Postharvest handling and technologies for livestock products

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Animal source foods: 5 of 6 highest value global commodities (total value of these five: over US Int $ 700 billion)

Cattle meat $171 billion
Gains in meat consumption in developing countries are outpacing those of developed countries at the same per capita level. The graph shows projected meat consumption in million metric tonnes from 1980 to 2050, with lines indicating the trend for developing and developed countries, and a dashed line for developing countries at the same per capita level as developed countries (hypothetical).
Africa: 1 billion consumers: high potential to consume more livestock products

Europe: ASF 21% of diet
SS Africa: ASF 6% of diet

By 2050: 2 billion consumers

Source: Herrero et al 2008
More than 80% of perishables bought from informal markets

Characteristics

- No effective health and safety regulations;
- Many actors;
- Pay no tax;
- Traditional processing & retail practices;
- Poor infrastructure;
- Little support from public sector or NGO.

Benefits

- Cheap;
- Fresh;
- Local breeds;
- Taste;
- Trust vendors;
- Credit.
Role of women in post-harvest activities

<table>
<thead>
<tr>
<th>Product</th>
<th>Production</th>
<th>Processing</th>
<th>Marketing</th>
<th>Consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk (cow)</td>
<td>men (x Nairobi)</td>
<td>women</td>
<td>women (x Abidjan)</td>
<td>both</td>
</tr>
<tr>
<td>Milk (goat)</td>
<td>men (w milk)</td>
<td>women</td>
<td>women</td>
<td>both</td>
</tr>
<tr>
<td>Beef/goat</td>
<td>men (w assist)</td>
<td>m</td>
<td>m (butcher, pub)</td>
<td>both</td>
</tr>
<tr>
<td>Poultry</td>
<td>women</td>
<td>women</td>
<td>women</td>
<td>both</td>
</tr>
<tr>
<td>Pigs</td>
<td>women</td>
<td>men</td>
<td>men</td>
<td>both</td>
</tr>
<tr>
<td>Fish, crabs</td>
<td>men</td>
<td>women</td>
<td>women</td>
<td>both</td>
</tr>
</tbody>
</table>
Increasing concerns over food safety

In 7 developing countries studied

• Many/most reported concern over food safety (40-97%)

• Willing to pay 5-10% premium for food safety

• Younger, wealthier, town-residing, supermarket-shoppers willing to pay more for safety

• Buy 20-40% less during animal health scares

Jabar et al, Lapar et al
Foods implicated in FBD

Painter et al., 2013, Sudershan et al., 2014, Mangan et al., 2014; Tam et al., 2014; Sang et al., 2014; ILRI, 2016
Post-harvest solutions

Add value

Create trust

Reduce waste

Create employment for women & youth
Treated nets: reduce disease
Dairy value chain in Assam

Concerns about milk quality in Assam

Training to promote knowledge and hygiene amongst producers and traders

2009
2009-2011
2012

Fig: Map of Assam
Capacity-building, awareness, incentives

- Training on hygienic milk production and handling
- Along the dairy value chain: producer, trader
- Media and information campaigns
- Peer to peer monitoring & evaluation
- Incentive: good publicity & membership dairy platform
• Better knowledge & practices.
• Less mastitis
• Higher revenues
• Greater consumer trust in milk

• 70% of traders in Assam are currently registered
• It benefited the economy by $6 million a year in Assam
• 1.5 million consumers benefiting from safer milk
Improvements are feasible, effective, affordable

- Branding & certification of milk vendors in Kenya: led to 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 COI
better lives through livestock

ilri.org