BREEDING POLICY
Of
small ruminants
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SHEEP BREEDING IN PUNJAB
• Sheep population in Punjab is 6.36 million with a positive trend in population growth.
• In 1996 sheep population was 6.14 millions which increased to 6.36 millions in 2006.
• Punjab has 24% of the national sheep population.
• Mutton production is 5.3 million tones while wool amounts to 9.5 thousand tones.
• Major sheep breeds are Lohi, Thalli, Kajli, Buchi and Sipli.
• Apart from these breeds Salt Range, Kachhi and Khadali are also found in the province.
• All these breeds produce coarse wool.

SHEEP BREEDING IN PUNJAB (cont..)
• One or more than one flock of Lohi, Thalli, Kajli, Buchi, Sipli and Kachhi are being maintained at Government Livestock Farms.
• Research & Development Centre Rakh Khairewala District Layyah is the major institutional facility for sheep and goat research.
• Directorate of Small Ruminants Punjab Multan provides veterinary extension services to over 2.0 million heads of Small Ruminants in four divisions (Multan, Bahawalpur, D.G Khan, Sargodha) and 42 tehsils of the Punjab Province.

OBJECTIVES OF THE PROPOSED BREEDING POLICY FOR SHEEP IN PUNJAB
• Improving mutton, Wool and other economic characteristics in existing sheep breeds through selective breeding in a multi-tier breeding structure of open nuclei.
• Training & education of farmers on practicing culling of uneconomical animals within a breeding stock.
• Encouraging pure breeding of animals within their respective home-tract to improve production quality for local and export markets.
### ACTION PLAN FOR SHEEP BREEDING

<table>
<thead>
<tr>
<th>Objective</th>
<th>Strategy</th>
<th>Program</th>
<th>Target/Timeframe</th>
<th>Action by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving Mutton and Wool Production</td>
<td>Selective breeding</td>
<td>Introduction of artificial insemination service</td>
<td>- A.I. practice to be started in one nucleus flock at the station level in the 1st stage after the introduction of artificial insemination to other flocks and in multipurpose in later stage.</td>
<td>DSR / LPRI / DLF (B.I)</td>
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<tr>
<td></td>
<td></td>
<td>Exchange of outstanding males among nucleus flocks</td>
<td>- Best recorded and evaluated males to be exchanged.</td>
<td>DLF / DSR / DLOs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of Artificial Breeding Farms</td>
<td>- Development of artificial breeding farms to be started at DSR / LPRI / DLF (B.I).</td>
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<tr>
<td></td>
<td></td>
<td>Improvement of artificial insemination service</td>
<td>- Improvement of artificial insemination service to be started at DSR / LPRI / DLF (B.I).</td>
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<tr>
<td></td>
<td></td>
<td>Conservation &amp; Genetic Improvement of native pure breeds of sheep</td>
<td>- Conservation &amp; genetic improvement of native pure breeds of sheep.</td>
<td>DSR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthening of Woolen Industry</td>
<td>- Strengthening of woolen industry.</td>
<td>DSR / DOLF / DLOs</td>
</tr>
</tbody>
</table>

### Objective

- Improving Mutton and Wool Production
- Selective breeding

### Program

- Establishment of open nucleus flocks of different breeds at Government Livestock Farms.
- Selection of outstanding nucleus flocks of different breeds at Government Livestock Farms.
- Development of artificial breeding farms.
- Improvement of artificial insemination services.
- Conservation & genetic improvement of native pure breeds of sheep.

### Target/Timeframe

- Improvement of artificial insemination services.
- Development of artificial breeding farms.
- Improvement of artificial insemination services.
- Conservation & genetic improvement of native pure breeds of sheep.

### Action by

- DSR / DOLF / RCCSC / LPRI / BRI
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**GOAT BREEDING IN PUNJAB**

- Goat population in Punjab is 19.83 millions which is highest (37%) amongst all the provinces. (Livestock census 2006).
- It was 10.76 and 15.30 millions in 1986 and 1996 census, respectively. (142.4% @ 3-4% annually)
- Main goat breeds are Beetal, Teddy, Nachi and Dera Din Panah (DDP).
- Beetal with bigger size and milk production potential to Nachi and D.D.P, fetches maximum price for sacrificial purpose and is also reared in other provinces for raising as purebred as well as for cross breeding.
- The primary purpose of goat raising is production of goat meat.
- Milk is also of importance in Beetal, Nachi and DDP.

**OBJECTIVES OF THE PROPOSED BREEDING POLICY FOR GOAT IN PUNJAB**

- Improving goat meat and other economic characteristics of existing goat breeds through selective breeding in a multi-tier breeding structure.
- Training & education of farmers on practicing culling of uneconomical animals.
- Encouraging pure breeding of animals within a home-tract to improve production quality for local and export markets.
**ACTION PLAN FOR GOAT BREEDING**

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</thead>
<tbody>
<tr>
<td>Improving meat production</td>
<td>Selective breeding</td>
<td>Breeding</td>
<td>50% survey of medium and large scale flocks after approval of breeding policy in next year</td>
<td>DSR/DLOs</td>
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<td></td>
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<td>Multi-purpose</td>
<td>Nucleus and multi-purpose flocks to be maintained at institutional level and with the progressive breeders.</td>
<td>DSR/DLF/DLOs</td>
</tr>
<tr>
<td></td>
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<td>Fortnightly milk recording</td>
<td>Fortnightly milk recording in nucleus and multiplier flocks</td>
<td>DSR/DLF/DLOs</td>
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<tr>
<td></td>
<td></td>
<td>Establishment of nucleus flocks</td>
<td>Establishment of nucleus flocks</td>
<td>DSR/DLF/DLOs</td>
</tr>
</tbody>
</table>

**DATA SHOWING DESIRABLE TRAITS OF DIFFERENT GOAT BREEDS IN PUNJAB**

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Breed</th>
<th>Ave. Birth Weight (Kg)</th>
<th>Ave. Weaning Weight (Kg)</th>
<th>Ave. Adult Weight (Kg)</th>
<th>Twinning %</th>
<th>Ave. Milk Yield (Lit. Day)</th>
<th>Ave. Hair Yield (Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BEETA</td>
<td>3.6</td>
<td>18.0</td>
<td>66.0</td>
<td>44.0</td>
<td>56.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>NACHI</td>
<td>3.5</td>
<td>20.0</td>
<td>67.0</td>
<td>46.0</td>
<td>27.0</td>
<td>3.0</td>
</tr>
<tr>
<td>3</td>
<td>D.D.P</td>
<td>4.0</td>
<td>20.0</td>
<td>69.0</td>
<td>50.0</td>
<td>31.0</td>
<td>3.0</td>
</tr>
<tr>
<td>4</td>
<td>TEDDY</td>
<td>1.5</td>
<td>10.0</td>
<td>42.0</td>
<td>27.0</td>
<td>10 to 15 %</td>
<td>-</td>
</tr>
</tbody>
</table>

**Objectives**

- Selective breeding
- Conservation & genetic improvement of native pure breeds of goat
- Development of Breeder / Farmer Association
- Development of Breeder / Farmer Association
- Improvement of meat
- Breeding of (R&D) Rash Khairewala, LES Faisalpur, Allahdad, Rakh Ghulaman and LPRI Bahadar Nagar.
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