Modernization of agricultural statistics to respond to new multidimensional demands

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Outline

① Global agriculture: facts and figures
② Challenges ahead for agricultural statistics
③ Quality and methodological issues
④ Modernization
⑤ Conclusions
World population forecasts

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SOURCE: UN WORLD URBANIZATION PROSPECTS
Undernourishment

PEOPLE UNDERNOURISHED, 2014-2016 (PERCENTAGE)

SOURCE: FAOSTAT
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Food deficit

DEPTH OF THE FOOD DEFICIT, 1990-2016 – 3 YEAR AVERAGE (KCAL/PER CAPITA/PER DAY)

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SOURCE: FAOSTAT
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Environmental impact

EMISSIONS AND PRODUCTION, 1961-2014 (ABSOLUTE VALUES, INDEXES)

WORLD MARINE FISH STOCKS, 2013 (PERCENTAGE)

SOURCE: WORLD BANK

SOURCE: FAO, SOPHIA REPORT 2016
SDGs and agriculture

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Even if data availability has improved under the MDGs, more work and resources are needed to answer to the SDGs challenges.

Today still too many developing countries are lacking the agriculture census.

**SHARE OF COUNTRIES THAT CONDUCTED DATA COLLECTION ACTIVITIES IN LINE WITH INTERNATIONALLY RECOMMENDED PERIODICITY**

- Agricultural census: 71.2%
- Health survey: 47.9%
- Population census: 91.1%
- Poverty survey: 53.4%

*SOURCE: WORLD BANK*
A global system for agricultural statistics

- Producing minimum set of core economic, social, environmental and geographical core data
- Better integrate agricultural statistics into National Statistical Systems
- Improving governance and statistical capacity building

A VISION COHERENT WITH THE MODERNIZATION PERSPECTIVE
Quality

- Relevance
- Reliability
- Effectiveness
- Professional independence
- Sound methodology
- Accuracy
- Timeliness and punctuality
- Coherence and comparability
- Accessibility and clarity

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Challenges

- Measure new complex cross-cutting issues
- Reduce the use of surveys and the response burden
- Satisfy multidimensional demand for good quality statistics
- Consistency checks are important especially in case of multiple sources
- Data collections should not be duplicated
- Re-think data capturing systems
- Improve human capital skills
**Methodological issues**

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<th>ADMINISTRATIVE DATA</th>
<th>EXPERT ESTIMATIONS</th>
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**Key:**
- ****: Excellent
- ***: Good
- **: Moderate
- *: Poor

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A new paradigm

«We can and must move from a paradigm of producing the best estimates possible from a survey to that of producing the best possible estimates to meet user needs from multiple data sources»

C. Citro

How to choose between these methods?

How to combine them?

- Key concepts: data quality, time series continuity, territorial details, efficiency
- Transparency
- Data flows mapping recommended
- Good relationships and synergies with other significant producers
Modernization: drawn value from data

- Assessing users needs
- Giving incentives to sustain data quality
- Integrating and linking data
- Implementing a sound legal framework
- Enhancing and reorienting skills
- Moving from ‘silo’ model
- Reducing burden
- Increasing technology use
Modernization: the register-based statistical system

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The World Program for the Census of Agriculture is setting definitions, concepts, standards and guidelines to ensure comparability across Countries.

WCA 2020 examines 4 different possibilities for census (classical, modular, integrated census/survey, combined with administrative data).

Focus on ICT use.
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Key words

QUALITY

RESEARCH

TRUST

COMPETENCIES

PARTNERSHIP
THANK YOU
and enjoy
the Seventh International Conference on
Agricultural Statistics