FORWORD

Goat rearing is the main source of economy of the poor & weaker section of the society. State earns remarkable revenue from mutton, milk & other products. According to Livestock Census, 2007, there are 218.81 lac goats in Rajasthan. Sirohi, Marwari, Jhakrana, Barbari & Jamnapari are the main goat breeds of the state. Out of them Sirohi, Marwari & Jhakrana have their home tract in Rajasthan. Goat rearing has resulted in economic development of animal breeders, but enhanced production of goats can only be achieved through scientific breeding & a policy suitable to local climatic conditions and need of local animal breeders. The main aim of goat breeding policy is to enhance the productivity of local goats through genetic up gradation & selection breeding.

Looking to the great scope of development and technological advancement in the Animal Husbandry sector, a new breeding policy of goat has been prepared. The breeding policy has been prepared after considering comments received from field officers and other stakeholders. It is expected that the directives laid down in breeding policy would help to further improve the goat husbandry in the state and socio economic status of the breeders through increased productivity of their animals.

Director, Animal Husbandry Department,
Rajasthan, Jaipur

Principal Secretary
Animal Husbandry Deptt.
Rajasthan, Jaipur
GOAT BREEDING POLICY

1. **INTRODUCTION:**

   Rajasthan has 218.81 lacs Goat as per 2007 livestock census, which play an important role in the state economy. A vast majority of the poor and back ward section of the society is dependent on the Goat rearing for livelihood. The state earns annually remarkable revenue from mutton, milk and other products. Cost economy and less expensive housing make the sheep economically viable proposition for the poor people. The size of flock varies from 3 to 5, to as high as 50 goats. The marginal farmers and landless laborers are the poorest in rural society which mostly rear the goat. A majority of farmers rearing goat are maintaining them at subsistence level.

   About ten lac households in the state are engaged in rearing of small ruminants (sheep, goats and rabbits) and other allied activities. The main reasons for low productivity are poor exploitation of genetic potential of indigenous animals, low absorption of available technology, inadequate resource of feed and fodder, insufficient health cover, inadequate marketing & credit support etc.

2. **Major Challenges :-**

   - Shrinkage of pastureland.
   - Lack of suitable marketing infrastructure and industry for utilization of wool and meat in the state.
   - Quality of goat.

3. **Aim :-**

   The policy consciously aims at fostering the development of Goat by increasing their production in terms of meat & milk in the state to improve upon the economic status of the rural livestock owners.

4. **Objectives :-**

   Through the creation of breeding policy for goat, following objectives are being proposed:-

   - Genetic improvement for production traits of indigenous breeds of goat through selective breeding and upgrading.
   - Rearing and distribution of improved bucks.
   - Distribution of bucks after testing them for important sexually transmitted diseases.
   - Conservation of important indigenous breeds.
   - Castration and culling of lower body weight and less productive goat and its subsequent replacement by the elite goats in a phased manner.

5. **Livestock Population :-**

   Rajasthan has 218.81 lacs Goat as per 2007 livestock census. Five important breeds of goat are located in the state, viz. Sirohi, Marwari, Jhakrana, Barbari and Jamnapari.
6. Native Goat Breeds, Home Tract and their Average Production:

<table>
<thead>
<tr>
<th>Breed</th>
<th>Home Tract (Districts)</th>
<th>Av. Milk Prod’n. [Kg./ Day]</th>
<th>Type of Animal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jhakrana</td>
<td>Alwar</td>
<td>1 – 1.5</td>
<td>Milch Type</td>
</tr>
<tr>
<td>Sirohi</td>
<td>Sirohi, Jalore, Ajmer Nagour, Udaipur, Rajsamand, Bhilwara, Dungarpur, Banswara</td>
<td>0.75 – 1.0</td>
<td>Dual Type</td>
</tr>
<tr>
<td>Marwari</td>
<td>Jaisalmer, Jodhpur, Barmer, Jalore, Pali</td>
<td>0.50 – 0.75</td>
<td>Meat Type</td>
</tr>
</tbody>
</table>

7. Past Experience

The current Goat population of Rajasthan is 218.81 lacs, which is about 12% of the total population of goats in the country.

Five important breeds of goat are located in the state, viz. Sirohi, Marwari, Jhakrana, Barbari and Jamnapari.

Jhakrana and Sirohi are in demand in other parts of the country as improver of stock.

In 1981, crossbreeding of Sirohi goats with Alpine and Toggenberg was initiated by the Government of Rajasthan in collaboration with Swiss Government under “Indo-Swiss Goat Development and Fodder Production Project”, in the Semi-arid conditions of Rajasthan. Although there was an increase in meat and milk production, but mortality rate was increased up to 25 percent, along with new emerging diseases in crossbred goat population. On the basis of experience gained out of this project ICAR had banned crossbreeding of goat with exotic breed animals.

Due to unsatisfactory results of crossbreeding, improvement of goat flocks was attempted using Sirohi breed. Presently Sirohi bucks are being reared at Government calf rearing station, Ramsar District Ajmer, after procuring elite kids from their native tract. The breed has shown satisfactory performance in the area with enhanced production. Therefore it is realized that production of goat be increased through selective breeding.

8. Breeding Policy for Goat:

- Selective breeding and up gradation of Sirohi, Marwari, Jhakrana, Barbari and Jamnapari breeds for higher body weight & milk production
- Non-descript goats will be upgraded.
- The Jhakrana breed will be conserved.
- Nondescript males will be castrated to avoid indiscriminate breeding of goat.
- All possible efforts will be made to avoid inbreeding in the flocks.
- No sire will be used for more then 2 years in the same flock.
- To preserve and propagate well defined indigenous breeds in home tracts bucks will be distributed in their home tract only.
9. **Selection of Bucks:**

The bucks will be selected on the basis of phenotypic breed characters along with body weight minimum 30 Kg at the age of 9 to 12 months.

The minimum standards for selection of bucks for natural service are prescribed as follows:

<table>
<thead>
<tr>
<th>Breed</th>
<th>Minimum Dam’s yield per lactation (Litres per 150 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jhakrana</td>
<td>150</td>
</tr>
<tr>
<td>Marwari</td>
<td>100</td>
</tr>
<tr>
<td>Sirohi</td>
<td>130</td>
</tr>
<tr>
<td>Barbari</td>
<td>107</td>
</tr>
<tr>
<td>Jamnapari</td>
<td>200</td>
</tr>
</tbody>
</table>

### DISTRICTWISE GOAT BREEDING POLICY

#### JAIPUR RANGE

<table>
<thead>
<tr>
<th>S.no.</th>
<th>District</th>
<th>Goat population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jaipur</td>
<td>1009212</td>
<td>Sirohi, Barbari</td>
<td>Sirohi, Barbari</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Sikar</td>
<td>1142930</td>
<td>Marwari, Sirohi, Jhakrana</td>
<td>Marwari, Sirohi, Jhakrana</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Jhunjhunu</td>
<td>640214</td>
<td>Marwari, Sirohi, Jhakrana</td>
<td>Marwari, Sirohi, Jhakrana</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Alwar</td>
<td>715581</td>
<td>Jhakrana, Jamnapari</td>
<td>Jhakrana, Jamnapari</td>
<td>Both</td>
</tr>
<tr>
<td>5</td>
<td>Dausa</td>
<td>353596</td>
<td>Sirohi, Jamnapari, Non descript</td>
<td>Sirohi, Jamnapari</td>
<td>Both</td>
</tr>
</tbody>
</table>

#### BIKANER RANGE

<table>
<thead>
<tr>
<th>S.no.</th>
<th>District</th>
<th>Goat population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bikaner</td>
<td>943591</td>
<td>Non descript, Marwari</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Sriganganagar</td>
<td>362065</td>
<td>Non descript, Marwari</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Hanumangarh</td>
<td>277612</td>
<td>Non descript, Marwari</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Churu</td>
<td>919581</td>
<td>Non descript, Marwari, Sirohi</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
</tbody>
</table>
### JODHPUR RANGE

<table>
<thead>
<tr>
<th>S.no.</th>
<th>District</th>
<th>Goat Population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jodhpur</td>
<td>1439505</td>
<td>Marwari</td>
<td>Marwari</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Jaisalmer</td>
<td>1132856</td>
<td>Marwari</td>
<td>Marwari</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Barmer</td>
<td>2228415</td>
<td>Marwari</td>
<td>Marwari</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Jalore</td>
<td>547858</td>
<td>Marwari, Sirohi</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>5</td>
<td>Sirohi</td>
<td>342738</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>6</td>
<td>Pali</td>
<td>700183</td>
<td>Marwari, Sirohi</td>
<td>Marwari, Sirohi</td>
<td>Both</td>
</tr>
</tbody>
</table>

### UDAIPUR RANGE

<table>
<thead>
<tr>
<th>S.no.</th>
<th>District</th>
<th>Goat Population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Udaipur</td>
<td>1220165</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Rajsamand</td>
<td>522663</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Banswara</td>
<td>464636</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Dungarpur</td>
<td>391447</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>5</td>
<td>Chittorgarh</td>
<td>686401</td>
<td>Sirohi, Sirohi</td>
<td>Sirohi, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>6</td>
<td>Pratapgarh</td>
<td>253370</td>
<td>Sirohi, Sirohi</td>
<td>Sirohi, Sirohi</td>
<td>Both</td>
</tr>
</tbody>
</table>

### AJMER RANGE

<table>
<thead>
<tr>
<th>S.no.</th>
<th>District</th>
<th>Goat Population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ajmer</td>
<td>772258</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Nagaur</td>
<td>1437087</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Bhilwara</td>
<td>173218</td>
<td>Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Tonk</td>
<td>397418</td>
<td>Non descript, Sirohi</td>
<td>Sirohi, Barbari</td>
<td>Both</td>
</tr>
</tbody>
</table>

### KOTA RANGE

<table>
<thead>
<tr>
<th>S. no.</th>
<th>District</th>
<th>Goat population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kota</td>
<td>216080</td>
<td>Non descript, Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Baran</td>
<td>272389</td>
<td>Non descript, Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Bundi</td>
<td>369245</td>
<td>Non descript, Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Jhalawar</td>
<td>380459</td>
<td>Non descript, Sirohi</td>
<td>Sirohi</td>
<td>Both</td>
</tr>
</tbody>
</table>
BHARATPUR RANGE

<table>
<thead>
<tr>
<th>S. no.</th>
<th>District</th>
<th>Goat population</th>
<th>Available breed</th>
<th>Proposed breed for breeding</th>
<th>Purpose for which to be reared (mutton, milk or both)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bharatpur</td>
<td>222735</td>
<td>Sirohi, Jamnapari, Barbari</td>
<td>Sirohi, Jamnapari, Barbari</td>
<td>Both</td>
</tr>
<tr>
<td>2</td>
<td>Dholpur</td>
<td>150804</td>
<td>Non descript, Sirohi</td>
<td>Jamnapari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>3</td>
<td>Karauli</td>
<td>389930</td>
<td>Non descript, Sirohi</td>
<td>Jamnapari, Sirohi</td>
<td>Both</td>
</tr>
<tr>
<td>4</td>
<td>Sawai Madhopur</td>
<td>359051</td>
<td>Jamnapari, Barbari, Sirohi</td>
<td>Jamnapari, Barbari, Sirohi</td>
<td>Both</td>
</tr>
</tbody>
</table>

Note: Population shown in column number 3 is as per Livestock census, 2007.

10. **Area of operation** :-
- The various agencies involved in the breeding programme will work in their respective area of operation.
- Irrespective of operating agencies, the breeding policy and other norms prescribed herewith will be strictly applicable to all operators.

11. **Records and Returns** :-
- Proper records of distributed bucks will be kept by the goat rearing farm and at district head quarter.
- Regular follow up and monitoring programme will be carried out for scientific evaluation by all agencies engaged in breeding operation in the state.

- On the basis of the objectives achieved through execution of the above policy and experiences gained therein regarding limitations and constraints, the above breeding policy may be reviewed after five years of implementation or whenever required.
- Whenever the breed wise livestock census is made available, the above breeding policy will be reviewed, if required.
- The university and CSWRI experts will be consulted regularly to evaluate and advice on the implementation of the programme and suggest corrective measures.
- Progressive goat rearers will be registered by the concerned veterinary institutions at the panchayat level, record of which will be kept by the Deputy Director of the district. Department will provide technical support to those progressive goat rearers.