

Participatory Mapping for the Restoration and SLM Plan for T35A-E

Workshop Report: 2 Tribal Area: Elangeni

NLEIP

Ntabelanga and Lalini Ecological Infrastructure Project

Implemented by: The Department of Environmental Affairs:
Chief Directorate Natural Resource Management in association with Rhodes University.

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November 2017



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



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NLEIP PARTICIPATORY MAPPING FOR THE RESTORATION AND SLM PLAN
FOR T35 A-E

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Figure 5: Nosiseko Mtati

RECOMMENDED CITATION

Lunderstedt, K., Mtati, N., Ntshudu, M., & Powell, M. (2017). *Participatory Mapping for the Restoration and SLM Plan for T35A-E. Workshop report no. 2: Tribal area- Elangeni.*

Unpublished report for DEA: NRM.



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LIST OF ACRONYMS

CoP:	Community of Practice
CDW	Community Development Worker
DEA:	Department of Environmental Affairs
DWS:	Department of Water and Sanitation
GIS:	Geographical Information System
Ha:	Hectare
NLEIP:	Ntabelanga Lalini Ecological Infrastructure Project
nrm:	Natural resource management
NRM:	Chief Directorate Natural Resource Management
SIP:	Strategic Integrated Project
SLM:	Sustainable land management
RU:	Rhodes University
UWP:	uMzimvubu Water Project



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WORKSHOP REPORT 2: ELANGENI TRIBAL AREA

INTRODUCTION

The Ntabelanga Lalini Ecological Infrastructure Project (NLEIP) was born of the need to support the uMzimvubu Water Project (UWP) in the Eastern Cape Province, South Africa. The catchment area extends across three district municipalities (Joe Gqabi, OR Tambo and Alfred Nzo) in the former northern Transkei communal areas, as well as commercial farming and forestry areas (Figure 1). The Department of Water and Sanitation (DWS) through the UWP intends to construct two dams, namely the Ntabelanga and Lalini dam on the Tstitsa River, a main tributary to the uMzimvubu River. The dams are expected to irrigate 2 900 ha of land and provide potable water to 730 000 people in the area (Fabricius *et al.*, 2016). The DWS has categorized the project as a Strategic Integrated Project (SIP), playing a major role in not only improvements in and development of infrastructure, but also in socio-economic development.

Through acknowledging the role of socio-economic development, NLEIP seeks to foster polycentric governance and deepen democracy by co-creating a new future for residents in the catchment. Part of this process will entail co-designing the Restoration and SLM (Sustainable Land Management) plan. This report is one of five reports that was commissioned to be included in the DEA: NRM strategic planning for NLEIP. The first phase of the Restoration and SLM plan is focused on the catchments (T35A-E) that supply water to the proposed Ntabelanga Dam. The second phase of the Restoration and SLM Plan will cover the catchments (T35F-M) that supply water to the Lalini Dam, the attached hydro-power plant and the associated irrigation.

Phase 1 of the Plan in the Ntabelanga T35A-E region covers the Elundini Local Municipality in the Joe Gqabi District Municipality. The Tribal Authority Areas within the Ntabelanga extent include: Lower and Upper Tsitsana, Batlokoa, Elangeni, Northern Mpondomise and Basuto. This report covers just one of these tribal authority areas, Elangeni (Figure 2).



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It has always been the vision and ethos of NLEIP to conduct the social assessments and the participatory mapping efforts at the appropriate scale (close to the village-cluster level). This is aimed at ensuring greater representation and inclusion of the voices of minority in the planning. Unfortunately, due to time constraints and the logistics connected to a large area – this has not been possible, but tribal authorities will be revisited through engaged and sustained community engagement work, effectively revising and fine-tuning the findings of this report, as well as the co-management plans for the future. This report was commissioned by DEA: NRM to undertake a rapid assessment and pitched at the level of the Tribal Leaders and associated structures.

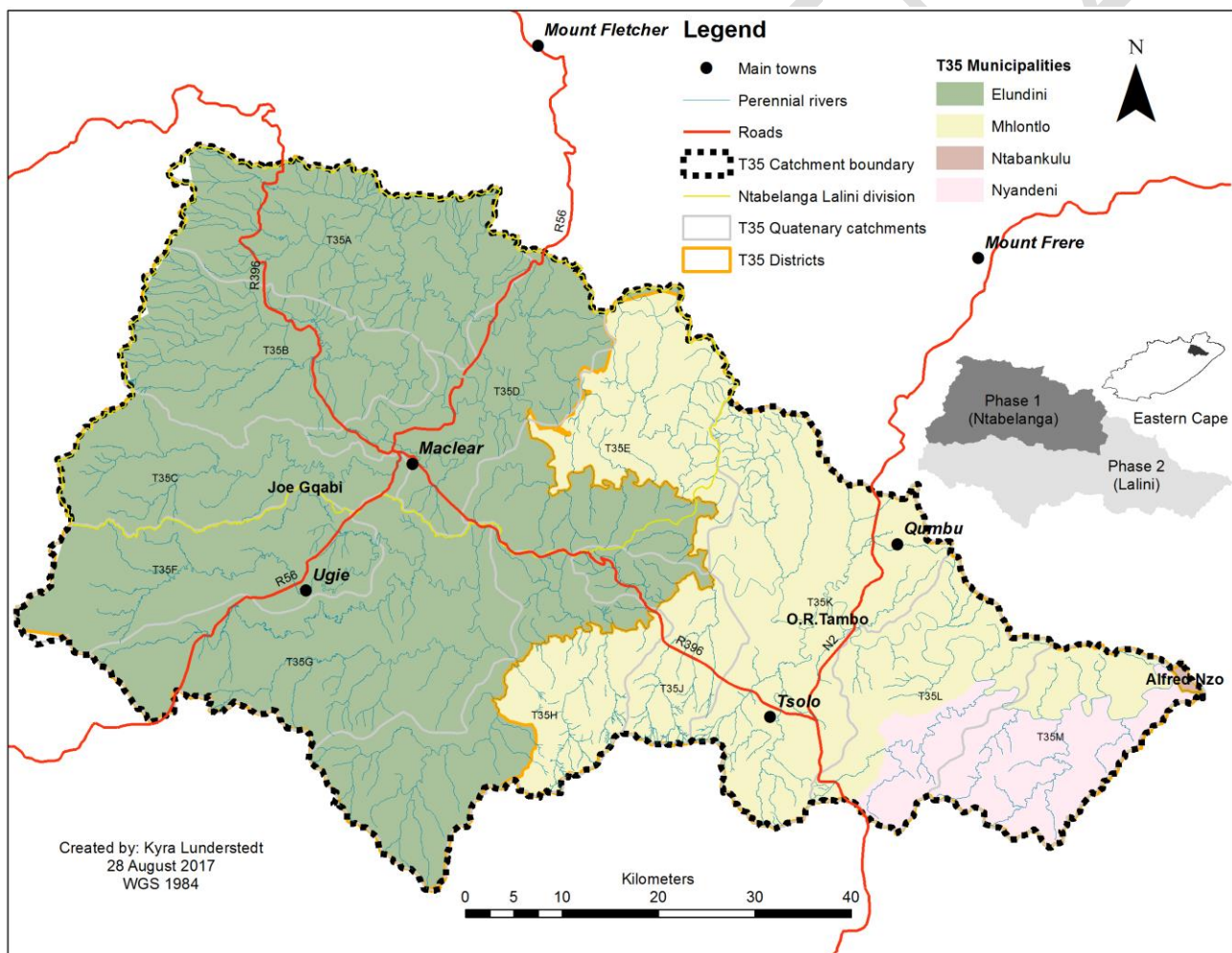


Figure 1: T35 catchment and NLEIP footprint.



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WORKSHOP AGENDA, PROTO-VISION AND PRELIMINARY PRINCIPLES

Rhodes University members of the Sediment and Restoration Community of Practice (CoP) within NLEIP, conducted their second community participatory mapping workshop in the Elangeni tribal authority on the 24th July 2017. The workshop, which was conducted in isiXhosa, only had representation of one village, Upper Sinxaku. The Chief and his headman had to attend a meeting that was important in Qumbu. Most participants were curious community members that were not at any level of leadership and therefore our intended audience for the workshop was not as expected. Only two sub-headman were present for the whole tribal area and women were well represented and voiced out their opinions comfortably.

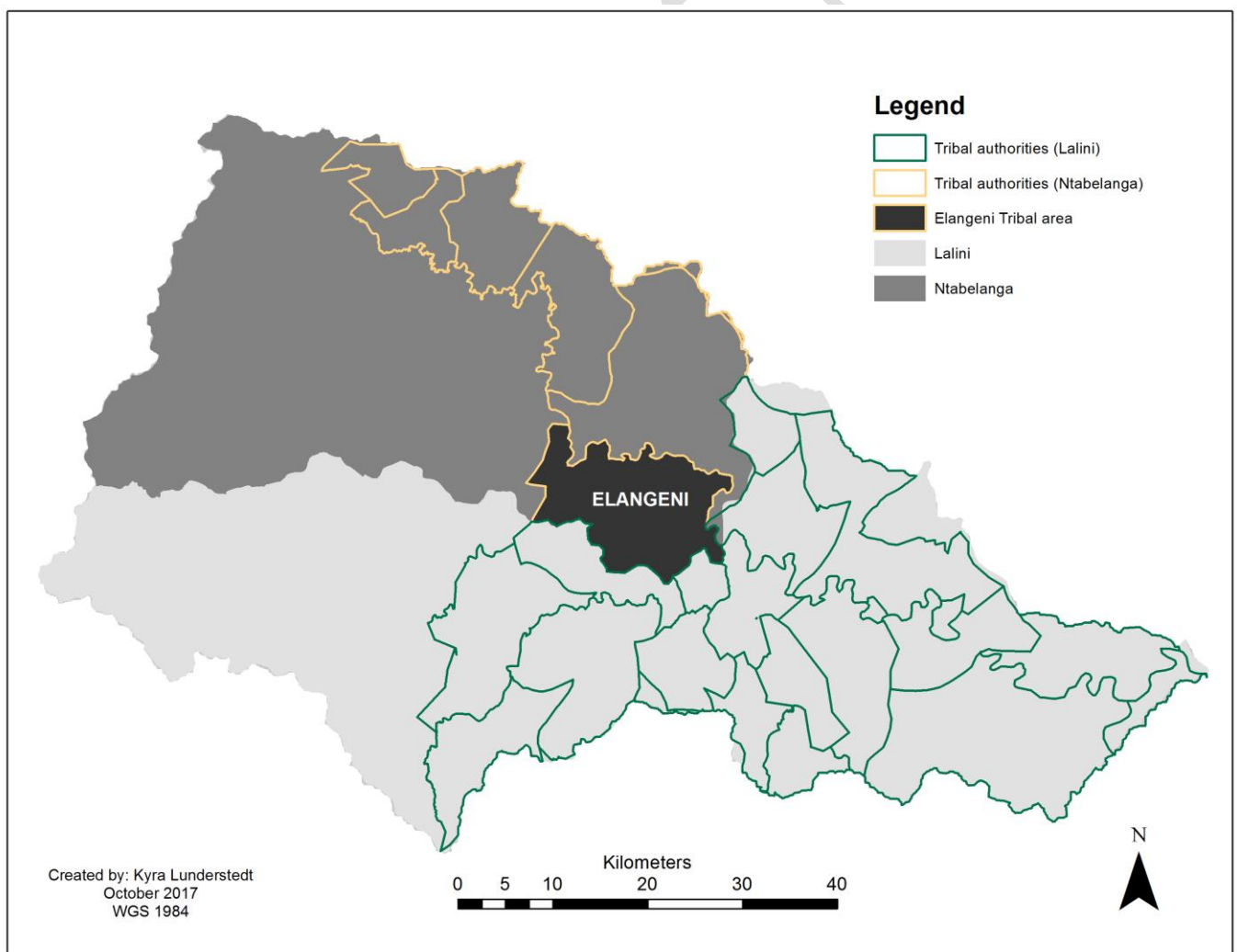


Figure 2: Location of the Elangeni tribal authority area.



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The workshop began with five members and the CDW (Community Development Worker); others joined as the workshop progressed. The report is an account of the method in which the workshop was conducted and the feedback that was received from the workshop participants.

AGENDA

The agenda below was used mostly as a guideline for the duration of the workshop and to reiterate the community's voice in the process.

1. Introduction by the tribal leader.
2. Introduction from Rhodes University NLEIP team.
 - a. Purpose of the meeting
 - b. Background to NLEIP
 - c. The preliminary vision for the NLEIP project
 - d. Principles of NLEIP
3. Natural resource problems within the tribal authority and catchment: a community perspective.
4. Management and restoration options: slideshow and explanations.
5. Mapping exercise of natural resource problem priority areas and themes.
 - Gully restoration
 - Hillslope restoration
 - Alien invasive vegetation clearing
 - Fire management
 - Grazing management
 - Wetland restoration
 - Avoided degradation (protecting areas with good vegetation cover)
6. Sustainable Land Management and restoration options: a community perspective.
7. Discussion on willingness of restoration options and management interventions and changes.
8. Conclusions and take-home messages.
9. Meeting closure and thanks.

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NLEIP PROTO-VISION

The Rhodes University (RU) facilitator gave a brief description of the vision and explained carefully that it was a proposed vision and would need to be systematically interrogated and validated by all the residents and stakeholders in the NLEIP footprint. The community seemed provisionally happy with the below vision:

“To support sustainable livelihoods for local people through integrated landscape management that strives for resilient social-ecological systems and which fosters equity in access to ecosystem services.”

FIVE CORE PRINCIPLES OF NLEIP

The facilitator further explained the core principles that NLEIP strives to adhere to which are:

1. To restore landscapes.
2. To maintain restored and natural landscapes.
3. To avoid degradation, as it is cheaper and more sustainable than restoring landscapes.
4. To ensure inter-generational equity and
5. To encourage an involved democracy.

WORKSHOP PROCEEDINGS

PRE-WORKSHOP DISCUSSION OF NATURAL RESOURCE PROBLEMS

In this section, the facilitators asked the attendees of the workshop to voice to us the natural resource problems within their tribal area that they have identified. We emphasized that these problems should only be in relation to natural resources and it was a session intended to engage the community without the influence and knowledge of those conducting the workshop (See Figure 3 of attendees and activities). The following is a list of problems and observations as conveyed during the session:

- Some of the men conveyed that the women in the tribal area are chopping down *Vachellia (Acacia) karroo*, which is causing erosion. The women however exclaimed that they are not to blame and that there are individuals who come into the area and chop down the trees to sell as firewood.



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- Uncontrolled grazing requires better management by the community through constructing grazing camps.
- Livestock footpaths are causing dongas.
- Unprotected springs are eroded. All living things in the area drink from the spring and it needs protection.
- Soil erosion is being caused by hunters who dig holes to trap wildlife.
- Dongas are further being caused by: water running down the mountain side and high frequency veld fires preventing grass root growth.
- Veld fires: mountains have been burnt more than usual in recent years, leaving the area exposed, where roots do not get to grow and result in soil erosion. The fires also affect homes and livelihoods.



Figure 3: Elangeni workshop at the church hall in Upper Sinxaku.

WORKSHOP COMMENTS ABOUT IDENTIFIED NRM PROBLEMS AND SOLUTIONS

The following are remarks from a session where we showed community members a slideshow containing pictures of our own identified natural resource problems as well as possible methods for management and restoration. Here we identified seven problems or areas where intervention is needed. *It must be noted that the community voice in this section was not accurately captured as the facilitator did not ask the participants for their opinions on the effectiveness of the different options. However, where there was minimal communication and input, which has been recorded below.*

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HILLSLOPE EROSION

- One sub-headman raised an issue with regards to using Vetiver. He described it as a type of grass that has red roots that grow so deep into the soil that it becomes almost impossible to remove it, especially in gardens. He said that the grass was planted by a white man near the river and has since been brought by cows who eat it and defecate the seed in the homesteads.

OVERGRAZING/ GRAZING MANAGEMENT

- The participants mentioned the need for grazing camps to rest the land, because that is how grazing was managed in the past.

ALIEN INVASIVE VEGETATION

- There was no mention of invasive alien plant management.

FIRE MANAGEMENT

- The tribal authority has rules with regard to burning, but the people do not abide by these rules. Apart from intentional burning, common causes of the fires include lit cigarettes and fire escaping from households that use fire to cook outside.

WETLANDS

- No problem identified with wetlands except for the fact that they become dry during winter.

DONGAS

- One quote that was taken from the session and relevant to dongas: “Our elders before us used to think and plan better than us. So the problem is with us. Climate change also has an effect on the rain patterns which affect the planning”

AVOIDED DEGRADATION

- Everyone liked the idea of a future with a restored and healthy environment.



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PARTICIPATORY MAPPING EXERCISE

The workshop was divided into four randomly chosen groups. Each group was asked to highlight the top three nrm problems that influenced and affected them. This was recorded per group, see Figure 4 for the images of data capture.



Figure 4: Group prioritization of three out of seven selected nrm problems in the Elangeni tribal authority.

All four groups prioritized dongas as their number one nrm problem. Groups' 2-4 prioritized fires as a second priority, while group 1 stated it was a third priority after overgrazing. Groups 2 and 3 listed overgrazing as a third priority, while group 4 had an issue with hillslope erosion (Table 1).

Table 1: A community perspective on the top ranking natural resource management challenges.

Group	Dongas	Hillslope erosion	Alien plant invasives	Fires	Wetlands	Avoided degradation	Over-grazing	Other
1	1			3			2	
2	1			2			3	
3	1			2			3	
4	1	3		2				

Following the prioritization, each group was asked to place three tokens on an enlarged map of the area, for each nrm problem that they identified. This was useful and engaged members well in a practical sense. However, it wasn't efficient when it came to post-processing due to scale issues (large token on small scale map). Figure 5, is an example of a map with tokens.



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Figure 5: Map of Elangeni Tribal Area, showing top three fire prone locations per group. Different colours represent different groups.

The top three locations for each of the three priority areas were digitized using Google Earth Pro after the workshop. During the workshop, we additionally asked of the current and future land use areas in the tribal authority and digitized accordingly. KML files of the region were further exported and saved as shapefiles in ArcGIS. Figure 6 shows the final map following mapping using Google Earth Pro and digitizing the locations identified in the nrm prioritization.

All groups identified dongas as the top priority in the area because they are becoming worse over time. However, as mentioned previously, the Elangeni participants understand the activities that lead to erosion. In a personal communication between our facilitator, Monde Ntshudu and one sub-headmen, it was uncovered that he was well informed and had been educated on nrm through attending Green Village Project workshops. An important problem not to disregard is the sand-mining in the area, which threaten croplands. However, the community are afraid to voice their concerns, as their lives will be in danger.



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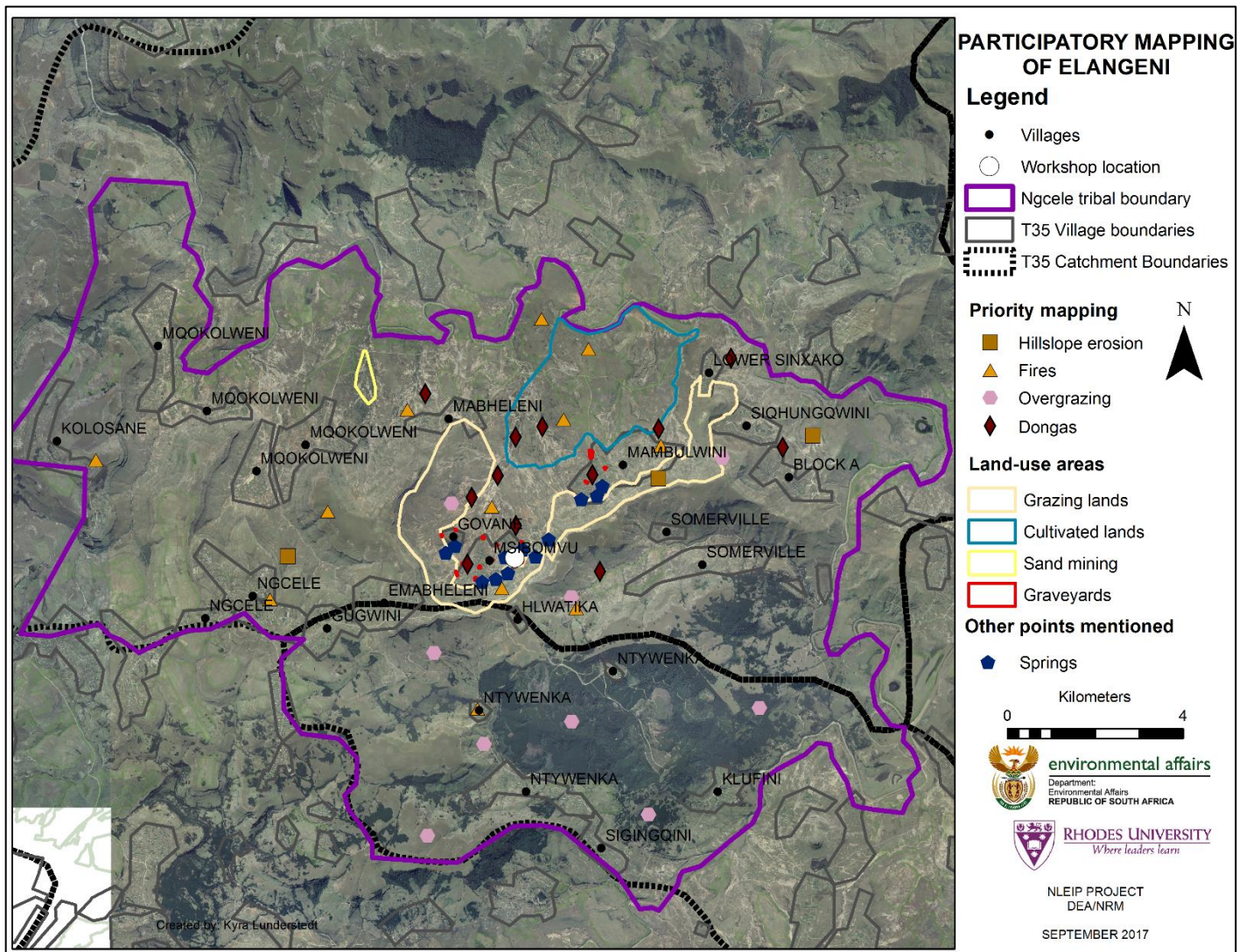


Figure 6: Post workshop map following the participatory exercise of Elangeni natural resource problems.

The area of the Elangeni tribal area is 20 134 hectares (ha), of which certain land-use areas were digitized. The delineated land-use areas are beneficial in deciding on locations for management intervention. These included grazing areas (884 ha), cultivated lands (939 ha, although currently used as grazing land), agricultural projects (none), fenced areas (none), grave sites (17) springs (12), sand mining (one location) and proposed residential areas (none). Most agricultural fields are not active and are used for grazing; as a result, grazing land overlaps fields. The participants claimed that old fields could be used again if they were fenced, but not all fields will be used for farming in the future. In addition, some fields are currently farmed by individuals near the river, but those will soon become a project.



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CLOSING REMARKS

The NLEIP team received good feedback, however both we and the Elangeni members present feel the need for a follow up workshop as the tribal authority was not well represented. The representation from a single village meant that there was potentially bias toward certain areas and not all land-use areas would therefore have been mapped. The following report is therefore only a **first draft**. At the end of the workshop, we readdressed the NLEIP proto-vision and the attendees still expressed content.

ACKNOWLEDGEMENTS

The NLEIP Participatory Mapping Team would like to thank the Elangeni community and participants of the workshop for their time, patience and input into constructing an nrm problem and land-use map for their tribal area. Gratitude must also extend to Harry Biggs, Bennie van der Waal and Dylan Weyer for their assistance, input and feedback on our method, both during and following our first workshop in this series. Google is acknowledged for providing open access to programs such as Google Earth Pro, which is hugely useful and effective in conducting such workshops.

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