

# All India Coordinated Research Project on Goat Improvement

## **INTRODUCTION :**

The All India Coordinated Research Project on Goats was initiated during the IV<sup>th</sup> Five Year Plan with the main objective to develop new genotypes involving crossbreeding of native goat breeds with high yielding exotic breeds in order to improve the efficiency of production of milk, meat and fibre. This programme continued upto VII<sup>th</sup> Five Year Plan. With the experience gained and information generated, it was considered necessary to improve the native goat breeds, which are well adapted to the local environment and managemental systems in their natural habitat. The present scheme on Goat Improvement was, therefore, conceived and initiated during IX<sup>th</sup> Five year plan with the main emphasis on improvement of goats involving farmer's flock in the hometract of different goats breeds and selection within the breed. The programme was based on involving the flocks maintained at the Institutional farms nucleus herd) and village flocks maintained by the farmers. The farm units consisting of Institutional flocks maintained under organized farm conditions include Jamunapari, Barbari and Sirohi breeds. Field units are based on the flocks owned by the farmers maintained under village management system in the native home tracts and include Jamunapari, Marwari, Sirohi, Sangamneri, Surti, Black Bengal, Malabari and Ganjam breeds. During XI<sup>th</sup> Plan five more field units on different goat breeds viz. Black Bengal, Osmanabadi, Gaddi, Assam Hill and Changthangi has been included and the technical programme was also modified.

## **Farm based units :**

### **Objectives:**

1. To estimate genetic variance of economic traits in goats.
2. To estimate breeding value of males and females.
3. In-situ/ex-situ conservation of elite germplasm and its effective utilization.
4. To estimate production economics of goats under farm conditions.
5. To validate farm based goat production technologies under field conditions.

### **Technical Programme:**

1. Each unit will maintain 200-300 breedable does and 10 bucks under semi-intensive system of management.
2. Selection of males and females will be made on the basis of 6 months body weight in small breeds (Black Bengal) and 9 months body weight in medium and large breeds.
3. Selected of females will also be done on the basis of age and weight at first kidding.
4. Important production data like body weight at different age group (3, 6, 9 and 12 months), milk yield, kidding weight, age and weight at first kidding to be recorded.
5. Culling will be done on the basis of selection criteria adopted for selection of the does.
6. Feedlot studies will be conducted by the nutrition component worker for estimating FCE and carcass characteristics in 10 males upto 6, 9 & 12 months of age.

7. Disease pattern and control measures will be undertaken by the goat health component worker.
8. Selected superior sires will be maintained as the elite germplasm and 500 doses of semen of each elite buck will be stored in the Semen Bank by the reproduction component worker.
9. Superior sires will be distributed for improving the production of goats in the farmers' flocks. Semen of all the bucks will be tested for quality before use for breeding.
10. Selection differential for body weight to be estimated.
11. Economics of goat rearing will be analysed in collaboration with NCAP, Delhi.

**Field based units:**

**Objectives:**

1. To assess the production performance of goat breeds in farmer's flocks under village management system and improve the germplasm through selection.
2. To evaluate the socio-economic status of goat breeders and the economics of goat production in farmers flock.
3. To disseminate the pro-poor goat based technologies under field conditions and assessment of their impact on goat production.

**Technical Programme:**

1. The performance recording on growth, milk yield, reproduction, health etc. will be done separately for each group and reporting will be made accordingly.
2. Each unit will maintain at least 4 Centres having at least 600 breedable does under the coverage.
3. Selection of males and females will be made on the basis of 6 months body weight in small breeds (Black Bengal) and 9 months body weight in medium and large breeds.
4. Multiple birth born kids will be preferred over single born kids in the selection of future bucks.
5. Semen Bank will be established by each Unit to store at least 1000 doses of semen of each elite buck available in the field area to promote ex-situ conservation of the breed and 500 semen doses to be sent to NBAGR, Karnal.
6. The socio-economic studies will be undertaken and viability of goat rearing will be worked out.
7. Strategic supplementary feeding schedule will be followed to improve the nutritional level of the goats.
8. Health coverage will be provided to all the goats in the project area in collaboration with State Animal Husbandry Department.
9. Marketing aspects of live goats and goat products viz. meat, milk, skin, hair and manure will be studied.
10. Efforts will be made to form goat breeder's societies, cooperative societies and to register the goat flocks in the breeding tract of the respective breeds.

## COORDINATING UNIT

The coordinating unit of the AICRP on goat improvement is located at Central Institute for Research on Goats, Makhdoom, Farah, Mathura. The Project is coordinated by the Director of the Institute. However, a principal scientist is nominated as Incharge P.C. Cell to support the Director in proper coordination of the administrative, technical and financial matters of the project. The location of different units has been depicted in Table –1.

**TABLE –1: Ongoing Projects under AICRP on Goat Improvement during XI Five Year Plan**

Sl. No.	Name of the Unit	Location	Utility
<b>From X Plan :</b>			
1.	Jamunapari Farm Unit	CIRG, Makhdoom	Milk & Meat
2.	Barbari Farm Unit	CIRG, Makhdoom	Milk & Meat
3.	Sirohi Farm Unit	CSWRI, Avikanagar (Raj.)	Milk & Meat
4.	Marwari Field Unit	R.A.U. Bikaner (Raj.)	Meat
5.	Black Bengal Field Unit	WBUVS & F, Kolkata	Meat
6.	Ganjam Field Unit	OUA & T, Bhubaneswar	Meat
7.	Sangamneri Field Unit	MPKV, Rahuri (MH)	Meat & Milk
8.	Surti Field Unit	N.A.U. Navsari (Gujarat)	Milk & Meat
9.	Malabari Field Unit	K.A.U. Trichur (Kerala)	Meat & Milk
10.	Sirohi Field Unit	M.P.U.A & T., Udaipur (Raj.)	Meat & Milk
<b>New Units approved during XI Plan :</b>			
1.	Black Bengal Field Unit	BAU, Ranchi (Jharkhand)	Meat
2.	Assam Hill Field Unit	A.A.U. Guwahati (Assam)	Meat
3.	Gaddi Field Unit	HPKC, Palampur (HP)	Meat & Fibre
4.	Osmanabadi Unit	NARI, Phaltan (MH)	Meat & Milk
5.	Changthangi Unit*	DRDO, Leh (J&K)	Pashmina & Meat

\* This unit has not been started yet.