

UrbanFood^{Plus}

The role of urban livestock keeping in household food security in Bamako, Mali

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Introduction

- With growing urban population, animal keeping in urban and peri-urban areas of West Africa increases.
- Important reasons for urban livestock keeping are contribution to household income and direct access to food.
- → The relationship between tropical livestock units (TLU) owned by households (HH) and their food security status was investigated.

Results

- According to HFIAP, 63% of HHs are food insecure (Fig. 2), and 24.7% thereof are moderately food insecure.
- A food secure household owns 9.37 TLU on average.
- This is 2.14 and 3.46 TLU more than TLU owned by mildly and moderately food insecure HH.
- The correlation between TLU owned and food insecurity (Fig. 3) is negative and significant at α = 5%.

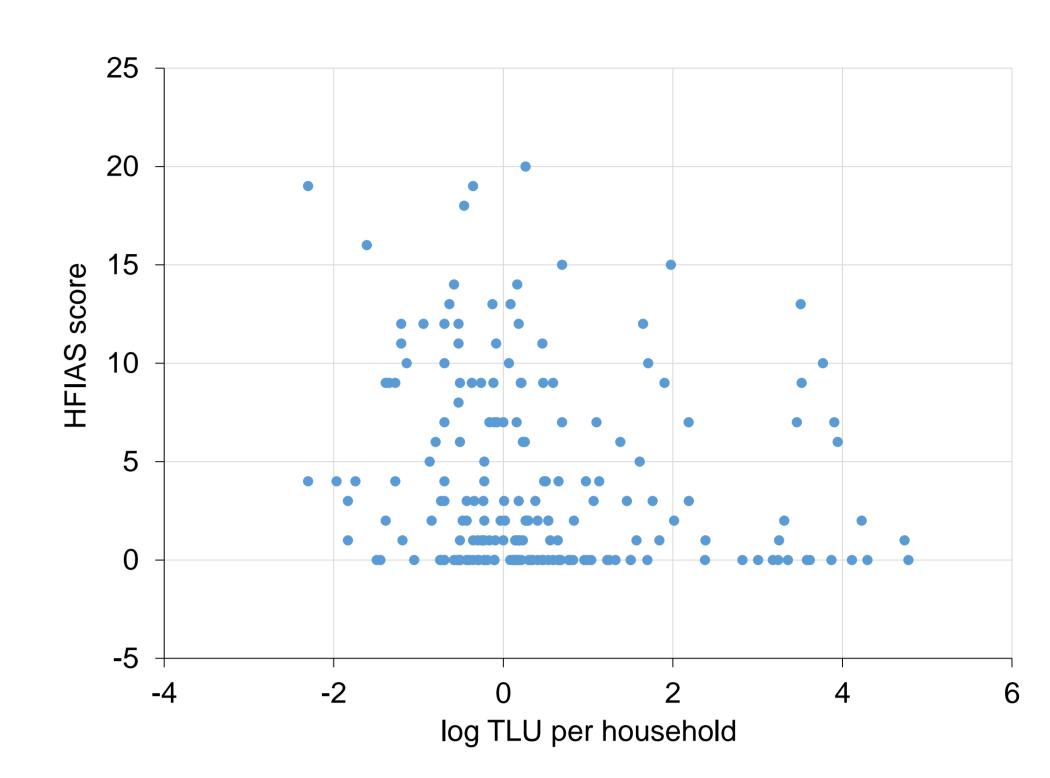


Fig. 3: Scatter plot of Household Food Insecurity Access Scale Score (HFIAS) versus TLU ownership (log-transformed)



Fig. 1: Urban farmer in Bamako feeding sheep.

Highlights

- A 1% increase in TLU ownership is associated with a 0.16% decrease in HFIAS score.
- Livestock ownership in urban & periurban Bamako is severely skewed, with many HH owing few animals and some owing a very large number.
- Living in an urban or peri-urban location does not impact food security status.



Fig. 4: Urban cattle keepers offering milk in their neighborhood market.

Methodology

- 187 HHs in urban & peri-urban Bamako (Mali) were interviewed about livestock management (Fig. 1 & 4) and food security status during 11/15 - 01/16.
- HHs were categorised using Household Food Insecurity Access Scale Score (HFIAS) and Household Food Insecurity Access Prevalence (HFIAP).
- Negative binomial regression was used to check the correlation between TLU ownership and food insecurity status.
- Further characteristics such as gender & education level of HH head, HH size and location were also included.

Food secure Mildly food insecure Moderately food insecure

Fig. 2: Prevalence of household food insecurity

Conclusions

- Although possessing livestock does not completely annihilate the threat of food insecurity, more animals improve food security status.
- Over-dispersion of TLU ownership indicates that livestock keeping in Bamako is highly diverse in terms of size of animal possession.

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