



# 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

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# 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

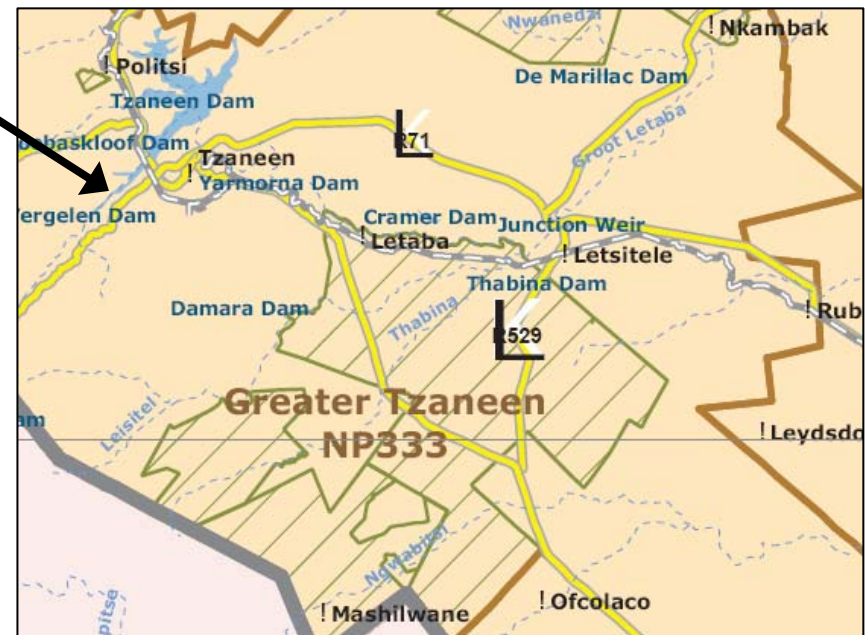
# Representation studies



- 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.

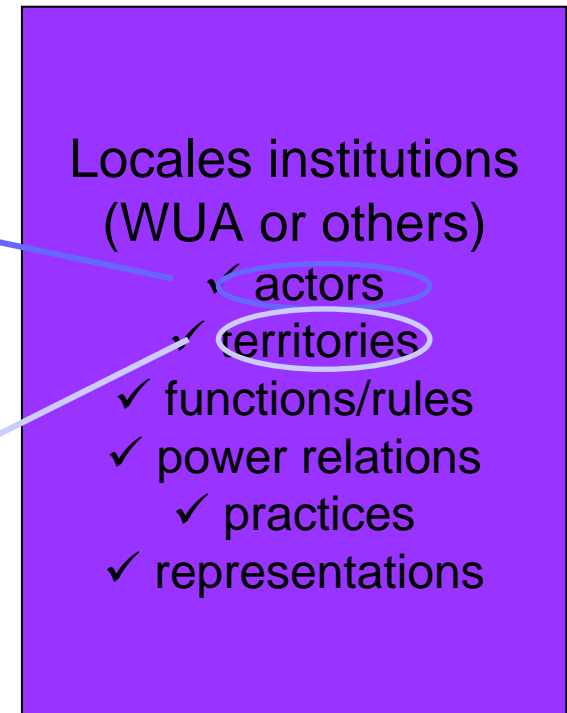
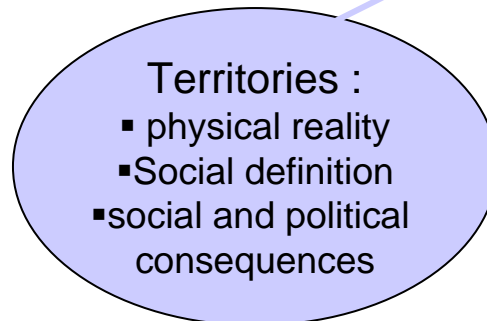
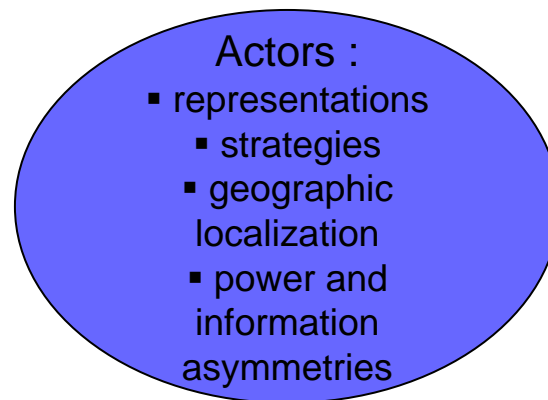
# Pilot study

- Thabina irrigation scheme, Mopani district, Limpopo



# Research protocol

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



# Preliminary results

**Table 1 Community cohesion (nb and % of respondents)**

|                                       | Yes        | No        |
|---------------------------------------|------------|-----------|
| Collective resolution of pb           | 7 (53.8%)  | 6 (46.2%) |
| Sense of community of pb <sup>1</sup> | 9 (69.2%)  | 3 (23.1%) |
| Good compliance with rules            | 11 (84.7%) | 2 (15.3%) |

<sup>1</sup> One interviewee did not respond

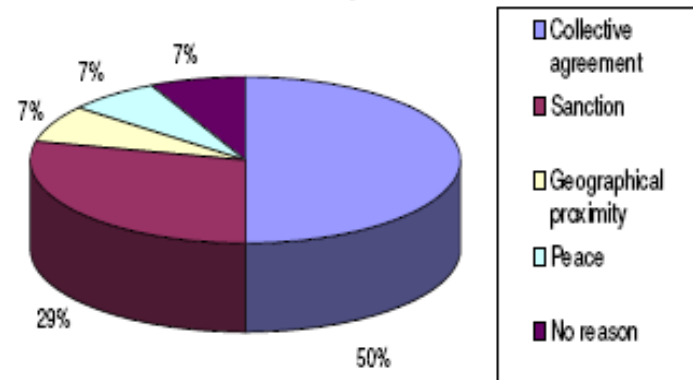
Thabina irrigation Scheme – Author's own data, 2007

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

|     |         | Reason given              |           |
|-----|---------|---------------------------|-----------|
| Yes | 9 (69%) | Geographical proximity    | 5 (55.6%) |
|     |         | No reason                 | 4 (44.4%) |
| No  | 4 (31%) | No activity in the scheme | 4 (100%)  |

Thabina Irrigation Scheme – Author's own data, 2007

**Figure 1 Reasons for compliance with scheme rules (% of responses)**



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<sup>1</sup>)**

|  |           |   |           |  |           |
|--|-----------|---|-----------|--|-----------|
| <i>Scheme infrastructure in need of repair</i> |           | <i>Shortage of water</i>                  |           | <i>A farmer disrespects allocation rules</i>     |           |
| Money collection                               | 5 (38.5%) | Do nothing/Stop cultivating               | 5 (38.5%) | Go to WUA  | 7 (53.9%) |
| Collective work                                | 1 (7.7%)  | Do nothing/Keep cultivating               | 1 (7.7%)  | Go to another ext. authority                     | 3 (23.1%) |
| Seek external help                             | 5 (38.5%) | Reduce cultivated area                    | 4 (30.8%) | Seek mediation                                   | 4 (30.8%) |
| Do nothing                                     | 2 (15.3%) | Change water allocation                   | 1 (7.7%)  | Use sanctions                                    | 1 (7.7%)  |
|  |           | No response                               | 2 (15.3%) | Do nothing                                       | 1 (7.7%)  |
|  |           |   |           | Pb does not exist                                | 2 (15.3%) |
| <i>A farmer pollutes/deteriorates</i>          |           | <i>Conflict between 2 or more farmers</i> |           | <i>Domestic infrastructure in need of repair</i> |           |
| Go to WUA                                      | 6 (46.1%) | Go to WUA                                 | 5 (38.5%) | Use alternative resources                        | 2 (15.3%) |
| Go to another ext. authority                   | 9 (69.2%) | Go to another ext. authority              | 5 (38.5%) | Repair as a household                            | 3 (23.1%) |
| Seek mediation                                 | 4 (30.8%) | Gather as farmers                         | 3 (23.1%) | Seek external help                               | 6 (46.1%) |
| Use sanctions                                  | 3 (23.1%) | Seek mediation                            | 6 (46.1%) | Do nothing                                       | 1 (7.7%)  |
| Pb does not exist                              | 1 (7.7%)  | Pb does not exist                         | 1 (7.7%)  | No response                                      | 2 (15.3%) |

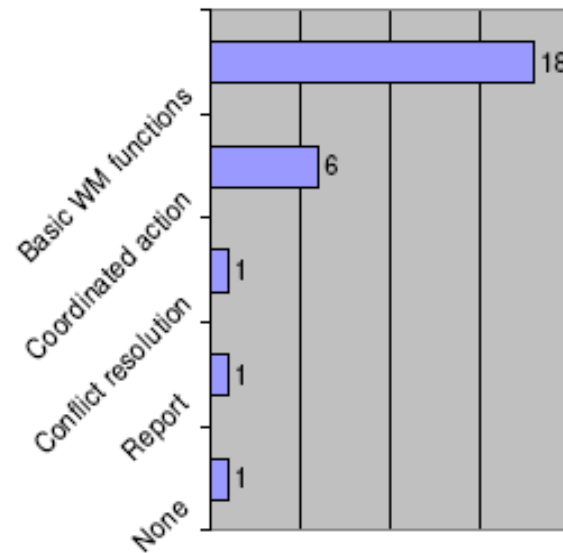
<sup>1</sup> Percentages are calculated according to the number of interviewees (vs. responses); some interviewee might have given more than one response.

Thabina irrigation Scheme – Author's own data, 2007

- Small majority recalls collective action
- Little reference to WUA action

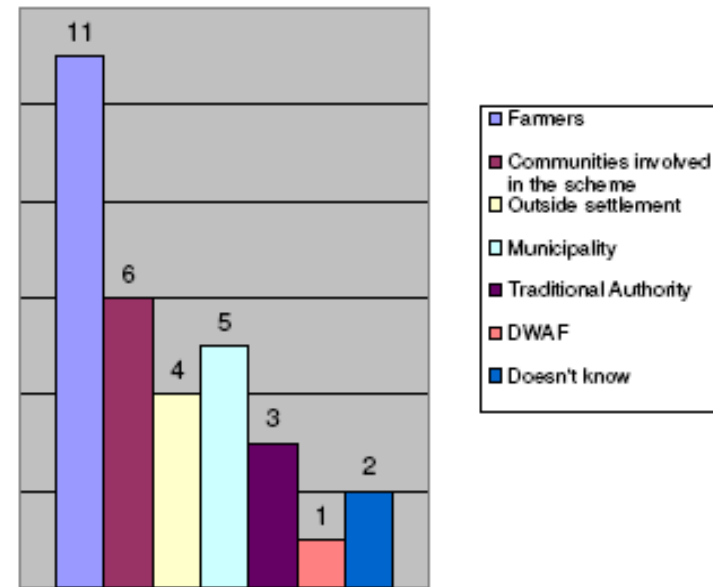
# Preliminary results (3)

Figure 3 Functions to be performed by a local WM institution (nb of responses)



Thabina Irrigation Scheme – Author's own data, 2007

Figure 4 Groups that should be represented on the WUA management committee (nb of respondents)

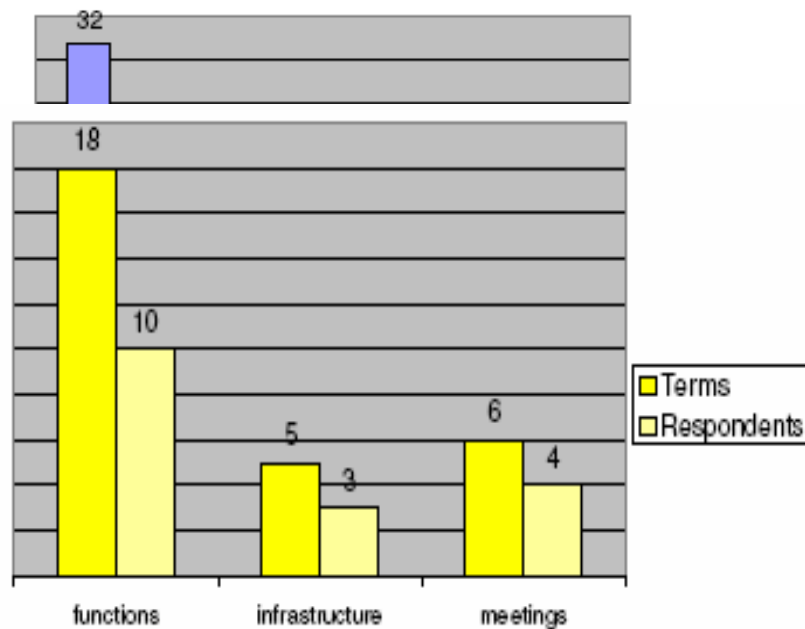


Thabina Irrigation Scheme – Author's own data, 2007

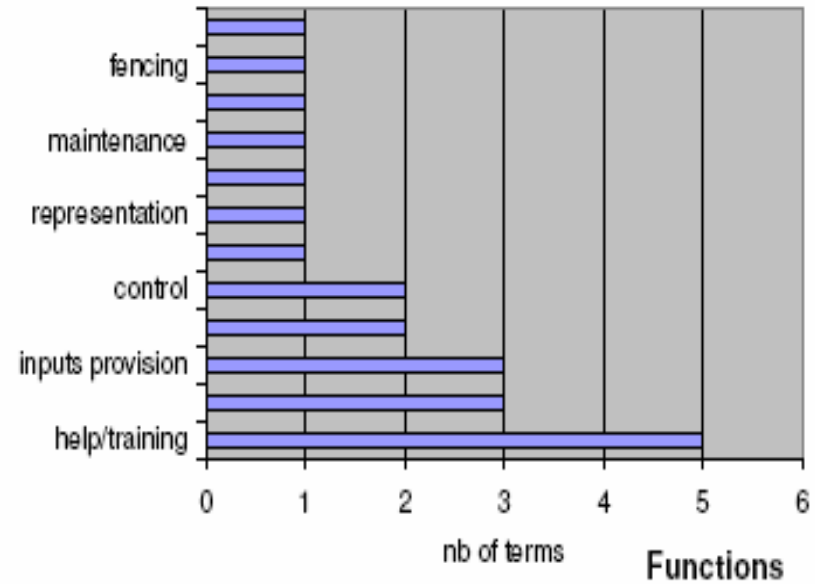
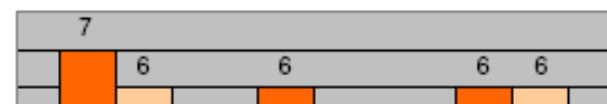
- Basic WM functions / coordination of actions
- Farmers + community / traditional authorities, municipal district / outside settlement

# Preliminary results (4)

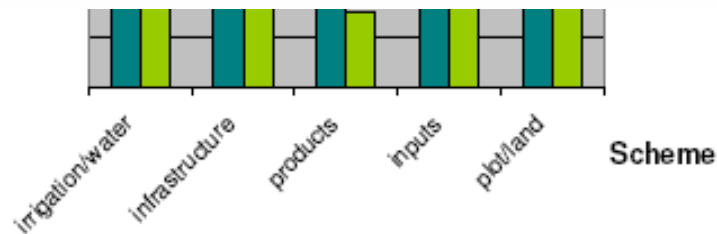
Figure 5 Verbal associations<sup>1</sup>



WUA



Functions



Scheme



Community

A decorative graphic at the top of the slide consists of two groups of three circles. The left group has a solid light purple circle on the left, a white circle with a light purple outline in the middle, and a solid light purple circle on the right. The right group has a solid light purple circle on the left, a white circle with a light purple outline in the middle, and a solid light purple circle on the right.

# Conclusions

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

