



Regional Seminar on Census Data Dissemination and Spatial Analysis for Arabic Speaking Countries

16-19 May 2011

Amman, Jordan

Report

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Introduction

1. United Nations Statistics Division organized a Regional Seminar on Census Data Dissemination and Spatial Analysis for Arabic Speaking Countries in Amman, Jordan, from 16 to 19 May 2011, in collaboration with the Department of Statistics of Jordan and Arab Institute for Training and Research in Statistics (AITRS). It brought together 29 participants from National Statistical Offices (NSOs) of 13 Arabic speaking countries and other relevant organizations. See annex 1 for the list of participants.

2. The Seminar offered participating countries a forum to share national practices and strategies in disseminating census data, including the use of ICT. In addition, participants addressed the benefits and challenges of using modern technologies, including the use of GIS, and special analyses. The present report summarizes the highlights of the discussion during the four day seminar. See annex 2 for the agenda of the seminar.

Session 1: Opening

3. The seminar was opened by remarks by Mr. Fathi Nsour, Director-General, Arab Institute of Training and Research in Statistics (AITRS), Ms. Keiko Osaki-Tomita, Chief, Demographic and Social Statistics Branch of UN Statistics Division, and by Mr. Hayder Fraihat, Director-General, Department of Statistics, Jordan. The opening remarks equally commended the timeliness of the seminar, given the fact that the mid-decade of the 2010 census round has passed and many countries in the Arabic speaking region have already had a census. As countries successfully complete enumeration, a logical step to take is to shift the focus of census-related activities to data analysis and dissemination. The representatives of three organizations appreciated long-term partnerships among them, which enabled to gather key statisticians and census managers from countries of the region, and to have extensive discussion on important issues in census implementation. Participants were encouraged to vigorously exchange their own experiences for the benefits of colleagues from other countries in the region.

Session 2: 2010 World Programme on Population and Housing Census

4. UNSD made an introduction presentation on the 2010 World Programme on Population and Housing Census, providing the participants with the background of the programme and the status of census implementation to date by countries in the world. She also reported on a wide range of activities that UNSD has carried out to support the global programme. Responding to the questions raised by participants, she provided clarifications about the relationships between NSOs and UNSD in implementing the global census programme, the time span that the current round covers, and the differences between DevInfo and CensusInfo which UNSD promotes for census data dissemination.

5. Participants also pointed out the differences in the population figures often observed between the one published by the UN and the one that a NSO produces based on censuses. Such differences in figures sometimes not only confuse the general public, but also undermine the credibility of national statistics. The similar concerns were repeatedly expressed by participants throughout the seminar. Furthermore, it appears that the two sets of population figures released

by the UN (i.e. the national figure that UNSD reports and the estimates by the UN Population Division) also add to the confusion. In this regard, it was expected that the UN made more efforts to provide adequate explanations about the sources of data and the technicality involved when it disseminated the information.

6. During the self-introduction of participants that followed the presentation on the world census programme, the representatives of participating countries briefed about the stage of their census implementation or plans, especially about the plans for disseminating census results. It appeared that more than half of participating countries already conducted a census in the current census round, and were therefore keen on learning more about the strategies for data dissemination.

Session 3: Regional Perspective on Census Data Dissemination

7. The session included a presentation by UNSD on results of pre-workshop questionnaire on country with census data dissemination and spatial analysis. The objectives of the pre-seminar questionnaire were: (i) to better understand census dissemination practices at the country level; and (ii) to facilitate the sharing of experiences on census dissemination across countries. Through the questionnaire, information is collected on consultations with data users; census products and services; technological tools for dissemination of census results; use of GIS in census data dissemination; accessibility of census data and copyright issues; data confidentiality; outreach programme; metadata and documentation; and challenges faced in the dissemination of census data.

8. The presentation showed the majority of countries are using or planning to use improved technology for the dissemination of census data. This includes use of the Internet to disseminate census information, including also use of on-line databases. The majority of participating countries are also using GIS web-based mapping as well as interactive mapping and data tabulation tools to analyze and present the data. Countries are also being innovative in their outreach programs to improve statistical literacy to the general public as well as to the media. In this regard, some are employing social media, including Twitter and Facebook in order to reach a wider audience.

9. The presentation and general discussion, however, showed that Arabic speaking countries have different practices and plans for census data dissemination. Differences among the countries are influenced by technical capacity and availability of funds, among other things. Differences in technical capacity were pointed out with regard to technological tools for dissemination of census results and also in the use of GIS in census data dissemination.

10. During the discussion, countries mentioned that they are faced with an increasing demand for access to individual data which may explain the observed tendency for having on-line databases. It was also mentioned, however, that plans for census taking and the dissemination of the data are sometimes affected by the political situation in the country. Other challenges that were identified include lack of training and difficulty using new techniques.

Session 4: Strategies for Census Data Dissemination

11. The session on strategies for census data dissemination was composed of an overview presentation on the strategies as well as two others on: (i) identification of and consultations with census data users, and (ii) determination of the scope and form of census data. The overall objective of the session was to present strategies for identification of different types of data users and determine their data needs, and also to discuss what types (variety) of data outputs to be produced for the different types of data users. The session included a presentation by UNSD and also national presentations by Jordan, Syria, Iraq, Palestine, and Tunisia.

12. In discussions to this session, countries indicated that they are making considerable efforts to have consultations with different groups of data users, including also the media, in order to identify specific interests and needs for data. It was also pointed out that it is important for NSOs to create a culture of communicating effectively with data users. This is because having better networking with users also improves the image of NSOs.

13. Countries reported that compared to previous census rounds, they have diversified the modes of data disseminations, due largely to developments in information and communication technology. This applies also to the use of social media as part of their census data dissemination strategy. Countries have also experienced an increase in the demand for individual data which creates a challenge for them on how to cope with privacy/confidentiality issues. Participants cautioned, however, that national census data dissemination strategies need to strike the balance between cost and quality of information to be provided.

14. To improve the dissemination and utilization of national data, participants requested that websites of such organizations as the United Nations should have an Arabic version or link to websites of NSOs of Arabic-speaking countries.

Session 5: Use of technological tools in the dissemination of census data

15. The session included one UNSD presentation and three presentations by countries (Oman, Sudan, Egypt). The presentations and the subsequent discussions highlighted the importance of using the new technologies for the improvement of census data dissemination and recognized particularly their capabilities that enhance the user-oriented approach in data dissemination. Some particular challenges the Arab countries are facing were raised by the participants: how to keep up with modern information and communication technologies used for data dissemination, partly due to language barrier. The participants demanded from UNSD more training opportunities in the form of study visits to exchange national experiences and share best practices, or additional workshops to enhance knowledge on new technological tools used in census data dissemination. The existence of a free dissemination tool as CensusInfo was mentioned as a possible country customizable tool for the dissemination of the 2010 round censuses.

Session 6: Use of GIS, web-based mapping and spatial analysis

16. The session included two UNSD presentations, first presentation on the use of GIS and web-based mapping for census data dissemination and the second one dedicated to spatial analysis; one presentation by a resource person on spatial analysis applications in the region, as well as five country presentations (Saudi Arabia, Morocco, Oman, Qatar, Sudan). The country presentations showed that GIS has been already used in different stages of census operation, although the degree of use greatly varies among countries. The presentations and the discussions emphasized the importance of the development and use of Geographic Information Systems (GIS) and geographic databases, web-based mapping and geographic-based products for census data dissemination. Participating countries showed indeed strong interest in the use of GIS, web mapping, and spatial analysis.

17. Many participants stressed the fact that NSOs should take into account that modern technologies/programmes to be used in census data dissemination need to be sustainable ones, and new technologies can be quickly outdated. The participants recognized that building a geospatial infrastructure in support of census activities require resources and good cooperation at national level, particularly between NSOs and the offices which produce base maps.

18. A topic that was widely discussed across the seminar was the importance of continuously improving the skills of staff through training to enhance the use of data dissemination technologies, especially in the areas of GIS and spatial analysis. It is desirable that a country has a national center for GIS to coordinate the work done by different regions. With regard to spatial analysis, NSOs need to be clear for what the analysis is needed. Fundamental work of geocoding should be made and a geographic database should be built, before conducting spatial analysis.

Session 7: Data accessibility, confidentiality and copyright

19. The session had a presentation by UNSD followed by presentations on the national experiences of Egypt, Jordan and Saudi Arabia. The UNSD presentation highlighted that while the objective of data dissemination is to maximize the accessibility of census data, this should be achieved while also safeguarding the confidentiality of the census information. As countries design and implement policies that aimed at providing adequate access of users to census results, there should be accompanying policies and procedures to mitigate disclosure of individual information. Participants pointed out, however, that concerns about data confidentiality should not be used an excuse for NSOs not to adequately disseminate their census results.

20. As part of enhancement of accessibility to census data, participating countries pointed out that it is important to provide statistical literacy training to the users of the data in order to educate them on how to interpret the data. Efforts on improving statistical literacy should cover both the general public as well as the media. For example, users of the data should be educated on why there may be different figures from different sources of data, such as one from a survey and the other from the census.

Session 8: Role of metadata in census data dissemination

21. The session began with the presentation by UNSD on the role of metadata in census data dissemination. The presentation touched on the definition, the role that metadata plays, and type

of metadata. The range of metadata encouraged to be included in the tabulations of census data was also discussed. It was stressed that metadata was a key element of census data dissemination to ensure that the underlying concepts on the issues were well understood and that the results were properly interpreted. However, currently, data dissemination and exchange take place in ad-hoc manner, using all kinds of non-standard format. Among them, SDMX and DDI are commonly used with the support of international organizations.

22. Participants well realized the importance of disseminating census metadata, and of scaling up the efforts to disseminate census metadata. Some participants mentioned that their office was trying to improve the metadata of previous censuses. It was considered that metadata allowed users to better understand the nature of information, and increased the comparability of data among countries in the region. A country commented that the toolkit provided by international organizations made them easier to standardize census related metadata. Some of the concerns related to metadata included the degree of information to be disclosed to public, especially about content errors and sampling errors.

Session 9: Conclusions and recommendations

23. Based on the interactive discussions, participants identified and proposed a set of recommendations to improve census data dissemination and spatial analysis. The adopted conclusions and recommendations are attached below.

Conclusions and Recommendations

1. The Regional Seminar on Census Data Dissemination and Spatial Analysis for Arabic Speaking Countries was held in Amman, Jordan, from 16 to 19 May 2011. The Seminar was organized by the United Nations Statistics Division, in collaboration with the Department of Statistics of Jordan and Arab Institute for Training and Research in Statistics (AIRTS). It was attended by 29 participants from National Statistical Offices (NSOs) of 13 Arabic speaking countries and other relevant organizations.

2. The participants of the seminar reached the following conclusions and recommendations:

Strategies for Census Data Dissemination

3. Participants stressed that the development of dissemination strategies be an integral part of the overall planning process for the census. In this regard:

- It is Important to create opportunities to consult with various stakeholders and identify specific needs for data, and to develop appropriate products and related forms for their dissemination.
- It is encouraged to diversify the means of dissemination, taking advantage of existing as well as new information and communication technologies (e.g. GIS, interactive websites, social media networks) to enhance the dissemination process to reach a wider audience, including the media and general public.
- Enhancing statistical literacy of the general public, media and potential users was considered crucial for successful dissemination of census results. Statistical awareness and educational programs on the ways to access, interpret and use census information might be needed for effective outreach. In addition, functional partnerships with the media are necessary in order to improve the wider dissemination and understanding of statistical information from censuses.

Use of dissemination technologies, including GIS and spatial analysis

4. NSO should regard a sustainable geography programme in support of census activities as a continuous process. Participants recognized that countries in the region face challenges:

- (i) keeping abreast of advances in data dissemination technologies;
- (ii) addressing a need for study tours to exchange national experiences as well as training opportunities to enhance knowledge on new technological tools, especially in the areas of GIS and spatial analysis.

5. In general, NSOs rely on national geographical authorities for base maps, which sometimes may be difficult to acquire. It was recommended that NSOs build good relationships with the national geographical authorities, particularly in the context of the National Spatial Data Infrastructure.

6. Participants recommended that building and developing geospatial databases is a prerequisite for creation of geographic information systems and a basis for spatial analysis which is an emerging trend in the presentation and visualization of census information. It is also noted that census organizations should be encouraged to embark on mobile technology (GPS, PDA, etc.) not only at the census preparatory and data collection stages, but also at the data dissemination stage as appropriate.

Data accessibility, confidentiality, copyright and Metadata

7. Participants stressed the challenges NSOs face in maintaining data confidentiality with advancement in technology, accompanied by greater demand for data accessibility. It is recommended that NSOs take necessary steps to safeguard confidentiality and avoid the risk of disclosure of individual information, particularly when using GIS and spatial analysis for dissemination at small area level. However, NSOs should not use data confidentiality as an excuse to not disseminate their census results widely.

8. Participants agreed that comprehensive metadata should be an essential part of census data dissemination. It was, however, recognized that there was a lack of common metadata standards and a need to develop minimum metadata elements, including concepts, their definitions and classifications, as well as methodologies, data structure and data quality.

9. Participants recommended that international organizations ensure that national census data provided by country be disseminated in adequate and timely manner through appropriate channels, including Demographic Yearbook Data published by the United Nations Statistics Division.

10. Participants commended that the present Regional Seminar on Census Data Dissemination and Spatial Analysis was a valuable opportunity to enhance their knowledge on data dissemination, and urged to seek a possibility of organizing a follow-up meeting, when necessary, in collaboration with relevant regional organizations.

Annex 1: List of participants

No	Country Name/ Organization	Count	Contact Person Information
1.	Algeria	1.	Ms. Amal LAKEHAL Director of population and employment statistics National Office of Statistic
2.	Egypt	2.	Ms. Fatma ABD EL RADII General Director of Population Studies CAPMAS
		3.	Ms. Zeinab HOSNEY General Manager CAPMAS
3.	Iraq	4.	Ms. Aseel RADI Technical Advisor Central Organization in statistics
		5.	Ms. Abd Ali AYMEN Statistician Central Organization in Statistics
		6.	Ms. Hameed GHUSOON Head of Internet Department Central Organization in Statistics
		7.	Mr. Muhanad AL-SUDANI Director of Entry Processing Center Central Organization in Statistics
4.	Jordan	8.	Mr. Mohammad Al-jundi Head of labor force division Department of statistics of Jordan
		9.	Mr. Hussam Abu Shukur Head of Electronic dissemination section Department of statistics of Jordan
		10.	Ms. Manar Aljukh Statistician in Population Section Department of statistics of Jordan
		11.	Ms. Safa' Alzoubi Programmer Department of statistics of Jordan
		12.	Ms. Saida Al-MoMANI Directorate of Public Relations and Media Department of statistics of Jordan
5.	Morocco	14.	Mr. Abdelhaq EL ARABI Department Head of GIS High Commission of Plan (HCP)

No	Country Name/ Organization	Count	Contact Person Information
6.	Occupied Palestinian Territories	15.	Mr. Abdallah NAJJAR General Director Deputy/Censuses Directorate Palestinian Central Bureau of Statistics (PCBS)
7.	Oman	16.	Mr. HAMED AL DAGHEISHI Statistician Ministry of National Economy
8.	Qatar	17.	Mr. Mohamed Al-Boainain Head of Demography section
9.	Saudi Arabia	18.	Mr. Fahad ALFAHEAD Director of Population and Vital Statistics Central Department of Statistics and Information
		19.	Mr. Abdullah ALHAMLAN Head of Mapping Unit Central Department of Statistics and Information
10.	Sudan	20.	Mr. Abdel Gadir ELSADIG GIS Office Director Central Bureau Of Statistics
		21.	Mr. Elsir ABBAS Director of the Director General Office Central Bureau Of Statistics
11.	Syria	22.	Mr. Ali RUSTOM Director of Population and Social Statistics Directorate CBS
12.	Tunisia	23.	Mr. Mounir JELASSI The manager of publishing and the relationships with the users National Statistical Institute
13.	Yemen	24.	Mr. Tareq AL-KEBSI Director, Population Studies Central Statistical Organization
14.	Arab Institute for Training and Research in Statistics	25.	Mr. Fathi Nsour Director General Arab Institute for Training & Research in Statistics
		26.	Mr. Hayder Al-Janabi IT Coordinator Arab Institute for Training & Research in Statistics
		27.	Ms. Vivien Al-Nassir Administrative Arab Institute for Training & Research in Statistics
15.	UNSD	28.	Ms. Keiko OSAKI-TOMITA Chief Demographic and Social Statistics Branch United Nations Statistics Division

No	Country Name/ Organization	Count	Contact Person Information
		29.	Mr. Amor LAARIBI Statistician Demographic Statistics Section United Nations Statistics Division
		30.	Ms. Margaret MBOGONI Statistician Demographic Statistics Section United Nations Statistics Division

Annex 2: Agenda

TIME	TOPIC
<u>Monday 16 May 2011</u>	
9:00 – 9:30	<i>Registration of participants</i>
9:30 – 10:00	Session 1 – Opening remarks - JDOS, UNSD, AITRS
10:00 – 11:00	Session 2 – The 2010 World Programme on Population and Housing Censuses <ul style="list-style-type: none"> - Presentation by UNSD - Round table oral briefing by countries - General discussion
11:00 – 11:30	<i>Coffee break</i>
11:30 – 12:30	Session 3 – Regional Perspective on Census Data Dissemination <ul style="list-style-type: none"> - Presentation by UNSD on results of pre-workshop questionnaire on country with census data dissemination and spatial analysis - General Discussion
12:30 – 13:30	<i>Lunch</i>
13:30 – 15:00	Session 4 - Strategies for Census Data Dissemination <ul style="list-style-type: none"> - Presentation by UNSD - General Discussion
15:00 – 15:30	<i>Coffee break</i>
15:30 – 17:00	Session 4.1 – Identification of and consultations with census data users <ul style="list-style-type: none"> - Presentation by UNSD - Presentations by countries <ul style="list-style-type: none"> o Jordan o Syria o Iraq - General Discussion
<u>Tuesday 17 May 2011</u>	
9:00 – 10:30	Session 4.2 – Determination of the scope and form of census data dissemination <ul style="list-style-type: none"> - Presentation by UNSD - Presentation by countries <ul style="list-style-type: none"> o Palestine o Tunisia - General Discussion
10:30 – 11:00	<i>Coffee break</i>
11:00 – 12:30	Session 4.2 – Determination of the scope and form of census data dissemination (Contd.)
12:30 – 13:30	<i>Lunch</i>
13:30 – 15:00	Session 5 - Use of technological tools in the dissemination of census data <ul style="list-style-type: none"> - Presentation by UNSD - Presentation by countries <ul style="list-style-type: none"> o Oman o Sudan o Egypt - General Discussion

TIME	TOPIC
15:00 – 15:30	<i>Coffee break</i>
15:30 – 17:00	Session 5 - Use of technological tools in the dissemination of census data (Contd.)
<u>Wednesday 18 May 2011</u>	
09:00 – 10:30	Session 6 – Use of GIS, web-based mapping and spatial analysis - Presentation by UNSD - Presentation by countries <ul style="list-style-type: none"> ○ Saudi Arabia ○ Morocco - General Discussion
10:30 – 11:00	<i>Coffee break</i>
11:00 – 12:30	Session 6 – Use of GIS, web-based mapping and spatial analysis (Contd.)
12:30 – 13:30	<i>Lunch</i>
13:30 – 15:00	Session 6 – Use of GIS, web-based mapping and spatial analysis (Contd.) - Presentation by ESRI - Presentation by countries <ul style="list-style-type: none"> ○ Qatar ○ Sudan - General Discussion
15:00 – 15:30	<i>Coffee break</i>
15:30 – 17:00	Session 6 – Use of GIS, web-based mapping and spatial analysis (Contd.)
<u>Thursday 19 May 2011</u>	
9:00 – 10:30	Session 7- Data accessibility, confidentiality and copyright - Presentation by UNSD - Presentation by countries <ul style="list-style-type: none"> ○ Egypt ○ Jordan ○ Saudi Arabia - General Discussion
10:30 – 11:00	<i>Coffee Break</i>
11:00 – 12:30	Session 8 – Role of Metadata in Census Data Dissemination - Presentation by UNSD - Presentation by countries <ul style="list-style-type: none"> ○ Algeria ○ Palestine ○ Yemen - General Discussion
12:30 – 13:30	<i>Lunch</i>
13:30 – 15:00	Session 9 – Recommendations and conclusions