

TWINNING CONTRACT

JO/13/ENP/ST/23

Strengthening the capabilities of the Department of Statistics in Jordan



MISSION REPORT

on

Activity: 1.5 Supply and Use Tables III

Mission carried out by
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List of Abbreviations

DoS	Department of Statistics of Jordan
ToR	Terms of Reference
SUT	Supply and Use tables
CPC	The Central Product Classification
NA	National Accounts
GFCF	Gross Fixed Capital Formation

1. General comments

This mission report was prepared within the Twinning Project "Strengthening the capabilities of the Department of Statistics in Jordan". It was the third mission to be devoted to national accounts within Component 1 of the project.

The main purposes of the mission were:

- To familiarize the DoS staff with the IT-tool for SUT
- To review calculations for output, intermediate consumption and value added as well as procedures for enumeration.
- To discuss compilation strategies for balancing supply and use.
- To make plans for further work and agree upon work to be done before next mission scheduled September 2014.

The consultants would like to express their thanks to all DoS officials and individuals met for the kind support and valuable information which they received during their stay in Jordan and which highly facilitated their work.

The views and observations stated in this report are those of the consultants and do not necessarily correspond to the views of EU, DoS or Statistics Denmark.

2. Assessment and results

During the first missions devoted to the compilation of a Jordanian SUT, a new strategy for compiling SUT was established. It was decided to use a newly developed EXCEL-based IT SUT program tool based on macros in Visual Basic. The system was installed on the PC's belonging to the National Account team. During the second and third mission did the DoS-staff become familiar with the new SUT-system by retrieving figures from the SUT-system, and during the third mission did they get further familiar with the system by:

- Coding available data with the proper codes for product, transaction and industry or consumption-group.
- Retrieving and saving data in the SUT-system.

The frame-work for the SUT was established on the first mission, and it was decided that the SUT should contain:

- 2 digit ISIC3.1 industries
- 250 rows for products and a correspondence table between the CPC codes and these products have been established on previous missions.

The main purpose for the third mission was to fill the SUT-system with the available data and create an initial SUT. The manual balancing of the initial SUT will start at the next mission in the end of September. A list with missing data was made after the second mission, and the DoS have worked with finding and coding the missing data. Some of the data was received before the mission, but most of the data was received during the mission and a lot of time was devoted to find, discuss and code the missing data and the work was made as job-training by the DoS-staffs desks.

The DoS-staff has, at our request, been working on coding product taxes, product subsidies and trade margins after the last mission. We received some material before the mission and the data were discussed and further coded during the mission. The product taxes, product subsidies and trade margins

forms together with the gross sales tax the bridge column from basic prices to purchasers prices. Further work is needed before the bridge column is finished, and DoS should send us some material on other taxes and subsidies and gross sales tax before the next mission.

A lot of data were added to the SUT-system during the mission and the work on an initial SUT has made great progress since the second mission, but there are still some data missing. Status over missing data and the work that needs to be done by both the experts and the DoS were discussed during the last day of the mission.

Status over missing data and work needed to be done after the third mission is as follows:

<u>Production:</u>	<u>Missing:</u>
Industry 75-85	Non-market activity distributed by NA-product
NPISH	Distribution by NA-products
<u>Bridge column:</u>	<u>Missing:</u>
Trade margin layers	Data received
Gross sales taxes	Distribution by NA-product – data not received
Other Taxes and subsidies	Distribution by NA-product – data not received
<u>Intermediate consumption:</u>	<u>Missing:</u>
Industry 70	Distribution by NA-product
<u>Final consumption of NPISHs:</u>	<u>Missing:</u>
	Distribution by NA-product
<u>Final cons. of general government:</u>	<u>Missing:</u>
	Distribution by Collective Cons. Groups and by NA-products
<u>Gross fixed capital formation:</u>	<u>Missing:</u>
	Distribution by GFCF-type and NA-product for non-market
	Distribution by NA-product for market
<u>Changes in inventories:</u>	<u>Missing:</u>
Materials	Distribution by type and NA-product – data received
Trade	Distribution by type and NA-product – data received
<u>Imports and exports of services:</u>	<u>Missing:</u>
	Distribution by NA-product

The work with the missing data is in progress and for most parts, is it the final transformation to the SUT-systems codes and format that is missing.

3. Conclusions and recommendations

After the first mission on Supply and Use tables, the experts believe that the primary goal: to establish a new supply and use table for 2010 is achievable within the time schedule.

It must however be stressed, that this task is very specific and involves a considerable amount of work. Therefore resources continuously have to be available and involvement of many people is necessary if the project is going to succeed. We strongly urge the management to consider this.

In accordance with the abovementioned status at the end of the third mission, we agreed that the DoS-staff should:

- Distribute the production for the non-market activity in industry 75-85 by NA-products.
- Distribute the production for the NPISH activity by NA-products.
- Final consumption of general government should be distributed by consumption group and NA-products.
- Changes in inventories for materials distributed by type and NA-products.
- Changes in inventories for trade distributed by type and NA-products.
- Imports and exports of services distributed by NA-products.

A first draft of above mentioned data should be sent to the experts at Statistics Denmark by the 14th September. This will give the experts some time to look at the data before the next mission and we have already received coded data for changes in inventories for materials and trade.

In accordance with the abovementioned status at the end of the third mission, we also agreed that the the Danish experts will work on:

- The bridge column
- GFCF distributed by type and NA-products.
- Intermediate consumption distributed by NA-products for industry 70
- Work on the NPISH activity distributed by NA-products (together with the DoS)

The purpose for the next mission is to start the manual balancing on the initial SUT. It is therefore important that the DoS-staff finds time to get further familiarized with the SUT-system and with retrieving and saving figures in the SUT-system.

During the mission, the experts showed some products in imbalance and we discussed possible causes to the imbalance. One of the reasons for imbalance was that the supply and the use were coded in different ways, for example was electricity given one product-code while the use for household consumption was given another product-code. Imbalance due to different coding of the supply- and use-side should be investigated as one of the first things in the manual balancing, since this disturbs the picture for the “real” balancing-problems. The codes should be changed in the files used to create the initial SUT and then saved again on the SUT. This will ensure that the changes are recorded and documented and it will also ease the work the next time DoS updates the SUT-system.

Before starting the manual balancing it is strongly recommended that all targets for column totals for output and input are documented in a systematic way and that it is made possible to track down changes to these estimates during the balancing process. **A directory at a specific PC should always contain the central “current version” of the system.** It should include:

- Current versions of the definitions and descriptions for transaction codes, industries, consumption groups and products as well as those correspondence tables that are needed to convert the information from the data sources into the appropriate SUT-codes.
- A current version of the targets for column totals, the names of the Excel sheets that contain their calculations and where to find a description of the data and calculation methods used.
- The most up to data versions of the Excel sheets with values of the outputs and inputs by products ready to be entered into the SUT framework.
- The current version of the SUT-framework populated with data. It is also recommendable to keep a number of backup copies of this framework from earlier stages of the process. This will make it possible to go back to an earlier stage when major errors are detected in the recent copy of the system.

A separate Excel workbook should always contain:

- Estimated values of supply from output by industries and imports in basic prices

- Estimated uses for intermediate consumption by industries, final consumption by consumption groups as well as other final uses including exports in purchasers' prices.

These values can be considered as targets for the corresponding column-totals in the SUT environment. They may – especially for the uses – differ from the column-totals that can be calculated by adding together the values specified by products that can initially be entered into the SUT environment. It is furthermore recommended that a table shows which data sources are used to compile the totals and product structures for each individual industry, consumption group and the other categories of supply and use.

The people that work on different areas of the system will usually work on local Excel sheets. As long as such calculations are in an experimental stage, they should stay on the local PCs, but when the calculations has got a final form they should be copied as the current version of to the central system while previous version could be kept separately as backup for some time.

When the work on various issues is distributed to different PCs, updating of Excel workbooks may result in different versions of the same Excel sheets. Confusion can easily arise regarding which versions should be considered the “current” versions. It is therefore recommendable that the newly updated Excel workbooks are stored in the central system as soon as they found to be free of errors.

Well defined procedures for updating of the central system are recommended. The responsibility for maintenance of this system should preferably be shared by one or two persons.

This will facilitate the balancing procedure and ensure documentation for the work done to the data in the SUT.

Annex 1. Terms of Reference**Terms of Reference****EU Twinning Project JO/13/ENP/ST/23****24-28 August 2014****Component 1: National Accounts****Activity 1.5: Supply and Use Tables III****0. Mandatory results and benchmarks for the component**

- The national accounts system in Jordan updated to SNA 2008 (Apr 2015)
- The national accounts system in Jordan will cover the informal sector (Apr 2015)
- Assessment report on current situation (Jan 2014)
- Review of the GDP methodology (Apr 2014)
- Plan for how to change base year in the fixed price calculations (Jan 2015)
- Plan for how to improve the current accounts (Jan 2015)
- Present and discuss the concept of different types of agricultural accounts (Jan 2015)
- Data sources, compilation methods, and balancing in relation to supply and use tables reviewed and updated towards SNA08 principles (Apr 2015)
- Provide recommendations on how to update input-output tables (Apr 2015)
- Update the methodology for calculation the informal sector (Apr 2015)

1. Purpose of the activity

- Continued familiarization of the DoS staff with the IT-tool for SUT
- To review and assess the data sources, their exhaustiveness in relation to the informal sector as well as their internal consistency
- To review calculations for output, intermediate consumption and value added as well as procedures for enumeration.
- To discuss compilation strategies for balancing supply and use
- Special focus on changes needed in the current system in order to comply with the ESA10/SNA08
- To introduce the DoS staff to requirements regarding supply and use tables in the ESA 2010 / SNA2008

2. Expected output of the activity

- DoS staff further familiarised with the IT-tool for SUT
- Recommendations prepared on the next steps in relation to how to deal with the imbalances
- A lining up of work programme for the next activity (1.6, scheduled for 28. September – 2. October 2014)
- DoS staff introduced to the Danish and in general European experiences in compiling Supply and Use tables

3. Participants

DoS:

Mr Moawiah Alzghoul Director of National Accounts Directorate, and component leader

Annual national accounts

Amal Abu Afeefeh - Head of the Annual Accounts Division

Khairallah Almarzoug

Farhan Mohammad

Loay Alrawashdeh

Ali Zaitoun

Ayman Nasir

Input-output division

Murad Bani-Hamad

Murad Omari

Quarterly accounts division

Walid Battah - Head of the Quarterly Accounts Division

Jaber Alfazza

Walaa Gharram

MS experts

Mr. Jens Holst Jensen, Senior Adviser, National Accounts division, Statistics Denmark

Ms. Maria Nilsson, Senior Adviser, National Accounts division, Statistics Denmark

Programme for the mission

Time		Place	Event	Purpose / detail
Sunday, morning	08.30 – 10.00	Hotel /DoS	Meeting with RTA	To discuss the programme of the week
Sunday, morning	10.00 – 12.00	DoS	Meeting with BC Component Leader and BC Experts	Information and follow-up on activities since activity 1.4. Which part of the SUT is now completed? What is the status regarding the data still missing after the previous. Mission? Discussion of challenges faced, if any, when using the SUT-IT tool. Can everyone format, test and save data in the SUT? Can everyone extract data from the SUT. Correct data and save again?
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Sunday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Review of the populated SUT. Column by column. Review of data for each industry and the calculations behind them. - Output - Intermediate consumption - Value added - Procedures for enumeration - Correction for informal sector? 03.30 – 04.00 - Break down by which products?
			Preparations / Report writing	Preparations / Report writing
Monday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Continued from Sunday afternoon.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Monday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued from Monday morning.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing

Tuesday, morning	08.30 – 09.00	DoS	Preparations / Report writing	Preparations / Report writing
	09.00 – 12.00		Meeting with BC Component Leader and BC Experts	Continued from Monday afternoon.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
Tuesday, afternoon	01.00 – 03.30	DoS	Meeting with BC Component Leader and BC Experts	Continued from Tuesday morning. Review of remaining columns. Private consumption, Government consumption, NPISH, GFCF, Changes in inventories.
	03.30 – 04.00		Preparations / Report writing	Preparations / Report writing
	08.30 – 09.00		Preparations / Report writing	Preparations / Report writing
Wednesday, morning	09.00 – 12.00	DoS	Meeting with BC Component Leader and BC Experts	Continued from Tuesday afternoon.
	12.00 – 01.00		Break / Preparations / Report writing	Break / Preparations / Report writing
	01.00 – 03.30		Meeting with BC Component Leader and BC Experts	Review of a number of product balances extracted from the now populated SUT (first discussions of what to do with the imbalances)
Wednesday, afternoon	03.30 – 04.00	DoS	Preparations / Report writing	Preparations / Report writing
	08.30 – 09.00		Preparations / Report writing	Preparations / Report writing
	09.00 – 11.30		Meeting with BC Component Leader and BC Experts	Discussions of open issues. Discussions of work programme until next mission (28-2 October 2014)
Thursday, morning	11.30 – 12.30	DoS	Ad-hoc meetings	Final clarifications with BC Experts, preparation of report and presentation for BC Project Leader
	12.30 – 01.00		Debriefing with BC Project Leader	Conclusions and decisions and their consequences for the next activity and the implied work programme for BC Experts
	01.00 – 03.30		Meeting with BC Component Leader	Presentation for BC Project Leader

Annex 2. Persons met

DoS:

Mr Moawiah Alzghoul Director of National Accounts Directorate, and component leader

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Walid Battah - Head of the Quarterly Accounts Division

Jaber Alfazza

Walaa Gharram

RTA team

RTA, Thomas Olsen,