

Tanzania Market Survey C: Descriptive Analysis

Beth Savagar

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Data Overview:

1) Market Survey A

- For purpose of market type definition and MVA, market survey A provides:
 - Reference database for market locations
 - Summary of number animals sold

2) Nearest Town Location:

- Compute distance to nearest town using tanzania-towns database:
 - Source: <https://data.apps.fao.org/map/catalog/srv/eng/catalog.search#/metadata/41f6d923-9e22-4d30-9046-5ede043f4aa6>
 - Compute distance between market and nearest town (“major”, or “other” town)
 - Use to Type Markets based on EcoPPR market type definitions.

3) Market Survey C, part I (Info) :

- For purpose of market type definition and MVA, Market Survey C, part I provides:
 - Number of respondents surveyed at each market (proxy for market size)
 - Number of markets visited by each respondent (summarised as mean per market)
 - Proportion traders at each market

4) Market Survey C, Part II (Activities):

- For purpose of market type definition and MVA, Market Survey C, part II provides:
 - Activity at market for each respondent
 - * *Summarised as proportion respondents undertaking X activity at market*
 - Number of times each respondent visits the market (to buy/sell) each month:
 - * *Summarised as mean visits to the market per month*
 - Origin placetypes for animals sold at the market
 - * *Summarised as proportion of origin placetypes for animals sold at market*
 - Origin transport for animals sold at the market
 - * *Summarised as proportion of origin transport types for animals sold at market*
 - Destination placetypes for animals bought at the market

- * Summarised as proportion animals destination placetypes for animals bought at market
- Destination transport for animals sold at the market
- * Summarised as proportion of destination transport types for animals bought at market

Market Characteristics:

Market surveys were filtered to **exclude** markets in Mtwara region

Markets in Ruvuma and Lindi (1 market each) were also excluded - Visited as part of Mtwara surveys

(1) Number of surveys per market:

- NA's correspond to markets in survey A which are not found in survey C

[1] "59 markets were surveyed, excluding Mtwara markets"

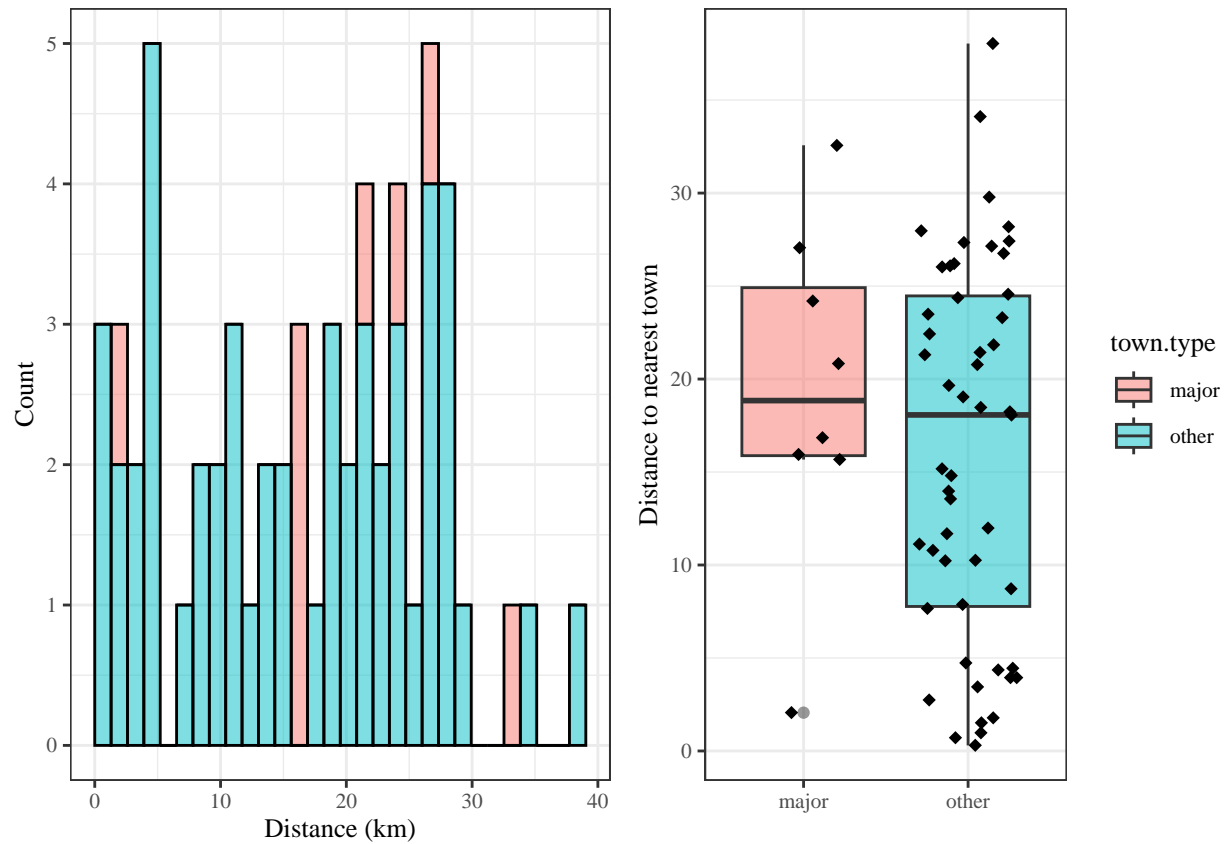
min	q1	median	mean	q3	max	NAs
20	36.5	45	49.88	56.75	109	1

(X) Distance to nearest town:

- *Distance to nearest town in km*

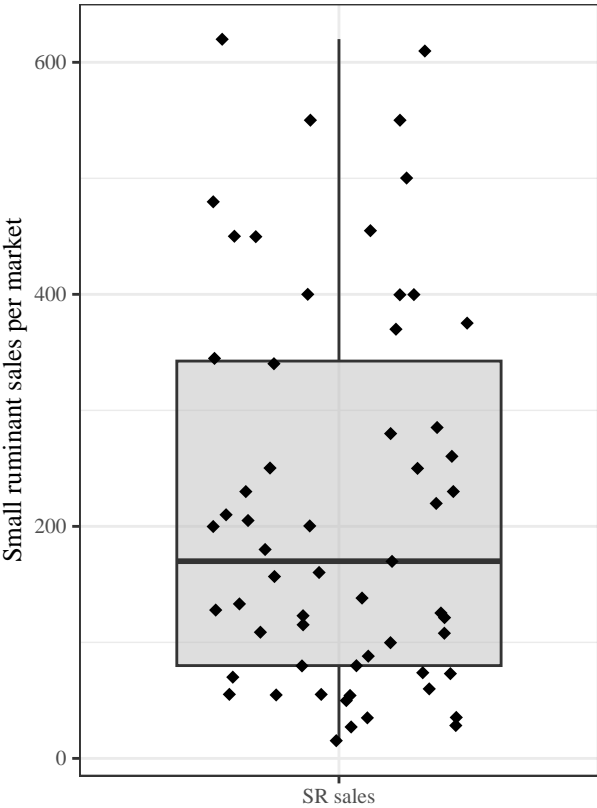
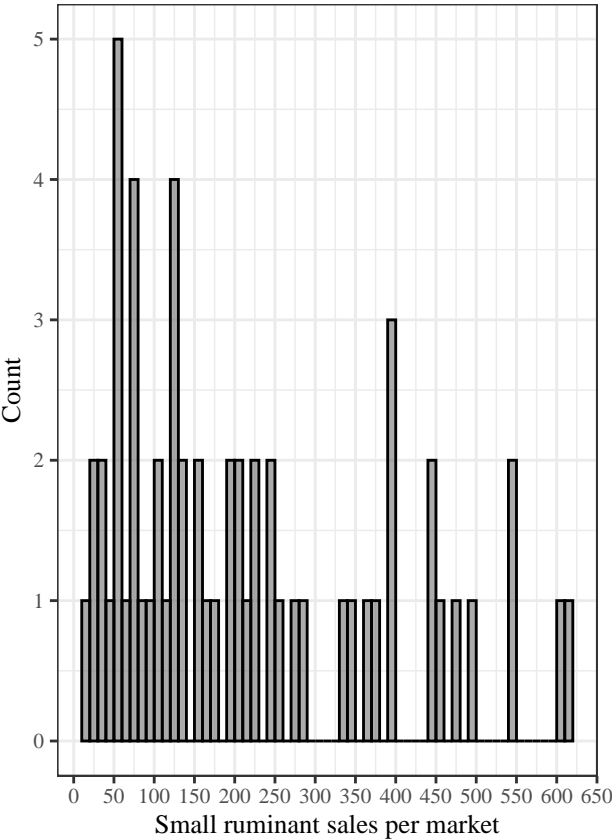
min	q1	median	mean	q3	max	NAs
0.3	8.3	18.07	16.58	24.47	38.04	0

'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.



(2) Small ruminant sales per market:

min	q1	median	mean	q3	max	NAs
15	80	170	218.92	342.5	620	0

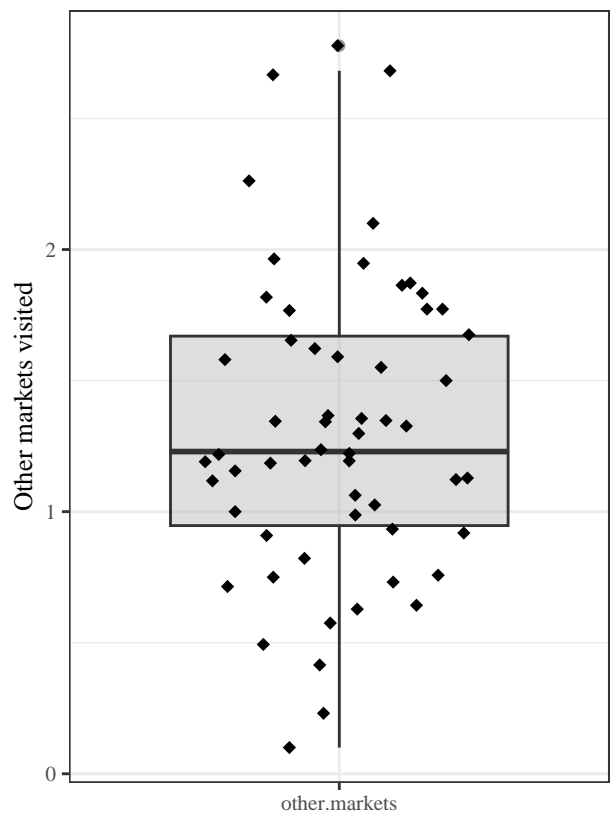
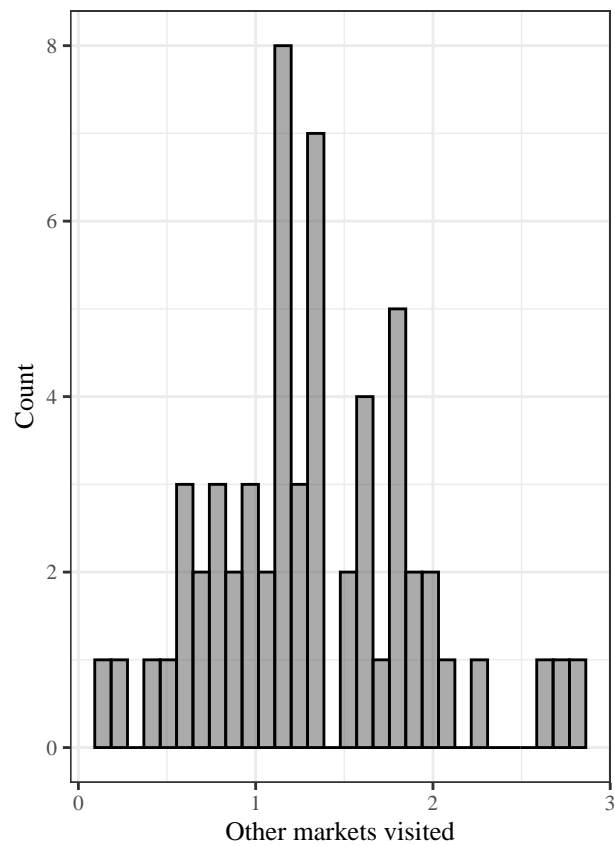


(3) Other markets visited:

- *Mean visits to other markets per month, per actor*

min	q1	median	mean	q3	max	NAs
0.1	0.95	1.23	1.32	1.67	2.78	1

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## 'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.
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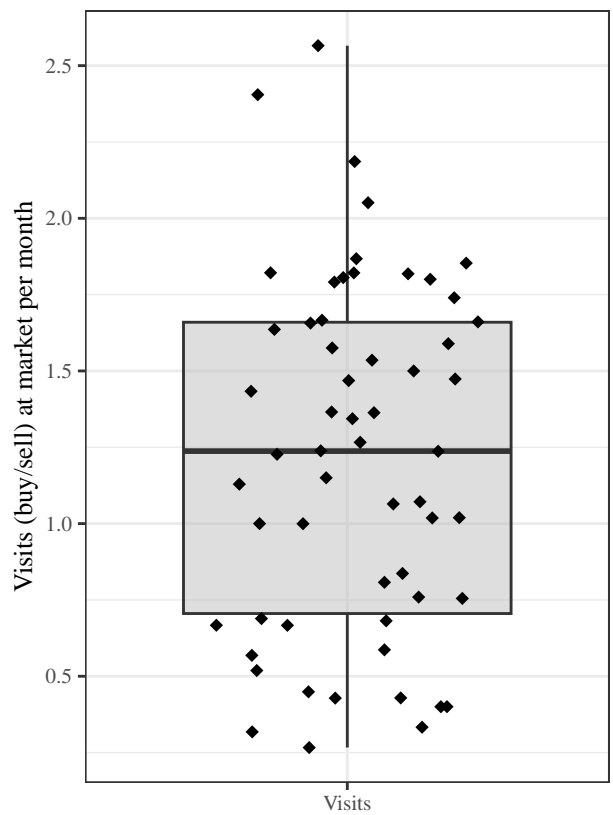
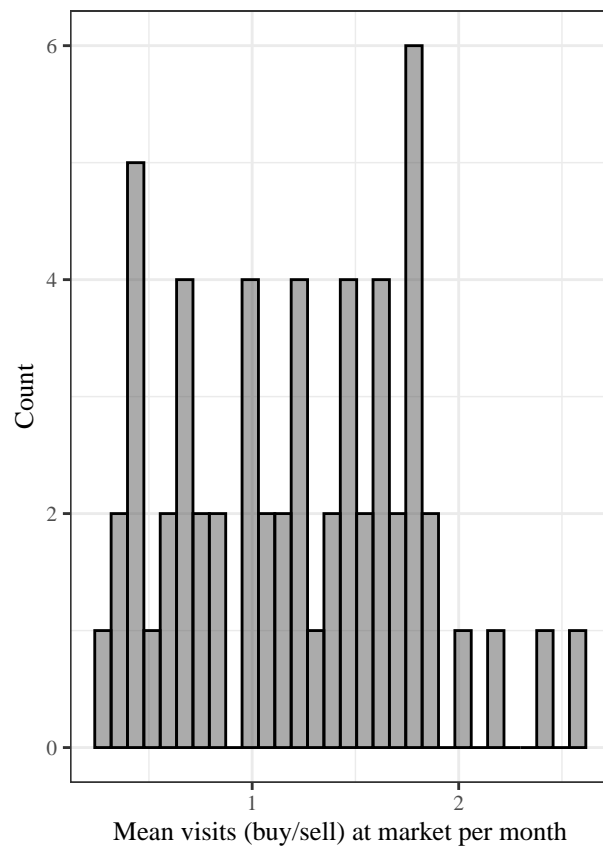


(4) Visits to this market:

- *Mean visits to this market per month, per actor*

min	q1	median	mean	q3	max	NAs
0.27	0.71	1.24	1.22	1.66	2.57	1

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## 'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.
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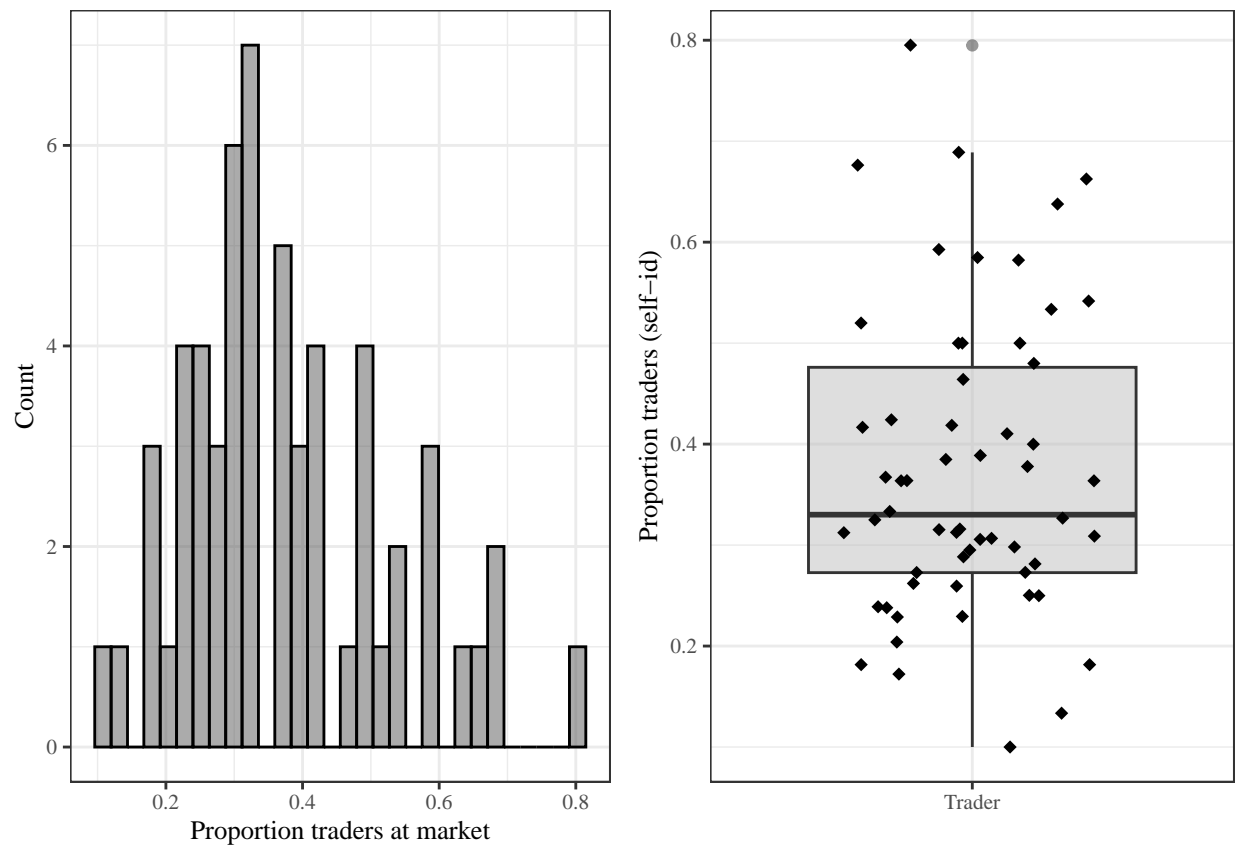


(5) Proportion traders at market

- *Proportion traders at market (self-id as “trader”)*

min	q1	median	mean	q3	max	NAs
0.1	0.27	0.33	0.37	0.48	0.79	1

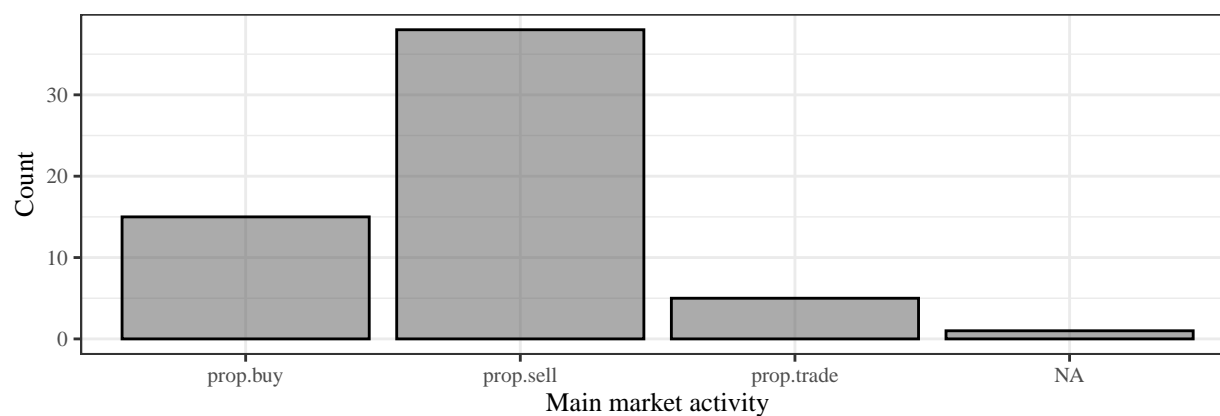
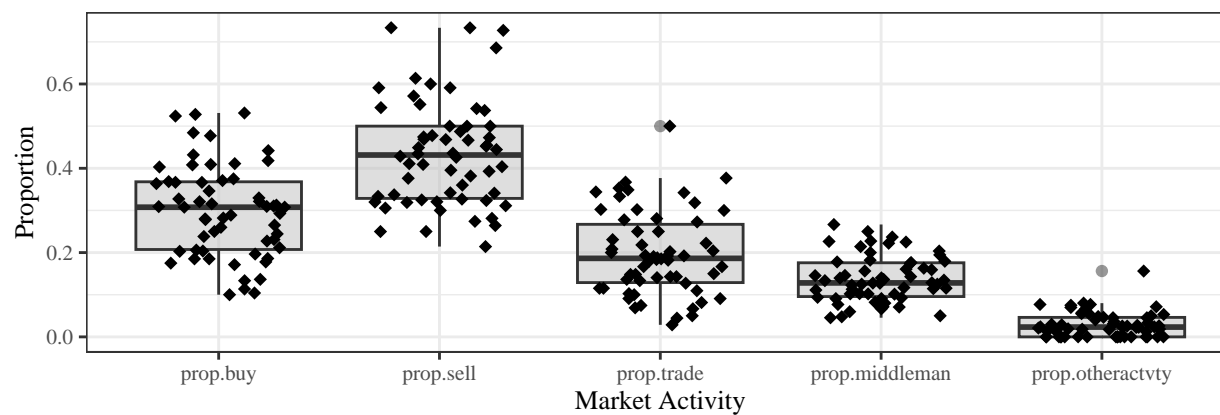
```
## 'stat_bin()' using 'bins = 30'. Pick better value with 'binwidth'.
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(6) Activities at the market

- Proportion actors at the market reporting activity types:
 - Selling
 - Buying
 - Trading
 - Brokering/Middleman
 - Other

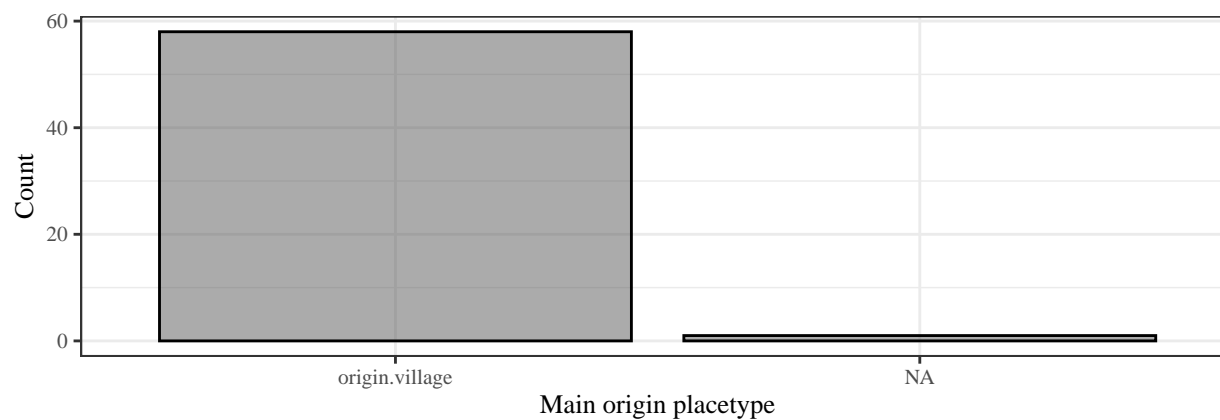
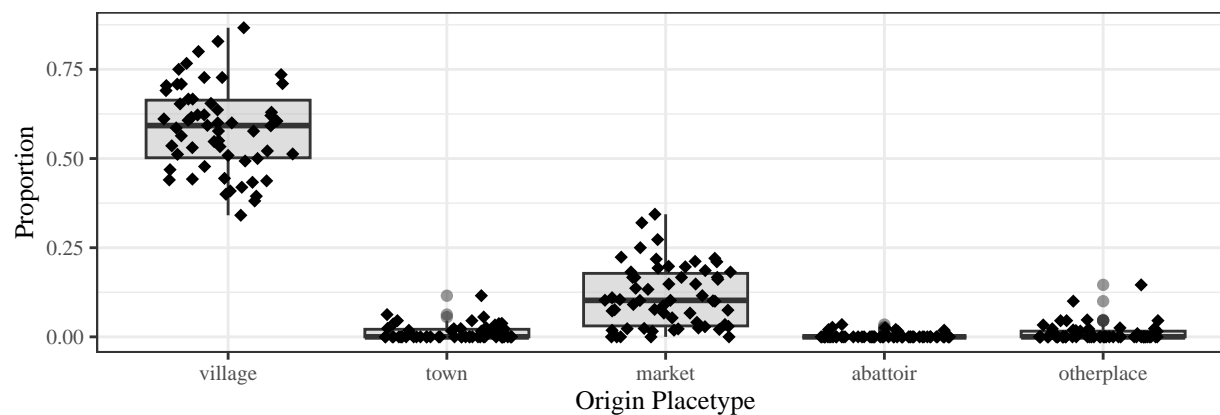
activity	min	q1	median	mean	q3	max	NAs
prop.buy	0.10	0.21	0.31	0.30	0.37	0.53	1
prop.sell	0.21	0.33	0.43	0.43	0.50	0.73	1
prop.trade	0.03	0.13	0.19	0.20	0.27	0.50	1
prop.middleman	0.05	0.10	0.13	0.14	0.18	0.27	1
prop.otheractvty	0.00	0.00	0.02	0.03	0.05	0.16	1



(7) Origins of animals sold at the market

- Proportion of actors bringing animals from different origin placetypes:
 - Village
 - Town
 - Market
 - Abattoir
 - Other

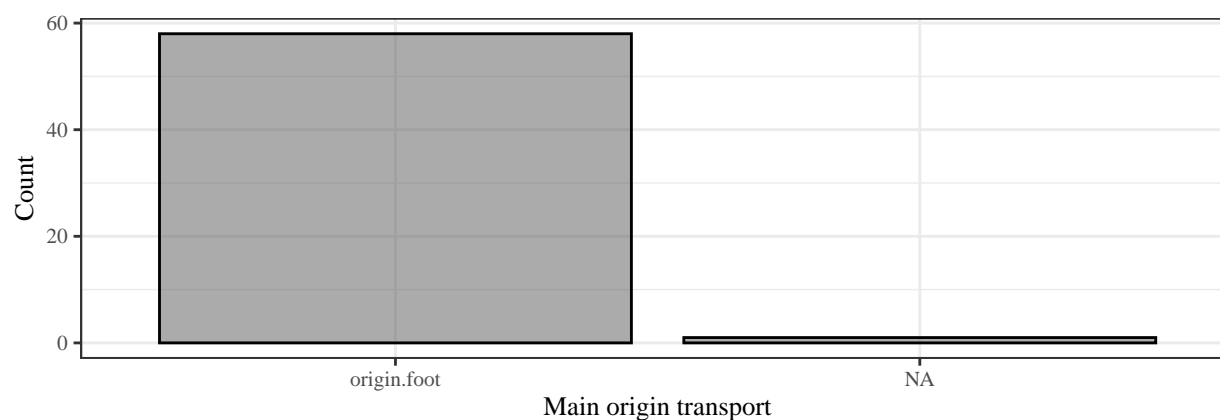
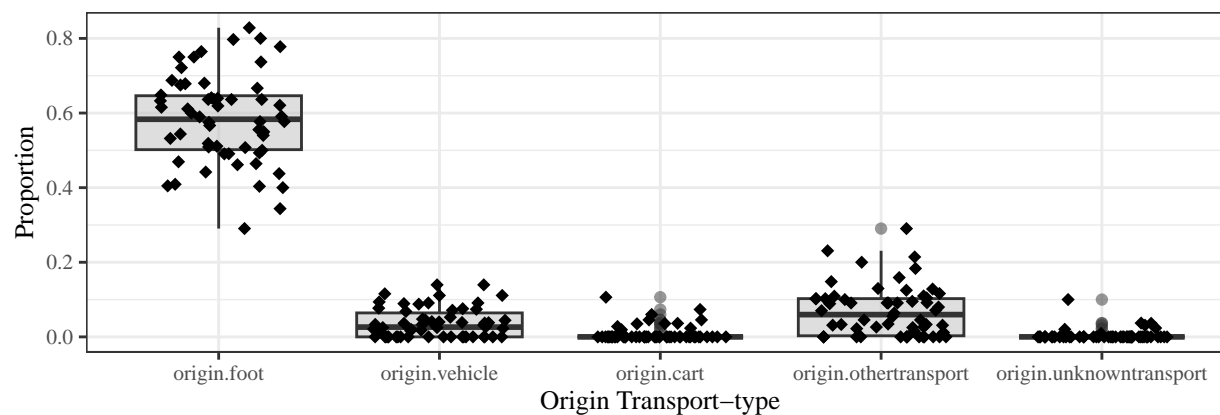
placetype	min	q1	median	mean	q3	max	NAs
village	0.34	0.50	0.59	0.58	0.66	0.87	1
town	0.00	0.00	0.00	0.01	0.02	0.12	1
market	0.00	0.03	0.10	0.11	0.18	0.34	1
abattoir	0.00	0.00	0.00	0.00	0.00	0.03	1
otherplace	0.00	0.00	0.00	0.01	0.02	0.15	1



(8) Transport to market

- Proportion of actors using different types of transport to bring animals to market:
 - Foot
 - Vehicle
 - Cart
 - Other
 - Unknown

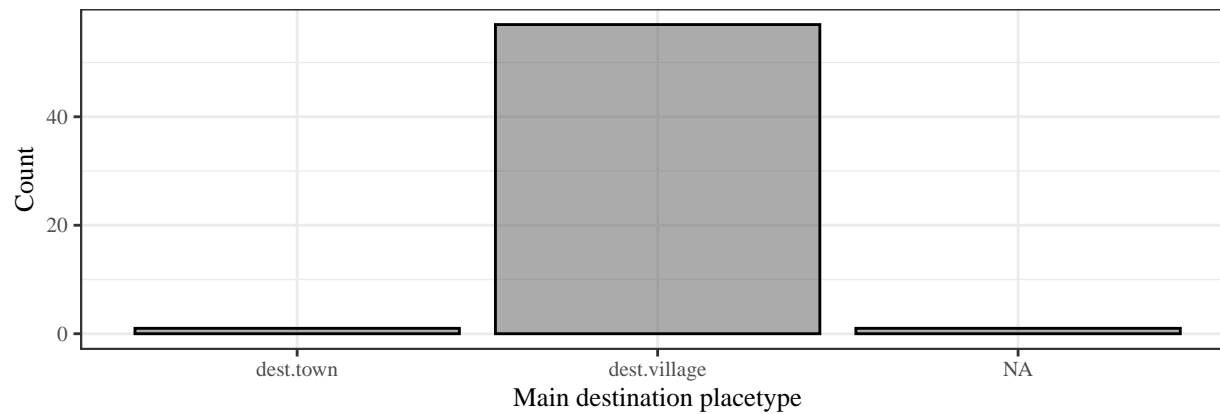
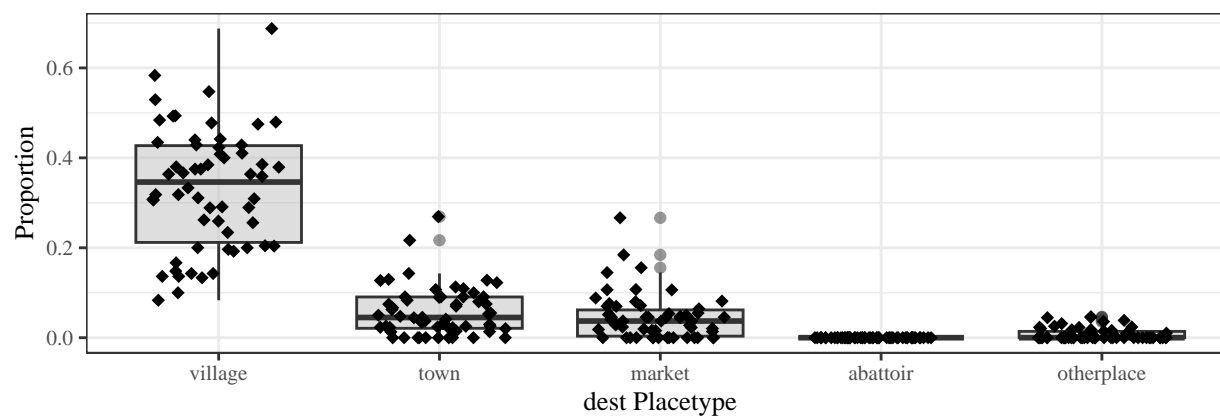
transtype	min	q1	median	mean	q3	max	NAs
origin.foot	0.29	0.5	0.58	0.58	0.65	0.83	1
origin.vehicle	0.00	0.0	0.03	0.04	0.06	0.14	1
origin.cart	0.00	0.0	0.00	0.01	0.00	0.11	1
origin.othertransport	0.00	0.0	0.06	0.07	0.10	0.29	1
origin.unknowntransport	0.00	0.0	0.00	0.00	0.00	0.10	1



(9) Destinations of animals bought at market

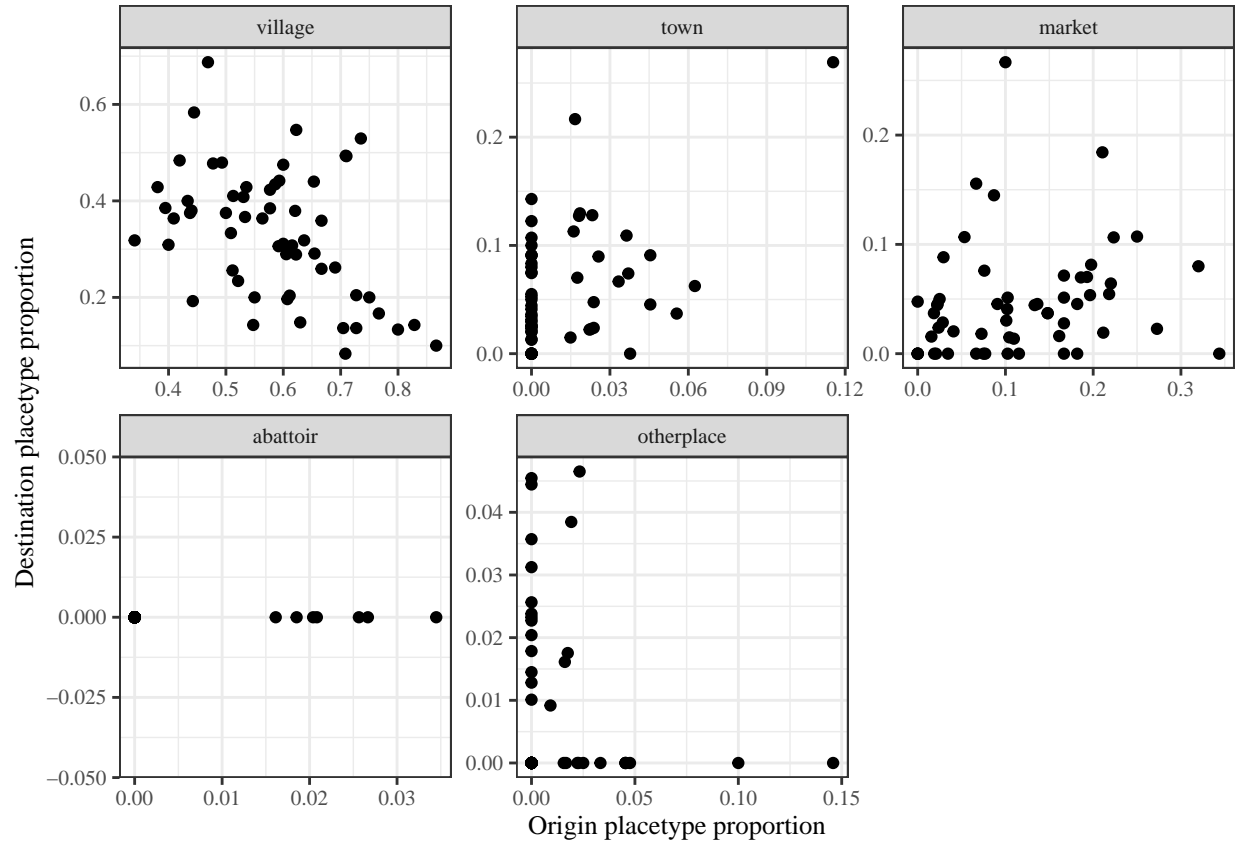
- Proportion of actors taking animals to different destination placetypes:

placetype	min	q1	median	mean	q3	max	NAs
village	0.08	0.21	0.35	0.33	0.43	0.69	1
town	0.00	0.02	0.04	0.06	0.09	0.27	1
market	0.00	0.00	0.04	0.05	0.06	0.27	1
abattoir	0.00	0.00	0.00	0.00	0.00	0.00	1
otherplace	0.00	0.00	0.00	0.01	0.01	0.05	1



(9ii) Correlation between origin and destination placetype

- *Correlations between proportion origins and proportion destinations at each market*



(10) Transport from market

- Proportion of actors using different types of transport to take animals to market:
 - Foot
 - Vehicle
 - Cart
 - Other
 - Unknown

transtype	min	q1	median	mean	q3	max	NAs
dest.foot	0.09	0.25	0.39	0.38	0.50	0.71	1
dest.vehicle	0.00	0.04	0.06	0.08	0.10	0.23	1
dest.cart	0.00	0.00	0.00	0.01	0.00	0.12	1
dest.othertransport	0.00	0.03	0.07	0.09	0.14	0.34	1
dest.unknowntransport	0.00	0.00	0.00	0.01	0.00	0.15	1

