

# Demystifying the Pathways of Impact of a Livestock Transfer Program on Household Resilience & Food Security in Malawi

Jennifer Lane, DVM, MPH

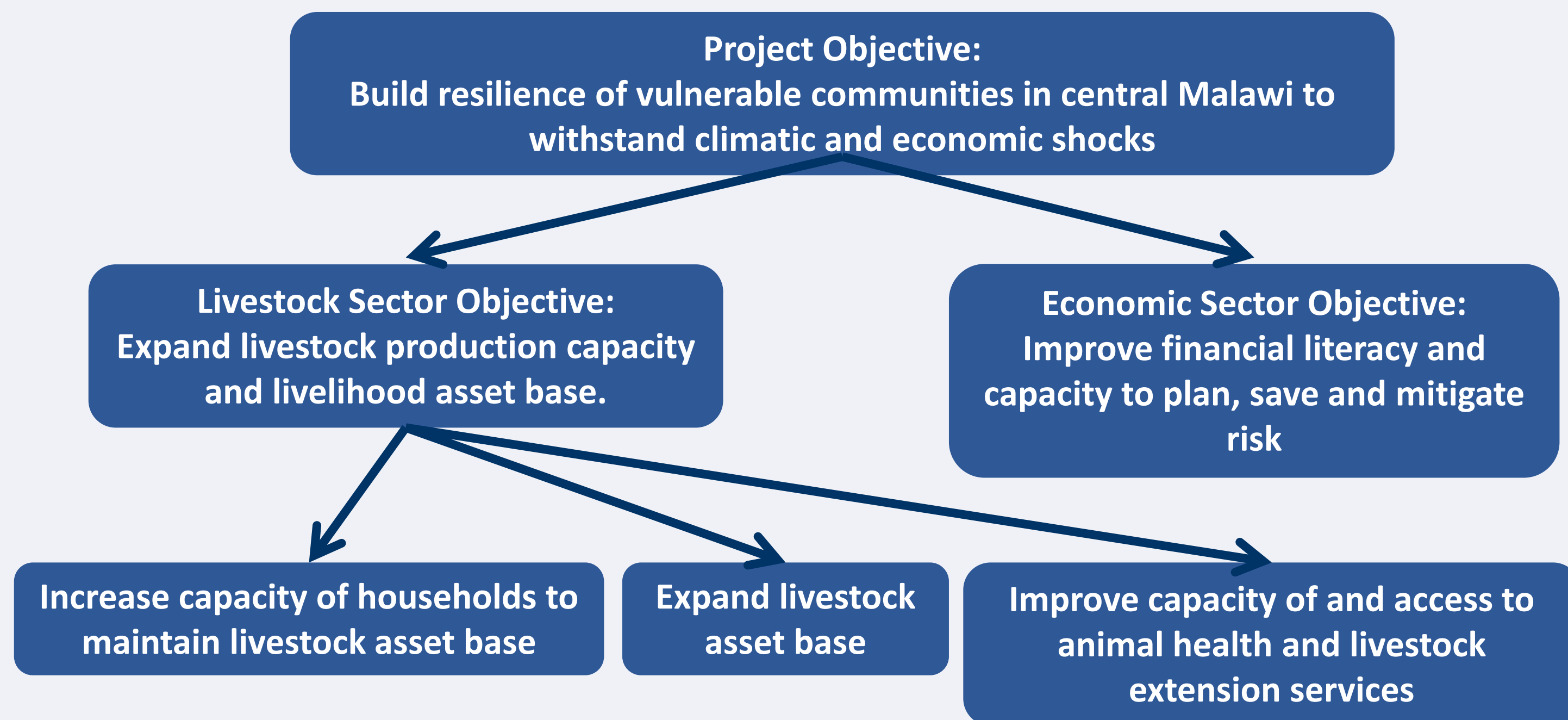
Land O'Lakes International Development, Congressional Hunger Center



## Introduction

Livestock focused agricultural development has the potential to improve household resilience and food security while reducing malnutrition. Households keep livestock to produce food, generate income, provide draught power and manure, act as financial instruments, and enhance social status.<sup>1</sup> Livestock activities are often integrated at multiple levels making the roles they fill in the wellbeing of a household complex. In Malawi, the livestock sector is relatively undeveloped.<sup>2</sup> Livestock projects in Malawi have the potential to improve resilience and nutrition but understanding how activities impact gender dynamics, household consumption patterns, and shock elasticity is imperative to better design approaches while integrating nutrition-sensitive programming.

## Livestock for Resilience (L4R) Project Theory of Change



## Objective

The objective of this research was to delineate the pathways and types of impact livestock transfer projects have on household resilience and food security.

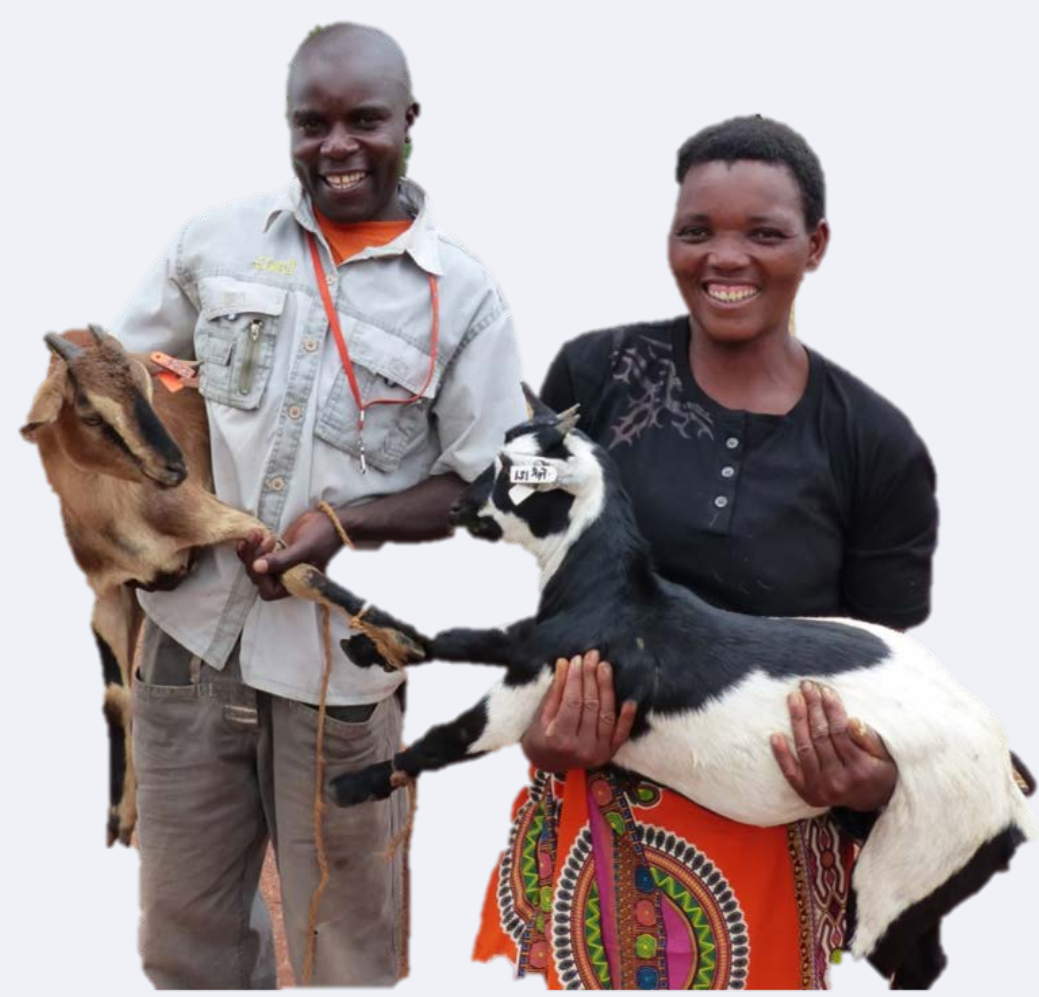
## Methods

Data was collected throughout a 23-month, USAID/OFDA funded Livestock for Resilience project implemented by Land O'Lakes International Development in central Malawi, using a mixed methods approach.

- Baseline, Midterm and Final evaluation quantitative surveys, including household and livestock assets, education, income, dietary diversity and food security indicators were performed.
- Midterm and Final evaluation qualitative key informant and focus group discussions with project participants and key stakeholders were held.
- Informal conversations with project participants, livestock vendors, key stakeholders and market observations during the last nine months of project implementation were conducted by the primary author.
- Routine statistical analyses were paired with theme analysis for qualitative interpretation.

## Findings

**N=533** member households surveyed in project final evaluation  
 Mean Household Size: **5.5 people**  
**\$287USD\*** Mean Household Annual Income  
**80%** of Households owned chickens, **55%** owned goats  
**449 Households** belong to a Village Savings and Loans Association  
 And **374** have active savings  
 Mean savings by women = **\$19.62\*\*** vs. **\$16.44\*\*** = Mean savings by men



**44%** of households feel better able to feed animal source foods to vulnerable individuals in their home

## Livestock Asset Base in Project Area, Before and After Project<sup>1</sup>

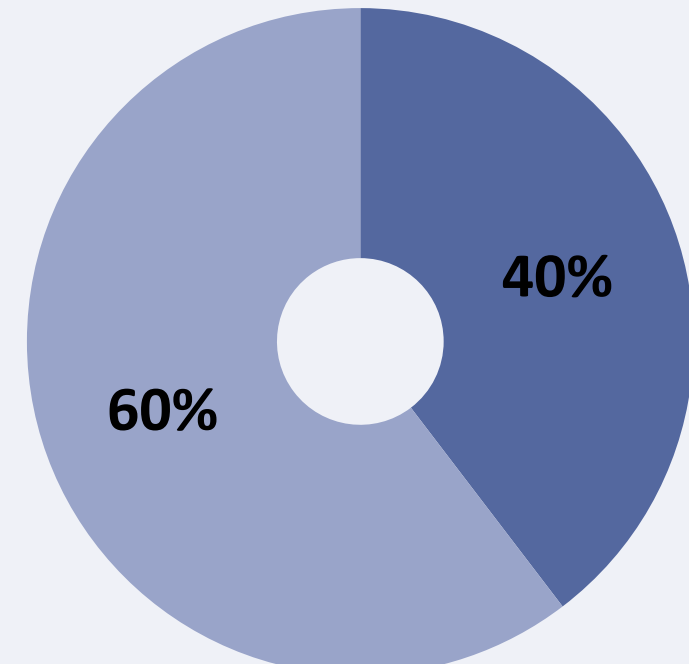
	Chickens		Goats	
	2014	2016	2014	2016
Mean	7	11.3	3.5	4.2
Median	6	10	3	4



Herd size preferred by farmers to voluntarily sell livestock, rather than for need based sales

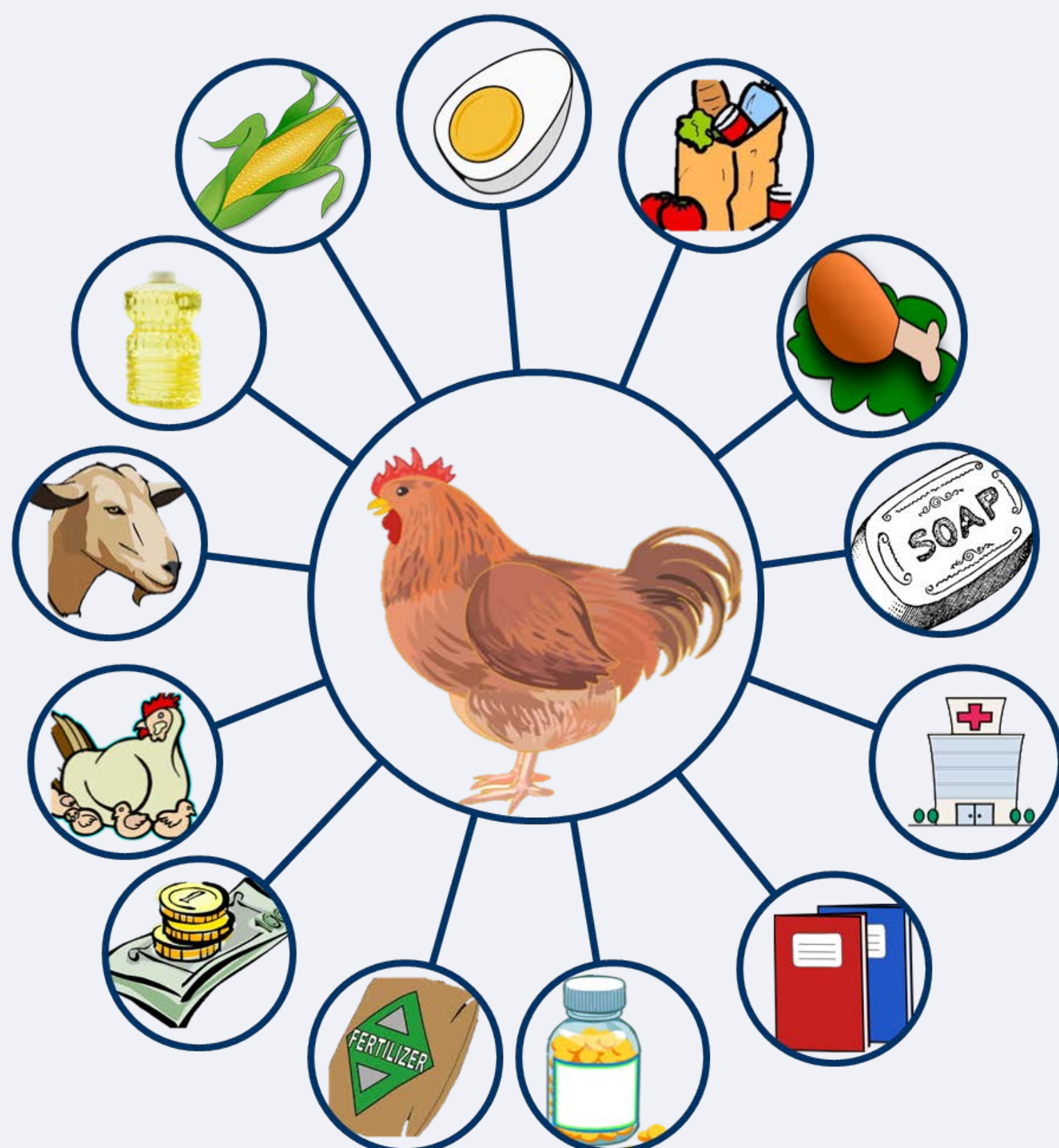
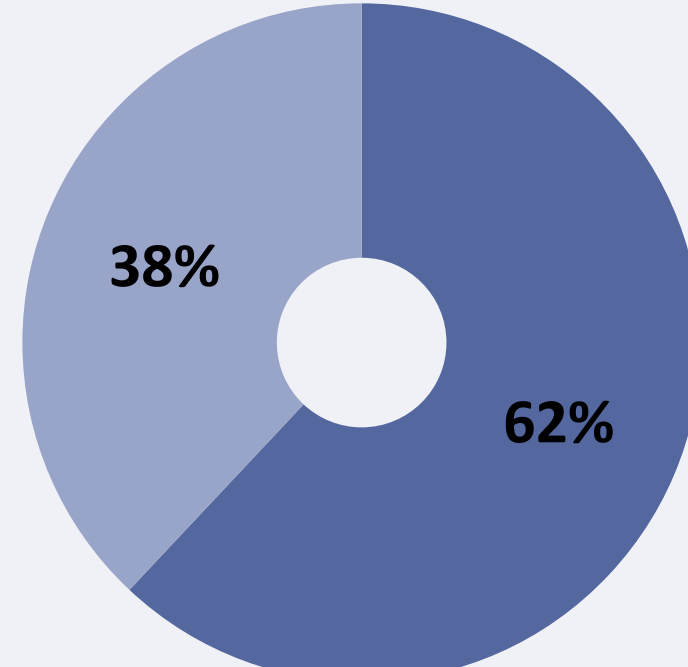
## Reason For Chicken Sale

■ Food ■ Non Food



## Reason For Goat Sale

■ Food ■ Non Food

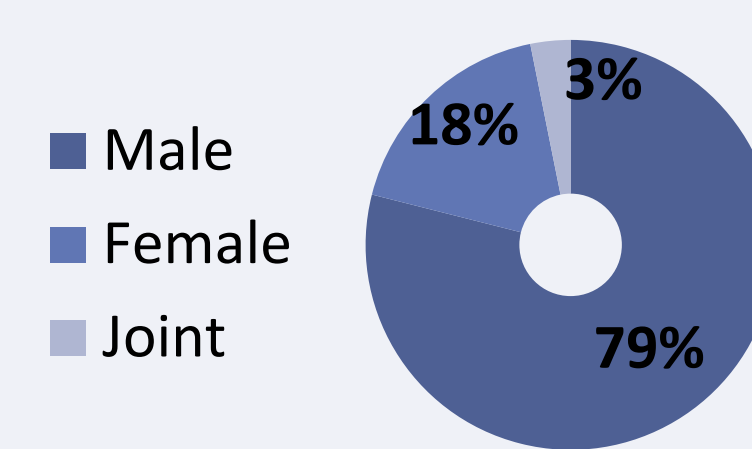


Livestock assets are converted into both food and non food items for households. This is highly seasonal and need dependent.

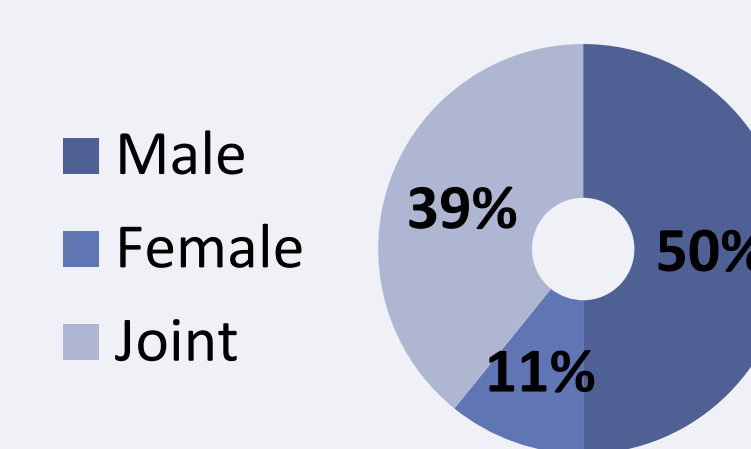
## Findings

### Livestock Sale Decision Making by Gender

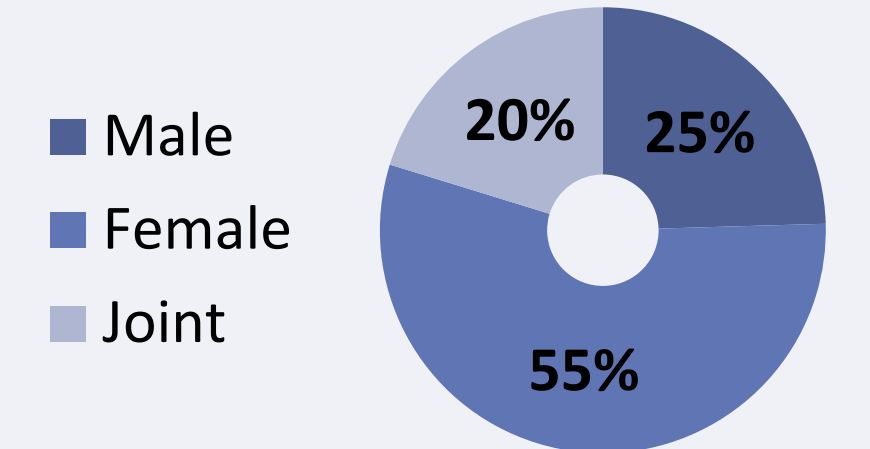
#### Goat Sale Decision Making



#### Egg Sale Decision Making

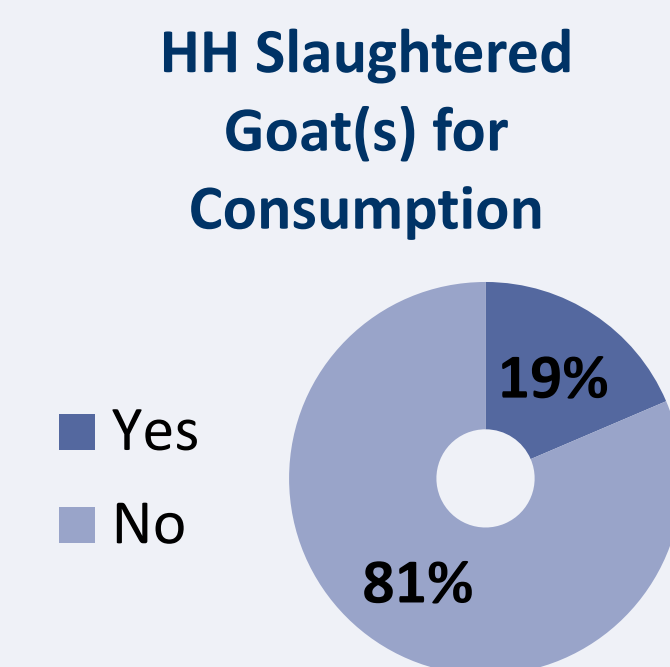


#### Chicken Sale Decision Making

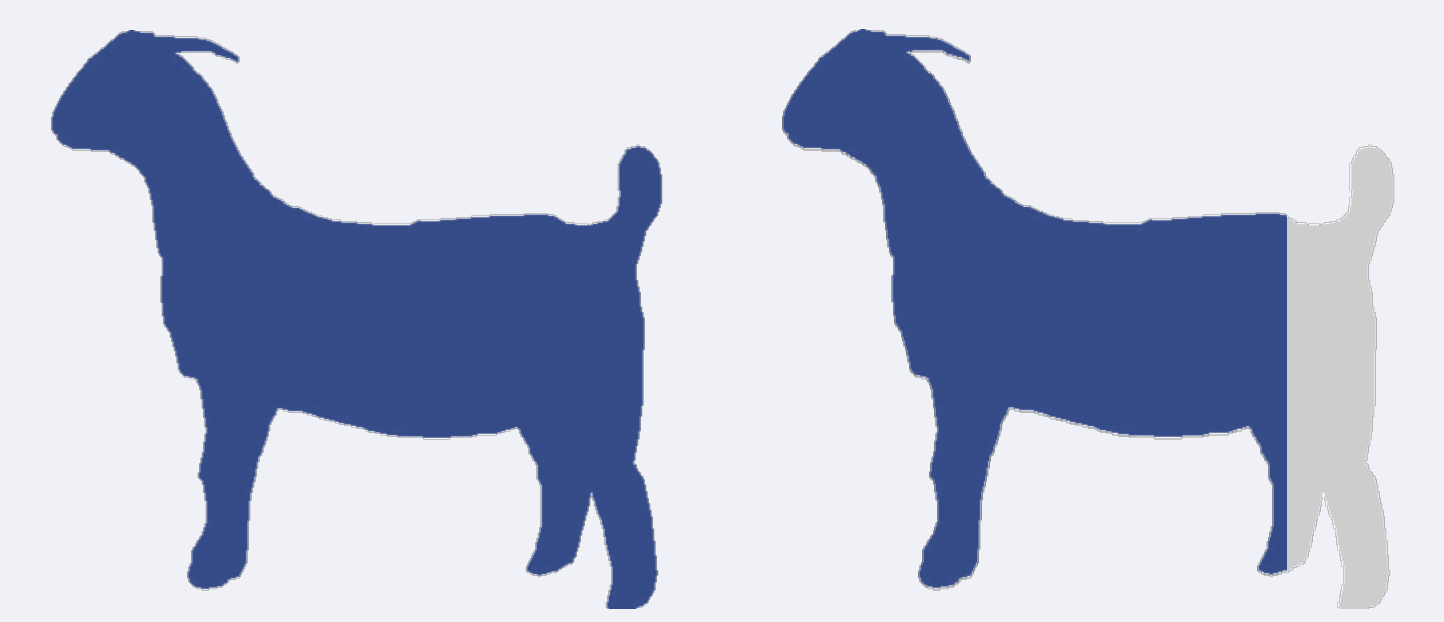


### Annual Household Slaughter For Consumption of Small Livestock Products

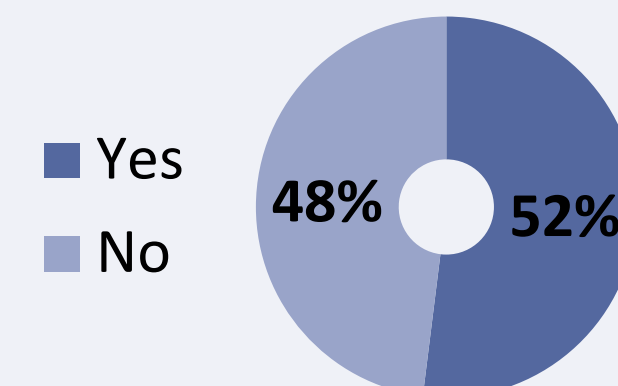
#### % of HH Slaughtering Livestock



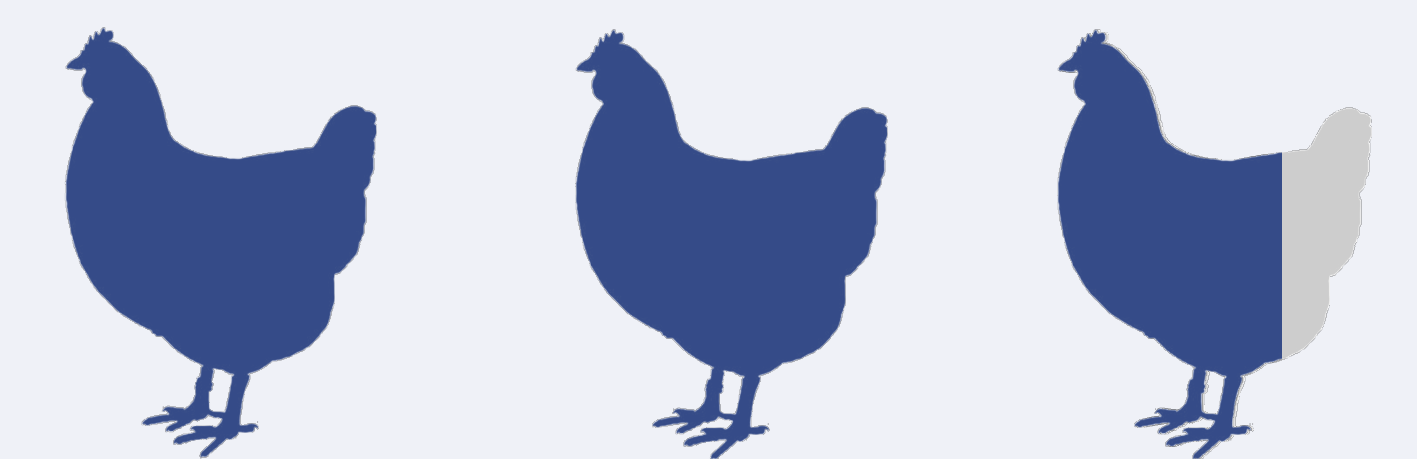
1.8



#### HH Slaughtering Chicken(s) for Consumption

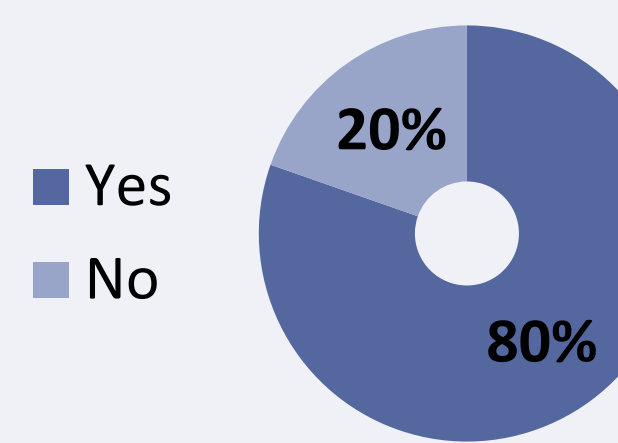


2.7

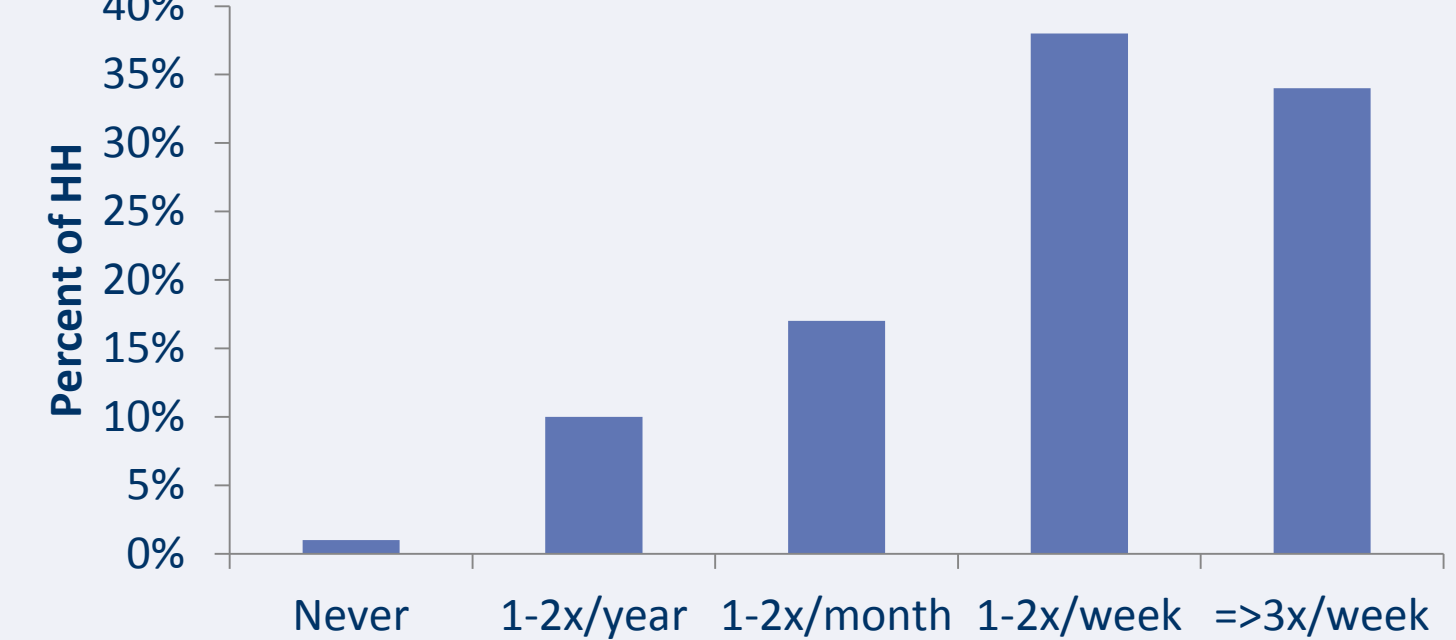


#### Household Egg Consumption

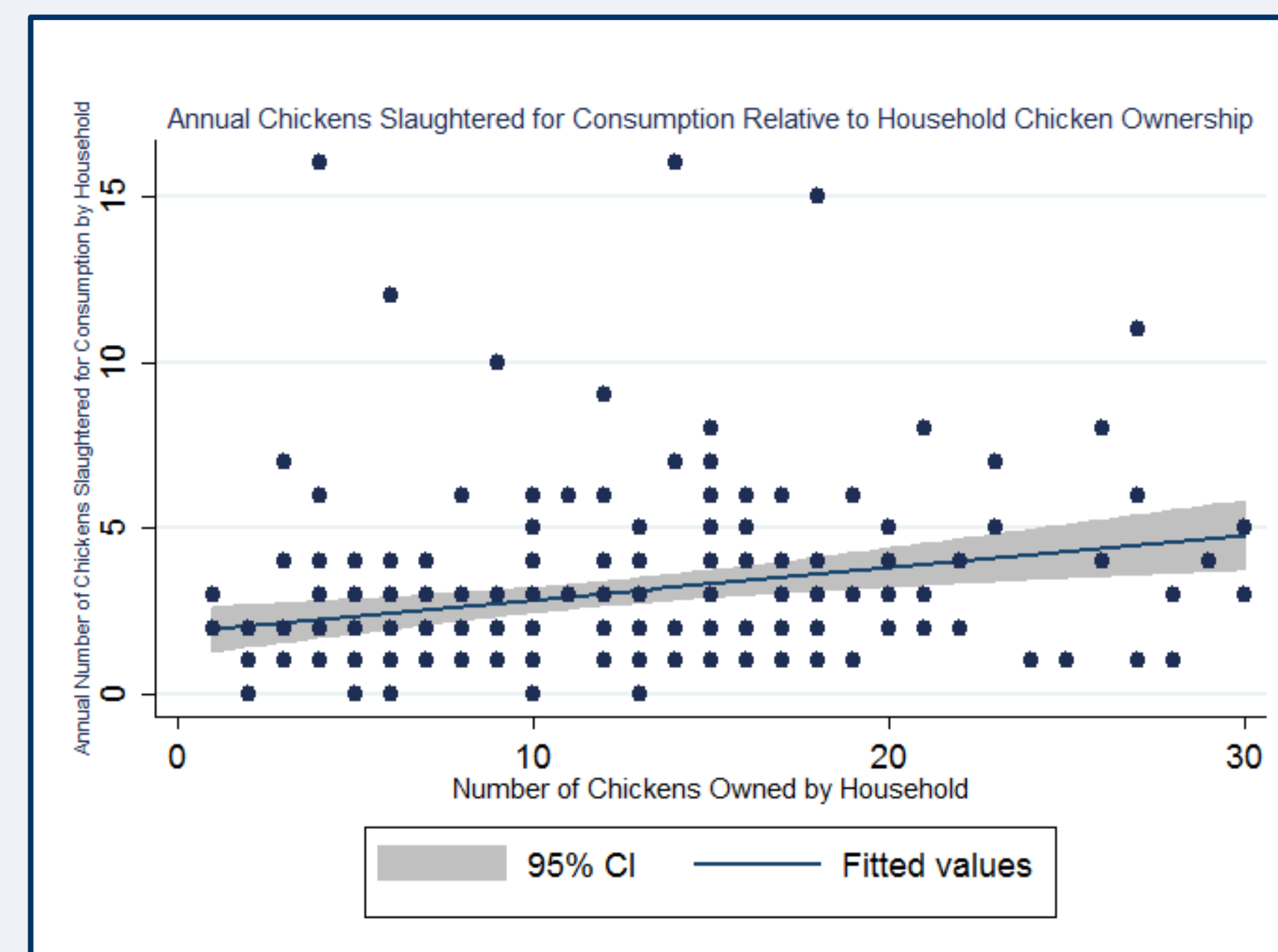
#### HH Consumes Eggs



#### How Often Does HH Consume Eggs?



**71%** of eggs consumed are purchased



## Conclusions

- Livestock development interventions have **multiple pathways of impact**; not all directly or even indirectly relate to increased consumption of animal source foods. The majority of households sold livestock, especially chickens, **to meet household needs other than food needs**. While most chicken owning households reported they consumed eggs at least once weekly, the majority of eggs consumed were purchased.
- Even if households have viable flock and herd sizes, **household consumption of home produced animal source protein does not increase correspondingly**. This has major implications when designing nutrition sensitive animal source food interventions that encourage home production of chickens and goats.
- Households often rely on piecemeal, crop sales and Village Savings and Loan Association (VSLA) loans when faced with financial needs and preferentially turn to this **before selling livestock, especially goats**. Goat sales appear to be reserved for serious emergency needs and bulk staple food purchases in the lean season.
- **Major gender differences exist** in the decision making process to sell or slaughter livestock; **women most often decide on chicken sales**, while men dominate goat sale decisions.
- Pairing a **livestock asset transfer project with other consumption smoothing mechanisms such as VSLA** access was integral to the success of the project as viewed by project staff and project members
- **VSLAs enabled women to partake in financial decision making** and positively influence household savings and spending practices. **Men's engagement in VSLA activities further empowered women** as men realized the value of VSLAs and actively encouraged their wives' participation.

## References

- 1) Randolph TF, Schelling E., Grace D., et al. 2007. "Role of livestock in human nutrition and health for poverty reduction in developing countries." Journal of Animal Science 85.11: 2788-2800.
- 2) Malawi Agriculture Sector Wide Approach; A prioritized and harmonized agriculture development agenda: 2011-2015. 2011. Ministry of Agriculture and Food Security.

## Acknowledgements and Contact Information

This research and poster were possible with support from:

- L4R project farmers
- Carmen Jaquez & Meredith Sagers, Land O'Lakes International Development
- Boniface Msiska and the entire USAID/OFDA L4R project team
- Institute for Economic and Social Research, Lilongwe, Malawi
- Congressional Hunger Center, Washington, D.C.

### Author Contact Information

Jennifer Lane, DVM, MPH  
 Animal Health and Livelihoods Technical Advisor  
 Mickey Leland International Hunger Fellow  
 Land O'Lakes International Development, Lilongwe, Malawi  
 jennielane@gmail.com  
 +265 (0)99 437 6977

\* Exchange rate \$1USD = 623 MWK (365-day average) \*\* Significantly different, p=0.05 †: if HH owns at least 1 of species