Assessing the Impact of Reducing Post-Harvest Loss
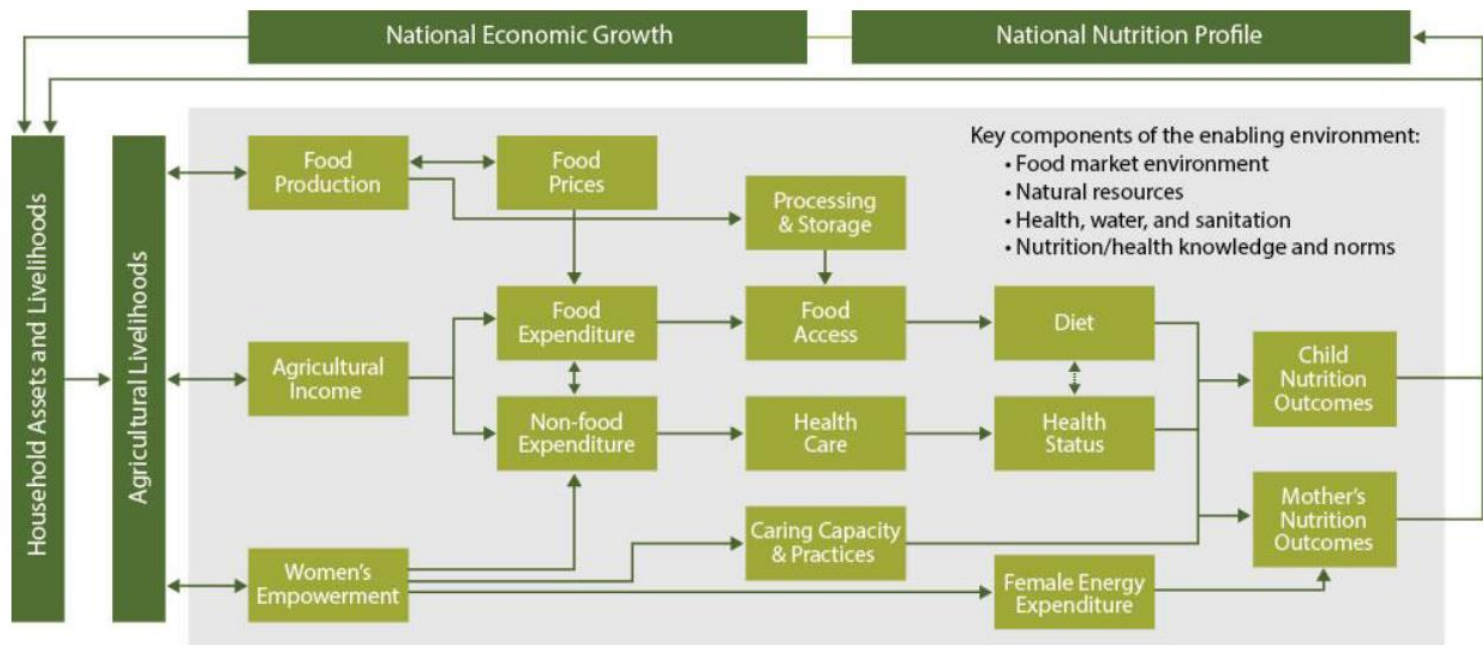
Brian Lindshield

Associate Professor

Department of Food, Nutrition, Dietetics and Health

KANSAS STATE
UNIVERSITY
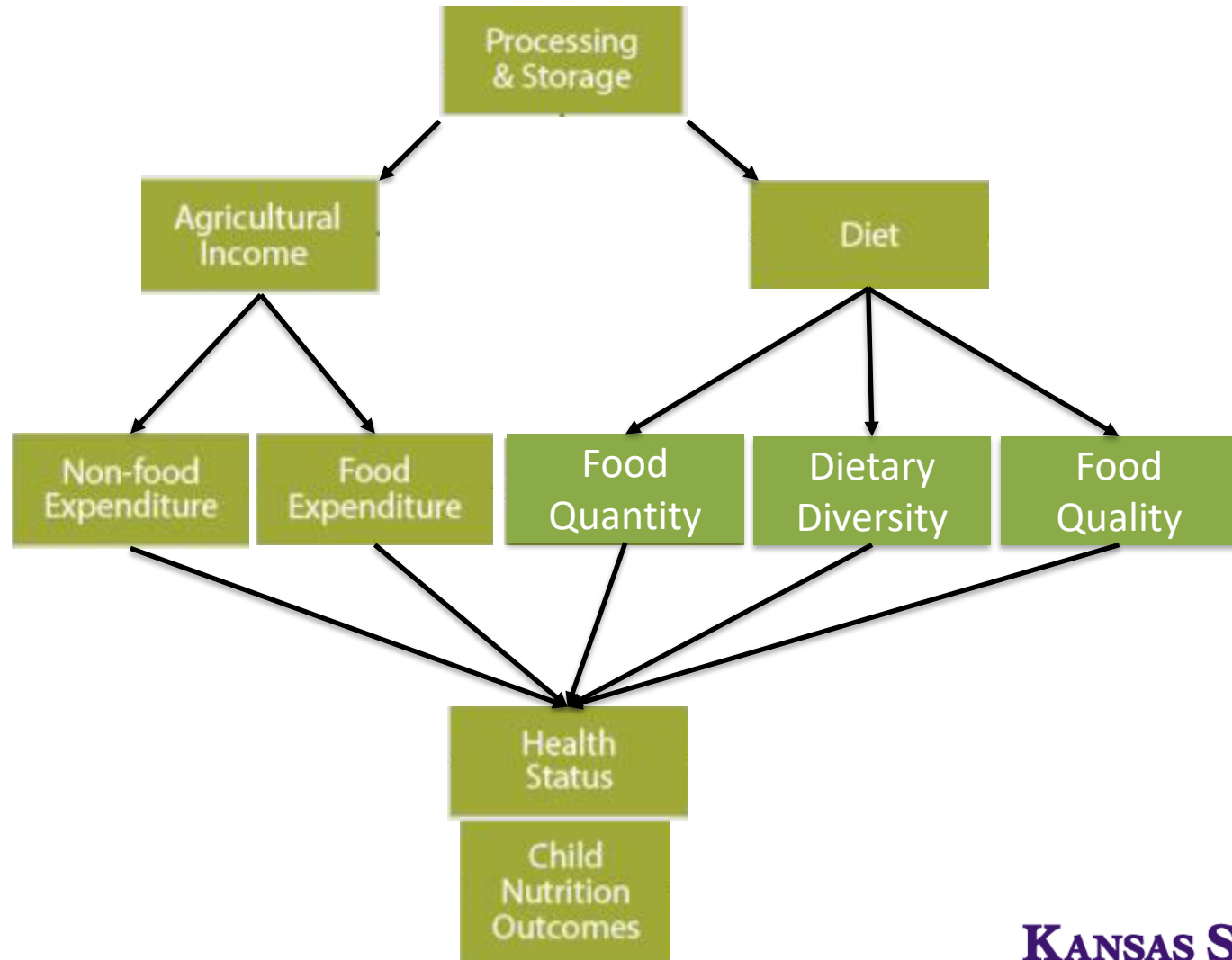
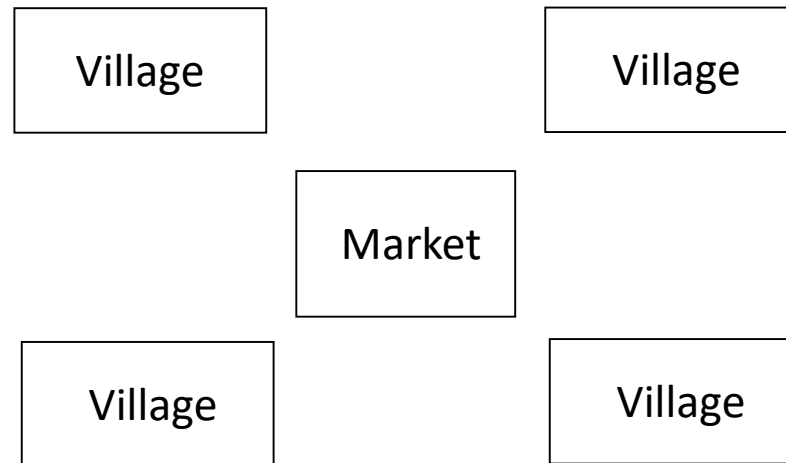# Nutrition-Sensitive Agriculture

Assessing the Impact of Reducing PHL

2016 Plan

- In 4 countries:

- 100 small-scale maize (rice in Bangladesh) farmers with children under 2 years of age in 2 geographically-different producing regions (200 total).

- Randomly allocate them to 2 different groups in each region (50/group).

Pair-wise randomization around market

Village   Village

Market

Village   Village

Data Collected

- Demographic Data
- 24 hour recall
- Height
- Weight
- Mid-upper arm circumference
- Pitting Edema
- Economic data (interview or questionnaire)
- Assess Grain quality in home

Distribute Bags to Groups

- Group 1 - Traditional Bag (Control)
- Group 2 – PHLIL Bag (PICs, GrainPro, Zero Fly)

2018 Plan

- Return to same households to collect the same data to determine If reducing PHL changes parameters :

- Compared to baseline

- Between control and PHLIL bag groups.

2016 Milestones

- Milestone 1: Sign contract that includes milestones

- Milestone 2: In collaboration with the PHLIL team and in-country stakeholders, finalize a plan to collect data

- Milestone 3: Collect and share with cleaned data with PHLIL by November 2016. Distribute bags after data collected.

- Milestone 4: Using a format decided on in coordination with PHLIL, submit a baseline report to PHLIL by December 2016

Progress

- Bangladesh
  - Dr. Saidur Rahman, Professor & Head, Department of Agricultural Economics at Bangladesh Agricultural University was recommend by the in-country PI Dr. Monjurul Alam.
  - Dr. Rahman recommended Dr. Faiz Ahmed, Chief Medical Officer and Principal Investigator of the Community Medicine and Nutrition Component of Farming Systems and Environment Studies at BAU
  - Requested more information on Dr. Ahmed's nutrition experience

- Ethiopia
  - School of Public Health, College of Health Sciences, Mekelle University
  - Selected because they demonstrated the greatest capacity to conduct this work as judged by visits to Hawassa, Mekelle and Bahir Dar Universities in November
  - Contract nearly finalized

Progress

- Ghana
  - Both a recent Kansas State University Human Nutrition PhD recipient (originally from Ghana) as well as the Ghana PHLIL team recommended Dr. Emmanuel Ohene Afoakwa, Professor and Head of the Department of Nutrition and Food Science at the University of Ghana
  - Subagreement signed

- Guatemala
  - The NGO SHARE, which is the main in-country PHLIL partner, has experience collecting this type of data for other projects
  - Contract nearly finalized