



Maximizing Nutritional Benefits of Agricultural Interventions

Do good, but above all do no harm

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Infant & Young Child Nutrition (IYCN) Project

The Infant & Young Child Nutrition Project

- USAID Global Health Bureau flagship project.
- Aim: to prevent malnutrition for mothers and children from pregnancy until two years of age (1,000 days).
- Led by PATH in collaboration with CARE, The Manoff Group, and University Research Co., LLC.



Does increased agricultural production improve nutrition?

“...one of the most persistent of misperceptions...about technology and economics...is the idea that as long as production is rising, any problems of consumption will sort themselves out.”

(Pacey and Payne)



Does increased income improve nutrition?

“Income is a rather dubious indicator of the opportunity of being well nourished....”

(Drèze and Sen)

Photo: PATH/Evelyn Hockstein



Does increased income improve nutrition?

Not everything can be bought...



Maximize production or nutritional impact?

“There are trade offs and complementarities between production/employment goals and meeting nutritional goals which should be taken into account...when making program decisions.” (USAID, 1982)



Photo: PATH/Evelyn Hockstein

Review of experience

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

Negative food security impacts when...

- Un- or under-employment increases among population groups that are already un- or under-employed.
- Cultivation shifts to cash crops and the shift decreases labor utilization.
- New technologies take hold but smaller farmers cannot afford to adopt them.



Negative food security impacts when...

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



Principle causes of negative impacts...

1. Smallholders not able to participate in improvements.
2. Mechanization disproportionately favors larger farms.
3. Benefits of price supports unequally distributed.
4. Without intentional support, the landless do not benefit.
5. Time or physical constraints limit women's ability to feed their children properly.

Positive food security impact is more likely when promoting...

- Agricultural tasks normally performed by women.
- Small-scale processing.
- Food disproportionately produced by food insecure households.



Principles for positive food security impact...

1. Give priority to agricultural activities that generate employment.
2. Watch the effect on food prices: are poor households net sellers or net purchasers of those commodities?
3. Be careful about promoting cash crops. Effects depend on surplus land/labor and basic crop supply price variability.
4. Encourage small-scale agricultural processes and beware of projects that involve labor-displacing mechanization.
5. Increase production of foods that are eaten by at-risk population groups.
6. Involve women. Improvements in women's income are more likely to translate into improved food security.

Principles for increasing positive nutritional impacts...

1. Integrate nutrition counseling, particularly for women
2. Incorporate homestead production.
3. Introduce micronutrient-rich crops.
4. Ensure that vulnerable populations consume the foods produced (including infants/children).
5. Support agricultural tasks performed by women (e.g., harvesting, processing, preservation) and balance time for child/family care.
6. Improve health to ensure utilization of nutrients.



Solutions

1. Include meaningful nutrition objectives in project design with activities supporting them (do good).
2. Protect nutritional considerations when designing of production/income projects (do no harm).



Introducing meaningful nutrition objectives

- What population groups are most vulnerable?
- What population groups are already worst off?
- What is the nature of the malnutrition problem?

Ensuring that activities support objectives

- Reduce stunting (chronic malnutrition) or reduce wasting (acute malnutrition)?
- Reduce protein-energy malnutrition, or reduce micronutrient malnutrition?
- Reduce underweight among women?

Photo: PATH/Evelyn Hockstein



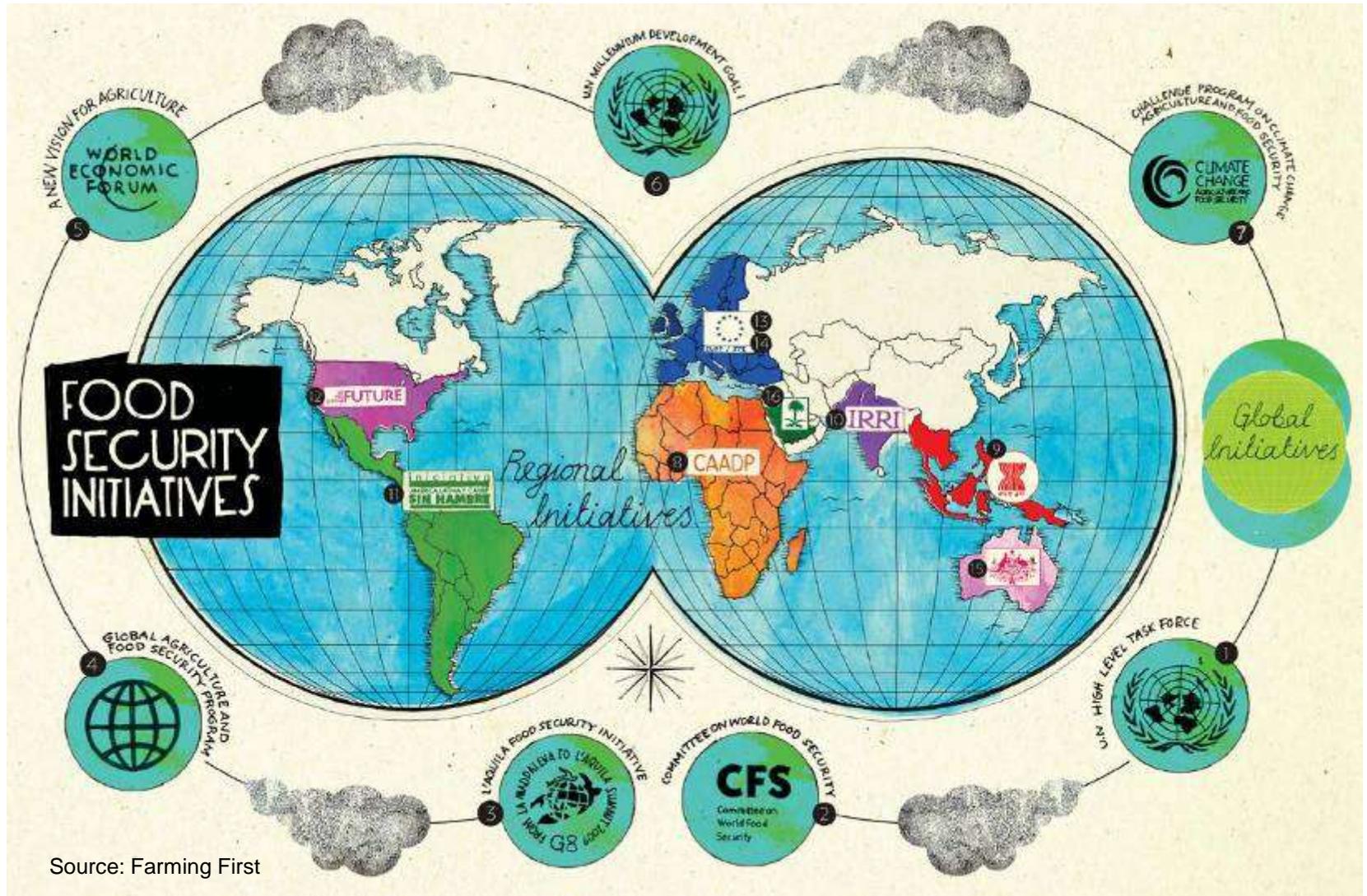
Designing interventions

- Include nutrition programming expertise on design team.
- Refer to the “Nutrition Program Design Assistant”
<http://www.coregroup.org/component/content/article/119>



Photo: PATH/Jenny Winkler

A new era for agricultural development



Source: Farming First

Nutritional Impact Assessment Tool: Avoiding negative impacts

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

Nutritional Impact Assessment Tool

The tool assists agriculture and nutrition program planners in assessing the likely nutritional outcomes from agriculture interventions. Please refer to the accompanying Nutritional Impact Assessment Tool Guide for instructions on how to use the tool.

STEP 1 List project objectives

List each of the project objectives in the space below.

STEP 2 Define population groups at risk

List at risk groups in the left hand column and name a comparison group for each one in the right hand column.

At risk groups	Comparison groups
A.	A.
B.	B.
C.	C.

STEP 3 Determine nutritional status of population groups at-risk

Complete the table with data on the nutritional status of at risk and comparison groups. Use rows 1 to 3 for data representing either children under 2 or children under 5. Use rows 4 to 6 for data representing girls/women 15 to 44 years of age. Insert an X if data is not available for specific populations.

	At risk group A	Comparison group A
Children < 2 or < 5 (under 5)		
Indicator 1:		
Indicator 2:		
Indicator 3:		
Adolescents 15-44 years		
Indicator 4:		
Indicator 5:		
Indicator 6:		

USAID United States Agency for International Development

IYCN International Youth Nutrition Center

How does it work?

- STEP 1 List project objectives.
- STEP 2 Define population groups at risk.
- STEP 3 Determine nutritional status of population groups at-risk.
- STEP 4 Create alternative approaches.
- STEP 5 Estimate outcomes.
- STEP 6 Modify approach as needed.
- STEP 7 Assess alternative approaches.
- STEP 8 Design mitigation plan.
- STEP 9 Develop review plan.

Step 2: Define Population Groups At-risk

- Functional groups likely to be at risk may include:
 - Small landowning households.
 - Households selling labor.
 - Female-headed households.
 - Socially-excluded households (ethnicity, caste, occupation).
 - Households with chronically ill head.

Step 3: Describe Nutrition Situation for At-risk Population Groups

- Obtain (disaggregated) data for children < 2 (or under 5) and for reproductive-age girls and women.
 - Caloric intake (nutrient intake if possible).
 - Dietary diversity.
 - Nutritional status (anthropometric).
 - Vitamin A and iron status (or intake).
- Identify most disadvantaged population groups.

Step 4: Create Implementation Alternatives

- Create an alternative implementation options for meeting the stated project objectives.

Original plan: Increase household income by expanding tobacco production.

Alternative 1: Increase household income by introducing ponds and small-scale fisheries

Step 5: Estimate Likely Outcomes for Disadvantaged Groups

- Modeling of outcomes based on prior evidence.
- Considerations like...
 - Do vulnerable groups consume the commodities?
 - What impact will the intervention have on food prices? Are vulnerable households net sellers or purchasers?
 - What will be the impact on women's time? Women's labor and income?

Step 6: Modify Plans as Needed

- Based on expected impact...
 - modify project design
 - repeat impact assessment
 - accept alternative if no negative impact.
- When no negative impact proceed to next step.

Step 7: Assess Alternatives and Justify Selection

- If the selected approach ranks lower than an alternative for nutritional benefit, justify keeping it.
- If the final selection does not produce the best nutritional impact, a rational justification should exist.

Step 8: Mitigation Plans

- Prepare a mitigation plan to be implemented if negative impacts occur.
- Define the process for monitoring nutritional impacts over the course of the project

Step 9: Review Plan

- Process for review, including timeline and the groups and/or individuals to conduct the review.
- Ensures a realistic assessment.

Moving forward

- Avoid assumptions that production or income increases automatically improve nutrition
- Be intentional about improving the nutrition situation.
- Focus attention on nutritionally vulnerable groups (objectives, monitoring, mitigation plans).

Thank you



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