Understanding farmers’ drought perceptions in Tanzania and Ethiopia

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1. Background and Objective

- Agricultural productivity limited due to soil degradation
- Limited use of SWC measures
- Farmers see drought as their major problem

⇒ To understand farmers’ drought perceptions

2. Methods

- Questionnaires
- In-depth interviews
- Group discussions
- Picture assignment
- Drought seminar (Tanzania)

3. Summary of results

- Drought perceptions in both countries are built on similar principles
- Farmers have area-specific knowledge of drought based on:
  - Climatic conditions
  - Memory of and experiences with drought (Figure 1)
  - (changes in) Physical environment
- Farmers see differences in drought vulnerability (Table 1)
- Experiential knowledge strengthens farmers’ beliefs (Figure 1)

4. Conclusions

- Drought perceptions are based on weather conditions
- Drought perceptions include soil properties and soil quality concerns
- Agronomic measures that increase rainwater use efficiency:
  - Address drought problem as perceived by farmers
  - Address soil degradation concerns as perceived by scientists

Figure 1: Elements shaping and influencing drought perception

Table 1: Perceived differences in drought vulnerability according to farmers

<table>
<thead>
<tr>
<th>Tanzania</th>
<th>Ethiopia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land management: Timing, technique &amp; crop type</td>
<td>Land management: Timing, SWC, fertilizing &amp; crop type</td>
</tr>
<tr>
<td>Soil characteristics: Type, texture &amp; fertility, length of use</td>
<td>Soil characteristics: Type, texture, depth &amp; fertility</td>
</tr>
<tr>
<td>Location of land: Slope</td>
<td>Location of land: Slope, altitude</td>
</tr>
<tr>
<td>Farmers’ characteristics: Ability &amp; attitude</td>
<td>Farmers’ characteristics: Ability, attitude, sex household head &amp; land holding</td>
</tr>
<tr>
<td>Weather conditions: Rainfall &amp; sunshine</td>
<td></td>
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</tbody>
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