State of Kuwait
Central Statistical Bureau

Non-Traditional Data Collection Approaches in The 2011 Kuwait General Census

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Outlines

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Non-traditional Approaches
in the 2011 Kuwait Census

- Non-traditional data collection approaches adopted had a substantial technological impact on the entire census process, especially in the transformation from the methodology of the traditional field census to hybrid methodology.

- Minimization of overall costs and efforts, as well as upgrading and improvement of data quality.

- The state of Kuwait is testing and implementing non-traditional data collection approaches (alternative methods) for collecting, processing and disseminating key statistics, as follows:

    1- The internet as a collection method (**E-census**).

    2- Explaining the role and importance of **call center** for supporting of census.

    3- Presenting the Kuwaiti experience in Pilot Project for **Register-Based Census**.

First: E-census

- The internet is being increasingly favored as the mode of communication between citizens (companies, government, and the society in general).

- The e-census has been seen as part of the strategy to modernize the collection mechanisms.

- The Kuwait 2011 Census of Population and Housing allowed people to respond via the internet as part of an effort to innovate and bring the country in line with the best international practices.

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Main principles and The goals of E-census

Five main principles:

1. it must be easy to use.
2. guarantee data security.
3. having similar navigation features as other sites.
4. a similar questionnaire layout to the paper version.
5. no central database of dwellings.

The goals of E-census:

1. A modern image for the census
2. Better user-friendliness
3. Better data quality
4. Cost reduction

Methodology of E-census

E-census depends on two steps:

Step (1): Registration

The Kuwait E-Census web site is open for all Kuwaitis and residents of Kuwait who have a Civil ID issued by the public authority for civil information. The data should be entered by the head of the family or a delegated family member.

Step (2): Data completion

Household head will add all household members' details (including maids and drivers), including ones who are temporarily out of Kuwait with basic information for each member.

E-census Results

- The overall results of the e-census were positive.
- The e-census present set of different reports as follows:
  1. Total number of E-census registration (includes only not completed forms) = 565,713
  2. Total number of E-census registration (includes only completed forms).

E-census registers percentage to the total number of population	Number of E- census register	Total number of population
15.65%	479,729	3,065,850

  3. Total number of incomplete E-census forms = 85,984

   - The percentage of incomplete E-census forms =

$$85,984 / (479,729 + 85,984) = 15.20\%$$

Second: The Call Center

Kuwait Census 2011 project had a great deal of challenge, having had a new direction of implementing a multichannel communication model with Kuwait population to maintain the high quality & efficiency of information given under a customer centric service approach.

Objectives

To utilize the latest communication technology to match the needs of different segments of Kuwaitis and/or residences by providing immediate support helping:

Phase I: Enumerator recruiting	Phase II: Census
•Answering inquiries •Confirming training. •Calling for contract. •Supporting during field work.	•Running awareness campaigns •Quality Control of enumerators •Home visits follow-ups and appointment fixing •Information corrections •Customer satisfaction surveys •Supporting E-Census.

The Call Center functions and Added Values

The Call Center functions

- Outbound calls "awareness, quality assurance, customer satisfaction surveys, registrations confirmation and feedbacks"

- Inbound calls "Inquiries, complaint management, suggestions and revisit arrangements"

- Back office " Data corrections, accounts reset, trouble tickets closing and reporting"

The Call Center Added Values

- Increased customer satisfaction.

- Immediate progress feedback.

- High level of responsiveness.

- Project close monitoring.

- Managing with numbers "detailed reports"

- High security of information.

The Call Center and the E-census

- The Call center has an important role in the success of the E-census through making or receiving a wide range of calls and directing a large amount of text and audio messages to raise awareness of the citizens and residents and helping them to complete the registration.

Outgoing Calls	Incoming Calls	Total
82453	68268	150721

Response:

- The call center received a good response from the citizens and residents of Kuwait.

Third: **Register-Based Census**

- Register-Based Census (RBC) is another methodology for carrying out censuses

- RBC differs from the traditional field census in two process:
    1. Locations identification (set the general framework of the census).
    2. The capture of individual data.

- which the derived input (data) of these processes from sources would work as an administrative records maintained by the state, instead of the initial data which are identified and captured in the field.

- However, the register- based census methodology can be similar to the multi-mode process (hybrid methodology) in the process of data collection, auditing and classifying them, and also in the process of dissemination of multiple patterns.

Advantages and Disadvantages of RBC

Advantages

- Cost minimization.

- Producing results in relatively shorter time.

- Lesser dependence on estimates.

- Better support to the government annual plans.

Disadvantages

- Data are derived from the records and registers which are set for administrative purposes. Therefore, such data many not satisfy or be compatible with the census needs, and

- Diversity of data sources requires the development of special systems for data processing and cleaning (Data Cleansing), as well as making sure to secure the existence and structure of what is known as the (Common Field/Key), otherwise the data will be non-correlation.

- The census' total data (for individuals or housing) among administrative restrictions will be different for technical, administrative, security or even political reasons which doesn't fit the need to issue census data to comply the requirements of the agencies or departments of the CSB.

Pilot Project for Register-Based Census: A Kuwaiti Experience

- CSB initiated a pilot project to develop the register census system based on the data available from various government sources (restrictions and administrative records), especially since the Law No. 27/1963 gave CSB full power to request any needed data.

- the CSB management has allocated a small budget for a pilot project to develop RBC for the census year 2010, and assigned responsibility for implementing the project to a group of Kuwaiti researchers and experts.

- The project's main aim was to assess to what extent CSB can publish the census data – in time – from the administrative records and registers.

The Objectives of Pilot Project for RBC: A Kuwaiti Experience

1. Assessing and marking out the availability of the census data in the registers and records of Kuwait.

2. Bringing out a manual of the census data classified according to their availability in these records and registers.

3. Collecting the necessary data from the different administrative registers and records according to CSB classification.

4. Adoption and development of an automated system set on a central database from the different administrative registers and records. The system derives and produces the census results according to the census needs and the prerequisites of the GCC data basket.

The Achievements of Pilot Project for RBC: A Kuwaiti Experience

- 23 out 101 population census tables, i.e. 22.7% of the total tables.

- 15 out of 39 tables concerning data about disability, i.e. 38.5%.

- 8 out 76 tables for housing data, i.e. 10.5%.

- 30 out of 36 tables for establishing data, i.e. 83.3%.

- 10 out of 61 tables for the requirements of the GCC data basket, i.e. 16.4%.

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Conclusion and Recommendations

E-Census

- The general acceptance and the image of the E-census option were very positive.
- The data were available much more rapidly and in better quality than the paper-based data, due to online data entry and online checks, thus saving several months of processing time.
- However, saleable and flexible solutions, secure and powerful data connections as well as the monitoring of online transactions are expensive.
- And as long as the access to the Internet and the incentives to use it are not radically improved, official statistics will continue to use a mix of data collection methods.
- Harmonized and up to date population and housing registers are the backbone of the central database and mailing systems, which are essential for online surveys.
- Improving electronic registers and their linkage is also an investment in online surveys.
- Future trends are promising and will lead to safer and less costly solutions.
- The main advantages of the 2011 E-Census are: it simplifies response, transmits a modern image of Kuwaiti Statistics and the 2011 Census and creates a positive climate which favors citizens' cooperation, and improves response quality.
- Main objective; enumerators and paper questionnaires will entirely disappear in future Population Censuses and applying this in Household surveys at a later stage.
- To place online surveys in the more general perspective of E-Government, this will promote a new administrative culture, building on transparency and the standardization of the available information and fostering the regular electronic exchange between administrations and the empowered citizens.

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Conclusion and Recommendations

Register-Based Census

- Although the general census results and data of administrative records showed similar output to the traditional field census methodology, but it depends on practice on the coverage, quality and categories of data available in the administrative records, this will lead to a disparity in the output results of the census from country to country.

- It also proved that the census results from the administrative registers and records in Kuwait can only be partial alternative to the results of the traditional one (or even the hybrid methodology).

- The test also shows that the ratio of producing census results can notably increase if financial and human resources are sufficiently provided.

- The experiment revealed that there is need for more research on a number of issues:

  – Increasing the coverage of the statistical variable by adding new government records and registers (e.g. Ministry of Justice and Ministry of Health), as well as data from the private sector (private universities and internet and cell phone providers).

  – Designing a form for the register-based census (similar to that of the field census), and the possibility of determining the logical relation between the cells and the variables in each cell.

  – The possibility of connecting the GPS outputs and the census frame for the population and housing through the GIS instead of the postal addresses.

Conclusion and Recommendations

Register-Based Census

Furthermore, the experience revealed the need for more cooperation, coordination and complementarily between CSB and the other concerned units which produce statistical data to achieve the following objectives:

- Unification of the statistical concepts, definition and terminologies.

- Organizing and coordinating the utilization of the international and regional statistical criteria which determine the statistical data variables and their coding.

- Listing the basic demographic, social and economic variables needed in the statistical data, and determining the units and entities which should cover these data in their administrative records. The concerned units and institutions should coordinate with the CSB in unifying the definitions of these variables, their classification and coding.

- Unifying the dates of providing the statistical data, as well as increasing the periodically of their updating.

- Activating cooperation and communication among the institutions and units in charge of producing statistical data related to census to achieve coordination and complementary between CSB and these entities.

Future Works

- There is a large correlation between the statistics and information technology and cannot set limit on separate between them.

- With the revolution in technology which became vital and necessary to go along with and catch up these development troughs what is called Electronic-Stat(**E-Stat**).

- The proposed E-Stat is easy way for collecting, processing, exchange and dissemination of information, taking into account the transparency and security of Information.

- Finally, it is recommended that high-level meetings and symposia be organized between the statistical and IT communities to delineate future developments, depending on the changes and needs.

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Thanks