

# **Constraints to Nigerian pastoral cattle production**

Abubakar Suleiman<sup>1,2</sup>, Elizabeth L. Jackson<sup>1</sup>, Jonathan Rushton<sup>1</sup>

- 1. Royal Veterinary College, London, UK
- 2. Ahmadu Bello University, Zaria, Nigeria

#### **Overview**



Optimal herd productivity is essential for maintaining nutrition and livelihoods of the 15.3 million Nigerian pastoralists, but it is threatened by changes in population, land use, socioeconomic environments and animal health services.

### **Objectives**



- To identify constraints to production relative to animal health issues.
- To asses pastoralists perception on prevalence, relative incidence and case fatality patterns of cattle diseases.

#### **Methods**

#### Study Design

- Participatory Epidemiology
- Study Participants: Heads of households from 10 selected districts in pastoral areas of Nigeria

#### Data collection

10 focus group discussions with 86 participants



#### **Data Analysis**

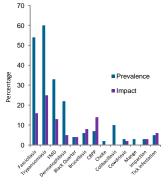
- Tests of associations between constraints and impacts on production: Kruskal Wallis one way analysis of variance.
- Tests of agreements amongst focus group participants:
  Kendell's coefficient of concordance, "W".

#### **Results**

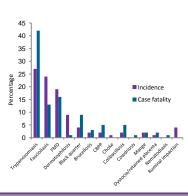
Estimated scores (%) for constraints on cattle production in pastoral areas of Nigeria

areas of Nigeria				
Constraints	Mean	Median	Range	Rank
Limited access to stock routes	21	19*	3-30	1
Cattle rustling	17	17*	0-40	2
Water scarcity	16	16*	0-33	3
Diseases	10	10	0-30	4
Scarcity of grazing land	9	7	0-29	5
High cost of supplementary feeds	8	5	0-27	6
Poor extension services	6	3	0-24	7
Limited access to veterinary services	5	0	0-21	8
Lack of subsidised inputs	5	0	0-20	9
Non-implementation of interventions	2	0	0-17	10
Conflicts with crop farmers	1	0	0-7	11
Low productivity of cattle breeds	0	0	0-0	12
*p<0.05				

Estimated mean herd prevalence and median scores for disease impact on production



Estimated median scores for relative incidence and case fatality rates of cattle diseases



#### **Conclusions**

The study revealed a greater importance of natural resource (land and water) constraints and cattle rustling relative to disease, suggesting weaknesses in the producers institutional environment. Pastoralists perceived endemic diseases including trypanosomiasis, foot and mouth disease and fascioliasis as having significant impact on production.

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#### **Abubakar Suleiman**

E mails: asuleiman@rvc.ac.uk

abubakarsuleiman@abu.edu.ng

URL: <a href="http://www.rvc.ac.uk/about/our-people/abubakar-suleiman">http://www.rvc.ac.uk/about/our-people/abubakar-suleiman</a>

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