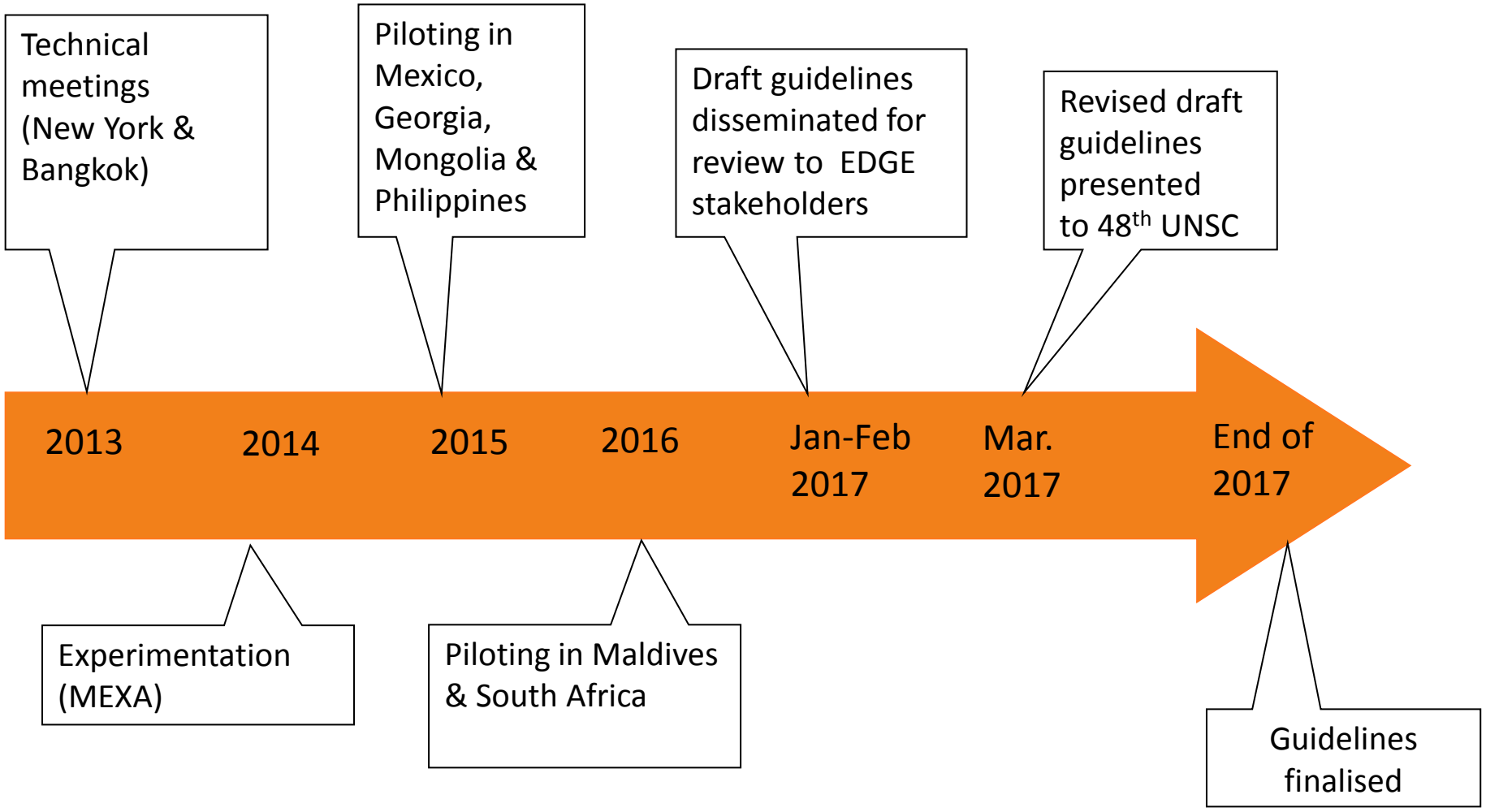
Advancing Methodology on Measuring Asset Ownership from a Gender Perspective

United Nations Statistics Division

UN Women

Technical Meeting on the UN Methodological Guidelines on the Production of Statistics on Asset Ownership from a Gender Perspective
New York, 5-6 May 2017

Background on developing the guidelines



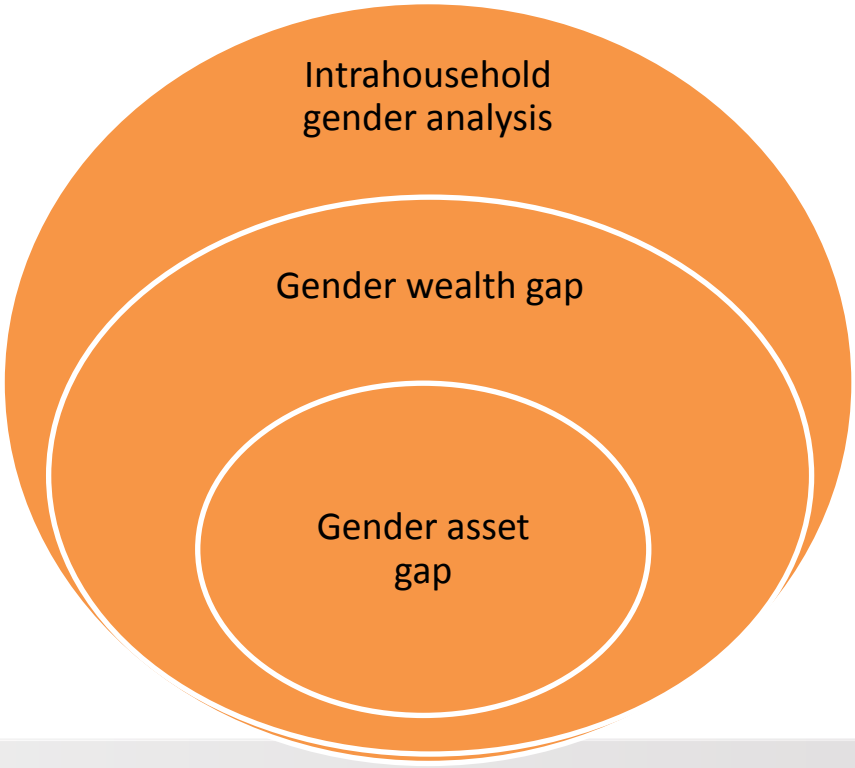
Objectives of meeting

- Present additional findings from EDGE pilots for consideration
- Solicit input on key remaining technical issues prior to finalising the guidelines

Overview of Guidelines

Purpose:

- Provide guidance on collecting, processing, analysing and disseminating individual-level data on asset ownership for the production of official gender statistics



Overview of Guidelines (2)

Users:

- Targeted to NSOs

Consistent with existing internationally-agreed standards:

- System of National Accounts, 2008
- Principles & Recommendations for Population & Housing Censuses, 3rd rev.
- OECD Guidelines for Micro Statistics on Household Wealth

Consistent with structure of UNSD international statistical guidelines

- Covers all components of producing official statistics, from conceptual framework to data dissemination

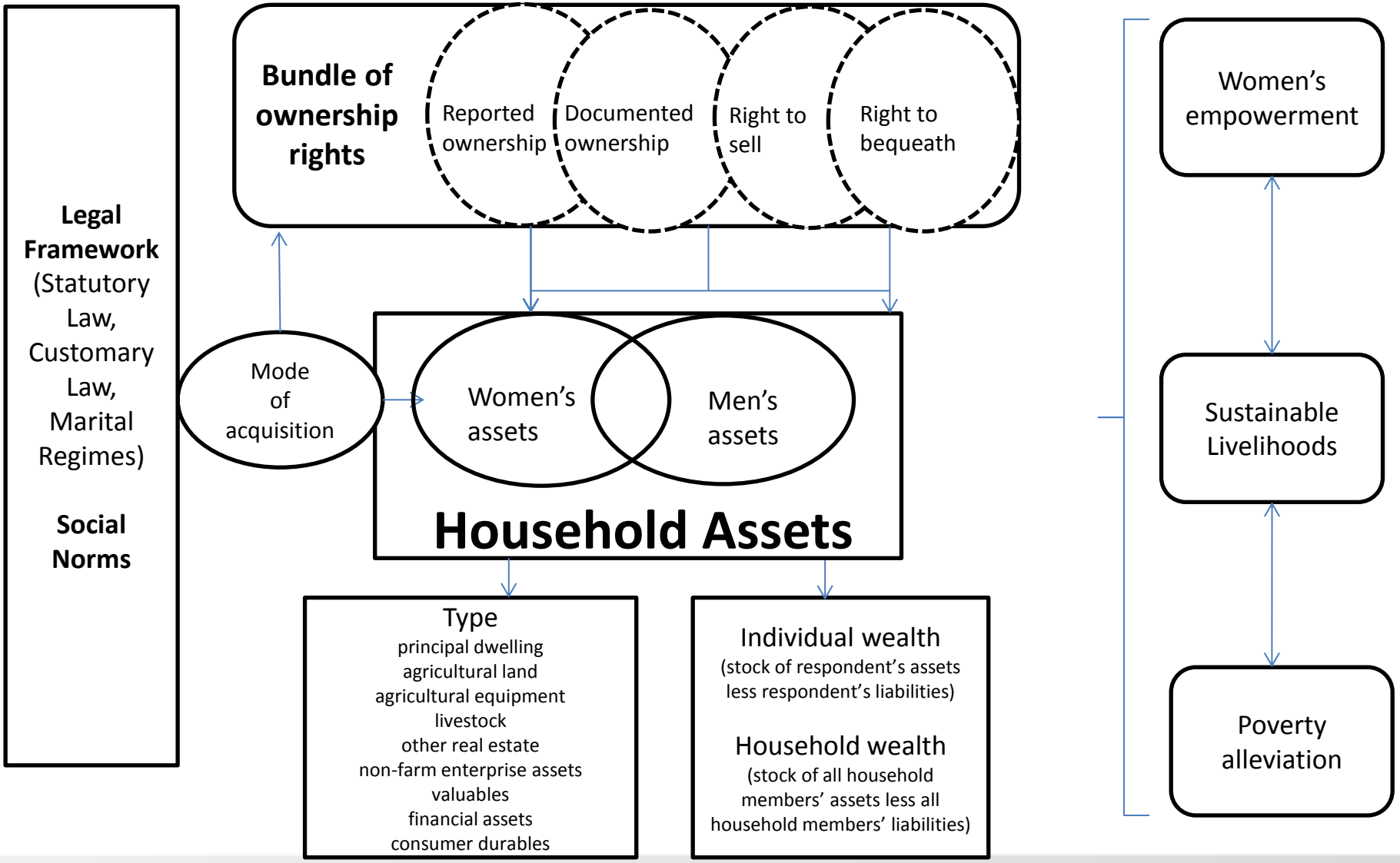
Guidelines_Part I:

A conceptual framework for measuring asset ownership from a gender perspective

Overview of Guidelines_Part I

- Definitions of ownership
- Who to interview
- Definition and coverage of assets
- Establishing the value of assets
- Units of observation

Overview (2)


Legal Framework (Statutory Law, Customary Law, Marital Regimes)
Social Norms
Bundle of ownership rights
Reported ownership
Documented ownership
Right to sell
Right to bequeath
Mode of acquisition
Women's assets
Men's assets
Household Assets
Type
principal dwelling
agricultural land
agricultural equipment
livestock
other real estate
non-farm enterprise assets
valuables
financial assets
consumer durables
Individual wealth
(stock of respondent's assets less respondent's liabilities)
Household wealth
(stock of all household members' assets less all household members' liabilities)
Women's empowerment
Sustainable Livelihoods
Poverty alleviation

Overview (3)

✓ Self-reported data collection

- Why?
  - MEXA found that
    - Proxy reporting underestimates women's (men's) ownership of key assets, incl. dwellings, ag. land and financial assets
    - Proxy reporting assigns ownership to people who don't consider themselves owners

Overview (4)

Overlap between respondents' reporting and proxy respondents' reporting on respondents' dwelling ownership status, by sex of self-reported respondent, Uganda (%)

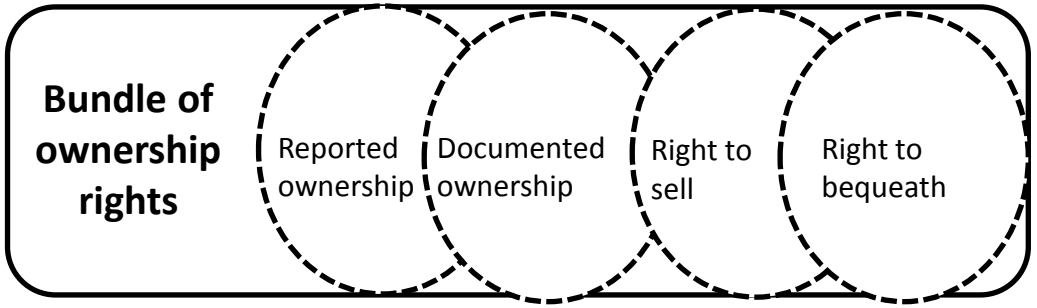
Respondent's status according to at least one proxy respondent	*Respondent's Self-Reported Status*			
	Owner		Not Owner	
	Men	Women	Men	Women
Owner (exclusive or joint)	91	53	9	7
Not owner	9	47	92	93
# of observations	131	76	94	204

*TA 4 households with 2+ respondents

Items for consideration

Consideration of economic rights

Removal of “economic ownership” from conceptual framework



Why?

- Different meaning in the SNA → relabeled as “economic right”
- Analysis of pilot data

Economic rights (2)

Percentage of owners of principal dwelling with economic right to dwelling, by sex of respondent owner (%)

Country	Sex of respondent owner	**Reported** owners with right to decide how to use money from sale of dwelling	**Documented** owners with right to decide how to use money from sale of dwelling
Georgia	Men	90	98
	Women	81	93
Mongolia	Men	96	97
	Women	91	93
Philippines (Cavite Province)	Men	90	96
	Women	90	95
South Africa (KZN)	Men	95	100
	Women	93	96
Uganda	Men	94	97
	Women	83	93

Economic rights (3)

Percentage of owners of agricultural land with economic right to land, by sex of respondent owner (%)

Country	Sex of respondent owner	**Reported** owners with right to decide how to use money from sale of land	**Documented** owners with right to decide how to use money from sale of land
Georgia	Men	94	99
	Women	85	93
Mongolia	Men	99	97
	Women	85	90
Philippines (Cavite Province)	Men	96	93
	Women	96	99
South Africa (KZN)	Men	93	100
	Women	94	97
Uganda	Men	95	97
	Women	84	96

Economic rights (4)

Percentage of NON-reported owners of principal dwelling who self-report rights to dwelling, by sex of respondent (%)

Country	Sex of respondent owner	Right to economic proceeds	Right to sell dwelling	Right to bequeath dwelling
Georgia	Men	4	3	2
	Women	4	4	3
Mongolia	Men	8	9	7
	Women	28	25	23
Philippines (Cavite Province)	Men	3	3	3
	Women	4	3	3
South Africa (KZN)	Men	6	..	..
	Women	2	..	..
Uganda	Men	11	4	4
	Women	19	2	3

Economic rights (5)

Percentage of NON-reported owners of agricultural land who self-report rights to land, by sex of respondent (%)

Country	Sex of respondent owner	Right to economic proceeds	Right to sell land	Right to bequeath land
Georgia	Men	2	1	.9
	Women	4	3	2
Mongolia	Men	.8	.7	.6
	Women	3	3	2
Philippines (Cavite Province)	Men	.4	.5	.4
	Women	.8	.4	.4
South Africa (KZN Province)	Men	0	..	..
	Women	0	..	..
Uganda	Men	4	1	1
	Women	9	2	1

Core and additional assets

Core assets	Additional assets
Principal dwelling	Livestock
Agricultural land	Agricultural equipment
Non agricultural land	Other real estate
	Valuables
	Financial assets
	Non-agricultural enterprise assets
	Consumer durables

Enterprise assets

- Asset, not enterprise
- Non-incorporated enterprises
- Non-agricultural enterprises

Valuing assets

- Why?
  - Calculating **wealth** measures

- How?
  - Valuation methods **consistent with existing standards**
    - Current market values -> Potential sales value (and some alternatives)
    - Need to itemize assets as they have different characteristics and owners

  - Three main **challenges**/issues:

(1) Which assets to value?

(2) Who should provide values?

(3) How to deal with high missing values?

Valuing assets (2)

(1) Which assets to value?

- Two competing issues:
  - Operational feasibility
  - Obtaining unbiased measures of distribution of wealth

- GAGP project:
  - All assets valued, but complicated data collection
  - A key result: principal dwelling, agricultural land, other real estate and nonfarm businesses comprise over 80% of physical household wealth

➢ EDGE pilots:
  - Decision to value major assets only
  - Some limitations of the wealth statistics obtained

➢ Should **the Guidelines** recommend that countries value all assets?

Valuing assets (3)

(2) Who should provide valuation information?

- One criteria: missing values on valuation questions

Proportion missing values - questions on valuation of principal dwellings (%)

	All respondents	Self-reported owner	Most knowledgeable person	Informed of market transactions
Mongolia	16	14	15	5
Philippines	54	48	48	23
Georgia	69	68	65	22
Uganda	28	7	10	3

- Other criteria considered:
  - Statistical properties of the distributions of data on valuation

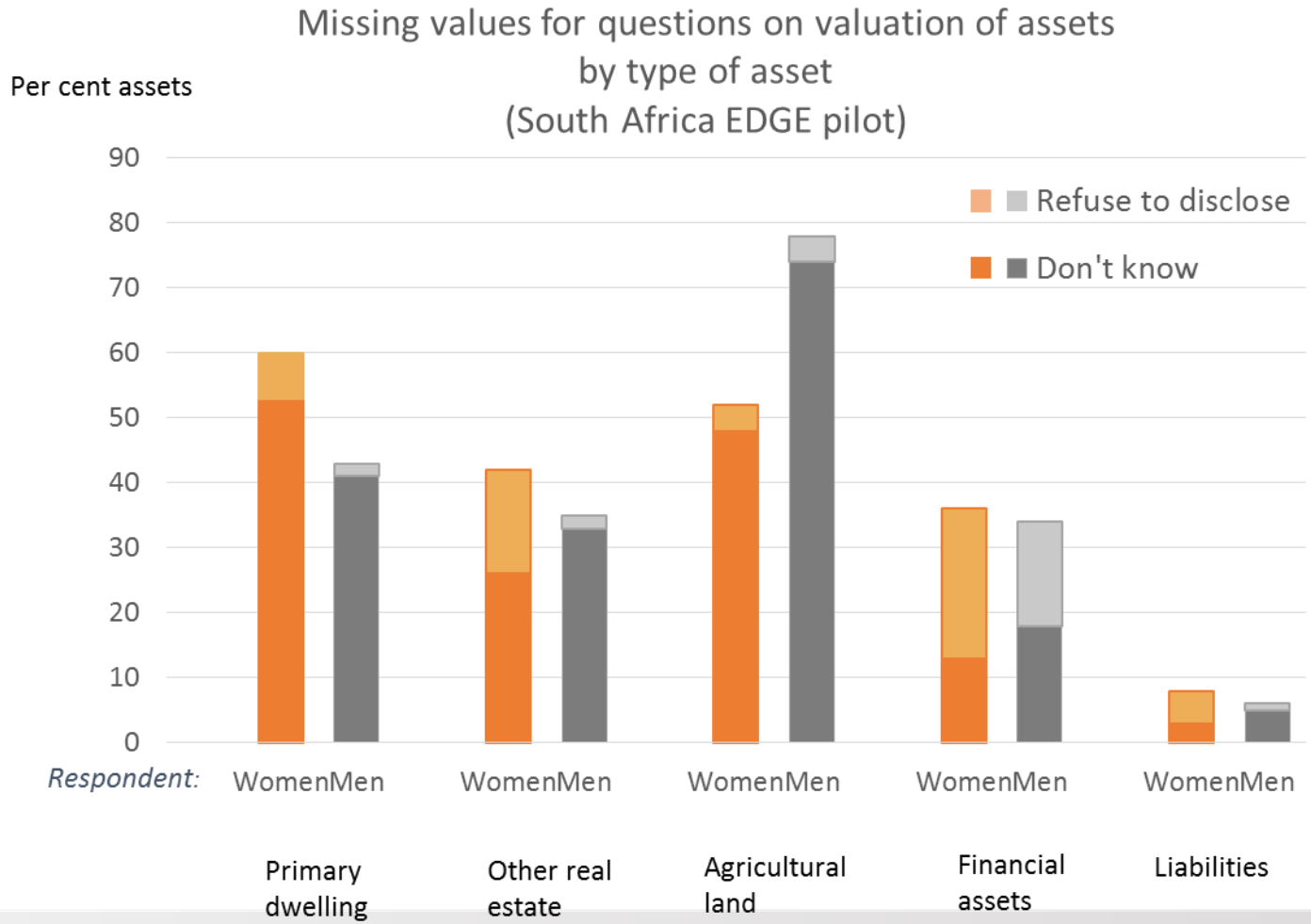
Valuing assets (4)

(3) Dealing with high missing values

- High missing values in most EDGE pilots
- Could be explained by:
  - Lack of information on market transactions
  - Markets thin or inexistent
  - Sensitive information

Valuing assets (5)

- “Sensitive information” may not explain a lot



Valuing assets (6)

- Obtaining valuation based on other methods and sources?
  - Using additional sources of data on asset prices and statistical matching methods.
    - Some challenges:
      - Lack of markets
      - Lack of reliable sources

Rostering of assets

- Why?
  - Collecting information on characteristics of assets, including value and size.
- How?
  - Two types of roster of assets may be created, depending on the respondent selection protocol and survey objectives:

Respondent roster of assets
(assets owned by the respondent)

- When interviewing one person
  -> Roster collected in the individual questionnaire

↓ Individual wealth

Household roster of assets
(assets owned by all household members)

- When interviewing multiple persons
  -> Roster collected only once in the household questionnaire

↓ Individual wealth
Household wealth

Hidden assets

Proportion of respondents reporting at least one hidden asset, by sex of respondent and type of asset (%)

	Georgia		Mongolia		Philippines		South Africa		Uganda	
Asset type	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Ag. land	.2	.2	2	0	1	1	..	..	..	..
Ag. equipment	1	0	0	0	..	..	..	..	..	..
Enterprises	1	.5	0	.5	0	0	8	2	..	..
Other real estate	.3	0	.7	0	0	1	4	0	..	..
Financial assets	12	13	5	9	7	9	5	6	16	13
-Owed money	..	..	..	..	..	..	24	5	25	30
Liabilities	4	4	.5	.8	5	4	7	11	25	18

Guidelines_Part II:

The role of household surveys and other sources of data in collecting individual-level data on asset ownership and control

Overview of Guidelines_Part II

- **Household surveys**
- Population and housing censuses
- Agricultural censuses and surveys
- Administrative sources of data

Part III of Guidelines:
Guidance for Implementation

Overview of Guidelines_Part III

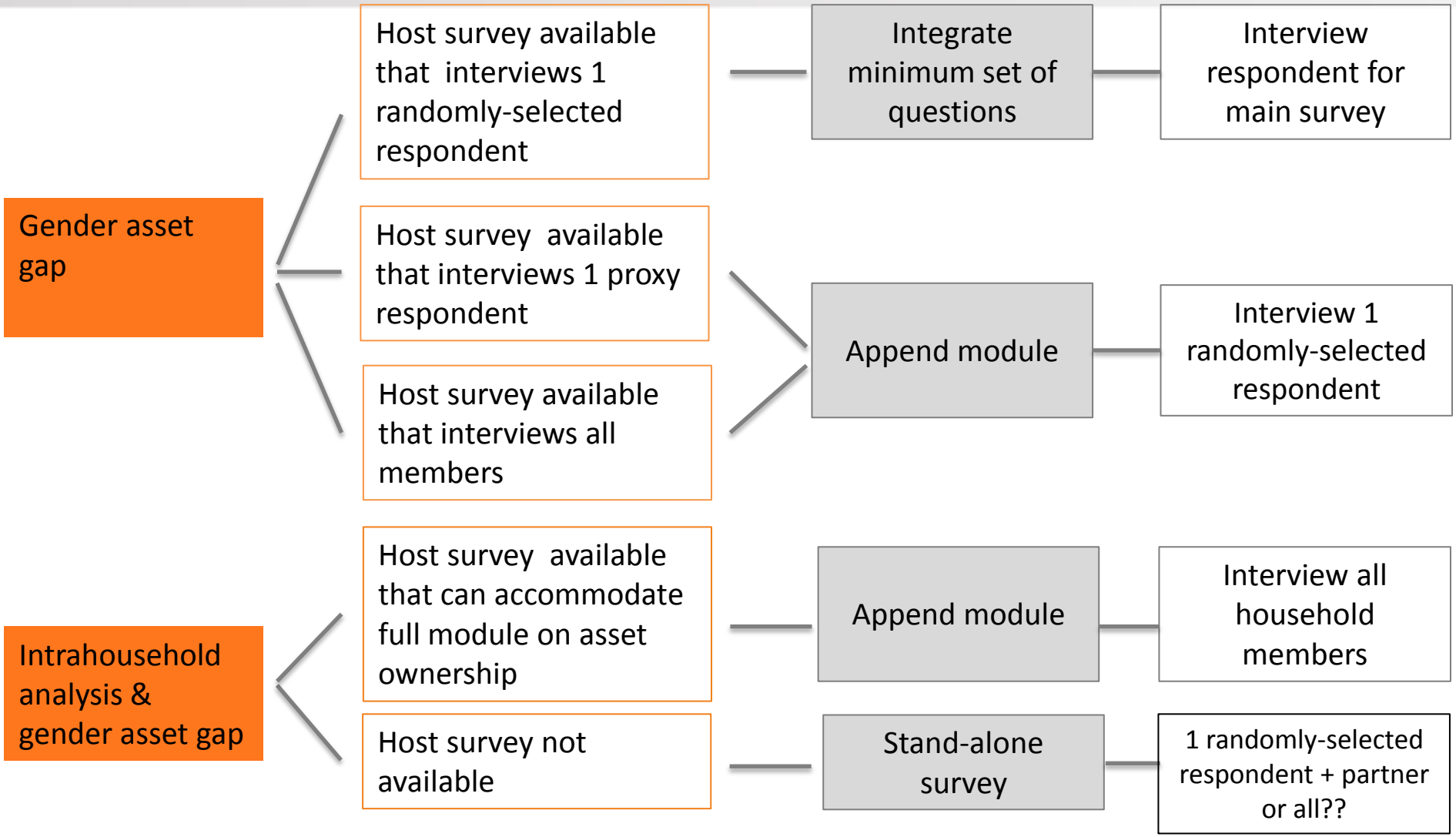
- Planning the survey
- Data collection strategies
- Modes of data collection
- Sample design
- Questionnaire design
- Field operations

Items for consideration

Data collection strategies

Minimum set of questions	Appended module	Stand-alone survey
• 4 questions per asset integrated into existing survey	• Individual-level module appended to existing survey	• Household questionnaire + individual questionnaire
• Survey objective: Gender asset gap	• Survey objective: Gender asset gap or intrahousehold analysis	• Survey objective: Intrahousehold analysis
• Additional data from survey may be available for cross-analysis	• Multi-topic host surveys are rich source of data for analyzing relationships between asset ownership and key outcomes	• Additional modules can be added to analyze relationship between asset ownership and key outcomes
• Data collection subject to sample design and field work organization of main survey	• Data collection subject to sample design and field work organization of host survey	• Flexible sample design and field work organization

Deciding between data collection strategies



Whom to interview?

1-randomly selected adult household member

1-randomly selected adult household member + partner

All household members

Whom to interview? (2)

Some considerations:

- Cost
- Quality of data
- Feasibility for countries to use

Whom to interview? (3)

Whom to interview?	Precision of estimate with the same budget		Possibility of oversampling women		Complexity of field work	Within-hh selection /weight calculation	Reconciliation
	Prevalence	Intra-hh					
1 randomly selected person	Reference group						
1 randomly selected person + partner	+	+	?	-	-	-	-
All household members	++	+?	-	--	--	+	--

19% men in rural Mongolia owns ag land vs 5% for women

Requirement on simultaneous interview

- Should simultaneous interviewing be required to avoid potential contamination?
  - In real life, you can never achieve complete simultaneity
    - Try to achieve and if not feasible during the time the enumerators are in the EA, do as many interviews as possible; document the experience
      - Requires setting up the interview team so multiple persons can be interviewed simultaneously
    - Relax the requirement
      - Business as usual, only need 1 enumerator

How successful is the simultaneity in the pilots?

Proportion of adults interviewed and interviewed simultaneously (%)

	Georgia	Mongolia	Philippines	Uganda	
				Arm 4	Arm 5
Number of 2-adult households interviewed	926	1282	622	237	248
Proportion of all eligible adults interviewed	84%	74%	89%	58%	54%
Proportion of all eligible adults interviewed simultaneously	71%	43%	57%	47%	38%
Number of 3-adult households interviewed	1399	2620	789	54	58
Proportion of all eligible adults interviewed	75%	39%	76%	37%	40%
Proportion of all eligible adults interviewed simultaneously	57%	27%	32%	22%	26%
Number of 4+-adult households interviewed	N/A (a maximum of 3 adult members were interviewed in those countries)			60	60
Proportion of all eligible adults interviewed				23%	25%
Proportion of all eligible adults interviewed simultaneously				8%	8%

Selecting the random respondent

- Kish versus the birthday method

Guidelines_Part IV:

Data processing, analysis and dissemination

Overview, Guidelines_Part IV

- Data processing
- Recommended indicators
- Data analysis and dissemination of results

Items for consideration

Reconciling discrepancies

- Even when self-reported data is collected, reporting discrepancies exist when > 1 household member is interviewed

Overlap between couples on exclusive dwelling ownership status, by sex of couple member, South Africa (%)

Spouse's self-reported status	*Respondent's Self-Reported Status*	
	Exclusive Owner	
	Men	Women
Owner (exclusive or joint)	38	65
Exclusive owner	14	29
Joint Owner	23	35
Not owner	61	35
# of observations	34	17

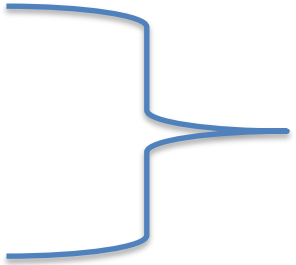
Reconciling discrepancies (2)

Implications for:

- Indicators on form of ownership (individual or asset-level) and gender wealth gap

How to reconcile?

- Head overrides
- Most inclusive
- Use of info on marital regime



- Ignore discrepancies -> no asset-level indicators
- Other?

Consideration of asset level indicators

- E.g. proportion of agricultural parcels exclusively owned by women (men)
- Policy value?

Proposed indicators

Global indicators:

- Standardised indicators countries are encouraged to produce, for core assets

National indicators:

- Complementary indicators countries may wish to produce, based on policy needs and resources available for data collection

Indicator constructs

Indicator	Rationale	Asset coverage	Level of monitoring
Proportion of individuals with reported ownership of [asset], by sex	• Broadest indicator of asset ownership • Measures people's perceptions of whether they consider themselves owners	All assets	N
Proportion of individuals with documented ownership of [asset], by sex	• Measures ability to claim ownership rights in law over an asset • Useful for monitoring national policies and programs on housing and land titling reform	Principal dwelling, agricultural land, non-agricultural land	N
Proportion of individuals with the right to sell or bequeath the [asset], by sex	• Measures alienation rights over assets	Principal dwelling, agricultural land, non-agricultural land	N
Proportion of total population with documented ownership of the [asset] or the right to sell or bequeath the [asset], by sex	• Measures ability to claim ownership rights in law over an asset as well as right to sell or bequeath asset in absence of documentation • Comparable across countries with disparate rates of documentation	Principal dwelling, agricultural land, non-agricultural land	G

Indicator construct (2)

Indicator	Rationale	Asset coverage
Proportion of individuals who share documented ownership of [asset] with spouse or partner, by sex	• Useful for monitoring national policies and programs to increase women's ownership of land and housing through joint titling	Principal dwellings, agricultural land, non-agricultural land
Proportion of individuals who acquired ownership of [asset] through [specific mode of acquisition], by sex of individuals.	• Useful for developing policies and programs promoting women's and men's accumulation of assets	Principal dwelling, agricultural land, non-agricultural land
Share (%) of documented (reported) agricultural land area owned by women out of total documented (reported) agricultural land area owned by women and men	• Accounts for gender differentials in size of agricultural land owned by women and men.	Agricultural land
Gender wealth gap	• Accounts for gender differentials in quantity and characteristics of assets owned by women and men	Principal dwelling, agricultural land, non-agricultural land and other real estate, non-agricultural enterprise assets, financial assets

SDG Indicator 5.a.1 (a) + (b)

Current Iteration	Proposed Indicator
5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex	5.a.1 (a) Proportion of total agricultural population with documented ownership of agricultural land or the right to sell or bequeath agricultural land, by sex
5.a.1 (b) Share of women among owners or rights-bearers of agricultural land, by type of tenure	5.a.1 (b) Share of women among individuals with documented ownership of agricultural land or with the right to sell or bequeath agricultural land

How should countries identify which documents to include?

Deriving weights for population-based indicators (1)

- Adjust for unequal probability of within-hh selection
  - 4 adult members in the hh and 1 selected:
    - Selection probability: ¼ → weight assigned to the selected person: 4
  - 4 adult members in the hh and 1 selected randomly; select partner if he/she is in the hh
    - If the partner is in the hh, both have a selection prob of ½
    - If no partner, the randomly person has selection prob of ¼
  - 4 adult members in the hh and all selected:
    - No weights necessary at the individual-level selection
- Adjust for unit non-response

Deriving weights for population-based indicators(2)

- Adjust for unit non-response (higher in urban and among men)
  - Weighting class adjustment: aligning the respondent distribution to the original sample distribution, defined by key characteristics:
    - Correlated with outcome variables
    - Collected for both respondents and non-respondents
      - Sex
      - Region, urban/rural, age, relationship to head of the household, marital status, education and economic characteristics
  - Propensity score adjustment

Calculating nonresponse adjustment weight

Sex	Education	Sample	Respondents	Response rate (R_i)	Nonresponse adjustment weight ($1/R_i$)
Women	None	236	175	0.74	1.35
	Primary	580	458	0.79	1.27
	Secondary	298	188	0.63	1.59
	Higher	79	52	0.66	1.52
	Total	1193	873		
Men	None	96	61	0.64	1.57
	Primary	510	340	0.67	1.50
	Secondary	350	168	0.48	2.08
	Higher	107	72	0.67	1.49
	Total	1063	641		

Source: Data from the Uganda EDGE pilot survey, Arms 4 and 5 combined, self-reporting only.

Deriving weights for population-based indicators(3)

- Post-stratification weighting
  - Sample aligned with population distribution, defined by certain characteristics
  - Information on these characteristics need to be available for both sample and population

Deriving additional weights for asset-based indicators

- Developing weights for assets
  - Information needed for one specific asset (e.g., one parcel)
    - exclusively or jointly own?
    - If jointly owned, how many joint owners?
    - How many joint owners are household members and how many are non-household members?
  - Varies by type of ownership
  - If multiple respondents, ownership needs to be reconciled

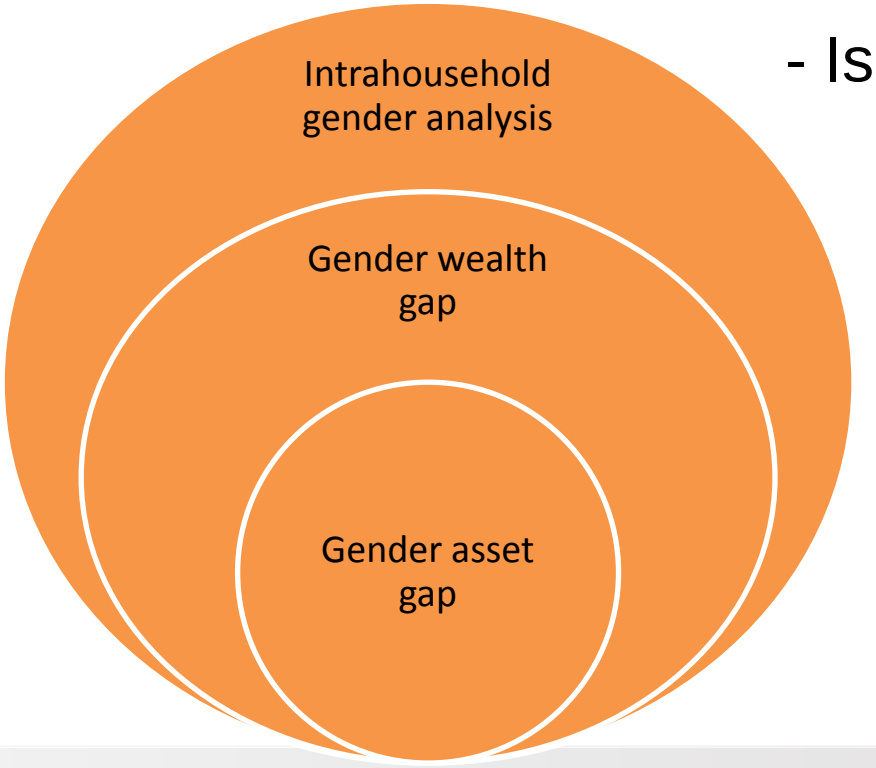
Examples on how to derive asset weights

A household of 3 adults, reported ownership of dwelling

Selection protocol	Ownership of the dwelling	Weight for the dwelling
1 randomly selected person	Owned exclusively by the selected respondent	Inverse of the selection prob of the respondent 1/3 = 3
1 randomly selected person	Owned jointly by the respondent with another hh member and 1 non-hh member	Inverse of total selection probability of all joint owners (1/3*2 + 1/3) = 1
1 randomly selected person (A) and the partner (B)	A owns jointly with B	Inverse of total selection probability of A & B (1/2+1/2) = 1

Analysis and dissemination

Two sections: (1) Data analysis and presentation; and (2) Dissemination



(1) Data analysis and presentation

- Each type of objective covered
- Issues addressed:
  - Purpose of analysis
  - How to organize data to facilitate analysis
  - Calculation of key measures
  - Example(s) of bi- and multi-variate analysis
  - Presentation of results in graphs and tables

Analysis and dissemination (2)

(2) Dissemination products recommended:

- Data tabulations
- Gender indicator databases
- Analytical publications
- Sharing of microdata

Analysis and dissemination (3)

Intrahousehold gender analysis

- Two components considered so far:
  - Analysis of gender differences among couple partners
  - Using measures of gender inequality within the couple to predict selected outcome variables.
  - Other analysis?

Thank you

For additional information:

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http://unstats.un.org/unsd/gender/EDGE