



# Regional Training Workshop on Transition to Register-based Approaches for Population and Housing Censuses

Ankara, Türkiye  
12-15 June 2023



# Use of administrative data to support the implementation of traditional censuses

**Regional Training Workshop on Transition to Register-based Approaches for Population and Housing Censuses**

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# Types of census:

- **Traditional census (full field enumeration with paper/electronic questionnaire):**  
Collection of data directly from respondents in the field by enumerators and/or through a paper/ electronic/online questionnaire
- **(Fully) Register-based census:** all information for individuals/households is compiled from several independent administrative registers
- **Combined approach:** Elements of both the traditional and register-based approaches are combined to the extent that suits national circumstances, two main categories are:
  - Combining registers with full field enumeration
  - Combining registers with reduced field operation or sample survey

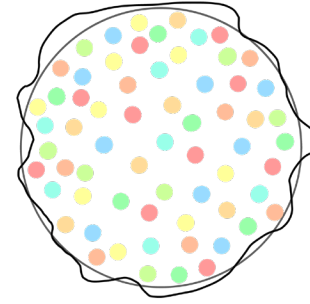
# Using administrative data in the census - potential benefits



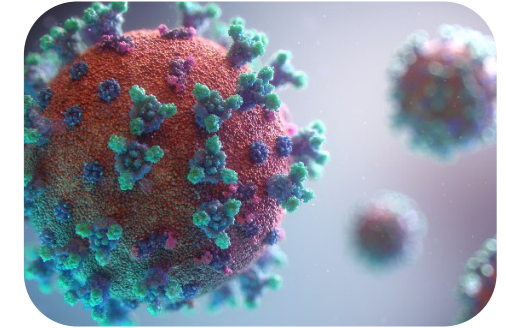
**Bridging data gaps**



**Reducing costs**



**Improving the coverage**



**Less adversely affected by crisis**



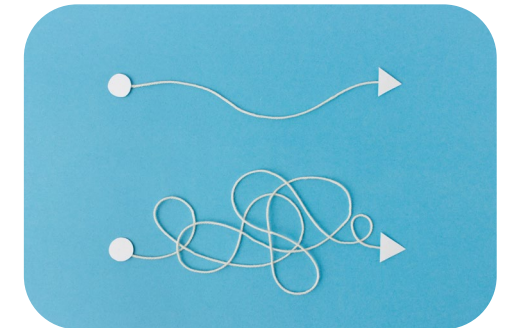
**more granular statistics**



**Reducing response burden**



**Increasing timeliness and frequency**



**Simplifying field operation**

# Using administrative data in the census – key challenges



**Availability of high-quality updated administrative data sources**



**Legal basis for the use of and access to administrative data**



**Mechanisms for collaboration with data providers**



**Public approval**



**Human resources**



**Interoperability**

# Using administrative data in the census

- The transition to a “fully register-based census” is a medium to long-term process.
- Not all countries are ready for the transition, and for some countries, this is not a target.
- Many countries do not have reliable or universal population registers, or other pre-conditions are not met.

However, administrative data can be used in various ways in the census depending on the quality and availability of administrative data sources, expertise in the use and management of administrative data, and design of the census processes and procedures.



# Administrative data supporting data collection

- Administrative data may be utilised to support “data collection operations”, including but not limited to:
- Building enumeration areas
  - National/postal address list to replace or simplify the listing process
  - Telephone list to facilitate data collection
  - Available data on specific sub-populations/regions (such as residents of institutional households) to facilitate data collection
  - Available data on some census items to prefill the questionnaires (either paper/electronic or online) to be checked/updated/confirmed by respondents

When the quality of the administrative data source is **satisfactory**.

# Administrative data to improve the coverage/quality

- Administrative data may be utilised to “improve the coverage/quality of census data”, including but not limited to:
- Dealing with missing values or non-respondents and improving the imputation procedure
  - Filling data gaps for hard-to-reach population groups
  - Providing data on a particular region, for example, due to a natural disaster
  - Validating/checking census data/aggregates
  - Weighting/calibration process of the sample survey(s) related to the census
  - Complementing census for some data items which are more easily and accurately collected from administrative sources

When the administrative source is of **high-quality**, and it is possible to link data at the **record-level**.



# Australia example

- No intention to conduct a register-based census due to the lack of public approval raised from concerns around data privacy
- **2016 Census:** Use of the national address register to support mailing the questionnaires to households
- **2021 Census:**
  - Identify communities with lower-than-average response rates (like elderly, migrants, etc. and devise proper strategies for assisting them.
  - Improve census count by determining occupied dwellings on census night (under the strictest data privacy procedures) and improving the imputation procedures
  - Fill data gaps in areas affected by unexpected events (like bushfires)
  - Comparing census data with administrative data for quality control purposes

# Indonesia example



- **2020 Census:** Use of population data from the Population Registration System to modernise its census approach was explored.
- Several legislative instruments were either introduced or amended, with a focus on providing Statistics Indonesia with the necessary access to data from the Population Registration System
  - The coverage of civil registration data is not yet great
  - The data from the system was combined with previous census data to create a statistical population register.
  - The online questionnaire was filled with data to be verified by respondents and through field operation.

# Relevant resources

APRIL 2022

## EMERGING TRENDS IN CENSUS APPROACHES IN ASIA AND THE PACIFIC

with country examples



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# STATS BRIEF

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STATISTICS DIVISION

## Tapping into administrative data in census-taking: an emerging trend in Asia and the Pacific



**Blog on**  
Innovation meets tradition: Administrative data shaping censuses in Asia and the Pacific



# STATS CAFÉ

4 April 2022 | 13:00 - 14:30 (UTC+7)  
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## Emerging Trend – The Use of Administrative Data in Asia-Pacific Censuses



## Data Integration Community of Practice (DI-CoP)



Pages / Data Integration Community of Practice / Data Integration Community of Practice - Homepage

### Census and Population Register

Created by Panita Rattanakitpirom, last modified on Jun 24, 2022



# Takeaways

- The transition to a fully register-based census is a medium to long-term process and may not be suitable for all countries.
- Administrative data can be used in various ways to improve the quality and efficiency of a traditional/combined census.
- Even if administrative data is not of sufficient quality, it may still be worthwhile to explore ways to benefit from available administrative data sources and look into how they may be improved to be of more use in the future.
- There are valuable resources available, and it is also advisable to review country experiences.
- Steps should be taken with caution to minimise any disruption in census results, which are one of the most critical data sources for evidence-based decision-making and planning in many countries.

A decorative graphic featuring the text "Thank you" in a dark blue, rounded, cursive font. The word "Thank" is on the top line and "you" is on the bottom line. A yellow smiley face with a wide, open-mouthed grin is positioned between the two lines of text, partially overlapping the letter 'a' in "Thank". The entire graphic is set within a white square with a light blue border. The background consists of a dark blue horizontal band across the middle of the page, with a white background above and below it. At the bottom of the page, there is a horizontal bar composed of several small, colorful rectangular segments in various colors including red, orange, yellow, green, blue, and purple.