cape Town. Using GIS to undertake density counting, South African census data and the MANDISA database, the study finds that changing fire severity patterns over time do not necessarily reflect concomitant changes in dwelling density. The challenge posed by the complex nature of risk in informal settlements in the South African urban landscape calls for a holistic and integrated approach to Disaster Management.