Statistical Centre of Iran

United Nations Statistics Division (UNSD)

Economic Cooperation Organization (ECO)

Report of the Training Workshop on
"Compilation of Quarterly National Accounts for ECO Member States"

Conducted by
United Nations Statistics Division (UNSD)

In joint cooperation with
Statistical Centre of Iran (SCI)

and

Economic Cooperation Organization (ECO)

8-11 March 2015, Statistical Centre of Iran, Tehran

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1. Introduction

The Training Workshop on the "Compilation of Quarterly National Accounts for ECO Member States" was held from 8-11 March 2015 at the Statistical Research and Training Centre (SRTC) of Iran, Tehran. It was conducted by the United Nations Statistics Division (UNSD) in collaboration with the Statistical Centre of Iran (SCI) and the Economic Cooperation Organization (ECO).

The main objective of this training workshop was to provide basic knowledge on the compilation of Quarterly National Accounts (QNA) that present updated information on macroeconomic indicators at the national level for economic policy making and to support economic research studies in the countries.

The training workshop was attended by participants from Azerbaijan, Kyrgyz Republic, Pakistan, Tajikistan, Turkey and Iran (host). The ECO delegates as well as relevant staff of the Statistical Center of Iran also attended the workshop. The list of participants is attached as ***Annex-I***.

2. Opening session

At the opening session of the training workshop, Mr. Hayri Marashlioglu, Deputy Secretary General of the Economic Cooperation Organization welcomed the participants and thanked the Statistical Centre of Iran and UNSD for their contribution to organizing the regional training workshop. Talking about the importance of technical training on the development of the System of National Accounts in the region, he referred to the continuous collaboration with the UNSD and SCI on the implementation of the statistical capacity building programme for ECO National Statistical Offices (NSOs). He also highlighted the role of the ECO Statistical Network (ECOSTAT) in the development of statistics in the region and called on ECO NSOs for their active cooperation with the ECO Secretariat for updating this regional statistics website. A copy of his statement is attached as ***Annex-II***.

Dr. Rezaee, Head of the Statistical Research and Training Centre, in her opening remarks expressed her hope for a successful workshop to assist the participants to improve the compilation of QNA to fulfill the minimum requirement for the scope of the implementation of the 2008 SNA. A copy of her statement is attached as ***Annex-III***.

Mr. Benson Sim, the UNSD resource person, in his opening statement referred to the international work programme on short-term statistics which was endorsed by the 42nd session of the United Nations Statistical Commission. One component of the work programme recommends the establishment of an internationally-accepted data

template and metadata on short-term statistics for use in macroeconomic surveillance and early warning of economic and financial vulnerabilities. He underlined that the compilation of QNA is one of those statistics. He also noted that compiling QNA may be a more complicated task than compiling annual national accounts (ANA). One of the reasons is the need to produce accurate, comprehensive and reliable QNA estimates in a timely manner every quarter to satisfy the different demands of various stakeholders. A copy of his statement is attached as ***Annex-IV***.

The workshop was inaugurated by the message of Dr. Adel Azar, Head of the Statistical Centre of Iran, who stressed the importance of the availability of timely key high-frequency data for detecting sources of vulnerability and implementing corrective actions in time. He highlighted the compilation of QNA, which will provide a picture of current economic developments that is more comprehensive than that provided by individual short-term indicators. He added that QNA should provide timely, coherent, accurate, comprehensive and reasonably detailed data to serve as a framework for assessing, analyzing and monitoring current economic developments. A copy of his message in attached as ***Annex-V***.

3. Background information

The training workshop on the "Compilation of Quarterly National Accounts for ECO Member States" was part of the ECO-UNSD collaboration on the implementation of the statistical capacity building programme of the ECO for the development of statistical activities in the region. ECO and UNSD have already conducted regional training on the SNA for ECO NSOs in 2007, 2012 and 2013.

4. Training Programme and Structure of the Workshop

The agenda for the four-day training workshop was prepared and proposed by the UNSD. The provisional agenda is attached as ***Annex-VI***.

The training sessions were conducted by the following resource persons:

1. Mr. Benson Sim, Statistician from the National Accounts Section of the UNSD

2. Mr. Feraidoon Rasteh, Senior Expert on National Accounts from the SCI

3. Mr. Yusuf Gokhan Ozbakish, Statistician from the Turkish Statistical Institute (TurkStat)

After the opening session, the workshop proceeded with its agenda from the second session.

4.1   Scope and role of quarterly national accounts

An overview of the scope, purposes and benefits of compiling Quarterly National Accounts was presented by the UNSD. The key features of QNA, their roles and uses, time series data, transparency, timeliness and reliability and setting up QNA were among the main topics of the discussion. It was highlighted that the scope of

QNA is less complete than that of ANA, but QNA form an integrated accounting framework to track short-term economic performance that is more timely than that provided by ANA. QNA use the same standard classification as in ANA, but at a higher level of aggregation as the focus of QNA is on growth rates and their temporal characteristics such as acceleration and deceleration. The discussion for the presentation clarified that in order to satisfy one requirement for the minimum required dataset for the scope for the implementation of the 2008 SNA, compiling agencies will only need to publish either the quarterly industry-based or expenditure-based nominal and volume measures of gross domestic product (GDP) estimates.

4.2   Data sources for compiling quarterly GDP estimates

An overview of the process of identifying and assessing data sources for compiling quarterly GDP estimates were presented. This topic comprised two presentations. In the first presentation, the resource person from the SCI gave an overview of the process of identifying and assessing data sources for compiling quarterly expenditure-based GDP estimates. A comparison of the changes in concepts and definitions of the 2008 SNA with the previous version indicated these changes were moderate. Access to the data sources for some expenditure components, including gross fixed capital formation and changes in inventories as well as foreign trade statistics were mentioned as challenging in compiling QNA.

In the second presentation, the resource person from Turkstat gave an overview of the data sources for compiling quarterly production-based GDP. The main data sources included short-term sample surveys including those for households and the labour force, appropriate short-term indicators, administrative data and various types of price indices. Also, the common data sources for each type of economic activity and taxes and subsidies on products were identified. Both presentations reviewed solutions to overcome the situations where the available data do not meet the requirements of the SNA. The discussion for the first presentation clarified that the expenditure incurred on unsuccessful mineral exploration activities should still be included in gross fixed capital formation, while the discussion for the second presentation clarified that rental should be included in intermediate consumption, while rent should be included in property income.

4.3   Benchmarking

Under this topic, the objectives of benchmarking and an overview of the most common benchmarking techniques to derive QNA estimates which are consistent with ANA estimates and to avoid pitfalls such as the "step problem" were introduced. Benchmarking was defined as a statistical technique to correct inconsistencies between estimates of the same variable obtained from data collected at different frequencies to produce a consistent time series. In this way, the differences between quarterly and annual data sources were identified and benchmarking methods to resolve inconsistencies were introduced. The discussion for the presentation clarified that benchmarking should not be used to correct the issue of non-additivity arising from computing annually-chained volume measures of GDP as non-additivity is the natural outcome of chaining.

4.4   Seasonal adjustment

UNSD presented an overview of the concept of time series data and their components, the objectives of seasonal adjustment, the most common models and methods used for undertaking seasonal adjustment and issues in seasonal adjustment which are specific to QNA such as whether to seasonally adjust major aggregates directly or indirectly. The discussion for the presentation focused on the appropriate seasonal adjustment method compiling agencies should use in compiling QNA and also clarified that it is possible for compiling agencies to customize the seasonal adjustment software to take into account country-specific holidays when doing seasonal adjustment.

4.5   Price and volume measures

The issues for compiling price and volume measures that are of specific importance to QNA were presented under this agenda item. These included the basic concepts of quantity, price, volume and value and how to aggregate price and volume measures over time, how to choose the base year in the QNA, the frequency of chain-linking and the techniques for annual chain-linking of quarterly data. Index formula including Laspeyres index, Paasche index and Fisher index were introduced and the basic principles and methods for deriving price and volume measures were discussed. The discussion for the presentation focused on how to address the issue of non-additivity arising from computing chained volume estimates of GDP and clarified the distinction between base year and reference year and the usefulness of calculating contributions to real GDP growth even when volume measures of GDP are not chained annually.

4.6   Revision policy and dissemination practices

An overview of the causes of revisions to the QNA, the nature of the revision process, the types of revisions (quarterly revision cycle, annual revision cycle and periodic revision cycle), issues with revisions and the essential features of a well-designed and carefully managed revision and dissemination policy to address the issues surrounding revisions was presented by the UNSD. Some of the features included predictability and openness, advance notice of causes and effects with explanations, as well as easy access to sufficiently long time series of revised data. The discussion for the presentation focused on how far back compiling agencies should revise the estimates, backcasting techniques and the impact of backcasting on the unadjusted and seasonally-adjusted QNA. UNSD also noted during the discussion that it is currently working on a handbook on backcasting with a consultant and that the handbook aims to document the best practices to address the various issues associated with backcasting and how to address the impact.

4.7   Way forward

This session discussed the common needs of participating countries in the compilation of QNA in order to assess what follow-up actions and assistance can be provided to assist them to improve the compilation of their QNA. The following topics were proposed by the participants:

- Accounting for non-observed economy
- Proper allocation of work-in-progress in output across the four quarters
- Maximizing the use of existing data sources such as the labour force survey
- Backcasting and details on its techniques
- Uses of seasonally adjusted and unadjusted quarterly GDP estimates and their components
- Proper use of price indices to obtain the volume measures for each industry and expenditure component
- Development of data sources for gross fixed capital formation in intellectual property products such as research and development, gross fixed capital formation in weapons systems and acquisitions less disposals of valuables

A copy of all the presentations of the resource persons is attached as ***Annex-VII***.

4.8   Country presentations

The provisional agenda for the training workshop allocated a number of sessions for participants to make a presentation on the status of the compilation of QNA in their country. Based on the proposed structure of the presentation, the country presentations covered the main topics such as the scope and coverage of QNA, data sources for compiling QNA, benchmarking techniques in use, seasonal adjustment methods used, if any, price and volume measures, revision policy and dissemination practices. Each country presentation was followed by a discussion.

The country presentations revealed that all the participating countries are at various stages of compiling QNA. Azerbaijan has compiled QNA for the years from 2001 and the estimates have been published since 2011. The SCI has been compiling QNA since 2001 and has developed the estimates based on the 2001 version of the International Monetary Fund's Quarterly National Accounts Manual. The QNA estimates of the SCI are prepared and published using the production and expenditure approaches. In Kyrgyz Republic, the National Statistical Committee has started compiling QNA in recent years, but the results have not published yet. In Tajikistan, the Agency on Statistics has started compiling QNA with the technical assistance of an international consultant since 2008, but the results are for internal use and have not published yet. The Pakistan Bureau of Statistics has started compiling QNA since 2013 using the production approach, but the results have not been published yet. In Turkey, Turkstat is compiling and publishing QNA estimates based on the production and expenditure approaches. The discussions for the country presentations included clarifications on the need to distribute the output and value added of activities such as agriculture which take a long time to complete across the quarters, the proper method to calculate volume measures of taxes and subsidies on products and how to make better use of existing data sources such as labour force surveys to calculate volume measures of GDP. A copy of the presentations of ECO delegates is attached as ***Annex-VIII***.

5.   Closing Ceremony

At the closing session of the workshop, representatives of the SCI, ECO, and UNSD acknowledged the successful outcome of the training workshop based on the evaluation by participants who rated the training sessions as successful. The workshop participants also appreciated the joint efforts made by the above three institutions in preparing, organizing and conducting the event.

Dr. Adel Azar, Head of the SCI, in his message on the occasion of the closing ceremony of the workshop, expressed the hope that with the new knowledge gained in the training workshop, participants will contribute more effectively to the statistical development of their country. To maximize the benefits of the workshop, he advised the participants to put their new knowledge into practice as well as to share it with their colleagues. A copy of Dr. Azar's message is attached as _Annex-V_.

The training workshop concluded with the presentation of the Certificates of Completion of the training workshop to the participants.

6.   Expected Outcomes of the Training Course

Before the concluding session of the workshop, an Evaluation Form was distributed to the participants to gather their views and proposals on the topic and content of the workshop. A copy of Evaluation Form is attached as **_Annex-IX_**.

An analysis of the Evaluation Forms of the participants revealed the following:

1.   All the participants "Agree" and "Strongly Agree" that content of the training workshop was relevant to their work.

2.   Most of the participants (89%) "Agree" that content of the workshop was comprehensive enough.

3.   A vast majority of the participants (94%) "Agree" that content of the workshop was clear to them to understand.

4.   All the participants "Agree" and "Strongly Agree" that they have been able to follow the speed of the training workshop.

5.   A vast majority of the participants (94%) "Agree" that duration of the training workshop was adequate.

6.   Most of the participants (83%) believe that the time spent on theoretical lessons was "Just Right".

7.   The participants mostly (83%) evaluated the training materials as "Good" and "Very Good".

8.   The performance of the facilitator of the training workshop has been rated "Very Good" and "Good" by most of the participants (89%).

9.   All the participants evaluated the performance of the trainers as "Good" and "Very Good".

10.   The participants mostly (89%) are "Satisfied" and "Very Satisfied" with the meeting room and facilities.

11.   The participants mostly (89%) are "Satisfied" and "Very Satisfied" with overall training expectations.

12.   The following topics in economic statistics were proposed by the participants for ECO's consideration in organizing training courses and workshops in future:

        1) Non-observed economy/Informal sector
        2) Compilation of Supply-Use and Input-Output Tables in current prices and volume terms
        3) Compilation of sequence of accounts of the 2008 SNA
        4) Price statistics and indices (CPI, PPI,…)
        5) Seasonal adjustment in QNA
        6) Expenditure approach in 2008 SNA
        7) Tourism Account
        8) Environment Account
        9) Business registers

13.   The participants proposed the following suggestions for improvement of training activities in the future:

- Providing more training to the ECO National Statistical Offices.
- Allocating more time to practical training during the training period.
- Spending more time to resolve the problems of countries in the area related to the topic of the training workshop.