Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists

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Why the need to measure resilience?

• Importance of resilience for land degradation, food security, improved livelihoods of the rural poor

• There are no resilience participatory assessments at the household level (but there are many tools e.g. FAO’s RIMA effort on a broader scale)

• Need to understand both “academic” resilience & the needs and desires of the people most affected
Definition of Resilience

is “the capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation” (IPCC, 2014).
What is SHARP?

- SHARP is a participatory assessment of climate resilience of farmers and pastoralists at the household level
- Designed as to allow for autonomous use by communities and/or FFS
- Developed over 1.5 years
  - E-discussion
  - 4 field tests (Uganda, Senegal, Mali)
  - 150+ reviewers
- Tablet-based participatory and interactive application
- Implementation in GEF-funded CC adaptation projects in sub-Saharan Africa over the next 3-5 years
A participatory learning tool

- Facilitates interactive learning and dialogue during Farmer Field School (FFS) training
- Integrated into FFS curricula over season
- Immediate feedback
3 Phases of SHARP Implementation

• Phase 1:
  – Participatory assessment of resilience

• Phase 2:
  – Participatory discussions with pastoralists/local leaders, government etc.

• Phase 3:
  – Integrate results to perform temporal/ geographical/ practice analyses and combine with CC data
  – Incorporate data for use in AP/FFS/ government policies/ upcoming projects
The SHARP survey

- 4 section survey: practices, environment, social and economic

- 51 questions, not all relevant to pastoralists

- Questions matched to 13 agro-ecosystem resilience indicators (Cabell and Oelofse, 2012)

- Goal = Facilitators empower pastoralists to assess their resilience to CC and discuss priorities in a participatory manner
The questions

For each question, 4 parts collecting information on resource/resilience:

– Acquire quantifiable information on the resource level
– Perceived adequacy of resource level
– Perceived importance of specific resource
– Space for elaboration on drivers
# Land degradation

**Environment**

Have you observed one or several of the following soil degradation processes these last five years?

<table>
<thead>
<tr>
<th>Erosion (from wind)</th>
<th>Deforestation (reduction in trees and shrubs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shift of flora (invasive species)</td>
<td>Compaction (hard ground)</td>
</tr>
<tr>
<td>Declining yields</td>
<td>Soil pollution (poisoned soil)</td>
</tr>
<tr>
<td>Erosion (from water)</td>
<td>Other (specify) 1</td>
</tr>
<tr>
<td>Increased weed competition</td>
<td>Other (specify) 2</td>
</tr>
<tr>
<td>Grazing area quality degradation</td>
<td>No soil degradation observed</td>
</tr>
<tr>
<td>Soil salination (preventing crops from growing)</td>
<td></td>
</tr>
</tbody>
</table>

Is the land you have access to suitable for your farming activities?

- Not at all
- A little
- Average
- A lot
- Completely

How much of an impact does land degradation have on your farm system?

- Not at all
- A little
- Average
- A lot
- Very
Scoring

Relative resilience = response score + adequacy score + importance score

Response scoring determined through expert e-discussion and consultations

<table>
<thead>
<tr>
<th>Question</th>
<th>Aspect measuring</th>
<th>Scale/ rating (/10) (a)</th>
<th>Adequacy scale/ rating (/10) (b)</th>
<th>Importance scale/ rating (/10) (c)</th>
<th>Relative resilience score (a+b+c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land degradation</td>
<td>Types of land degradation observed</td>
<td>0=10, 1=7, 2=4, 3+=0</td>
<td>Not at all = 0, A little = 2.5, Average =5, A lot =7.5, Completely =10</td>
<td>Not at all = 10, A little = 7.5, Average, =5, A lot =2.5, Very = 0</td>
<td>R</td>
</tr>
</tbody>
</table>
Use of results

• Ranking => resilience priorities for farm system

• Once ranking is obtained:
  – Household level priorities identified;
  – Resilience of different participants compared;
  – Resilience scores for different groups compared;
  – Priorities at community level established.

• This achieved through discussions with facilitators and pastoralists
A. Your most resilient aspects

1. Savings (29)
2. Perennial crops (28)
3. Practicing intercropping and other (26)
4. Access to information (25)
5. Traditional activities (22)

B. Your least resilient aspects

61. Animal nutrition (1)

C. How do you do compared to Farmer Field School average?
Next steps

• Capacity training using the tablet application in Angola (March 2015) and Niger (June 2015)
• Implementation in other GEF-funded CCA projects: Chad, Mozambique, Burkina Faso, Uganda, Senegal, Mali, and more upcoming projects
• Publish article on SHARP methodology, first SHARP document & Facilitators’ Guide in early 2015
• Have continual feedback to improve the tool, esp. Phases 2 & 3
• Mainstream SHARP in more projects and integrate it with other tools, e.g. LADA
THANK YOU!