Advancing Methodology on Measuring Asset Ownership from a Gender Perspective

EDGE
EVIDENCE AND DATA
FOR GENDER EQUALITY

United Nations Statistics Division

UN Women

Workshop on the Production of Statistics on Asset Ownership from a Gender Perspective through Household Surveys
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Sampling Design issues specific to measuring asset ownership from a gender perspective

Outline

- Sampling issues in the guidelines

- General and EDGE-specific sampling issues

- Examples from the ADB pilot

- Sampling calculation tool on EDGE website: interactive playaround

Items covered in the guidelines

- General principles in sampling
  - Target population
  - Sampling frame
  - Sample size determination
  - Structure of the sample (stratification, cluster)
- Selecting individuals from households
  - Calculation of sample size, cost etc

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- Population subgroups
- Non-response

Sampling design issues

- Stand-alone survey or appended module?
  - Stand-alone survey implies all sampling issues considered
  - For an appended module intra-household selection is still a specific issue
- Which estimates do we try to obtain?
  - Ownership-related indicators (incidence, wealth measures, etc.)
  - Intra-household analysis dynamics
  - Indicators vis-à-vis agricultural population

Sampling design issues (cont.)

- Which types of disaggregation are important?
  - Women/men
  - Age groups
  - Regions
  - Socio-economic variables (marital status, education, employment, etc.)

Sampling design issues (cont.)

- Where do we obtain data on parameters?
  - Gender and sex distribution, other demographic variables – relatively easy to obtain (censuses, current demographic statistics, registers)
  - Design effect -> Rate of intra-cluster homogeneity: more difficult to obtain, especially if the survey is conducted for the first time. Taking proxies from other surveys.

Within-household respondent selection

- Valid for stand-alone surveys and modules

- How many do we interview?
  - All adult members – no worries for selection mechanisms, possible problems with refusal-related biases and need for post-stratification
  - One adult per household
  - A few members (e.g. three adults)

- Who are the respondent(s)?
  - Most informed, woman/man only, random

Whom to interview – different options

Approach 1: interview 1 adult member randomly from each household

Approach 2: interview more than 1 adult member from each household

Interview all household members

Interview 1 couple randomly from couples in the household; and 1 randomly selected individual from the non-coupled household members

Interview 1 person randomly selected from each household + the partner if available

Interview more than 1 (fixed number) individuals randomly selected from the household

How many/whom to interview within household – factors to consider

- Objectives
  - Ownership prevalence & gender wealth gap
  - Intra-couple analysis

- Data collection instrument
  - Appending: sample size and interview protocol of the host survey

- Operational challenges
  - Random selection: Kish, birthday methods
  - Contamination
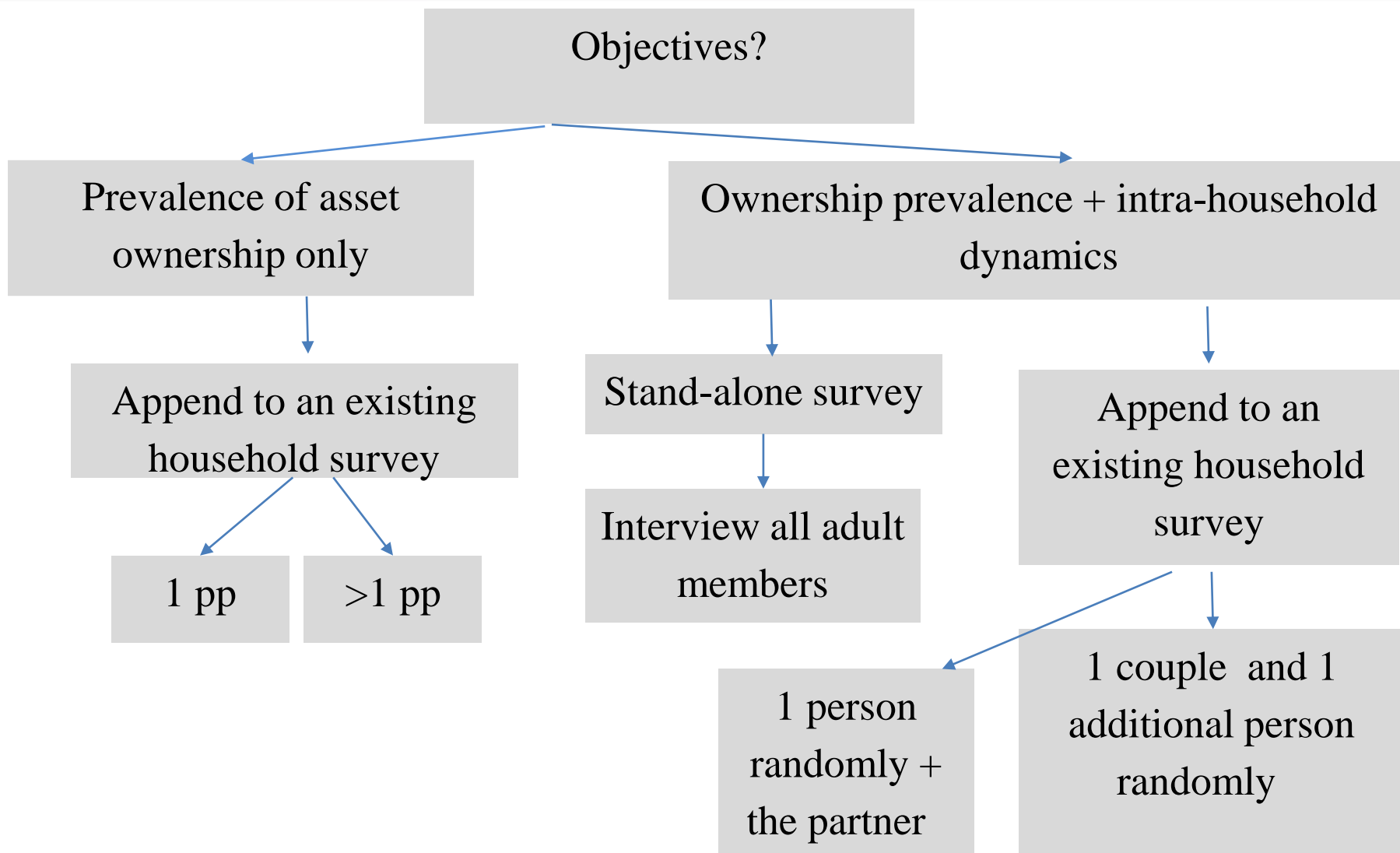 - Reporting discrepancies → reconciliation

- Cost considerations
  - Prevalence of key indicators
  - Precision requirement
  - Design effect
  - Non-response rate

Objective

Recommendations: whom to interview

Objectives?

Prevalence of asset ownership only

Ownership prevalence + intra-household dynamics

Append to an existing household survey

Stand-alone survey

Append to an existing household survey

1 pp

>1 pp

Interview all adult members

1 person randomly + the partner

1 couple and 1 additional person randomly

Some sampling concepts

- Number of **adults selected per household**
- **Estimated prevalence** (of ownership)
- **Cluster size** (# of hhs per cluster) - b
- **Average number of adult members** in a household
- **Design effect:**

$$\text{Deff} = 1 + (b - 1)*\text{roh}$$

- **Intra-cluster homogeneity rate (roh):** measure of correlation between elements within the cluster
- Required **coefficient of variation (cv):** precision of the estimate measured as $\text{se}(x)/\bar{x}$ (standard error of x divided by $\bar{x}$).

Thank you

For additional information:
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