United Nations Expert Group Meeting
Improving Migration Data in the Context of the 2030 Agenda

20-22 June 2017, New York

UNSD presentation

Session 6

Using population censuses to compile data for migration-relevant SDG indicators
Overview

- Use of censuses in the collection of int’l migration statistics
- Aspects of planning and design of population censuses relevant to migration data collection
- Core census topics on int’l migration
- Migration-relevant SDG indicators that can potentially be measured through population and housing censuses
- Recommendations for improving availability and standardization of int’l migration data
Use of census in collection of int’l migration data

- Census represents the most comprehensive and the most available source of internationally comparable statistics on int’l migration.
- Universal coverage – covering all residents, all int’l migrants, including certain categories of small migrant groups, and undocumented migrants.
- Another advantage is that it collects a substantial amount of information about each individual – allowing the characterization of int’l migrants by variety of demographic and socio-economic characteristics.
- Geographical info collected on place of residence can be used to determine where int’l migrants live for further analysis and study.
Use of census in collection of int’l migration data

- Through the inclusion of a few questions, censuses allows the estimation of migrant stock + migrant flow whereby data from two successive censuses can be used to estimate net int’l migration

- Little variation in how migration questions are asked among countries → better international comparability → possibility of sharing data among countries to estimate volume of emigration
Use of census in collection of int’l migration data

Among limitations:

- Censuses cannot capture current trends in int’l migration as censuses are generally carried out only every 10 years (5 in few cases).
- Not suitable for obtaining statistics on the more dynamic modalities of spatial mobility such as circular migration.
- Not suitable for obtaining statistics requiring detailed and probing questions (e.g., causes or consequences of international migration).
- In countries using sampling (long forms) for migration related questions, coverage of certain small groups of migrants is a problem (as migrants are not usually randomly spatially distributed) and the results are of limited use for detailed analysis and cross-tabulation.
- Migrants tend to participate less than the general population due to several reasons (fear, unfamiliarity with language/culture).
Aspects of planning and design of censuses relevant to migration data collection

- Several aspects of census planning and design have a bearing on the coverage and quality of international migration data.

- Many of the decisions made at the various stages of census planning and operations will impact data and data collection on international migration.

- The next few slides discuss some of these decisions and issues.
Aspects of planning and design of censuses

- **At the initial planning stage**
  - Who is included?
    - Usual resident population count/approach
    - Population present count/approach
    - Treatment of special population groups – military/diplomatic personnel outside the country, cross-border workers, students studying abroad, persons working in another country, persons with residences in multiple countries (P&R rev. 3)
  - The use of sampling in the census (short/long forms)
    - Factors to consider when deciding whether to pose migration questions in the short or long form:
      - is there need to tabulate for small areas + small population groups?
      - is there need for probing certain questions?
      - proportion of international migrants in overall population (> or <5%);
      - sample size for long form (10 or 20%)
Aspects of planning and design of censuses

- **At the preparatory stage**
  - Communications and publicity campaign
    - identify areas with concentration of immigrants and tailoring communications and publicity to these groups
    - increase confidence of immigrants (esp. undocumented) to participate by assuring that census enumeration is separate from activities of immigration authorities
    - offering publicity in different languages
  - Training of interviewers
    - understand the enumeration approach; household listing: inclusion/exclusion rules; proper recording of country names; probing; major skip patterns, etc.
    - in areas with concentration of immigrants, ability to build trust, dealing with fears, and eliciting truthful responses
  - Confidentiality
Aspects of planning and design of censuses

- **In questionnaire preparation**
  - Selection of topics
    - Care should be taken to include topics relevant to international migration in the census, esp. if data from other sources are not available (country of birth/citizenship, arrival) and topics that tested well and determined to be feasible for collection
  - Formulation of questions
    - Avoid technical terms, e.g., “migrant”, “immigrant”, “place of usual residence” (for sake of both enumerators & respondents)
  - Design of the response options
    - The use of pre-coded response categories, only where appropriate, and providing “other, specify:” category
  - Provision of questionnaire in different languages
Aspects of planning and design of censuses

- **In the plan of enumeration**
  - Enumeration method
    - face-to-face enumeration may be preferred in areas with large migrant groups rather than self-enumeration to ensure the questions are understood
  - Issues of coverage (difficulty enumerating migrants) – due to the fact that many may live in unconventional living situations, esp. in periods immediately after arrival
    - special measures need to be taken (eg. establishing special “census stations” in places where they congregate; targeted publicity and reach-out)
Aspects of planning and design of censuses

- In the plans for data processing and dissemination

  - Taking care to preserve the detailed information collected, including for country names
  - Disaggregate by sex and age, and other relevant variable
  - Cross-tabulate to show differences in characteristics of migrant subgroups (e.g., labor force participation by citizenship, duration of residence in the country)
  - Disseminate accompanying metadata (concepts, definitions, classifications; data coverage; sampling errors, etc.)
  - Disseminate results pertaining to migrant groups (refugees, undocumented migrants, etc.) in culturally sensitive manner
Core topics on international migration

- Country of birth
- Country of citizenship
- Year or period of arrival in the country

- topics necessary for identifying migrant stocks that are relevant for policy:
  - stock of foreign-born persons (country of birth)
  - stock of foreigners (country of citizenship)
  - stock of returned migrants
  - stock of native-born persons with foreign-born parents
Country of birth

- Question on country of birth - used to distinguish between native-born and foreign-born persons

<table>
<thead>
<tr>
<th>Region</th>
<th>Included No. (%)</th>
<th>Not included No. (%)</th>
<th>Total No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>22 (81)</td>
<td>5 (19)</td>
<td>27 (100)</td>
</tr>
<tr>
<td>North and Central America</td>
<td>13 (93)</td>
<td>1 (7)</td>
<td>14 (100)</td>
</tr>
<tr>
<td>South America</td>
<td>7 (88)</td>
<td>1 (12)</td>
<td>8 (100)</td>
</tr>
<tr>
<td>Asia</td>
<td>21 (68)</td>
<td>10 (32)</td>
<td>31 (100)</td>
</tr>
<tr>
<td>Europe</td>
<td>24 (89)</td>
<td>3 (11)</td>
<td>27 (100)</td>
</tr>
<tr>
<td>Oceania</td>
<td>12 (100)</td>
<td>0 (0)</td>
<td>12 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>99 (83)</td>
<td>20 (17)</td>
<td>119 (100)</td>
</tr>
</tbody>
</table>
Data quality issues on country of birth

- confusion arising from changes in national boundaries of countries
  - for both internal consistency and international comparability, P&R recommends country of birth be recorded according to national boundaries existing at the time of the census
- issues arising from improper design of response options
  - pre-coded response options that include regions (grouping of countries), which prevents detailed cross-classification by country of birth
    - coding on the country of birth should be in sufficient detail to allow the individual identification of all countries of birth that are represented in the population
    - any grouping of countries should be done at data processing stage
  - improperly placed non-response or unknown response categories
    - response options need to be clarified and properly designed
Suggestion on how to ask country (place) of birth

- to improve formulation of question and design of response options

ASK OF ALL PERSONS
Where was (person) born?

or
What was the usual place of residence of (person’s) mother when (person) was born?

__(This country) [Specify province and municipality.]
Province ____________  __ Unknown
Municipality ____________  __ Unknown

__(Another country [Specify country according to present borders.]
Country ____________  __ Unknown

__(Country of birth unknown
Country of citizenship

- Question on country of citizenship - used to identify the stock of foreigners
- P&R - question be asked of all person, in addition to that on country of birth

<table>
<thead>
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<th>Region</th>
<th>Included No. (%)</th>
<th>Not included No. (%)</th>
<th>Total No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>24 (89)</td>
<td>3 (11)</td>
<td>27 (100)</td>
</tr>
<tr>
<td>North and Central America and the Caribbean</td>
<td>3 (21)</td>
<td>11 (79)</td>
<td>14 (100)</td>
</tr>
<tr>
<td>South America</td>
<td>2 (25)</td>
<td>6 (75)</td>
<td>8 (100)</td>
</tr>
<tr>
<td>Asia</td>
<td>22 (71)</td>
<td>9 (29)</td>
<td>31 (100)</td>
</tr>
<tr>
<td>Europe</td>
<td>27 (100)</td>
<td>0 (0)</td>
<td>27 (100)</td>
</tr>
<tr>
<td>Oceania</td>
<td>8 (67)</td>
<td>4 (33)</td>
<td>12 (100)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>86 (72)</strong></td>
<td><strong>33 (28)</strong></td>
<td><strong>119 (100)</strong></td>
</tr>
</tbody>
</table>
Country of citizenship

- **Data quality issues**
  - there is wide variation among countries in the way the question is asked and in the way response options are designed *(pre-coding categories made of regions, adjectives for nationality/ethnicity, category of “stateless”)*
  - unlike country of birth, country of citizenship can change *(due to naturalization, marriage, changes in territories, emergence of new States, incidences of becoming stateless)* – this could affect reliability of reported citizenship
  - multiple citizenships can also affect responses, if appropriate design of response options is not provided
Suggestion on how to ask citizenship

- to improve formulation of question and design of response options

ASK OF ALL PERSONS
Of what country is (person) a citizen?
   or
What is (person’s) country of citizenship?
   __ (This country)
   __ (This country) and another country [Specify according to present borders.]
      The other country _____________
   __ Another country (Specify country according to present borders.)
      Country _______________  __ Country unknown
   __ Country of citizenship unknown
   __ No citizenship (Stateless)
Year or period of arrival

- Distinguishes: between recent migrants and long-term migrants
  - question could refer to - first arrival or most recent arrival
  - while the question is mainly for people born outside of the country, it could also be applied to native-born persons if the topic of return migration is of interest
Suggested way of asking period of arrival

ASK OF PERSONS BORN IN ANOTHER COUNTRY

2. On which year and month did (person) first arrive in (this country) to live for a year or more?
   Year _____ Month ____ __ Unknown

ASK OF PERSONS OVER ONE YEAR OLD

1. Has (person) ever lived outside (this country) for a period of at least 12 months?
   __ Yes
   __ No → Skip next 2 questions
   __ Don’t know → Skip next 2 questions

2. When did (person) last arrive to live in (this country) for 12 months or more?
   Year _____ Month ______ __ Don’t know

3. In which country did (person) last live? [Specify country according to present borders.]
   Country ______________ __ Don’t know
Proportion of countries/areas covering the UN core topics on int’l migration, by region, 2010 round
Migration-relevant SDG indicators that can potentially be measured thru censuses

**Goal 3**

**3.1.1 Maternal mortality ratio**
- **Preferred source:** CRVS with high coverage + medical certification of cause of death
- **Other sources:** Population census; HHS; sample or sentinel registration systems
- **P&R topics:** “Household deaths in the past 12 months” classified by age, sex and date of death; follow-up questions concerning cause of death
- If the deceased was a woman aged 15 to 49, a question on occurrence of death “while she was pregnant or during childbirth or during the six weeks after the end of pregnancy?”
- **Caution:** There is no universal agreement about the feasibility and quality of collecting reliable cause of death information as part of a PHC, and this topic should be included in the census if countries lack a reliable, continuous death statistics from CRVS

**3.2.1 Under-five mortality rate**
- **Preferred source:** CRVS with high coverage
- **Other sources:** Population census; HHS; sample registration systems
- **P&R topics:** if questions to each woman of reproductive age is posed on “Children-ever born alive”; “Children living”; alternatively, “Household deaths in the past 12 months”
- Indirect demographic methods (and model life tables) could be used to obtain estimates of under-five and infant mortality rates
- **Caution:** ideal data source is CRVS with high coverage, and this topic should be collected in countries lacking a reliable, continuous death statistics from CRVS
Migration-relevant SDG indicators that can potentially be measured thru censuses

Goal 3

3.c.1 Health worker density and distribution

- **Preferred source**: Health workers registry, if it exists and is of high coverage
- **Other sources**: Population census; LFS
- **P&R topics**: “Occupation” of employed population
- **ISCO-08 Classification**: Sub-major group 22: Health professionals and 32: Health associate professionals
Migration-relevant SDG indicators that can potentially be measured thru censuses

Goal 4

4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex

- **Sources**: Population census;
- **Other sources**: HHS collecting retrospective data on participation of young people and adults in education/training programmes in a specified period in the recent past (usually the last 12 months).
- **P&R topics**: “School attendance”
- if collected for persons of all ages and not just for those in the school age population; including youths (15-24) and adults (25-64) and covering both formal and non-formal education/training, including educational and training programmes organized for adults in productive and service enterprises, community-based organizations and other non-educational institutions, etc
- disaggregated by types of programme such as TVET, tertiary education, adult education and other relevant types and cover both formal and non-formal programmes
Migration-relevant SDG indicators that can potentially be measured thru censuses

Goal 5

5.5.2 Proportion of women in managerial positions

- **Preferred source**: Administrative sources
- **Other sources**: Population census; HHS (LFS)
- **P&R topics**: “Occupation” of employed population
- ISCO-08 Classification- Major Group 1: Managers – Sub-major groups 11: Chief Executives, Senior Officials and Legislator; 12: Administrative and Commercial Managers; 13: Production and Specialized Services Managers; 14: Hospitality, Retail and Other Service Managers
- **disaggregated by sex**
Migration-relevant SDG indicators that can potentially be measured thru censuses

Goal 8

8.5.2 Unemployment rate, by sex, age and persons with disabilities

- **Preferred source:** LFS; Integrated HHS
- **Other sources:** Population census; administrative records
- **P&R topics:** “Labour force status” yielding the three categories of “employed”, “unemployed” (which together make up the population in the labour force), and “outside the labour force”
- **Caution:** due to the periodicity of census, measurement of unemployment may be preferable through LFS or other integrated HHS

8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training

- **Preferred source:** Integrated HHS; LFS
- **Other sources:** Population census
- **P&R topics:** “School attendance”, “Labour force status”
- **Caution:** due to the long periodicity of census, measurement of NEET is preferable through integrated HHS
Migration-relevant SDG indicators that can potentially be measured thru censuses

Goal 11

11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing

- **Sources**: Housing censuses; HHS
- **P&R topics**: “Type of living quarters” and topics related to housing conditions: access to improved water; access to improved sanitation facilities; sufficient-living area (not overcrowded); durable housing; and security of tenure.

Goal 16

16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

- **Preferred source**: CRVS with high coverage; HHS (such as DHS, MICS)
- **Other source(s)**: Population censuses
- **P&R topic(s)**: not recommended topic
- But in countries lacking a reliable, continuous CRVS may use censuses and HHS to collect this information
- Several countries collected this information in 2010 round of censuses: Belize, Brazil, Burkina Faso, Burundi, Congo, Malawi, Mali, Namibia, Nicaragua, Peru, Philippines, Swaziland, Timor-Leste, Togo, Zambia
Income related indicators that can potentially be measured thru censuses -- after methodological refinement and/or addressing data quality issues???

1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities

8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

- **Preferred source(s):** HHS such as LSMS, HIES, Integrated HHS, etc
- **Other source(s):** Population censuses
- **P&R topic(s):** “Income” (and in the case of Indicator 8.5.1, “Working time”)
- **Caution:** The measurement of “income” is complex and difficult in general field enquiries, particularly population censuses as this involves identifying: both monetary and non-cash (goods and services) receipts; various sources (employment both paid and self-employment, income from the production of goods/services for own final use, property income; current transfers; etc)
- therefore, this topic is generally considered more suitable in a sample survey of households or from administrative data sources such as tax or social security records
Recommendations for improving availability and standardization

- **Adopt set of core questions recommended by UN**
  - ensure inclusion of core topics on country of birth/citizenship and year/period of arrival
  - use phrasing of the census questions provided in UN Handbook to ensure harmonization and int’l comparability
  - pay special attention to aspects of planning and design of censuses that impact on coverage and quality of collection of int’l migration statistics

- **Improve participation of migrant groups in census**
  - to improve coverage – identify areas with concentration of immigrants, tailor comm./publicity, use multi-language, assure the separation of the census exercise from activities of immigration authorities
  - to improve item response – transmit questions tested as difficult in advance of the census during the publicity campaign or at an appropriate time before census date; train interviewers; improve design of response options
Recommendations (cont’d)

- Improve data dissemination on int’l migration
  - evaluate and analyze data collected from censuses and disseminate results, both data and metadata, including in the form of microdata and analytical reports
  - disaggregate and cross-tabulate by sex and age, and other relevant variable in order to show differences in characteristics of migrant subgroups