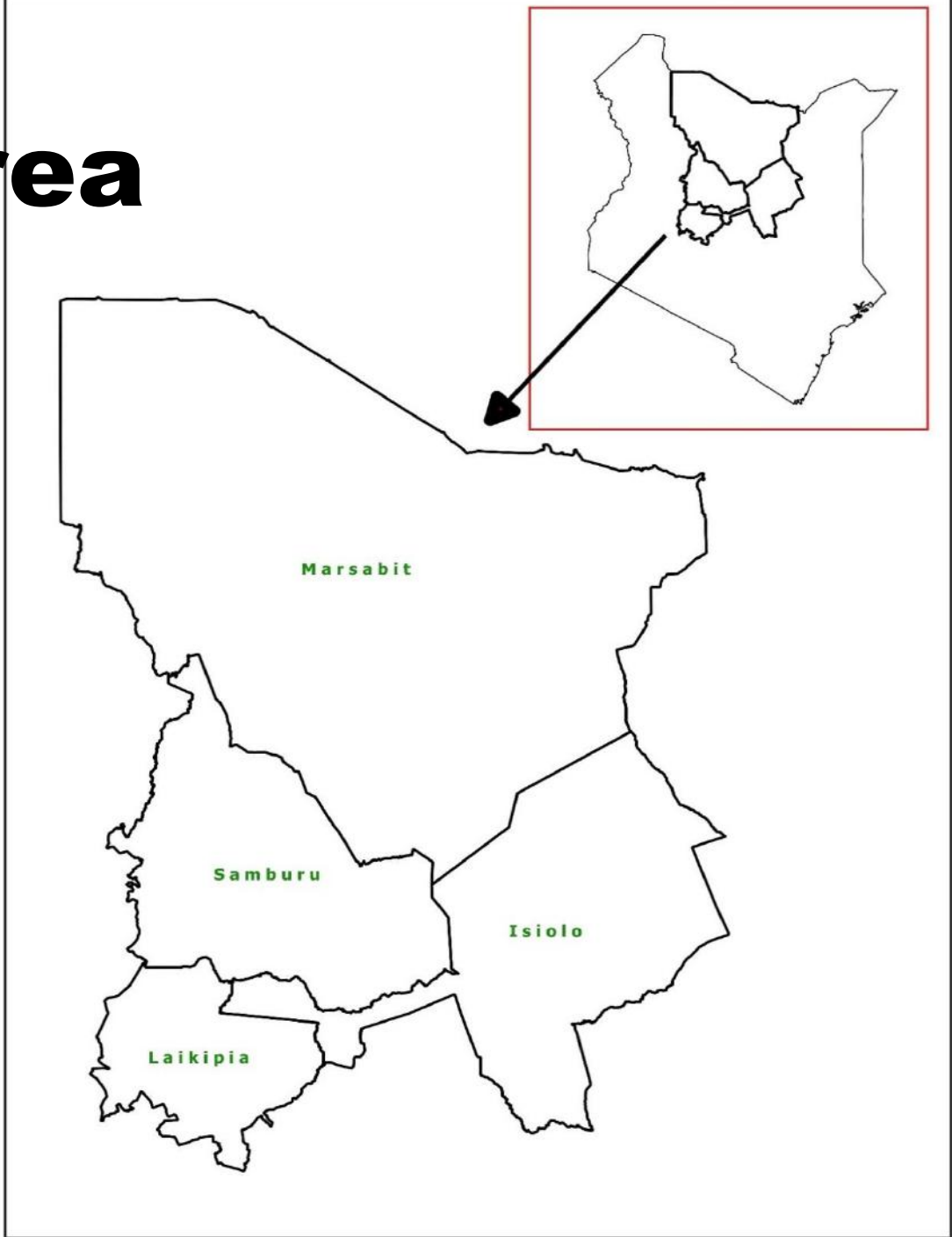
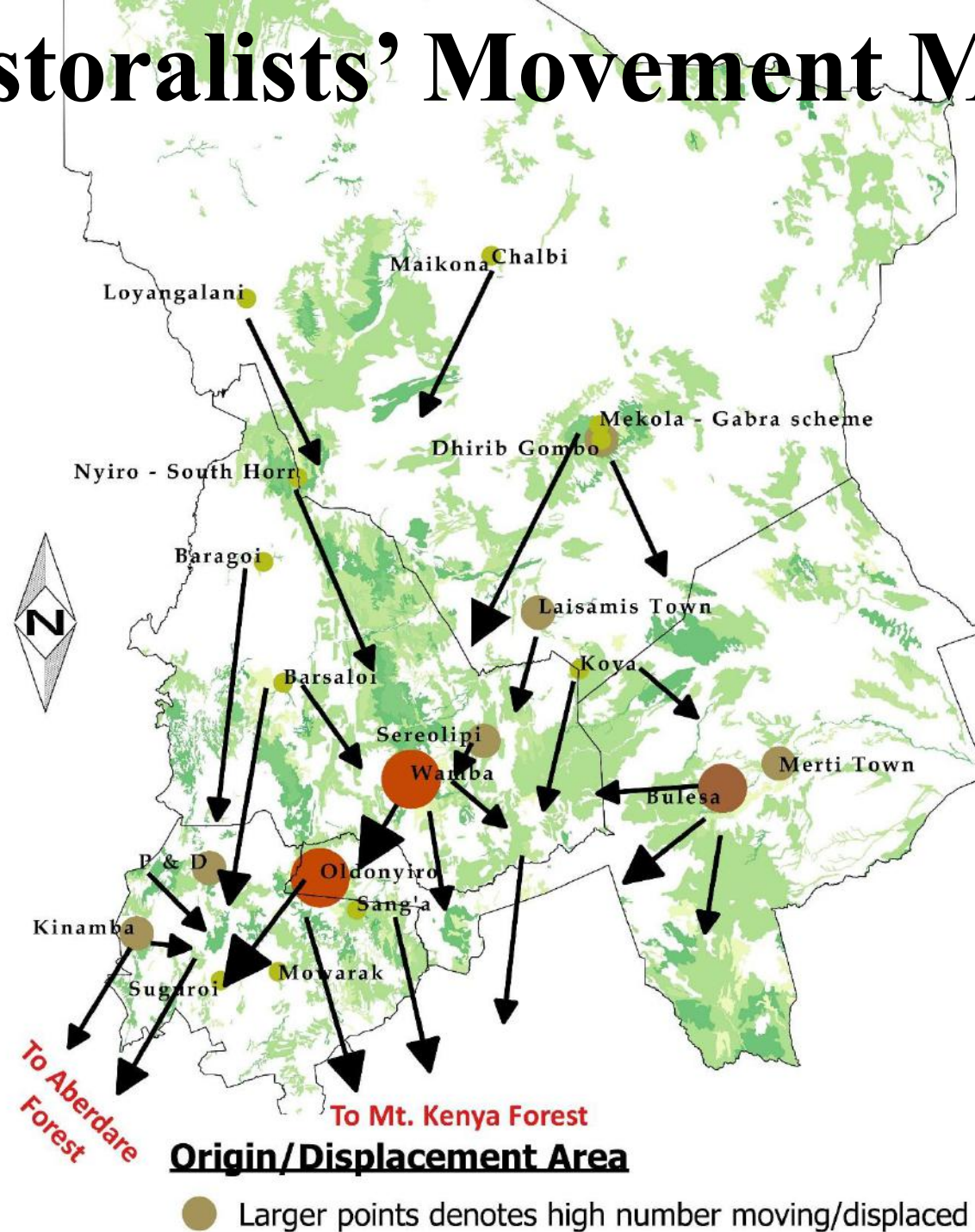


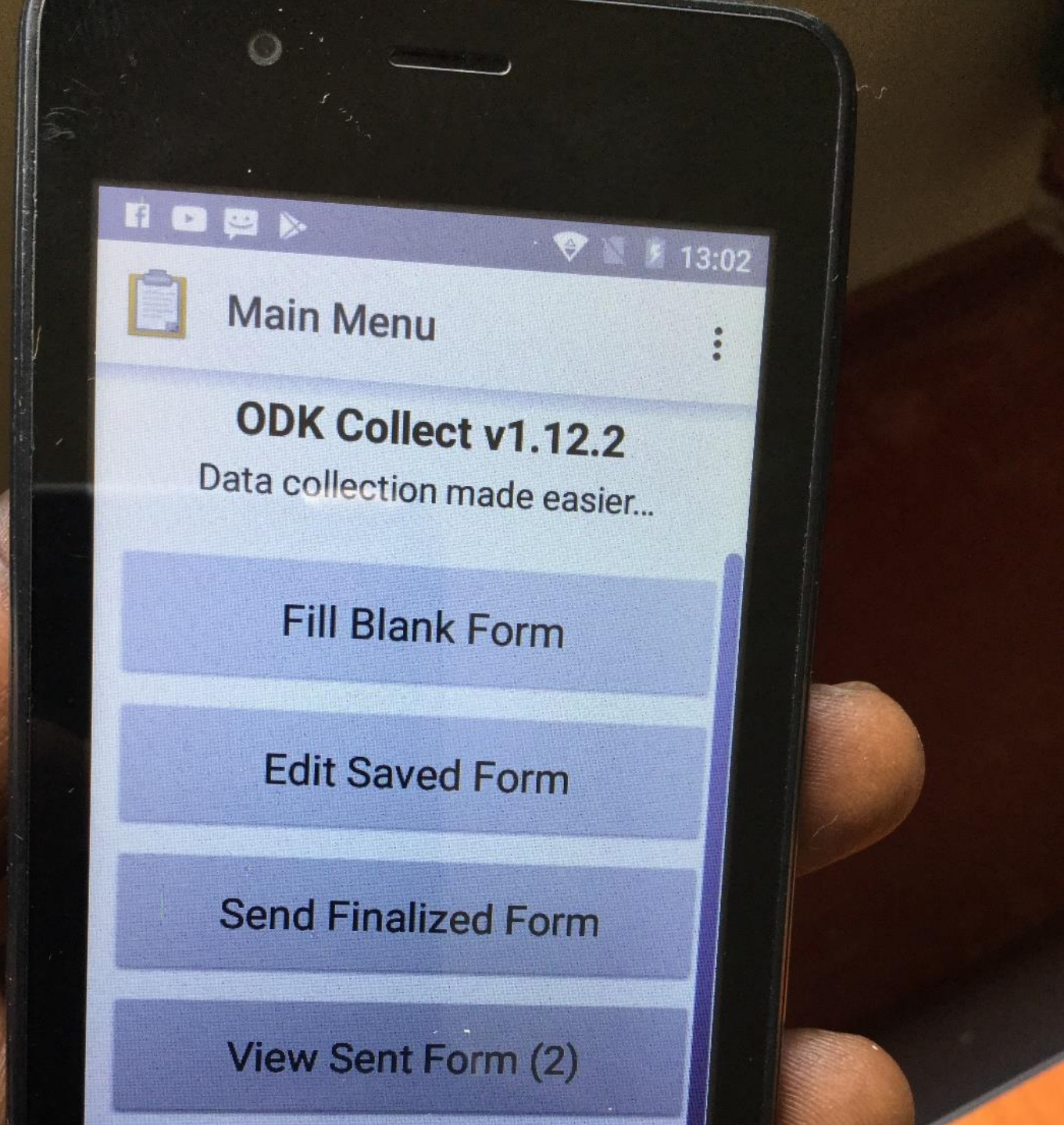
**Use of Mobile Technology
for assessments of
Community and Wildlife
Use of Rangeland
Resources in Laikipia,
Kenya**

Study Area



Pastoralists' Movement Map

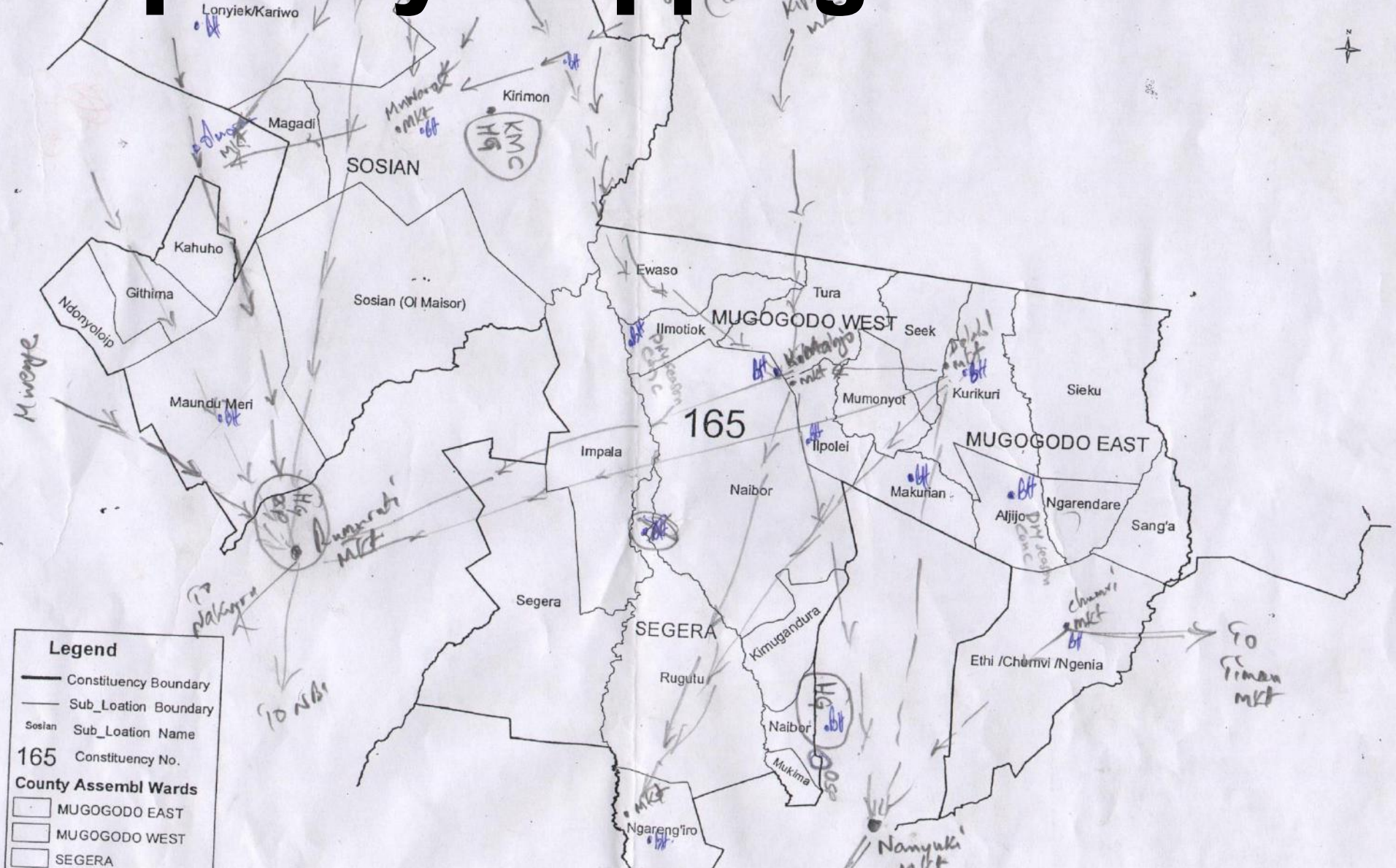




- Simple Smartphones
- ODK Collect Platform
- Easy User interface
- Automatic upload when GSM network
- Automatic Recording of time, and respondent identity
- Records both text and photographic data

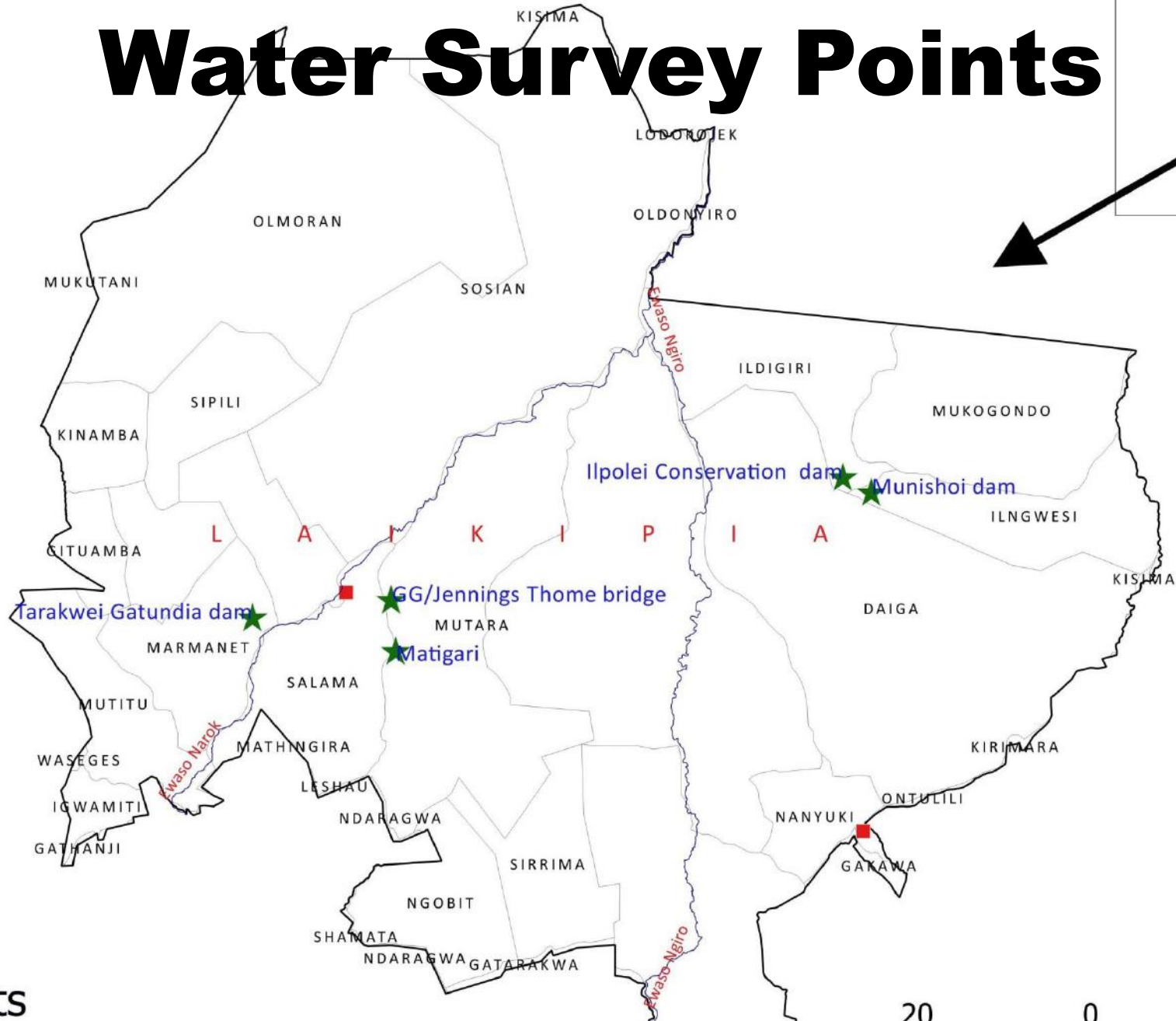
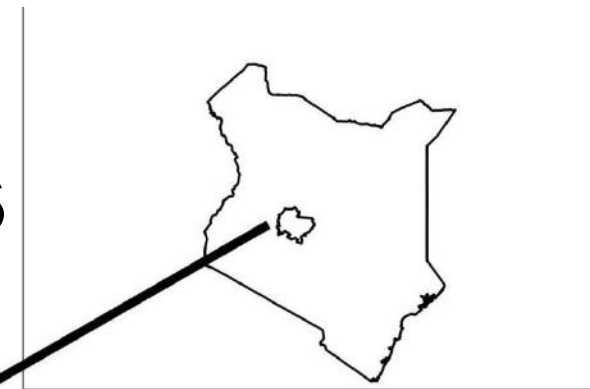


Participatory Mapping of Routes





Water Survey Points



end

★ Watering points





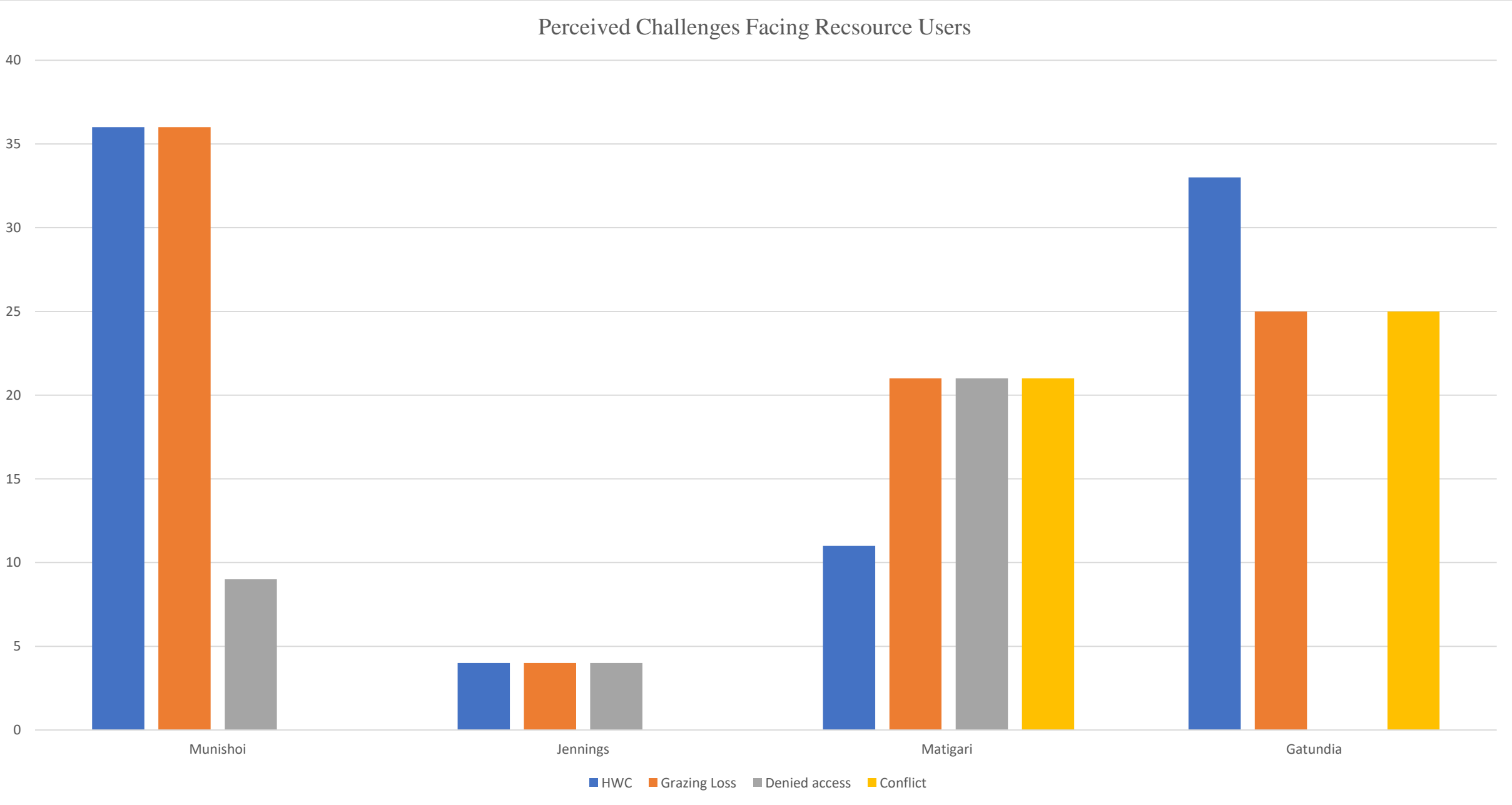


Invasives (*Opuntia stricta*)

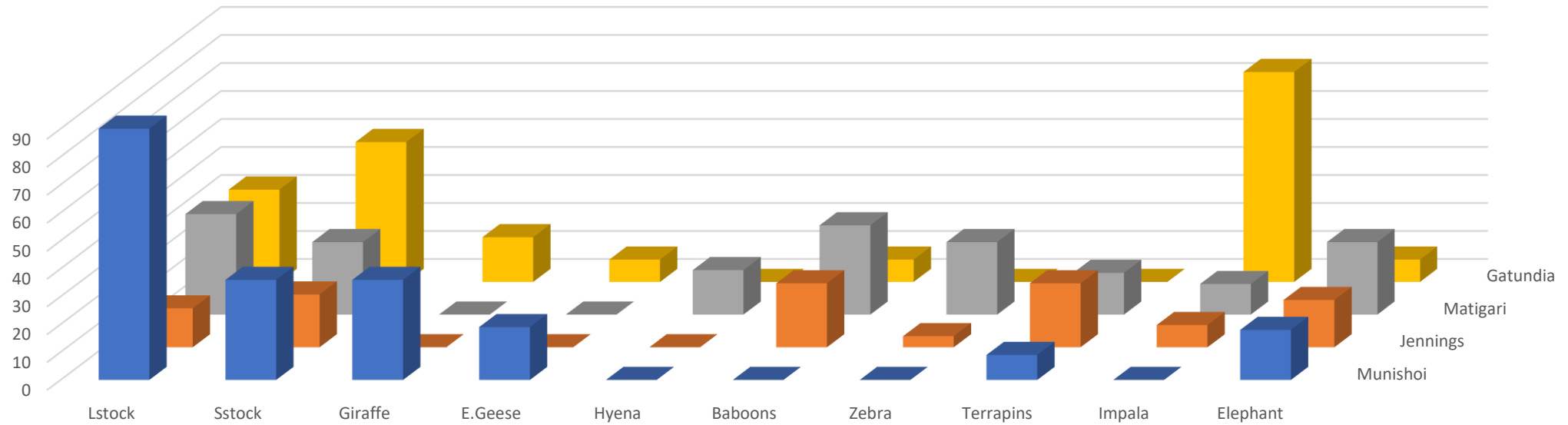




Perceived Challenges Facing Recsource Users



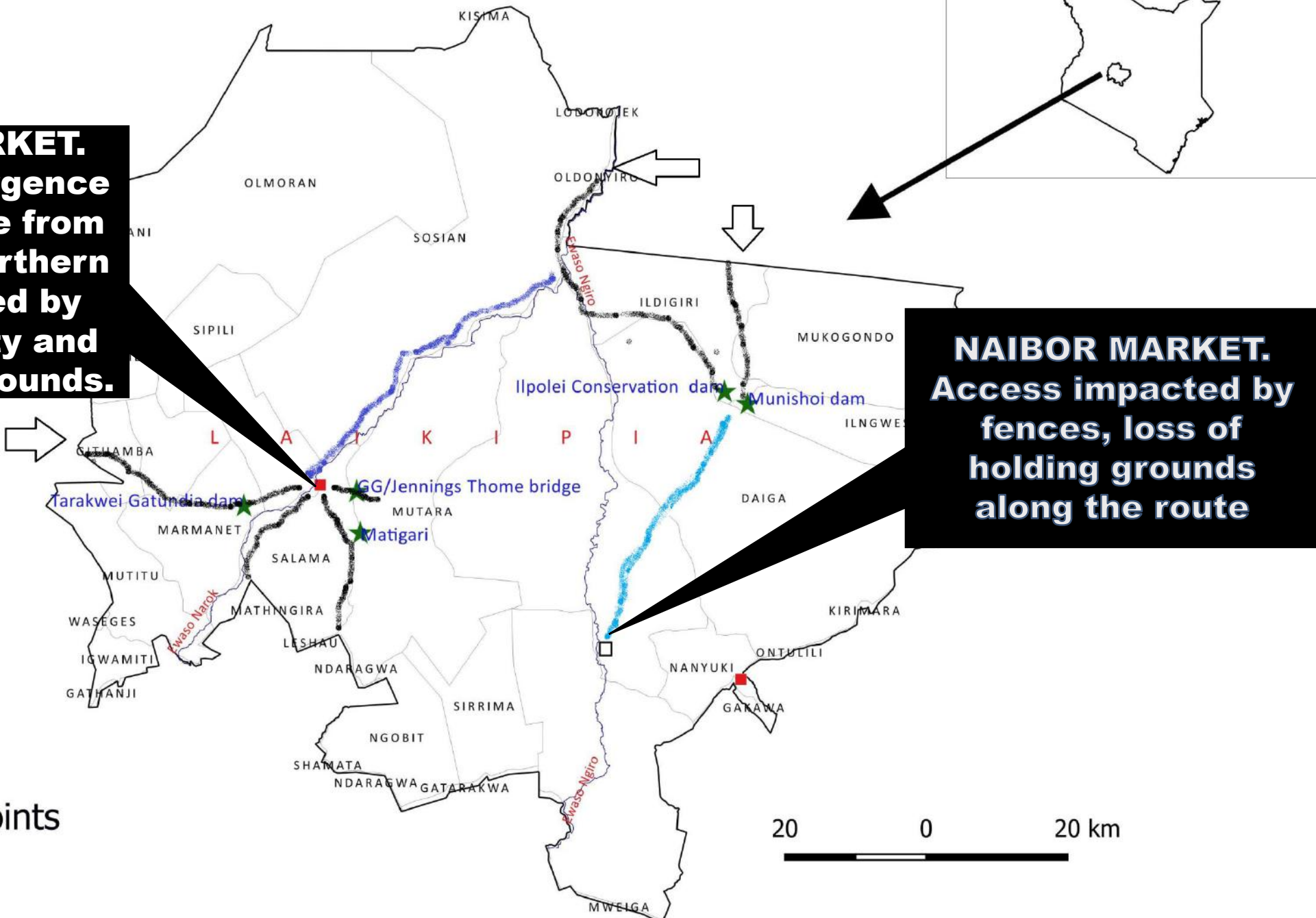
Species detected using the water sources in the study area



■ Munishoi ■ Jennings ■ Matigari ■ Gatundia

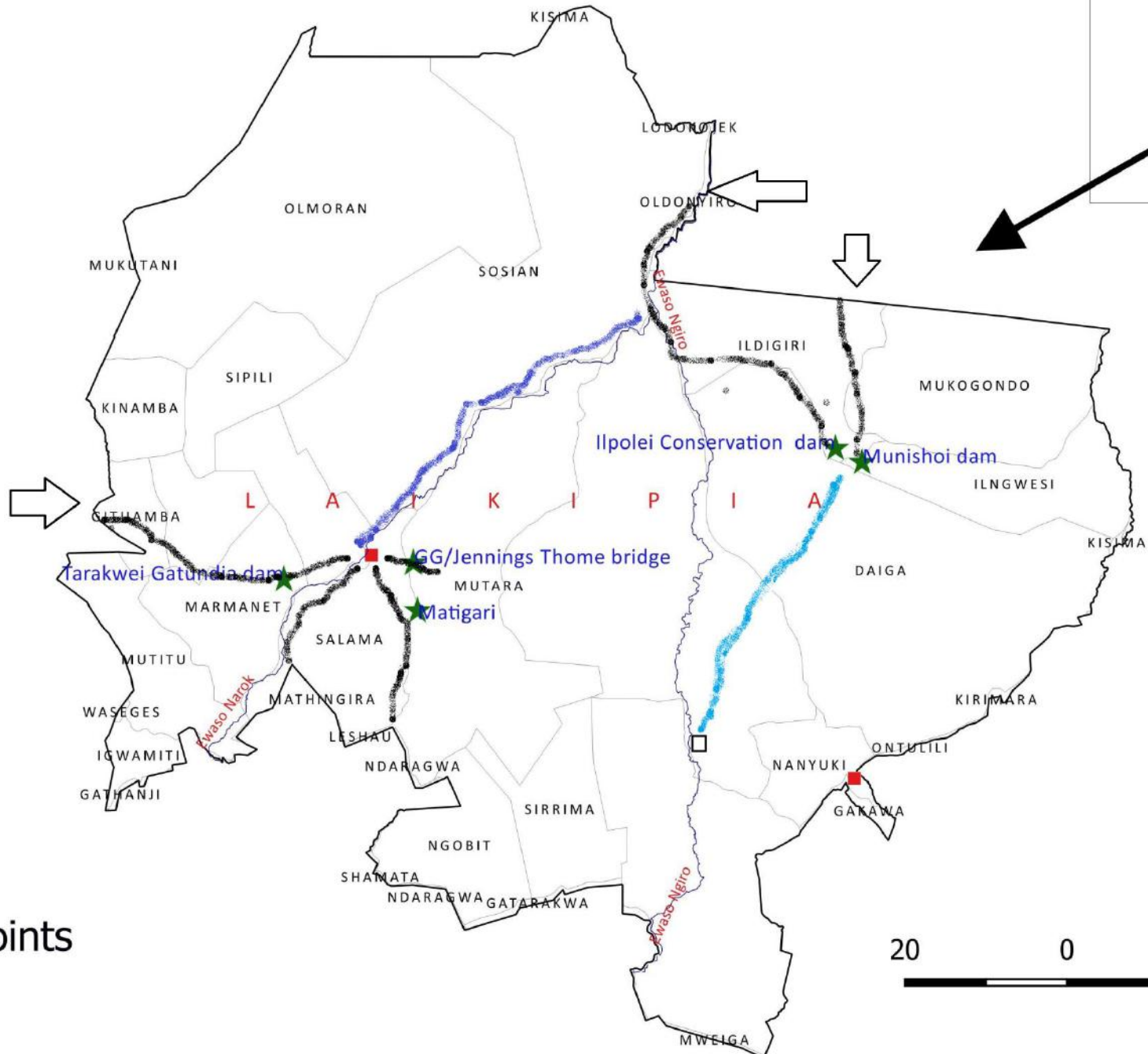
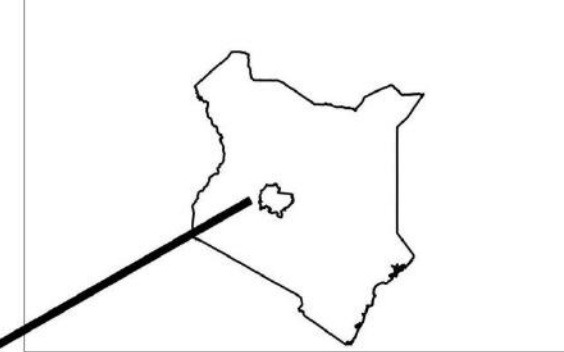
RUMURUTI MARKET.
Important convergence
of livestock trade from
four counties. Northern
Access impacted by
fences, insecurity and
loss of holding grounds.

NAIBOR MARKET.
Access impacted by
fences, loss of
holding grounds
along the route



end

★ Watering points



end

Designated Stock Routes





15°C



03 / 16 / 2018

10 : 41 AM

STOCKRT 1



32°C



02/28/2018

03:14PM

STOCKRT1



27°C



03 / 10 / 2018

09 : 28 AM

STOCKRT 1



29°C



03 / 10 / 2018

12 : 34 PM

STOCKRT 1



14°C



03 / 15 / 2018

01 : 02 AM

STOCKRT 1



27°C



04/07/2018

12:46PM

STOCKRT 1



13°C



04 / 19 / 2018

12 : 57 AM

STOCKRT 1



10°C



03 / 22 / 2018

09 : 31 PM

STOCKRT 1



19°C



03 / 13 / 2018

11 : 35 AM

STOCKRT 3



14°C



03 / 15 / 2018

01 : 20 AM

STOCKRT3



12°C



03 / 17 / 2018

12 : 12 AM

STOCKRT3



12°C



05 / 02 / 2018

11 : 52 PM

STOCKRT3



25°C



03 / 10 / 2018



04 : 44 PM

STOCKRT3

Emerging Issues/ Further Work

- **Public/ Community Training on NRM**
- **Sustainable Livelihoods as a basis of NRM**
- **Planning for Livestock movement**
- **Improved Resource Governance**
- **Social Impacts**

Contributions to the Aichi Biodiversity Target

4	<p>Indicator 1: Number of community people involved in planning use of rangeland resources in Laikipia</p> <p>Indicator 2: Hectares of connected and accessible rangeland resources (pasture and water)</p>	
BEFORE (2012)		AFTER (2017)
<p>Previously all rangeland management was done only by government and large landowners</p> <div style="text-align: center; margin-top: 20px;">  </div>		<p>Now, Pastoralists, Water users, security officers, wildlife management officials and livestock marketing officials are involved.</p> <div style="text-align: center; margin-top: 20px;">  </div>
<p>Blockng of livestock routes by landowners and developers had caused habitat fragmentation. This caused human-wildlife conflict and resource conflict between people.</p>		<p>Important livestock routes identified, and being restored. This will lead to connection of over 60,000 hectares of wildlife habitat and pastures for livestock, as well as access to markets</p>

Message to the CBD for post-2020

- The post-2020 biodiversity targets should include the existing livelihoods of local communities.**
- Communities should have representation in biodiversity management and targets.**
- Communities are the stewards resource and their rights to those resources must be protected in line with UN SDGs Number 1, 2, and 3.**

Suggestions to IPSI for post-2020

- **Longer term engagement with individual projects.**
- **Collaborations between projects in different continents to share lessons, and techniques.**
- **More resources for SDM grants**

Acknowledgements.

- **Research Team: Francis Kago, John Mwaura, Martin Kahindi, Alex Plimo David Ouma.**
- **IPSI Secretariat**
- **IGES**
- **Community members of Matigari, Munishoi, Jennings and Gatundia**