What to do with sick animals: A study of pastoralists’ decision-making in the Far North Region, Cameroon

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Research Problem

Pastoralists in the Far North Region of Cameroon seem to manage sick animals in a paradoxical way: the literature describes the long-term goal of pastoralists to be health and longevity of the herd ([4], [5], [6]), but they frequently do not remove animals sick with chronic diseases, such as Brucellosis, that can affect fertility of animals and humans.

Study Region

[Map of the Far North Region of Cameroon, Africa]

Models of disease and fertility

Herdiers make clear connections between disease and abortions in cattle.

But not all diseases were considered equally dangerous. Herdiers were more likely to link trypanosomiasis-with fertility problems than Brucellosis. One reason may be that flies transmitting trypanosomiasis are visible, whereas Brucellosis bacteria are not.

Fertility Rates & Brucellosis Prevalence

[Charts showing fertility rates and Brucellosis prevalence]

Why keep sick animals?

Herdiers keep sick animals in their herd due to rational, economic reasons. Social stigma against keeping sick animals prevents herdiers from getting a good price on a sick animal at market.

Management of animal disease

Near all herdiers interviewed said that their first action when they have a sick animal in their herd is to administer veterinary drugs.

Three main common drugs purchased by mobile and sedentary herdiers are oxytetracycline, diethylcarbamazine, and verben.

Some mobile herdiers also mentioned the use of “fire” or cauterisation to treat sick animals.

Decision-Making Process of Selling Animals

[Chart showing decision process]

Does disease affect reproduction?

Mobile and sedentary herdiers had similar reactions to animal disease.

Although we found a statistically significant difference in fertility rates between sedentary and mobile herdiers, the differences in the prevalence of Brucellosis was found to be non-significant.

There are other factors than disease management that influence herd fertility.

Why keep sick animals?

[Chart showing reasons for keeping sick animals]

Effects of Brucellosis on Herd Fertility

We found an unexpected statistically significant, positive relationship between Brucellosis prevalence and herd fertility rates.

Exact nature of relationship needs further research.

References cited


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