Unlocking the potential of livestock technologies in Ethiopia: Shifting from piecemeal solutions to holistic approach

Kebebe Ergano, Alan J. Duncan, Simon J. Oosting

Nile Basin Development Challenge (NBDC) Science Workshop, Addis Ababa, Ethiopia, 9–10 July 2013
Introduction- I

• Mismatch in DD and SS for dairy products

• Diminishing land and water resources

• Intensification of livestock production is a necessity

• Intensification involves use of new agricultural technologies and practices
Introduction-2

- Various technologies and institutional interventions promoted

- Adoption of technologies and interventions is very low

- What is holding back farmers from using technologies & interventions?
Introduction-3

- AIS recognizes innovation as a result of combination of technical, social, institutional and organizational dimensions.

- The need for holistic analysis of transition paths of smallholder dairy.

- Systemic innovation policy framework was used to assess innovation constraints in dairy sub sector.
Methods

• Review of document covering 1950’s to 2013

• Event history analysis was used to map interaction patterns between system functions

• Focus group discussion and key informant interview
Results- I

• Livestock development efforts focused on technical solutions to breeding, feeding and health constraints

• Social, institutional and organizational issues were treated lightly or totally neglected in R&D

• Little attention was given to organizational requirements of the innovation process in livestock sector
Results-2: Fulfilment of innovation functions

<table>
<thead>
<tr>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge development</td>
<td>Guidance of search</td>
<td>Knowledge dissemination</td>
</tr>
<tr>
<td></td>
<td>Market formation</td>
<td>Advocacy</td>
</tr>
<tr>
<td></td>
<td>Resources mobilization</td>
<td>Entrepreneurship</td>
</tr>
</tbody>
</table>
Coordination matters!
Conclusions

• R&D efforts limited to piecemeal technical solutions to constraints at one or two steps in the value chain

• Public research and extension systems could not provide institutional set up for value chain coordination

• Unlocking the full potential of dairy technologies requires suitable combination of technologies, skills and behaviour, processes and organization

Innovation = technological innovation + business model innovation
Recommendations

• Research focus should be geared towards designing, prototyping and experimenting with alternative livestock value chain coordination mechanisms

• Encouraging the search for suitable models for livestock value chain coordination

• Monitoring the efficacy of alternative models of value chain coordination is essential