



Participatory assessment of land degradation and sustainable land management in grassland and pastoral systems

Jonathan Davies, IUCN Global Drylands Initiative
Caterina Batello, FAO Ecosystem Management team



Project in Brief

- Develop a participatory methodology for assessing the status of pastoral and grassland systems
- Fine-tune the methodology for scale up through GEF and other initiatives
- Address current assessment shortcomings and gaps



Challenges to grassland assessment

- Poor availability of data
- Established methodologies may be misleading
 - E.g. reliance on Net Primary Productivity
- More accurate assessments can be prohibitively expensive
- Methodologies are developed for small scale assessment
- Ecological challenges
 - Non-equilibrium systems (e.g. drylands)
 - Bush encroachment as a form of degradation
- Conflicting production & conservation objectives



Objective

- **Strengthen the capacity of** local and national stakeholders in grassland and pastoral areas to assess **Land Degradation** and make informed decisions by promoting Sustainable Land Management in a way that preserves the diverse ecosystem services that grassland provide
 - Support long-term planning by herders and local government
 - Combine locally-relevant and globally-comparable indicators



3 Components

1. Participatory assessment and monitoring system for pastoral areas comprising of grasslands and rangelands (75% of the project)
2. Inform international and national agro-pastoral decision making processes
3. Knowledge management, monitoring and evaluation



Development of assessment methodology

- Draft guidelines for implementation
- International and national inception workshops
- International expert's meeting (4th qtr 2016)
- International and national validation workshops



Overview of the assessment methodology

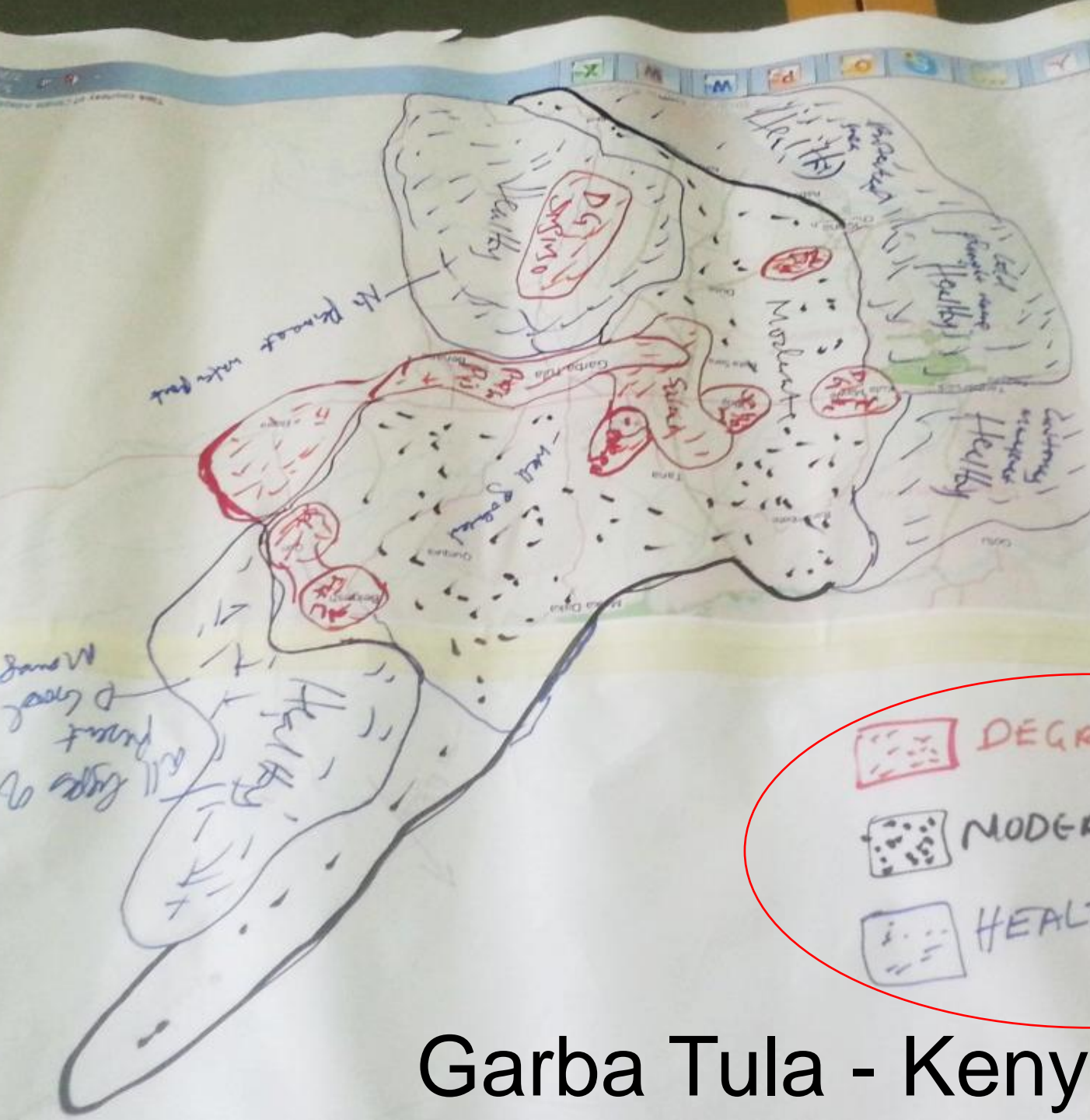
- District (“landscape” level) workshops:
 - Participatory landscape classification and mapping
 - Participatory indicator selection
- Identification and training of local assessment team
- Rapid validation of selected indicators and review of indicators (1 day)
- Full assessment (est. 5 days)



Participatory approach

- Establishing management objectives
- Site selection
- Indicator selection
- Conducting the assessment

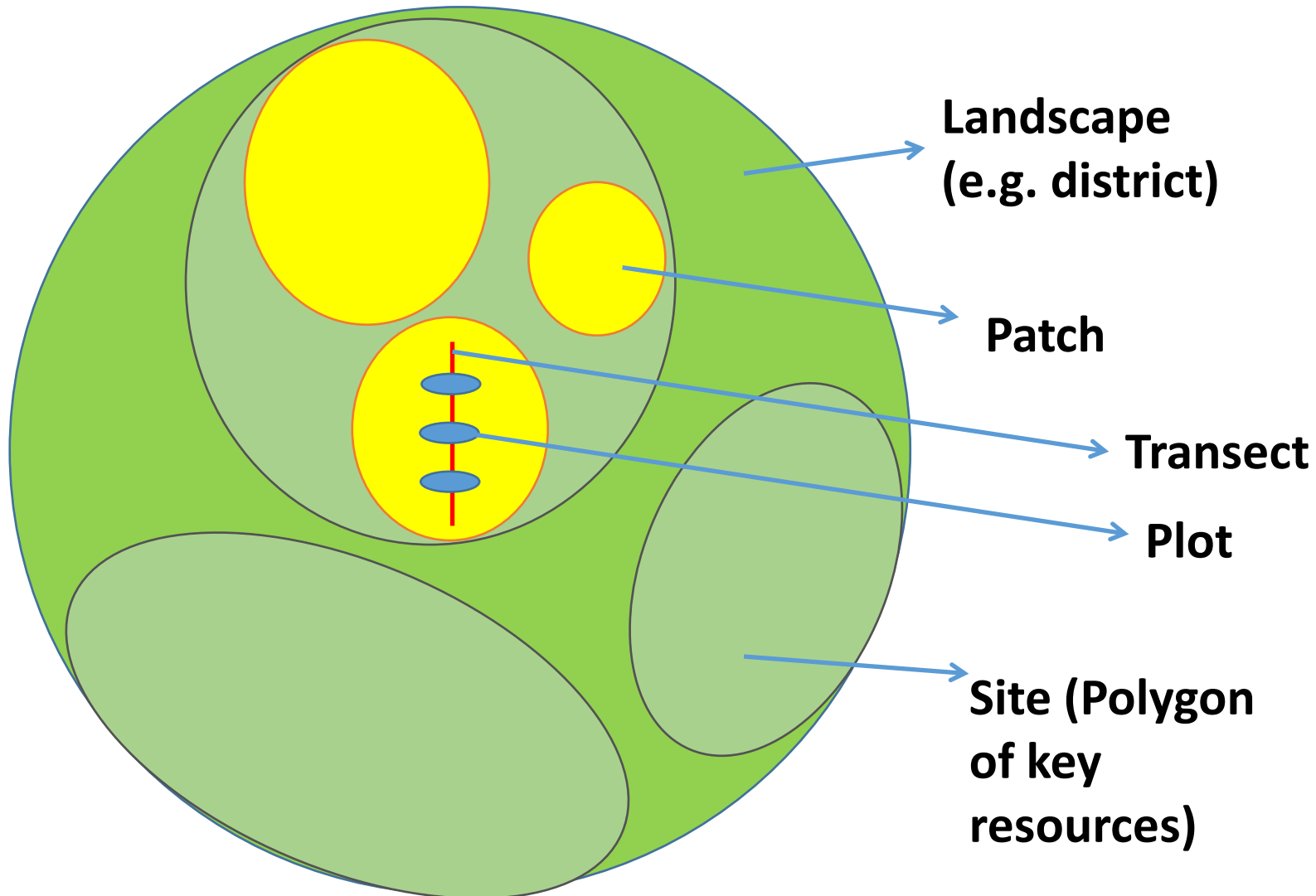
Aim of participation: capture local knowledge, ensure results are locally accepted, combine scientific and local/indigenous knowledge



Garba Tula - Kenya ©Yasin Mahadi



Landscape classification





Comparability of results

- Global comparability of results is not a local priority
- May be important for governments partners
- Could add rigour? Ensure key indicator sets are covered
- Keep it to a minimum for comparability



Indicator Domain	Description
Soil	<ul style="list-style-type: none">• Physical degradation processes• Biological/chemical soil degradation
Hydrology	<ul style="list-style-type: none">• Total water retained in the system (e.g. aquifers, soil moisture)• Water quality
Biota	<ul style="list-style-type: none">• Total biota (e.g. vegetation cover, NPP)• “Quality” of biota (e.g. productive or high value species)
Socio-economic (secondary data)	<ul style="list-style-type: none">• Include the five indicator groups required by the UNCCD• Locally-relevant indicators of production and livelihood outcomes



Questions for project learning

- How do we define grasslands and rangelands?
- What is an appropriate scale for assessment?
- How do we account for non-equilibrium systems and shifting baselines?
- Which sub-set of indicators is suitable for monitoring of grasslands?



Questions for project learning

- What indicators are useful for assessment of Sustainable Land Management in grasslands?
- What indicators can give insights into tipping points (linked to collapse and transformation) in grassland ecosystems?
- How do community indicators, based in an entirely different epistemology, compare with scientifically derived indicators?
- How do we respect Free Prior and Informed Consent in grassland and rangeland assessment?



Thank you

- Next steps:
 - Project due to start around June 2016
 - Experts meeting 4th quarter 2016
 - National inception meetings November 2016 – April 2017