

Antimicrobial use in smallholder livestock systems in Ethiopia

Biruk Alemu, Kebede Amenu, Gezahagn Alemayehu, Hiwot Desta, Michel Dione, Ulf Magnusson and Barbara Wieland

Introduction

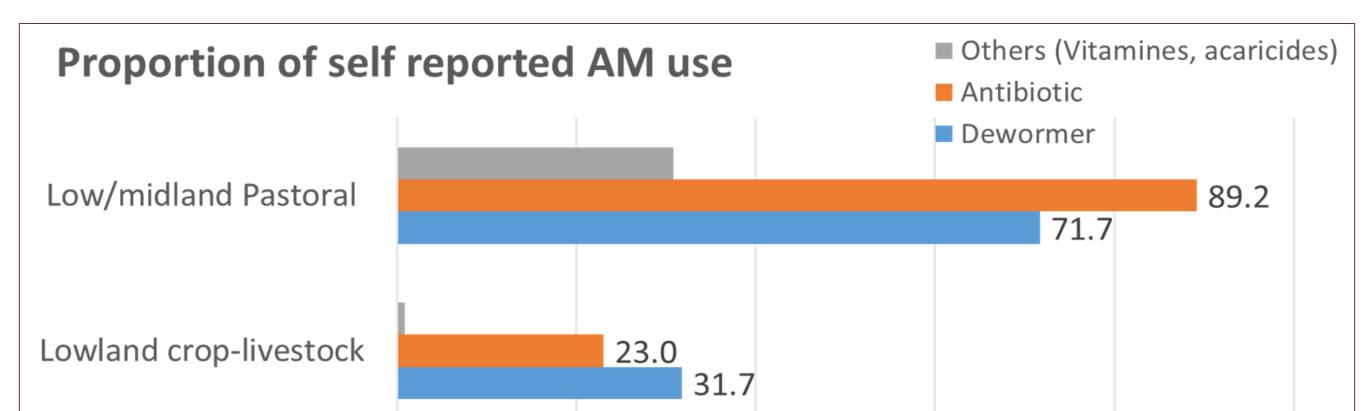
- Ethiopia has different production systems and agro-ecologies
- Very scarce information on antimicrobial usage in animals
- Factors and incentives influencing AMU are poorly understood
- In Ethiopia regulations on use of antibiotics in livestock are poorly enforced

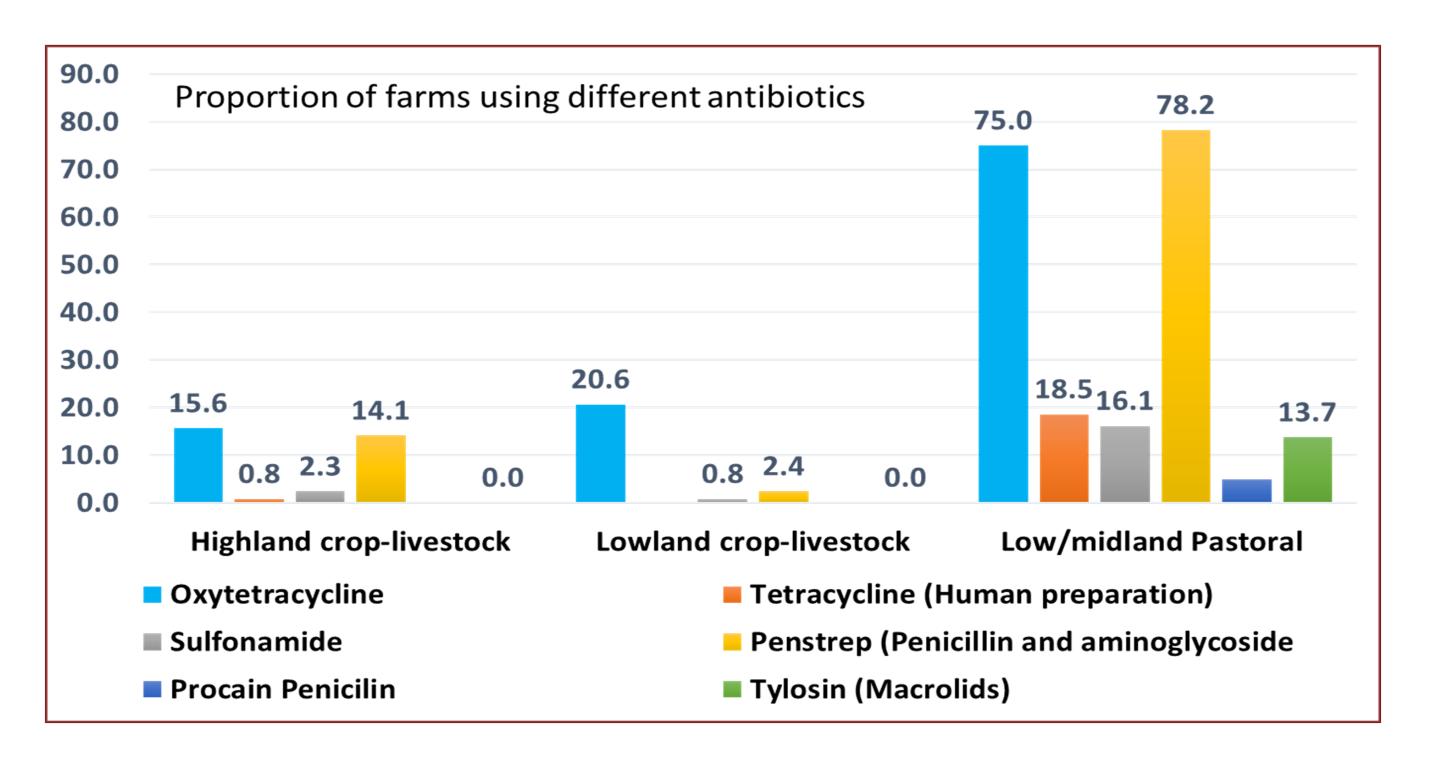
Methods

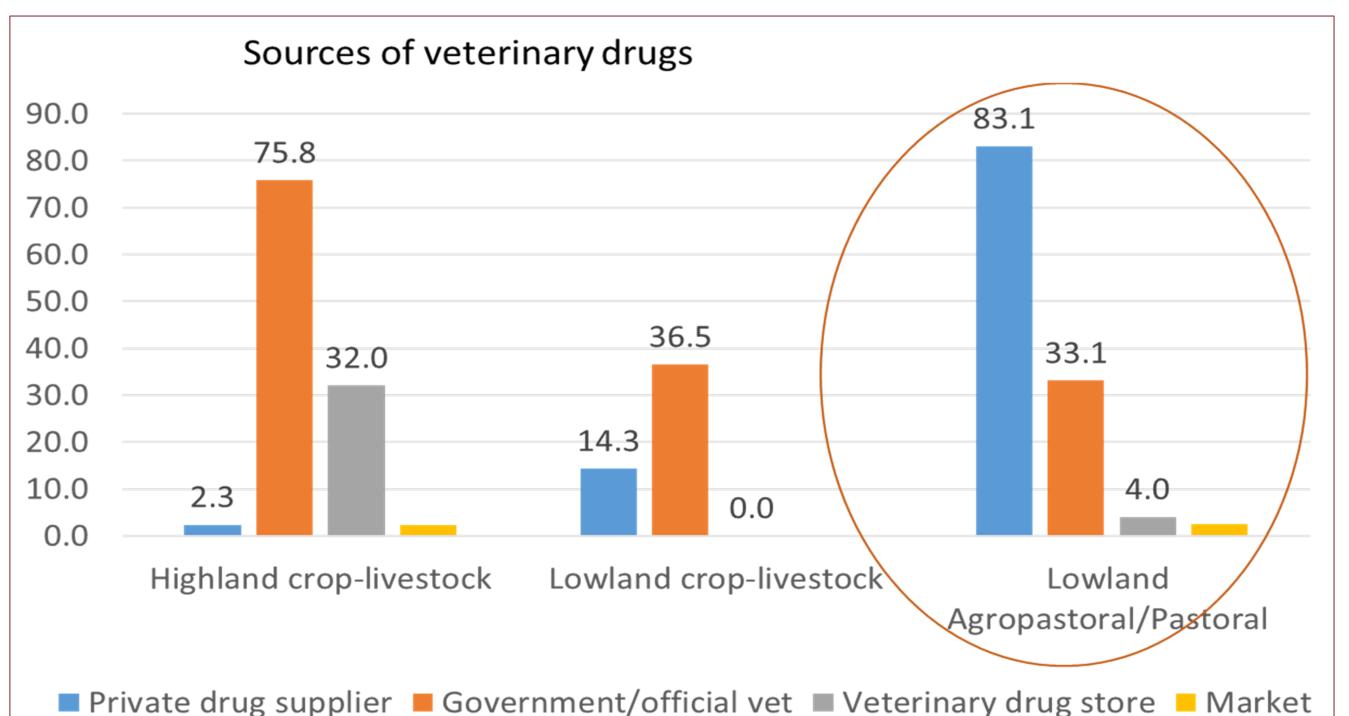
- Cross-sectional KAP survey in 379 randomly selected households in 12 representative sites from six districts
- Highland, Lowland and Pastoral agro-ecologies included
- Farmers have easy access to veterinary drugs that can be illegal or counterfeit

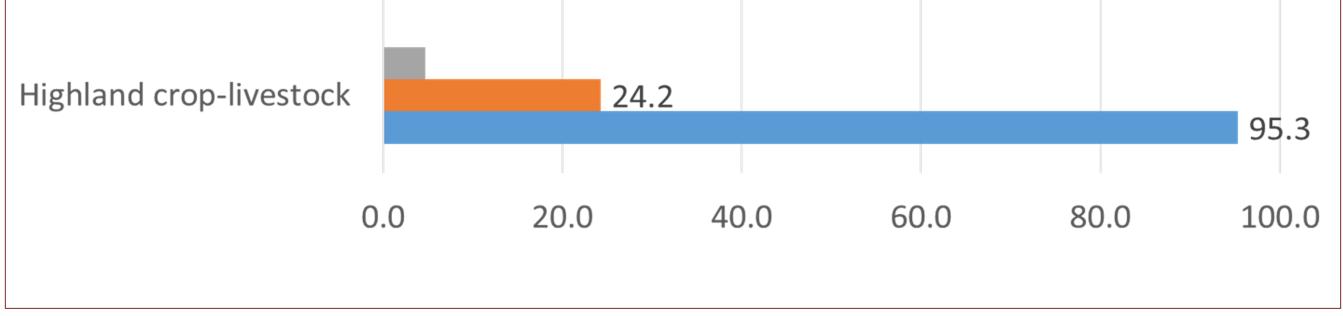
Findings

- Observation 95% pastoralist have at least one antibiotic at hand
- Human antibiotics are being used for veterinary purpose (18.5% of pastoralist households)
- 31% of households seem to use antibiotics wrongly
- Frequent antimicrobial use were: respiratory problems and digestive/internal parasite infections









Proportion of farms using different antihelminthics

Low/midland Pastoral 62.5 0.0 50.8 0.8 Lowland crop-livestock 0.0 31.7 Highland crop-livestock 28.9 65.6 80.0 0.0 10.0 20.0 50.0 70.0 30.0 60.0 40.0 Clozasole Tetramisole Tetraclozan Ivermectin Fenbendazole Fasinex Albendazole

Conclusions

- Lack of knowledge and wrong practices are common but different across production systems
- There is a need to understand and monitor antimicrobial use in small holder livestock keepers in Ethiopia
 - Access to veterinary drugs limited in some areas (highlands), while elsewhere drugs are readily avialable
- Increase in counterfeit and illegal imports (pastoralist areas)
- Findings of the study help to target future interventions to reduce antimicrobial use and resistance

Contacts: Biruk Alemu (<u>B.A.Gemeda@cgiar.org</u>) and Barbara Wieland (<u>b.wieland@cigar.org</u>)



This document is licensed for use under the Creative Commons Attribution 4.0 International Licence. February 2019

