#### TWINNING CONTRACT

Institutional Capacity Building for the Central Agency for Public Mobilisation and Statistics (CAPMAS) and Developing the Legal Framework for Statistics in Egypt

EG/07/AA/F106



# **MISSION REPORT**

on

Calculation of the CPI and publication and use of the CPI

Components no 5.4.5 and 5.4.6

Mission carried out by
Mr Oskars Alksnis, Central Statistical Bureau of Latvia
in Cairo, 19 – 23 July 2009

Version: Final

	STATISTICS DENMARK
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#### **List of Abbreviations**

CAPMAS Central Agency for Public Mobilisation and Statistics

CAA Central Agency for Accounting

CBE Central Bank of Egypt
CPI Consumer Price Index
EU European Union
GDP Gross Domestic Product

HICP Harmonised Index of Consumer Prices

HICP-CT Harmonised Index of Consumer Prices - Constant tax

IMF International Monetary Fund
MOED Ministry of Economic Development

MOF Ministry of Finance
NA National Accounts
PPI Producer Price Index
PPP Purchasing Power Parities

TOR Terms of Reference

### **Executive Summary**

This mission report was prepared within the Egyptian-Danish Twinning Project "Institutional capacity building for the central agency for public mobilisation and statistics". This was the third mission to be devoted to Assessment of the State of the Egyptian Consumer Price Index within Component 5.4. "Development of certain statistical areas" of the project.

This mission 5.4.5 and 5.4.6 was aimed at reviewing and improving CPI methods in the field of index compilation formulas, namely procedures for the calculation of the elementary aggregate indices, aggregation procedures, linking methods, calculation of effects. During the mission the review of publication procedures and the use of CPI in national accounts and among external users (e.g. Central Bank and Ministry of Finance, Ministry of Economic Development) was carried out.

During the visit expert obtained a good overview on the procedures, which are employed by CAPMAS regarding index calculation methods. Additional meeting was devoted to the data publication procedures and meeting with representatives from main Egyptian data users took place. The Terms of reference (ToR) of the mission and the agenda of the mission are given in the annex to this report.

#### 1. General comments

The purpose of the mission was to have a workshop where EU consultant and CAPMAS officials could work together, exchange experiences and discuss the possibilities of improved approaches for index compilation. The aim was to define further improvements in the Egyptian CPI methodology in the field of index calculation and data publication. Important part of the workshop was the joint discussion with main CPI data users in Egypt.

The Expected Results of the mission were:

- assessment of current procedures for index calculation and provision of recommendations for further improvements in the area;
- assessment of current procedures for index publication and use of the index and provision of recommendation for further improvements in the area.

In general the Egyptian Consumer Price Index procedures are well in accordance with international standards. For most headings both the methodology and data seem to be satisfactory, and the movements in both prices and weights in recent periods correctly reflect economic determinants. No major problems showed up in the subjects of this mission. While the representativity of the CPI, in terms of accuracy and reliability, are generally adequate, the Egyptian CPI would benefit from further analysis and some improvements to support the current methods, in particular regarding index aggregation formula and data accessibility on the CAPMAS website.

The consultant would like to thank all officials and individuals he met for the kind support, valuable information and interesting discussions during his visit in Egypt, which highly facilitated the work of the consultant.

#### 2. Assessment and results

#### 2.1 Egyptian CPI methods concerning index calculation

The scope, coverage and calculation of the Egyptian CPI comply with international recommendations. In terms of geography and population the index covers the whole of Egypt and all population groups are included. The index for elementary aggregates is calculated with the un-weighted monthly-chained geometric mean (Jevons) formula. The elementary aggregates have a geographical dimension, therefore 8 areas and 171 basic consumption categories forms 1368 elementary price indices. Since geometric mean formula has some advanced statistical properties in comparison with arithmetic mean, the use of it would be supported, especially in cases when elementary aggregates have rather wide (loose) product specifications, as it is the case in the Egyptian CPI sample structure.

The weights are derived from the Income, Expenditure and Consumption survey (2004-2005) and are price updated to January 2007 prices.

For aggregation and calculation of higher level indices and all item index CAPMAS apply short-term basis modified Laspeyres type index. The current month's price is compared with previous month's price and price change is linked to previous month's index. The weights are price updated each month with previous month's price index. IMF experts recently recommended the method, as temporary solution in the situation while new up-to-date weighting information is not available.

The base for index series is January 2007=100.

So far CAPMAS do not carry out effect (contribution) calculations.

#### 2.2 Methods and procedures of publication of the CPI and use of the index in Egypt

Data publication procedures in CAPMAS are in line with recommended international standards: it is released as soon as possible (10<sup>th</sup> day of the month, following the reference month at 9:00am), made available to all users at

the same time, released according to the pre-announced timetable and made available in convenient form for data users. The press release is available also on the CAMPAS website in Arabic and English languages.

The most comprehensive CPI data source is "Monthly Bulletin of Consumer Price Index". It contains detailed price change data (till COICOP 3 or 4-digit level) both for total Egypt and for main regions of the country. For selected items more detailed information is provided. The weighting information, some historical index data as well as methodological description of the index compilation can be found in the publication both in Arabic and English languages.

Access to the price index data other than press release on the CAPMAS website is partly restricted, since only registered users can access the data. Moreover, the amount of available CPI data is limited.

The CPI is used widely in Egypt, from the Central Bank, Ministry of Finance, Ministry of Economic Development and Central Agency for Accounting as its most important users. The index is primarily used to measure inflation, but also as a deflator and a compensation index. From the joint meeting with representatives of main data users in Egypt, it may be concluded that there exists a good cooperation between CAMPAS and institutions, which regularly use the price statistics, at the same time maintaining methodological independency of the CPI compilers.

In general main users receive as detailed information as other users. National Central Bank (CBE) receives more detailed data. For analytical purposes special aggregates have been calculated by CAPMAS upon demand. CBE performs calculations of the core inflation. When publishing inflation data, institutions refer to CAMPAS as data producer. The GDP calculations are carried out by NA unit of Ministry of Economic Development, therefore all necessary data are provided to MOED.

#### 2.3 Summary

During the mission, the EU expert presented the overall production system of the CPI in Latvia and introduced CAPMAS with main steps of the CPI harmonisation in Latvia. More detailed explanations and examples on the calculation of the CPI were provided. Also the index publication and use was presented, including on-line Internet Data Base. CAPMAS officials presented their methods of index calculation and data publication, also including on-line Internet demonstrations. Each topic was widely discussed, reaching mutual understanding of the issue.

At the end of the workshop the EU expert and CAPMAS officials discussed and summarized all the subjects and aspects that had been presented earlier during the visit. The first preliminary results and findings were also presented by the EU representative.

#### 3. Conclusions and recommendations

#### 3.1 Recommendations concerning an assessment of the current Egyptian CPI methods

#### **Recommendation 1:**

Concerning index calculation formula, CAPMAS has recently introduced the short-term basis modified Laspeyres type index, which was proposed by IMF, as a temporary solution in the situation while new up-to-date weighting information is not available. Thought frequent change of the methodology does not facilitate the reliability of the index, it is, however, recommended to reconsider possibility to introduce the annual chain-link index since this approach has been widely used among countries. It should be noted that proposed method is closely related to another statistical issue – regular availability of up-to-date weighting information.

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### **Recommendation 2:**

It is recommended that for long term index series the base be set to average of the year (e.g. 2005=100) rather than to particular month of the year.

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### **Recommendation 3:**

It is recommended that CAPMAS start to calculate and publish in press releases monthly and / or annual contribution (effects), since these calculations would facilitate the better understanding of the reasons behind price changes both for index compilers and data users.

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### **Recommendation 4:**

In general, Internet facilities allow putting more statistical information conveniently available to data users. Therefore it is recommended to reconsider possibility to gradually increase the amount of the available CPI data on the CAPMAS website.

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### **Recommendation 5:**.

It is very likely that Internet would increase its importance as statistical data source in future. CAPMAS should reconsider possibility to provide more free access to statistical data, including consumer price data on its website

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### **Recommendation 6:**

It is recommended to provide more easy accessible links to methodological descriptions of CPI calculation (like SDDS) on the CAPMAS website both in Arabic and English languages.

Responsible institute: CAPMAS

Deadline: During the project, before September 2010

#### Annex 1

#### Terms of Reference

for a short-term mission to the Central Agency for Mobilisation and Statistics On

Activity 5.4.5
Workshop on Calculating CPI
And
Activity 5.4.6
Workshop on publication and use of CPI

#### **Background**

CAPMAS and Statistics Denmark with partners have established a fruitful cooperation in the framework of Twinning. This twinning project is EG/07/AA/F106.

This activity is part of component 5, *Development of certain statistical areas* in the subcomponent dealing with the Consumer Price Index (CPI). The objective for this component is the developing of the (CPI) in Egypt.

This activity will contribute to this objective and especially to the benchmark set out in the contract: By the 18<sup>th</sup> month, A new methodology to collect and process consumer price data and to calculate and publish CPI is in place.

#### **Purpose of the mission**

The mission is a workshop, where the MS and BC experts will work together to review the index formula, calculation of CPI.

Also MS and BC experts will review the publication procedures and the use of CPI in national accounts, statistical analyses and among external users (e.g. Central Bank and Ministry of Finance).

#### **Expected Results**

- · Recommendations for calculation of CPI
- Recommendations for publication and use of CPI

#### **Activities**

A tentative schedule for the mission is:

Sunday 19 July 2009

Introduction to and overall discussion of the activity with RTA

Meeting with component leader and the relevant staff within CAPMAS

Settling the agenda for the mission and CAPMAS presentation of ground already covered Presentation of the Latvian production of CPI

Monday 20 July

CAPMAS presentation of the CPI calculations and discussion of the methodology

Tuesday 21 July

CAPMAS presentation of the publication of indices: press release, web publication, paper publications, etc. and discussion of this

Wednesday 22 July

CAPMAS' and other stakeholders' presentation of their use of indices (National Account, Central Bank, Ministry of Finance, etc.)

Thursday 23 July

Final discussions and clarifications with CAPMAS

Presentation of preliminary results, findings and proposal for methodology changes

#### Tasks to be done by CAPMAS to facilitate the mission

The beneficiary will arrange meetings with the relevant staff in CAPMAS.

#### **Consultant and counterpart**

The mission will be carried out by:

Mr. Oskars Alksnis, Central Statistical Bureau of Latvia

The beneficiary's counterpart will be Ms Awatef Hussein and Ms. Magda Mahmoud.

#### **Timing**

The mission will be carried out during 19-23 July 2009 in Cairo.

#### Report

A final report from the mission should be made available not later than two weeks after the termination of the mission.

# **Annex 2 People met**

# Activity 5.4.5, 6 Workshop on Calculating CPI & Publication and Use of CPI Participants from Inside CAPMAS 19-22/07/2009

	Name Title		
1	Ms. Magda Mahmoud	Manager of Financial Statistics Dept.	
2	Ms. Suaad Mohamed	Manager of CPI Dept.	
3	Mr. Ahmed Abdo	Head of CPI division	
4	Ms. Suaid Ghali	CPI division	
5	Ms. Mona Mohamed	CPI division	
6	Ms. Magda Abbas	CPI division	
7	Mr. Ahmed Ateff	CPI division	
8	Mr. Ibrahim Ismail	CPI division	
9	Ms. Sara Osman	CPI division	
10	Ms. Basma Ibrahim	CPI division	
11	Ms. Sahar Mohamed CPI division		
12	Ms. Manal El Nemer	Manager of indicators' software Dept.	
13	Mr. Mohamed Farid	Statistical Sector	
14	Ms. Hala Fathy	Computer specialist	
15	Mr. Hisham Shaker	СРІ	

# **Participants from outside CAPMAS**

	Name	Title	Side
1	Ms. Amany Khalel	Senior Specialist	Ministry of Economic Development
2	Ms. Kareman Mohamed	Senior Specialist	Ministry of Economic Development
3	Ms. Lameaa Mohi	Senior Specialist	Ministry of Economic Development
4	Ms. Hager Ismail	Senior Specialist	Ministry of Economic Development
5	Mr. Mona Moouad	Senior Specialist	Ministry of Economic Development
6	Mr. Adel Abbas	Assistant manager	Central Bank of Egypt
7	Mr. Aeman Maher	Head of division	Central Bank of Egypt
8	Mr. Suleiman Mahdy	Researcher, Minister's office	Ministry of Finance
9	Mr. Mohamed Ahmed	Deputy of general manger	Central Bank of Egypt