

Characteristics of Actors Involved in the Live Poultry Trading in Bangladesh

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Introduction

- Poultry meat & eggs production provide many employment opportunities for people in low and middle income countries (LMIC)
- Poultry value chains are more diverse in LMIC compared to high-income settings
- Poultry trading networks, including movement of birds between farms and markets, may play an important role in the of pathogens that enhance the disease risk for poultry and human populations

Objectives

- Describe the actors involved in live poultry trading in Bangladesh
- Identify how are the actors connected in the live poultry trading chain
- Explore the differences in chicken trade and transactions among the diverse actors in the live poultry trading chain

Methods

- Study Population:** Live bird markets (LBMs) in 5 cities (Dhaka, Chattogram, Cumilla, Bogura, Jashore)
- Surveys of actors involved in live poultry trading chains
 - LBM managers (N=48)
 - Stall owners/vendors trading poultry (N=412)
 - Mobile poultry traders/MM (N=172)
 - Feed and chick dealers (N=157)
- Data collection:** August 2020 - February 2021
- Descriptive statistics and social network analysis to describe the connectivity of actors involved in the live chicken trading chain from farm locations to LBM stalls

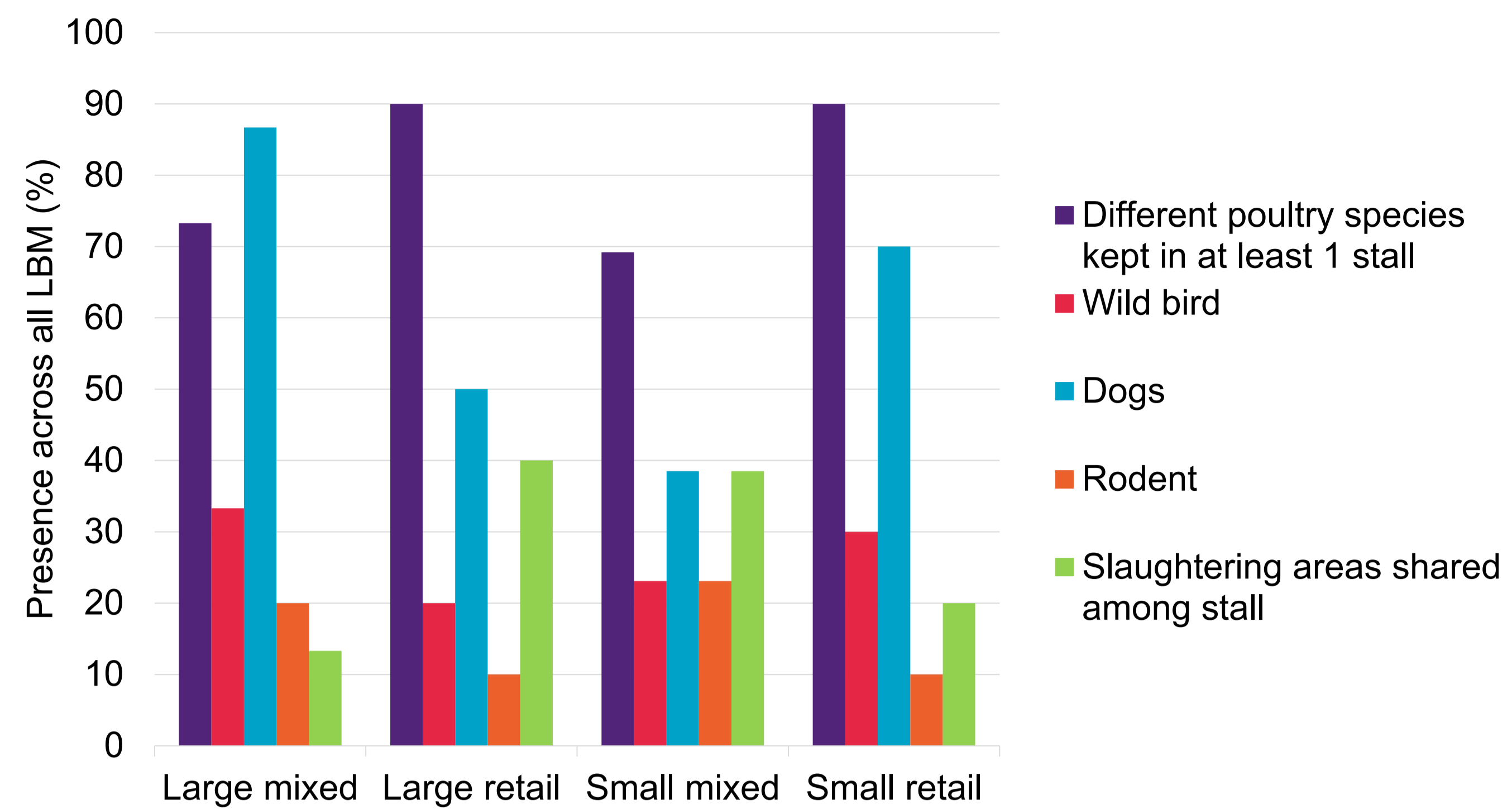


Fig 4: Observations conducted at LBMs (N=48)

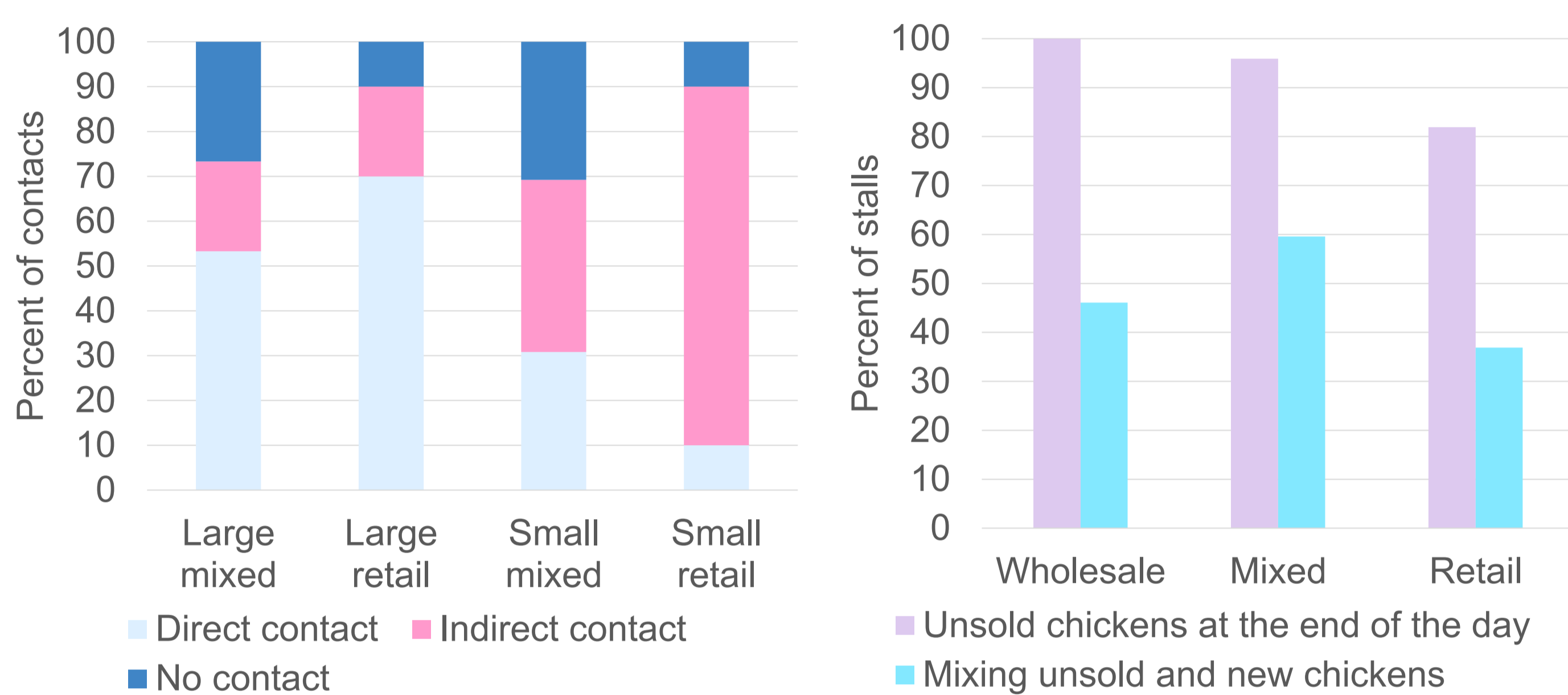


Fig 5: Contacts between chickens and other poultry species in LBMs

Fig 6: Unsold chickens by type of stalls at LBMs

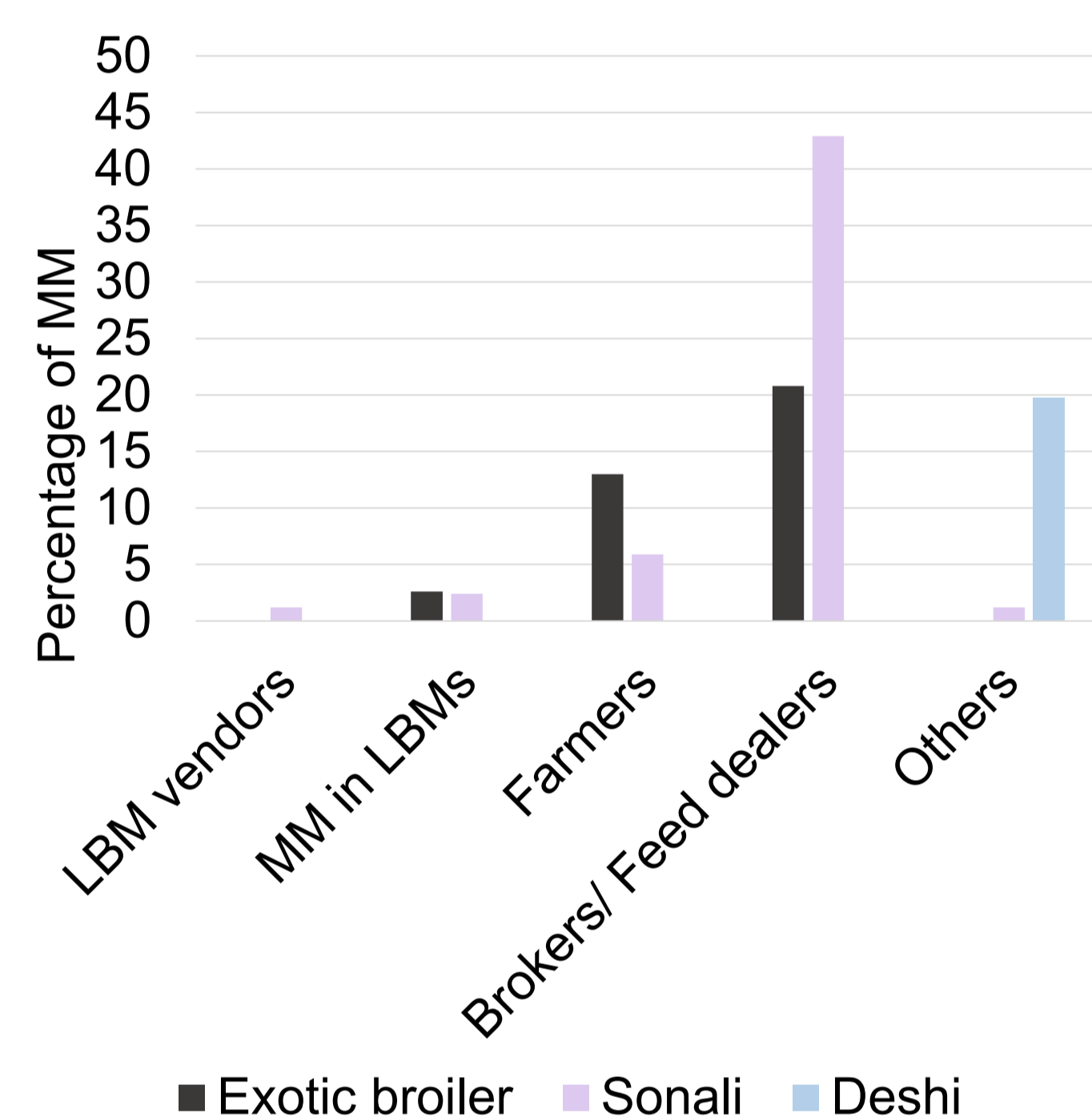


Fig 7: Sources from where chicken are purchased by MM

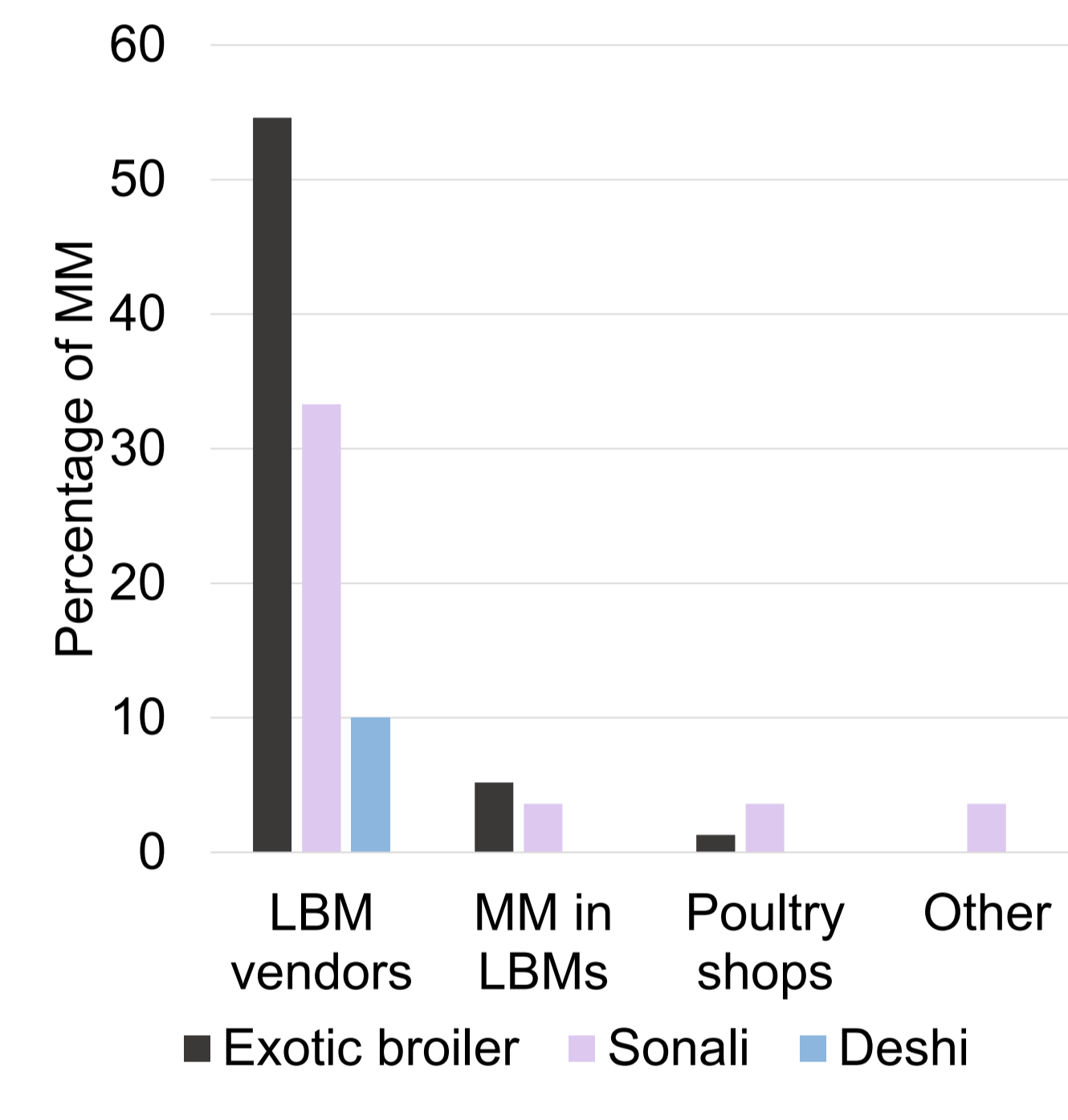


Fig 8: Destinations to where chicken are sold by MM

- Trading chains identified
- Exotic broilers: 683
- Sonali: 617

Table 2: Frequency of types of trading chains by chicken types

| | Exotic broiler | Sonali |
|--|----------------|--------|
| Farm→Feed dealers→Mobile traders→Retailer | 56.2% | 47.0% |
| Farm→Feed dealers→Mobile traders→Wholesaler→Retailer | 7.2% | 6.3% |
| Farm→Feed dealers→Wholesaler→Retailer | 0% | 7.9% |

Results

Table 1: Type of live bird markets surveyed

| District | Market type | | | |
|------------|---------------------|----------------------|---------------------|----------------------|
| | Large mixed n=15 | Large retail n=10 | Small mixed n=13 | Small retail n=10 |
| Bogura | 0 | 0 | 0 | 3 |
| Chattogram | 4 | 2 | 2 | 3 |
| Dhaka | 10 | 5 | 4 | 1 |
| Cumilla | 1 | 0 | 3 | 2 |
| Jashore | 0 | 3 | 4 | 1 |

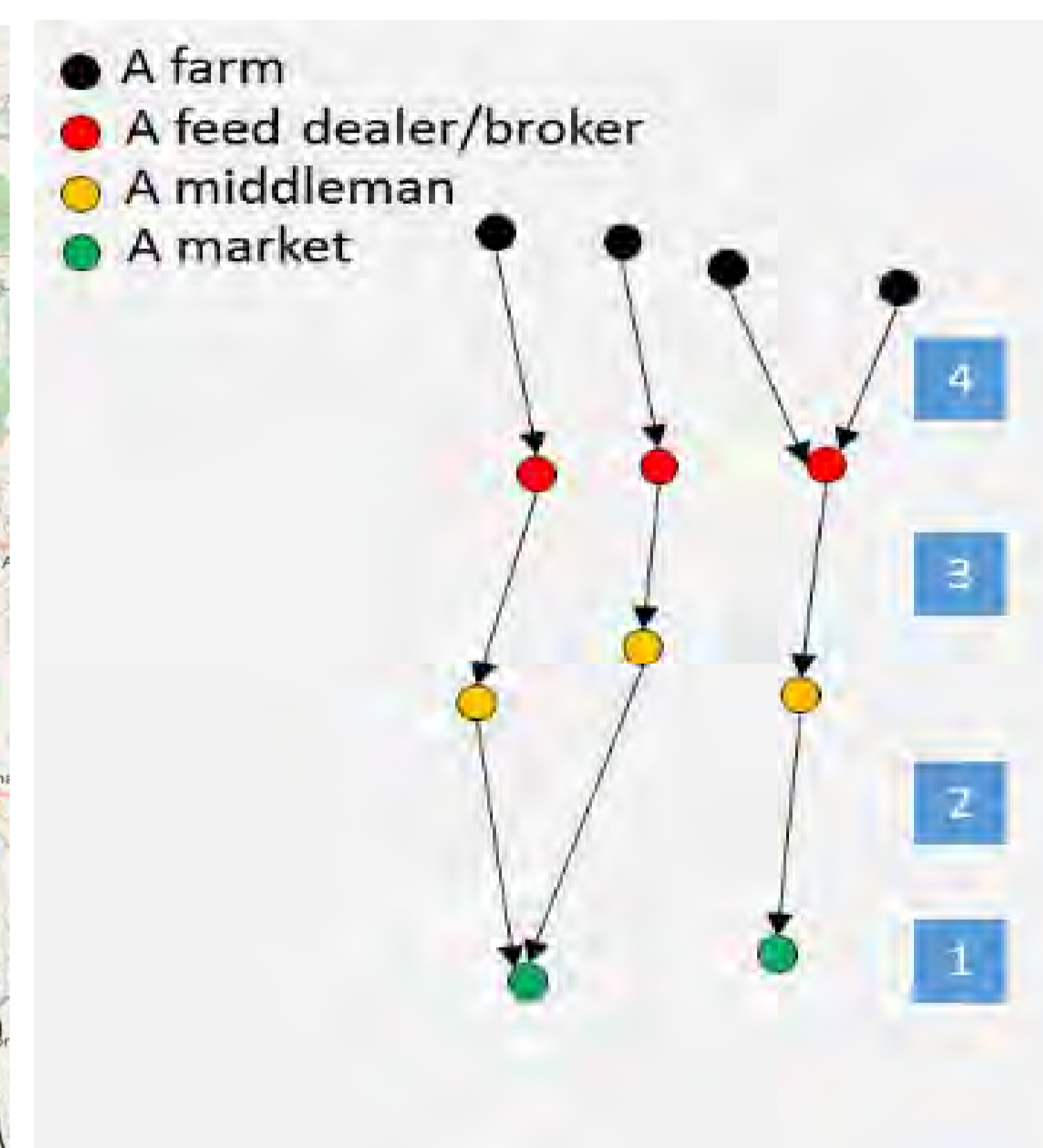


Fig 2: Tracing the links between actors



Fig 3: Chickens being supplied by staff of a MM to a stall at a LBM

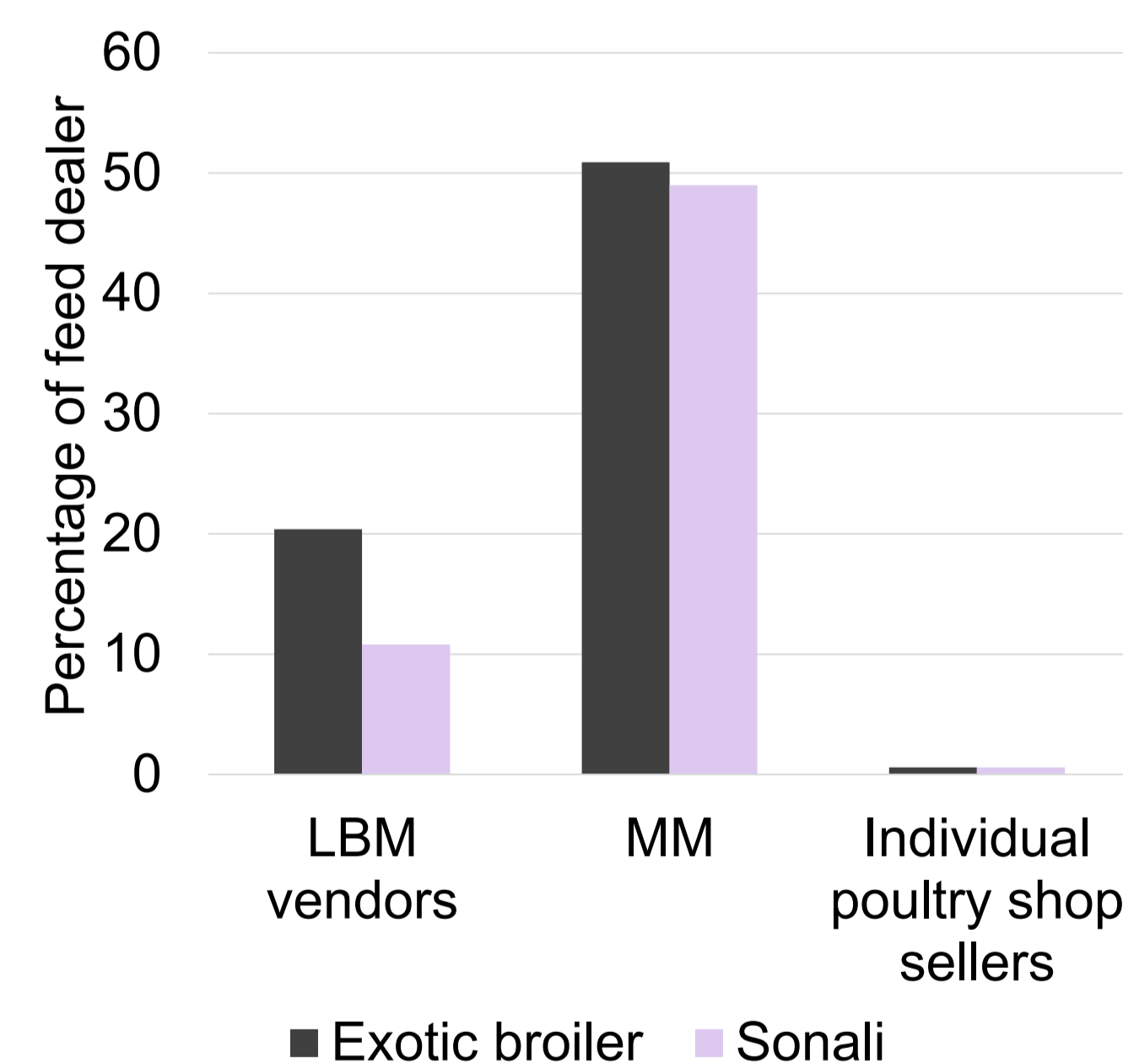


Fig 9: Destinations to where chicken are sold by feed dealers

Implications

- Identification of poultry trading & management factors that may increase the risk of pathogen spread in poultry and human populations
- Research provided a sampling frame of MM, from which MM were selected to track their daily trading activities using a customized App

Acknowledgements



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