Risk management and communication in informal dairy sector in Côte d’Ivoire: Options for sustainable livelihoods

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Key messages
- Informed practice resulted in poor quality of low productivity of FDP
- About 90% of milk produced on average per day per farm (10.4 l) and the remaining 10% were consumed within the farm
- Milk was contaminated by SBSEC
- Strains of SBSEC were found in milk consumers stool

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Epidemiology Consumers
- Consumers at第一届 level (n=50)
- Farmers Collectors Vendors Households Total
- Raw milk in tank (n=98)
- Collector (n=30)
- Vendor (n=30)
- Mill (n=15)
- Local milk technologies and FDP properties
- Isolation of probiotic strains and FDP
- Risk of intestinal infections, diarrhoea and gastroenteritis
- Descriptive analysis of the role of risk factors and improvement of quality
- Development of dairy unit models for good quality FDP production
- Mix social sciences Mix economy
- revolver (n=50)
- milk, FDP and stool sample collection
- Isolation and molecular characterization of FDP from farmers

Technology Processing
- Data from FDP vendors (n=15)
- Focus group discussion on needs and problems
- Sensitivity instrument land analysis
- Descriptive analysis of practices
- Mix in food technology
- Mix medical

Next step
Future interventions identified by stakeholders comprised:
(i) awareness on local dairy hygiene and nutritional value for the population especially school children
(ii) stakeholders organization around cooperative to develop sustainable dairy model (public dairy with private management)
(iii) promote healthy milk products for school canteen programme in Korhogo through adapted local dairy technology.

Involved institutions
Swiss TPH
CSRS Centre Suisse de Recherches Scientifiques en Côte d’Ivoire
ERAfrica
PASRES
UBS Optimus Foundation

Objectives
Assess local technologies and the dairy value chain in relation to Sii prevalence, followed by a participatory stakeholder workshop to validate findings and derive adapted interventions.

Methods
A cross-sectional study was conducted in Korhogo (Côte d’Ivoire) from May to August 2014 with farmers, collectors, vendors and household members using participatory approach.

Table 1: Price of milk per actor of dairy chain based on the season

<table>
<thead>
<tr>
<th>Level</th>
<th>Minimum price of selling milk (FCFA/Liter)</th>
<th>Maximum price of selling milk (FCFA/Liter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>150</td>
<td>200</td>
</tr>
<tr>
<td>Collector</td>
<td>175</td>
<td>250</td>
</tr>
<tr>
<td>Vendor</td>
<td>300</td>
<td>400</td>
</tr>
</tbody>
</table>

Table 2: Number of milk samples contaminated by SBSEC at different level of dairy chain

<table>
<thead>
<tr>
<th>Samples</th>
<th>Farmers</th>
<th>Collectors</th>
<th>Vendors</th>
<th>Households</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive milk (SBSEC)</td>
<td>14 / 30</td>
<td>5 / 12</td>
<td>7 / 26</td>
<td>34</td>
<td>56</td>
</tr>
<tr>
<td>negative milk (PCR)</td>
<td>18 / 29</td>
<td>7 / 13</td>
<td>7 / 26</td>
<td>34</td>
<td>70</td>
</tr>
</tbody>
</table>

Figure: Quantity of daily milk produced, sold and consumed at farms level

Picture: Strains of SBSEC isolated from milk consumers stool