

# CIFSRF CARICOM Project

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# Project Background:

## Linking Agriculture, Nutrition and Health

- **increased production of vegetables, fruits and animal forage through drip irrigation**



# Objectives

- ☞ Describe the nutritional health of primary school children and changes as a result of school feeding
- ☞ Measure the extent to which one can improve a school lunch program for 3200 children through the use of more local produce

# Study Design

Random allocation of 7 /17 primary schools  
in government sponsored lunch program:  
4 menu change ; 3 control schools



# Nutritional outcomes

## Baseline and 2 yr follow-up (n=188)

Children's height and weight

Caregiver's height , weight, questionnaire

Child 24 hr recall

Hemoglobin status

## Process evaluation

Implementation

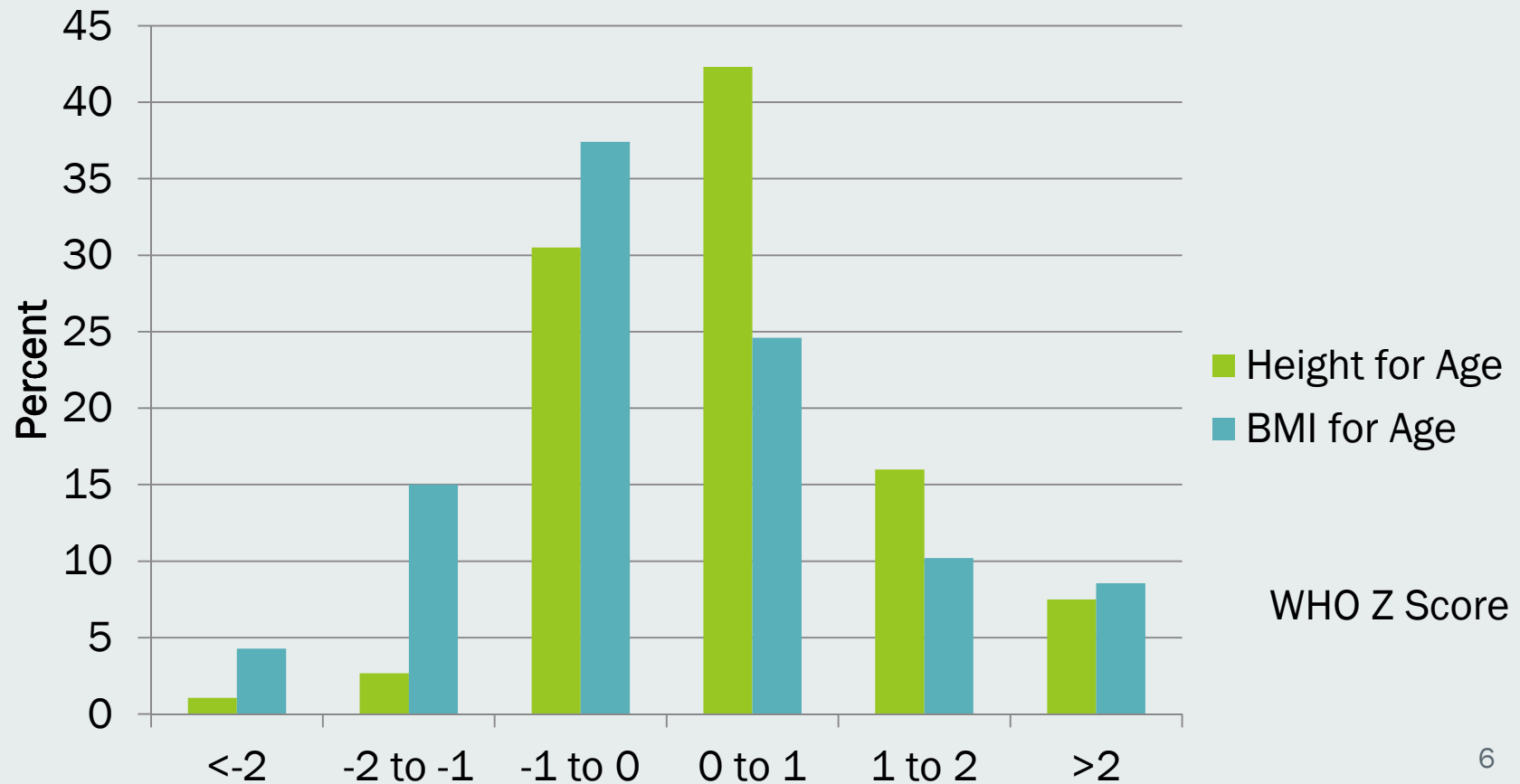
Cost

Acceptance

# Baseline Surveys: Farm-To-Fork Model

## Health and Nutrition Status of Children

### Height and BMI for Age



# School lunch program for 3200 children/d

## Old

Rice and beans turkey wings,  
Noodles/ground meat,  
Hot dogs  
Chicken soup with pumpkin  
and dumplings  
Cheese sandwich  
Sugar drink

## New

- ☞ Goat meat
- ☞ String beans, Carrots
- ☞ Tomatoes, cucumbers
- ☞ Sweet potato, pumpkin
- ☞ Melon, banana

# Neglected School Feeding??

- ☞ Interest for Ministry of Education??
- ☞ Ministry of Health??
- ☞ Ministry of Agriculture??
- ☞ Condition of the central kitchen

▪



# Process evaluation for continuous improvement

Supplies used per day- logbook of foods issued from the storeroom each day

Additions in 2 week period

Watermelon, carrots, pumpkin, tomatoes, cucumber

Better meat more often

Food purchase records for cost

New menu costs 70% more (more due to better meat cuts than fruits and vegetables)

29% of food budget is for a sugar drink

# Acceptance

## ∞ Food acceptance by children

Children waste less familiar foods (tomato, cucumber)

## ∞ Other observations

Sweets offered for sale at school or by outside vendors

# Overall lessons on Farm to Fork

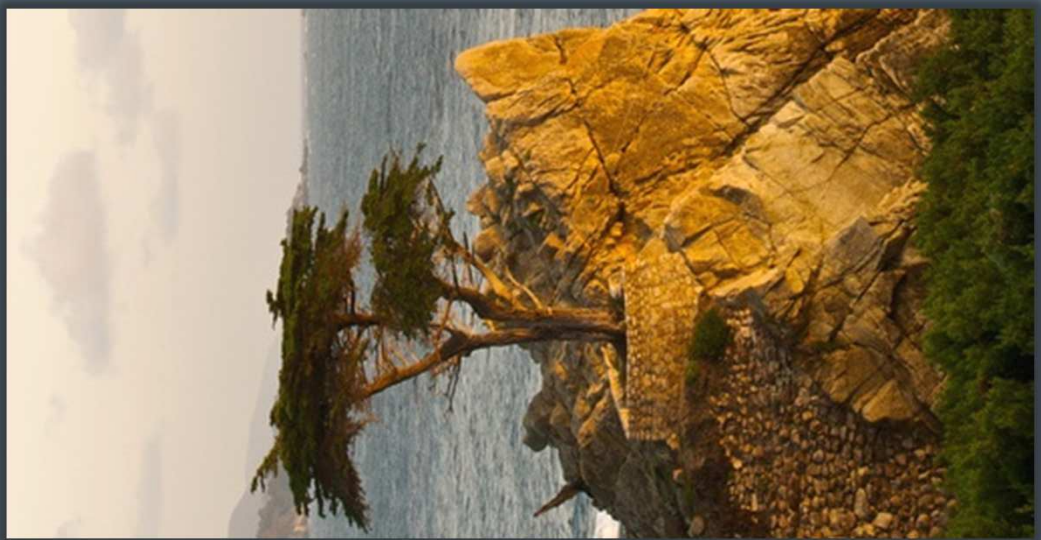
## Farm

- ∞ Increased income
- ∞ Inconsistent supply of fruits, vegetables and goat meat ( seasonality, losses, etc)

## Kitchen

- ∞ Increased workload
- ∞ Increased cost
- ∞ Reducing sugar??

or  
Fork to Farm??



# Intervention: School Lunch Menu Change

## Menu Modification

