

How Livestock Is Used As a Coping Mechanism with Respect to Food Insecurity Among Livestock Keepers of Africa

A Literature Review from a Current Perspective

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Land O'Lakes

INTERNATIONAL DEVELOPMENT

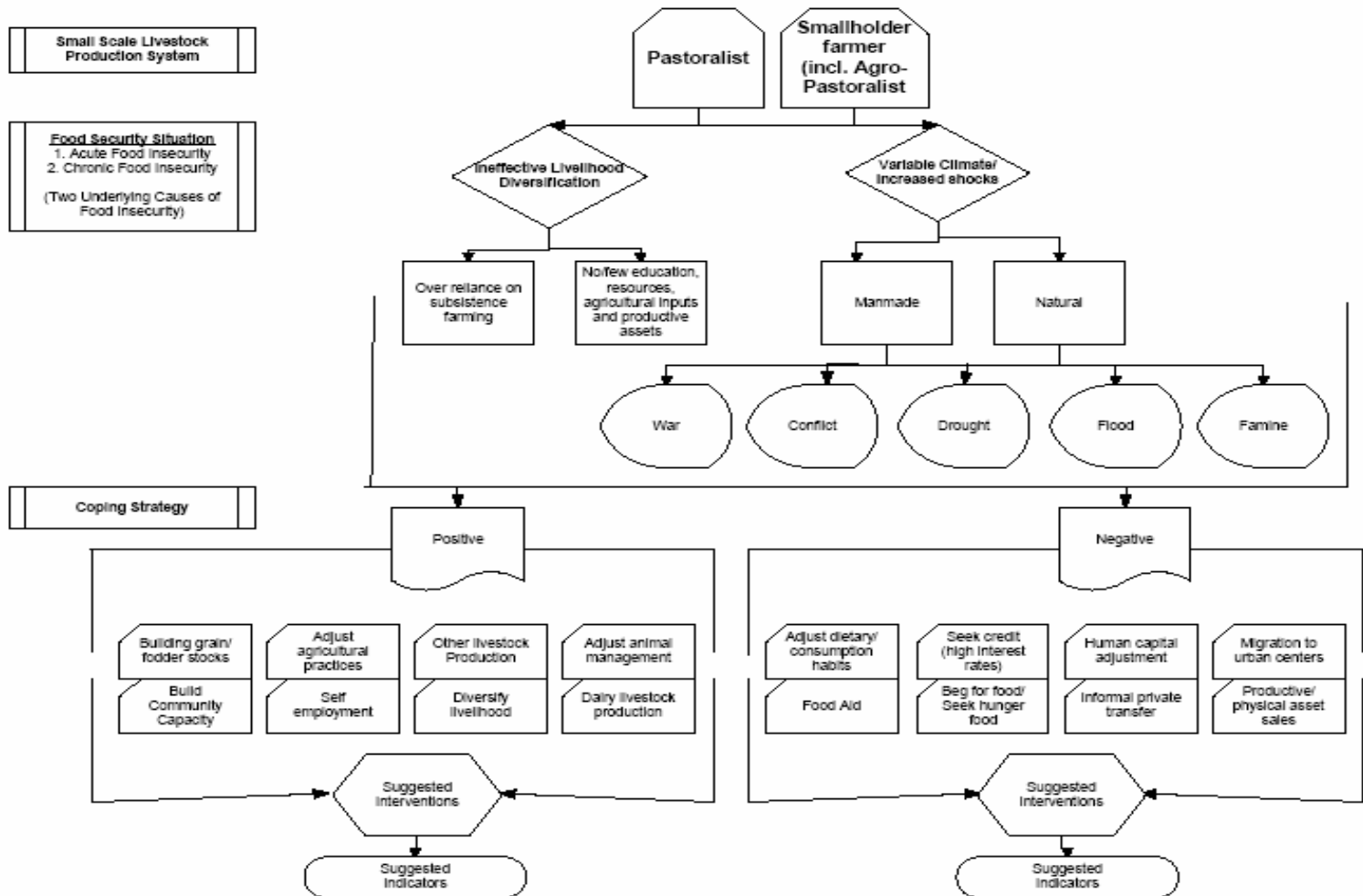
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PRESENTATION OUTLINE

1. Case Studies
 - Title II Land O'Lakes Zambia DAP
 - Pastoralists and Surrounding Issues
2. Livestock Interventions & Coping Matrix
3. Main Conclusions
4. Discussion

COPING STRATEGIES SMALL SCALE LIVESTOCK PRODUCTION SYSTEM





CHRONIC FOOD INSECURITY – LOL ZAMBIA TITLE II PROGRAM

- Zambians Increase Income
 - Smallholder Dairy Producer Development
 - Distribution of Productive assets
 - Distribution of pass-on calves
 - Provision of artificial insemination (AI)
 - Market Linkage
 - Market facilitation with processor
 - Collaboration with local NGOs and government



ZAMBIA CASE STUDY (cont.)

- Cooperative Development
 - 6-8 months training
 - Develop Community Livestock Worker
 - Monthly Performance monitoring
- Milk Collection Centers
 - Bulking center
 - Transforming into BDS



ZAMBIA CASE STUDY FINDINGS

- Average total income of beneficiaries increased 24 % from start of program
- MIHFP reduced 1.8 months from baseline
- Children and adults drinking milk average around 300 ml/per/day
- Dairy cows are a multiplier effect—pass-ons and alternative economic opportunities
- Dairy cows are surviving during drought, but recently some were destocked due to the CBPP disease
- Beneficiaries are food secure in one agricultural year as recognized by FFP



PASTORALISTS CASE STUDY

- Mobility paradigm
 - Pastoralists are one of the largest vulnerable groups in Africa
 - Large number of pastoral groups in a small area, competition for scarce resources is common
 - Pastoralists have kept and maintained livestock for many years
 - Growth in livestock numbers has not kept up with human population growth.
- Recent experiences indicate that the times are changing and there are times when pastoralists can not cope well with frequent shocks.



LIVESTOCK INTERVENTIONS VARY —EMERGENCY PHASES

- Risk Preparation—preserve the herd
- Emergency Alert—involves anticipating the poor terms of trade for the pastoralists
- Emergency—make use of the situation by destocking the dying animals
- Rehabilitation—indicated when the rains arrive as in the case of drought

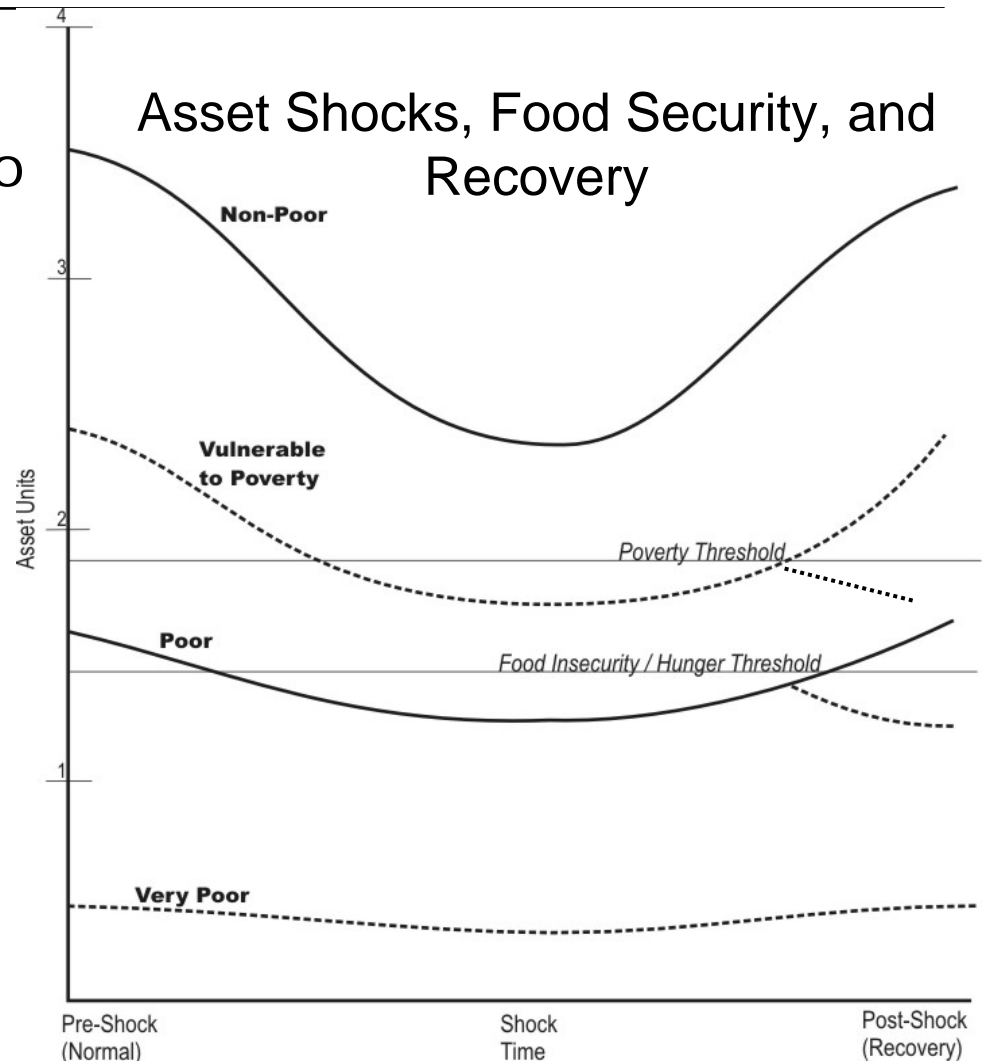
INTERVENTIONS (cont.)

Livestock Interventions also depend on types of wealth group

- Non-poor
- Vulnerable to poverty
- Poor
- Very poor

(NOTE: Shock=Drought)

Source: Peter D. Little, "Trade, Livelihoods, and Food Security in Southern Somalia," report prepared for the Food Security Programme, United Nations FAO, (FAO, Rome: 12/15/2005) 20.



COPING MATRIX

Positive Coping Strategy	Suggested Dairy and Livestock Interventions					
	Chronic Food Insecurity (ongoing interventions)	Acute Food Insecurity				Suggested indicators
		Risk Preparation	Emergency Alert	Emergency	Rehabilitation	
Livestock production	<ul style="list-style-type: none"> Dairy livestock production: Use crossbred dairy cow; training and extension in animal husbandry, pasture cultivation and fodder storage, water conservation, recordkeeping, and cooperative development; build Milk Collection Center; and develop market linkage with processor, creating a viable value chain Form cooperative/group and develop transparent and inclusive organizational structure Provide AI services Train paravets Develop animal health, land, and/or water committee Build fodder storage shed Collect and save fodder Improve animal nutrition Diversify livestock holding: Large stock-donkey, oxen, camel and small stock-rabbits, chicken, pig, goats/sheep Diversify livestock products: meat, milk, hides/skins, honey Build value of livestock and products: cheese, ghee, leather handicrafts, jerky, specialty honey Support the vaccination of sick animals Use vet/medical mobile model to reach more mobile groups Train dairy cow as traction animal Trade in large stock for smallstock or destock for money 	<ul style="list-style-type: none"> Dairy livestock production Build Milk Collection Centers for bulking milk Build and strengthen market linkages with processors Form cooperative/group and develop transparent and inclusive organizational structure Provide AI services Train paravets Develop animal health, land, and/or water committee Create private sector water/pasture management options Build fodder storage shed Collect and save fodder Improve animal nutrition Diversify livestock holding: Large stock-donkey, bull, camel and small stock-rabbits, chicken, pig, goats/sheep Diversify livestock products Build value of livestock and products Repair and improve water points Designate cattle camp grazing area for breeding stock 	<ul style="list-style-type: none"> Utilize saved fodder Protect water points Provide feed supplement to breeding stock and immature females Empower application of animal health, land, and/or water committee Adjust animal management: split herd, culling of young and old bulls, stagger breeding among animal types, graze males and milk dairy animals Support paravets Vaccinate sick animals within the vector Use vet/medical mobile model to reach more mobile groups Voluntary destocking Provide subsidies to traders to simulate destocking initiatives, i.e. cover transport cost, feed costs Slaughter animals and purchase meat for food distribution at location Truck animals into markets Provide water and fodder along trekking route using camels Place animals in fattening/quarantine/breeding camps Mitigate conflicts 	<ul style="list-style-type: none"> Food Aid: direct, natural resource oriented FFW/FFA/FFT or CFW Provide potable water and shelter to the needy Utilize saved fodder Protect, repair and improve water points Provide feed supplement to breeding stock and immature females Support application of animal health, land, and/or water committee Adjust animal management: split herd, culling of young and old bulls, stagger breeding among animal types, graze males and milk dairy animals Support paravets Vaccinate all animals Use vet/medical mobile model to reach more mobile groups Commercial destocking Provide subsidies to traders to simulate destocking initiatives, i.e. transport cost Slaughter animals and purchase meat for food distribution at location Truck animals into markets Provide water and fodder along trekking route using camels Place animals in fattening/quarantine/breeding camps Mitigate conflicts 	<ul style="list-style-type: none"> Dairy livestock production Strengthen cooperative/group Strengthen Milk Collection Centers Provide access to AI services Strengthen market linkage with processor Support paravets Strengthen committees Improve animal nutrition Diversify livestock holding Diversify livestock products Build value of livestock and products Collect and save fodder Repair and improve water points Provide vaccination as disease may still exist in area Provide fodder/water subsidy as fodder may still be scarce, using camels Develop alternative feed Restock smallstock to appropriate marginalized hrs 	<ul style="list-style-type: none"> % of farmers adopt project defined minimum sustainable agricultural technology # of animal health, land and/or water committee formed # of milk collection centers # of animals destocked by type # of animals restocked by type # of animals stocked by type # of animals own** # of productive female livestock for sale in the market** # of beneficiary trained HDS Average annual crop yield** Monthly net income from sales PGCI



LITERATURE REVIEW

MAIN CONCLUSIONS

- Livestock, especially dairy livestock, can be the key to improving, protecting and enhancing food security
- Positive coping strategy
- Diversify livelihood options to increase access to food security
- Mobility is important to keep in mind but may not be for everyone at all times
- Use of livestock as a coping strategy as part of Development Relief Approach



THANK YOU

DISCUSSION PERIOD