## REPORT THE TRAINING COURSE ON "QUARTERLY NATIONAL ACCOUNTS AND SHORT-TERM INDICATORS" AMMAN-JORDAN 6-10 October 2010

#### 1. Introduction

Within the 2010 work plan of the AITRS, the training course series on National Accounts (NA) to improve the capacity of the statistical offices and their staff members in the area of National Accounts, and considering the need of the Arab National Statistical Offices (ANSOs) for medium - level statisticians in NA and the created vacancy in the statistical offices following the swift circulation of the experts, the Third Training Course on National Accounts was organized during 6-10 October 2010 to complement the first and second training course organized during 17-29 April 2010 and 25-29 July 2010, respectively. The participants in this course are those who participated in the first and second courses. The third training course aimed to improve the knowledge of the statisticians in the area of national accounts to analyze the economic policies and the performance of macroeconomic indicators through the availability of short-term economic indicators of a period less than one year as well as to train the participants on how to build short-term indicators by defining the inputs, accounts mechanisms, economic models used for estimation and processing of the economic data. This will enable to obtain more accurate data through one defined system and increase the knowledge of the staff working in economic surveys according to the concepts of national accounts; thus they will be able to design and develop simple forms for data providers.

#### 2. Organizers

The Arab Institute for Training and Research in Statistics (AITRS) and the Statistical, Economic and Social Research and Training Center for Islamic Countries (SESRIC) coorganized the Training Course.

#### 3. Preparation for the Training Course

The Arab National Statistical Offices (ANSOs) had been invited to nominate their representatives for participation in the training course according to Terms of Reference of the Course (Appendix No. 1). The invitation letter requested these ANSOs to nominate the same representative who had participated in the previous two training courses on National Accounts. 20 participants representing 12 Arab states attended the course – Jordan, UAE, Bahrain, Tunisia, Sudan, Syria, Iraq, Oman, Libya, Egypt, Morocco and Yemen.

#### 4. Opening and Method of the Training Course

Mr. Fathi An-Nusoor, Director General of AITRS, opened the training course on October 6<sup>th</sup>, 2010, with the presence of Dr. Khalid Khawaja, Chief Expert. Mr. An-Nusoor welcomed the participants and hoped a good stay for them in Jordan and benefit from this important course as it would be delivered by experts of well known experience in the area of national accounts. He also commended the role of AITRS in the organization of such useful courses for the statisticians and workers in the Arab National Statistical Offices.

The method of the training course included a deepening programme of comprehensive theoretical and practical lectures. The participants were provided by detailed knowledge on various issues of quarterly national accounts and short-term indicators. The course presentations tackled, on one hand, the general framework of quarterly national accounts and short-term indicators, including introduction on the origin and development of their systems, concepts and importance, system of quarterly accounts' preparation, types of volumes and prices indices and the ways of developing them. On the other hand, the course dealt with the modeling of quarterly data using BENCH Programme, practical exercises of this programme and the manner to use the attained results to prepare quarterly estimations and matching them with the annual data.

Two experts delivered the lectures of the training course; Mr. Koth Salim, International Consultant in National Accounts from the Arab Republic of Egypt; and Mr. Omar Hakouz, Regional Consultant to the ESCWA.

The course commenced its activities according to its work programme (Appendix No. 3) as follows:

- Mr. Koth Salim delivered a general lecture on the Origin and Development of Quarterly National Accounts System, Types of Volumes and Prices Indices and the Ways of Developing them and the most important sources for preparing the Estimations of Domestic Product according to the production method, and the ways of applying field surveys to collect the needed data. He also tackled special issues related to ways of preparing the quarterly and annual estimations. Beside that he also discussed the estimation of tax and subsidies for products with constant prices, and the estimation of trade margins with constant prices, and the way of matching between the monetary and maturity principles when preparing the quarterly estimations.
- Mr. Kotb also delivered a lecture of the Principles of Times Series Modeling, and the
  differences between the quarterly and annual national accounts, and the basic aspect of
  Proportional Denton Method.

- He also delivered the method used in measuring production and added value in national accounts and business accounts and the way followed in the classification and collection of items and transactions included in the lists.
- He also introduced the source of data relevant to the other economic activities and sources of data according to the expenditure.
- Practical applications on BENCH Programme and the method of using the results for the preparation of quarterly estimations and their match with the annual data have been distributed to the participants under supervision of Mr. Omar Hakouz.
- Mr. Omar Hakouz introduced BENCH Programme, the used files and their preparation and time-series modeling programmes.
- Transformation of data from Excel to BENCH programme, programme application and result extraction have also been shown to the participants.
- Expert Kotb Salim introduced the method of capital, financial account and budget calculation in national accounts and accounts of economic activities. He also presented the fixed assets in the general budgets which include the assets revaluation, etc.
- Mr. Omar Hakouz presented special issues related to the preparation of the annual and quarterly estimations, the taxes and subsidies for products with constant prices, estimation of the value of trade margins with constant prices and how to match between monetary and maturity principles when preparing the quarterly estimations.

The discussion, interventions, view exchange and presentation of country experiences were the salient features of the course, whereat many discussions have been made and questions have been raised by the lecturers in clear and thorough manner.

At the end of the training course the AITRS distributed CD's containing the contents of the course: the theoretical lectures, presentations by the lecturers and country experiences.

#### 5. Closure of the Course

Mr. Fathi An-Nusoor, Director General of AITRS, and Dr. Khalid Khawaja, Chief Expert in the AITRS, ended up the course. Mr. An-Nusoor emphasized for the participants the importance of using and application of the new learnt information during the course. He also hoped to hear if every participant could organize a course for their colleagues in their countries on the subjects of this course. He also emphasized the keen of AITRS to improve the capacities and make the qualified lecturers available to cover the training courses organized by AITRS. He also commended the efforts of the lecturers during the course. He also indicated the important role of AITRS in enhancing the capacity of the cadres in the national statistical offices. He also wished success for the participants in their career. He also mentioned that the AITRS will continue in organizing such kind of courses and advanced ones in this field in case the Arab Statistical Offices request him to do so. Certificates have been awarded to the participants at the end of the training course.

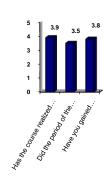
#### 6. Assessment of the Training Course

At the end of the training course the AITRS distributed Assessment Forms to the participants to attain the technical and administrative assessment in the light of their answers and calculation of the arithmetic mean of each answer, which is made out of five scores explain the following:

#### A. Objective Realization

- The objective of the training course has been realized between good and very good grades, or 3.9 out of 5 scores.
- The participants satisfaction with the course period ranged between good and very good, or 3,5 scores.
- The course added experiences / skills to the participants ranged between good and very good, or 3,8 scores out of 5 total scores.

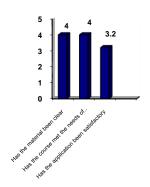
Fig. 1: Objective Realizationgu



#### B. The Contents

- The course has been characterized with its clarity and its contents have met the needs of the participants with respect to their works.
   The needs have been met within the range of good and very good, or with a degree of 4 of each of them.
- The practical side has been realized with the range of good and very good, or 3,2 scores as illustrated in fig. 2.

Fig.2: Course Contents



#### Performance of the Trainers

#### 1. Expert Koth Salim

Results have shown that he has gained the great satisfaction of the participants. He gained excellent degree in the all aspects of the assessment; 4.5 scores.

#### 2. Mr. Omar Hakouz

He also has also shown excellent performance in all aspects of the course assessment, 4.5 scores.

#### C. Training Instruments

The trainees expressed that the instruments used in the training course have ranged between good and very good, 3.2 scores.

#### D. Organization of the Course

- In reply to the question on the hotel where most of the participants stayed during the course period the answer ranged between good to very good; 3.1 scores,
- With respect to the social programme the answer ranged between good and very good; 3.8 scores.
- The evaluation of the hall where trainees received the course, the evaluation ranged between good and very good; 4.1 scores.
- The administration of the course by AITRS received an assessment with very good mark; 4 scores (Fig. 3).

#### E. General Issues

- Interaction with the trainers and exchange of views with them was very good; 4.4 scores.
- Interaction of the trainee with his/her colleagues was very good; 4.5 scores.
- Access of trainees to the necessary tools and print handouts has ranged between good and very good; 3.9 scores (Fig. 4).

#### F. Observations Made by Participants

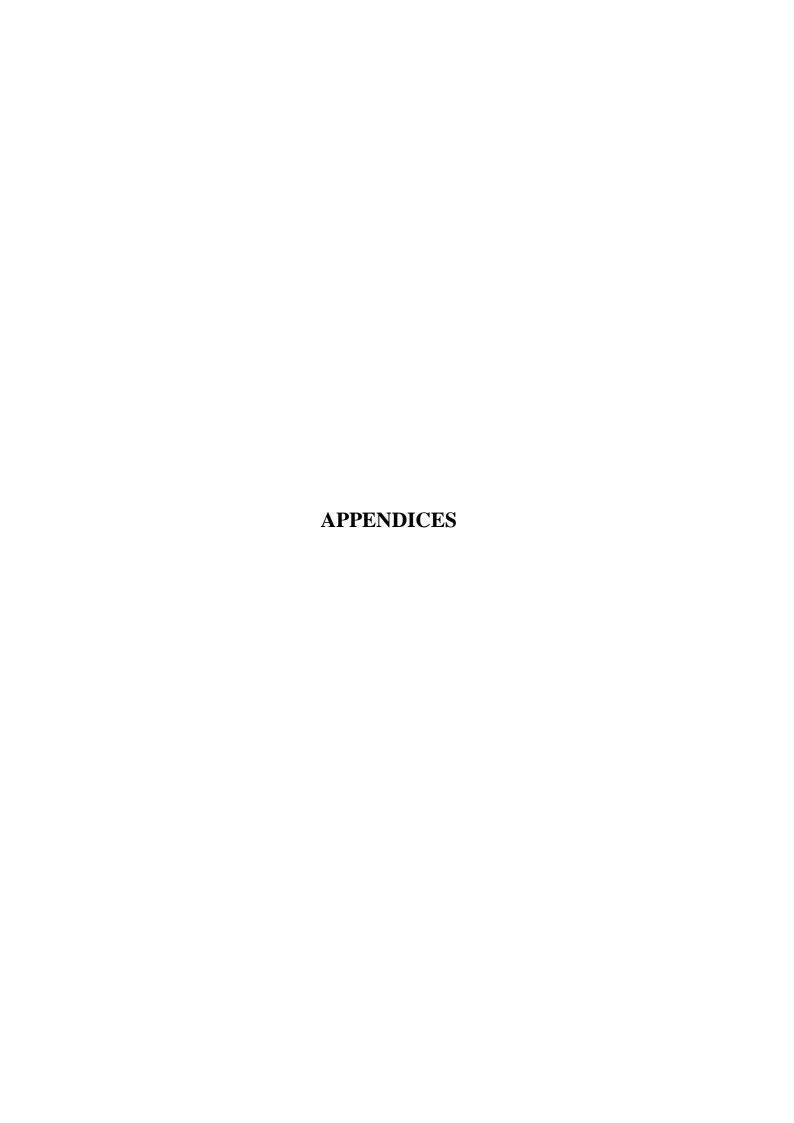
The participants in the training course made the following observations:

- With regard to the preparation and organization, the course level has been ranged between good and very good levels. All visual and programmes of training have been provided.
- Lodging was comfortable and hotel services were good. The participants expressed their satisfaction with the stay during the course period.
- Lecturers were at high level of experience and presentation of information. They usefully exploited the plotted time. They presented the subjects with interactive manner, the factor which opened the horizons of the participants and their understanding of the subject materials. Discussions and question-raising were the pervasive features of the course.
- 95% of the participants requested the participation of Mr. Koth Salim in the next coming courses on national accounts.
- The objectives of the training course have been realized as expressed in the received answers of the questionnaire.

 The participants expressed their laudation for the lecturers and the organizing institution, and they also commended the organizational efforts exerted during the preparation stage for this training course and provision of administrative and social services.

#### G. The Recommendations Made by the Participants were as follows:

- More time should be made available for application of all statistical programs used in studying the subject of the training course in order to achieve the utmost benefit through increasing application skills.
- Organization of special training courses on supply and use tables.
- Because of differences in processing approaches, increase of practical applications to urge the participants to carry more practical drills relevant to the various economic sectors has been recommended.
- Training on output, input and macroeconomic tables.
- It necessity of PC's loaded with applications and drills before the start of the course has been indicated as one necessary tool for realization of the utmost benefit.
- If possible, the reorganization of the course for the same participants and trainees should be considered.







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### **APPENDIX No. 1** Terms of Reference

#### Training Course on Quarterly National Accounts and Short-Term Indicators Amman, 6-10 October 2010

Itama	Details		
Item Course Title			
	Quarterly National Accounts and Short-term Indicators		
Code	2010/2.2.(2)		
Area	Economic Statistics		
Type	For all Arab Countries		
Duration	5 days		
Date	6-10 October 2010		
Organizers	Arab Institute for Training and Research in Statistics + Statistical,		
	Economic and Social Research and Training Center for Islamic		
	Countries (SESRIC)		
Place	Amman-Jordan		
Language	Arabic		
Objectives	To enhance work on the analysis of economic policies and performance		
	of macroeconomic indicators through the availability of short-term		
	economic indicators in period shorter than annual terms. The course		
	aims to train the participants on the performance of short term		
	indicators by defining the inputs and calculation mechanisms and		
	economic models used in the estimation and processing of economic		
	data.		
Targeted	Second Cadre assistant to the experts of national accounts and economic		
Category	statistics.		
Qualifications	Preferably the person participated in the course organized this year		
Needed	by AITRS in the area of national Accounts.		
Outputs	Furnish the participants with the ability to deal with quarterly or		
_	short-term data and let them gain the necessary skill to produce		
	short-term indicators by using the necessary tools.		
Main subjects	- Scope and Role of Quarterly Accounts		
of the Course	- Systems of Quarterly Accounts Preparation		
	- Sources of Needed data to build Quarterly Accounts		
	- Important Standard figures used in Quarterly National		

	Accounts
	- Special Issues of the ways of preparing the Annual and
	Quarterly Estimations
	- Principles of Time-Series Modeling
	- Modeling of Quarterly data by using BENCH Program
	- Practical Application of BENCH Program
	- Tractical Application of BENCITT Togram
Method	Lectures and Discussion
Lecturers	- Koth Salim, Regional Consultant in National Accounts
	- Omar Hakouz, Regional Consultant in National Accounts
Expenditures	AITRS bears the expenditures of one participant from each country.
	These expenditures are:
	<ul> <li>Hotel defined by AITRS</li> </ul>
	Per Diem for 6 nights according to AITRS regulations
	- Economic Flight ticket via the shortest route
	AITRS never bears the following expenses:
	<ul> <li>Expenses of participants from or residents in the country where the</li> </ul>
	course is held
	Expenses of participants from countries with due arrears of their
	contributions in the AITRS budgets
	Expenses of participants from Arab and International Organizations
	A country may participate with more than one participant providing
	that it bears their expenditures.
	- Upon the consent of the NSO, nominees other than those from the
	NSO could be accepted on payment of US\$500/week to cover the
	actual expenditures.
	actual experiences.
Certificate	1- AITRS awards participation certificate
	2- The participant won't be awarded with participation certificate if
	he/she misses more than 25% of the course period. Per diems
ESEARCH AND P	will not be paid for the days of absence; l intry
SESRI	will be informed with that.
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# Appendix No. 2 List of Participants Training Course on Quarterly National Accounts and Short-Term Indicators Amman, 6-10 October 2010

No.	Country	Name	Office	Address
1		Forhan Filoh Alahanmin	Assistant Espannist /NA	Tel: 0795948630
1.		Ferhan Fileh Alghanmin	Assistant Economist/NA	Email: farhan@dos.gov.jo
2.		Sami Nazar Khasawnah	Economic Analyst	Tel: 0788640109
۷٠			Economic Analyst	Email: sami@dos.gov.jo
3.		Hamdan Almarzoug	Assistant Faces mist/NA	Tel: 0788584888
٥.		Tramuan Almarzoug	Assistant Economist/NA	Email: khair@dos.gov.jo
4.	Jordan	Luay A. Alrawashdah	Assistant Economist/NA	Tel: 0777154093
4.	Jordan	Luay A. Allawasiluan	Assistant EconomistyNA	Email: loay@dos.gov.jo
5.		   Wala M. Gharam	Assistant Economist/NA	Tel: 0788830058
٥.		Wala W. Gilaraili	Assistant EconomistyNA	Email: walag@dos.gov.jo
6.		Ghada M. Isa	Chief Researcher/Economic	Tel: 0795409217
0.			Info and Studies	Email: ghada.e@mop.gov.jo
7.	Mohammad Shalan		Chief Organizer/National	Tel:
/ •		Worldmind Orlaidi	Economy	Email: mahmoud.s@mop.gov.jo
8.	UAE Fatma M. Shehi		Economic Stat/NSO	Tel: 0504170700
0.	OAL	Tatilia W. Olicili		Email: fshehhi@nbs.gov.ae
9.	Bahrain	Hanan Bahar	Information Specialist/N	Tel: +97336650005
9.	Darirairi	Tidilali Ballal	miormation opecialist/N	Email: bahar.hanan@cio.gov.bh
10.	Tunisia	   Mabrouk Nasri	Eng. Stat and data Analysis	Tel: +21671281123
10.	Turnsia	Ling. Stat and data Analysis		Email: nasri.mabrouk@yahoo.fr
11.	Sudan	Noon Osman Ali Statistical Inspector		Tel: 91299856
11.	Sudan Noon Osman All			Email: noon3157@yahoo.com
10	Assis Dire		Assis Director of Dept in	Tel: +963113335830
12.	Syria	George Azar	NSO	Email: gazar58@gmail.com

13.		Hiba Hasan Ghirawi	Assis. Statistician, GDP & NI Dept.	Tel: +9647901457875 Email: icosit-na@yahoo.com Email: hiba.abdullah@yahoo.com
14.	Iraq	Mohamad Kh. Yasin  Afaf Abbas Hasan	Dept. Financial Analysis, NA Directorate	Tel: +9647703985675 Email: mohamadkyassin@yahoo.com
15.			Chief Statistician/Head of NI Dept.	Tel: +9647901208774 Email: afaf_ha52@yahoo.com
16.	Oman	Suad Abdullah Maawali	Statistician/Director General of Economic Statistics Dept	Tel: +96899073988 Email: smaawali@mone.gov.om
17.	Libya	Ashref Ashomani	Statistical Researcher	Tel: 0923715231 Email: ahsraf94@yahoo.com
18.	Egypt	Suzan Ali Moh. Nusa	Director General/NA	Tel: +112796135 Email: uzan.moussa@hotmail.com
19.	Morocco	Asif Zouhra	State Engineer	Tel: +667755651 Email: zaasif@hotmail.com
20.	Yemen	Faris Moh. Annahari	Director of Dept. of Service Accounts	Tel: +96773842651 Email : farismas@yahoo.com





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## Appendix No. 3 Programme of the Training Course on "Quarterly National Accounts and Short-Term Indicators"

#### Amman, 6-10 October 2010

First Day (Wednesday) 6 Oct. 2010			
9:00-9:30	Opening	Lecturer	
9:30-10:30	9:30–10:30  Scope and role of QNA  - What are the National Accounts?  - General Scope of National Accounts  Basic Scope  Advanced Scope  - Aims of QNA  - Role of QNA  - Time-Series  - Seasonally Revised Data  Conceptual Linkages between Annual and Quarterly Estimations		
10:30 - 11:00	Break		
11:00-12:30	System of QNA Preparation	Kotb Salim	
	Necessary Steps for Development of QNA System		
	<ul> <li>Relationship between Annual and Quarterly Estimations</li> <li>Accredited details level</li> </ul>		
12:30 - 13:30	Launch		
13:30 - 15:00	QNA Development System	Kotb Salim	
	Assessment of Quarterly indicators		
	Assessment of Development System		
	Ways of Quarterly Data Dissemination		
15: - 15:15	Break		
15:15 - 16:45	Types of Volume and Prices Indices and their Development	Kotb Salim	
Second Day (Thursday) 7 Oct. 2010		Lecturer	
9:00 - 10:30	Sources of Necessary Data for QA	Kotb Salim	
	Definition and Evaluation of the different Sources		

sues Related to Data Sources	
portant Sources for GDP Estimations according to Production Method	
conomic Activities)	
iculture	
nufacturing and Construction	
Data Sources	Kotb Salim
a Sources of the Rest of Economic Activities	
a Sources According to the Mode of Expenditure	
of Field Surveys for Data Collection	Omar Hakouz
ues Related to the Annual and Quarterly Estimations	Omar Hakouz
mations of Taxes and Subsides to Products with Constant Prices	
mation of Trade margin value in Constant Prices	
v to match between Monetary and Maturity Principles during	
paration of Quarterly Estimations	
er Issues	
	portant Sources for GDP Estimations according to Production Method conomic Activities) iculture nufacturing and Construction  Data Sources a Sources of the Rest of Economic Activities a Sources According to the Mode of Expenditure  of Field Surveys for Data Collection  ues Related to the Annual and Quarterly Estimations mations of Taxes and Subsides to Products with Constant Prices mation of Trade margin value in Constant Prices to to match between Monetary and Maturity Principles during paration of Quarterly Estimations





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Third Day (Frid	day) 8 Oct. 2010 Trip to Petra Archaeological Site			
Fourth Day (Sa	Fourth Day (Saturday) 9 Oct. 2010			
9:00-10:30	Principles of Time-Series Modeling	Kotb Salim		
	- Difference between Annual and Quarterly National Accounts			
	- Important Aspects related to Time-Series Modeling			
	- Ways of Time-Series Modeling without commas			
	- Basic aspects of Danton Proportional Method			
10:30-11:00	Break	Lecturer		
11:00-12:30	Principles of Time-Series Modeling	Kotb Salim		
	- Time-Series Modeling and Adjustment			
	- Time-Series Modeling Data Processing			
	- Extraction of Quarterly Constant Prices data through Subtraction			
12:30-13:30	Launch			
13:30-15:00	Quarterly Data Modeling Using BENCH Program	Omar Hakouz		
	- Time-Series Modeling Programs			
	- Introducing the Program			
	- Introducing used Files and ways of their development			
15:00-15:15	Break			
15:15-16:45	Quarterly Data Modeling Using BENCH Program	Omar Hakouz		
	- Loading Up the Program			
	- Transfer of data from Excel to BENCH			
	Application and Results			
Fifth Day (Sun	day) 10 Oct. 2010	•		
9:00-10:30	Practical Applications of Bench Program and Method of Using the	Omar Hakouz		
	Results for Preparation of Quarterly Estimations & their Compatibility			
	with the Annual Data			
10:30-11:00	Break			





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11:00-12:30	Practical Applications of Bench Program and Method of Using the	Omar Hakouz
11:00-12:30	Practical Applications of Bench Program and Method of Osing the	Offiai Flakouz
	Results for Preparation of Quarterly Estimations & their Compatibility with	
	the Annual Data	
12:30-14:00	Practical Applications of Bench Program and Method of Using the	Omar Hakouz
	Results for Preparation of Quarterly Estimations & their Compatibility	
	with the Annual Data	
14:00-14:30	Closing of the Course and Distribution of the Certificates	
14:30-16:30	Launch	