



Mapping urban risk in African cities: Bringing to light invisible voices and spaces in Freetown (Sierra Leone) and Karonga (Malawi)

Rita Lambert, Adriana Allen, Emmanuel Osuteye, Mtafu Manda, Braima Koroma

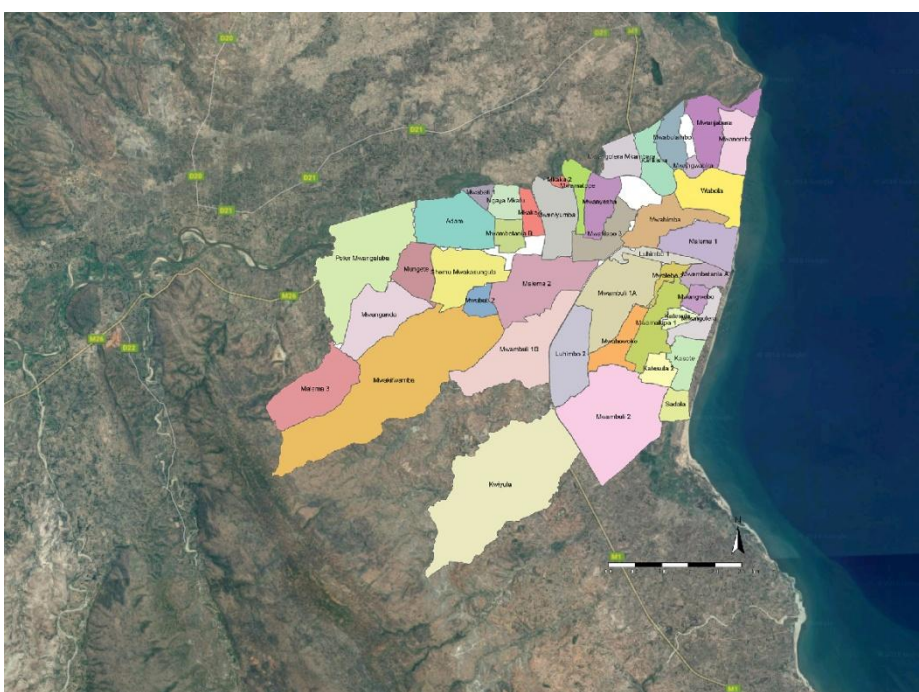
ACC Conference- Cape Town 1-3 February 2018

Untaming methodologies: reframing urban risk through

60 Informal settlements in Freetown- Pop.1.1mil



44 Villages in Karonga – Pop. 63 000



THE SITE OF READING



Map showing the diversity of hazards in Freetown

Reported Hazard Prone Area

(indicating location name)
Source: Department of Housing

- Inland Flooding
- Landslide
- Flooding from the Sea

Documented Disaster Event

(indicating year of incident)
Source: Disaster Management Unit

- Construction Collapse
- Inland Flooding
- Industrial Contamination
- Landslide, Mudslide

Surveyed Hazard Prone Area

(indicating location name)
source: GPS-survey by
Project Team and City Councillors 2011

- Flood Prone Area
- Solid Waste Dump Site
- Solid Waste Dump Transition Point
- Water Pollution by
Solid Waster Dump Site Drainage

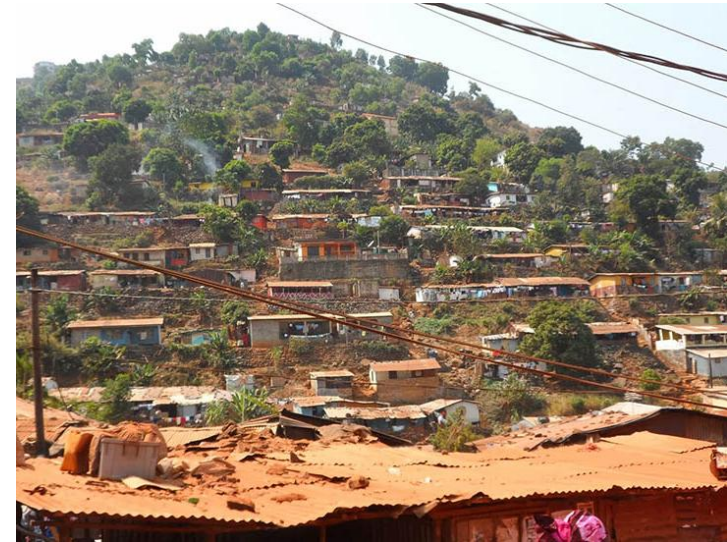
- Municipality Boundary
- Western Area National Park
- Proposed Buffer Zone for National Park
- Altitude contour in meter,
interval 50m (processed from
Shuttle Radar Topography
Mission data 2000)
- Watercourse
- Road Network
Source: SLIS, adjusted by project
 - Primary road
 - Secondary road
 - Tertiary road
 - Local road

Source: Ministry of Lands, Country Planning and the Environment (MLCPE) and Freetown City Council (FCC) (2014) Environmental Assessment and Evaluation of Natural Disaster Risk and Mitigation in Freetown. Coordinated by Ronnie A. D. Frazer-Williams. Final Report. EuropeAid/SL/Cris. No: FED/2010/250–190. Page 18

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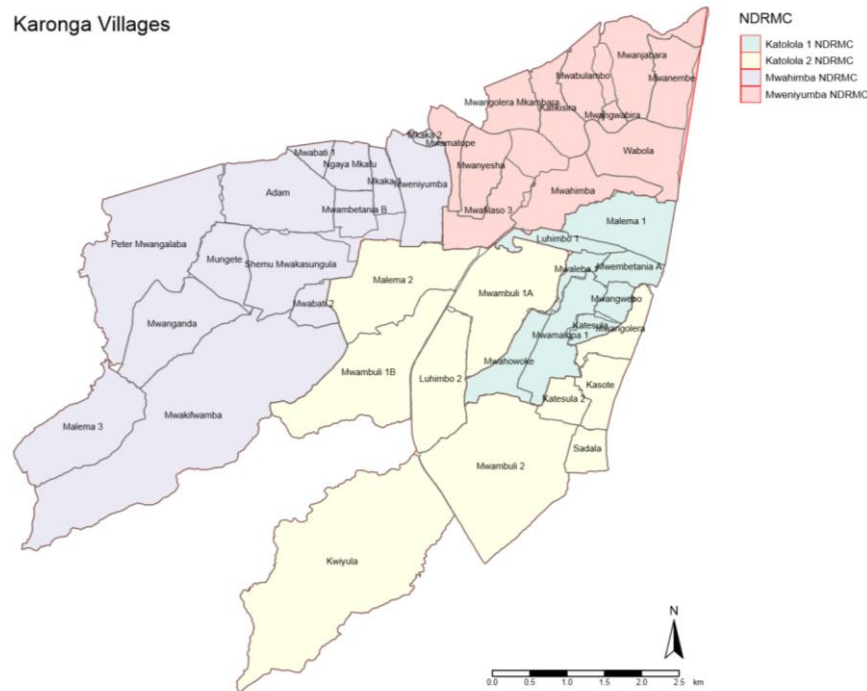


Locating Informal settlements and working with the governance structure of the Federation of the Urban Poor in Freetown



Project focused in 15 informal settlements with different geographic condition- from coastal to steep slopes

Karonga Villages



- Karonga constitutes 44 villages
- 44 villages are grouped into 4 Neighbourhood Disaster Risk Management Committees (NDRMC) headed by existing village headman
- Each of the 44 villages also headed by a chief
- NDRMC formed in 2015, recognised by government on paper but not operational
- No mapped boundaries between villages- currently divisions marked by plant beacon



3 different surveys at settlement/village level designed with community inputs:

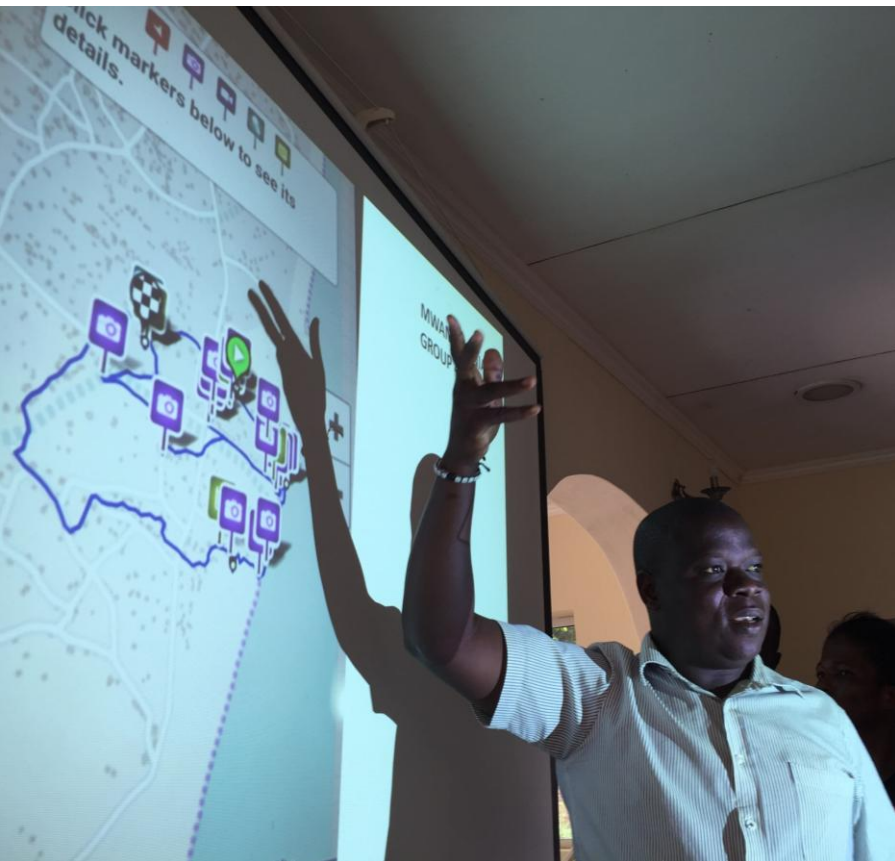
1) Initiatives, 2) Hazards and Vulnerabilities, 3) Capacities to act

- Hazards- following Desinventar Database- recording deaths, injured and other losses
- Capacity to act-measured through an assessment of the contribution of different groups to:
 - Recovery, mitigation, prevention/reduction of risk
 - Funding, knowledge, labour
 - Knowledge, skills , experience,
 - Organisational capacity
 - Political links





THE SITE OF AUDIENCING



ReMapRisk - KARONGA



UrbanARK

About

UrbanARK

About Karonga

Hazards

Vulnerabilities

Capacity to Act

Voices from Karonga



About ReMapRisk

ReMapRisk is a tool that allows the mapping and analysis of often under-recorded everyday risks, such as water and sanitation related diseases, and small-scale episodic disasters, such as fires and localised floods. The tool allows local communities to document and monitor how risk accumulation cycles or 'urban risk traps' materialise over time and where, feeding spatial and temporal details into an interactive online database.

The database stores information about Hazards, Vulnerability and Capacity to Act and enables public enquiries across all fields of information recorded that can be visualised through maps in response to each enquiry. The last tab to the right [Voices from Karonga] records local community perspectives on their experiences of risk accumulation and actions undertaken and required to disrupt risk accumulation cycles.



ReMapRisk - KARONGA



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About Karonga

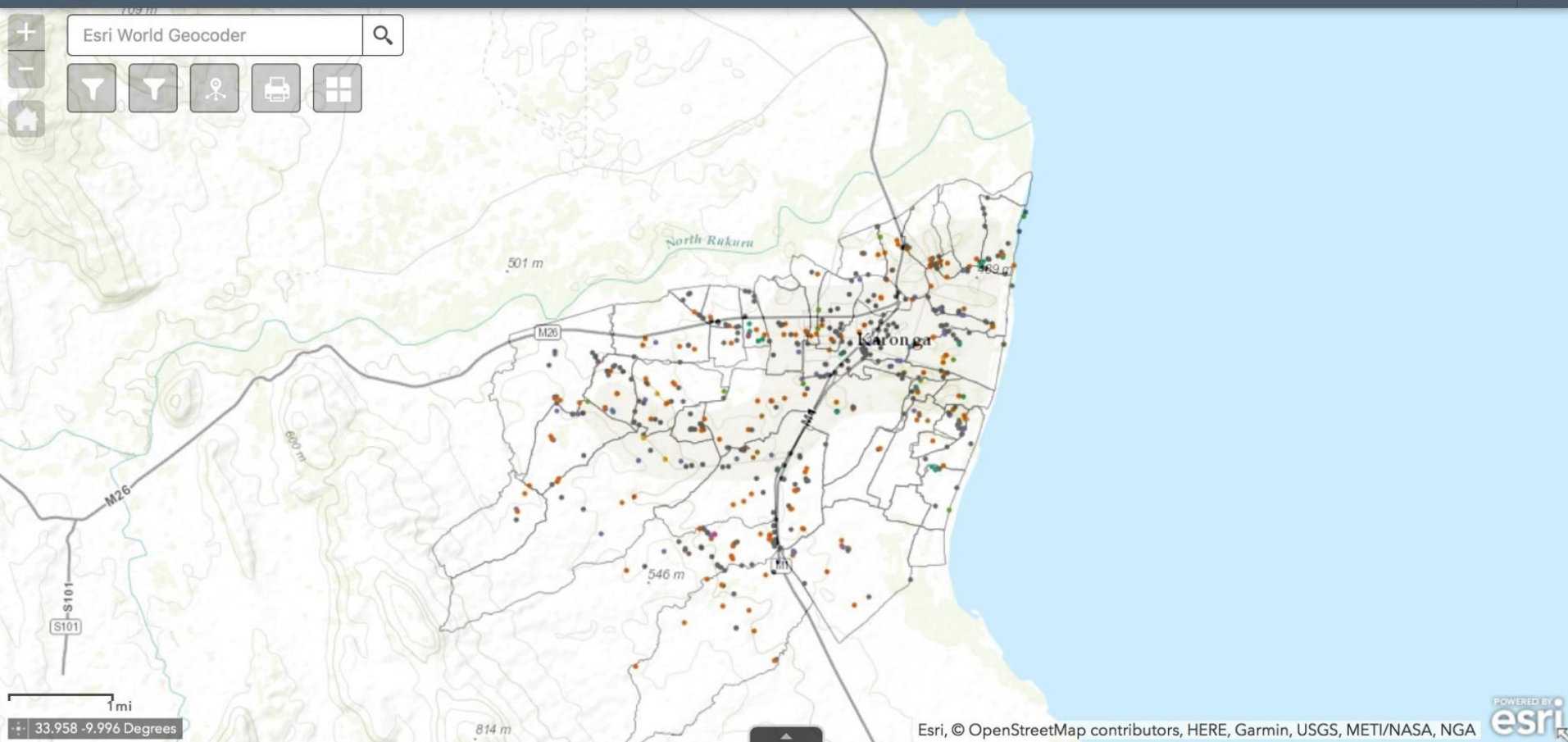
Hazards

Vulnerabilities

Capacity to Act

Voices from Karonga

Karonga - Initiatives



ReMapRisk - KARONGA



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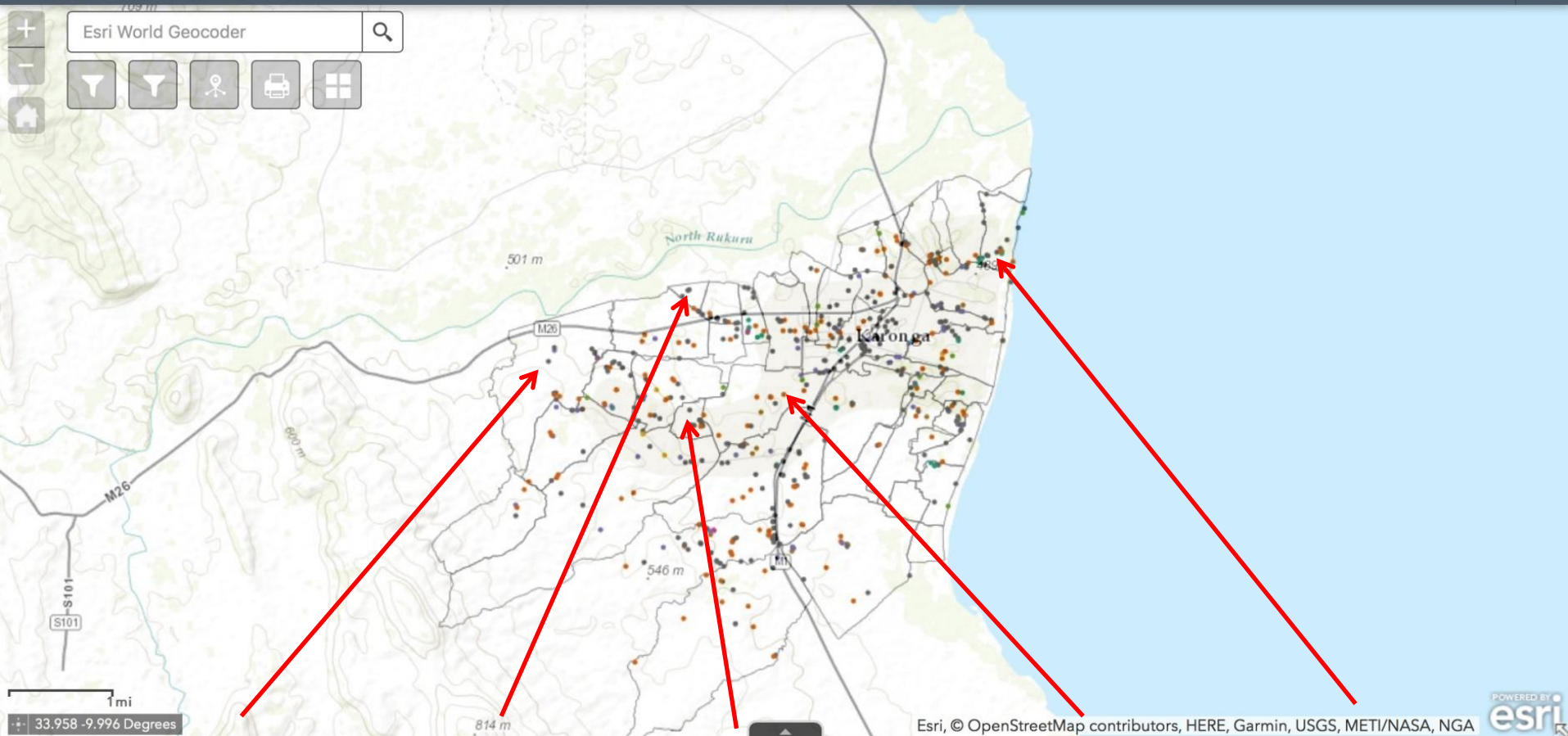
Hazards

Vulnerabilities

Capacity to Act

Voices from Karonga

Karonga - Initiatives



Esri, © OpenStreetMap contributors, HERE, Garmin, USGS, METI/NASA, NGA



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- The three sites of mapping, reading writing and audiencing, **show different opportunities for how one can interrogate the city and provide a spatially and socially grounded way of producing knowledge for action.**
- **These three sites are not only interrelated but also iterative**
- **Challenges**
 - The scaling up and sustaining multiple engagements over time
 - Ownership of the data
 - Misreading of data- Focus on the resilience of inhabitant not just the concentration of risks
 - Unintended consequences