



Global Strategy  
IMPROVING AG-STATISTICS



# Introduction to FAO/UNFPA Guidelines for Linking Population and Housing Censuses with Agricultural Censuses

## AGENDA ITEM VII



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## Outline

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- Need for the guidelines and audience
- Previous International recommendations
- Advantages of coordinating the population and housing censuses with agricultural censuses
- Development of the guidelines
- Content of the guidelines
- Analysis of linked data for agricultural policy
- Way forward and follow-up actions



## Need for the guidelines and audience

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### Needs

- Users perspective
  - meet emerging needs for integrated data for policy-making
    - broader scope for agriculture under Global Strategy: food security, poverty reduction, environment etc.
  - improving quality of data collected during the censuses
  
- Implementing agency and country perspective
  - cost effectiveness
  - coordinated data under an integrated statistical system

### Primary audience

- Population and housing census statisticians
- Agriculture census statisticians
- Statisticians and analysts



## Previous International recommendations

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- FAO World Programme for the Census of Agriculture 2010
- Conference of European Statisticians Recommendations for the 2010 Censuses of Population and Housing, UNECE in cooperation with EUROSTAT, 2006
- Principles and Recommendations for Population and Housing Censuses, Rev 2, UNSD 2008 (*endorsed in 2007*)
- The 2010 Africa Round of Population and Housing Censuses. Draft Implementation Handbook (*A Guide for African Countries*), UNECA 2008
- Widely accepted as suitable method of collection for agricultural statistics



## Development of the guidelines

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- Many international recommendations for integrating agriculture into the population and housing census but no operational guidelines
- Review of what has worked from existing country practices 2000 and 2010 rounds
- Synthesis of findings to extract general recommendations on data items, data collection methods and analysis
- Many countries already implementing linked censuses



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## Advantages of linking population and housing censuses with agricultural censuses

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### Cost effectiveness

- 50 % reduction in some countries:
  - Coordinated approach rather than two separate collections reduces costs
  - Shared infrastructure, logistics, personnel and equipment can be used for both censuses, particularly census cartography
- Reducing the scope of the agricultural censuses: Smaller agricultural census possible by including basic agricultural questions in population and housing census
- Common master sample frame. Reduces costs of separate listing to produce frame
- Ensuring regular agricultural census data collection



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## Advantages of linking population and housing censuses with agricultural censuses

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### Sample Design

- Building a reliable sample frame
  - For the core agricultural census
  - For specialized supplementary modules
  
- Optimizing the sampling design
  - Stratification
  - Defining optimal sample size
  
- Broader agricultural census coverage
  - When agricultural census applies cut-offs it allows for data collection on units below cut-offs
  - Reflects data needed under broader scope of agriculture

### Data Analysis

- Enriching data analysis from the two censuses (linked data)



## Content of the guidelines

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The guidelines:

- Highlight *selected country practices* in collecting agricultural data in the population and housing census
- Set out the *data items recommended* for collection
- Set out *approaches to integration*, and the characteristics of countries these apply to
- Describes how to *use the data for building sampling frames and optimizing the sample design*
- Provides examples of *data analysis* using linked data for areas which fall under a broader scope of agricultural statistics

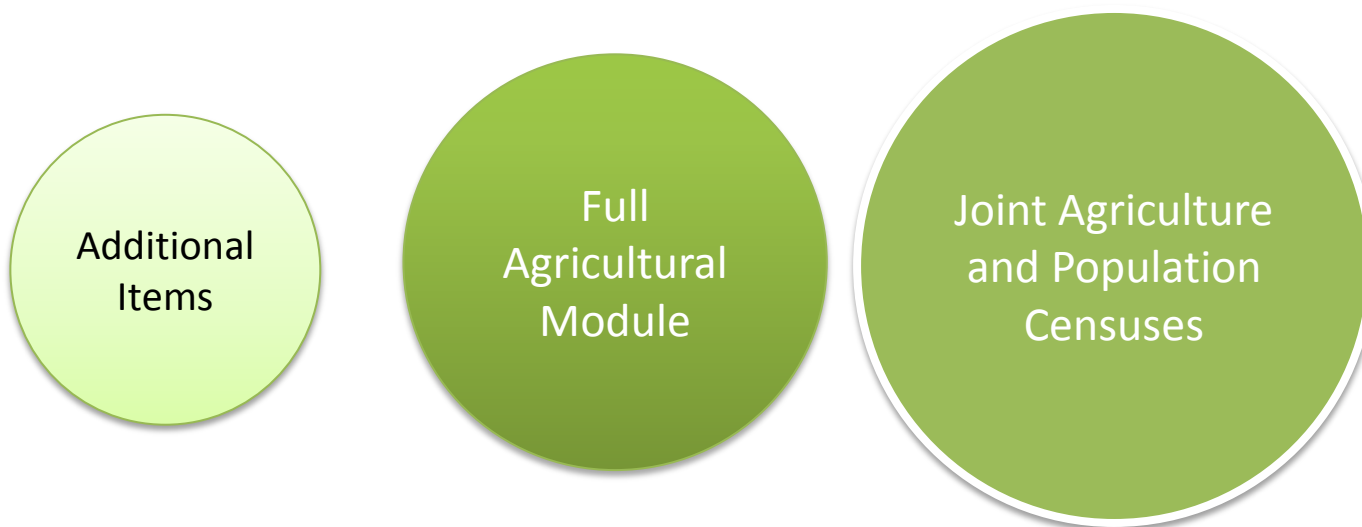




## Content of the guidelines

Linking data from the population and housing censuses with agricultural census data

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- Choice of modality is part of the programme of data collection in country
- Must be seen in the context of an integrated statistical system

## Content of the guidelines

### Core data items and further supplementary items

#### **Core data items:**

- Whether the household is involved in own-account agriculture production
- Area of land used for agricultural purposes

<b>Data items for SUPPLEMENTARY agricultural module for Population and Housing Census</b>	<b>Corresponding AGRICULTURAL CENSUS item (CORE)</b>
<b>Item S-A1:</b> Identification of agricultural holders	
<b>Item S-A2:</b> main purpose of production	<b>0006</b> Main purpose of production of the holding. Number of land parcels.
<b>Item S-A3:</b> Area of agricultural land according to land use types	<b>0007</b> Area of holding according to land use types. <b>0008</b> Total area of holding where possible (minimum question)
<b>Item S-A4:</b> Land tenure types	<b>0009</b> Land tenure types on the holding
<b>Item S-A5:</b> Presence of irrigation	<b>0010</b> Presence of irrigation on the holding.
<b>Item S-A6:</b> Types of temporary crops grown	<b>0011</b> Types of temporary crops on the holding
<b>Item S-A7:</b> Types of permanent crops grown and whether in compact plantations	<b>0012</b> Types of permanent crops on the holding and whether in compact plantations.
<b>Item S-A8:</b> Number of animals for each livestock type	<b>0013</b> Number of animals on the holding for each livestock type
<b>Item S-A9:</b> Presence of aquaculture	<b>0014</b> Presence of aquaculture on the holding.
<b>Item S-A10:</b> Presence of forest and other wooded land	<b>0015</b> Presence of forest and other wooded land on the holding



## Approaches to linking the censuses

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- Few data items for a frame followed by full agricultural census
- Carried out during pre census listing or actual enumeration
- Full scale module for households under an agricultural census cut off followed by agriculture census of larger producers
- Full scale module of households to replace agriculture census
- Choice depends on scale of agriculture:
- Mostly small-scale agriculture conducted by households
- Substantial large farms with significant amount of cash crops
- Both large and small scale agriculture, where small scale is important for food security etc.



## Optimize Sample Design

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- Preparation of the survey frame
  - List frame of small holders with basic agricultural information for sample design
- The data in the frame can be used to optimize sample design
  - Holdings, number of plots, number of livestock etc
  - Used to determine sample size
  - Used for intra-class correlations – and therefore to determine size of sampling **units**
  - Allocating the sample to different strata
  - Selecting the PSU by PPS



## Analysis of linked data for agricultural policy

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- Core agricultural items – key indicators:
  - farm household status or non farm household
  - area of land used for agricultural purposes
  
- Supplementary items based on FAO WCA 2010 Programme
  
- Population and Housing census items
  
- Demographic analysis
  - Fertility of farm household sector
  - Gender analysis of the farm household sector
  - The elderly in the farm household sector



## Way forward and follow-up actions

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- Available in pdf and hardcopy at: [Linking Population and Housing with Agriculture Censuses: with selected country practices](#)
  
- Regional workshops were held:
  - Pacific region: Noumea, New Caledonia, 28 May - 1 June 2012 with SPC, UNFPA and Paris21
  - Near East region: Amman , Jordan 24-28 June 2012 with ESCWA and AITRS
  
- Further workshops for other regions 2012 and 2013
  - Africa region: Abidjan, Côte d'Ivoire 2012
  
- Anticipate more in depth discussion and planning workshops as part of WCA 2020 round



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THANK YOU

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