



Towards Nutrition Security Among Mothers and Children Through Livelihood Programs



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Introduction

Food and nutrition insecurity is still a global problem despite attempts by governments to address it. Uganda, our case study has had a long history of a very low GHI

In 1991, Uganda Food and Nutrition Council embarked on drafting a comprehensive Uganda Food and Nutrition Policy, and its Investment Strategies.

- Completed in 2001, reviewed in 2003.

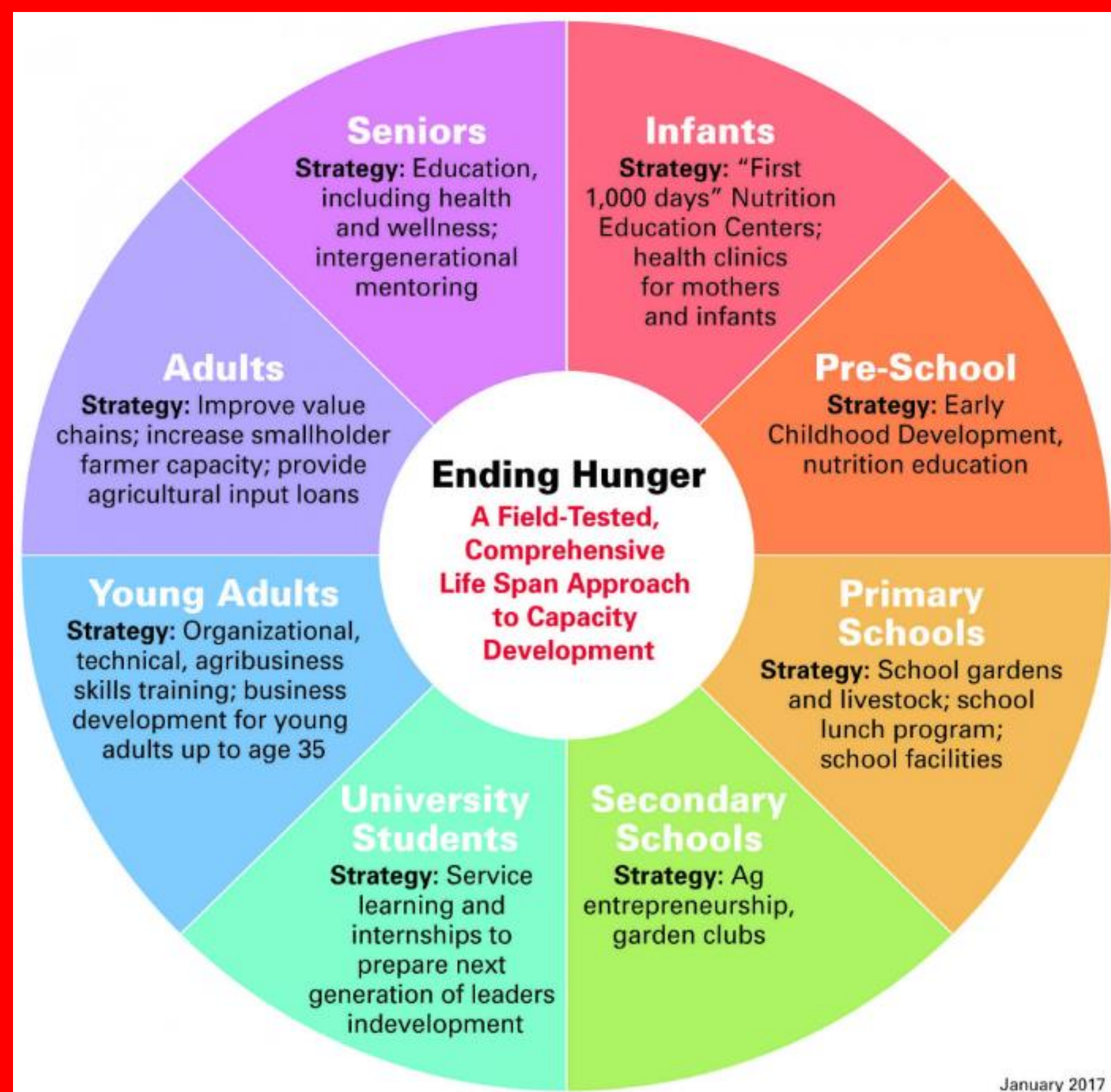
The council had a challenge of limited extension agents.

- Part of the policy strategies was the promotion of public-private partnerships through the ministries
- Health, Agriculture, Office of Prime Minister...

These strategies ushered in the partnership between Uganda and Iowa State University (ISU) through the Center for Sustainable Rural Livelihoods (CSRL)¹.

CSRL Capacity Building Concept

CSRL touches the lives of all community members, from pregnant to seniors, through different livelihood programs while concurrently building their capacities³.



The CSRL uses a community-based approach to the management of malnutrition through nutrition education centers (NECs).

This study sought to determine whether participation in the Livelihood Education Programs (LEPs) impacts the nutritional health status of mothers and children.

Methods and Procedures

Comparative survey; Part of a larger study
NEC trainers led the research team to NEC households

- We accessed 316 Households that had
 - 292 mothers and 394 children aged 0-59 months
- Interviewed an additional 138 for comparison that had
 - 121 mothers and 121 children

Types of Data Collected

- Asked if households participated in any LEPs
 - Age at first pregnancy of mothers.
 - Sex and age of children.
- Data on maternity practices
- Anthropometric indices: Height and weight.

Data Analysis and Interpretation

- Mothers' health based on Body Mass Index
 - <18.5Kg/M2 -- Underweight.
 - 18.5-24.9Kg/M2 -- Healthy.
 - ≥25Kg/M2 -- overweight.
- Children's health - Z-scores using WHO Anthro
- <-2 standard deviations from the median reference
 - Height-for-Age (HAZ) -- Stunting.
 - Weight-for-Age (WAZ) -- Underweight
 - Weight-for-Height (WHZ) – Wasting

Findings

Nutritional health varied between households and participation in the LEPs.

- Most mothers were healthy (70.7%), overweight (16.7%), and underweight (12.6%).
- Child stunting rates were higher (37.1%) compared to wasting (16.7%) and underweight (22.7%).

Findings Conti...

Relationships

- Agronomy programs were associated with healthy children (55.1%)
- Underweight among mothers can be attributed to early pregnancy at 12 years.
- Underweight mothers were associated with underweight (27.7%) and stunted children (44.6%).
- Stunting affected more boys than girls and 24-35 months of age, a weaning period from breastfeeding
- Only 66.9% of the fourth youngest child had at least four antenatal clinic visits (ANCs).
- 87.6% of mothers gave birth with the help of nurses
 - However, home birth was at an increasing rate.

Conclusions and Implications

Participation in nutrition and health education is a prerequisite to behavioral change toward good health.

There are positive behavioral changes in nutrition and infant feeding, maternal, reproductive health practices.

We recommend more partnerships in monitoring the implementation and assessment of the practices.



LEPs and Overall, Health Status	Reproductive Mothers					Children 0-59 Months of Age				
	Non-Participants		LEPs Participants		P-Value (χ ²)	Non-Participants		LEPs Participants		P-Value (χ ²)
	f	%	f	%		f	%	f	%	
Agronomy and Postharvest										
Malnourished	64	30.5	57	28.1	0.593	124	53.9	128	44.9	0.042
Healthy	146	69.5	146	71.9		106	46.1	157	55.1	
Livestock Integration										
Malnourished	80	30.8	41	26.8	0.392	155	51.3	97	45.5	0.196
Healthy	180	69.2	112	73.2		147	48.7	116	54.5	
Nutrition and Infant Feeding										
Malnourished	52	30.4	69	28.5	0.677	93	51.1	159	47.7	0.467
Healthy	119	69.6	173	71.5		89	48.9	174	52.3	
Water and Public Health										
Malnourished	52	30.6	69	28.4	0.630	92	50.5	159	47.7	0.564
Healthy	118	69.4	174	71.6		90	49.5	174	52.3	
Complementary Services										
Malnourished	41	29.3	80	29.3	0.997	68	47.9	184	49.3	0.770
Healthy	99	70.7	193	70.7		74	52.1	189	50.7	
Community Income Innovations										
Malnourished	113	29.3	08	29.6	0.969	236	49.2	16	45.7	0.693
Healthy	273	70.7	19	70.4		244	50.8	19	54.3	