

**Tier two:** Mainly composed of selected County multiplier units and act as intermediaries to multiply and distribute the flock to other farmers and farmer groups. The multipliers are private farmers with established infrastructure and resources to support basic breeding and performance recording.

### Roles of Tier 2

- Recipients of elite bucks and does from nucleus tier
- Support basic breeding and performance recording
- Routine feedback channels to tier one.



A multiplier receiving elite Saanen breed buck from KALRO Naivasha

**Tier three:** Mainly composed of ordinary dairy goat farmers who are the main recipients of genetic materials from tier two.

### Roles of Tier 3

- Recipients of bucks and does from multiplier
- Recipient of culled does from nucleus
- Basic recording
- Routine feedback channels to Tier two (multipliers)
- Cross-breeding with local goat breeds.

The bucks are assigned to particular does within a community for breeding. The dairy goat breeders' association are responsible for buck rotation that is done after every round of mating.

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## COMMUNITY-BASED BREEDING PROGRAM FOR DAIRY GOAT



## Introduction

Community-based breeding programs (CBBPs) entails identifying strategic multipliers and partner nucleus farms under a three-tier breeding structure. (Figure 1).

## Objectives of community-based breeding programs

- Improve overall flock productivity - milk yield, reproductive performance.
- Avail improved breeds through sustainable breeding practices.
- Breed conservation through preserving and improving desirable traits in various dairy goat breeds through selective breeding.

## Importance of community-based breeding programs

- Promote sustainable utilization and conservation of dairy goat genetic resources.
- These programs initiate systematic breeding at the community level.
- They organize goat identification and recording of performance and pedigree data.
- The programs are based on the knowledge, needs, perceptions, and active participation dairy goat keepers.

## Components of CBPP and their roles



Bottle feeding milk to improved dairy goat kids

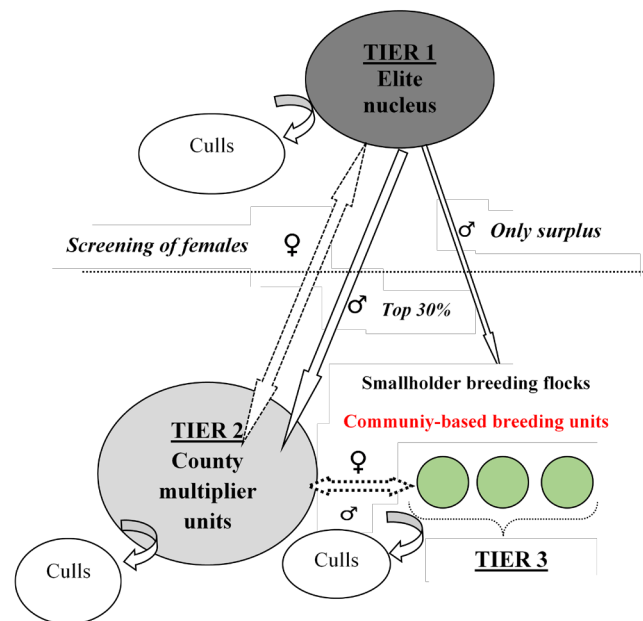


Figure 1: Schematic flow of Community Based Breeding Program for dairy goat

**Tier one:** Mostly composed of research Institute (KALRO) and progressive individual farms where elite nucleus flocks are maintained.



Some of the elite goat breeds maintained at KALRO Naivasha

## Roles of Tier 1

- Source of elite breeding bucks and does.
- Selection decisions supported by pedigree and performance recording and mating of elite animals.
- Targeted feeding and husbandry support for breeding animals.
- Capacity building for lower cadre flocks.
- Sourcing and dissemination of superior germplasm to the community.



Various dairy goat breeds sourced for breeding program at KALRO Naivasha