The importance of skills and indigenous knowledge of pastoralists in the socioeconomic surveys of T&T in tsetse infested areas of the Sudan

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Introduction

Series of socio-economic surveys were conducted in villages around Eldamazin town the Blue Nile State.

Some of our previous activities:

- Socio-economic impact of T&T on the livelihood of pastoralists in the Sudan
- Trypanocidal cost as an economic parameter in socio-economic surveys of AAT in the Sudan
- Socio-economic impact of T&T on cattle productivity in the Sudan
Methodology

Methodology technique

Participatory approach methods were used
• Study area
• The Blue Nile State (BNS)
- Data collection

- Tools
  - Questionnaires of selected respondents
  - Direct observations and personal interviews with community leaders
  - Group discussions
Analytic techniques

- Descriptive statistic were used as means of data analysis such as Pie and Bar charts and Relative frequency
Results & Discussions
Tribal composition of communities inhabiting the BNS

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulani</td>
<td>50</td>
</tr>
<tr>
<td>Ruffaa</td>
<td>27</td>
</tr>
<tr>
<td>Kennana</td>
<td>20</td>
</tr>
<tr>
<td>Angasana</td>
<td>1.5</td>
</tr>
<tr>
<td>Nuba</td>
<td>1.5</td>
</tr>
</tbody>
</table>
Ranking of livestock diseases affecting cattle herds in the BNS

- Trypanosomosis: 63.4
- Ticks + TBD & ecto-parasites: 25
- C.B.P.P: 8.3
- Internal parasites: 3.3
Percent of respondents classified AAT as a problem and considered it as an important (economic) disease in the BNS:

- Most serious problem: 71.7%
- Amongst first three important diseases: 23.3%
- Recognized but other diseases have higher priority: 5%
Challenge of AAT in resident cattle

- 83% High
- 17% Medium
Challenge of T&T in migratory cattle

- High: 92%
- Medium: 8%
Trypanocidal drugs used in the BNS

- Berenil + Ethidium bromide + Antrycide: 46.8
- Berenil + Ethidium bromide: 35
- Berenil + Antrycide: 10
- Ethidium bromide: 5
- Berenil: 1.6
- Ethidium bromide + Antrycide: 1.6
- Samorin: 0
% Respondents with tsetse flies and their vernacular names

- 28.3% of the cattle owners in the BNS have not seen tsetse flies and are not familiar with them although they have heard about tsetse flies.

- **Um Bogani** is the famous name for tsetse flies throughout the state.
  Fluani use **Bobi**
Indigenous knowledge of biting flies and their vernacular names

- **Beuit** for *T. taeniola* & **Um Nalato** for *T. bigutatus*
- **Beli** for *A. agrestis* and **Alarge** for *T. bigutatus* & **Attar** for *T. taeniola*
- **Abu Rababa** for *T. taeniola*
- **Lusaga** for *T. sufis* and **taer albager** for *T. bigutatus*
- **Um Kokab** for *Philloliche magrettii*
- **Elgebersha** for *A. agrestis*
% of respondents with indigenous knowledge of trypanosomosis

- 95.0 % of respondents in the BNS consider trypanosomosis as problem in cattle herds in the state which affect their health and production

- Marad Um Bogani is the famous vernacular name for trypanosomosis together with Marad Elduban

- Fulani use Loge and Babosi
Conclusion

- The present study indicates that farmers have their own indigenous knowledge and acquired several skills in the field of disease vectors and livestock diseases in the state.
- Farmers in the BNS recognize tsetse flies, other biting flies, trypanosomosis, ticks and tick-borne diseases (TBDs).
Transhumance as a mode of living evolved to avoid high populations of biting flies.

Skills and indigenous knowledge of pastoralists are very important for any tsetse and trypanosomosis intervention in tsetse infested areas.

This huge battery of information must be used in community collaboration programmes for tsetse control project in the Sudan.
Acquired skills
Thank you