## United Nations Regional Workshop on the 2020 World Programme on Population and Housing Censuses: International Standards and Contemporary Technologies

8 – 11 May 2018, Colombo, Sri Lanka

## **Conclusions and recommendations**

- 1. The workshop was conducted in partnership with the Department for Census and Statistics of Sri Lanka. Population and housing census methodologists, representatives and managers from Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan and Sri Lanka participated at the workshop. At the opening, the workshop was addressed by Dr. A.J. Satharasinghe, Director General, the Department of Census and Statistics, Sri Lanka, Mr. Anuradha Kumarasiri, Additional Secretary of the Ministry of National Policies and Economic Affairs and the representative of the United Nations Statistics Division. The workshop was chaired on separate days by Ms. D.D.G. Anoja Seneviratne, Director, Population Census, Demography and Cartography, Ms. Nimali ds Silva, Statistician, Department of Census and Statistics, Sri Lanka, Mr. Lizen Shah Nayeem, Deputy Director, Bureau of Statistics, Bangladesh and Mr. Srdjan Mrkic, Chief, Demographic Statistics Section, United Nations Statistics Division.
- 2. The participants expressed their appreciation for the organization of the workshop and emphasized that it was very timely taking into consideration the momentum that is being built in regard to the implementation of the ECOSOC Resolution on the 2020 World Programme on Population and Housing Censuses, stipulating that each Member State conducts at least one population and housing census in the period 2015-2024.
- 3. In that context, the participants outlined that the workshop is timely also from the point of view of the adoption of the 2030 Sustainable Development Agenda and the role it assigns to statistics in general and population and housing censuses in particular.
- 4. The workshop welcomed the revised version of the *Principles and Recommendations for Population and Housing Censuses* as well as the revised *Handbook on the Management of Population and Housing Censuses*. The participants re-iterated that the *Principles and Recommendations* represent a cornerstone for national census planning and implementation of the 2020 round of population and housing censuses. It also outlined that in the context of regional activities full compliance with the concepts and recommendations contained in these volumes has become of utmost importance.
- 5. The workshop also noted with appreciation the draft of the *Guidelines on the Use of Electronic Data Collection Technologies in Population and Housing Censuses*, as well as the draft *Handbook on Measuring International Migration through Population Censuses*, outlining their value for the preparation and conduct of censuses in the 2020 Round of Population and Housing Censuses. All four volumes were introduced and their contents elaborated during the workshop.
- 6. The workshop took copious note of and expressed appreciation for the global activities aimed at executing the 2020 World Programme of Population and Housing Censuses as presented the United Nations Statistics Division UNSD. The participants welcomed this coordinated initiative and the efforts invested by the contributing partners, both in the context of providing internationally adopted methodological framework for conducting population and housing censuses and in the context of directly supporting efforts to enhance and build national capacities in the field of census-taking.
- 7. The workshop noted that participating countries endorsed different methods for conducting population and housing censuses in the 2020 round, from the traditional paper-based canvasser approach, to the use of combined paper and tablet based data collection, to the use of internet and tablet combined method. Recognizing the advantages of the use of contemporary technologies for conducting population and housing censuses, primarily the use of tablet computers and geo-spatial technologies, the workshop

- encouraged those participating countries that are still considering the main data collection method to take these advantages into consideration, as well as many challenges that have to be faced, while making the final decision. It also noted a successful outcome of internet/tablet combined method implemented in a participating country.
- 8. For countries in the region that have opted for the multi-mode collection method with a view to improving coverage and reducing cost, it was recognized that the multi-mode collection method increases operational complexity and requires sophisticated response tracking methods to minimize duplications and nonresponse. It was further emphasized that the collection design needs to be optimized for such type of collection exercise to manage mode effects and data comparability issues.
- 9. The workshop concluded that several participating countries indicated their continued interest and effort in using administrative sources of data for the purposes of generating census statistics. They also noted the many challenges in this regard, including discrepancies in definitions and concepts leading to inconsistencies with international standards; accuracy of the data; the completeness of the coverage; and the legal framework.
- 10. Participants noted with particular interest the list of core topics for population and housing censuses as recommended by the *Principles and Recommendations* and concluded that for most part the topics scheduled to be collected in participating countries correspond to the internationally recommended ones. A concern was raised by the participants in regard to the newly revised definition of work and the workshop concluded that there is a need for additional technical advice regarding the implementation of the revised concept and urged UNSD to liaise with ILO in that respect.
- 11. The majority of the countries in the region has experiences in using Computer Assisted Personal Interviewing (CAPI) in smaller surveys and field tests and refined their processes and procedures first before making a decision to use them in their censuses. The participants highlighted the importance of building capacity and expertise of the national statistical offices and using an incremental approach to the adoption of new data collection technologies.
- 12. The participants outlined that making a decision on whether or not to use electronic data collection technologies in censuses is of substantial importance and needs to be reached with the involvement of all potential stakeholders and early enough to afford sufficient preparatory time for testing. The decision should be made on the basis of detailed analysis of past experiences, demonstrated need, market research, comparative costs as well as capacity to employ the technologies.
- 13. The workshop underscored that one of the key challenges in employing a CAPI-based data collection refers to recruiting technologically skilled and computer-literate temporary field staff. The participants highlighted the importance of providing adequate training both on the content of the questionnaire and on the use of the device as well as providing sufficient technical support in the field. Another challenge was the need to develop alternative data transfer mechanisms and protocols in parts of the country where the communications infrastructure is lacking.
- 14. The workshop outlined the issue of the cost of acquiring tablets for CAPI-based data collection and the challenges associated with the limited life of the devices and finding justifications for re-using the devices for secondary purposes, as well as protocols that ensure the security of data. The workshop encouraged countries to partner and cooperate with a view to pooling resources and sharing the devices for their respective data collection operations.
- 15. Some participating countries expressed their concerns about the uncertainty of budgetary resources potentially jeopardizing their plans and preparations for using tablets for their 2020 round census. They have acquired capacity and expertise as well as tested their CAPI applications and systems in surveys and they are interested in applying in censuses and waiting on budgetary decisions. The workshop recommended that all efforts should be made by governments and development partners in terms of ensuring the timely availability of census budgets. In addition, the workshop recommended that NSOs

- should produce comprehensive census project documents and submit them timely to the government and donors to ensure their support.
- 16. The workshop underscored the centrality of digital mapping to census operations utilizing electronic data collection technologies. The countries in the region have experience in the application of Geographical Information System (GIS) during the 2010 census round and in subsequent surveys however, the workshop also noted that in several countries in the region the use of GIS is not fully implemented and that may have adverse effect for the census in the 2020 round. In the context of international recommendation on the necessity to ensure the production of geo-referenced small-area census statistics in the 2020 Round, the workshop noted the importance of geo-coding in the next census, thus enhancing the quality and utility of census results as well as improving the efficiency and effectiveness of census operations.
- 17. Participants expressed the importance of establishing a centralized system for management, monitoring and controlling operational activities to ensure census coverage and data quality. Such a system could provide capabilities for real-time monitoring, tracking, and communication among field staff. It was also noted that such a system can be efficiently used if it is established as a part of field operation and in an integrated manner with other systems used for data collection, staff recruitment and logistics. The workshop requested from UNSD to find good country practices.
- 18. The workshop noted that in a number of participating countries societies consists of many ethnicities and languages all factors that have considerable impact on designing and executing population and housing censuses. The workshop concluded that all efforts need to be made in order to ensure the full and complete coverage of every household in the country in spite of all these difficulties.
- 19. Participants noted the role that military played in securing the enumerators and census materials used in conducting a population and housing census in a participating country and concluded that in certain circumstances such an approach may indeed be necessary provided that the role of the military is limited to ensuring safety to enumerators and census materials.
- 20. In the same context, the workshop noted that in another participating country the safety of executing the full-range statistical data gathering could not be ensured in certain areas which resulted in developing an alternative method consisting of conducting a full enumeration in few parts of the particular area where safety can be assured and then, using fine-resolution satellite imagery coupled with sophisticated algorithms, extrapolate the result to the whole area a process called "hybrid census". As such an exercise can provide the approximate total population numbers broken by very few variables, the workshop noted that it falls far short of the population and housing census international standards; yet, it may be unavoidable in certain circumstances.
- 21. Discussing the significance of the population and housing censuses in terms of measuring international migration in the 2020 round, the participants underlined that the 2010 round provided a sound basis for assessing and developing the most suitable approaches taking into full consideration the international recommendations regarding the topics of place of previous residence and duration of residence. Participants advised to include questions on emigrants and labor migration in international migration.
- 22. The workshop noted the relationship between population and housing censuses and the production of the Sustainable Development Goals (SDG) indicators. It recognized that census statistics are critical for producing a number of SDG indicators and that a number of indicators cannot be produced without census data in the numerator or denominator. The workshop encouraged countries to map SDG indicators in terms of data sources, availability, timeliness and frequency. The workshop requested UNSD to identify pertinent census topics and questions for the sake of production of SDG indicators.

23. Quality assurance and quality control of all the segments of the population and housing censuses is prominently displayed and elaborated in both the *Principles and Recommendations* and the *Handbook on Management*, the workshop noted. In that context, it recommended that measures to ensure high quality of both the processes and outputs needs to be embedded with key indicators in all the population and housing censuses in the participating countries in a permanent and sequential (that is, that each subsequent phase of the census can be initiated only when the previous one met with the key quality standards) manner. In the context, comprehensive census quality assessments reports need to be produced by each country that undertakes a census in 2020 round, following the quality assessment dimensions presented in the UNSD guidelines.