DIAGNOSING CONSTRAINTS TO MARKET PARTICIPATION OF SMALL RUMINANT PRODUCERS IN NORTHERN GHANA

AN INNOVATION SYSTEM ANALYSIS

Smallholders
OUTLINE

- Background
- Research objectives
- Sensitizing concepts
- Methods & case description
- Findings
- Implications
Background

- Ghana produces 30% of meat requirement
- Part of rest imported from Burkina Faso, Niger & Mali
- 70% of local production from Northern Ghana
- Smallholders account for bulk of production
- Local demand for livestock products unexploited
Background

Why is smallholders participation in market for small ruminants relatively low in Northern Ghana?
Sensitizing Concepts

Household Food Security: 2 dimensions
- consume what it produces
- sell what it produces to purchase food

Innovation
- process of transforming new ideas into useful outcomes
- innovation hindered due to institutional constraints

Institutions
- rules, standards or principles that prompt actions
- manifested as drivers of change
General Objective

To provide a descriptive understanding of reasons for smallholders’ low production and participating in livestock markets.

Research Questions

1. What are the prevailing practices of small ruminant production and marketing in smallholder households?

2. What are the farm level and higher level constraints that hinder innovation in small ruminant production and market participation by smallholders?
Methods

- Five communities purposively selected and systematic sampling of households in Lawra and Nadowli Districts.
- Interviews with the supply chain actors.
- Focus group discussion and ranking of constraints.
- Stakeholder workshop for analyzing institutional reasons.
- Thematic data analysis: classify data (i.e. categories), make notes and identify connections among categories.
Characteristics of smallholder communities

<table>
<thead>
<tr>
<th>Community</th>
<th>Population (n/village)</th>
<th>Households (n/village)</th>
<th>% hh keeping goats</th>
<th>% hh keeping cattle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orbili</td>
<td>302</td>
<td>51</td>
<td>96</td>
<td>16</td>
</tr>
<tr>
<td>Tankyara</td>
<td>321</td>
<td>66</td>
<td>85</td>
<td>35</td>
</tr>
<tr>
<td>Tangasie</td>
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<td>71</td>
<td>6.1</td>
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<tr>
<td>Kumalsa</td>
<td>381</td>
<td>66</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Tabiasi</td>
<td>219</td>
<td>37</td>
<td>77</td>
<td>71</td>
</tr>
</tbody>
</table>

**Livestock species**: goats, sheep, cattle, pigs, chicken, guinea fowls.

**Crop production system**: maize, sorghum, millet, groundnut, cowpea.

- Total farm size 1.7 – 3.4 hectares
Findings

Prevailing practices
- Tethering during the rainy season
- Free-range management during the dry season
- Market-related off-take: mostly distress sales
- Minimum investment in feeding and health
Findings

Constraints experienced:

1. Lack of water during dry season

2. High mortality reflect on low input in veterinary services:
   e.g. in 2010: 63% among kids (less than 1 year);
   47% among adult goats (over 1 year)

3. Livestock theft
Findings

Institutional analysis of key constraints
## Findings

### Levels of institutional reasons

<table>
<thead>
<tr>
<th>Level</th>
<th>Reasons</th>
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</thead>
</table>
| **1. Community** | • limited arable land  
                  | • low input principle of livestock production  
                  | • weak traditional structure for control of theft                      |
| **2. District**  | • weak formal structures for justice delivery  
                  | • weak interaction between community and district organisations for water provision |
| **3. National**  | • weak structure for animal production and health services delivery.     |
Findings

Resilient strategies of most smallholders entail:

> diversified sources of livelihood

> maintaining the herd as a capital stock and insurance.

> low input use in small ruminant production
Conclusions:

Only few smallholders (i.e., ‘positive deviants’) and self-organized groups increase investment in animal husbandry.

Generally, market- production or intensification - increase external input - is not a viable option.
Implications

1) Institutional constraints other than market access should be addressed (i.e. development coordination)

2) Explore different types of small ruminant innovation system pathways
e.g. co-creating approach to development
likely to continue

resolving joint technical and institutional issues is a necessity
END

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