Integrating Nutrition into Livestock-Livelihoods Programming for Small-Holder Farmers: Findings from Malawi

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Agenda

• Leland SOW
• Background Info
• Livestock ➔ Nutrition Pathways
• Malawi L4R overview
• Opportunities for Integration
• Questions and Discussion
Leland Fellow Scope of Work

• Help understand pathways of impacts of livestock on household food security, livelihoods and nutrition

• Provide technical and animal health support to L4R

• Research Study within L4R – which approaches result in the greatest likelihood to improve food security and nutrition

• Evaluate current and recent LOL programming to understand what works best

• Visit PCI- Njira Title II, USAID DFAP project to understand their livestock/nutrition programing and how they are integrating

• Understand current and historical trends of development and academic community on integrating nutrition into livestock and agriculture programming

• Co-Lead TOPS funded Livestock, Animal Source Food & Household Nutrition Learning Series that Land O’Lakes is convening in collaboration with ILRI
How many of the Sustainable Development Goals (SDGs) directly or indirectly relate to livestock?

- 5
- 10
- 14
- 17
Maternal & child undernutrition

Immediate Causes

- Inadequate dietary intake
- Household food insecurity
- Inadequate care

Underlying Causes

- Income poverty; employment, self-employment, dwelling, assets, remittances, pensions, transfers, etc.
- Lack of capital; financial, human, social and natural

Basic Causes

- Social, economic and political context
Small Stock & Livelihoods “Capital”

**Human**
- ASF contribute to nutrition

**Natural**
- Manure for crops, potential for improved soil fertility

**Financial**
- Financial asset (savings on the hoof)
- Income generation

**Physical**
- Ag & Industry Value Chain Contribution
- Herd Size

**Social**
- Livestock as a status symbol
- Social Capital
Livestock Pathways to Nutrition

IMPROVED NUTRITION OUTCOMES
Pause - Any Questions?
Livestock for Resilience – L4R

- USAID-OFDA funded
- 23 months
- $2 Million
- 6000 target HH
- Central Malawi Ntchisi & Dowa
Project Objective:
Build resilience of vulnerable communities in central Malawi to withstand climatic and economic shocks.

Livestock Sector Objective:
Expand livestock production capacity and livelihood asset base.

- Increase capacity of households to maintain livestock asset base.
- Expand livestock asset base.

Economic Sector Objective:
Improve financial literacy and capacity to plan, save and mitigate risk.

- Improve capacity of and access to animal health and livestock extension services.
To delineate the pathways and types of impact livestock transfer projects have on household resilience and food security

| OBJECTIVE | BASELINE MIDLINE ENDLINE Quantitative surveys | FOCUS GROUP DISCUSSIONS & KEY INFORMANT INTERVIEWS | MARKET OBSERVATIONS & “Lived the project” | ROUTINE STATISTICS & THEME ANALYSIS |
Research CHALLENGES

• No Specific Nutrition Component

• Not really panel data

• Budget
Generally, how have you been utilizing the livestock herds that you keep on your farm over the last 12 months?

Did you sell any livestock over the last 12 months?

What would be an ideal number of adult chickens and goats for you to start selling regularly and not when you have an immediate or urgent need for cash?

Over the past 12 months, did you slaughter goats/chickens for consumption at home?

What are the coping mechanisms when unexpected expenditure occurs?
N = 533 member households surveyed
Mean Household Size: 5.5 people
$256 USD Mean Household Annual Income

80% owned chickens 55% owned goats
Chicken Flock 9.6 → 14.4
Goat Herd 4.6 → 5.3

374 have active savings in a VSLA
Mean savings by women: $19.62 vs $16.44 Mean savings by men

44% of households felt “better able to feed animal
source foods to vulnerable individuals in their home”
Herd size preferred by farmers to voluntarily sell livestock, rather than for need based sales.
If a household owns an average of 11.3 chickens, how many chickens/year might you expect them to consume?

- 2
- 3
- 5
- 7
- 9
Annual HH Slaughter for Consumption

- **1.8 goats**
- **2.7 chickens**

**HH Consumes Eggs**
- Yes: 20%
- No: 80%

71% of eggs consumed are purchased.
Annual Chickens Slaughtered for Consumption Relative to Household Chicken Ownership

- Y-axis: Annual Number of Chickens Slaughtered for Consumption by Household
- X-axis: Number of Chickens Owned by Household

- 95% CI
- Fitted values
Village Savings and Loan Association
Access to financial resources identified as the MOST important resilience capacity to recover from shock - evaluating various shocks across multiple contexts in Ethiopia

Pathways ARE NOT linear

Eggs often have more value to the farmer in potential to turn into another chicken

VSLA / Access to financial services is integral to livestock project success
**Animal HEALTH & HUSBANDRY Training, +/- Livestock TRANSFER**

- Increased Livestock &/or ASF production
- Increased Livestock/ASF available for sale &/or consumption
- Improved HH Nutrition, HH Food Security, Increased HH Income, Improved HH resilience

**Targeted Behavior Change Communication around consumption of ASF**

1) Consideration of agricultural season when delivering livestock messaging regarding sales of livestock and/or ASF, and consumption of ASF
2) Look for opportunities for more cross-sectoral collaboration

**Explicit Nutrition Objectives**

1) Improved monitoring and measurement of nutrition outcomes and impact on HH food security and livelihoods
2) Distinct project targets disaggregated for consumption of specific ASF

**Activities**

1) Outdoor, Improved Animal Housing
2) Chick Care
3) Chicken Vaccination against Newcastle Disease
4) Income Smoothing Measures (VSLA, mobile banking, etc.) so that household can have access to financial savings capabilities and grow herd/flock size, instead of relying on livestock sales for emergency cash flow needs
5) Environmental considerations

1) Importance of ASF to alleviate undernutrition and micronutrient deficiency – esp. in women and children (1st 1000 days)
2) Change value structure of livestock – important to nutrition (vs. income potential)
3) Option of sale of livestock products for purchase of less expensive nutrient rich foods
Thank you
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Questions?