Understanding Decisions Makers: Food Security in Developing Countries
Survey Design and Interpretation
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Why use formal surveys

• What questions do we want to answer

• What do we want to infer

“Formal surveys involving the use of questionnaires provide a systematic, ordered way of obtaining information from respondent and enable precise statistically analyzable data to be obtained.”
General characteristics of formal surveys

- Background information: substantial
- Time allocation: preparation substantial
- Implementation: less
- Analysis and interpretation: more
- Total time: more
- Hypothesis beforehand: required
- Enumerators
- Representative sample
- High value of statistical techniques
Planning a structured survey

• Identify data expected from the survey: questions that we expect to answer known (determining data needs)
• Design the survey based on the analytical method that will be used: how will the data be used (determining question content and format)
• Choice of the concepts and definitions used: standard terms and enumerators (household, head of household)
• Definition of the respondents: who are interviewed
Planning a structure survey: questionnaire construction

- Open ended vs closed questions
- Wording the questions
- Leading questions
- Convoluted questions (and/or)
- Question sequence
- Verbatim or shorthand questions
Planning a structured survey

• Pre-testing the questionnaire
  – Wording
  – Sentence construction
  – Format
  – Difficult questions
  – Refusal rate
  – Same answers
  – Time requirement
  – Coding
  – Usefulness of data
Planning a structured survey

- Sample selection: sample frame
- Choice of interviewing method
- Establish data processing and analysis requirements
A household survey

- Why
- Who how and when
- Components of the survey:
  - Demographic
  - Agriculture
  - Non Agriculture
  - Climate and information
Components of the survey

Demographics:

• Defining the household
• Questions on age, gender, relationship
• Questions on education and language (communication)
• Presence during the year
Components of the survey

Production Crops:

- Crops, production and uses (include market)
- Decisions: when to plant, how much to plant, information used
- Climate and production: outcomes in a year of drought, in a year of good rains, in a year of frost by crops
Components of the survey

Production of Livestock:

• Per animal species production use and market
• Land use for livestock production
• Climate and production: outcomes (include mortality and morbidity) in a year of drought, in a year of good rains, in a year of frost by crops, in a frequent year
Components of the survey

Other:

- Production responsibilities by activity
- Marketing responsibilities
- Household care responsibilities
- Climate and coping strategies: what do you do when...
Components of the survey

Non agricultural activities:

- Other sources of income
- Migration: what where when and income
- Other activities: group participation, organizations, credit
From data to variables

- Coding and cleaning
- Construction of variables:
  - life cycle example: adult equivalents
  - duality example: in-kind income and cash income
- Analysis:
  - Cluster to identify profiles
  - Regression to analyze response