

F.J. Solomon. Examining the feasibility of flood early warning systems in informal settlements: Focus on the flood risk experience of Kosovo and Masiphumelele residents, Cape Town, South Africa (MPhil in Disaster Risk Science, 2011).

Much of the City of Cape Town's urban landscape is characterised by informal settlements, with many poor and disadvantaged communities living in areas exposed to the recurrent risk of rising floods. Recurrent flood impacts during the winter rainfall months, and their costs, are disproportionately borne by both those at risk and the local government. This thesis examines the possibility of applying people-centred flood early warning systems in informal settlements in the City of Cape Town, with particular focus on Kosovo and Masiphumelele informal settlements. A social science risk perspective is adopted with the application of a risk communication framework. The study sought to investigate the urban flood risk context of both study sites and the risk governance approach to managing and communicating flood risk. Factors influencing flood warning processes, and behavioural factors influencing response to flood risk and flood warnings were examined, using qualitative and quantitative research methods. Findings of the study suggest that due to a number of challenges relating to prevailing risk communication processes in the City, flood early warning systems for informal settlements may be considered inappropriate. The challenges to the success of flood early warning processes include the City of Cape Town's risk governance approach and conceptualisation of flood risk and flood warnings, as well as opportunistic behaviour in response to flooding. Research findings indicate that informal households value their assets and will make creative adjustments to prevent them during a flood event. Therefore a flood early warning system centred on these needs may be applicable, if all other challenges are overcome. The results underline a need for greater understanding of the level of flood risk community members are willing to take, and what levels of loss stakeholders are prepared to accept.