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Report on the results of the fourth UNSD survey on the impact of the COVID-19 pandemic on 2020 round of population and housing censuses

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I. Introduction

- 1. The United Nations Statistics Division (UNSD), in its role as the Secretariat to the 2020 World Programme on Population and Housing Censuses, has been monitoring the impact of the COVID-19 pandemic on census taking since 11 March 2020 when the WHO declared the virus a global pandemic. It was expected that public health measures undertaken to mitigate the COVID-19 pandemic (such as social distancing, restriction on mobility, etc.)—along with funding constraints due to reallocation of government budget to combat the pandemic and disruptions to procurement and distribution of census materials due to the attendant economic and social disruptions—might adversely impact the conduct of population and housing censuses.
- 2. Data quality is one of the major concerns of population and housing censuses conducted under the pressure of the COVID-19 pandemic. The high risk to the quality of census data emanates from adjustments to census processes and procedures motivated by the pandemic such as the extension of the duration of enumeration of the population and late changes to the design of field operations in order to reduce face-to-face interactions with respondents. The concept of "usual residence" may have less relevance in the uncertainty unfolding during the COVID-19 pandemic for people who have changed their place of residence. The pandemic might also make it more difficult to reach hard-to-count population groups, including people living in institutions who may have moved due to the pandemic. The pandemic may affect the quality of census results relating to topics such as internal migration and labour force and schooling activities. Such impacts could reduce the comparability of census results from the current round with those from previous rounds.
- 3. UNSD has thus far conducted four surveys with the aim of continuously monitoring and reporting on the impact of COVID-19 on census-taking. The first survey, conducted in March/April 2020 at the onset of the pandemic, targeted countries that originally scheduled a census in the year 2020. The survey sought to elicit preliminary information directly from national statistical offices (NSOs) on how they were being impacted by COVID-19. Response was received from 46 countries, providing a tentative understanding of the pandemic.
- 4. The second UNSD survey, conducted in collaboration with the World Bank, was administered to all NSOs in September 2020. A part of the survey consisted of six questions directed at countries that originally scheduled a census in the year 2020 or 2021. Response was received from 119 countries, providing a more comprehensive understanding of the unfolding impact of COVID-19 on statistical activities across the world, including on the conduct of population and housing censuses.
- 5. These two surveys together showed that the majority of the responding countries had to postpone their censuses to a later time in 2020 or 2021, while others carried out (or expected to carry out) their censuses as planned in 2020 or 2021, with extension to the duration of enumeration in many cases in order to ensure full coverage of the population. Only a few countries which rely on administrative registers for producing census statistics indicated that they do not expect any delay in conducting their census in 2020 or 2021.
- 6. The third UNSD survey was conducted in December 2020/January 2021. The survey targeted 121 countries that were expected to carry out a census in the year 2020 or 2021. The

survey requested countries to provide information on the impact of COVID19 on preparatory census activities, field-based enumeration, census methods and challenges. Response was received from 104 countries, which represents an overall response rate of 86 per cent. Collectively, the information compiled from that survey provided an overview of the disruptions and challenges in the implementation of the 2020 round of population and housing censuses due to the COVID-19 pandemic.

- 7. The fourth survey, and the object of this report, was administered in the period September-December 2022 to about 210 countries or areas that conducted or planned to conduct a census in the 2020 round (i.e. in the period spanning the years 2015 to 2024). 137 countries responded to the survey, representing an overall response rate of 65 per cent. This report presents a summary of the information collected in this survey from 118 countries that conducted their census or planned to conduct their census in period since the onset of the pandemic (i.e. since 11 March 2020). The information compiled in this report provides an overview of the impact of the COVID-19 pandemic on the implementation of the 2020 round of population and housing censuses, and how national statistical offices have adapted their implementation plans in response to the pandemic. A summary of the responses received is provided in Annex II.
- 8. It is important to recognize that the information that was provided by countries—particularly by those that are still planning and have yet to conduct their census—is as it relates to the situation at the time of the survey, i.e., mainly in the period September-December 2022. These countries were yet to conduct their census at the time they responded to the survey, and hence, may not have reported the full extent of the impact of the COVID-19 pandemic on census activities. The interpretation of the results should, therefore, take this circumstance into account. A study at a later time might provide a more accurate assessment of the full impact of COVID-19 on the implementation of 2020 round population and housing censuses.

II. Impact on census schedule

- 9. The survey collected information on whether or not countries changed their census schedules. Out of 118 countries that conducted a census or planned to conduct a census after 11 March 2020 (when the WHO declared COVID-19 as a global pandemic) and that responded to the survey, 63 countries (representing 53 per cent) reported change in their census schedule as compared to the originally planned one, while 55 countries indicated that their census schedule did not change.
- 10. Among the 63 countries that reported change in census schedule, 53 countries (more than 8 out of 10) reported that the change in census schedule was due to the impact of the COVID-19 pandemic (see table 1 in Annex II). Nearly all these countries relied on the traditional census or the combined census methodology. Countries that utilized the fully register-based methodology faced little impact from the COVID-19 pandemic. Delays in receiving administrative data due to the COVID-19 pandemic affected a few countries that use the fully register-based methodology.
- 11. Among the 10 countries that reported impact on census schedule due to reasons other than COVID-19, budgetary issues were the major cause for the postponement of censuses. Other reasons that impacted census schedules among responding countries included security, political instability

and natural disasters. Countries also reported additional reasons such as: delays in the procurement of tablets; delays in setting up central census offices; shifts in census dates to avoid conflict with elections; and, statutory requirements.

- 12. The survey requested countries to provide information on the current census reference date as well as the originally planned census reference date. The responses indicate that for census schedules impacted by COVID-19, postponement in the census reference date ranged from a few weeks and months to years. Additionally, the survey requested information on the current census enumeration period (including any period for non-response follow-up) as well as the originally planned census enumeration period. For countries that indicated that their census schedule was impacted by COVID-19, the extension in the census enumeration period ranged from a few days and weeks to months, in some cases.
- 13. The survey results show that the majority of the countries that originally scheduled a census in the years 2020 and 2021 were severely impacted by the pandemic, while those that scheduled a census in 2022 were affected to some extent. Censuses originally planned for 2023 and 2024 were impacted to a smaller degree.

III. Impact on census budget

- 14. The survey included questions on the impact of COVID-19 on census budget. It also included questions on whether or not the impact resulted in a budget decrease for censuses already conducted (likely decrease for censuses still being planned) or an increase (likely increase for censuses being planned). In the event of an increase, the survey requested the reason for the increase from among the following options: i) procurement of PPE and COVID-related protocols; ii) enhanced publicity campaign; iii) enhanced training (e.g. develop online training); iv) enhanced contactless data collection (e.g. CAWI, CATI, self-response paper questionnaire); v) update census maps (due to postponement of census date); and, vi) other reason. For budget decrease, it requested the cost cutting measures taken by countries from the following specified response options: i) shorten the questionnaire; ii) drop the long questionnaire (if the census originally was designed to use short form/long form method); iii) use administrative data sources; iv) use new technologies or methods; and, v) other measure.
- 15. The survey found that out of 103 countries, 68 (representing two in three countries or 66 per cent) reported change in their census budget as compared to the original one, while 35 countries did not see a change in their census budget (see table 2 in Annex II). Among these 68 countries, 47 (or about 70 per cent) reported the change in census budget as being due to the impact of the COVID-19 pandemic. 21 countries, on the other hand, attributed the change in census budget to other reasons, including: increase in census operational costs due to extension to the enumeration period, enhanced non-response follow-up, change in census procedures, economic instability (e.g., inflation, fluctuations in exchange rates), and increased cost of census equipment and materials.
- 16. Out of the 47 countries that reported budget impact due to COVID-19, 9 countries reported experiencing budget decreases, while 38 indicated seeing budget increases. 27 countries indicated costs for the procurement of PPE and COVID-related protocols as being one of the major reasons for

budget increase. 23 countries saw increased costs due to the need for enhanced publicity campaigns, while 16 for enhanced training (e.g., develop online training), 12 for enhanced contactless data collection (e.g., CAWI, CATI) and 9 for updating census maps. 15 countries indicated other reasons including: additional expenses related to postponement of census operations; increased costs of logistics, storage, office space and equipment; modifications to software; contract extensions for field staff; and, increased non-response due to respondents not cooperating due to fears of COVID-19.

17. Among the 9 countries that took cost-cutting measures due to budget decreases, 5 relied on the use new technologies or methods to attain reduction in costs. One country indicated shortening the census questionnaire, while another one mentioned using administrative data sources for the purpose of reducing census costs. Other cost-cutting measures mentioned include cuts to budget for publicity campaigns.

IV. Impact on data collection method(s)

- 18. The survey collected information on whether or not countries changed or expected to change their census data collection method(s) due to the COVID-19 pandemic as compared to the originally planned method(s). The survey also collected information on what changes were made with a view to replacing or reducing face-to-face interactions as a consequence of the COVID-19 pandemic. The response options offered were: i) use administrative data sources; ii) enhance contactless data collection methods (e.g., CAWI, CATI, self-response paper questionnaire); and, iii) other change.
- 19. Out of 103 countries, 69 reported that the census data collection method(s) did not change as compared to the originally planned method(s), while 34 said they changed or planned to change their data collection method(s) (see table 3 in Annex II). Among the 34 countries, the change was necessitated by the COVID pandemic in 22 cases. 12 countries changed their method(s) due to considerations other than COVID-19. Among these other considerations were the need for modernization of statistical processes through the use of electronic data collection technologies.
- 20. Among countries that made changes to the data collection method(s) due to the pandemic, 19 indicated utilizing or enhancing contactless data collection methods (eg. CAWI, CATI, self-response paper questionnaire) with a view to reducing or eliminating contact between enumerators and respondents. 9 countries indicated using administrative data sources, while 7 made other changes. These other changes refer not to another method of data collection but to changes made to census procedures. Among examples of "other" changes mentioned by responding countries include: use of call centers for collection of some data, changes in the prioritization of modes of data collection, and changes to plans and procedures for data verification, imputation of group quarters, and post-enumeration surveys.
- 21. The survey also requested countries to provide the proportion of the population enumerated (expected to be enumerated) by each of the following data collection modes: i) PAPI (interview with paper questionnaire); ii) CAPI (interview with mobile device such as tablet, laptop); iii) CATI (computer assisted telephone interview); iv) PASI (self-response via paper questionnaire); and, v) CAWI (self-response via Internet).

- 22. The results indicate that 78 per cent of the responding countries (that relied on the traditional, rolling or combined census methodology involving field-based enumeration) utilized or planned to utilize CAPI, computer-assisted personal interview with a mobile device such as a tablet or laptop (see figure 1 below and table 4 in Annex II). 46 pr cent of responding countries used or planned to use Internet (CAWI) data collection, while 21 per cent indicated use of CATI, computer assisted telephone interview. 11 per cent of the responding countries reported using or planning to use PASI, self-response via paper questionnaire consisting of either mail-out/mail-back or drop-off/pickup by enumerator. Paper questionnaire (PAPI) was used in 40 per cent of the responding countries.
- 23. It should be noted that in the majority of the cases where contactless modes of data collection were used, the modes were not newly used, rather, they represent modes of data collection originally planned to be used, albeit at a smaller scale in connection with some specific areas of the country and/or special population groups. Due to the COVID-19 pandemic, increased reliance was made of these modes of data collection in order to increase self-enumeration and reduce face-to face data collection.

CAWI 46% **PASI** 11% CATI CAPI 78% PAPI 40% 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Figure 1: Proportion of countries utilizing data collection mode(s)

V. Impact on census questionnaire content

24. The survey requested countries to indicate whether or not they added (or expected to add) new questions to the census questionnaire due to the COVID-19 pandemic (for example, new questions related to COVID-19 infections/deaths and loss of employment/income, etc). It also requested countries to specify the new questions added (or will be added) and to indicate whether or not these newly added questions were field-tested (or expected to be field-tested) before their adoption.

- 25. Survey results show that the vast majority of countries (84 pr cent) did not add or expected to add new questions to their 2020 round census questionnaire (see table 5 in Annex II). In the case of countries relying on registers as a data source, no country added or planned to add new variables from the registers as a result of the COVID-19 pandemic. On the other hand, 19 countries indicated adding new questions (or variables) or modifying response categories to existing questions. Some of the questions responding countries specified adding (or planning to add) to their census questionnaire (or modifying response categories) included:
 - Cause of death (with one of the response options being COVID-19)
 - Death due to COVID-19
 - Extension of reference period for mortality in the household
 - Change in income/livelihood (personal or household) as a result of COVID-19
 - Remote working/ Teleworking / Working online
 - Reasons for unemployment (new response category added: COVID-19)
 - Absence from work (last week) due to COVID-19
 - Contracting infection from COVID-19
 - Seeking medical care due to COVID-19
 - Vaccination status (for COVID-19)
 - Follow education online

VI. Impact on publicity and communication

- 26. The survey requested countries to indicate whether or not they enhanced their publicity and communication messaging as a result of the impact of the COVID-19 pandemic. It requested countries to specifically indicate whether or not they updated (or expected to update) their publicity and communication messaging to convey new field procedures to ensure health and safety. Table 6 in Annex II presents the results of the survey.
- 27. Out of 103 responding countries (with field-based enumeration), nearly three in four countries (72 per cent) indicated that indeed they enhanced (or planned to enhance) their publicity and communications messaging due to the pandemic. 29 responding countries did not enhance their publicity campaigns.

VII. Impact on training

- 28. The survey collected information on whether or not the training of field staff (consisting of enumerators, supervisors and managers) was affected by the COVID-19 pandemic. Countries were requested to specify the impact from the following response options: i) duration of training increased (will increase); ii) online training was offered (will be offered); and, iii) other impact. The survey also requested information on the duration of training (in number of days) for enumerators, supervisors and managers, and whether or not the training duration for each category of field staff was adequate to cover all the skills required.
- 29. Among the 103 countries that responded to the survey on this topic, 45 (44 per cent) reported that they changed their training programme for field staff as a result of the COVID-19 pandemic (see table 7 in Annex II). Out of these, 29 countries offered online training, while 13

increased the duration of training. 13 countries made other changes, including to the training of their field staff:

- Content was added about procedures for limiting the spread of COVID-19
- Added training on phone follow-up in areas that could not be reached due to restrictions related to the pandemic
- Training materials for supervisors were sent in advance
- Used bigger training spaces to facilitate social distancing
- COVID protocols were applied strictly (wearing of mask, sanitizer) to safeguard trainees
- Distance learning/e-learning and independent learning (including via national television)
- Training included more guidelines (regarding the self-enumeration method and the electronic monitoring of the process)
- 30. Information on the duration of training (in number of days) for enumerators, supervisors and managers was gathered by the survey. Out of 93 countries that responded on this topic, in 40 countries the training of enumerators lasted (or is expected to last) only 5 days or less; in several instances it lasted only one day. In 27 countries, the training of enumerators lasted 6 to 10 days, while in 14 countries training was for a period lasting 11 to 19 days. The duration of training was 20 days or more in 11 countries (in 8 of these countries, the duration was 30 days or more). The duration of training for supervisors and managers showed a similar pattern of variability.
- 31. In more than 3 out of 4 countries that responded, the training for enumerators included (or will include) the following content (see table 8 in Annex II):
 - Included (will include) videos or demonstrations to model techniques of interviewing
 - Covered (will cover) map reading to navigate to housing units
 - Covered (will cover) instrument training for mobile data capture
 - Covered (will cover) COVID-19 safety and hygiene protocols
 - Conducted (will be conducted) in the same language as that of the interviews

Practice/mock interviews in the field were included (or will be included) in the training of 74 per cent of the countries that responded.

VIII. Impact on census data analysis

- 32. The survey collected information on whether or not countries made effort to analyze (or planned to analyze) census results in order to assess the impact of the COVID-19 pandemic. The survey also asked countries to identify the variables most impacted (or expected to be most impacted) by the pandemic from among the following options: labor force, education, internal migration, international migration, mortality, fertility, and other variable. The survey further requested countries to describe the type of analysis conducted (or expected to be conducted) and the data sources used (or expected to be used) for the analysis.
- 33. The survey found that out of 118 countries that provided response on this topic, 42 countries (representing about one in three responding countries) assessed or intended to assess the impact of COID-19 on census results (see table 9 in Annex II).
- 34. Among the census variables/topics most affected by the pandemic include labor force, a topic 31 countries reported as having been most impacted by COVID-19. The next most affected topics were internal migration and international migration, for which 20 countries each reported

impact. Mortality was a topic reported by 18 countries as having been impacted by the pandemic. 7 countries indicated fertility as being impacted by the pandemic. Other variables/topics some countries mentioned as being impacted by the pandemic include: income, travel to work (commute), living conditions, non-monetary poverty, relationship with families, and living arrangements.

- 35. Among the types of analysis performed by countries and mentioned in survey responses include:
 - Comparing data with alternative sources
 - Analysis and comparison of census data with vital statistics (to identify impact of COVID-19 on mortality
 - Analyses focused on changes in trends and likely impacts associated with the effect of COVID-19
 - Assessment of trends over time from social surveys and linkage to survey responses
 - Comparison of census results with data from surveys of the labor force and administrative sources on migration statistics
 - Comparison with previous census results, administrative data sources and existing survey sources
 - Demographic analysis

IX. Evaluation of census data quality

- 36. The survey requested countries to indicate whether or not they evaluated (or planned to evaluate) their census coverage and to specify the coverage rate attained or expected to be attained from field-based enumeration. It also requested information on the method(s) used or expected to be used to conduct the evaluation of the census coverage. The response options offered were: i) post enumeration survey (PES); ii) demographic analysis; iii) comparison with administrative datausing aggregate datasets; iv) comparison with administrative datausing unit record datasets; v) comparison with data from existing surveys; and, vi) other method(s).
- 37. 77 countries out of 103 that responded to the survey (representing 3 out of 4 responding countries) indicated that they evaluated or planned to evaluate the quality of their census data (see table 10 in Annex II).
- 38. With regard to the method(s) used or expected to be used to conduct the evaluation of census coverage, 53 countries indicated relying on the post enumeration survey (PES), while 39 countries mentioned demographic analysis as being the method used or to be used. 37 countries reported use of comparison with administrative data (using aggregate datasets). About 30 countries each reported use of the methods involving comparison with administrative data (using unit record datasets) and comparison with data from existing surveys. 8 countries mentioned using other methods such as those involving field-based verification exercises for assessing the quality of census coverage.
- 39. Countries utilizing the fully register-based census methodology were requested to provide information on what measures were used (or will be used) for assessing the quality of administrative data in terms of both coverage and content. Some countries mentioned having a

continuous evaluation in place to assess the quality of registers and having a quality framework (with various dimensions of quality) for assessing quality at different stages including at source, input, process and output levels. At the input stage, countries assessed quality both for the structure and detail of the incoming data as well as the possibilities of further use. They evaluated fluctuations in data over a longer period of time, including by checking causes such as changes in legal acts, classifications, internal systems of institutions, as well as socio-economic processes in society. At the process level, some countries reported performing assessment of the quality of linkages and the territorial distribution of non-linkages. The majority of the responding countries assess census results (outputs) compiled from administrative registers by comparing the outputs with data from other sources including surveys (e.g. LFS) and previous census results.

Annex I: Survey questionnaire

The *Survey on 2020 Round Population and Housing Censuses* was conducted by the United Nations Statistics Division (UNSD) in collaboration with members of the International Committee on Census Coordination (ICCC), which includes the UNFPA, the International Program of the US Census Bureau and the World Bank.

The purpose of the survey was to collect information on 2020 round censuses with a view to assessing the implementation of census operations. The survey also aims to collect information on the impact of COVID-19 and how national statistical offices have adapted their implementation plans in response to the pandemic. The information collected by the survey provided input for this background document to the United Nations Statistical Commission.

The survey was prepared in response to a decision of the ICCC and pursuant to the United Nations Economic and Social Council (ECOSOC) resolution E/RES/2015/10 which established the 2020 World Population and Housing Census Programme and which requested the Secretary-General to monitor and to regularly report to the Statistical Commission on the status of census-taking among United Nations Member States.

The survey was intended to be completed by the Census Manager or the person with overall responsibility for population and housing censuses. Response to the survey questions was to be made with reference 2020 round censuses (i.e. censuses conducted in the period spanning the years 2015 to 2024). If a country conducts census every 5 years, the response was to be provided for the census closest to the year 2020.

The online-based survey is available at the following link: https://input.un.org/EFM/se/3995D1A46E34DF2C

Annex II: Results of the survey

Table 1: Impact of COVID-19 on census schedule

	Total	Traditional	Rolling	Combined	Fully register
Response	118	75	1	27	15
Change in schedule:					
Yes	63	48	0	14	1
No	55	27	1	13	14
Schedule impact due to:					
COVID-19 pandemic	53	38	0	14	1
Other reason(s)	10	10	0	0	0

Table 2: Impact of COVID-19 on census budget

	Total	Traditional	Rolling	Combined
Response	103	75	1	27
Change in budget:				
Yes	68	52	0	16
No	35	23	1	11
Impact on budget due to (Change in budget = Yes):				
COVID-19 pandemic	47	35	0	12
Other reason(s)	21	17	0	4
How COVID-19 impacted budget:				
Budget decreased	9	6	0	3
Budget increased	38	29	0	9

Budget increase due to:				
Procurement of PPE and COVID-related protocols	27	23	0	4
Enhanced publicity campaign	23	21	0	2
Enhanced training (eg. develop online training)	16	12	0	4
Enhanced contactless data collection eg. CAWI, CATI, etc.	12	9	0	3
Update census maps	9	9	0	0
Other	15	10	0	5
Cost cutting measures (due to budget decrease):				
Shorten the questionnaire	1	1	0	0
Drop the long questionnaire	0	0	0	0
Use administrative data sources	1	1	0	0
Use new technologies or methods	5	3	0	2
Other	4	2	0	2

Table 3: Impact of COVID-19 on census data collection method(s)

	Total	Traditional	Rolling	Combined
Response	103	75	1	27
Collection method changed:				
Yes	34	25	0	9
No	69	50	1	18
Impact due to (Collection method changed = Yes):				
COVID-19 pandemic	22	14	0	8
Other reason(s)	12	11	0	1
Changes made due to COVID-19:				
Use administrative data sources	9	6	0	3
Enhance contactless data collection methods eg CAWI, CATI	19	13	0	6
Other	7	5	0	2

Table 4: Proportion of countries using data collection mode(s)

	Total	Traditional	Rolling	Combined	Traditional	Rolling	Combined
	Number					Per cent	
Response	101	76	1	24	75%	1%	24%
PAPI	40	36	0	4	90%	0%	10%
CAPI	79	63	0	16	80%	0%	20%
CATI	21	15	0	6	71%	0%	29%
PASI	11	5	1	5	45%	9%	45%
CAWI	46	27	1	18	59%	2%	39%

Table 5: Impact of COVID-19 on census questionnaire content

	Total	Traditional	Rolling	Combined	Fully register
Response	118	75	1	27	15
Added question(s): Yes No	19 99	14 61	0 1	5 22	0 15

Table 6: Impact of COVID-19 on census publicity and communication

	Total	Traditional	Rolling	Combined					
Response	103	75	1	27					
Enhanced publicity and communication messaging:									
Yes	74	54	1	19					
No	29	21	0	8					

Table 7: Impact of COVID-19 on census training

	Total	Traditional	Rolling	Combined
Response	103	75	1	27
Training changed:				
Yes	45	33	0	12
No	53	37	1	15
Not determined yet	5	5	0	0
Change (Training changed=Yes):				
Duration of training increased	13	12	0	1
Online training offered	29	19	0	10
Other	13	10	0	3

 Table 8: Content of training for enumerators

	Number of responses	Yes	No	Don't know	Yes	No	Don't know
			Number			Per cent	
Included (will include) practice/mock interviews in the field?	94	70	23	1	74%	24%	1%
Included (will include) videos or demonstrations to model techniques of interviewing?	91	70	19	2	77%	21%	2%
Covered (will cover) map reading to navigate to housing units?	94	80	12	2	85%	13%	2%
Covered (will cover) instrument training for mobile data capture?	89	83	5	1	93%	6%	1%
Covered (will cover) COVID-19 safety and hygiene protocols?	95	80	8	7	84%	8%	7%

Conducted (will be conducted) in the same language as that of the interviews?

93 81 11 1

87% 12% 1%

Table 9: Impact on census data analysis

	Total	Traditional	Rolling	Combined	Fully register
Total response	118	75	1	27	15
Analyzed impact:					
Yes	42	28	1	10	3
No	66	38	0	16	12
No response	10	9	0	1	0
Variables most impacted:					
Labor force	31	22	0	7	2
Education	13	10	0	3	0
Internal migration	20	15	0	4	1
International migration	20	14	1	5	0
Mortality	18	15	0	2	1
Fertility	7	5	0	2	0
Other	4	3	0	1	0

Table 10: Evaluation of census data quality

	Total	Traditional	Rolling	Combined
Response	103	75	1	27
Evaluation of coverage: Yes	77	60	1	16
No Not applicable	11 4	6 0	0 0	5 4

No response	11	9	0	2
Method of evaluation:				
Post enumeration survey (PES)	53	47	0	6
Demographic analysis	39	31	0	8
Comparison with administrative data - using aggregate datasets	37	27	1	9
Comparison with administrative data - using unit record datasets	29	16	0	13
Comparison with data from existing surveys	28	24	0	4
Other	8	7	0	1