Food safety policy in 9 African countries

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International Livestock Research Institute

- One of 15 CGIAR centers: *agriculture research for pro-poor development*
- Budget: $83 million in 2014
- 123 senior scientists from 39 countries
  - 56% are developing country nationals
  - 34% are women
- Large campuses in Kenya and Ethiopia.
  - Offices: Hanoi, Beijing, Bangkok, Delhi, Hyderabad, Guwahti, Ouagadougou, Ibadan, Maputo, Kampala, Dar es Salaam
Density of poor livestock keepers (PLK)

- One billion PLK depend on 19 billion livestock
- 4 countries have 44% of PLK
- 75% rural, 25% urban poor depend on livestock
- Livestock contribute 2-33% income
- Livestock contribute 6-36% protein

Thornton et al.

*Update: March 2012
## Livestock sector: Opportunities & challenges

<table>
<thead>
<tr>
<th></th>
<th>One health</th>
<th>Socio-Economic</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunities</strong></td>
<td>Population growth, food and nutrition security</td>
<td>Regional and global demand for livestock products</td>
<td>Manure, fertilizer, regenerative energies</td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
<td>Overconsumption, <strong>food safety</strong>, (emerging) zoonoses, infectious disease</td>
<td>Equity, gender, urbanization, transboundary diseases</td>
<td>Land/water degradation, human-wildlife conflict, pollution, emissions</td>
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</table>
Food safety: the most important agriculture associated disease

- World wide per year >3 billion cases of diarrhea and 0.5 million deaths of children under 5

- 80% of child deaths due to diarrhea in South Asia and Africa

- Animal source foods are most important source of food borne disease (FBD)
Situational Analysis of food safety in 9 countries

Côte d’Ivoire
Ghana
Mali
South Africa
Ethiopia
Kenya
Uganda
Tanzania
Mozambique
Key findings for food safety

• Multiple FS institutes with overlapping mandates
  – 13 in Mozambique; 7 in Cote d’Ivoire

• Multiple policies/ legislative acts
  – Mostly unfocused and generic

• Collective action
  – Small scale processor/retailer: mostly absent, often ambiguous position
  – Consumer, farmer: in place but weak and un-representative
  – Large scale processor/ retailer: strong

• Laboratory and human resources mostly scored “inadequate” or “highly inadequate”
Key findings for food safety

- There is no information on presence of many important pathogens

- Probability of inspection varies inversely with poverty
Growing concern about food safety

- Many/most reported concern over food safety (40-97%)
- Willing to pay 5-10% premium for food safety
- Buy 20-40% less during animal health scares
- Younger, wealthier, town-residing, supermarket-shoppers willing to pay more for safety
Informal markets have a major role in food security and safety

- Account for 39% of the national GDP
- More than 80% of food is sold in informal markets
- Accessible and affordable to everyone
- Involve many actors
- Prone to activities that may compromise food safety
- Perceived to be unsafe by policy makers
Compliance: Formal worse than informal

- Poor total bacteria
- Unacceptable total bacteria
- Unacceptable faecal bacteria
- Unacceptable Staph
- Unacceptable listeria
- Any unacceptable

Supermarket
Wet market
Village
More regulation associated with worse practices

<table>
<thead>
<tr>
<th>Hazard Transmission</th>
<th>Risk mitigation strategies currently practiced (%)</th>
</tr>
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<tbody>
<tr>
<td>Ecosystem to cow</td>
<td>Keep only one species 29%</td>
</tr>
<tr>
<td></td>
<td>Zero-graze 38</td>
</tr>
<tr>
<td></td>
<td>Use own land only for feed 41</td>
</tr>
<tr>
<td></td>
<td>Avoid common grazing 56</td>
</tr>
<tr>
<td></td>
<td>Keep local breeds 27</td>
</tr>
<tr>
<td>Milk shed to cow</td>
<td>Use feed/water trough 94</td>
</tr>
<tr>
<td></td>
<td>Have concrete/stone floor 96</td>
</tr>
<tr>
<td></td>
<td>Use bedding 41</td>
</tr>
<tr>
<td>Milk shed / dairy to milk</td>
<td>Have washable shed wall 100</td>
</tr>
<tr>
<td></td>
<td>Have metal/tin roof 96</td>
</tr>
<tr>
<td></td>
<td>Store containers off floor 29</td>
</tr>
<tr>
<td></td>
<td>Keep milk bar dry 45</td>
</tr>
<tr>
<td>Milk handler to milk</td>
<td>Use hot water to clean 18</td>
</tr>
<tr>
<td></td>
<td>Use soap to clean 81</td>
</tr>
<tr>
<td></td>
<td>Wear protective clothing 1</td>
</tr>
<tr>
<td></td>
<td>Wash hands with soap before handling milk 59</td>
</tr>
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<td></td>
<td></td>
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<tr>
<td>Transport to milk</td>
<td>Don’t drink unsold milk 10</td>
</tr>
<tr>
<td>Milk to consumer</td>
<td>Treat milk 50</td>
</tr>
<tr>
<td></td>
<td>Avoid drinking raw milk 93</td>
</tr>
<tr>
<td></td>
<td>Check milk quality by smell/taste 48</td>
</tr>
</tbody>
</table>

Average of 17.25 risk mitigation strategies used

Farmers who believed UA was legal used more strategies
Efforts in managing food safety in informal markets must be pro-poor

• The poor are more prone to food-borne disease but cannot afford to fall ill
• Risk management needs training, skills development and prerequisites
• Linking formal and informal markets can decrease poverty
• Impact assessment on economic losses and gains of food safety risks is needed
Improvements are feasible, effective, affordable

- Branding & certification of milk vendors in Kenya: secured livelihoods, improved milk safety & saved economy $33 million
- Peer training, branding, innovation for Nigerian butchers led to 20% more meat samples meeting standards and cost $9 per butcher but resulted in savings $780/per butcher per year from reduced cost of human illness
- Providing information on rational drug use to farmers, led to knowledge increase x 4, practice x 2, disease decrease by 1/2
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