

# Responsible use of antimicrobials in small ruminants

## Problem statement

- The use of veterinary drugs in food-producing animals in Ethiopia has been increasing with improved access to veterinary drug stores.
- However, knowledge on how these drugs work and how they should be used to achieve the intended impact is often not passed on to livestock keepers. Wrong use of antimicrobials and other veterinary drugs and non-enforcement of withdrawal periods contribute to the risk of emergence of resistances and may result in residues in food items. Resistances are not only a public health concern, but also contribute to treatment failure in livestock, thus threatening livelihoods.
- As the major causes of morbidity and mortality of small ruminants in project sites in Ethiopia are respiratory diseases, use of antimicrobial drugs for treatment is inevitable.



## Key messages and solutions

- Conducting a survey to assess knowledge, attitude and practice (KAP) in all CRP Livestock study sites in Ethiopia.
- Training on rational use of drugs for farmers, extension agents, community animal health workers, veterinarians, and drug providers (prescribers and dispensers)
- Determine antimicrobial residue level in milk and meat using validated antibiotic residue test kits and compare with the established tolerance (safe) levels of antibiotic residues for consumers.
- Test milk samples for antimicrobial resistance

## Benefits

- Improved understanding of use of veterinary drugs in small ruminant production and how producers perceive treatment with antimicrobials
- Responsible and prudent use of veterinary drugs
- Reduced veterinary drug residues in food items
- Important data on current situation of occurrence of antimicrobial resistance in Ethiopia to inform development of a antimicrobial resistance monitoring program

## Evidence

- Various studies in Ethiopia provided evidence that antimicrobial resistance is indeed a problem incl. one study conducted in areas linked to project sites.
- Also there is a growing body of evidence that farmers increasingly revert to use of antimicrobials to treat sick animals.



## Suitability

- The intervention is appropriate in all areas where consumption of small ruminant product is common.
- The intervention complements all animal health interventions.

| Resource requirements (low to high) |           |
|-------------------------------------|-----------|
| Land                                | ○ ○ ○ ○ ○ |
| Water                               | ○ ○ ○ ○ ○ |
| Labour                              | ○ ○ ○ ○ ○ |
| Cash                                | ● ● ● ○ ○ |
| Access to inputs                    | ● ● ● ● ○ |
| Knowledge and skills                | ● ● ● ○ ○ |

| Impact areas (low to high) |           |
|----------------------------|-----------|
| Food security              | ● ● ○ ○ ○ |
| Human nutrition            | ● ● ○ ○ ○ |
| Employment and livelihoods | ● ○ ○ ○ ○ |
| Natural resources base     | ○ ○ ○ ○ ○ |
| Gender empowerment         | ● ○ ○ ○ ○ |
| Market linkages            | ● ● ● ○ ○ |

## Value chain focus



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