



2010 World Population and Housing Census Programme

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2008 General Population Census of Cambodia Preliminary Results

Preliminary results of the March 3, 2008 census of Cambodia have been released. Some of the highlights from the data include the following:

- (i) Total population 13.4 million (6.5 million males; 6.9 million females);
- (ii) Population density for the country increased from 64 to 75 persons per square kilometer during 1998-2008;
- (iii) National annual population growth rate during the last decade is 1.54 percent (urban and rural areas are respectively 2.55 percent and 1.30);
- (iv) Average size of household (excluding institutional, homeless, boat and transient household) has decreased from 5.2 in 1998 to 4.7 in 2008 (from 5.5 to 5.0 in urban areas, and 5.1 to 4.6 in rural areas);
- and (v) The percentage of urban population in Cambodia has increased from 17.6 to 19.4.



Enumeration was done on a *de facto* basis, covered households as well as households staying in institutions, and homeless population, transient population and those found staying in boats on census night. Preparation of enumeration area maps was undertaken by June 2006. Village boundaries were checked and measurement of location of each village was taken using GPS. A post enumeration survey was undertaken soon after the completion of the census in 100 selected enumeration areas. Data processing is in progress, and final census results are expected to be ready by the middle of 2009. There will be increased internet data dissemination.

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Plans for the 2011 United Kingdom Census

The UK census is a collaborative effort between the three national statistical offices representing England and Wales (the Office for National Statistics), Scotland (the General Register Office, Scotland) and Northern Ireland (the Northern Ireland Statistics and Research Agency), each of whom are planning their next census for 27 March 2011, and are actively working together towards the goal of providing fully harmonised statistics.

This will be particularly important following the introduction of a new European Union Regulation in July 2008 which will require all 27 Member States to provide Eurostat with harmonised outputs on the range of core topics recommended by the Conference of European Statisticians and published by the UNECE.

Details of the proposed design for the 2011 Census in England and Wales are given on the Office for National Statistics website at <http://www.ons.gov.uk/census/2011-census/2011-census-project/design-for-census/index.html>

The website highlights the statistical and operational strategic aims that helped to frame the design. It also outlines the major changes proposed from the 2001 approach and gives an indication of the benefits and risks.

The more detailed proposals, covering the topics and questions to be included, innovations in the data collection, processing and dissemination operations, and plans for a fully integrated rehearsal in October 2009, will be set out in a Government White Paper, which scheduled to be presented to the UK Parliament by the end of November 2008.

The 2011 Census design draws on experiences from the 2001 Census, current world best practice and changes in available technology, and also takes account of the views of users following an extensive programme of consultation over the period 2003-2008

The design includes the following major innovations:

- (i) multiple enumeration approaches, targeted at specific areas, including post-out of questionnaires as well as hand delivery, supported by an accurate and up to date address register
- (ii) online completion of questionnaires
- (iii) tracking of each form from printing to processing through a robust form tracking system
- (iv) more functions for the call centre, acting as a hub for query resolution and the issuing of additional forms
- (v) flexible field force for follow-up, targeted on poor response areas
- (vi) use of technology in the field to monitor progress and direct the follow up operation

Similar information on the censuses in Scotland and Northern Ireland is available from the GRO website at:

<http://www.gro-scotland.gov.uk/census/censushm2011/index.html>

and the NISRA website at:

http://www.nisranew.nisra.gov.uk/census/2011_census.html



Main Conclusions and Recommendations of the Preparatory Meeting for Oman 2010 Census (25-28 May 2008)

The Directorate of Social Statistics and Census of Oman organized the Preparatory Meeting for Oman 2010 Census on 25 to 28 May 2008. The objectives of the meeting were to review the past experiences and lessons learned from the previous censuses in the Sultanate of Oman and in other more statistically advanced countries; and to identify suitable new technologies to be applied for the 2010 Population and Housing Census in the Sultanate of Oman.

In order to achieve these objectives and to broaden the knowledge and awareness of the national census staff, experts from Australia, South Africa, the United States of America (USA), United Nations Commission for Europe (UNECE), the United Nations Statistics Division (UNSD) and several international consultants participated in the deliberations interactively with the national and regional (GCC States) experts over a period of four days. These deliberations were spread over 12 sessions and the following are some of the conclusions of the meeting:

- (i) It was recognized that adopting new technologies does not always achieve the desired goals. New technologies should be carefully chosen, tested and proven to be effective before relying on them as a major component in census operations.
- (ii) Enumeration areas and locality demarcations are important to meet the census objective of complete coverage, and therefore they should be agreed upon before the census is conducted.
- (iii) The use of outsourcing requires a high level of in-house capability needed to specify requirements, evaluate and monitor performance, and manage deliverable of potential contractors.
- (iv) The census questionnaires should not be unduly burdensome. A possible approach to reduce the burden on the respondents could consist in including in the census questionnaire only the most important characteristics, to be collected through easy-to-understand simple questions. In this regard the United Nations Principles and Recommendations for Population and Housing Censuses and other related documents may provide useful guidance. Information on more detailed characteristics, including questions aimed at relevant sub groups of the population, could be collected in post-censal and inter-censal surveys.
- (v) A quality census requires careful planning at each step of census processes. This includes identifying the time needed as well as the human and material resources required. The operationalization of the plan requires close monitoring to ensure that the project is being implemented according to the planned schedule.
- (vi) To ensure the proper interpretation of data, it is essential that detailed metadata be provided. A comprehensive administrative report about the census processes is also essential, both for institutional memory and for better utilization of data and to improve future censuses.
- (vii) Independent evaluation of census coverage and content of census data and its quality should be an essential part of the census program. The decision to conduct a post enumeration survey (PES) should be carefully reviewed in the light of available resources, both human and monetary, keeping in mind that this does not necessary imply that the census count will be adjusted.
- (viii) A strategy for dissemination of data should be an integral part of the census program and should be based on consultations with the stakeholders.



UNSD-ESCAP Regional Workshop on Census data processing: contemporary technologies for data capture, methodology and practice of data editing, documentation and archiving, Bangkok, Thailand, 15-19 September 2008

The purpose of the Workshop was to present international standards for processing population and housing censuses and to highlight the significant additional capabilities of contemporary technologies and their use for census data capture and data editing. More specific objectives include to: (i) present the revised international standards for conducting population and housing censuses, focusing on recommended core topics as identified in the United Nations Principles and Recommendations Revision 2; (ii) present and discuss contemporary technologies in census data capture, including the use of optical mark recognition (OMR), optical character recognition/intelligent character recognition (OCR/ICR), Internet data collection, use of handheld devices for data collection; (iii) discuss the process stages for data capture; (iv) present an overview of major commercial suppliers for data capture; (v) present the principles and practices for census data coding and data editing; and (vi) present international standards for data documentation and archiving and corresponding tools. The workshops also offer the possibility for the sharing of experiences among participants regarding census data processing in their countries.

Some of the recommendations that came up during the discussions included the following:

(i) When choosing the method of data capture, countries should carefully assess their capacity and cost factors before opting for any particular technology for their next census, and that the use of new technology should not be influenced solely by current trends but rather by national needs.

(ii) Decisions pertaining to outsourcing should be taken early enough during the preparatory stages of a census in order to allow time for the bidding process, for testing and implementation of technical specifications.

(iii) Data capture process should have a complete quality assurance plan, regardless of the technique used. The different parts of the process should be monitored with few but reliable indicators.

(iv) The importance of early preparation for the planning of data capture activities. In addition, it was recommended that the pilot census should include a test of data capture, data editing, and data tabulation.

(v) Increase the value, quality and usability of the conducted population and housing censuses by documenting the respective data sets from the beginning in accordance with international standards and good practices and by ensuring that the documented data sets are archived properly.

(vi) Participants expressed, with great appreciation, the benefits gained from the exchange of relevant experiences during the workshop.



Results of UNSD Global Stock-taking on Census Finance and Budgeting

Recently, the Demographic and Social Statistics Branch of the UN Statistics Division (UNSD) launched a stock-taking exercise under the auspices of the 2010 World Population and Housing Census Programme, in relation to national plans for implementation of censuses conducted during the 2010 decade (2005-2014). The results were obtained from a short questionnaire sent out to the heads of all National Statistical Offices (NSOs) in the autumn of 2007 via email, fax and/or regular mail. Information was requested on census manager contacts, projected census dates, planned census activities over the years spanning the round, overall financial requirements as well as break-downs by activity and by source, potential donor sources, and finally technical assistance needs and offerings. More than 130 countries responded. From the information obtained, a short analytical paper was written given the salient results, entitled "Projected Census Dates, Funding Requirements and Sources, and Technical Assistance Needs for the 2010 Round of Population and Housing Censuses". Of particular interest from the paper are the global and regional results on overall census costs in USD, total and median census costs per capita, percentage national investment on total census budget, and percentage of total budget by census activity. Some emphasis is given to Sub-Saharan Africa, the region of the world in greatest need of assistance in relation to the present round of census-taking.

Total Census Costs and Cost per Capita by Region for both Responding Countries and for All Countries of the World (Estimated)

Region	Estimated Cost Per Capita for All Countries ((USD)	Estimated Total (%) Census Costs for All Countries (USD Millions)
<i>Africa</i>	2.0	2035.4 (6.4%)
<i>North America</i>	33.1	18046.4 (56.9%)
<i>South America</i>	2.7	1099.1 (3.5%)
<i>Asia</i>	1.0	4270.8 (13.5%)
<i>Europe</i>	7.8	5683.6 (17.9%)
<i>Oceania</i>	15.9	567.2 (1.8%)
Total	4.6	31702.6

The paper can be downloaded from the UNSD Census Knowledge Base at: <http://unstats.un.org/unsd/censuskb/article.aspx?id=10491&cNode=6S5F1P> or alternatively at <http://unstats.un.org/unsd/censuskb/article.aspx?id=10491&cNode=2V1G0W>.

News from the Census Knowledge Base

The Census Knowledge Base is a major component of the website of the 2010 World Population and Housing Census Programme. The knowledge base serves as a repository of documents on census methodology, as well as documents on best practices in census taking. To date, knowledge base contains about 321 articles, which is an increase of almost 100 articles from the time of the March newsletter this year.

Featuring the latest additions:

The latest additions include articles on Optical Data Capture and Intelligent Character Recognition, techniques used during the process of capturing the data from census forms. Among others the articles explain the principles of intelligent character recognition and provide tips for designing census forms in order to minimize errors during optical data capture. Another recent addition is an article by UNSD which gives an overview on projected census dates during the 2010 round of censuses, funding requirements and sources and assistance needs as reported from National Statistical Offices.

Tips and Tricks:

There are two ways of searching for articles. First, by browsing the categories and their sub-entries in the left panel. For each selection of the category or its sub-entry the available articles will get displayed in the right panel. Click the title to see the full article. The second option to search the knowledge base is to use the implemented search function. Click the Search tab and enter a keyword or country name in the first field. It is possible to limit the search for example to specific categories. Or search only for articles with a specific maximum age, this allows to search only recent additions such as no older than two weeks or one month.

Proposals for information for papers for the Census Knowledge Base and also for Census News should be sent by e-mail to globalcensus2010@un.org. For more information on the 2010 World Population and Housing Census Programme website and on the Census knowledge Base, visit <http://unstats.un.org/unsd/census2010.htm>.



Census mapping activities for the Sri Lanka 2011 population and housing census

A technical advisor on census geography from the United Nations Statistics Division, New York, undertook an advisory mission to Sri Lanka in September. The advisory mission aimed to help prioritize, separate out, and target the geographic data collection activities strictly dealing with the census. This was done by meeting with census and statistics staff to oversee and discuss census mapping activities in the main office in Colombo and in the field and to then deliver conclusions and recommendations on how to maximize efficiency and speed development in the preparation of enumeration area maps for the upcoming 2011 population and housing census of Sri Lanka.

With ongoing armed conflicts in the northern and eastern provinces, the Department of Census and Statistics (DCS), Sri Lanka has a daunting task ahead to carry out the next population and housing census, and without external support it is likely that the canvassing of most of the country in the time available - excluding these conflict areas - will be extremely challenging.

Mapping for the 2011 census is currently underway. Statistical officers from the DCS are tasked to spend 10 days every month for census mapping operations, to work with local populations. The goal is to delineate enumeration area boundaries to form a coherent and complete census block for the upcoming 2011 population and housing census. The methodology involves the use of local knowledge, GPS, satellite imagery, and GIS. It is a comprehensive exercise that takes stamina and fortitude. The DCS Sri Lanka recognizes this exercise as revolutionary to future statistical work. The resulting geographic information is input into a centralized GIS database maintained by the main office in Colombo, which prepares enumeration area maps for the census.

DCS Sri Lanka realizes that such geographic detail is needed for creating the data layers of the different administrative divisions, but they are in a race against time and must focus more efforts on census block mapping. Current mapping methods have proved successful in capturing the geographic information needed to build the geospatial infrastructure for the nation but with only around 6 months left for dedicated census mapping work by statistical officers in the 25 districts, more resources are needed and several changes and compromises must be made to accelerate field methods.

Further detail on the advisory mission can be found at: <http://unstats.un.org/unsd/census2010.htm>



DCS, Gampaha District Secretariat Statistical Officer in the field

