



BIOSECURITY MEASURES IN A SMALLHOLDER GOAT FARM IN KENYA

Biosecurity refers to practices designed to prevent the introduction and spread of infectious diseases within a farm and between farms. In smallholder goat farms in Kenya, where resources are often limited, implementing simple but effective biosecurity measures is essential to protect animal health, ensure sustainable production, and safeguard farmer livelihoods. These measures are customized to improve biosecurity in dairy goat farms especially to reduce cases of mastitis, but including other infectious diseases

01

Animal Introduction and Movement Control

- Purchase animals from trusted sources with verified health records.
- Quarantine newly acquired goats for at least 21–30 days before introducing them to the main herd.
- Limit unnecessary animal movement in and out of the farm.
- Transport animals in clean and disinfected vehicles.

02

Farm Access and Visitor Control

- Restrict visitor access to animal housing areas.
- Provide footbaths with disinfectant at entry points.
- Maintain a visitor logbook with names, contact information, and purpose of visit.
- Provide protective clothing (boots, coats) for visitors and workers.

03

Housing and Farm Environment

- Ensure proper ventilation, drainage, and hygiene in goat housing.
- Provide shallow bedding and clean out at every 14 days during warm weather and 21 days during cold weather
- Regularly disinfect pens, feeding troughs, and water containers – during changes.
- Use raised slatted floors where possible to reduce buildup of manure and urine.
- Dispose of manure and deadstock safely (burial or use in crop farms after treatment) and away from the housing pens.

04

Animal Health Management

- Keep records: health record, feed records and production records
- Observe goats daily for signs of illness (coughing, diarrhea, lethargy, reduced appetite).
- Isolate sick animals immediately and seek veterinary care.
- Deworm, vaccinate, and treat goats as per veterinary guidelines.
- Control vectors such as ticks, flies, and rodents through integrated pest management.
- For management of mastitis;
 - » Wash hands thoroughly before and after milking.
 - » Wash and dry udders with clean water and disposable/individual towels.
 - » Milk healthy goats before sick ones.
 - » Disinfect teats after milking (teat dipping).

05

Feeding and Watering Practices

- Provide clean feed and water.
- Store feed in rodent-proof containers.
- Avoid feeding goats on the ground; use raised troughs to reduce contamination.
- Ensure water points are not shared with other animals to prevent disease spread.

6.1 Herd Health Records

Summary:

- Animals are observed daily and findings are documented in the herd health record.
- Records are reviewed regularly to detect changes in health and productivity.
- Daily monitoring includes signs of disease, behavior changes, and production levels.
- Rigorous monitoring is required for isolated or high-risk animals.
- Non-routine events (e.g., outbreaks, treatments) are recorded.
- Records guide producers in measuring the success of the health program.

6.1.1 Individual Animal Records

- Each animal has a lifetime health record covering health checks, productivity, treatments, and movement history.
- Purchased animals' prior health records should be acquired and used as baseline data.
- These records tailor management to specific needs, improve productivity, and build buyer confidence.

6.1.2 Identification and Traceability

- Every animal is identified with industry-standard tags or microchips.
- Identification links goats to health and production records.
- Enables traceability within and between farms.
- Helps manage disease tracking, residue monitoring, and genetic selection.

6.2 Farm Management Records

Summary:

Tracks activities and complements animal health records to evaluate biosecurity effectiveness.

Examples include:

- » Cleaning and disinfection schedules
- » Pest control logs
- » Manure and deadstock disposal
- » Biosecurity training sessions
- » Visitor and access records

6.2.1 Input Records

- Record source, quality, and delivery details of all feed and bedding.
- Include feed test results for nutrition and contamination checks.
- Record which groups of goats received each batch for traceability.
- Helps track contamination sources and corrective action.



GET IN TOUCH:

ISAAA AfriCenter

ILRI Campus, Old Naivasha Rd.

PO Box 70-00605 Uthiru, Nairobi, Kenya

Phone: +254-20-4223618

E-mail: africenter@isaaa.org, emacharia@isaaa.org

Website: www.africenter.isaaa.org

Facebook: [Isaaa AfriCenter](https://www.facebook.com/IsaaaAfriCenter)

X: [@afri_isaaa](https://twitter.com/afri_isaaa)

