

# AICRP - GOATS

## Objectives

1. To enhance productivity of Pantja goat in their habitat.
2. To develop germplasm resource centers for Pantja goats.
3. To validate and implement breeding, feeding and health control technologies in the field to improve goat production and health.
4. Capacity building of stakeholders and goat keepers for sustainable and profitable goat husbandry.
5. To determine role of goat husbandry in livelihood and food security of goat keepers.

Presently, the project is operational in 5 clusters of U.S.Nagar and Nanintal districts, covering a total of 60 villages and 179 households, maintaining 3,000 registered Pantja goats. The program is being monitored from Pantnagar where a nucleus flock of Pantja goats is maintained.

## 1. Significant Achievements:

- **Establishment of Open Nucleus Flock of Pantja goats at Pantnagar** – Presently 40 bucks, 80 does and 32 kids are maintained in this flock. Purpose of this flock is to induct quality germplasm from breeding



tract, evaluate the animals raised and then make them available to the custodian beneficiaries for propagation and genetic improvement of Pantja goats. So far, 130 elite Pantja bucks have been distributed for this purpose.

2. **Creation of facility for Natural Service-**  
In order to provide further impetus to the mandate of the project this unique facility has been created at Pantnagar. So far, more than 250 goats have been served at the token charge of Rs.5 per service.



3. **Curbing undesirable breeding in the project area-** in order to maximize use of supplied elite breeding males a drive to castrate the roaming scrub bucks was launched under this drive under this exercise more than 201 scrub bucks were castrated.



4. **Multiplication of superior germplasm-** breeding of goats with the supplied Pantja bucks at the doors of beneficiaries has resulted in to the birth of 2,395 kids. These kids will act as assets on maturing and will provide economic support to the famers.
5. **Maintaining health status of goats in the project area-** Various inputs like mineral mixture, goat feed, deworming, medicines, vaccines, lime, feeding bowls, first aid kits, dips, etc. have been regularly provided to beneficiaries. This has resulting into drastic



reduction in morbidity (from 45.7 to 29.8%) and mortality (from 14.5 to 7.1%) in the project area.

6. **Performance of Pantja goats-** Age at first kidding, weight at first kidding, first kidding interval, first service period and lactation period in Pantja goats were  $430.0 \pm 6.1$  days,  $20.9 \pm 0.2$  kg,  $252.8 \pm 5.9$  days,  $102.5 \pm 6.2$  days,  $117.7 \pm 2.5$  days, respectively. Singlet, twin, triplet and kidding rates were 47.8, 49.5, 2.7 and 155%, respectively.
7. **Capacity building** – Goats are the poor men's cow. The poor goat-keepers require scientific know how to raise goats for maximum economic returns. A total of 1,033 goat keepers were trained in 19 on-farm and off-farm training programs. The visiting goat keepers had access to various novel technologies developed at Pantnagar, viz. elevated slatted platform, kids' cradle, kids' brooding chamber, seeping benches,





dual feeders and silvi-pasture. This has resulted into adoption of better husbandry practices to a very large extent.

## 2. Research Publications:

1. Indian J. Anim. Prod. Mgmt., 24 (3-4):43-45.
2. Indian J. Anim. Prod. Mgmt. 26 (1-2): 105-107.
3. Indian J. Anim. Prod. Mgmt., 27 (3-4): 130-132.
4. Indian J. Small Ruminants. 17 (1):128-129.
5. Indian J. Anim. Prod. Mgmt. 28 (1-2) 56-58.
6. Int. J. Basic and Applied Res. 12 (3):419-422.
7. Int. J. Basic Applied Res. 12 (3):423-424.
8. Indian J. Anim. Prod. Mgmt. 32 (3-4): 166-170.
9. Indian J. Anim. Prod. Mgmt. 32 (3-4):166-173.
10. J. Nat. Res. Dev. 12 (2):1-5.
11. Indian J. Traditional Knowledge. 17 (1): 155-161.
12. Indian J. Anim. Prod. Mgmt. 32 (3-4): 161-165.

13. Indian J. Anim. Res.:10.18805/ ijar.B-3489
14. Indian J. Livestock Res. 7 (10): 71-79.
15. Bhartiya Krishi Anushandhan Patrika. 32 (3):228-233.
16. Bhartiya Krishi Anushandhan Patrika. 32 (4):300-304.
17. Indian J. Small Rum., 24 (1): 146-149.
18. J. Ento. Zoo. Studies. 6 (3): 628-631.

### 3. Thesis Research:

1. Khare, P. (2005), "Studies on the effect of certain management intervention on well being of goats under semi-intensive system of rearing". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
2. Verma, P.K. (2008), "Studies on physical and performance traits of local (Pantja) goats of udham singh nagar district of Uttarakhand." MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
3. Najeebullah (2011), "Study on some haematological and carcass traits in local pantja goat wethers." MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
4. Patni, M. (2014), "Study on libido scrotal morphology and semen biology in the local Pantja bucks". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
5. Shail Nidhi (2014), "A study on certain physico-biochemical attributes of Pantja buck semen". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
6. Sastya, S. (2016), "Studies on evaluation of efficacy of herbal plants against gastrointestinal nematodosis in goats". MVSc. (Parasitology) Thesis, GBPUA&T, Pantnagar.
7. Pandey, M. (2017), "A study on some physical and biochemical properties of urine collected from Pantja goats". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
8. Khadda, B.S. (2017), "Study on various goat production system in tarai region with special

reference to Pantja goats". Ph. D (LPM) Thesis, GBPUA&T, Pantnagar.

9. Thapiyal, P. (2017), "Effect of modified housing system on performance of Pantja goats". MSc. Ag. (LPM) Thesis, GBPUA&T, Pantnagar.
10. Wani Ilyas (2017), "Epidemiological study of caprine neonatal kids disease and their clinical management in tarai and bhawar area (U.S. Nagar & Nainital Districts) of Uttarakhand". MVSc. ( Medicine) Thesis, GBPUA&T, Pantnagar.
11. Bhujel, S. (2018), "Prevalence of neonatal diseases of caprine with special reference to neonatal septicemia in few districts of kumaun region". MVSc. (Medicine) Thesis, GBPUA&T, Pantnagar.

### 4. Future Thrusts:

#### Management and health interventions to continue

As it is already proven that sound management and husbandry practices make a great impact on the productivity and profitability in livestock enterprise. Keeping this fact in view a number of training cum awareness programs (19) were organized for goat keepers to sensitize them about scientific methods of goat rearing. Till now 1033 goat keepers from the project area have been trained and there is plan of training about 300 goat keepers every year. Moreover, farmers are also trained in health care management of goats including vaccination, deworming, dipping and care of sick animals. Regular visits of project area by dedicated project staff are undertaken to deliver health care services at the doorsteps of goat keepers which will continue till project period. Both the activities under the project has greatly benefited goat keepers of the area and as a result goatry has become a popular and profitable venture among the poors and landless people.

#### Selection and distribution of elite Pantja bucks to continue

In order to continuously improve the elite/ open nucleus flock of Pantja goats and to achieve rapid genetic progress proper and careful selection of

breeding stock is necessary. At the same time distribution of elite Pantja bucks in the project area will ensure faster multiplication of elite animals in the field. Till now 130 elite bucks have been distributed in the project area and 2395 kids have borne and there is plan of distribution of 50 superior Pantja bucks per year to convert the entire area with 90 % Pantja population in next 25 years.

#### **Distribution of inputs for realization of their genetic potential**

Feed and medicines are critical inputs for goat

rearing to realize the true genetic potential from animals. In order to achieve this goal, various inputs have been distributed in the project area and the same will continue in years to come.

#### **To assess the economic impact of the Project**

In order to assess the economic impact of the project, an exercise will be undertaken with the help from other faculty of the university to conduct a study to determine actual economic impact of the project in the target area.