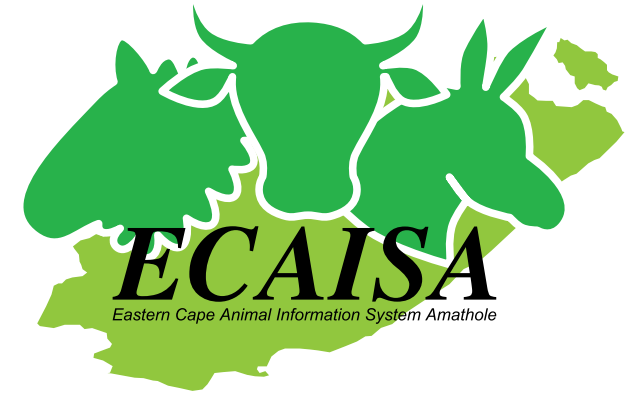




The ECAISA pilot project: animal population census in two selected Eastern Cape communal wards



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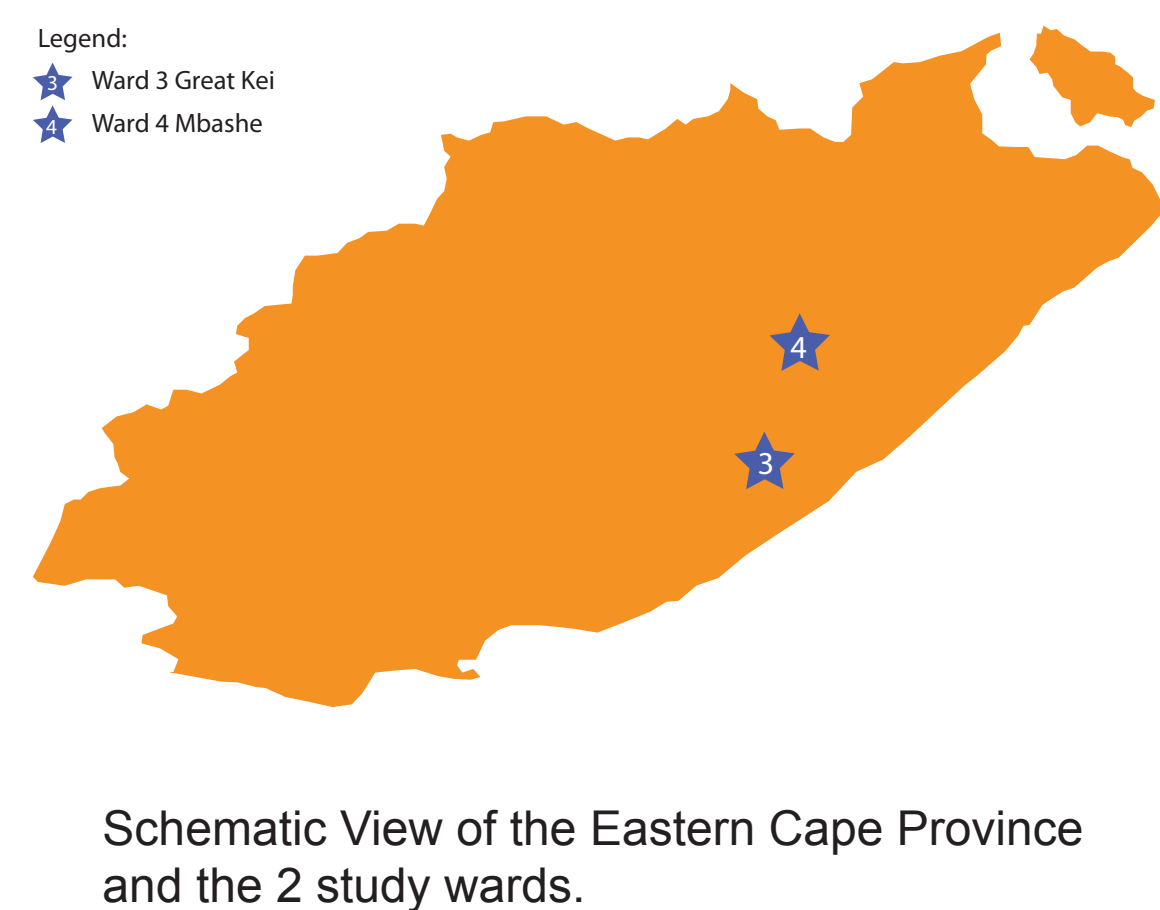


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Introduction

The Eastern Cape Animal Information System Amathole (ECAISA) is an animal census pilot project in rural areas of the Amathole District Municipality in South Africa. The general objective is to generate key information on animal numbers, agricultural structures and animal sanitary status for the Eastern Cape State Veterinary Services and to serve as a pilot for the upcoming census.



Over 20 data collectors completed 2179 questionnaires in a two week field period in February 2008. Selected animal population results are presented here.

Results: general population structure

Animal populations have different structures. The largest is the sheep population concentrated mainly in ward 4 Mbashe. Note the re-emerging pig population after the Classical Swine Fever control measures in 2007.

Species	Sum of animals	Animals per farmer				
		Mean	Median	Max	SD	CV
Sheep	30536	24.1	9.0	489	42.13	175.1
Goats	6788	5.2	3.0	131	7.21	137.4
Cattle	5729	5.4	4.0	46	4.94	91.9
Dogs	3474	2.0	2.0	10	1.52	76.2
Cats	775	0.5	0.0	7	0.79	174.3
Horses	449	1.7	1.0	9	1.73	101.2
Pigs	151	1.6	1.0	19	2.92	182.7
Chicken	14981	9.6	7.0	100	8.82	91.6
Ducks	557	0.4	0.0	45	2.28	650.1
Geese	521	0.3	0.0	20	1.71	511.0
Turkey	161	0.1	0.0	25	1.00	965.3

Results: ratios

For cattle, sheep and goats, a relatively high proportion of males in reproductive age is present.

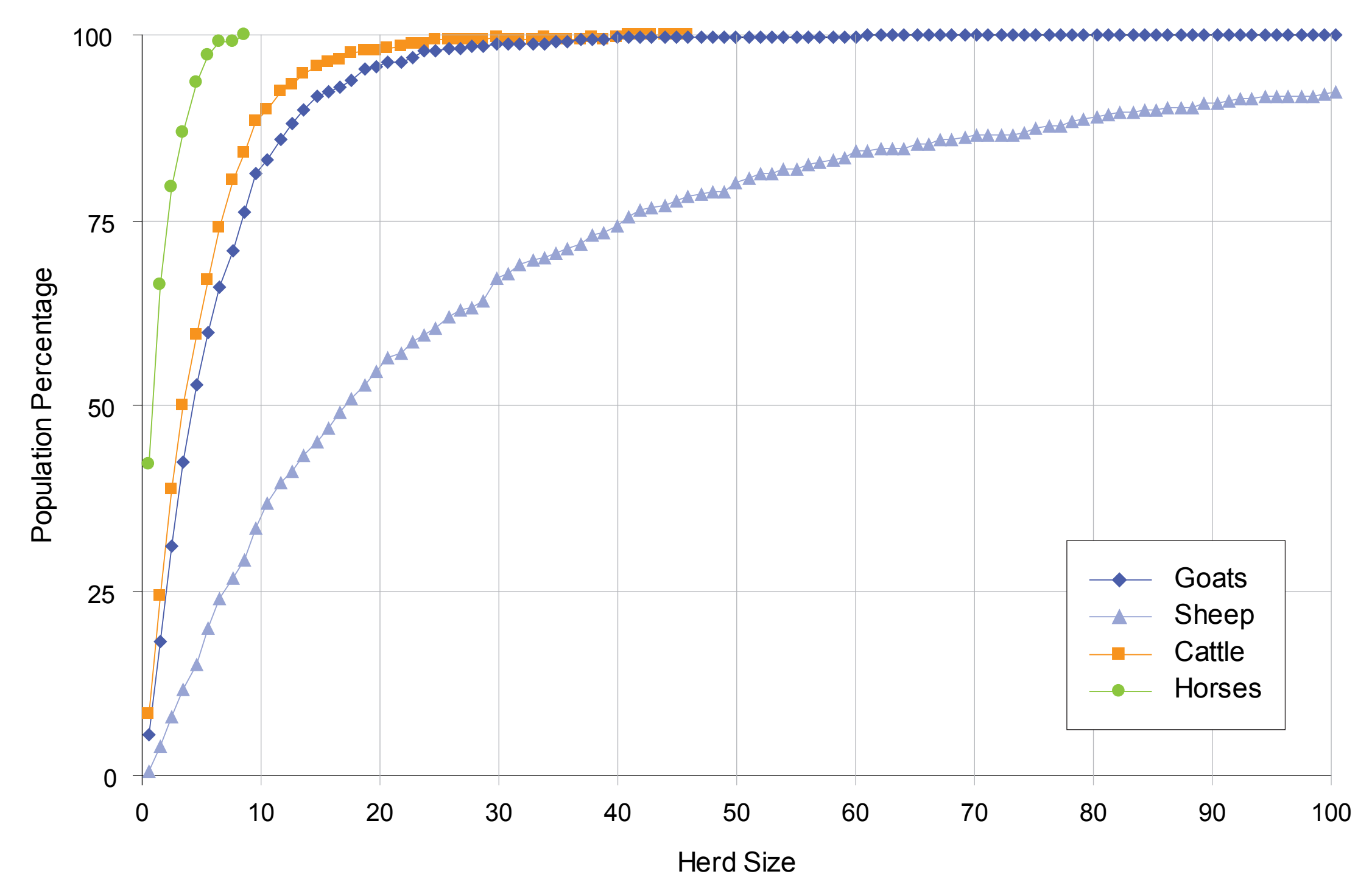


This, together with low offspring numbers reflects a limited reproductive status.

Cattle	Ratio	Sheep	Ratio	Goats	Ratio
Cow / Bull	4.5	Ewe / Ram	11.7	Doe / Buck	6.4
Cow / Calf	4.1	Ewe / Lambs	7.6	Doe / Kids	5.0

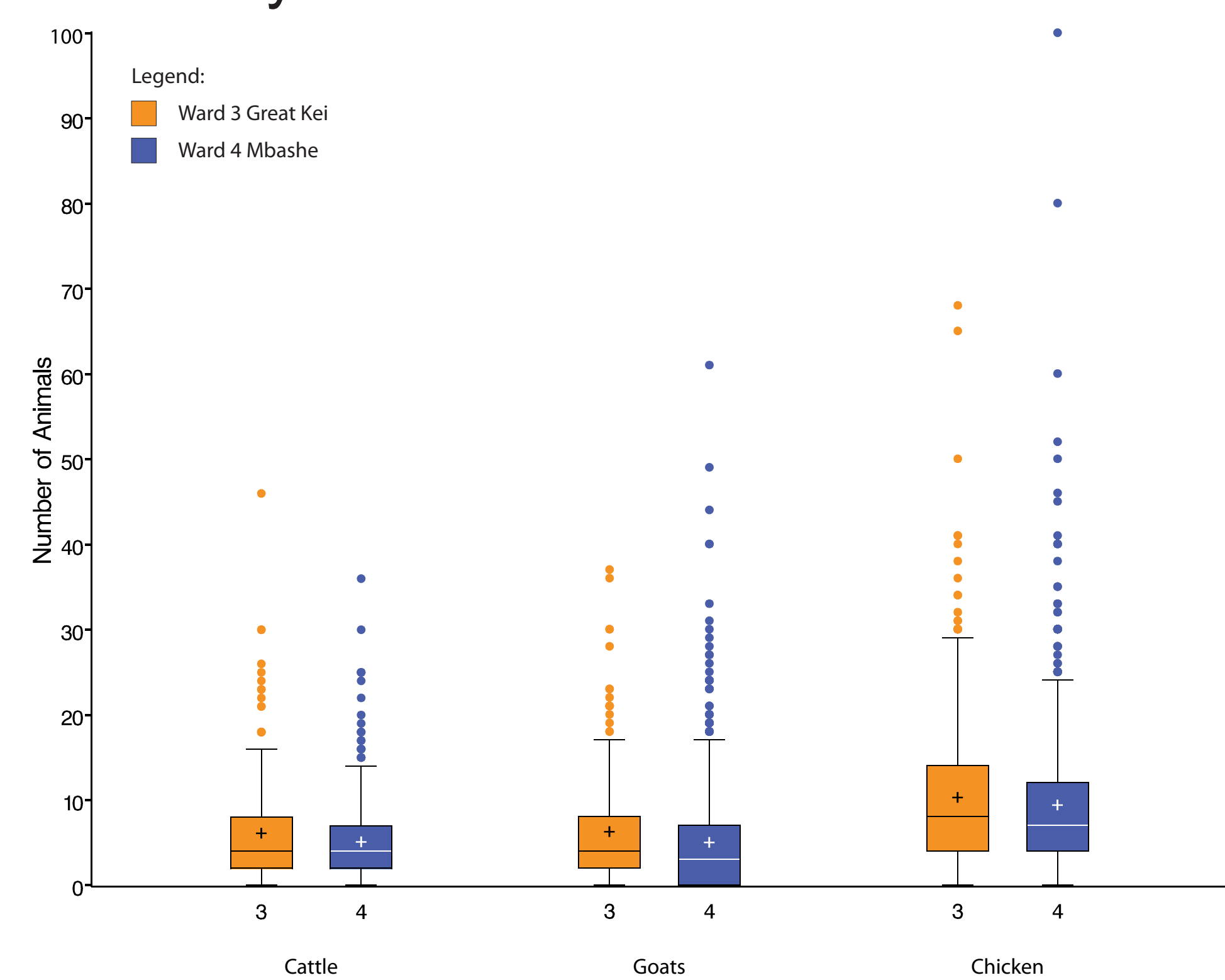
Results: cumulative density function

Animal population (% of total) by herd size are presented below for selected species. Note that, for example, 50% of sheep farmers own 17 or less sheep. In comparison, half of goat farmers own herds of 5 goats or less.



Results: differences between wards

Cattle, goats and chicken population had similar population structures in both study areas (results below). On the other hand the sheep and horse population was concentrated almost exclusively in ward 4 Mbashe.



Conclusions

- ★ Only sheep and horse population show significant differences between study wards. All other populations under study are present in both wards with relatively the same frequency and population structure.
- ★ One of the main factors related to the low fertility of livestock could be caused by the high male to female ratios.
- ★ Because both study wards were selected as part of a pilot study and are not a representative sample, further information is required from other representative wards to evaluate whether population structures are similar for all rural areas of interest.