Water user associations in South Africa - potential of representation studies for the development of alternative guidelines for small-scale irrigators WUA

Maud Orne-Gliemann

PhD Fellow, IFAS, CIRAD, SAFeWater-ARISE

Content

- Definitions and context
- WUA for smallholder farmers
- Representation studies
- Pilot study – Thabina irrigation scheme
- Research protocol
- Preliminary results
- Conclusions
Definitions and context

- **WUA**
  - “Although water user associations are water management institutions, their primary purpose, unlike catchment management agencies, is not water management. They operate at a restricted localized level, and are in effect co-operative associations of individual water users who wish to undertake water related activities for their mutual benefit.” (Chapter 8, NWA)
  - “a [WUA] is very simply a group of water users, such as irrigators, who pool their financial, technical, material, and human resources for the operation and maintenance of a water system.” (DWAF draft position paper of WUA, 2007)
  - A community institution with a political agenda - democracy, equity, representativity, empowerment of historically disadvantaged individuals (HDIs)
Definitions and context (2)

- Small-scale irrigation
  - gardens, small subsistence agriculture and commercial or semi-commercial schemes
  - 1/10th of the 1.3 million hectares irrigated land in South Africa
  - IMT programs initiated by provinces
WUA for smallholder farmers

- Evolution of establishment approach: from scheme to cluster WUA
- Improving financial sustainability, hydrological basis, level of integration
- Still, problems of financial sustainability, participation, institutional autonomy
Representations in WM: “the ideas, images and concepts, individuals or groups engaged in WM have, associate with or mobilize for the practices, territories and organizations of WM”

Implementation as a negotiation process whose outcome determined by stakeholders’ representations and that vehiculated by reform.
Pilot study

- Thabina irrigation scheme, Mopani district, Limpopo
Research protocol

• Open and close-ended question interviews
• Verbal associations
• Participatory photography (on-going)

Actors:
- representations
- strategies
- geographic localization
- power and information asymmetries

Territories:
- physical reality
- Social definition
- social and political consequences

Locales institutions (WUA or others):
- actors
- territories
- functions/rules
- power relations
- practices
- representations
Preliminary results

Table 1 Community cohesion (nb and % of respondents)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective resolution of pb</td>
<td>7 (53.8%)</td>
<td>6 (46.2%)</td>
</tr>
<tr>
<td>Sense of community of pb(^1)</td>
<td>9 (69.2%)</td>
<td>3 (23.1%)</td>
</tr>
<tr>
<td>Good compliance with rules</td>
<td>11 (84.7%)</td>
<td>2 (15.3%)</td>
</tr>
</tbody>
</table>
\(^1\) One interviewee did not respond

Thabina Irrigation Scheme – Author’s own data, 2007

Table 2 Do you ever go and see your WUA representatives with concern or request regarding your water resources? Why? (nb and % of responses)

<table>
<thead>
<tr>
<th>Reason given</th>
<th>Yes (69%)</th>
<th>No reason (44.4%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9</td>
<td>Geographical proximity 5 (55.6%)</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>No activity in the scheme 4 (100%)</td>
</tr>
</tbody>
</table>

Thabina Irrigation Scheme – Author’s own data, 2007

- Demography
- Cohesion
- Geographical proximity
Preliminary results (2)

Table 3: Responses to practical scenarios (nb and % of respondents)

<table>
<thead>
<tr>
<th>Scheme infrastructure in need of repair</th>
<th>Shortage of water</th>
<th>A farmer disrespects allocation rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money collection</td>
<td>Do nothing/Stop cultivating</td>
<td>Go to WUA</td>
</tr>
<tr>
<td>Collective work</td>
<td>Do nothing/Keep cultivating</td>
<td>Go to another ext. authority</td>
</tr>
<tr>
<td>Seek external help</td>
<td>Reduce cultivated area</td>
<td>Seek mediation</td>
</tr>
<tr>
<td>Do nothing</td>
<td>Change water allocation</td>
<td>Use sanctions</td>
</tr>
<tr>
<td></td>
<td>No response</td>
<td>Do nothing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pb does not exist</td>
</tr>
</tbody>
</table>

 5 (38.5%)       1 (7.7%)       7 (53.9%)          
 1 (7.7%)        4 (30.8%)       3 (23.1%)          
 2 (15.3%)       1 (7.7%)        1 (7.7%)           

A farmer pollutes/deteriorates

<table>
<thead>
<tr>
<th>Go to WUA</th>
<th>Go to another ext. authority</th>
<th>Seek mediation</th>
<th>Use sanctions</th>
<th>Pb does not exist</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (46.1%)</td>
<td>9 (69.2%)</td>
<td>4 (30.8%)</td>
<td>3 (23.1%)</td>
<td>1 (7.7%)</td>
</tr>
</tbody>
</table>

Conflict between 2 or more farmers

<table>
<thead>
<tr>
<th>Go to WUA</th>
<th>Go to another ext. authority</th>
<th>Gather as farmers</th>
<th>Seek mediation</th>
<th>Pb does not exist</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 (38.5%)</td>
<td>5 (38.5%)</td>
<td>3 (23.1%)</td>
<td>6 (46.1%)</td>
<td>1 (7.7%)</td>
</tr>
</tbody>
</table>

Domestic infrastructure in need of repair

<table>
<thead>
<tr>
<th>Use alternative resources</th>
<th>Repair as a household</th>
<th>Seek external help</th>
<th>Do nothing</th>
<th>Pb does not exist</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (15.3%)</td>
<td>3 (23.1%)</td>
<td>6 (46.1%)</td>
<td>1 (7.7%)</td>
<td>2 (15.3%)</td>
</tr>
</tbody>
</table>

1 Percentages are calculated according to the number of interviewees (vs. responses); some interviewee might have given more than one response.

- Small majority recalls collective action
- Little reference to WUA action
Preliminary results (3)

- Basic WM functions / coordination of actions
- Farmers + community / traditional authorities, municipal district / outside settlement
Preliminary results (4)

Figure 5 Verbal associations

- Functions: 32
- Infrastructure: 18
- Meetings: 10

WUA

Scheme

Fencing, maintenance, representation, control, inputs provision, help/training

Functions

Cooperation, problem, buyers, services

Community
Conclusions

- Scheme based WUA
- Collapsing collective action?
- Ward then scheme
- Potential of further representation studies