



# **WISHH Research**

*Integrating Research Findings*

# Nutritional Status of Botswana and Characteristics of Nutritional Risk

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# [ Botswana: Background ]

- 600,000 square kilometers
- Resources:
  - Diamonds, copper, nickel, salt, soda ash, potash, coal, iron ore, silver (exports >\$2.5 billion)
    - Imports >\$1.75 billion include foodstuffs, petrol, paper/metal products
  - Arable land: 0.65%
  - Per capita GDP: \$8,800
- Population: 1.56 million
  - Life expectancy at birth 30-31 years
  - Estimate HIV prevalence: nearly 37.3% (350,000)

# Botswana Research

- Cross-sectional representative sample
  - 388 households in eight areas with three strata each: towns, large villages, small villages
  - Surveys and nutritional status measures
  - Objectives:
    - Characterize nutritional status and needs
    - Understand factors affecting well-being
    - Basis for project planning

# Botswana Research

- 54.4% female headed households
  - 23.9% elderly headed
- Income: 31.7% <P400; 24% >P1000
- 27% employed; 41% not employed
- 20.5% 1 meal/d; 42% 3+ meals/d
- Protein sources
  - Meat, pulses, caterpillar, dairy
  - 55% in towns and 10% in rural areas consume protein daily

# Botswana Research

- Body mass index:
  - Overall: 19% underweight; 14% obese
  - Small villages: 26% underweight
- Under fives (n=155)
  - 23.4% stunted; 23.6% wasted; 25.8% low weight for age
  - Related to education level, gender and BMI of head of household, sanitation factors, location (urban v. rural)

# Effect of Dietary Protein Enrichment Pilot Program on the Growth of Under-Five Children in Day Care Centers in Gaborone, Botswana

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# [ Botswana Research (pt 2) ]

- Three day care centers
- Baseline and month 3 data collected
  - Intervention started at month 3 collection
  - TSP used in daily meals provided at two daycare centers, one other monitored as control
- Month 6 and 9 will provide impact data

# Pilot Assessment of the Nutritional Impact and Acceptability of Food Rations Provided to People Living with HIV/AIDS in Uganda

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# Uganda: Background

- 236,000 sq km
- Resources
  - Copper, cobalt, hydropower, limestone, salt, arable land (26%)
  - Imports \$1.75 billion; Exports \$2.5 billion
  - Per capita GDP: \$1,400
- Population: 26.4 million
  - Life expectancy at birth: 45 years
  - Est. prevalence of HIV: 4.1% (600,000)

# Uganda Research

- Impact study; rolling enrollment
- Baseline, Q1, Q2 data collections complete
- Baseline, Q1 Report complete
  - 76% consuming CSB; 88% consuming oil
    - CSB used as porridge or posho; oil for frying
  - 90% reported high acceptability for CSB
    - 10% reported lower scores due to course particles, bitter taste, bad smell, weevils

# Uganda Research

## ■ Improvements:

- 43% increased weight up to 3 kg
- 54% increased MAC
- 53% children increased head circumference
- 52-55% increased muscle strength
- Average ill days decreased 6 days (25→19)
- Increased food groups consumed (4.8→6)
- 84% improved QoL (linked to days ill)
- Perceived benefits of program
  - Improved health 48%
  - Improved food availability 38%



# Increasing Care and Support for PLWHAs (IMANAS)

WISHH, CARE, WFP,  
ASONAPVSI DAH, Honduras  
Ministry of Health

# Honduras: Background

- 112,000 sq km
- Resources
  - Timber, gold, silver, copper, lead, zinc, iron ore, antimony, coal, fish, hydropower
  - Arable land + crops: <13%
  - Imports \$3.11 billion; Exports \$1.37 billion
  - Per capita GDP: \$2,600
- Population: 26.4 million
  - Life expectancy at birth: 66 years
  - Est. prevalence of HIV: 1.8% (63,000)

# Honduras Research

- Controlled impact study
- Food basket with soy products introduced into pilot ARV programs
- 372 enrolled: 257 females; 115 male
  - 178 beneficiaries, 134 controls
- 36 children enrolled: 19 boys, 17 girls
- Baseline July/Aug 2003
- Final Sept 2004