LIVESTOCK FUTURES - THE NEED TO LOOK AT ALTERNATIVES

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INDIA
• India’s genetically diverse livestock and poultry population are a product of its traditional livestock system

• Livestock sector provides a coping mechanism to deflect the vagaries of agriculture productivity.

• In rainfed areas the livestock contributes 40% in semi-arid and in arid areas upto 70% of the agricultural gross domestic product

• From 2001 onwards the contribution from livestock is more than the output of food crops to the national gross domestic product. (Source GOI)
• Distribution of livestock is more equitable than that of land.

• In 2003 marginal farm households (≤1.0 hectare of land) comprised 48% of the rural households.

• They owned more than 50% of the country’s cattle and buffalo and 66% of small animals and poultry but own only 24% of the land.
RAINFED LIVESTOCK NETWORK
STUDY AREA

- States of Rajasthan, Gujarat, Madhya Pradesh, Maharashtra, Andhra Pradesh, Karnataka, Odisha
- 1000 house holds studied
## ASSESSMENT OF LIVESTOCK FEED SOURCES

<table>
<thead>
<tr>
<th></th>
<th>CPR’S</th>
<th>CROP RES.</th>
<th>PURCHASED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARID</td>
<td>66</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>SEMI-ARID</td>
<td>35</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>SUB-HUMID</td>
<td>67</td>
<td>32</td>
<td>1</td>
</tr>
</tbody>
</table>

CPR’S- Common property resources
CROP RES.- Crop residues
COMPARISON OF LIVESTOCK NUMBERS

1987

- Goats: 57.3m (24%)
- Sheep: 38.4m (16%)
- Buffaloes: 41.1m (17%)
- Crossbred cattle: 3.1m (1%)
- Indigenous cattle: 98.4m (40%)
- Others: 4.3m (2%)

2007

- Goats: 68.8m (25%)
- Sheep: 53.7m (20%)
- Buffaloes: 53.6m (20%)
- Crossbred cattle: 11.65m (4%)
- Indigenous cattle: 80.5m (30%)
- Others: 2.99m (1%)
TRENDS FROM ABOVE

- Native cattle reducing
- Replaced by Buffaloes
- Major increase in Small ruminants
- Marginal increase in terms of livestock units (0.14% per year)
# LIMITED LANDUSE PATTERN CHANGES FROM 1981 TO 2001 (million hectares)

<table>
<thead>
<tr>
<th>Landuse Type</th>
<th>Reduction/Increase (million hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest</td>
<td>0.6</td>
</tr>
<tr>
<td>Permanent Pastures</td>
<td>0.9</td>
</tr>
<tr>
<td>Non Agriculture, Wasteland etc.</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total Reduction</strong></td>
<td>2.3</td>
</tr>
<tr>
<td>Fallow</td>
<td>0.4</td>
</tr>
<tr>
<td>Current Fallow</td>
<td>1.4</td>
</tr>
<tr>
<td><strong>Total Increase</strong></td>
<td>1.8</td>
</tr>
</tbody>
</table>

*Landuse data - Ministry of agriculture, Government of India*
TYPE OF LIVESTOCK KEEPERS

- Sheep—by traditional rearers
- Cattle and buffaloes—Traditional and new communities have entered
- Goats—traditional but mainly new communities have entered
DRIVERS IN LIVESTOCK REARING

MILK—market demand and increasing selling price—regular cash flow

MEAT—market demand and increasing selling price—can be instantly cashed when needed
TRENDS OBSERVED IN LIVESTOCK REARING

• MILK – SHIFT FROM INDIGENOUS TO CROSSBRED CATTLE TO BUFFALOES

• SHEEP- SHORTER LAMBING INTERVALS, LOWER AGE AT MARKET & HEAVIER LAMBS,

• GOATS- NUMBER OF GOAT REARERS INCREASED
CONTRIBUTION OF PASTORALISTS AND SMALL LIVESTOCK KEEPERS

• Almost 100% of non poultry meat – small ruminants 72m. Sheep and 141m. Goats (contribute 52% of the meat), all in the extensive system-Where is the land to grow fodder to put them in the intensive system
### MILK PRODUCTION TRENDS

<table>
<thead>
<tr>
<th>Year</th>
<th>Indigenous Cattle</th>
<th>Exotic / CB</th>
<th>Total Buffaloes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. lactating (000)</td>
<td>Milk YIELD/DAY (Kg)</td>
<td>No. lactating (000)</td>
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<tr>
<td>1990-91</td>
<td>27097</td>
<td>1.316</td>
<td>2534</td>
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<tr>
<td>1995-96</td>
<td>27050</td>
<td>1.720</td>
<td>4913</td>
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<tr>
<td>2000-01</td>
<td>26872</td>
<td>1.919</td>
<td>6011</td>
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<tr>
<td>2005-06</td>
<td>28370</td>
<td>1.970</td>
<td>8216</td>
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<tr>
<td>2010-11</td>
<td>30945</td>
<td>2.219</td>
<td>11751</td>
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LESSONS TO LEARN

• LEARN FROM LIVESTOCK KEEPERS
• WORK WITHIN THE GENETIC NICHES
• BUILD ON THE RIGHTS ON COMMON PROPERTY RESOURCES-rights, tenures etc.
• FIND WAYS TO SUPPORT THEIR EFFORTS

THANK YOU