

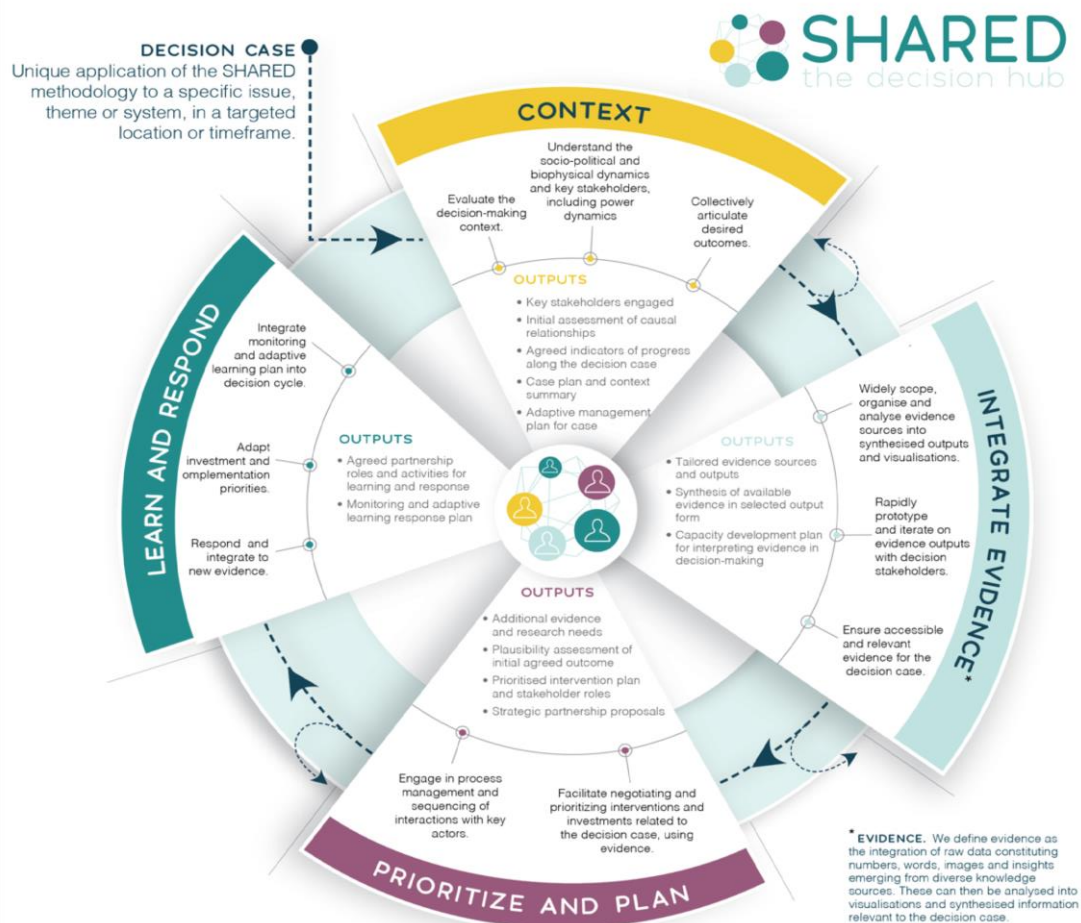
Applying user-centered design process and science to shift decision culture: A case study of the Laikipia Resilience diagnostics tool.



Tor Vågen, Stepha McMullin, Leigh Winowiecki, Louise Buck, Faith Musili , Constance Neely, Mieke Bourne, Sabrina Chesterman, Geoffrey Ndegwa, Ken Njogu, Agnes Gachuri

World Agroforestry

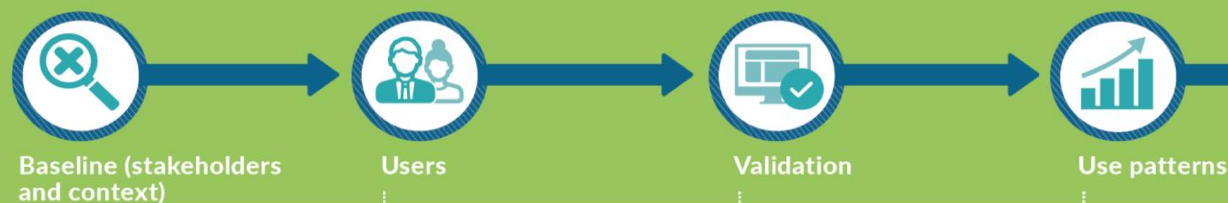
User centered design - to allow for accessible evidence



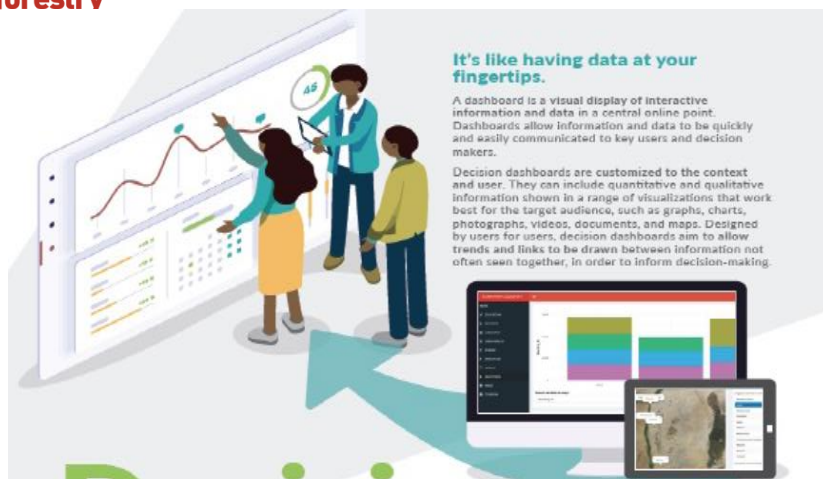
ICRAF approach to building decision support dashboards



SHARED the decision hub Dashboard co-design framework



Shifting the culture using decision dashboards



Decision dashboards

An information note to describe what decision dashboards are and how they can be used to assist in evidence based decision making and planning

Dynamic and user-centred.

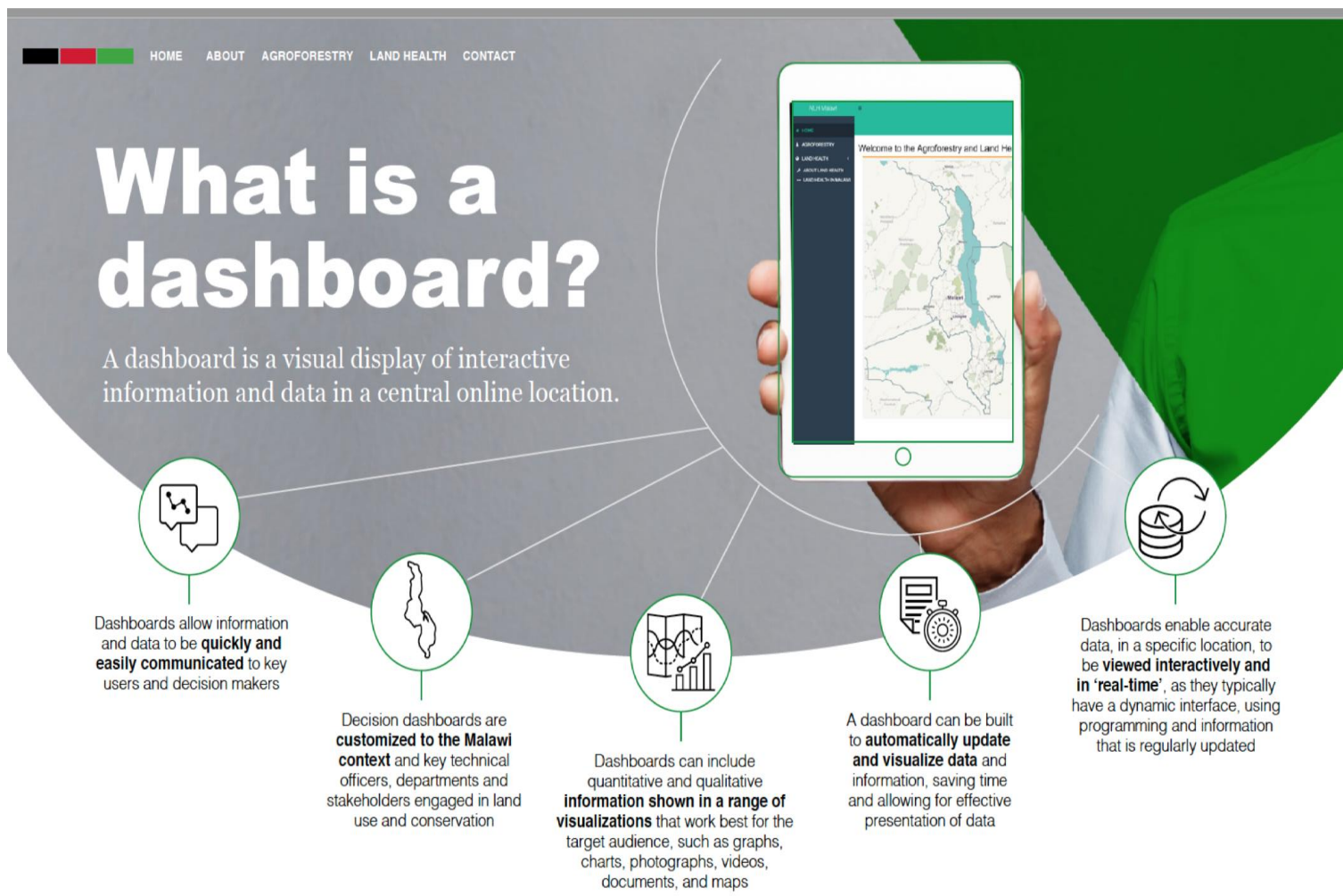
Dashboards typically have a dynamic interface, where information is not static like a report, but is instead regularly updated and can be viewed interactively and in 'real-time'. A dashboard can be built to automatically update and visualize data and information, saving time and allowing for effective presentation of data.

A decision dashboard is designed based on user needs, such as key themes, departments, or outcomes of a project. It can also be designed to incorporate different levels of data for different users – for example, a simple overview for policy makers and more detailed information for technical or specialist staff. In this way, users are able to 'filter' and 'select' data, using functions such as drop down menus to display specific information (e.g. gender or livelihood type) or live maps to select specific locations.

Decision dashboards link to a wider approach by an institution or government towards data management and evidence use in decision making and planning.



GeoScience Lab
Landscapes Portal
<http://landscapeportal.org>



Developed decision dashboards: <http://landscapeportal.org/tools/>

Laikipia Resilience diagnostics tool



Stakeholder facilitated approach to improve food and nutrition resilience for rural and urban communities: case study of Laikipia County, Kenya

Objectives

- To better understand the dynamics of rural-urban connectedness of food systems.
- Data cross-examination by key stakeholders through a structured facilitation process to enhance inclusive, cross sectoral and evidence based planning.
- Development of Integrated flagship projects by stakeholders incorporating nutrition-sensitive landscape approaches to address food and nutritional insecurity, and landscape health for vulnerable populations.

Key activities:

- Using a structured facilitation methodology for interaction with evidence: Stakeholder Approach to Risk informed and Evidence Based Decision Making(SHARED).
- Compiling land health information & relevant data from primary & secondary sources: based on identified data needs and availability .
- **Mapping food flows, production, consumption & markets.**
- **Synthesizing food system information into a decision support tool online in the form of an open-access dashboard**



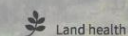
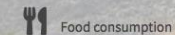
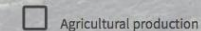
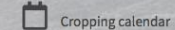
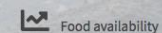
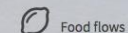
Laikipia Resilience Diagnostics Tool



Socioeconomic data



Food security



Livestock

Livestock census data

Welcome to the *Laikipia Resilience Diagnostics* tool

The Laikipia Resilience Diagnostic Tool covers Laikipia County, which is one of 14 counties within the Rift Valley region in Kenya. Laikipia County comprises three administrative sub-counties (the Constituencies) namely: Laikipia East, Laikipia North and Laikipia West. The Laikipia East Sub-County lie to the east, Laikipia North to the North and Laikipia West to the west of the County. The sub-County headquarters are at Nanyuki, Dol Dol and Rumuruti respectively.



Acknowledgements

The initial version of the Laikipia Resilience Diagnostic Tool (LRDT) was developed by the **World Agroforestry Centre (ICRAF)** GeoScience Lab with funding from the Daniel and Nina Carasso Foundation and ICRAF, in collaboration with Ecoagriculture Partners. It forms part of an project titled "Improving Food Systems Resilience and Nutrition of Vulnerable Groups by Integrating Territorial Strategies in Laikipia County, Kenya". The LRDT will continue to be co-developed by ICRAF in partnership with the Laikipia County Government.

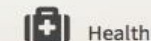
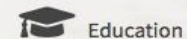


SHARED is a comprehensive framework tailored to specific decision needs; it brings together processes, evidence and tools to shift the decision paradigm towards more inclusive, inter-sectoral and inter-institutional integration to tackle complex decisions and achieve desired outcomes. The SHARED approach passes through four phases and is novel in the use of comprehensive facilitation to support interaction with evidence and co-learning, build long-term relationships and ensure that evidence can be critically evaluated and interpreted to inform decision-making. This targeted facilitation ensures cohesive communication across multiple institutions, political levels and knowledge systems to build capacity and the evidence-base as a continuously linked process, within the same development outcome pathway.

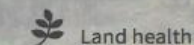
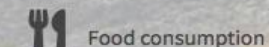
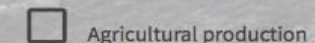
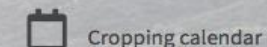
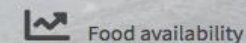
Modules



Socioeconomic data



Food security



Livestock

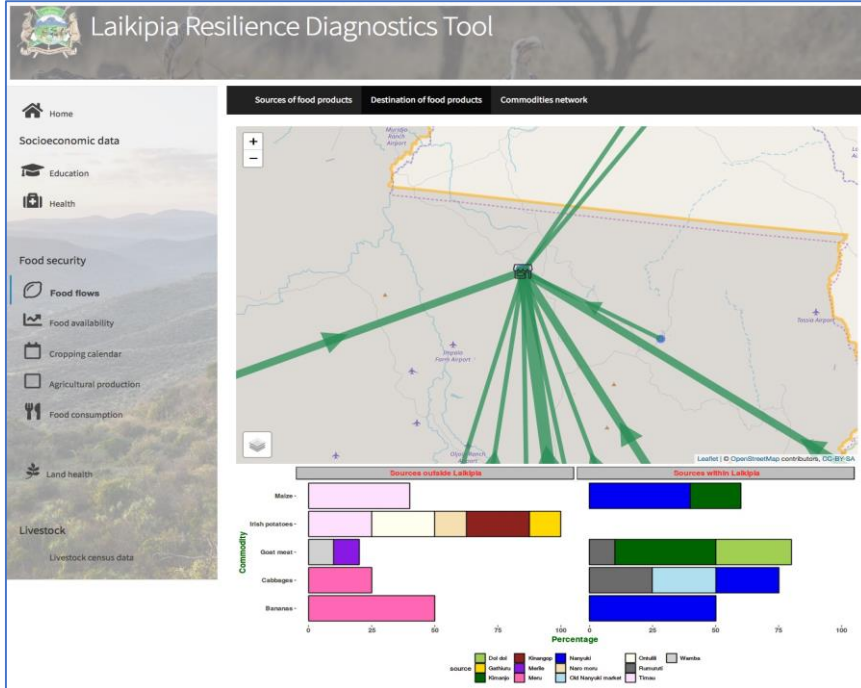
Livestock census data

Accessible via <http://landscapeportal.org/laikipiaRDT/>

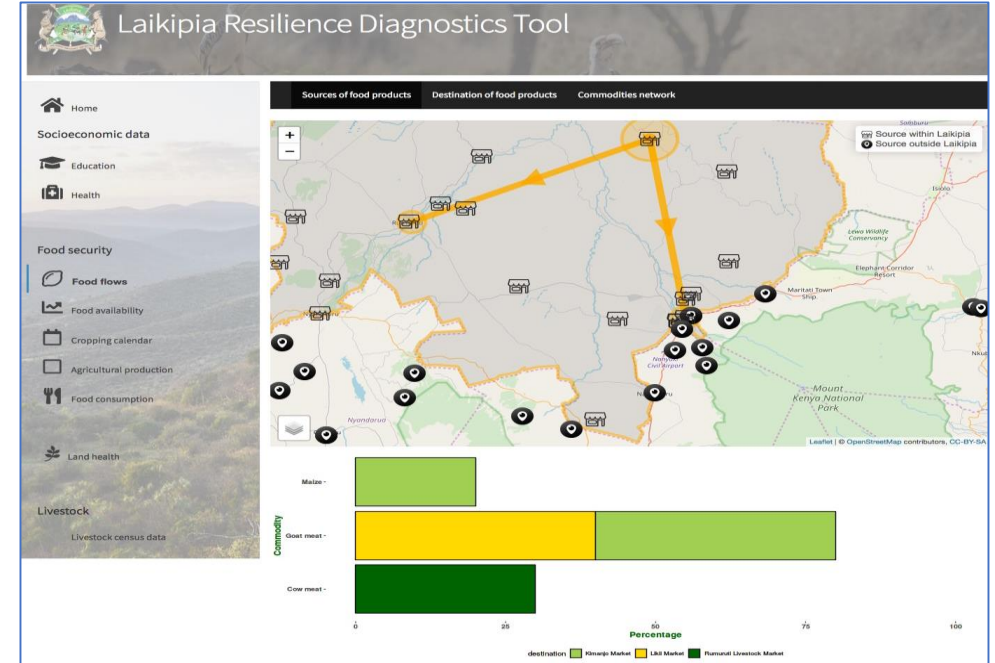


Food flows

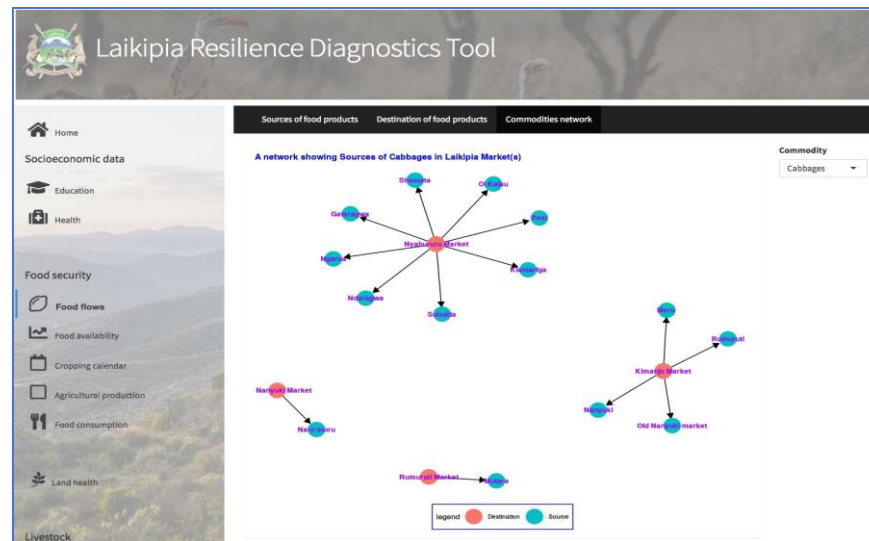
Markets



Sources



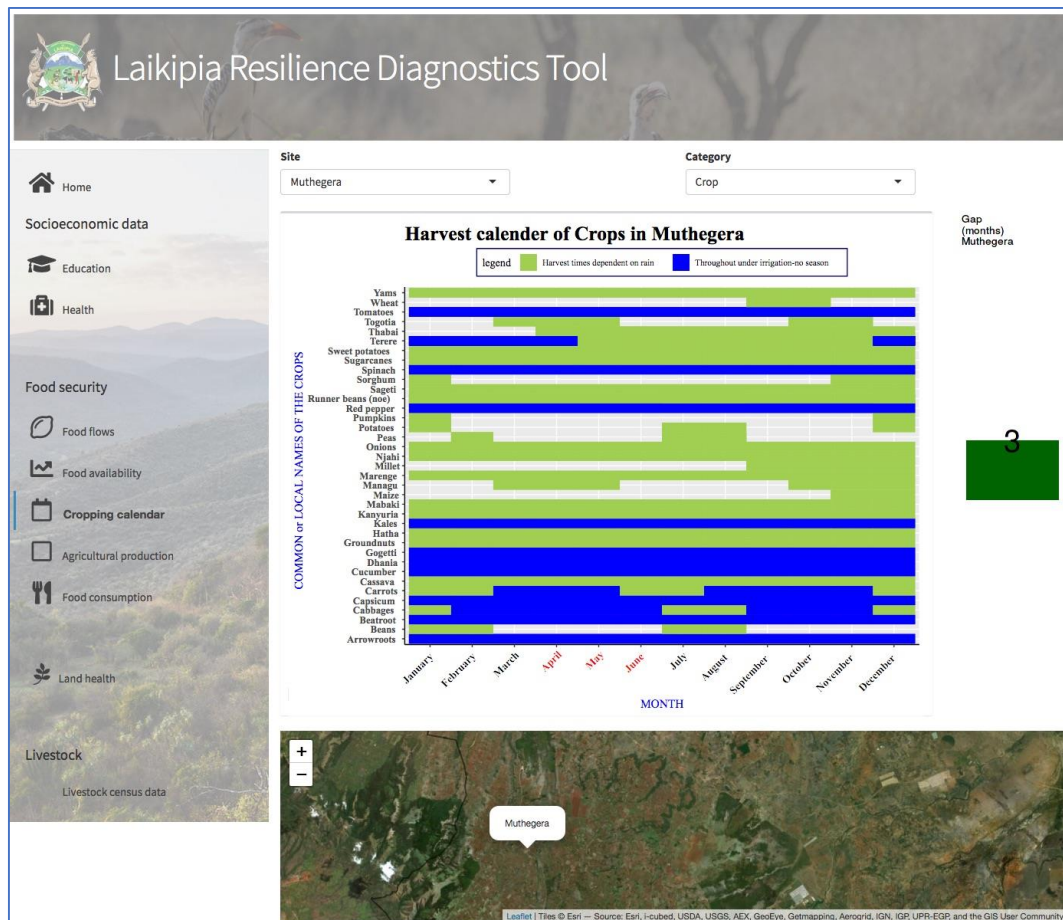
Commodities



The data was collected through a market survey in 5 “Vulnerable” sites in Laikipia county i.e Likii, Rumuruti, Muthengera, Kimanjo, Ngobit.

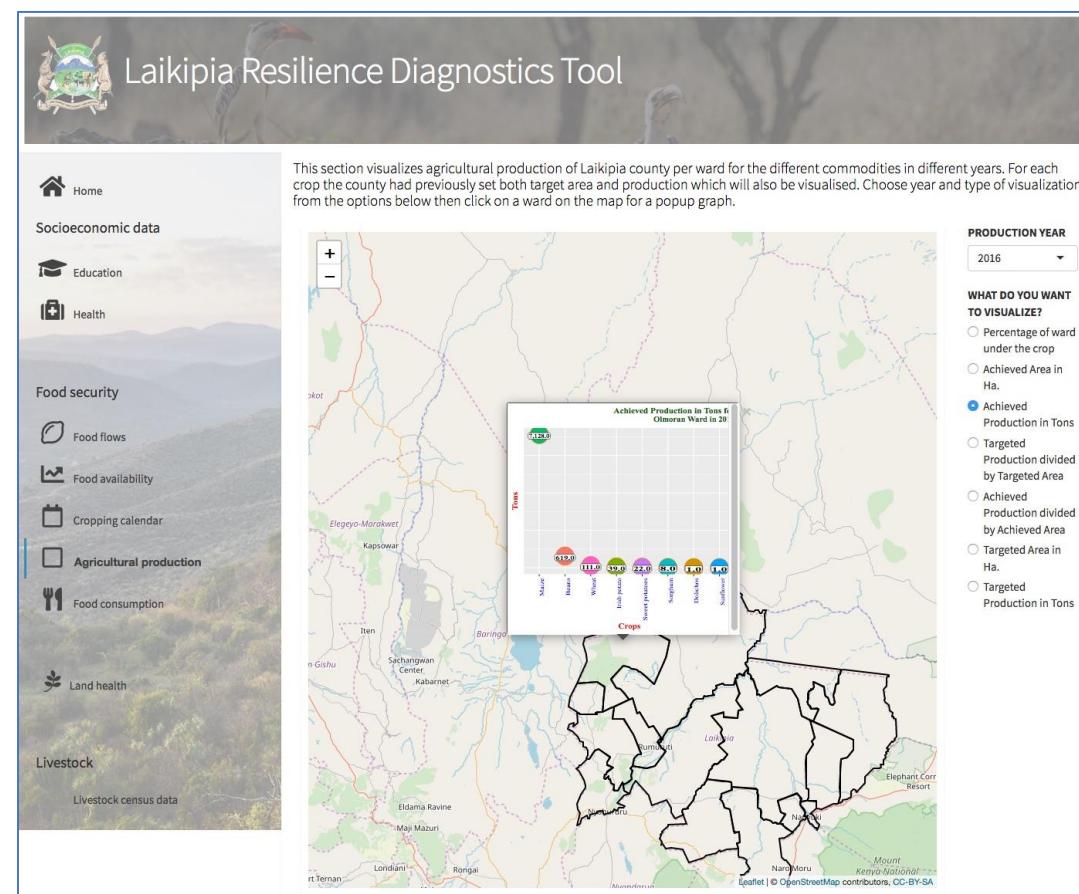
<http://landscapeportal.org/laikipiaRDT/>

Cropping calendar



- The Ministry of Agriculture, Laikipia county provided the agricultural production data at ward level for the years 2014 to 2017.

Agricultural production



<http://landscapeportal.org/laikipiaRDT/>

Food availability



Markets

Nyahururu Market

Old Nanyuki Market

Nyahururu Market

Rumuruti Market

Kimanjo Market

Rumuruti Livestock Market

New Nanyuki Market

Likii Market

Commodity

Oranges

Green maize

Irish potatoes

Kales

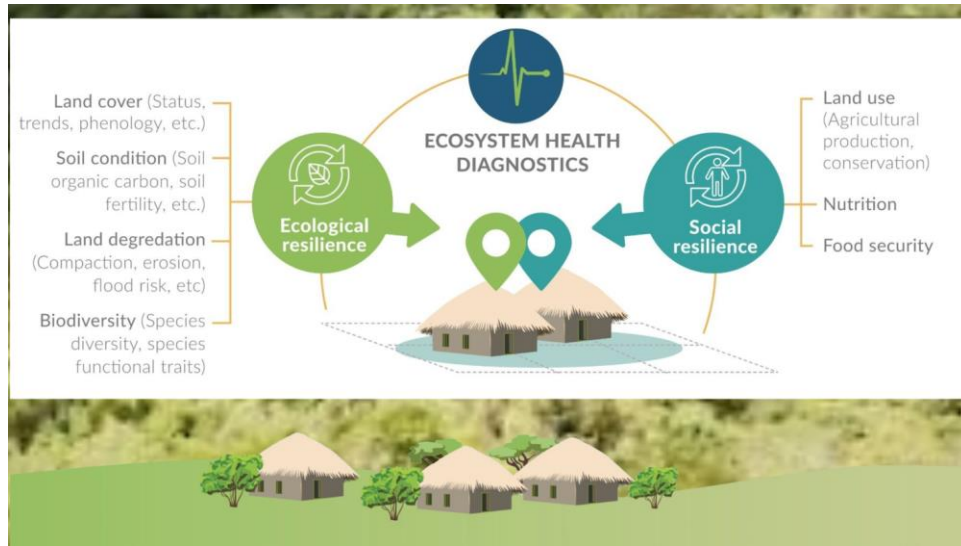
Maize

Meat

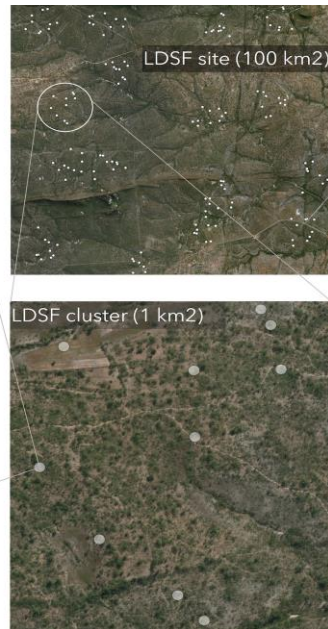
Milk

The data was collected through market surveys of markets within the vulnerable sites





Ecosystem health diagnostics and monitoring

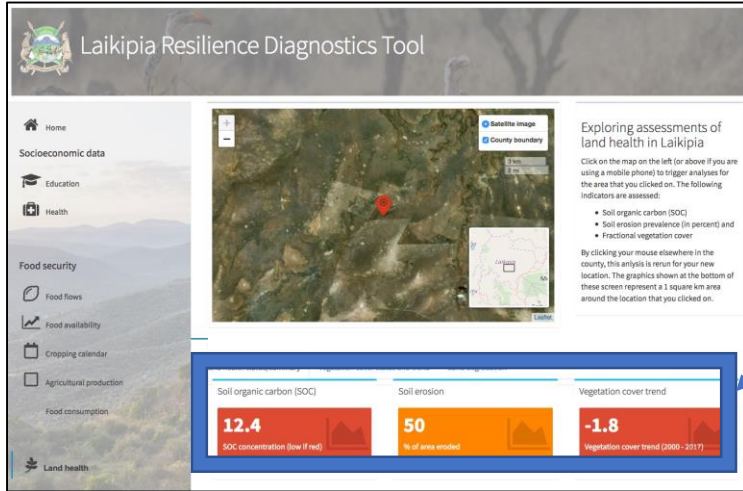


Building (on) Data-Driven Networks

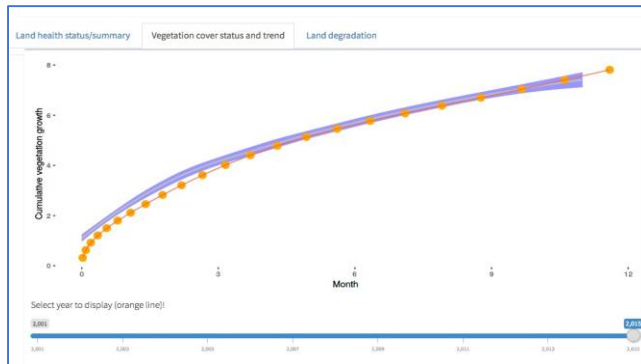
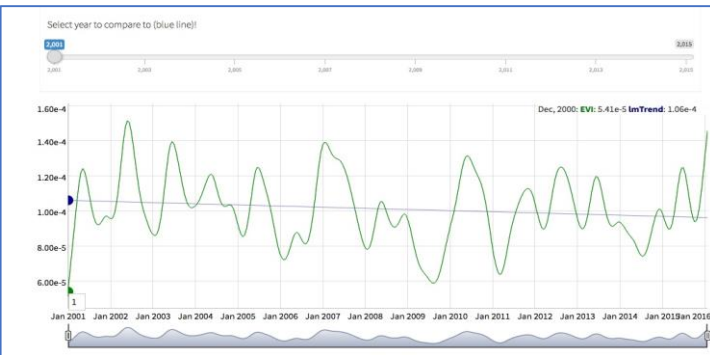
The Land Degradation Surveillance Framework (LDSF)

- Systematic and robust indicator framework
- Consistent sampling
- Assessments at multiple scales
- Spatially Explicit Assessment and Monitoring
- High Accuracy

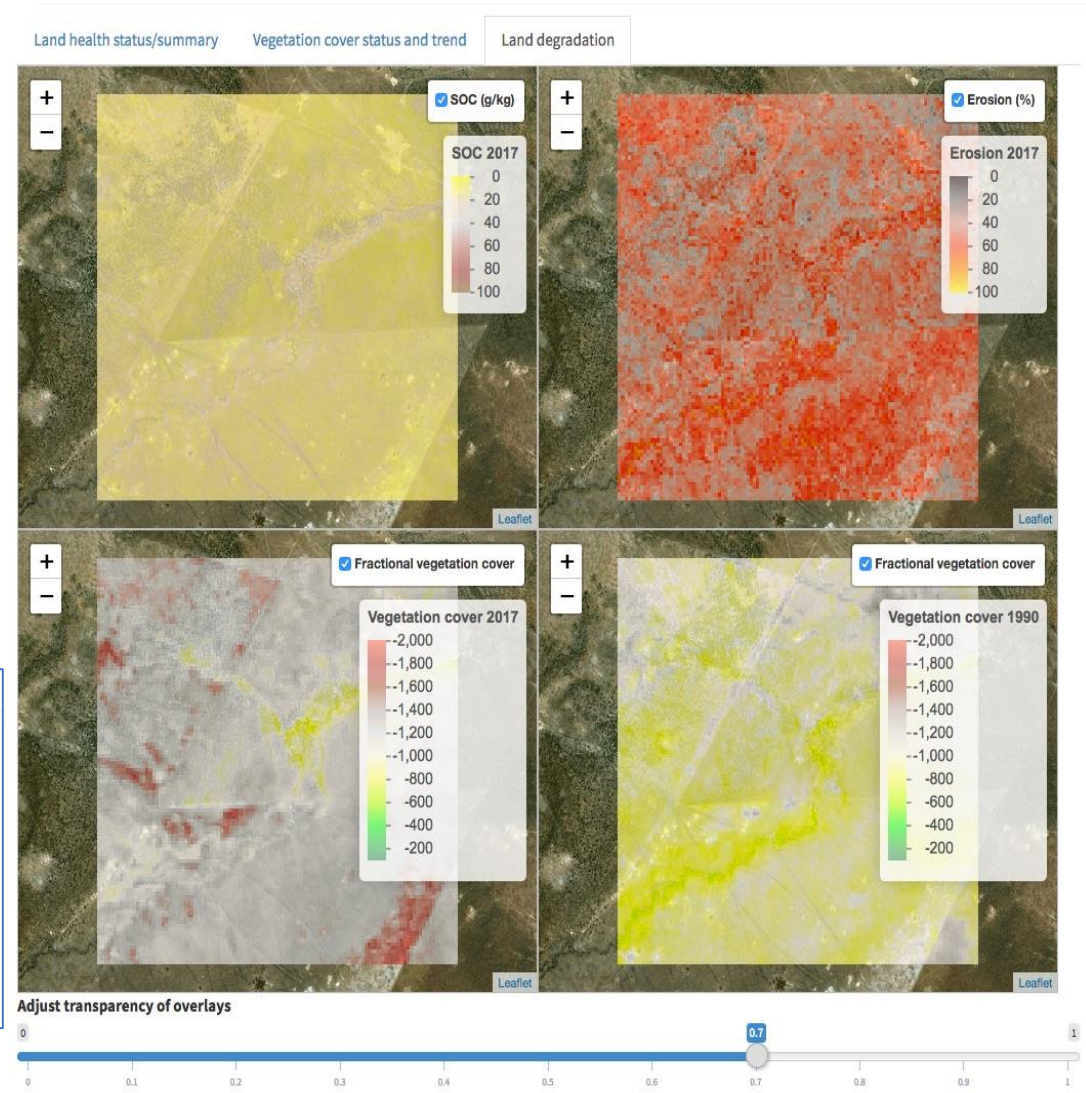
Land health



Land health status/summary for clicked location



1 Km square Cumulative vegetation growth for selected years



<http://landscapeportal.org/laikipiaRDT/>

Thank you!

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Science for a food-secure future