

Integration of agricultural surveys

Artur Łączyński

Renata Kaczkowska

Agriculture Department

Central Statistical Office in Warsaw

Warsaw, 22 March 2017

Outline

- Channels of data collection
 - Use of GIS
 - Survey (variable) integration
 - Organisation of agricultural surveys
-

Basic terminology

- CATI (telephone interview)
 - CAPI (personal interview using PC, handhelds, tablets etc)
 - CAII / CAWI (internet interview)
 - PAPI (personal and paper interview)
 - Data collection from administrative sources
-

Channels of data collection

- Paperless questionnaires
 - Core and module surveys (FSS and others)
 - All channels have been introduced in all agricultural surveys
 - A special management system/application
 - Data processing to obtain a single record for a farm
-

GIS in agricultural surveys

- ☐ Work dispatching
 - ☐ Control of interview location
 - ☐ Supporting interviewer itinerary
 - ☐ Data presentations on maps
 - ☐ In situ surveys
-

FSS + modules in Poland

- Surveyed sample of ca 1.5 mln farms:
 - Ca 200 thousands selected individual (private) farms
 - Ca 4.5 thousands legal persons (full coverage)
-

Dates of surveys in Poland (1)

- March - pig survey
 - June/July – Farm Structure Survey, cattle, sheeps and poultry survey, pig survey (integrated)
 - July – economic outlook survey
 - August – cereal yields & harvests survey (sub-sample of FSS)
-

Dates of surveys in Poland (2)

- October/November – rape seeds and the other crop yields & harvests survey (sub-sample of FSS)
 - December – pig survey, cattle, sheeps and poultry survey, (integrated)
 - January - economic outlook survey
-

Pre-selection of farms to a data collection channel

- Multilayer random selection (Neyman correction)
- All farms can participate in CAII
- Farms with a telephone number – CATI
- Farms with several modules – CAPI
- Farms without telephone numbers – CAPI
- Change channels during survey if necessary

Channel separation

- CAII – only one week
 - CATI/CAPI – afterwards
 - CATI can be carried centrally or regionally
-

Organisation of agricultural surveys

- Survey preparation
 - Data collection
 - Data processing
 - Data analysis
 - Data dissemination
-

Survey preparation

- The statistical farm register –
maintaining updating (addresses,
telephone numbers etc.)
 - Sample selection
 - Survey management modules
 - user management
 - Work dispatch (also with maps using GIS)
 - Finance and bookkeeping
-

Data collection (1)

- Electronic questionnaires (CAPI, CATI, CAII)
 - Application for survey management
 - The organizational module
 - ✓ Sampling frame (farm identification)
 - ✓ Operational statuses
 - ✓ Non-response classification
 - ✓ Daily operational reports
 - ✓ Completeness report
 - The ad hoc analysis module (during the survey) – correctness of answers
-

Data collection (2)

- Possibility of channel change
 - Data kept temporarily in an operational database
-

Data processing

- Operational and analytical databases
 - Control of central database, automatic corrections
 - Weights correction
 - Typology computation
 - Preparing of EUROFARM (the special database in Eurostat)
-

Data analysis

- The single record for a farm (e.g. A green/golden record)
 - Analytical tools e.g. SAS EG
 - Predefined / control tables computation
-