

The first register-based Census in Norway in 2011

How to comply with international recommendations?

Norwegian Censuses: Historical background

- 1960: Last fully traditional census
- 1964: Central Population Register (CPR) established
 - Based on Census 1960
- 1970 Census: Mainly traditional, but CPR used in data collection and editing
 - Census used to
 - Check and update CPR
 - Establish Register of Education (in SN)
- 1980 Census: Questionnaires shortened and sent by mail
 - Registers used to rationalise data collection and processing
 - ♦ No enumerators

Historical background (cont.)

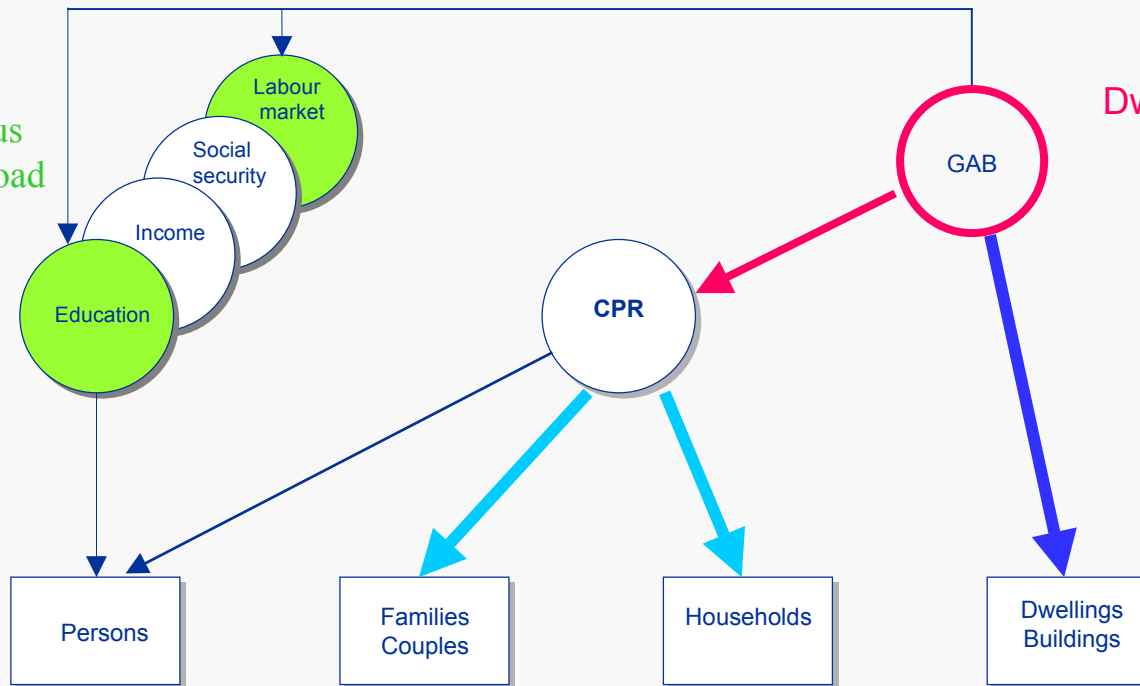
- 1990 Census
 - Register data on demography, education, income, geographical characteristics
 - Questionnaires for data on labour market, households and housing
 - Sample survey
 - Labour market register used in estimation
- 2001 Census
 - Data on persons (incl. labour market) based on registers
 - Data on families, households and housing based on questionnaires
 - ♦ Full coverage survey (all households)
- Future censuses: Totally register-based

Register-based population and housing census system

Population

Improvement for some variables, i.e.

- Occupation
- Current activity status
- Education taken abroad



Dwelling Address Project

Develop register-based statistics on families and households

Questionnaires

Develop register-based statistics on dwellings

Place of usual residence

- Defines the resident population of each country
- Two concepts: Legal residence and “de facto” address
- The recommendations recommend “de facto” address with an opening for use of legal address
- Legal residence most obvious in a register based census
- The Legal address is the same as “de facto” for most residents
- However there are some exceptions e.g. students

“De facto” address

- Statistics Norway (SN) are investigating some groups e.g. students, persons living in institutions, asylum seekers and homeless
- There are administrative registers that can be used as additional sources
- Using other sources than the CPR: the census population count will be different from the annual statistics.
- Relevance versus comparability

Consequences of using legal address

Total population

Households

- Mainly students

Housing

- Underestimating number of persons de facto not living in conventional dwellings
 - Homeless
 - Living in cottages, boats etc.
- Occupied vs. vacant dwellings

Quality of census topics

	Total	Available 2006			Available with improvements		
		No	Partly	Completely	No	Partly	Completely
Core topics, total	38	2	17	19	0	7	31
Population census	24	0	9	15	0	3	21
Housing census	14	2	8	4	0	4	10
Non-core topics, total	71	43	10	18	31	16	24
Population census	54	30	6	18	21	10	23
Housing census	17	13	4	0	10	6	1

Non core topics

	Total	Available 2006			Available with improvements		
		No	Partly	Completely	No	Partly	Completely
Non-core topics, total	71	43	10	18	31	16	24
High relevance	24	10	3	11	5	5	14
Medium relevance	25	15	5	5	8	9	8
Low relevance	17	13	2	2	13	2	2
No relevance	5	5	0	0	5	0	0

Challenges using registers

- Missing values
- No or insufficient updating
- The link between the resident persons and dwellings
- For some topics: No administrative data exist
 - Human behavior and attitudes

Missing values

- CPR: “ever resided abroad” and “place of birth” for the period before 1964
- Education taken abroad by immigrants that have entered Norway after 1999
- Occupation
- Some key variables in the GAB register have poor quality e.g. toilet and bathing facilities, number of rooms, type of heating and water supply

The link between the CPR- and GAB registers

- We only have this link for 83 percent of the population living in multi dwelling buildings. The main reason for this low percentage is the poor coverage in the capital Oslo. In Oslo the coverage is 68 percent
- If we include the whole population the percentage is 94
- Is a presumption to establish households
- Statistics Norway (SN) plays an active role to improve the quality
 - Quality monitoring
 - Coordinator
 - Initiative – taker

The link between the CPR- and GAB registers (cont.)

- Despite this quality problems SN is now using register-based data on families, households and dwellings for producing statistics.
- Families and households: The register information must be edited
 - Updated households from the 2001 census
 - Weighting
 - This method is not satisfactory in the long run
- Dwellings: Problems with housing topics including information on residents

Conclusions

- Most core topics covered
- Some problems with housing topics
- Improvements is necessary in several fields
 - By register owners and SN
- Data from sample surveys planned only for quality assessments
- Could be necessary to use such data to improve register data....
- But we are still planning for a fully register-based census in 2011