LIVESTOCK MARKETING SYSTEMS AND VALUE ADDITION IN PAKISTAN

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ISLAMABAD
PRESENTATION FORMAT

- CURRENT STATUS OF LIVESTOCK SECTOR
- LIVESTOCK MARKETING SYSTEMS
- MARKETING ISSUES AND STRATEGIES
- SCOPE FOR INVESTMENT
- WAY FORWARD
<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture share in National GDP</td>
<td>21.0 %</td>
</tr>
<tr>
<td>Livestock share in National GDP</td>
<td>11.4 %</td>
</tr>
<tr>
<td>Livestock Share in Agricultural GDP</td>
<td>53.2 %</td>
</tr>
<tr>
<td>Increase in Meat and Meat preparation exports</td>
<td>39.8 %</td>
</tr>
<tr>
<td>Dependent families</td>
<td>&gt; 6.5 m</td>
</tr>
<tr>
<td>Provides raw material for industry</td>
<td></td>
</tr>
<tr>
<td>Social security for rural poor</td>
<td></td>
</tr>
<tr>
<td>Security against crop failure in barani areas</td>
<td></td>
</tr>
</tbody>
</table>

Source: Economic Survey (2009-10)
# Livestock Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo</td>
<td>10.6</td>
<td>15.7</td>
<td>20.3</td>
<td>27.3</td>
<td>30.8</td>
</tr>
<tr>
<td>Cattle</td>
<td>14.9</td>
<td>17.5</td>
<td>20.4</td>
<td>29.6</td>
<td>34.3</td>
</tr>
<tr>
<td>Goats</td>
<td>21.7</td>
<td>29.9</td>
<td>41.2</td>
<td>53.8</td>
<td>59.9</td>
</tr>
<tr>
<td>Sheep</td>
<td>18.9</td>
<td>23.3</td>
<td>23.5</td>
<td>26.5</td>
<td>27.8</td>
</tr>
<tr>
<td>Camel</td>
<td>0.8</td>
<td>1</td>
<td>0.8</td>
<td>0.9</td>
<td>1.0</td>
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<tr>
<td>Horses</td>
<td>0.4</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Asses/Mules</td>
<td>2.3</td>
<td>3.1</td>
<td>3.7</td>
<td>4.5</td>
<td>4.8</td>
</tr>
</tbody>
</table>
### Livestock Products

<table>
<thead>
<tr>
<th>Year</th>
<th>Milk</th>
<th>Beef</th>
<th>Mutton</th>
<th>P.Meat</th>
<th>Hides</th>
<th>Skins</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>26.28</td>
<td>1.01</td>
<td>0.67</td>
<td>0.34</td>
<td>7.8</td>
<td>38.2</td>
</tr>
<tr>
<td>2001-02</td>
<td>27.03</td>
<td>1.03</td>
<td>0.68</td>
<td>0.36</td>
<td>7.9</td>
<td>39.2</td>
</tr>
<tr>
<td>2002-03</td>
<td>27.81</td>
<td>1.06</td>
<td>0.70</td>
<td>0.37</td>
<td>8.2</td>
<td>40.3</td>
</tr>
<tr>
<td>2003-04</td>
<td>28.62</td>
<td>1.09</td>
<td>0.72</td>
<td>0.38</td>
<td>8.4</td>
<td>42.4</td>
</tr>
<tr>
<td>2004-05</td>
<td>29.44</td>
<td>1.12</td>
<td>0.74</td>
<td>0.38</td>
<td>8.4</td>
<td>42.6</td>
</tr>
<tr>
<td>2005-06</td>
<td>31.97</td>
<td>1.45</td>
<td>0.55</td>
<td>0.51</td>
<td>11.4</td>
<td>43.3</td>
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<tr>
<td>2006-07</td>
<td>32.99</td>
<td>1.50</td>
<td>0.57</td>
<td>0.55</td>
<td>11.8</td>
<td>44.3</td>
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<tr>
<td>2007-08</td>
<td>34.06</td>
<td>1.55</td>
<td>0.58</td>
<td>0.60</td>
<td>12.2</td>
<td>45.3</td>
</tr>
<tr>
<td>2008-09</td>
<td>35.16</td>
<td>1.60</td>
<td>0.59</td>
<td>0.65</td>
<td>12.6</td>
<td>46.3</td>
</tr>
<tr>
<td>2009-10</td>
<td>36.30</td>
<td>1.66</td>
<td>0.60</td>
<td>0.71</td>
<td>13.0</td>
<td>47.4</td>
</tr>
</tbody>
</table>

Source: Pakistan Economic Survey, 2009-10
MARKETING SYSTEMS

- Live animals marketing
- Meat marketing
- Milk marketing
- Hides and skins marketing
- Wool marketing

Infrastructure
- Transportation
- Marketing Channels
- Pricing Mechanism
- Market Information System

Institutions
Policy
Legislation
Live Animals Markets and Abattoirs

**Live Animals Markets**
- Entry Fee large ruminant: Rs.20-90/A
- Small ruminant: Rs.10-20/A
- Contractual Period: 1-4 Years
- Contractual Amount: 1.5 – 50 million
- Inadequate Basic Facilities
- No Weighing Machine
- No Market Committee

**Abattoirs**
- Numbers are not sufficient
- Outdated and unhygienic conditions
- Lack of basic slaughtering facilities
- Rudimentary disposal system of byproducts
- Conventional flaying methods adopted
MARKETING OF LIVE ANIMAL SMALL RUMINANTS

- Producer/Farmer
  - Village Beopari
    - Livestock Markets (Con/CA)
      - Butchers/Retailers
        - Traders/WS
        - Exporter
      - Producer
        - 10%
        - 40%
        - 15%
        - 50%
        - 80%
        - 10%
        - 20%
        - 5%
        - 60%
        - 15%
        - 10%

Producer/Farmer

Traders/WS

Butchers/Retailers

Exporters

Producer

Village Beopari

Livestock Markets (Con/CA)
MILK MARKETING CHANNELS

- **Rural Producer (75%)**
  - 50% to Rural Commercial
  - 40% to Rural Subsistence

- **Peri Urban Producer (18%)**
  - 75% to Assembler

- **Urban Producer (7%)**
  - 5% to Retail Milk Shop

- **Assembler**
  - 10% to Processing Plants
  - 10% to Bakers Confectioners

- **Processing Plants**
  - 100% to Wholesale market

- **Retail Milk Shop**
  - 15% to Bakers Confectioners
  - 100% to Retail Store

- **Retail Store**
  - 100% to Consumers

- **Wholesale market**
  - 100% to Processing Plants

- **Consumers**
  - 100% to Retail Store

- **Bakers Confectioners**
  - 10% to Retail Store

- **Retail Store**
  - 100% to Consumers
MEAT MARKETING CHANNELS

- EXPORT Slaughter Houses (1%)
- OFFALS Retail Shops
- RS. HOUSE (49%)
- RETAILERS/Butchers
- WHOLESELLERS
- URBAN BUTCHERS (30%)
- Food Services/Supply
- Hotel/Restaurant
- CONSUMERS
- PROCESSING PLANTS
- EXPORTERS
- RURAL BUTCHERS (20%)
- Super Stores

Flowchart: 
- 70% from RS. HOUSE to WHOLESELLERS
- 90% from WHOLESELLERS to CONSUMERS
- 30% from RS. HOUSE to RETAILERS/Butchers
- 93% from RURAL BUTCHERS to Super Stores
- 2% from RETAILERS/Butchers to WHOLESELLERS
- 5% from WHOLESELLERS to CONSUMERS
- 3% from SUPER STORES to CONSUMERS
- 100% from PROCESSING PLANTS to EXPORTERS
- 100% from EXPORTERS to SUPER STORES
HIDES/SKIN MARKETING CHANNELS

SLAUGHTERHOUSE (30%)

FESTIVAL/QURBANI (10%)

BUTCHERS (60%)

ASSEMBLER

WHOLESALEERS / COMMISSION AGENT

PROCESSOR / TANNERIES
## PRICE AND PROFIT MARGINS

### Sale Prices Range

<table>
<thead>
<tr>
<th>Animal</th>
<th>Rs</th>
<th>__</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk Animal</td>
<td>65,000</td>
<td></td>
<td>120,000</td>
</tr>
<tr>
<td>Beef Animal</td>
<td>20,000</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>Mutton Animal</td>
<td>6,000</td>
<td></td>
<td>15,000</td>
</tr>
</tbody>
</table>

### Profit Range

<table>
<thead>
<tr>
<th>Animal</th>
<th>Rs</th>
<th>__</th>
<th>Rs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk Animal</td>
<td>2000</td>
<td></td>
<td>6,000</td>
</tr>
<tr>
<td>Beef Animal</td>
<td>1500</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Mutton Animal</td>
<td>500</td>
<td></td>
<td>1,500</td>
</tr>
</tbody>
</table>
## MILK PRICES

### Retail Milk Prices

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>UHT</td>
<td>Rs 75-80 per litre</td>
</tr>
<tr>
<td>Open Pasteurized</td>
<td>Rs 53-65 per litre</td>
</tr>
<tr>
<td>Fresh</td>
<td>Rs 35-50 per litre</td>
</tr>
</tbody>
</table>

### In Rural Areas

<table>
<thead>
<tr>
<th>Type</th>
<th>Price Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cow Milk</td>
<td>Rs 30-35 per litre</td>
</tr>
<tr>
<td>Buffalo</td>
<td>Rs 35-45 per litre</td>
</tr>
</tbody>
</table>
PRICE AND PROFIT MARGINS

Prices of Hide & Skin

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hide</td>
<td>Rs. 1500 – 2800</td>
</tr>
<tr>
<td>Skin</td>
<td>Rs. 300 – 600</td>
</tr>
</tbody>
</table>

Wholesaler’s Profit

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hide</td>
<td>Rs. 300-800</td>
</tr>
<tr>
<td>Skin</td>
<td>Rs. 100-250</td>
</tr>
</tbody>
</table>
ABATTOIR COST

Abattoir Fee per Animal

- Small Ruminants: Rs 10 - 20
- Large Ruminants: Rs 20 - 40

Slaughtering Charges per Animal

- Small Ruminants: Rs 30 - 50
- Large Ruminants: Rs 100 - 300
MARKETING CONSTRAINTS

- Traditional marketing systems
- Retail price structure for meats
- Inadequate marketing for milk producers
- Obsolete slaughter facilities, conservative butchering
- Poor quality of hide, skin and wool

Implications

- Limited investment in markets and other infrastructure
ISSUES, STRATEGIES AND POTENTIAL WAY FORWARD
# Marketing of Live Animals

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategy</th>
<th>Way Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate basic facilities</td>
<td>Channeling of Contractual money for provision of basic facilities</td>
<td>Sale of live animals on the basis of weight</td>
</tr>
<tr>
<td></td>
<td>Encouraging Pvt Sector for developing mkts with basic facilities</td>
<td>Private Sector</td>
</tr>
</tbody>
</table>
| Non-availability of specific transport & Overloading | Redesigning vehicles suitable for animal transport  
Awareness to traders | Reduction in losses  
Knowledge enhancement |
| Faulty pricing mechanism of meat animals | Enforcement of pricing by weight and need meat chilling | Cut and chilled meat - better quality |
| Smuggling to Afghanistan            | Regulatory coverage                                                      | Domestic supply stability             |
## MARKETING OF MEAT

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategy</th>
<th>Way Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlled retail price of meat causing slaughtering of unhealthy and old animals</td>
<td>Open price policy like chicken &amp; fish</td>
<td>Abolition of price fixation</td>
</tr>
<tr>
<td>Absence of meat grading and pricing by quality</td>
<td>Cut-based pricing under free mkt forces</td>
<td>Quality meat, cut based system</td>
</tr>
<tr>
<td>Primitive public abattoir</td>
<td>Encourage investment &amp; awareness for modernization</td>
<td>Quality meat</td>
</tr>
<tr>
<td>Illegal slaughtering</td>
<td>Strict compliance of the legal slaughtering</td>
<td>Certified meat</td>
</tr>
<tr>
<td>Lack of specialized skills in flaying &amp; meat handling</td>
<td>Awareness, Provision of institutional training &amp; Registration</td>
<td>Capacity building of butchers</td>
</tr>
<tr>
<td>Un-hygienic meat transportation &amp; sale</td>
<td>Awareness &amp; implementation of sanitary measures</td>
<td>Quality meat for better price</td>
</tr>
</tbody>
</table>
## MARKETING OF MILK

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategy</th>
<th>Way Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper milk collection system</td>
<td>Creation of milk producers’ associations</td>
<td>Improving Bargaining power</td>
</tr>
<tr>
<td>Un-hygienic milk handling &amp; adulteration</td>
<td>Awareness, Strict milk inspection system</td>
<td>Quality milk availability</td>
</tr>
<tr>
<td>Limited processing plants</td>
<td>Installation of milk processing Plants</td>
<td>Up scaling in processing</td>
</tr>
</tbody>
</table>
## Marketing of Hides & Skin

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategy</th>
<th>Way Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory treatment of hides and skins</td>
<td>Training of the butchers and traders</td>
<td>Improved quality hides/skins</td>
</tr>
<tr>
<td>High frequency of deterioration</td>
<td>Training of flayers</td>
<td>Improved quality hides/skins</td>
</tr>
<tr>
<td>Production of defective hide and skin</td>
<td>Awareness, Animal treatment for hide and skin diseases, strict ante mortem in slaughterhouses</td>
<td>Improved quality hides/skins</td>
</tr>
<tr>
<td>No initial grading (at butchers and slaughterhouse level)</td>
<td>Awareness and knowledge about grading</td>
<td>Lower losses &amp; better pricing</td>
</tr>
</tbody>
</table>
# MARKETING OF WOOL

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategy</th>
<th>Way Forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non availability of proper tools for shearing</td>
<td>Development of appropriate shearing tools</td>
<td>Quality improvement</td>
</tr>
<tr>
<td>Poor animal shearing system</td>
<td>Awareness, training of wool Shearer</td>
<td>Capacity building</td>
</tr>
<tr>
<td>Poor sorting and grading at farmers level</td>
<td>Awareness, training of farmers</td>
<td>Quality improvement &amp; better pricing</td>
</tr>
<tr>
<td>Absence of wool proper markets</td>
<td>Establishment of wool markets at small towns for increasing competition</td>
<td>Establishing wool marketing system</td>
</tr>
</tbody>
</table>
SCOPe FOR INVEsTMENt

• 36.30 billion liters of milk provide a promising enterprise, where only 3% is being processed

• Significant element of economies of scale exists resulting in cost reduction by 30 - 50 percent between small and large livestock herders

• Cost of milk production is favourable for mass scale milk collection and processing

• Huge consumer market exists
SCOPE FOR INVESTMENT

- 30.8 million buffaloes, 34.3 million cattle, 59.9 million goats and 27.80 million sheep are being maintained for milk and meat production
- 1.66 million ton of beef and 0.60 million ton of mutton is being produced annually
- Less than 5% is being processed and packed for local consumption and export purpose
- 7.67 million heads of beef animal and 16.93 million heads of mutton animals are available for strategic intervention in meat processing
- Same number of hides and skins are available for processing as value addition for leather goods
- Establishment of modern abattoirs for value addition of meat is required
- Establishment of leather tanning units is required
WAY FORWARD

Pilot Livestock Value Chain Development Scheme in Punjab
Investment in Pilot livestock Value Chain Development Scheme in Punjab

Geographical locations
- Six zones (Multinational, Cooperative, Private dairy, Both Multinational and private dairy, Wet market & special zone of Cholistan)

Partnership: PPP
- Input suppliers, livestock farmers, traders of livestock, processors and food retailers, government authorities
- Activities will be led by livestock farmers’ field schools for male and female both - KF, KWA, other NGOs in other districts

Beneficiary categories
- Farm and non-farm livestock herders, women and small livestock herders, livestock traders, processors and consumers.
- The total number of these stake holders would be about 1200 at each site times 6 sites will result into 7200 stake holders.
Project Components

• Selection and Identification of Sites and Potential Partners

• Establishment of livestock rural business hubs
  – Farmers’ organization
  – Input provision
  – Mal Muhafiz unit
  – installation of milk cooling tank
  – Livestock market

• Capacity building of livestock chain stakeholders
  – capacity building of dairy producer for addressing the need for productivity and quality improvement in milk
  – capacity building of meat raising farmer for addressing the need of productivity and quality in meat,
  – capacity building of other chain stakeholders for addressing the issue of milk collection, transportation, marketers and processors
  – specialized capacity building on food safety and quality grades and standards
Investment in Pilot livestock value chain development scheme in Punjab

• Research for Livestock Chain Development
  - Research on establishing a common milk and meat brand for “Pakistani Dairy” and “Halal meat”
  - Exploring strategy to capture more of the value added markets for process dairy products and meat products within Pakistan and for the export markets

• Workshops/ Seminars/ conference/ display
  - Chain stakeholders consultation workshop
  - Awareness seminars on chain development
  - Communication workshop at national level
Expected Benefits

• Ensure timely availability of quality inputs to livestock producers at their door step and livestock and livestock products sale

• Capacity building and training on knowledge and skill transfer will empower livestock farmer for the adoption of modern livestock and dairy production, management and handling technology, specialized training on food safety and standard packing processing

• These interventions will enhance livestock and dairy productivity and its quality and resultanty generate more income with higher milk and meat yield and better quality
Thanks
Livestock Production Constraints

- **Live Animals’ Production:**
  - Livestock farming is mainly traditional rather than an industry or commercialized business
  - Livestock farmers are mostly illiterate, unable to understand the due importance of factors like nutritive feeding, artificial insemination, Vaccination, etc.
  - Livestock extension services are still animal health oriented rather than production enhancing oriented
  - Marketing system not responsive to quality. It severely exploits the farmers, leaving little incentives for the farmers
  - Feeding patterns are based on grazing, fodder and crop byproducts
  - Formal lending institutions are less supportive

- **Potentials for Improvements:**
  - Rising prices of meat and milk offers production enhancing opportunities
  - Recent proliferation of processed milk marketing industries offer opportunities for enhancing milk productivity
  - Use of dairy value added items (yogurt, cream, cheese, etc.) in urban sectors has considerably increased compared to traditional *khoya*, ghee etc.
  - Livestock are sold on head basis and not on live weight basis
  - Inadequate and improper feeds and feeding management greatly limit optimal productivity
Constraints to Dairy Value Chain

- Production Constraints:
  - Inadequate/ineffective health cover
  - Poor quality nutrition
  - Wrong milking techniques that damages the teats,
  - Low milking yielding animals (buffaloes and cows)
  - Unfair milk price received by producers

- Marketing Constraints:
  - Dominance of loose milk in the marketing system
  - Consumers’ more consciousness in prices than quality
  - Severe and diversified range of adulteration

- Processing Constraints
  - Under utilization of installed capacity of the dairy plants
  - Small niche market for processed milk
  - Problem in procurement of raw milk at their price
  - High packaging and processing costs

- Consumption Constraints
  - No clear relationship between quality and price charged
  - Significantly high price of processed milk (particularly small packing) compared to loose milk
Increasing Consumption Trend

- Diversification of diets ⇒ meats, eggs and dairy products
- Population growth, urbanization and income growth
- Expected to continue-creating a veritable livestock revolution
- This represents new and expanding markets for small livestock producers
- Inappropriate policy and misallocation of investment resources could skew the distribution of benefits and opportunities
- ↑ demand for livestock products will lead to intensification of small holders’ food and feed production system and may provide an engine for sustainable livestock production