Community Based Hazards and Vulnerability Assessment in Alaska Informal Settlement

Presented by group z

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scope

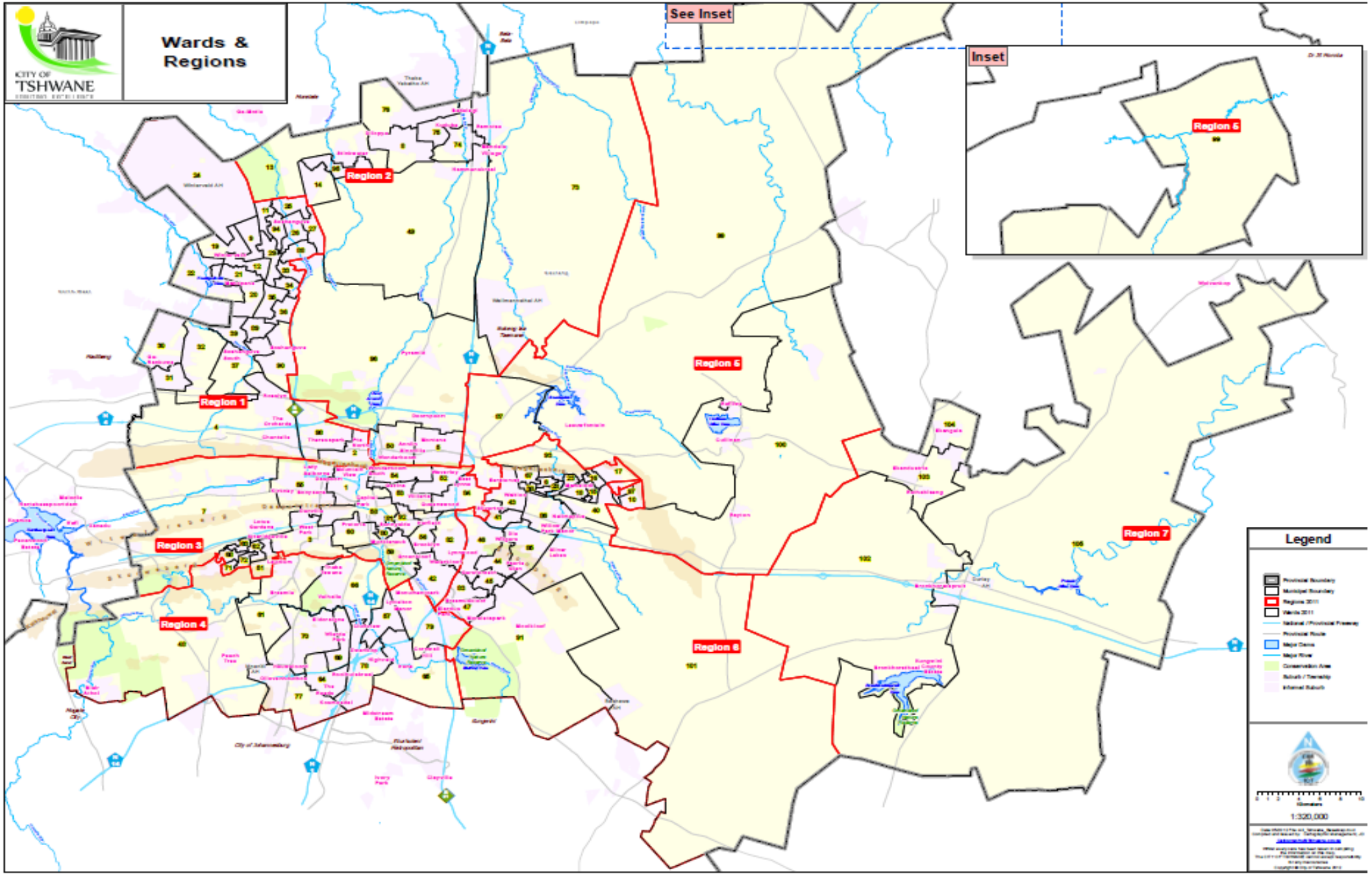
- Abbreviations
- Introduction
- Objectives
- Legal requirements
- Methodology
- Findings
- Challenges identified
- Discussion
- Conclusion and recommendations

Abbreviations

- CTMM- City of Tshwane Metropolitan Municipality
- DM- Disaster Management
- DMA- Disaster Management Act
- DMAA- Disaster Management Amendment Act
- DMC – Disaster Management Centre
- DRR- Disaster Risk Reductions
- IDP- Integrated Development Plans

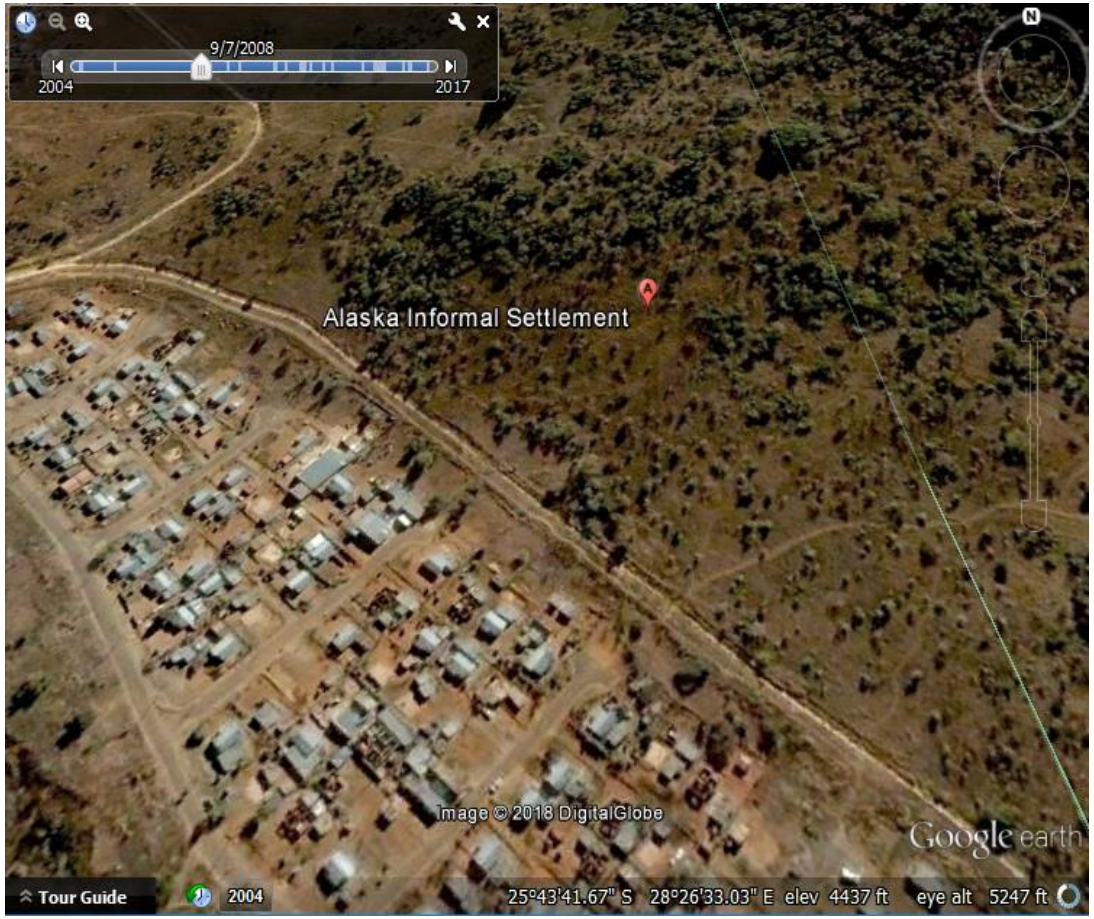
Introductions

- Alaska informal settlement is located in Mamelodi East, ward 10 which falls in Region 6 of the City of Tshwane Metropolitan Municipality.
- It is under the political leadership of Councilor Mantjane
- This informal settlement was established on the 15th March 2007
- The total numbers of houses was 527 in 2007 and 5980 in 2012.
- The residents are composed of mixed nationals (South Africans, Mozambicans, Zimbabweans).

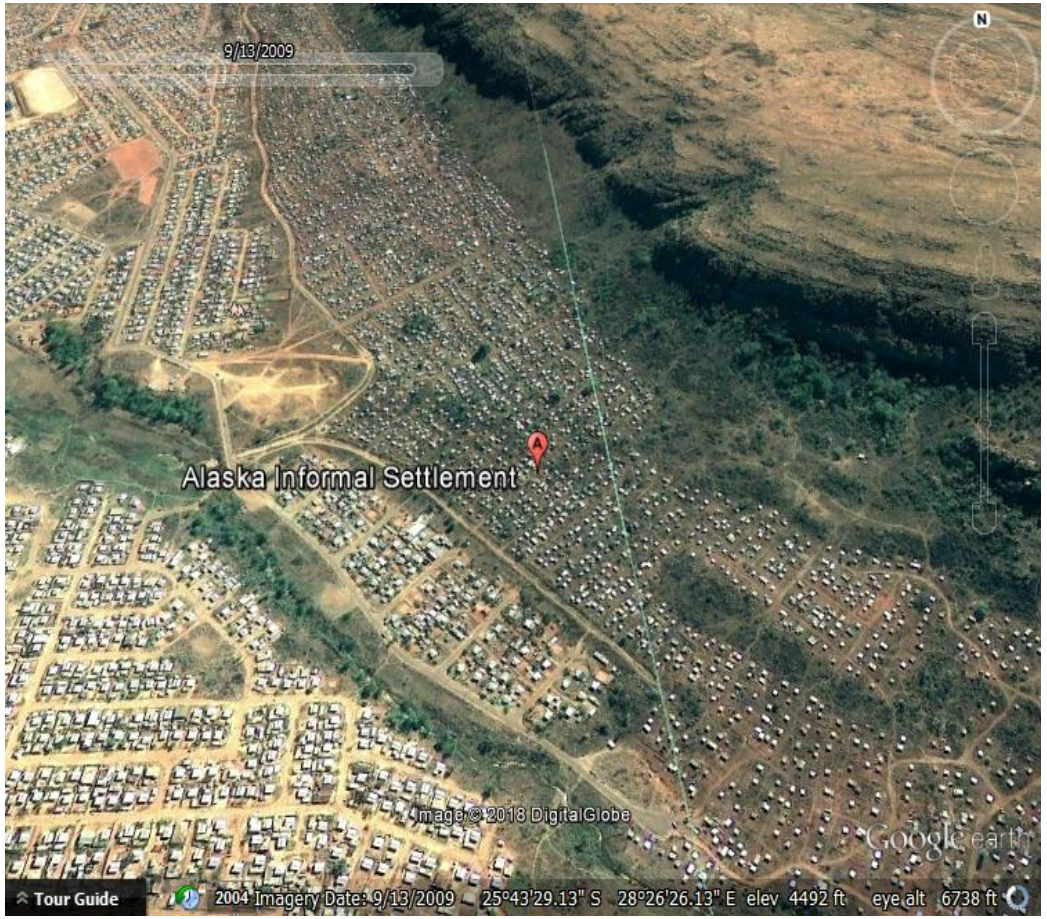

CITY OF TSHWANE
Wards & Regions
See Inset
Inset
Region 1
Region 2
Region 3
Region 4
Region 5
Region 6
Region 7
Legend
1:320,000

Introduction cont....

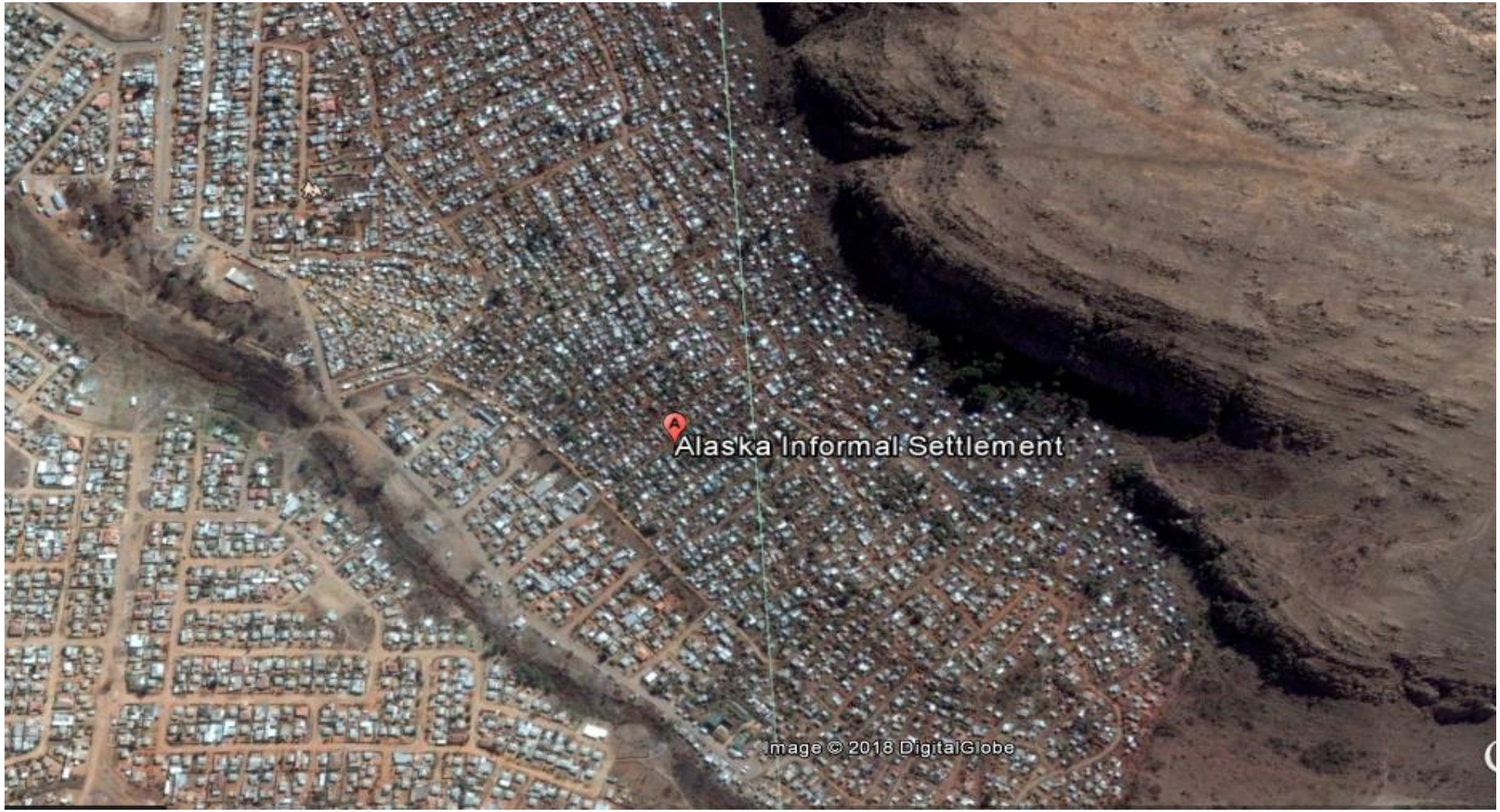
2008



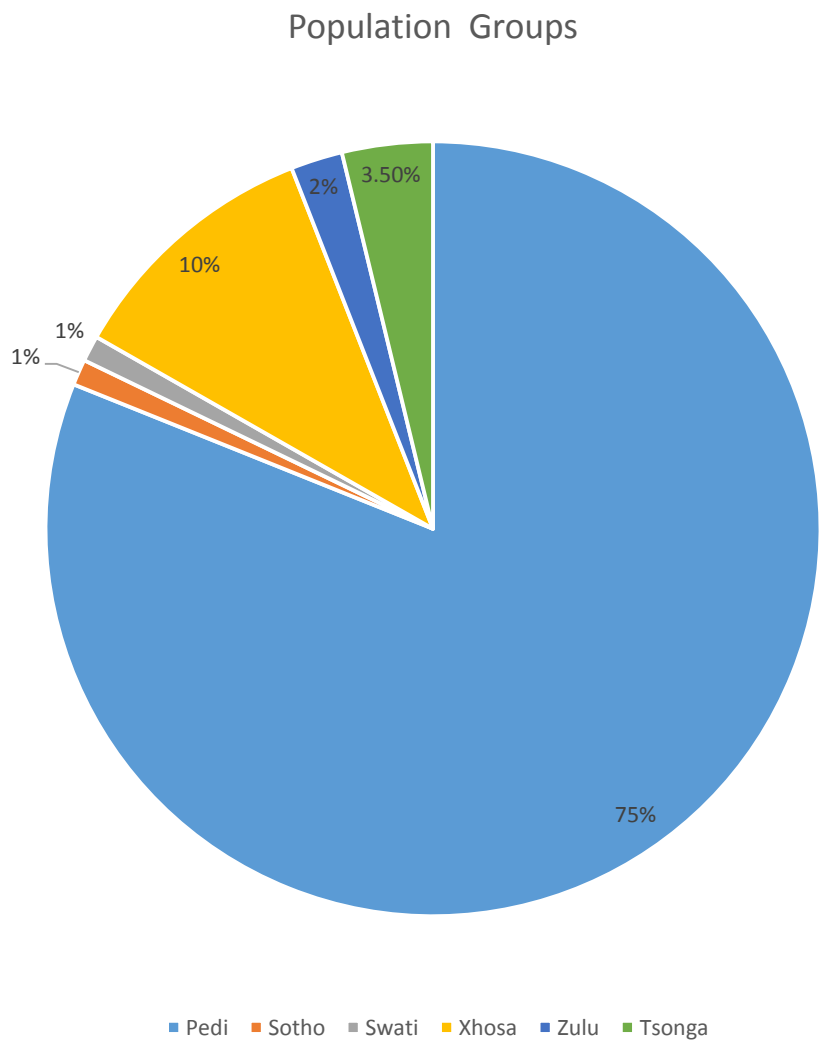
2009



2017



Introduction cont..



Objectives

- To identify hazard, vulnerability, risk and resilience
- To develop disaster risk profile
- To develop recommendations as part of DRR projects
- To recommend to CTMM DMC to include the projects recommendations as part of their DRR projects within the IDP.
- This provides the foundation for additional planning and specifies potential losses so that communities are able to prioritize funding and programming.

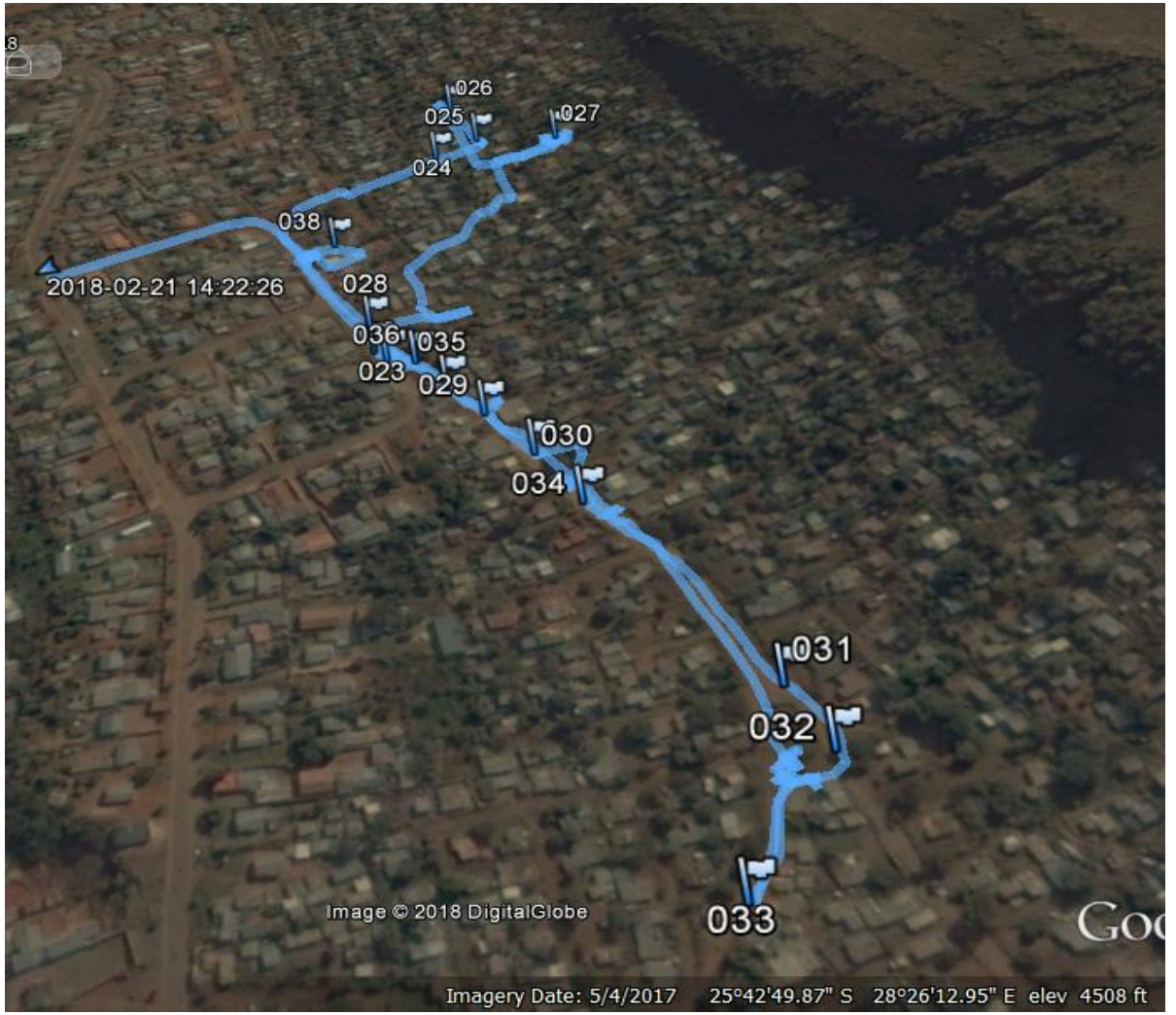
LEGISLATIVE REQUIREMENTS

- Mandate of DM is governed and guided by the following:-
- Constitution of the Republic of South Africa, Act 108 of 1996
  - DMA 57 of 2002, Act No 16 of 2015 DMAA
  - National Disaster Management Policy Framework (2005)
    - Sets the stage to guide the DM business in SA
    - Seal the gaps as contained within the DMA
    - Articulate certain directives at the core of disaster management service
  - Municipal Systems Act 32 of 2000
    - Advocates for a compulsory public participation process

Methodology

- This study was conducted through Transact walk
- Data was collected through:
    - Interviews
    - Questionnaires
    - Observation

Methodology – Study Area



Findings

Types of hazards identified

1. Illegal electricity connection (ground and space)
2. Snakes
3. Rock falls
4. Illegal waste dumping/Pollution
5. Encroachment of servitude
6. Floods/Water runoff

Vulnerability conditions

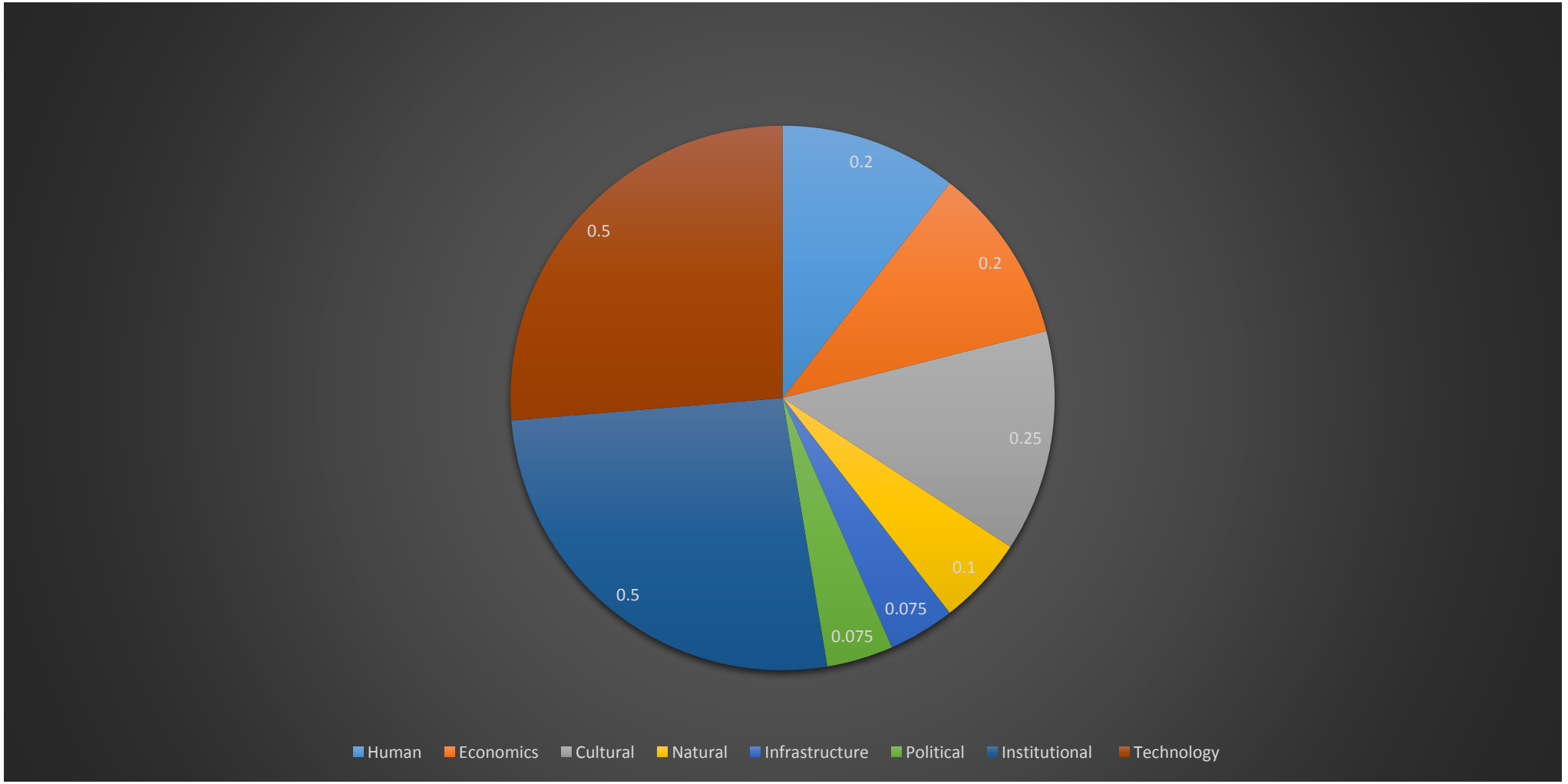
- Housing structure
- Mountainous slope
- Electrical shock from bare wiring
- Snake bites
- Health
- Collapse structure
- No proper drainage system

Findings cont....

Coping capacities

- Creation of gabion to prevent rock falls
- Balancing of the slope
- Sharing of resources
- Formation of pedestrians and motor bridges
- Fumigation with magnesium

Capitals


0.2
0.2
0.25
0.1
0.075
0.075
0.5
0.5
Human
Economics
Cultural
Natural
Infrastructure
Political
Institutional
Technology

Hypothetical Vulnerability Assessment

Hazards	Human	Economics	Cultural	Natural	Infrastructure	Political	Institutional	Technology	Total	Average
Floods	3	3	3	3	1	1	2	2	18	2.5
Illegal electricity connection	3	3	2	1	2	2	1	1	15	1.9
Illegal dumping	3	1	2	3	3	2	2	1	17	2.1

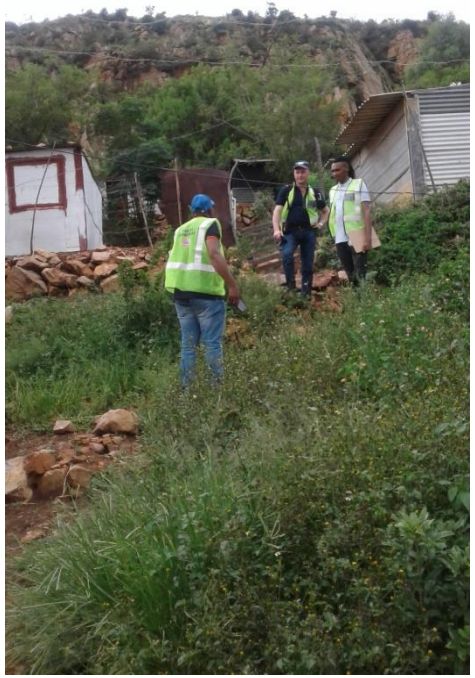
Scale 1 low 2 medium 3 high

Hazards	Public Awareness	Legislation	Early warnings	Response Activities	Preparedness	Average
Floods						
Illegal electricity connection						
Illegal dumping						


Alaska supermarket
OMO


7A
SPHAT
CHIPS


AL5078

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Challenges/needs identified

- The community of Alaska still lack access to adequate water, sanitation and accessible roads.
- A huge problem at the settlement is the accessibility of the roads and therefore it is impossible for emergency vehicles to enter the settlement.
- Lack of electricity and streetlights within the settlements makes the community vulnerable to shack fires and crime.
- Risk awareness projects to be initiated on a temporary basis before resettlement takes place.

Conclusions

- Community-based disaster risk reduction is a key to ensure safety for all. To approach hazards, it is necessary to conduct a vulnerability analysis as well as consider potential hazards in the area.
- To ensure sustainability, the whole community should be involved and their voice heard in the process.
- Often projects can fail because the community itself does not know how to maintain the investments made or because the international organizations involved do not address community needs.
- Disaster risk reduction is more than implementation of projects, it calls for a change of attitude and for understanding that one's way of living might need to change.
- Many actors from many sectors should be involved, including the local government, education and media sectors.

Recommendations

On the basis of the observation done during the transect walk and through consultation with the residents of Alaska the group felt that the following needs to be done in order to minimize the risks and vulnerabilities within the settlement:

- A proper waste management system should be upgraded in order to improve waste removal in this settlement.
- Disaster Risk Reductions such as awareness campaigns to address the dangers of illegal connection of electricity; a need for waste mngt and collection, a need for proper installation of electricity; toilet facilities; provision of water resource;

Literature Review

- Disaster Management Act 57 of 2002
- National Disaster Management Framework of 2005