Quality assurance for surveys and Censuses
EGYPT

presented by
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A- Introduction

B- Quality Control Department (Tasks – methodology)

C- Quality Control Economic Census 2018

D- Quality Control Population Census 2017
Due to the importance of the role of monitoring and evaluating data quality in order to achieve a high level of credibility and transparency, CAPMAS established a new department titled “General Department of Quality Control” in 1989.

The department performs quality control of most surveys carried out by CAPMAS such as:

- Household Income, Expenditure, and Consumption Survey (HIECS)
- Labor Force
- Population Census
- Economic Census
- ...etc
B- QUALITY CONTROL DEPARTMENT

(TASKS – METHODOLOGY)
Measuring the accuracy of statistical data from different sources.

Find out errors and identifying their scales, causes and types and trying to eliminate or minimize them at least.

Reviewing the frameworks’ coverage regarding different statistical operations, updating and determine the percentage of non-coverage.

Studying the clarity level of used instructions and statistical definitions for both the enumerator and respondent.
B.1. Quality Control Department Tasks

- Identifying weaknesses in stages of work and trying to overcome the problems.

- Calculate error rates resulting from enumerators or respondents, by resurveying and field check for the differences and analyze the results after conformity.

- Evaluate the training of field enumerators.

- Calling back the surveyed households.
B.2. Quality methodology in the field surveys

1. Attend the training and evaluate the trainers and trainees (enumerators).

2. Design a questionnaire containing the most important items of questionnaire.

3. Train the quality controllers on the questionnaire and method of collecting data.

4. Re-collect the data using the same method used by enumerators.

5. Select a random sample representing all regions of Egypt.

6. Immediate correction of errors in the field.
7. Make comparisons between the data of enumerators and quality controllers.

8. Calling back the surveyed households which have differences between quality controllers and enumerators To determine who is right and correct the error.

9. Determine the percentages of the difference between enumerators and quality controllers.

10. Submitting quality report to the Mr. president of CAPMAS containing the percentages of the difference and observations of field work.

11. Inform relevant survey departments with such errors to be corrected.
1. Designing a form contains the most important survey questions.

2. Select a sample representing 30% of the survey’s questionnaires other than the questionnaires that were surveyed in the field for all governorates.

2. Calling Back

3. Make a comparison between the results of Call Back and survey field questionnaires.

4. Submitting Q.C report to the Mr. president of CAPMAS containing the results of Call-Back

5. Inform relevant survey departments with such errors to be corrected
C- QUALITY CONTROL
ECONOMIC CENSUS 2018
C.1. CHECKING SAMPL FRAME - STAGE 1

1. **training for enumerators:**

   A. Training for enumerators was evaluated for all governorates for (19 training centers) during the period in terms of the following:

   - Evaluate readiness of training centers and availability of training tools (before the training).
   - Evaluate trainers in terms of their commitment to the timing of meetings and commitment to the training content.
   - Evaluate the behavior and commitment of trainers through (27 criteria).
   - Evaluate trainees in terms of their commitment to the time of attendance
   - Evaluate the behavior and commitment of trainees through (13 criteria).
   - Strengths, weaknesses and suggestions during training.

   B. Make a daily report on the results of the training day for correction the next day.
2. **Quality control methodology:**

A. The selection of the establishments that have been completed by the enumerators, According to activities

B. Each quality controller work in a daily district and complete 20 establishments in the same manner as the enumerator to verify the correctness of the completed data in the establishments that work, and verify the closed and empty establishments that have not been identified by the enumerator.

C. 416 districts were evaluated in fieldwork, By 1.4% of the total districts in the governorates.

D. 8380 establishments were evaluated in fieldwork, By 1.8% of the total establishments in the governorates.
C.1. CHECKING SAMPL FRAME - STAGE 1 – con

2. Quality control methodology:

E. number of questions were selected to verify them by call back unit: (the commercial name of the establishment - the current main economic activity of the establishment - sector - total number of employees)

F. Re-call back a number of establishments working for enumerators (1927 establishments), In 23 governorates.

G. Quality reports are submitted to the general supervisor of the Economic Census Daily for necessary action.

H. The general supervisor of the census send the comments contained in the quality reports to all the departments concerned to correct the errors.
3) **Main results of fieldwork matching:**

A. There are **286 establishments** that do not work for enumerators and work at quality, By **3.4%** of the total establishments that were matched (**8380 establishments**).

B. There are **323 establishments** that do not work at quality and work at enumerators, By **3.9%** of the total establishments that were matched (**8380 establishments**)
C.1. CHECKING SAMPL FRAME - STAGE 1 – con

3) **Main results of fieldwork matching:**

C. **For establishments working at the enumerators and quality:** The largest difference between the enumerators and the quality controllers in the establishments that working in the questions related to (the total number of employees in the establishment, the current main economic activity of the establishment) as follows:

![Bar chart](chart.png)

- **Number of employees of the establishment**: 29.2
- **The current main economic activity of the establishment**: 13.5
- **The current main economic activity of the establishment in detail**: 7.2
- **The commercial name of the establishment**: 2.9
- **Sector**: 1.2
4) Main results of Call back :

A- Differences in the work status of the establishment between enumerators and Call back : There are (32) establishments (working) for enumerators and (not working) at the Call back, by 3.0% of the total number of establishments contacted (1084 establishments).

B- Differences in establishments that have work for both the enumerators and the call back : The largest differences between the enumerators and the call back in the worked establishments was in the questions related to (total number of employees in the establishment) by 26.4% for 286 of the establishments with which 1084 establishments were called.
C.1. QUALITY CONTROL IN ECONOMIC CENSUS 2018 – Stage 2

1. **Quality control methodology**:  
   A. The quality control team worked in the fieldwork for 11 weeks. Then the work was done by call back unit until the end of the census.
   
   B. The quality controller work in a weekly district and complete (4) establishments each day in the same manner as the enumerator to verify the correctness of the completed data in the establishments that work.
   
   C. 24 governorates were evaluated, with a total of 347 districts.
   
   D. 3952 establishments were evaluated in fieldwork, By 1.1% of the total establishments in the governorates.
   
   E. 7470 establishments have been re-called, including 3786 establishments responded to the call.
1. **Quality control methodology:**

F. The differences between the enumerators and the quality controllers are verified by the Call back unit.

G. Closed establishments and is not inferred in the current statistics were verified.

H. Quality reports are submitted to the general supervisor of the Economic Census weekly for necessary action.

I. The general supervisor of the census send the comments contained in the quality reports to all the departments concerned to correct the errors.
C.1. QUALITY CONTROL IN ECONOMIC CENSUS 2018 – Stage 2 (con)

2. **Main results of fieldwork matching:**

A. There are (38) establishments with a difference in economic activity between the enumerators and quality controllers, by 1.0% of the total establishments evaluated in the selected governorates.

B. There are (1) district with a matching rate of less than 25.0%.

C. There are (269) districts with a matching rate (from 25.0% to less than 50.0%).

D. There are (66) districts with a matching rate (from 50.0% to less than 75.0%).

E. There are (11) districts with a matching rate (from 75.0% to 100.0%).

<table>
<thead>
<tr>
<th>Number of districts evaluated</th>
<th>Less than 25%</th>
<th>From 25% - less than 50%</th>
<th>From 50% - less than 75%</th>
<th>From 75% to 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of districts</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>347</td>
<td>1</td>
<td>0.3%</td>
<td>269</td>
<td>77.5%</td>
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<td></td>
<td></td>
<td></td>
<td>66</td>
<td>19.0%</td>
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<td></td>
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<td></td>
<td>11</td>
<td>3.2%</td>
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D- Quality Control Census  2017
Due to the importance of the census, quality control was carried out at all stages of the population census.

**Population**
- **Training**
- **Data collection**
  - The coverage of households.
  - The coverage of household members
  - The household members Characteristics

**buildings**
- **Training**
- **Procedures Evaluation for Blocking districts of inspectors**
- **Procedures Evaluation for numbering the districts of enumerators**
- **Data collection**

**establishments**
- **Training**
- **Data collection**
  - the coverage of establishments.
  - the Characteristics of establishment
D.1. Evaluation of buildings stage

- Visit a sample of buildings to ensure coverage of residential and non-residential buildings through special forms.
- Visit another sample of buildings to conduct a comprehensive inventory of the components of the building and its characteristics and its conformity with the data of the enumerator.

- Sends an immediate report if he finds some buildings that have not been met by the enumerators.
- Send a report by the end of the day containing the total of observations.
D.2. Evaluation of Population stage

A random sample was selected from the districts of Supervisors and enumerators which represents all governorates to ensure the following:

- The coverage of all households
- The coverage of all households members
- The household members characteristics
- The districts of the enumerators whose percentage of achievement was less than 100% were verified
- Some enumerators districts has been checked to verify the number of household
A random sample was selected from the districts of Supervisors and enumerators which represents all governorates to ensure the following:

1. The coverage of all establishments
2. The characteristics of establishment
3. Verification of closed establishments in the governmental sector and the public sector
4. Checking the enumerators who increase the percentage of non-operating establishments
In addition, the local training of the enumerators and Supervisors was evaluated at all stages of the census in terms of:

- training premises
- availability of training tools
- commitment of trainers
- commitment of trainees
- local training of the enumerators
Thank you!