



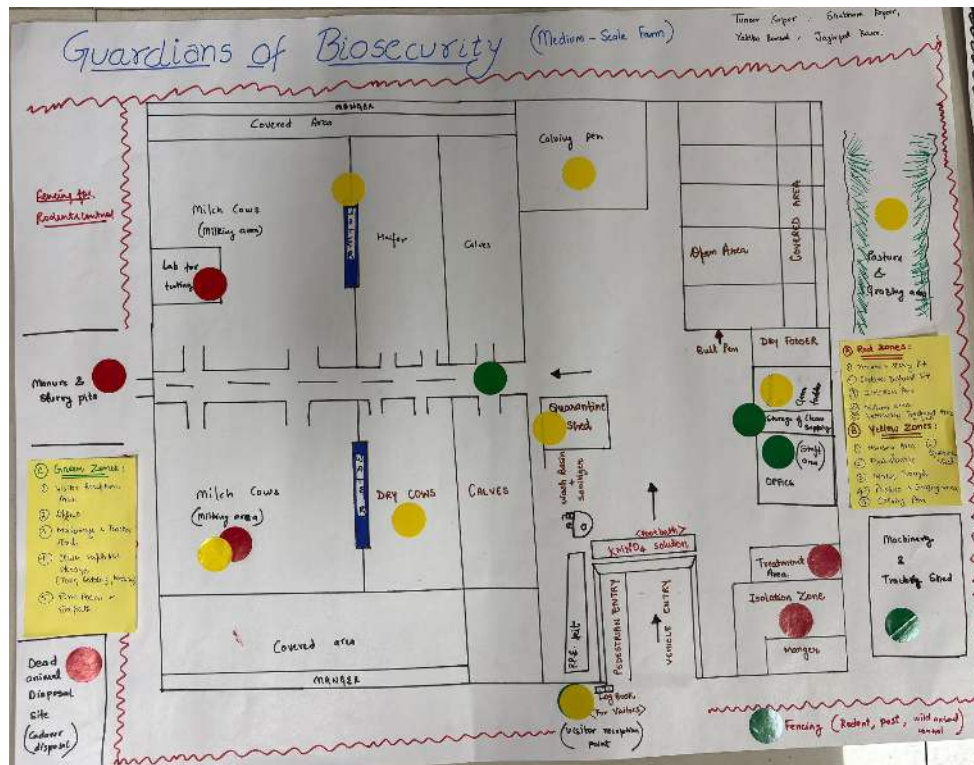
Biosecurity Farm Map Challenge – Activity Guidelines

Overview

The Biosecurity Farm Map Challenge is an interactive group activity that can be used as a stand-alone activity or as part of a longer workshop on AMR and biosecurity. It is designed to help participants understand infection risks in dairy farm settings. By visualising farm layouts and identifying risk zones, students develop practical insights into how biosecurity measures can prevent disease spread and reduce reliance on antibiotics. Participants were also encouraged to use these maps as visual aids during farm visits to support discussions and assist in conducting surveys.

Reference Biosecurity Farm Map:

The example below demonstrates how a dairy farm layout can be mapped to identify biosecurity risk areas, movement pathways, and intervention points for infection prevention.





Group Allocation

Participants to be divided into small groups. Facilitators may adjust the number of groups based on the total number of participants. Ideally, each group should have 3–4 members.

Objective

- To identify potential infection risk zones within a dairy farm
- To understand how daily practices influence disease transmission
- To propose practical biosecurity interventions

Materials Required

- Chart paper / A3 sheets
- Colored stickers or markers (Red, Green, Yellow)
- Pens/markers
- Pencils, eraser, sharpener
- 30 cm Ruler

Activity Instructions

Step 1: Sketch the Farm Layout

Draw a basic layout of a dairy farm on chart paper. Include key areas as per your understanding of a dairy farm.

Step 2: Identify Risk Zones

Use colored stickers or markers to classify different areas:

- **Red:** High-Risk Zones
Areas with a high likelihood of infection spread
(e.g., manure handling areas, sick animal pens, waste disposal zones)
- **Green:** Low-Risk/Safe Zones
Areas with minimal infection risk if managed properly
(e.g., well-protected feed storage, office/admin areas)
- **Yellow:** – Uncertain Zones
Risk depends on how the area is managed



(e.g., water troughs, shared equipment storage, entry points)

Step 3: Map Movement Pathways

Draw arrows to indicate the movement of animals, farm workers/visitors, equipment, and vehicles. Identify where cross-contamination is likely to occur.

Step 4: Add Explanations

Write brief notes next to each marked zone explaining why it was classified as red, yellow, or green and what risks are associated with that area.

Step 5: Suggest Biosecurity Interventions

For each zone, propose simple, practical measures.

Presentation & Discussion

- Each group presents its farm map (5–7 minutes per group)
- Facilitators and peers provide feedback
- Compare different approaches and highlight key learning points

Learning Outcomes

By the end of this activity, participants will be able to:

- Identify high-risk areas for infection spread on farms
- Understand how biosecurity practices impact AMR
- Apply practical solutions to improve farm hygiene and disease prevention

Facilitator Tips

- Encourage participants to think based on real farm experiences
- Prompt discussion with questions like:
 - “What happens if this area is not cleaned regularly?”
 - “Who moves through this space, and how often?”
- Emphasize that many risks are practice-dependent, not just location-based
- Link observations back to AMR