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

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Landscape classification

- Landscape (e.g. district)
- Patch
- Transect
- Plot
- Site (Polygon of key resources)
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
<table>
<thead>
<tr>
<th>Indicator Domain</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Soil</strong></td>
<td>• Physical degradation processes</td>
</tr>
<tr>
<td></td>
<td>• Biological/chemical soil degradation</td>
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<tr>
<td><strong>Hydrology</strong></td>
<td>• Total water retained in the system (e.g. aquifers, soil moisture)</td>
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<td></td>
<td>• Water quality</td>
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<tr>
<td><strong>Biota</strong></td>
<td>• Total biota (e.g. vegetation cover, NPP)</td>
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<td></td>
<td>• “Quality” of biota (e.g. productive or high value species)</td>
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<tr>
<td><strong>Socio-economic (secondary data)</strong></td>
<td>• Include the five indicator groups required by the UNCCD</td>
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<td></td>
<td>• Locally-relevant indicators of production and livelihood outcomes</td>
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</tbody>
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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