

**Sultanate of Oman
Ministry Of National Economy**



General Census for Population, Housing and Establishments 2010

**Second Session of the OIC-StatCom
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Definition of Census

- ✓ The United Nations defines a population Census as (the total process of collecting, compiling, analyzing and disseminating demographic, economic and social data pertaining at a specific time to all persons in a country or in a well delimited part of a country)

Census Value

- ✓ The value of the census is measured by the extent of benefiting from its output and utilization of its results and the system produced by it such as GLS
- ✓ These benefits are conditional on the availability of Census data and other outputs which can be analyzed by data users, on the one hand, and the extent of Census comprehensiveness and accuracy of implementation, on the other hand.



Dates of Population Censuses in the Sultanate

- ✓ **First Census -----1993**
- ✓ **Second Census-----2003**
- ✓ **Third Census -----2010**



Vision of the 2010 Census

- ✓ Endorse the Total Quality Concept
- ✓ Tight Cooperation with the rest of the GCC States and implement synchronized and coordinated Census with GCC member States
- ✓ Compatibility of Census methodologies and outcomes with the regional and international standard and recommendations.
- ✓ Achieve the highest level of comprehensiveness and accuracy
- ✓ Mechanize all census operations by the use of advanced apparatus and equipment
- ✓ Disseminate preliminary results of census one week after the conclusion of the census field work.
- ✓ Disseminate final result of the census within 30 days after the finalization of the census field work.



What is the new in the 2010 census

- ✓ Use the telephones through the call and quality assurance center in competing data, correction and ensuring its quality
- ✓ Use of internet in data collection(self-census through internet)
- ✓ Use of PDA in all regions of the Sultanate
- ✓ Endorse the use of digital maps to ensure the inclusion of all buildings and building the GIS



Methodology of the 2010 Census

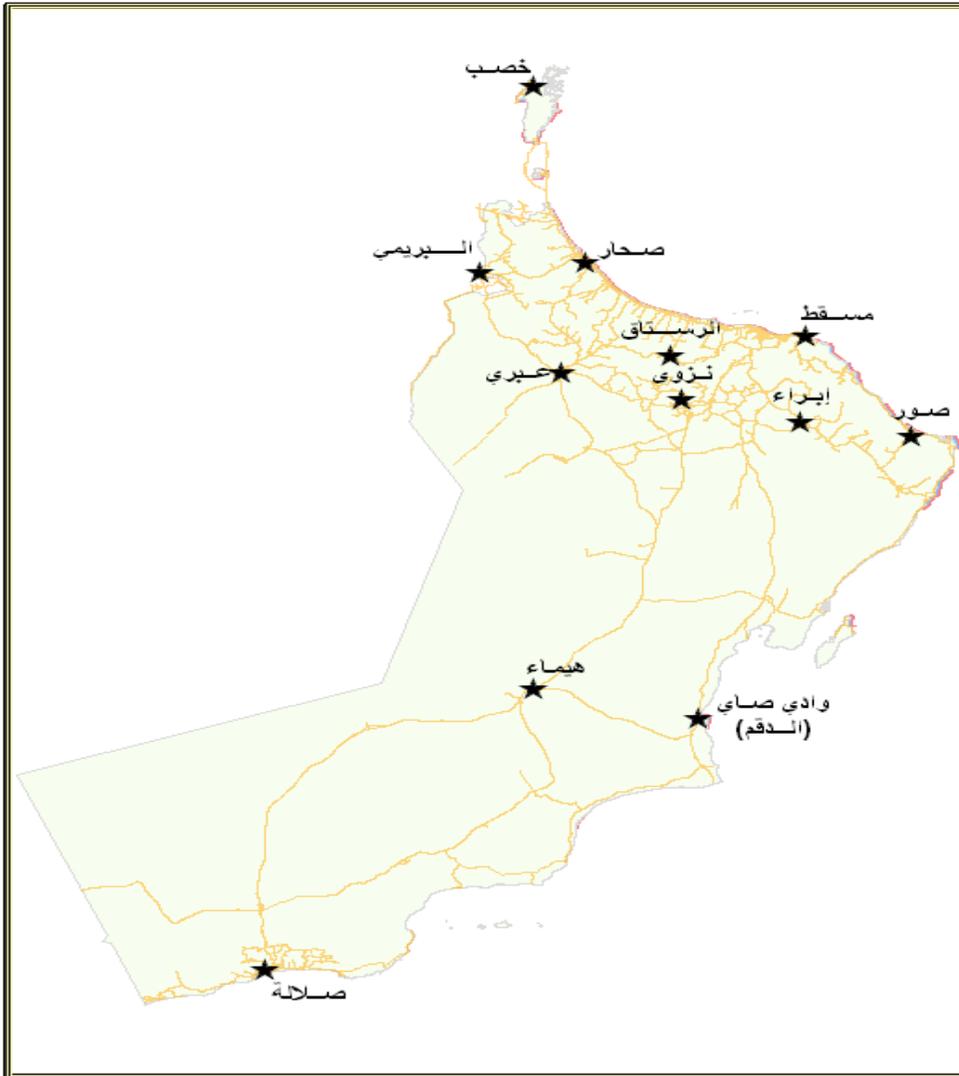
- ✓ Personal interview by the use of PDA
- ✓ Self counting by the use of internet
- ✓ Individual questionnaires(paper questionnaires)
- ✓ Complete the incomplete data, correct contradicting data by the use of telephones through the call and quality Assurance Center(for families with a Telephone)
- ✓ Complete the incomplete data, correct contradicting data through Personal interviews(for families with a Telephone)
- ✓ Reference line (Counting time) for the Census was set at the mid-night of 11/12 December 2010.



How the Counting Operation for 2010 Census was conducted?

- ✓ The Census administration divided the Sultanate's Land into small delimited division given the name of counting area. Each counting area includes about 120 houses/Family
- ✓ Each counting was assigned an enumerator who was trained and furnished with all tools and work requirements such a PDA and others to pay visit to the houses falling within his duty area and collect data about families and individuals residing in them.
- ✓ The counting of houses and houses started on the morning of 12 December 2010 and continued for 10 days.

Preparation and updating program for Digital Maps for 2010 Census



- ✓ A new set of high resolution Situate photos (50cm) covering 24.000 kilometer of the new areas
- ✓ A new set of high resolution photos(50cm) for updating the list of maps of 2003
- ✓ This work was completed in May 2009



System used in 2010 Census

Firstly: Office System and programs

Secondly: System used in the updating and acted counting

Third: System of the call Quality Assurance Center

Fourthly: Dissemination System



Firstly: Office System and Programs

A- Electronic office System

Communication between the Census administration, represented by the Operation Room and the field personnel, represented by the offices of the supervisors and assistant super visors during the updating and actual counting phases. On the basis of this a system was developed which was named the Electronic office, comprising the following:

Electronic memoranda which contain:

- ✓ Incoming and outgoing memos
- ✓ Drafts that can be written by the secretary then sent y the person in charge.
- ✓ The part of memos depends on the status and awarded juries diction.
- ✓ Provided with follow-up property and learning about the status of memos(whether read or not)
- ✓ There are three types of memos:

Ordinary

Urgent

Very urgent

Circulars

- ✓ Send form the operation room to all field staff
- ✓ A short message will be sent to supervisors
- ✓ Addresses and communication: the staff directly responsible can have the telephone number of the staff working in his area.
- ✓ Meeting minutes: Recording meeting minutes
- ✓ System and programs: programs will be loaded and operation authority will be given



Firstly: Office System and Program (Cont.)

B – Administrative and financial Affairs Programs

- ✓ A Staff member can perform the following tasks by the use of this system:
 - ✓ Request a personal service form the self- service system (requests for an ordinary leave or supplies)
 - ✓ Request approval for self-service and present the course of approvals pertinent to requests.
 - ✓ Follow-up the special mail(electronic correspondence)



Secondly : Systems used in updating and Actual Counting

Crew leader Systems

- ✓ Utilizing this system in updating operations and actual counting
- ✓ The supervisor's systems comprises data pertinent to building , residential units, establishments and families which were loaded on PDA from the counting phase .
- ✓ In addition to electronic maps and geographic information related to them.
- ✓ Establishments data from administrative records.
- ✓ This data will be loaded in the Crew leader's systems through a synchronized operation.
- ✓ It also includes all statistical data for buildings, residential units, establishments and families which were collected by the Crew leader using PDA during the updating phase.

Objective of the system

- ✓ Provision of programmes and mechanisms to facilitate data collection operation
- ✓ Collect data free of errors through the application of electronic auditing rules which ensure high quality during field data collection by the use of PDA.
- ✓ Speed up the transfer of data between the PDA data use and central computer through synchronization.
- ✓ Specify the geographic area for enumerator through GPS and GIS to ensure full coverage of the actual counting.



Secondly : Systems used in updating and Actual Counting (Cont.)

B- Supervisory Centers Systems

- ✓ Utilizing this system in the updating and actual counting.
- ✓ The supervisory centers systems embodies many main sets . These are :
- ✓ Field set : this set show all screens pertinent to the field and operation management for data collection. Such as:
 - ✓ Managing the blocks and the transfer of buildings from one block to the other and show the details of the transfer operation which were carried out.
 - ✓ Data transfer system : this system shows the data transfer screen with the PDA and the screen of sending data to the main database.
 - ✓ Indicators and follow-up reports system: This system show the indicators and follow-up and achievements related to the supervisory centers for the lists of buildings, houses , families and coverage reports, contents and the performance in actual counting.



Secondly : Systems used in updating and Actual Counting (Cont.)

C- Operation Room Systems

- ✓ The systems performed an important role in controlling and follow-up of census activities during the updating and actual counting phase.
- ✓ The operation Room System embodied the required tools to ensure acquaintance with all the changes which took place during the field work at the different region.
- ✓ Issue reports that have statistical inference where the system performed a fundamental role in supervising and follow-up the census activities during the collection of data of buildings, houses and families (actual counting) through the reports. The systems comprised four main lists as follows :
- ✓ Enumerator system which included coverage contents indicators reports in addition to performance reports .
- ✓ Supervisory centers to systems embodying individual counting questionnaire indicators , follow-up of transference of blocks and buildings among enumerators.
- ✓ Self-counting system including Self-counting families and individuals indicators in addition to calls indicators, coding and revision tasks.



Secondly : The systems used in Updating and Actual Counting (countd)

D-Enumerator System

- ✓ This system was used during the actual counting .
- ✓ The enumerator system contained the data about buildings, houses and families which were loaded in PDA in addition electronic maps and Geographic's data related to these.
- ✓ The comprised all the statistical data for families and individuals collected by the enumerator .
- ✓ Data transferred from the call and Quality assurance center.



E- Crew leader System (Lab Top)

- ✓ This system was used during the actual counting .
- ✓ It is a system for the provision of indicators about the field work of the enumerators.
- ✓ In addition to the display of detailed data collected about houses , families and individuals .
- ✓ To enable the superintendent to finalize the specialized revision.

Function of the Systems

- ✓ Capable of producing indicators at the level of any enumerator in the Crew leader group .
- ✓ It is a system capable of producing the indicators at the level of Crew leader.
- ✓ Distinction of unnatural indicators with a unified colour according to the calculation method of the operation room and supervisory centers for the supervisor and assistant supervisor.
- ✓ The classification according to current day supervisor .
- ✓ The system is not capable of printing at the level of houses , families or detail.
- ✓ Crew leader can type reports only.
- ✓ Changes in detailed data about building, houses , families and individuals are not possible.
- ✓ Distinction of the (Don't know) wherever.



Thirdly : Call center and Quality Assurance

• A- Call center and Quality Assurance

- ✓ In light of requirement of the census administration for the purpose of revising data provided by units palpating in the census and in a unique step the administration resorted to the use of the call center and Quality Assurance at the different phases of the general Census for population and Housing at both the updating and actual counting phases .
- ✓ This is to ensure the obtaining the closet to correct data to arrive at correct statistical results which reflect reality.
- ✓ The need for the call center during the updating and during the updating and the and census phase so as to revise data , ensure it's accuracy and communicate with the units whose data will participate in formulating the census output.

B- Revision and coding system

- ✓ This system aimed at providing brief lists professions, scientific specialization and economic activities to enable data entry staff to choose from it .
- ✓ In case of non-compatibility any value with reality of the individual concerned , the entry will insert a text description of the profession , activity or specialization.



C- Interactive Voice Response (I-V-R)

- ✓ I-V-R systems provides the public, citizens and expatriates alike with the required information about the 2010 census in addition to a contest related to the census with the aim of spreading of census culture among the public.
- ✓ The System Working Mechanism
- ✓ First Level: contacting the full-free number (80072010) . Choose a language
- ✓ Second level : Welcoming the caller
- ✓ One field is chosen (information or contest)
- ✓ Third Level : information about : census Administration , legal support , confidentiality of data, census staff.
- ✓ Information about the census : Types of Censuses , Census objectives , Census definition , census phases , preparation phase , updating phase , counting phase .
- ✓ Forth Level : The contest: caller choosing the contest will be asked four questions and of giving three correct answers , he/she will qualified to enter the draw to win one of the prizes .



D- Self – counting System

- ✓ Enter the required data into the questionnaire by the targeted individuals themselves with no need for conducting personal interviews with individuals at the locations.
- ✓ Each of the families participating in self-counting , has completed the electronic questionnaire, which was then revised to ensure that it complete and consistent.
- ✓ In case of contradiction or missing data , the family will be contacted to obtain missing data and ensure consistency.

D- Self – counting System via the Internet



Household Completed there basic data via the Internet when the PIN number was entered in the preparation for the actual count



Inquiries and assistance

Do you want to fulfill your data through the internet?

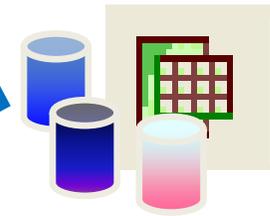
Yes



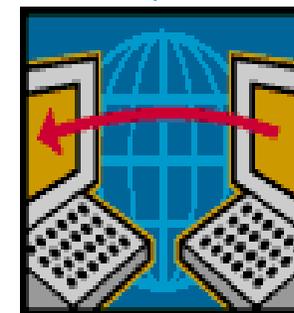
Updated Form



Send the data to the database



Separate the data of self-census Households in a special file in the call center



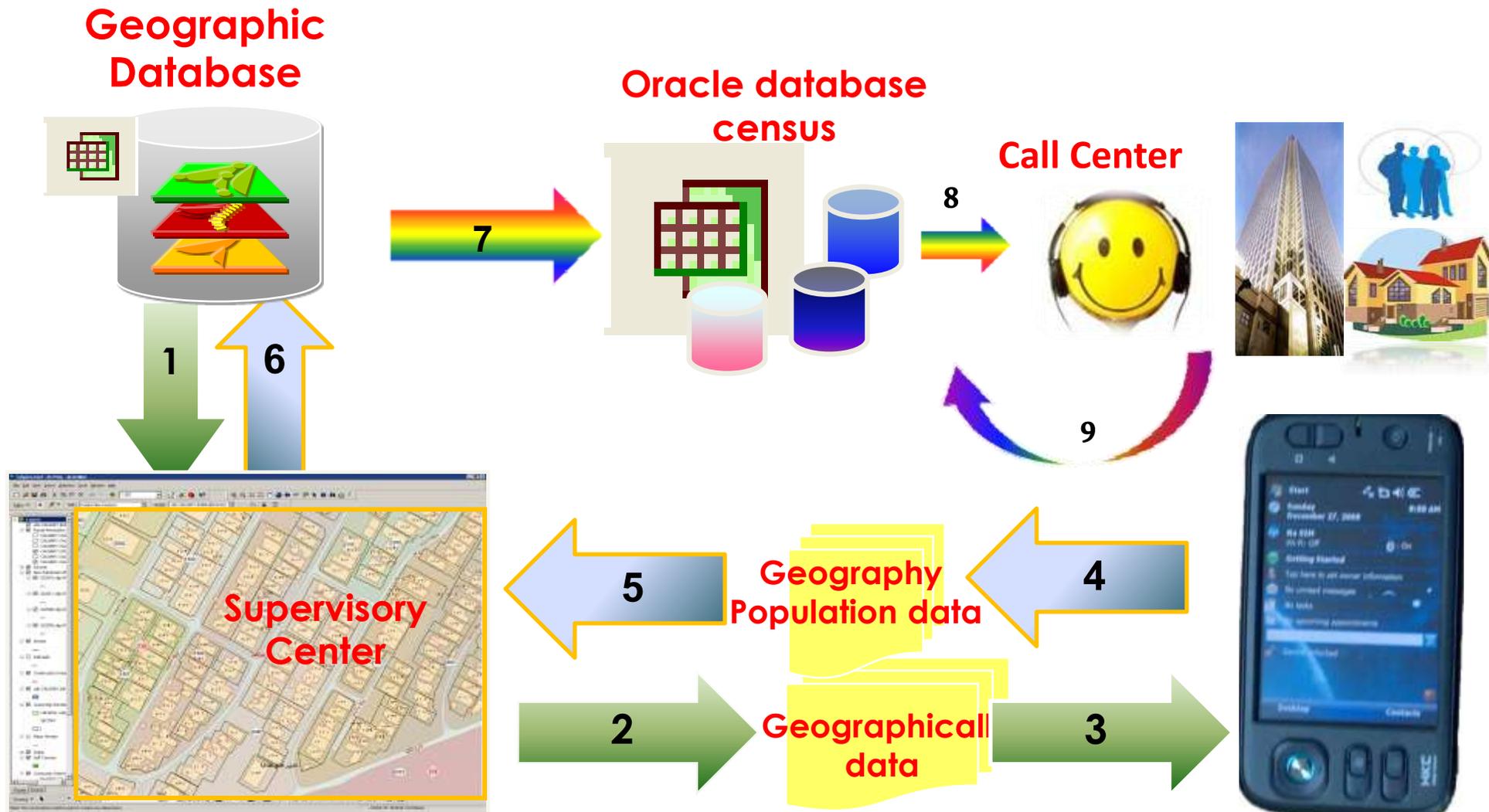
Call self-census Households to take an e-mail address



The user name and password was sent to the Households by e-mail and text messages (SMS) in order to ensure confidentiality



The flow of the data through the various stages





Fifthly: Tabulating and Dissemination System

- ✓ The Census results are considered the final and basic step in decision making process pertinent to planning development , where a number of tables prepared for dissemination and included the following:
- ✓ Fixed outputs: These are tables prepared in advance for users and can not be amended by users when loaded .
- ✓ Dynamic output : These are tables which can be amended by users when loaded.
- ✓ In addition to bulletins embodying the different census results.



Thanks for your
attention