



AN ANALYSIS OF AGRICULTURAL CENSUSES AND MAIN ISSUES FOR CONSIDERATION IN THE FUTURE

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Introduction: Background

- 8 decennial Programmes for the World Census of Agriculture (WCA) published from 1930 to 2000
- Purpose : to guide countries to use standard concepts and definitions and a standardised list of items in view of obtaining internationally comparable data
- FAO published main census data by country in a standard format, international comparison tables for main census items and the information on methods used by different countries
- FAO is now starting preparations for the WCA 2010 Programme, to be launched in 2005

Analyses of recent agricultural census results (1)

- National results compiled in standardised tables for international comparison for each Programme
- Further analysis in connection with data from the 1950 and 1970 WCA:
 - Three studies of 1950 WCA data classified by size of holding, concerning: (i) number and area of holdings, (ii) land tenure and (iii) land use
 - Gini coefficient and median size of agricultural holdings, using land area as a measure of size, were calculated using 1970 WCA data
- Additional analysis using data available from the last three decennial censuses (1990, 1980 and 1970) concerning:
 - Number and Area of Holdings and related parameters
 - Cattle

Analyses of recent agricultural census results (2)

Number and Area of Holdings, Average and Median Sizes, and Gini Coefficient : 1990, 1980 and 1970 WCA

Data available for 20 countries for a period that ranges from 17 to 25 years

In all reporting countries except Turkey, the average size of holdings was increasing steadily although the total area of holdings was decreasing.

- Largest increases of the average size :
Germany (113 %), Luxembourg (87 %), Belgium (84 %) and Denmark (63 %)
- Smallest increases of the average size :
Spain (6 %), Italy (8 %), Portugal (10 %) and U.S.A. (12 %)
- In Turkey, the average size decreased while the total area increased

Analyses of recent agricultural census results (3)

Number and Area of Holdings, Average and Median Sizes, and Gini Coefficient : 1990, 1980 and 1970 WCA

2 methodological problems for calculating and comparing the medians and Gini coefficients, based on classification by size of area of holdings :

- Country data are available as classified by size groups. Interpolation was done using log-normal properties of the distributions involved. Calculations can be done better using raw data not available at FAO
- FAO has been recommending in all World Programmes classification of the number and total area of holdings by size of total area of holding. This classification was not found suitable by some countries (mostly Europe). However in most countries (except Finland), the problem associated with the use of different classifications is of limited importance since agricultural area and productive area are not much different from total area, the difference being often less than 10 percent.

Analyses of recent agricultural census results (4)

Number and Area of Holdings, Average and Median Sizes, and Gini Coefficient : 1990, 1980 and 1970 WCA

Comparison of Gini coefficients over time within individual countries

- Increase occurred in Germany, Greece, Netherlands, Japan and Turkey
- Decrease can be noted in Austria, Belgium and Rep. of Korea.
- No significant change in the remaining 12 reporting countries

Comparison of Gini coefficients between countries for the 1990 WCA

- For 8 countries, data available refer to agricultural area classified by size of agricultural area : France, Germany, Greece, Ireland, Luxembourg, Netherlands, Norway and Portugal . The highest coefficients are found in Portugal (0.78) and Germany (0.68) and the lowest in Norway (0.46).
- For five countries, data available refer to total area classified by size of total area. Italy 0.78, Spain 0.86, United Kingdom 0.67, Turkey 0.61 and U:S.A. 0.74.
- For two countries, data available refer to total area classified by agricultural area. Belgium 0.56 and Denmark 0.44.
- For the remaining five countries, data available refer to five different classifications.

Analyses of recent agricultural census results (5)

Holdings Reporting Cattle and Number of Heads of Cattle: 1990, 1980 and 1970 Rounds of Agricultural Censuses

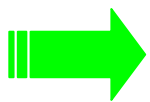
Data available for 17 (out of 43) countries, period of 20 years

- Specialization of cattle raising holdings can be observed at two levels:
 - the total number of holdings reporting cattle has decreased in all reporting countries except Poland
 - the proportion of holdings raising cattle has decreased, although the total number of cattle did not change much
- The average number of cattle per holding reporting cattle has increased in all 17 reporting countries. The largest increase was observed in Greece. Countries are very different: from 3.8 in Poland, 6.4 in Portugal and 13.0 in Greece to 86.0 in the United Kingdom, 89.0 in Canada and 308.8 in Australia (1990 WCA).

Issues for Consideration in the Future WCA (1)

The main objectives of the next agricultural census are:

1. to collect data on agricultural structures which do not change rapidly from year to year and to present them at national and sub-national levels
2. to provide a frame for other agricultural surveys based on agricultural holdings

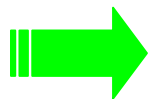


These objectives are similar to the ones of previous programmes

Issues for Consideration in the Future WCA (2)

The basic characteristics of the WCA 2010 are proposed to be the same as for the previous programmes :

- Concepts and definitions should be harmonized with those of other international organizations (UN, ILO, etc.)
- The scope of the agricultural census should be limited to essential data in order to limit the size of the questionnaire and ensure, thus, the success of the census. Additional data may be collected through specialized surveys
- The changes with respect to the previous censuses should be kept to the minimum in order to ensure data comparability



put more emphasis on data relevant to food security

Issues for Consideration in the Future WCA (3)

The following changes, referring to the list of items, may be considered

- Collect more data on livestock
- Give more emphasis to collecting data relevant to food security (such as availability of food storage, and environmental issues)
- Improve definitions and census coverage relevant to women's participation in agriculture, in order to avoid male-bias
- Simplify sections concerning soil characteristics and use of fertilizers and pesticides proposed in the WCA 2000
- Reconsider collection of data on crop production which is not a structural item

Issues for Consideration in the Future WCA (4)

Improve data analysis at county level

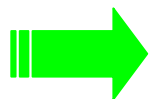
- Gini coefficient, medians, etc
- Time series tabulations for the most important data
- Graphic presentation of data

Improve data dissemination at county level

With the new facilities available, such as Internet and/or CD-ROMs

Collect data relevant to food security

- Use of a village infrastructure questionnaire (communication facilities, availability of storage facilities, local market, cottage industries, financial services, etc)
- International coordination to standardize concepts and data format



A chapter (or a supplement) on these matters may be included in the next FAO programme to provide assistance to countries

Discussion

Priorities to be given by FAO in the future work
including the next WCA Programme

European priorities / experiences that may be
relevant to FAO