



IYCN USAID's Infant
& Young Child
Nutrition Project

Focusing on Women and Children

A Nutritional Impact Assessment Tool for Planners

Tom Schaetzel
Infant & Young Child Nutrition (IYCN) Project

The Infant & Young Child Nutrition Project

- USAID Global Health Bureau flagship project on infant and young child nutrition.
- Aims to prevent malnutrition for mothers and children during the critical time from pregnancy until two years of age.
- Led by PATH in collaboration with CARE, The Manoff Group, and University Research Co., LLC.



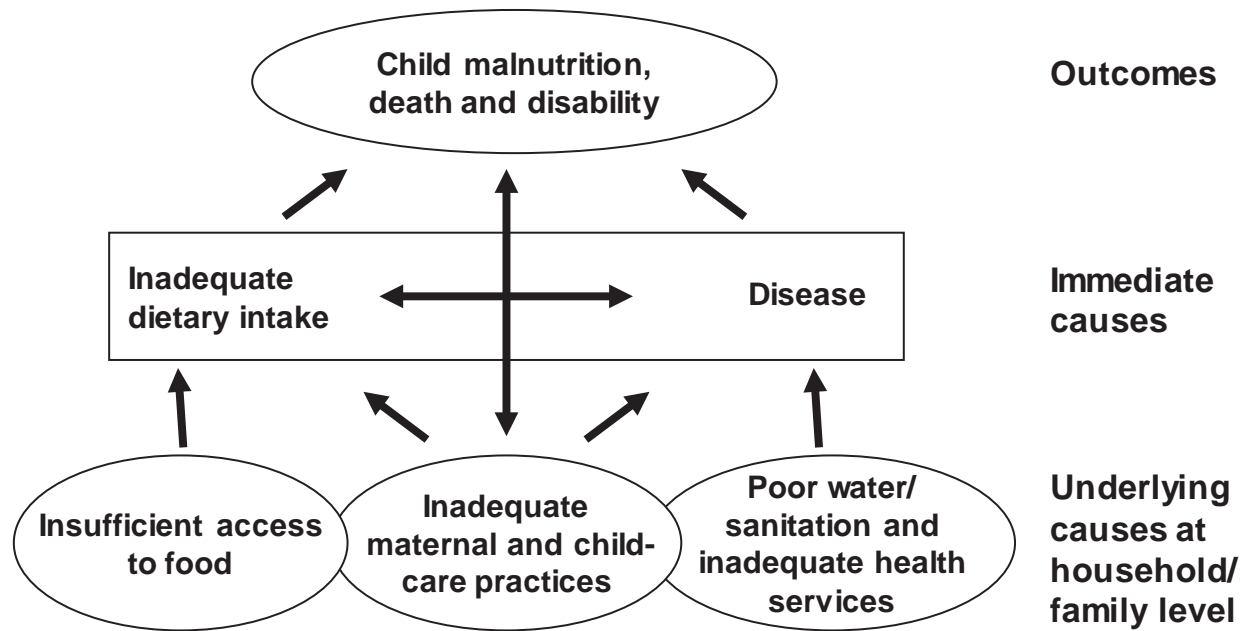
Children's needs are special

- In Kenya, shifting production from maize to sugarcane...
 - **Improved incomes:** sugarcane laborer wages 3 times higher than maize laborers.
 - **Improved household food intake:** 360 kcal per household per day.
 - **Did not improve child nutritional status:** caring practices and morbidity more important than food security and income.



Photo: PATH/Evelyn Hockstein

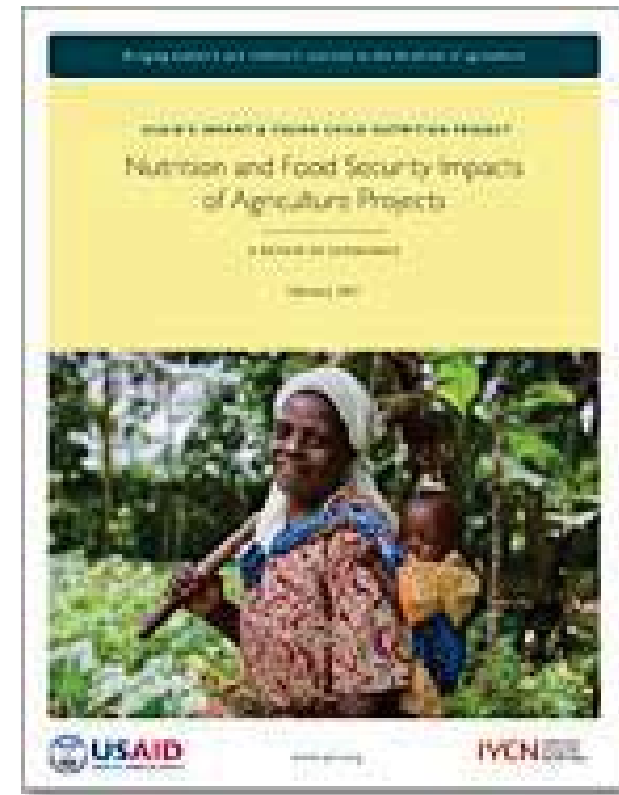
Will Increased Income or Food Availability Improve Child Nutrition?



Source: The State of the World's Children 1998

Defining the Problem: A Review of Experience

- What are the characteristics of agriculture interventions that improve food security and nutrition?
- What are the characteristics of interventions that have negative effects?



Potential for positive food security impacts

- Involve **women** (increases food security gain from income gain).
- Introduce **small-scale processing** for employment.
- Promote food disproportionately produced or consumed by food insecure households.



Photo: QFP/Mario DiBari

Potential for negative food security impacts

- Un- or under-employment increases (e.g., large-scale mechanization).
- New technologies take hold but smaller farmers cannot afford to adopt them.



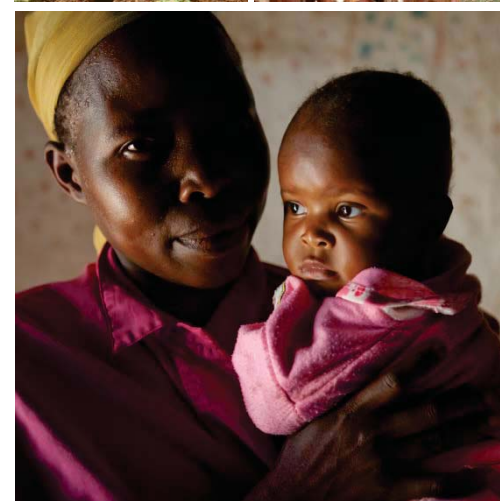
Potential negative food security impacts of price supports/controls

- Food prices drop and vulnerable households are net sellers.
- Food prices rise and vulnerable households are net purchasers.



Potential for positive nutritional impacts

1. Nutritional objectives.
2. Produce foods of high nutritional value AND vulnerable households consume a portion of their production.
3. Nutrition counseling included
4. Homestead production incorporated.
5. Access and utilization of health care, sanitation, and hygiene improved.
6. Micronutrient-rich crop varieties introduced and/or promoted.
7. Nutritionally vulnerable populations targeted.



Potential for negative nutritional impacts (beyond food security)

- **Agriculture employment** if it denies women enough time for child care
- **Animal production** if it increases the risk of zoonosis and chronic disease.
- **Irrigation** if it increases mosquito populations and malaria.



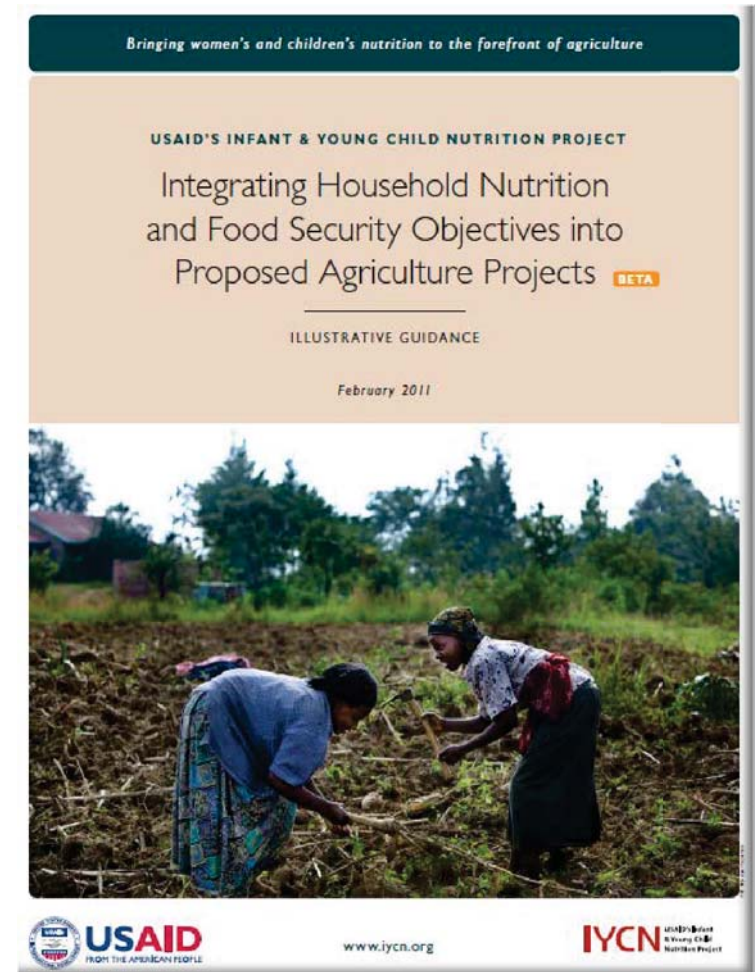
Offering Solutions: Tools for Planners

1. **Do Good:** Include meaningful nutrition objectives in project design with activities supporting them.
2. **Do no Harm:** Protect nutritional considerations in project design.



Including Nutrition Objectives

- Focus on women, infants and young children
- Specify a vulnerable population suffering from high malnutrition prevalence.
- Choose appropriate nutrition-related indicators.



Indicators for Objectives

- Food Security
 - Household Hunger Scale (HHS)
 - Household Dietary Diversity Scores (DDS)
 - Income/expenditure data
- Nutrition
 - Caloric intake
 - Minimum acceptable diet (or individual DDS)
 - Nutritional status (WFA, HFA, WFH)
 - Vitamin A or iron intake (or serum retinol / Hb)

Guidance for Activities to Support Objectives

- The SUN interventions
- Include nutrition programming expertise on design team
- IYCN brief on child nutrition programming
- “Nutrition Program Design Assistant”


<http://www.coregroup.org/component/content/article/119>

Protecting Nutrition: the Nutritional Impact Assessment Tool

- Similar to environmental and gender impact assessments.
- Helps agriculture program planners to consider nutrition impacts on vulnerable groups.

Nutritional Impact Assessment Tool

General instructions: This On-line tool enables you to assess the nutritional impact of your project. It is designed to be used by project planners and implementers. It is not intended to be used by the general public.



1 Project objectives

Enter each of the project objectives in the space below.

2 Population groups at risk



Define each at-risk group in the individual columns and enter the comparison group in the right hand column.

At-risk group	Comparison group
A	
B	
C	
D	
E	

3 Current status of population groups at-risk

Complete the table with existing data that documents the status of the at-risk and comparison groups. For rows 1-3 choose data that represents risk for children under 5 or children under 15 and for rows 4-5 choose data that represents girls/women 15-44 years. Insert an 'X' if data is not available for specific populations. Consult also for the International Survey Recommendations Overview for guidance on selecting data.

Group A	At-risk group	Comparison group
Indicator	Indicator	Indicator
Indicator 1:		
Indicator 2:		
Indicator 3:		
Indicators 4-5 (15 years)	Add a piece in the 4 indicators to show the current status of the comparison group.	Add a piece in the 4 indicators to show the current status of the comparison group.
Indicator 4:	or just make a note in the 'Remarks' box!	or just make a note in the 'Remarks' box!
Indicator 5:	or just	or just
Indicator 6:		

How does it work?

Step 1	List Project Objectives
Step 2	Define population groups at risk.
Step 3	Describe nutrition situation for at-risk.
Step 4	Create approach alternatives.
Step 5	Estimate likely outcomes.
Step 6	Modify as needed for no negative impact..
Step 7	Assess and select alternatives.
Step 8	Design mitigation plan.
Step 9	Develop review plan.

Step 3: Define nutritional situation

- Hardest part of the NIA: finding data specific to vulnerable groups
- Indicators:
 - Children's anthropometric data: WFA, HFA, WFH (or Mid-upper arm circumference if WFH not available)
 - Caloric intake (children and/or women)
 - Individual dietary diversity scores
 - Vitamin A or iron status (relative to standards)

Step 5: Estimate Likely Outcomes

		Food insecure population group B	← highland pastoralists
		Children <input type="checkbox"/> <2 or <input checked="" type="checkbox"/> <5 (check one)	
underweight →	Indicator 1	Positive	
vitamin A status →	Indicator 2	No change	
	Indicator 3		
	Overall impact estimate	No change to positive	
		Girls/women 15–44 years	
BMI →	Indicator 4	Positive	
	Indicator 5		
	Indicator 6		
	Overall impact estimate	Positive	

Decision matrix to guide discussion

Decision matrix for estimating expected outcomes

Intervention							Likely outcome
Cash crop	Is the land on which this crop is likely to be grown currently unused or underutilized?	Yes					Positive
		No	Is the crop which this crop will displace disproportionately consumed by food insecure households?	Yes			Negative
		No				Neutral	
New food crop (or livestock)	Is the land on which this crop is likely to be grown currently unused or underutilized?	Yes					Positive
		No	Is the crop which this crop will displace disproportionately consumed by food insecure households?	Yes	How does the nutritional value of the new food crop compare to the traditional crop it will replace?	Same	Neutral if cost is same; Positive if cost is less
						Better	Positive if cost is same or less; Neutral or Negative if cost is greater
						Worse	Negative
			Yes	How does the market price of the new food crop compare to the traditional crop it will replace?	Same	Neutral if nutritional value is same; Positive if nutritional value is better	
					More	Negative	
		Less	Positive if nutritional value is same or better				
	No					Positive or Neutral	

Step 7: Assess alternative approaches

- Rank according to best nutritional outcomes, and select the approach(es) to be implemented.
- **DO NOT NEED** to select the approach producing the best outcomes for nutrition.
- **DO NEED** to justify not selecting the approach producing the best outcomes for nutrition.
 - Cost
 - Detracts from production/income impact

Steps 8: Mitigation Plan

- Prepare a “mitigation plan” in advance
- Monitor results using indicators from initial impact assessment
- Implement the mitigation plan if observe negative impacts through monitoring.

Thank you



Tools available at www.iycn.org
Contact me: tschaetzel@path.org

References

- Kenya example: Cogill B, Kennedy E. Effects of sugarcane production in southwestern Kenya on income and nutrition. In: von Braun J, Kennedy E, eds. *Agricultural Commercialization, Economic Development, and Nutrition*. Baltimore, MD: Johns Hopkins University Press; 1994.