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#### Developing Indicators for assessing Social Vulnerability to flash flooding in sub-Saharan Africa

With global urbanization flooding is also becoming an urban problem. This study was part of the Integrated Flood Management (IFM) of Kampala, a UN-Habitat sponsored project, which recognises that flooding in Kampala is multi-dimensional and multi-sectorial.

The impact of flooding on the population can be reduced by designing a methodology for assessing and mapping the socially vulnerable population to flash floods at the household level, which is the main objective of this study. It is believed that the methodology will enhance techniques used in reducing the impact of flash floods on the people by incorporating this method into governments' policies and programmes on disaster reduction.

The methodology is based on the main components of social vulnerability, which captures the exposure, susceptibility and coping mechanisms of households to flash floods. The study started with a review of relevant literatures about the traditional or "classical" indicators of vulnerability assessment, in order to identify which one contributes to or reduces social vulnerability to flash floods. The various data were then integrated into a database, and indicators have been identified by using descriptive statistical.

The main factors that contribute to social vulnerability were then categorized under the components of social vulnerability, and spatial multi-criteria evaluation (SMCE) was then used to evaluate these components to obtain the overall Social vulnerability Index (SVI). One significant outcome of this study is a Social Vulnerability Index (SVI) map, which shows respondents' exposure, susceptibility and coping, mechanism levels of the study area.

The results reveal that, though, households may vary somewhat in terms of their exposure, susceptibility, and coping mechanism, the majority of the households have a high social vulnerability index (SVI). The resulting SVI map is not a static one, there is a need to update it regularly, because certain indicators do change.

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#### Resilience to disaster: Predicting resilience in a disaster prone community

Introduction. The ability to predict the level of engagement in preparatory behaviours of a community can provide useful recommendations in increasing such behaviours. The key variables that were investigated to predict preparation included social capital, self-efficacy and perceived threat. The applicability of using the Extended Parallel Process Model to predict preparatory behaviours in a disaster prone community was tested. It was expected that high self-efficacy and high perceived threat would predict an individual's level of preparation for a weather event and that this would be mediated by social capital factors. It was also expected that low self-efficacy and high perceived threat would predict concern which would also be mediated by social capital factors.

Method. A total of 279 (104 males, 172 females and 3 not identified) participants from a disaster prone community in North Queensland completed the questionnaire package. The questionnaire asked

participants about their previous experiences with extreme weather events, preparation, concern, perceived threat, self-efficacy, social capital and resilience.

Results. It was found that only self-efficacy predicted preparatory behaviours ( $p = .01$ ) and this was only mediated by social connectedness ( $p = .00$ ). Also, only the perceived severity of a future weather event was found to predict concern ( $p = .00$ ) and this was only mediated by trust ( $p = .00$ ).

Conclusions. Findings from this study suggest that increasing an individual's self-efficacy and social connectedness will increase the likelihood of the individual engaging in preparatory behaviours. This implies that greater social capital will contribute to improved community preparedness for a future weather event. Thus it would be beneficial for individual interventions and disaster preparedness campaigns aimed at disaster prone communities to target increasing individual self-efficacy and community social capital factors in order to increase the preparation undertaken for a weather event.

### **Mrs Elizabeth Unkles**

Emergency Management Coordinator, Mater Health Services

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#### **A journey from emergency response to integrated emergency management – the challenges, keys and the ultimate test for a Queensland tertiary healthcare facility**

Mater Health Services are a Queensland icon, providing exceptional, not for profit healthcare to more than 500 000 patients each year, through collocated private and public health facilities including seven hospitals, three health centres, a medical research institute, pathology and pharmacy businesses.

The organization has for many years had well embedded emergency response processes. These processes were vigorously tested by the natural disasters impacting Queensland in 2011. The lessons learned, coupled with subsequent regulatory changes, and highlighted the need for formalized contingencies and business continuity process.

In response, the Mater Health Services Emergency Management Framework was released in 2013 providing an integrated organizational approach to emergency prevention, preparedness, business continuity, emergency response and recovery.

The 2014 G20 Leaders Summit being held in Brisbane in November 2014, is within the same geographical vicinity as the Mater Health Services South Brisbane Campus. This event will test the effectiveness of the Emergency Management Framework.

This presentation will detail the challenges across the process from framework design to implementation, with an emphasis on embedding cultural change, and reflections on the effectiveness of the framework as it is put to the test.

Attendees will be provided with "keys", identified through both success and reflection, which may assist in embedding procedural and cultural changes in emergency management within their organisations.