INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/298

UGANDA

TECHNICAL ASSISTANCE REPORT—REPORT ON THE QUARTERLY NATIONAL ACCOUNTS STATISTICS MISSION

September 2017

This technical assistance report on Uganda was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed on November 2014.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
PO Box 92780 • Washington, D.C. 20090
Telephone: (202) 623-7430 • Fax: (202) 623-7201
E-mail: publications@imf.org Web: http://www.imf.org
Price: $18.00 per printed copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

Statistics Department

UGANDA

REPORT ON THE QUARTERLY NATIONAL ACCOUNTS STATISTICS MISSION

November 13–26, 2014

Prepared by Zia Abbasi
Macroeconomic Statistics Advisor
East AFRITAC

December 30, 2014

CONTENTS **Page**

ABBREVIATIONS

AFE	East Africa Technical Assistance Center of the IMF
AFR	African Department, IMF
ANA	Annual national accounts
BOP	Balance of payments
BOU	Bank of Uganda
COBE	Census of Business Establishments
COE	Compensation of employees
CPI	Consumer price index
CSI	Construction services industry price indices
DFID	Department for International Development, United Kingdom
EDDI	Enhanced Data Dissemination Initiative
FCE	Final consumption expenditure
FISIM	Financial intermediation services indirectly measured
GDP	Gross domestic product
GFCF	Gross fixed capital formation
GO	Gross output
GVA	Gross value added
HFCE	Household final consumption expenditure
IC	Intermediate consumption
IMF	International Monetary Fund
ISIC	*International Standard Industrial Classification of All Economic Activities*
ITSS	International Trade in Services Survey
MOA	Ministry of Agriculture
MSA	Macroeconomic Statistics Advisor
NARO	National Agricultural Research Organization
NAS	National accounts statistics
NPIS	Non-Profit Institutions Survey
NWSC	National Water and Sewerage Corporation
PFS	Project Framework Summary
PPI	Producer price index
QGDP	Quarterly GDP
QNA	Quarterly national accounts
SNA	*United Nations System of National Accounts*
STA	Statistics Department, IMF
SUT	Supply and use tables
TA	Technical Assistance
TTMs	Trade and Transport Margins
UBI	Uganda Business Inquiry
UBOS	Uganda Bureau of Statistics
UCA	Uganda Census of Agriculture

UNHS	Uganda National Household Survey
UNPS	Uganda National Panel Survey
URA	Uganda Revenue Authority
VAT	Value added tax
WIP	Work-in-progress

EXECUTIVE SUMMARY

- In response to a request from the authorities and in consultation with the African Department (AFR), the Macroeconomic Statistics Advisor (MSA)[1] at the East Africa Technical Assistance Center (AFE)[2] undertook a technical assistance (TA) mission to Kampala during November 13–26, 2014 to assist with finalizing the rebased annual national accounts (ANA) and quarterly national accounts (QNA) estimates for dissemination. This activity (14STG38:23) was undertaken within the context of the following project: National Accounts Statistics STA_UGA_2011_07.

- The Uganda Bureau of Statistics (UBOS) is responsible for producing the National Accounts Statistics and is participating in the IMF–DFID: Enhanced Data Dissemination Initiative QNA Module to improve and expand the QNA estimates disseminated. In addition, it has been rebasing the Gross Domestic Product (GDP) estimates to 2009/10. The MSA undertook diagnostic missions during August and November 2010 to review the data sources and compilation methodology used to compile the ANA and QNA estimates and to make recommendations for improvements.

- Six follow-up missions were undertaken by the MSA during the period 2011 to 2013 to assist with improving data sources and methods, including compiling agriculture and construction work-in-progress estimates, improved quarterly constant price and new current price gross domestic product (GDP) estimates, and supply and use tables (SUT); as well as providing related training on the compilation methodology and use of source data.

- In addition, four short-term expert missions were undertaken during this period to assist with data quality assurance; and the development and compilation of the SUT. A further four missions by consultants from Oxford Policy Management assisted with SUT compilation.

- The missions in May and September 2014 by the MSA assisted in finalizing the SUT and 2009/10 benchmark estimates; provided advice on the compilation of the rebased annual and quarterly estimates of GDP by economic activity; and made further improvements to the compilation methodology, including improving the annual and quarterly estimates for public administration, public education, public health, and GDP by expenditure components.

---

[1] Zia Abbasi is the Macroeconomic Statistics Advisor based at the East Africa Financial Technical Assistance Center of the IMF in Dar es Salaam, Tanzania.

[2] AFE is a part of a network of IMF Regional Technical Assistance Centers and is supported by several donors. The external donors include African Development Bank, Australia, Canada, European Investment Bank, European Union, Germany, IMF, Switzerland, The Netherlands and United Kingdom (DFID). TA is provided to Eritrea, Ethiopia, Kenya, Malawi, Rwanda, Tanzania and Uganda.

- The current mission was requested by the authorities to assist with finalizing the rebased GDP estimates for dissemination. The quarterly and annual GDP by economic activity and GDP by expenditure estimates at current and constant 2009/10 prices for 2008 up to Quarter 2 of 2014 were finalized during the mission. The main statistical tables are included in Appendix I.

- For the economic activity worksheets, the nominal and real growth rates, IC/GO ratios at current and constant prices, and implicit price deflators were checked. A number of adjustments were made to the methodology to improve the representativeness of the indicators and the weights of the composite price indices in order to ensure the resulting estimates are within expectations. That is, ensuring that changes and trends can be explained and are comparable to other economic indicators.

- The estimates for expenditure components were also reviewed. While the current price estimates are of reasonable quality, the constant price estimates are weaker. There is considerable scope to improve the price deflators and constant price estimates. TA to improve the expenditure estimates will be provided during 2015.

- In addition, the rebased series were linked with the 2002 series and annual current price estimates and volume indices at the 1-digit industry level and for the main expenditure components were compiled for 1998/99 to 2007/08 financial years and 1998 to 2007 calendar years.

- A number of revisions have been made to the national accounts series back to 2008/09, as a result of the rebasing of GDP from the 2002 base year to the new 2009/10 base year. The revisions to the previous estimates have resulted in the overall level of GDP at current prices increasing by an average of 16.5 percent a year, with increases of 14.6 percent in 2008/09, 17.3 percent in 2009/10, 20.4 percent in 2010/11, 18.4 percent in 2011/12, 14.9 percent in 2012/13 and 13.1 percent in 2013/14.

- The compilation of supply and use tables (SUT) in developing the 2009/10 base year estimates significantly improved the coverage of economic activities in the economy; especially for the informal sector and non-profit institutions. The benchmark surveys and studies undertaken for the 2009/10 SUT were more comprehensive than for the 2002 benchmark exercise in providing information on the economy and industry structures; identifying new products and activities; and providing more accurate estimates for activities that were already being measured.

- In addition, the compilation methodology for producing the estimates has been significantly improved by implementing a number of recommendations of the *United Nations System of National Accounts 1993* (*1993 SNA*) and *2008 SNA* update.

- The methodological changes include implementing the work-in-progress (WIP) methodology for agriculture and construction; replacing imputed bank charges with allocated financial intermediation charges indirectly measured (FISIM); compiling estimates at a more detailed level; compiling separate output (GO) and intermediate consumption (IC) estimates; and reducing the use of fixed IC/GO ratios. The revised methodology also makes use of more representative value and volume indicators; and prices data.

- A new ANA Bulletin was prepared during the mission including estimates for 2008/09 to 2013/14 financial years and 2008 to 2013 calendar years. The bulletin includes the standard statistical tables including estimates at current prices and constant 2009/10 prices; implicit price deflators; and percentage contributions to GDP and growth rates for GDP by economic activity, at the 1-digit *International Standard Industry Classification, Revision 4* (ISIC Rev. 4) level, and GDP by expenditure components. In addition, new statistical tables of current and constant 2009/10 price estimates have been included for economic activities at the 1-digit ISIC Rev. 4 level for GO and IC; formal sector and informal sector production; market and non-market production; and monetary and non-monetary production.

- The existing QNA Bulletin has also been expanded to include quarterly original, seasonally adjusted and trend estimates of GDP and GVA by economic activity at the 1-digit ISIC Rev. 4 level at current and constant prices for all quarters of 2009/10 to 2013/14 (20 quarters). Both bulletins were released on November 28, 2014.

- The mission worked closely with the National Accounts Department staff. The cooperation and support of the authorities and counterpart staff is very much appreciated.

- The next TA mission under this project is planned for May 4–15, 2015. The mission will assist with developing the methodology for compiling independent estimates for Household Final Consumption Expenditure and to improve the constant price estimates for Exports and Imports of Goods and Services.

- The completed GDP rebase action plan is provided in Appendix II.

PROJECT FRAMEWORK SUMMARY FOR QUARTERLY NATIONAL ACCOUNTS

PROJECT DESCRIPTION

Technical assistance on the improvement of Quarterly National Accounts for Uganda.

PROJECT OBJECTIVES 1.0

Description	Verifiable Indicators	Assumptions/Risk
Improvement of Uganda's QNA System	QNA figures meet stakeholders' expectations in terms of quality and timeliness and abilities of the staff.	Assumptions are that the staffing shall be appropriate in terms of numbers and qualification in addition to the availability of TA and appropriate source data.

PROJECT OUTCOMES

DQAF	Priority	Outcomes Description	Verifiable Indicators	Completion Date	Implementation Status
0.2.1	H	**Statistics prerequisites:** Increase the current staffing level of NAS Unit by two statisticians in order to implement improvements to QGDP.	Current staffing level of NAS Unit increased from 8 to 10 statisticians.	11/21/2011	Completed. There are currently ten staff members in the NAS Unit, including eight statisticians and two data editors.
0.2.1	H	Train NAS staff on the use of improved source data and compilation techniques for producing ANA and QNA.	NAS staff has the appropriate capacity and skills to compile high quality ANA and QNA.	12/31/2014	Training is being provided during missions and workshops. Need to nominate staff for IMF and other NAS courses.
3.1.1	H	**Data sources:** Improvement of data sources and indicators used to compile ANA and QNA in current and constant prices.	The indicators are representative and provide adequate coverage for each economic activity, expenditure	12/31/2014	A number of new surveys are being implemented to address data gaps, and coordination with other data providers is being improved.

DQAF	Priority	Outcomes Description	Verifiable Indicators	Completion Date	Implementation Status
			component and other aggregates.		
3.3.1	M	**Statistical techniques:** Rebasing of QGDP	New base year 2009/10 QGDP series.	11/28/2014	Completed. SUT finalized and benchmark estimates compiled. QGDP series finalized and updated.
3.3.1	H	Improve the methodology for compiling QGDP at constant prices.	Methodology for compiling QGDP at constant prices revised.	05/31/2014	Completed. Improvements have been implemented and the QGDP estimates have been publicly released, with further improvements incorporated in 2013 and 2014.
3.3.1	H	Develop the methodology for compiling QGDP at current prices.	Methodology for compiling QGDP at current prices implemented.	05/31/2014	Completed. Methodology developed.
3.3.1	H	Develop the methodology for compiling quarterly output and IC estimates.	Output and IC estimates compiled.	05/31/2014	Completed. Methodology and GO and IC estimates developed.
3.3.1	H	Produce QGDP estimates by expenditure share in current and constant prices.	QGDP by expenditure estimates compiled.	12/31/2015	Methodology developed. To be implemented by NAS staff with AFE TA.
3.3.1	H	Produce quarterly estimates of other key NAS aggregates in current prices.	Quarterly estimates of GNI, GNDI, saving, net lending/borrowing in current prices compiled.	12/31/2015	Methodology developed. To be implemented by NAS staff with AFE TA.
5.1.1	H	**Dissemination:** Release QNA within three months after the reference quarter.	QNA released to the public within three months after the reference quarter.	12/31/2011	Completed. QGDP estimates in constant prices were released to the public in early October 2011. UBOS plan to improve timeliness to two months.

DQAF	Priority	Outcomes Description	Verifiable Indicators	Completion Date	Implementation Status
5.1.1	H	Release QGDP by economic activity based on one digit on ISIC revision 4. - press release/media - publications/websites	QGDP by activity based on one digit on ISIC revision 4 released.	11/28/2014	Completed.
5.2.1	H	Update and release revised concepts, sources and methods manual for QGDP.	Updated QGDP manual disseminated.	11/28/2014	Completed.

Priority Scale: H - High M - Medium O - Other

TA ACTIVITIES - COMPLETED AND PLANNED UNDER THE QNA PROJECT

Date	ID	TA Activity Description
11/15/2010 – 11/26/2010	11STW5215	AFE LTE: National Accounts Statistics Mission
05/05/2011 – 05/18/2011	11STZ2714	AFE LTE: Quarterly National Accounts Statistics Mission
11/08/2011 – 11/17/2011	11STZ2718	AFE LTE: Quarterly National Accounts Statistics Mission
05/08/2012 – 05/17/2012	12ST46309	AFE LTE: Quarterly National Accounts Statistics Mission
11/05/2012 – 11/16/2012	12ST46310	AFE LTE: Quarterly National Accounts Statistics Mission
05/20/2013 – 05/31/2013	13ST80910	AFE LTE: Quarterly National Accounts Statistics Mission
11/04/2013 – 11/15/2013	13ST80911	AFE LTE: Quarterly National Accounts Statistics Mission
05/05/2014 – 05/23/2014	14STG3806	AFE LTE: Quarterly National Accounts Statistics Mission
09/15/2014 – 09/26/2014	14STG3816	AFE LTE: Quarterly National Accounts Statistics Mission
11/13/2014 – 11/26/2014	14STG3823	AFE LTE: Quarterly National Accounts Statistics Mission
05/04/2015 – 05/15/2015	TBA	AFE LTE: Quarterly National Accounts Statistics Mission

I. INTRODUCTION

1. In response to a request from the authorities and in consultation with the African Department (AFR), the Macroeconomic Statistics Advisor (MSA) at the East Africa Technical Assistance Center (AFE) undertook a technical assistance (TA) mission to Kampala during November 13–26, 2014 to assist with finalizing the rebased annual national accounts (ANA) and quarterly national accounts (QNA) estimates for dissemination. This activity (14STG38:23) was undertaken within the context of the following project: National Accounts Statistics STA_UGA_2011_07.

2. The Uganda Bureau of Statistics (UBOS) is responsible for producing the National Accounts Statistics and is participating in the IMF–DFID: Enhanced Data Dissemination Initiative QNA Module to improve and expand the QNA estimates disseminated. In addition, it has been rebasing the Gross Domestic Product (GDP) estimates to 2009/10. The MSA undertook diagnostic missions during August and November 2010 to review the data sources and compilation methods used to compile the ANA and QNA estimates and to make recommendations for improvements.

3. Six follow-up missions were undertaken by the MSA during the period 2011 to 2013 to assist with improving data sources and methods, including compiling agriculture and construction work-in-progress estimates, improved quarterly constant price and new current price gross domestic product (GDP) estimates, and supply and use tables (SUT); as well as providing related training on the compilation methodology and use of source data. In addition, four short-term expert missions were undertaken during this period to assist with data quality assurance; and the development and compilation of the SUT. A further four missions by consultants from Oxford Policy Management assisted with SUT compilation.

4. The missions in May and September 2014 by the MSA assisted in finalizing the SUT and 2009/10 benchmark estimates; provided advice on the compilation of the rebased annual and quarterly GDP by economic activity; and made further improvements to the methodology, including improving the annual and quarterly estimates for public administration, public education, public health, and GDP by expenditure components.

5. The current mission was requested by the authorities to assist with finalizing the rebased GDP estimates for dissemination. The mission worked closely with the National Accounts Department staff. The cooperation and support of the authorities and counterpart staff is very much appreciated.

6. To assist the reader, this report includes an Executive Summary on the main findings and an updated Project Framework Summary. Following this introduction, Chapter II provides a brief update in relation to the statistics prerequisites. Chapter III provides a summary of the rebased GDP estimates and revisions. Chapter IV provides detailed information on the methodology used to compile the rebased estimates of GDP by economic activity, while Chapter V summarizes the

methodology used to compile the rebased GDP by expenditure estimates. The rebased annual GDP estimates are included in Appendix I. The completed action plan for the release of the rebased GDP estimates is provided in Appendix II.

II. STATISTICS PREREQUISITES

7. Budget funding for the UBOS has been significantly constrained in recent years. However, most of the data needed for compilation of the SUT and GDP rebasing was eventually collected. The main data gaps remaining relate to detailed international trade in services and the detailed product breakdown of IC components by economic activity. The Integrated Trade in Services Survey has now been conducted and the results will be available for the next rebasing exercise. *The benchmark industry production surveys need to be improved to collect more detailed IC data*.

8. *As the next GDP rebase will be for 2015, it is strongly recommended that UBOS secure appropriate budget funding for benchmark surveys and to recruit a suitable expert to provide the 40 weeks of TA that will be required*. Both Kenya and Rwanda provide good examples of how this should be done using a single external consultant with support from the AFE MSA, as needed.

9. The current staffing level for the NAS Unit is now nine staff, comprising eight statisticians and one data editor. *There is a need to increase staff skills development through attendance at regional/international NAS courses, as well as training during TA missions*. The MSA and short-term experts have provided training to NAS compilers during missions on good compilation practices and better use of indicators and price indices in compiling ANA and QNA. In addition, some staff members have been participated in the two-week AFE NAS training course conducted in Tanzania during February 2012; and the AFE QNA training courses in Uganda during September 2012 and February 2014.

10. *As recommended previously, consideration needs to be given to reviewing and improving survey and data processing timetables. There is also a need to improve data coordination and understanding of NAS requirements within UBOS and with other data providers. The recommended NAS Technical Committee is yet to be established.*

III. REBASED GDP ESTIMATES

11. A summary of the rebased GDP estimates for 2008/09 to 2013/14 is presented in this chapter of the report. The analysis focuses on real growth at constant 2009/10 prices, unless stated otherwise.

Table 1: Growth Rates by Sector and Total GDP (Constant 2009/10 Prices)

Sector	2009/10	2010/11	2011/12	2012/13	2013/14
Agriculture, forestry and fishing	3.2%	2.9%	1.1%	1.8%	1.5%
Industry	7.8%	11.4%	3.1%	4.3%	4.3%
Services	5.9%	12.4%	4.9%	4.0%	4.2%
Taxes less subsidies on products	1.1%	11.9%	15.5%	0.5%	15.5%
Total	5.2%	9.7%	4.4%	3.3%	4.5%

12. In 2013/14, the economy grew in real terms by 4.5 percent at 2009/10 constant prices, compared to 3.3 percent in 2012/13.

13. The estimated nominal GDP for 2013/14 grew by 7.0 percent in current prices, compared to the revised 2012/13 growth rate of 7.5 percent; while the GDP implicit price deflator only increased 2.4 percent compared to 4.1 percent in the previous year.

Table 2: Contribution to GDP (Constant 2009/10 Prices)

Sector	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Agriculture, forestry and fishing	26.7	26.2	24.6	23.8	23.5	22.8
Industry	17.7	18.1	18.4	18.2	18.4	18.3
Services	48.2	48.5	49.7	49.9	50.3	50.2
Taxes less subsidies on products	7.4	7.2	7.3	8.1	7.9	8.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

14. The gross value added (GVA) for the Agriculture Sector increased by 1.5 percent in 2013/14, in constant 2009/10 prices. In real terms, the GDP share of the Agriculture Sector decreased from 26.7 percent in 2008/09 to 22.8 percent in 2013/14.

15. By comparison the Industry Sector grew by 4.3 percent in 2013/14. The Industry Sector share of GDP has declined in real terms, accounting for 18.3 percent in 2013/14 compared to 17.7 percent in 2008/09.

16. The Services Sector grew by 4.2 percent in 2013/14, accounting for 50.2 percent of total GDP in constant 2009/10 prices in 2013/14, compared to 48.2 percent in 2008/09.

17. Taxes less subsidies on products continued to grow significantly, up 15.5 percent in 2013/14, and accounting for 8.7 percent of GDP, compared to 7.4 percent of GDP in 2008/09.

18. The estimated GDP per capita in 2013/14 in current prices was 2.001 million Uganda Shillings (UGX), up 4.0 percent from the previous year, and 788 US Dollars

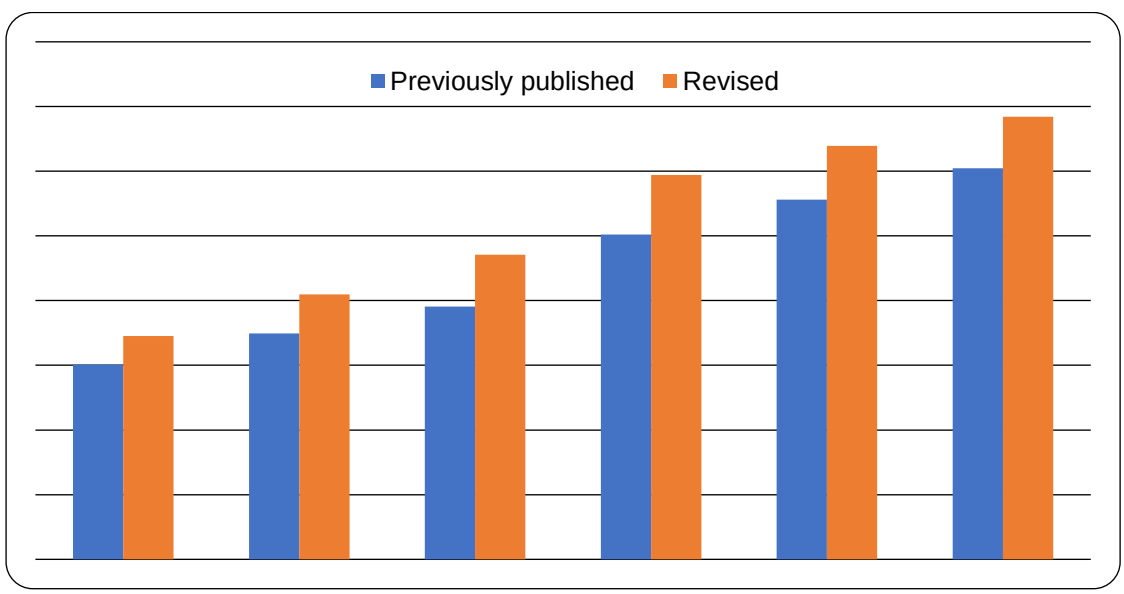
(USD), up 6.1 percent. In real terms, GDP per capita increased 1.5 percent at constant 2009/10 prices in 2013/14 to UGX 1.480 million and increased 1.5 percent to USD 730.

Table 3: GDP per Capita

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP at market prices						
At current prices (Billion shillings)	34,504	40,946	47,078	59,420	63,905	68,407
At constant 2009/10 prices (Billion shillings)	38,933	40,946	44,907	46,888	48,422	50,605
GDP per capita at current prices						
GDP per capita (UGS '000)	1,171	1,348	1,504	1,843	1,925	2,001
GDP per capita (US $)	607	665	648	721	743	788
GDP per capita at constant prices						
GDP per capita (UGX '000)	1,321	1,348	1,435	1,454	1,458	1,480
GDP per capita (US $)	651	665	707	717	719	730
Memorandum items						
Population ('000)	29,464	30,369	31,294	32,239	33,204	34,188
Exchange rate UGX per US $	1,930	2,029	2,323	2,557	2,591	2,538

19. A number of revisions have been made to the national accounts series back to 2008/09, as a result of the rebasing of GDP from the 2002 base year to the new 2009/10 base year. The revisions to the previous estimates shown in the chart above have resulted in the overall level of GDP at current prices increasing by an average of 16.5 percent a year, with increases of 14.6 percent in 2008/09, 17.3 percent in 2009/10, 20.4 percent in 2010/11, 18.4 percent in 2011/12, 14.9 percent in 2012/13 and 13.1 percent in 2013/14.

Figure 1: GDP at Current Prices in Billions of Shillings



20. The compilation of supply and use tables (SUT) in developing the 2009/10 base year estimates significantly improved the coverage of economic activities in the economy; especially for the informal sector and non-profit institutions. The benchmark surveys and studies undertaken for the 2009/10 SUT were more comprehensive than for the 2002 benchmark exercise in providing information on the economy and industry structures; identifying new products and activities; and providing more accurate estimates for activities that were already being measured.

21. In addition, the compilation methodology for producing the estimates has been significantly improved by implementing a number of recommendations of the *United Nations System of National Accounts 1993* (*1993 SNA*) and *2008 SNA* update. The changes include implementing the work-in-progress (WIP) methodology for agriculture and construction; replacing imputed bank charges with allocated financial intermediation charges indirectly measured (FISIM); compiling estimates at a more detailed level; compiling separate gross output (GO) and intermediate consumption (IC) estimates; and reducing the use of fixed IC/GO ratios.

22. The revised methodology also makes use of more representative value and volume indicators; and prices data. These improvements in the compilation methods have resulted in higher GVA and GDP levels; and contributed to the revisions. For example, the improved methodology for calculating gross trade margins contributed a 2.2 percent increase in the GDP level for 2009/10, while replacing estimates based on imputed bank service charges with estimates of FISIM (allocated across industries and expenditure components) contributed to a further increase of 1.2 percent to the new GDP level.

23. The rebased series were linked with the 2002 series and annual current price estimates and volume indices at the one-digit industry level and for the main expenditure components were compiled for 1998 to 2007.

24. A new ANA Bulletin was prepared during the mission including estimates for 2008/09 to 2013/14 financial years and 2008 to 2013 calendar years. The bulletin includes the standard statistical tables including estimates at current prices and constant 2009/10 prices; implicit price deflators; and percentage contributions to GDP and growth rates for GDP by economic activity, at the 1-digit *International Standard Industry Classification, Revision 4* (ISIC Rev. 4) level, and GDP by expenditure components. In addition, new statistical tables of current price and constant 2009/10 price estimates have been included for economic activities at the 1-digit ISIC Rev. 4 level for GO and IC; formal sector and informal sector production; market and non-market production; and monetary and non-monetary production.

25. The existing QNA Bulletin has also been expanded to include quarterly original, seasonally adjusted and trend estimates of GDP and GVA by economic activity at the 1-digit ISIC Rev. 4 level at current and constant prices for all quarters of 2009/10 to 2013/14 (20 quarters). Both bulletins were released on November 28, 2014.

IV. GDP BY ECONOMIC ACTIVITY

26. All compilation worksheets were reviewed during the mission and updated using the latest indicator and prices data collected by the national accounts compilers, including revised data for 2010/11 up to 2013/14. For the economic activity worksheets, the nominal and real growth rates, IC/GO ratios at current and constant prices, and implicit price deflators were checked; and adjustments were made to the methodology to ensure the resulting estimates are within expectations. That is, ensuring that changes and trends can be explained and are comparable to other economic indicators.

27. With the exception of Ministry of Agriculture (MOA) crops and General Government expenditure data, the same monthly/quarterly data used to compile the quarterly estimates are also used to compile the annual estimates of GO, IC and gross value added (GVA). As a result, the annual estimates are derived from aggregating the estimates for the relevant quarters.

28. The methodology uses detailed value-added tax (VAT) turnover data for a number of services industries at the 2-digit *International Standard Industry Classification, Revision 4* (ISIC Rev. 4) level. As no VAT turnover data are available for 2008, various value and volume indicators, and price indices have been used to compile current price estimates for the relevant 2-digit ISIC Rev. 4 industries in ISIC Sections J, K, L, M, N, R and S. The latest version of the compilation methodology is discussed in the following sections.

A. Agriculture, Forestry and Fishing

Agriculture Crops

29. Agriculture Crops estimates are derived using a WIP methodology in line with the recommendations of the *2008 SNA*, replacing the previous at harvest methodology. The 2008/09 Uganda Census of Agriculture (UCA) data on area cultivated, harvest, yield rates and crop prices were updated to 2009/10 to compile output for the main food crops. The 2009/10 Uganda National Household Survey (UNHS) consumption expenditure data, Development Authorities procurement data, exports and other source data were used to compile the GO for other crops. Detailed GO, IC and GVA estimates per acre for the major crop types in current prices are based on an Agriculture Study conducted in 2012 for reference year 2011.

30. The *ISIC AA – Cash Crops.xls* file incorporate production estimates for coffee, cocoa, cotton, flowers, palm, sugar cane, tea, tobacco, and vanilla. The main source data for compiling the annual and quarterly estimates are procurement data from the Development Authorities and exports data. For ongoing estimation purposes, all cash crop production is treated as monetary and as formal sector activity. The distribution of total inputs across each season is used to allocate the GO for cash crops on a quarterly basis and in deriving IC and GVA estimates.

31. The compilation file, *ISIC AB – Food Crops.xls* includes detailed estimates of GO, IC and GVA estimates in current and constant 2009/10 prices for the 22 main food crops for Quarter 1 of 2008 onwards, including: maize, millet, sorghum, paddy rice, wheat, other cereals, cassava, Irish potatoes, sweet potatoes, other root crops, beans, cow peas, field peas, pigeon peas, other legumes and pulses, ground nuts, soya beans, sesame, sunflowers, other vegetables, bananas and other fruit.

32. Post harvest quantities and area cultivated data from the Ministry of Agriculture (MOA) are available for 17 of these crops. A small quarterly agriculture survey with an annual sample of around 500 farmers is conducted for quality assurance purposes. In addition, it has enabled collection of quarterly indicator data on output yield rates, inputs and farm gate output prices and purchaser prices for inputs.

33. The yield rate and change in area cultivated for maize is used to extrapolate the area cultivated and output quantities for minor cereals; sweet potatoes data has been used for yams; and beans and peas data for other legumes and pulses. For the other fruits and other vegetables crop groups, a composite volume index based on growth in the total area cultivated and population has been used. The 2009/10 farm-gate prices for GO and IC are extrapolated using price indexes based on the Consumer Price Index (CPI) and Construction Services Industry Price Indices (CSI).

34. The worksheets include monetary and non-monetary breakdowns by crop type using the 2009/10 UNHS data on production for own consumption. The non-monetary subsistence component is extrapolated using the rural population growth rate as a proxy for subsistence farming. The monetary component is derived as a residual by deducting the non-monetary from the total. All production of food crops is treated as informal sector activity, until any large commercial farms are identified and production data collected.

Livestock

35. The estimates for Livestock are derived using a perpetual inventory method (PIM) and the WIP methodology in line with the recommendations of the *2008 SNA*, replacing the previous methodology based on annual data reported by the MOA. The 2009/10 estimates for GO, IC, and GVA for animal production are based on updated intake and off-take ratios and benchmark prices data from the 2009/10 Uganda National Panel Survey (UNPS); and the 2008 Livestock Census. For ongoing compilation, data on live animals sold to abattoirs; prices received by farmers per live animal, carcass weight, and meat and offal weight per animal; as well as output price indexes for various livestock products and various input price indexes are used.

36. The *ISIC AC – Animal Production.xls* file includes production for 10 types of livestock and related animal products, including: indigenous cattle, exotic cattle, goats, sheep, pigs, rabbits, camels and equine, chicken, other poultry, and bees; and blood; lard, meat, offal and hides and skins from farm slaughter; milk, eggs, manure

and honey. The file includes monetary and non-monetary production breakdown, using the same methodology as for food crops. Meat slaughtered on farm is treated as a secondary output as this activity takes place within the same livestock raising activity (and like raw milk a lot is consumed by the agricultural household). The GO and GVA for farm produced meat is recorded within this industry. All production is treated as informal sector activity, until any large commercial dairy farmers or ranches are identified and production data collected.

Agriculture Support Services

37. The benchmark estimates in the *ISIC AD - Agriculture Support Services.xls* file are based on data sourced from the Non-Profit Institutions Survey (NPIS). This activity was not previously measured and is an improvement in the coverage of the GDP estimates. All production is treated as monetary and formal sector. The constant price benchmark estimates are extrapolated using the movement in the monetary GO for agriculture crops and animal production. Composite price indices are used to reflate the constant price GO and IC estimates to current prices, with GVA derived as a residual.

Forestry

38. Data from the UCA, UNPS and UNHS were used to derive the 2009/10 benchmarks estimates. The benchmark estimates for logging in the *ISIC AE – Forestry.xls* file are extrapolated using constant price inputs of wood for construction and furniture manufacturing; and exports. The CSI timber price index is used for deflation/reflation.

39. The constant price estimates for firewood consumption by households are extrapolated using trend estimates of household use of firewood for cooking from the 2002 Population Census and the 2009/10 UNHS. For charcoal, the household consumption trend data between the 2005/06 and 2009/10 UNHS, adjusted to 2009/10 prices, is used to produce a volume indicator. This volume indicator is used to extrapolate the benchmark estimate to produce the constant price GO estimates. For intermediate demand for fuel wood, a volume indicator based on the constant price output for manufacturing and accommodation and food services is used. The combined charcoal and firewood CPI is used to reflate fuel wood constant price estimates to derive current price estimates.

40. The estimates for other forestry products are extrapolated using the current and constant price movement for all other forestry activities' production. The file includes a monetary/non-monetary split of production. Logging is treated as formal sector production, and all other monetary production is treated as informal sector production.

Fishing

41. The benchmark estimates for fishing are based on the 2009/10 UNHS household consumption and external trade data, adjusted in the SUT framework for intermediate demand by other industries. The current and constant price GO estimates in the *ISIC AF – Fishing.xls* file are compiled by extrapolating the benchmark estimates using the commodity flow approach. That is, domestic production is derived by adding domestic consumption and exports and deducting imports. The CPI for fresh fish is used for the GO price index. The benchmark IC/GO ratio is used to estimate IC, with GVA derived as a residual. The file includes a monetary/non-monetary split of production. All monetary production is treated as informal sector production.

B. Mining and Quarrying

42. The formal sector benchmark estimates are based on the latest Uganda Business Inquiry (UBI), Uganda Revenue Authority (URA) income tax and other source data, with informal sector derived as a residual in the SUT framework. Separate estimates for petroleum, mining and quarrying activities are compiled in the *ISIC B – Mining and Quarrying.xls* file. Current price GO and constant price GO and IC estimates are compiled by extrapolating the benchmark estimates using volume indices based on production quantities and value indices based on value (prices multiplied by quantities) of mining and quarrying products from the Construction industry file and the Mines Department.

43. The benchmark IC/GO ratios are used to derive the constant price IC and composite IC price indices are used to reflate these estimates to produce current price IC. GVA estimates are derived as residuals. All production is treated as monetary.

C. Manufacturing

44. The benchmark estimates are based on various data sources, including the Census of Business Establishments (COBE), UBI, and URA income tax data, balanced using the SUT framework. These benchmark estimates for 43 manufacturing activities are extrapolated in the *ISIC C – Manufacturing.xls* file using quarterly volume indicators based on the Index of Production (IOP), abattoir slaughter data and exports data for tobacco to derive constant price GO and IC estimates (using the benchmark IC/GO ratio), with GVA derived as a residual.

45. The current price GO estimates are estimated by extrapolating the GO benchmarks using value indicators that have been derived by reflating the volume indicators using the detailed Manufacturing Producer Price Index (PPI). For IC estimates, composite price indices, based on the CPI, PPI and implicit price deflators (IPD) for animal production GO and logging GO, are used to reflate the volume indicators to produce an IC value indicator for each industry and used to extrapolate the benchmark IC estimate. GVA is derived as a residual.

46. Separate GO, IC and GVA estimates at current and constant 2009/10 prices are compiled for each of the 43 activities, including at the total level; monetary formal and informal sectors; and for non-monetary production for own final use, where appropriate.

D. Electricity, Gas, Steam and Air Conditioning Supply

47. The GVA for the industry is estimated as the sum of the GVA of the distributor and the domestic generating companies selling electricity to the distributor. The benchmark GO and IC estimates are based on URA 2009/10 income tax data and extrapolated in the *ISIC D – Electricity Supply.xls* file using the volume of electricity distributed and the benchmark IC/GO ratio, with GVA derived as a residual.

48. For current prices, the benchmark GO estimate is extrapolated using a value index (based on inflating the volume index using the CPI for electricity and adjusted to 2009/10 = 100). All production is treated as monetary formal sector.

E. Water Supply, Sewerage and Waste Management Activities

49. For constant price estimates, the benchmark GO and IC estimates in the *ISIC E – Water Supply, Sewerage and Waste Management.xls* file for the formal sector are extrapolated using the volume of water distributed by the National Water Supply Company (NWSC) and the benchmark IC/GO ratio, with GVA derived as a residual. The NWSC provides water supply and sewerage collection services. The same indicator is used to extrapolate the informal sector monetary GO, and the informal sector IC/GO ratio will be applied to derive the IC, with GVA derived as a residual. For the non-monetary component, the trend growth rate of households collecting their own water (e.g., from communal wells, rivers, lakes) between the 2005/06 and the 2009/10 UNHS is used to extrapolate the benchmark GO and GVA estimates. There is no IC for non-monetary water collection by households, only GVA (labor).

50. For current price estimates, the CPI water charges index is used to reflate the volume indices to produce value indices where 2009/10 = 100. These indices are used to extrapolate the three benchmark GO estimates.

F. Construction

51. The WIP methodology is used to compile annual and quarterly construction industry production and gross fixed capital formation (GFCF) estimates at current and constant 2009/10 prices. The benchmark 2009/10 estimates have been developed using various data sources, including the URA income tax data, 2009/10 UNHS data for informal sector and the construction services price index weights, adjusted using the SUT framework. The benchmark estimates by type of construction activity are extrapolated using volume and value indices for a range of construction materials in the *ISIC F – Construction.xls* file to compile the ongoing GO, IC and GVA estimates in both current prices and constant 2009/10 prices. The commodity flow approach is

used to develop these indices of use of various materials in construction activities. The source data for the volume indicators comes from the IOP and the Mines Department for domestic production, and deflated imports and exports data from the URA external trade data and the Informal Cross Border Trade Survey (ICBTS).

52. The 2009/10 UNHS housing characteristics data and construction materials prices data have been used to compile benchmark estimates for traditional dwellings construction. The volume indicator used to extrapolate the benchmark estimates to compile quarterly constant price estimates is based on the trend growth rate in the number of traditional dwellings between the 2002 Population Census and 2009/10 UNHS. The growth rate indicator has been adjusted for dwelling replacements.

53. The URA external trade data (i.e., exports quantity, exports value, imports quantity, imports duties, and imports values) at the 4-digit level of the Harmonized System is aggregated into broader categories of construction materials, durable equipment, valuables, consumption goods and intermediate goods in the *External Trade.xls* file. The aggregated URA trade data, ICBTS data, and domestic production data for construction materials are aggregated into 13 main groups (i.e., timber, paint, plastic products, bricks and tiles, cement, concrete articles, steel bars, roofing sheets, other iron and steel products, electrical wire and cable, aggregate, lime, bitumen). The data are adjusted for product taxes, trade and transport margins (as appropriate) to produce value and volume indexes to extrapolate the benchmark estimates of construction materials by type of construction activity (i.e., own-account traditional and modern residential building, other residential buildings, non-residential buildings, and civil works). The construction materials value and volume indicators are lagged one quarter to take account of the timing differences between supply and use of the materials in construction.

54. The current price external trade data for construction materials are deflated, and domestic production volumes are adjusted to current values, using various CSI prices. Benchmark ratios are applied to the constant price material inputs to derive the other IC components (e.g., electricity, fuel, and other services) and GVA. Relevant price indices are used to reflate these IC components and GVA to produce the current price estimates. Separate estimates at current and constant 2009/10 prices are produced for total construction activity, formal and informal sectors, and for the non-monetary production (i.e., traditional dwelling construction).

G. Motor Vehicle Sales and Repairs, and Other Wholesale and Retail Trade

55. For ***sales and repairs of motor vehicles and motorcycles***, the benchmark estimates for sales margins in the *ISIC G – Trade and Repairs.xls* file are extrapolated using value and volume indices compiled using imports data to derive current and constant price estimates. A weighted composite volume indicator based on motor registration data is used to extrapolate the benchmark GO estimate for repairs to derive the constant price GO estimate. This is reflated using a price index based on the CPI for vehicle maintenance to derive the current price GO. The

benchmark IC/GO ratio is used to derive constant price IC, with GVA derived as a residual. A composite IC price index is used to reflate the constant price IC to current prices and then derive the GVA as a residual. Separate estimates for the formal and informal sectors are compiled.

56. For ***wholesale and retail trade***, the gross margins estimates balanced in the SUT framework and UBI IC/GO ratios have been used for the total, formal and informal GO and IC benchmarks respectively. The benchmark gross margin estimates are extrapolated using 16 value and volume indices, derived from the monetary GO for agriculture, forestry, fishing, mining and quarrying and manufacturing, and imports data. The benchmark IC/GO ratio is used to derive constant price IC, with GVA derived as a residual. A composite IC price index is used to reflate the constant price IC to current prices and then derive the GVA as a residual. Separate estimates for the formal and informal sectors are compiled. The dummy indicator data for cash crops and mining were replaced by actual data during the mission.

H. Transport and Storage

57. Separate formal and informal sector estimates are compiled in the *ISIC H – Transport and Storage.xls* file for each transport and storage activity, as appropriate. For ***rail transport***, quarterly financial data are used to compile the current price estimates. A volume indicator based on net ton-kilometers is used to extrapolate the benchmark estimates to derive the constant price estimates.

58. Constant price GO and IC estimates for ***road passenger transport*** are compiled by extrapolating the benchmark GO using a weighted composite passenger volume index (based on vehicle registration and tourist arrivals data) and the benchmark IC/GO ratio. Current price GO and IC are estimated by extrapolating the benchmarks using value indices, which are derived from reflating the constant price series using appropriate composite price indexes (CPI bus and taxi fares for GO and CPI petrol, maintenance and other services for IC). GVA estimates are derived as residuals. Constant price GO and IC estimates for ***road freight transport*** are compiled by extrapolating the benchmark GO using a weighted composite freight volume index (based on vehicle registration, diesel sales and constant price trade margins) and the benchmark IC/GO ratio. Current price GO and IC are estimated by extrapolating the benchmarks using value indices, which are derived from reflating the constant price series using appropriate composite price indexes (CPI transport for GO and CPI diesel, maintenance and other services for IC). GVA estimates are derived as residuals.

59. For ***water transport***, constant price GO and IC estimates are compiled by extrapolating the benchmark GO estimate using the rural population growth rate, as the closest proxy available for water transport mainly in rural areas, and the benchmark IC/GO ratio. CPI transport fares and a composite IC price index are used to produce value indices that are then used to compile the current price GO and IC.

GVA estimates are derived as residuals. The current price GO estimates for ***air transport*** are compiled by extrapolating the benchmark estimate using a value index based on VAT turnover. The current price estimates are deflated using a price index based on the transport fares CPI. The benchmark IC/GO ratio is applied to the constant price GO estimates to derive the constant price IC. Current price IC estimates are estimated by reflating the constant price IC using a composite IC price index. The GVA estimates are derived as residuals.

60. For ***warehousing and support activities***, constant price GO and IC estimates are compiled by extrapolating the benchmark GO using a weighted composite volume index (based on freight, passenger and mail volumes) and the benchmark IC/GO ratio. A composite GO price index (based on CPI rents and other services) and a composite IC price index are used to produce value indices that are then used to compile the current price GO and IC. GVA estimates are derived as residuals.

61. Constant price GO and IC estimates for ***postal and courier services*** are compiled by extrapolating the benchmark GO using a composite volume index (using mail cargo and postal volume indicators) and the benchmark IC/GO ratio. A GO price index (based on CPI transport fares) and a composite IC price index are used to produce value indices that are then used to compile the current price GO and IC. GVA estimates are to be derived as residuals.

I. Accommodation and Food Service Activities

62. In the *ISIC I – Accommodation and Food Service Activities.xls* file, the constant price GO and IC estimates for ***accommodation services*** are compiled by extrapolating the benchmark GO using a composite volume index (based on the trend constant price growth rate between 2005/06 and 2009/10 UNHS household consumption expenditure, tourists and constant price IC for client industries) and the benchmark IC/GO ratio. A GO price index (based on CPI accommodation/rents) and a composite IC price index are used to produce value indices that are then used to compile the current price GO and IC. GVA estimates are derived as residuals.

63. For ***food and beverage service activities***, constant price GO and IC estimates are compiled by extrapolating the benchmark GO using a composite volume index (based on the trend constant price growth rate between the 2005/06 and 2009/10 UNHS household consumption expenditure, tourists and constant price IC for client industries) and the benchmark IC/GO ratio. A GO price index (based on CPI meals away/restaurants) and a composite IC price index are used to produce value indices that are then used to compile the current price GO and IC. GVA estimates are derived as residuals.

J. Information and Communication

64. For ***telecommunications***, the constant price GO estimates are compiled in the *ISIC J – Information and Communication.xls* file by extrapolating the benchmark estimates using volume indices based on talk time within network, across networks,

international, and fixed line; internet usage and connections. The constant price IC is derived by applying the benchmark IC/GO ratio to the GO estimates. Constant price GVA is derived as a residual. The current price GO estimates are compiled by extrapolating the benchmark estimates using value indices derived by reflating the volume indices using the CPI for various telecommunication charges. A composite IC price index is used to reflate the constant price IC to derive current price IC, with the GVA being derived as a residual.

65. As household consumption expenditure on books and magazines accounts for more than 90 percent of the benchmark GO estimate, the benchmark estimate for ***publishing*** is extrapolated using the trend constant price growth rate between UNHS 2005/06 and 2009/10 household consumption expenditure to derive constant price GO. Constant price IC is compiled by applying the benchmark IC/GO ratio, with GVA derived as a residual. A value index has been developed using the CPI for text books and newspapers to reflate the volume index and is used to derive the current price GO estimate. A composite IC price index is used to reflate the constant price IC to derive current price IC, with the GVA being derived as a residual.

66. For ***audio-visual production and distribution activities, broadcasting and programming, computer and information services***, there are no comprehensive source data available for ongoing estimation. Value indices based on VAT turnover data are used to extrapolate the benchmark GO estimates to derive current price GO estimates. The value indices are converted to volume indices using the services CPI in order to derive the constant price GO estimates. The benchmark IC/GO ratios are applied to compile the constant price IC estimates, with the GVA estimates derived as residuals. Composite IC price indices are used to construct IC value indices to extrapolate the IC benchmark for each activity, with current price GVA estimates derived as residuals.

K. Financial and Insurance Activities

67. The main annual and quarterly input data used for the compilation of the estimates for the Bank of Uganda (BOU) and financial intermediaries in the *ISIC K – Financial and Insurance.xls* file is sourced from the BOU and commercial banks. The GO estimates for the BOU are derived using the cost approach (i.e., adding IC and GVA) for both current prices and constant prices. The constant price estimates are derived by deflating the current price estimates using the general CPI for compensation of employees; the equipment hire CSI for consumption of fixed capital; and the services CPI for IC.

68. The estimates for financial intermediation services indirectly measured (FISIM) in current prices are derived using the reported data on interest payable and receivable; and a weighted average interest rate applied to the value of deposits and loans. The constant price estimates are derived by extrapolating the benchmark estimates using volume indices for deposits and loans deflated using the general CPI. Other revenue is deflated using the services CPI. Reported data are used to compile

the current price IC for financial intermediaries, with current price GVA derived as a residual. The benchmark 2009/10 IC/GO ratios are applied to the constant price GO estimates to compile the constant price IC estimates, with the constant price GVA estimates derived as residuals. As FISIM on deposits and loans have been fully allocated to the IC of each economic activity and relevant expenditure component, there is no explicit deduction made for FISIM to the sum of the GVA for economic activities in deriving GDP.

69. For other financial services and auxiliaries (e.g., microfinance, foreign exchange dealers, stock exchange and brokers); insurance activities (including providers, agents and brokers); and pension funds, separate worksheets with benchmarks and indicators based on VAT turnover data for each activity are used to compile the estimates. The benchmark 2009/10 IC/GO ratios are applied to the constant price GO estimates to compile the constant price IC estimates, with the constant price GVA estimates derived as residuals. Composite IC price indices are used to reflate the constant price IC to compile the current price IC estimates for insurance and auxiliary activities. The current price GVA estimates are then derived as residuals.

L. Real Estate Activities

70. The benchmark GO estimates for ***actual and imputed rents*** in the *ISIC L – Real Estate Activities.xls* file are extrapolated using volume indices based on the trend constant price growth rate between the 2005/06 and 2009/10 UNHS household consumption expenditure to derive constant price GO estimates. Constant price IC estimates are compiled by applying the benchmark IC/GO ratio, with GVA estimates derived as residuals. A GO value index has been developed using the CPI rents to reflate the volume index, and is used to derive the current price GO estimates. An IC value index has been developed using the CPI repairs and maintenance to reflate the volume index, and is used to derive the current price IC estimates. The GVA estimates are derived as residuals.

71. For other ***real estate activities***, a value index based on VAT turnover data is used to extrapolate the benchmark GO estimate to derive current price GO estimates. The value index is converted to a volume index using the services CPI in order to derive the constant price GO estimate. The benchmark IC/GO ratio is applied to compile the constant price IC estimates, with the GVA estimates derived as a residual. A composite IC price index is used to develop the IC value index to compile the current price IC estimate. The GVA estimate is derived as residual.

M. Professional, Scientific and Technical Activities

72. Composite volume indices based on constant price output of client industries and deflated VAT turnover data are used to extrapolate the benchmark GO estimates to derive constant price GO estimates in the *ISIC M - Professional, Scientific and Technical Activities.xls* file. Composite value indices based on VAT turnover and

reflated constant price output of client industries using the services CPI are used to extrapolate the benchmark GO estimates to derive the current price GO estimates. The benchmark IC/GO ratios are applied to compile the constant price IC estimates. Composite IC price indices are used to develop the IC value indices to compile the current price IC estimates. The GVA estimates are derived as residuals.

N. Administrative and Support Service Activities

73. Composite volume indices based on constant price output of client industries and deflated VAT turnover data are used to extrapolate the benchmark GO estimates to derive constant price GO estimates in the *ISIC N - Administrative and Support Service Activities.xls* file. Composite value indices based on VAT turnover and reflated constant price output of client industries using the services CPI are used to extrapolate the benchmark GO estimates to derive the current price GO estimates. The benchmark IC/GO ratios is applied to compile the constant price IC estimates. Composite IC price indices are used to develop the IC value indices to compile the current price IC estimates. The GVA estimates are derived as residuals.

O. Public Administration; Compulsory Social Security Activities

74. The annual current price estimates in the *ISIC O – Public Administration.xls* file are based on more complete General Government finance data. The worksheets for public administration integrate the annual fiscal year benchmarks with the quarterly GO, IC and GVA series. The quarterly current price estimates are derived by extrapolating the annual benchmarks using quarterly Central Government IC and GVA data to produce the quarterly and calendar year estimates.

75. The CPI for services is used as a proxy price deflator for the quarterly GVA estimates. The benchmark GVA/GO ratio is then applied to derive the quarterly constant price GO estimates, with the IC estimates derived as residuals. A composite IC price index is used to reflate the quarterly constant price IC to derive the current price IC estimates. The quarterly current price GVA and IC estimates are summed to derive the current price GO estimate. The fiscal and calendar year constant price estimates are derived by summing the relevant quarters' estimates.

P. Education

76. The methodology discussed above for public administration is used for estimating ***public education*** GO, IC and GVA by level of education (i.e., pre-primary and primary education, secondary and technical education, higher education and other education) in the *ISIC P – Education.xls* file. The worksheets for public education integrate the annual fiscal year benchmarks with the quarterly GO, IC and GVA series. The calendar year estimates are estimated using the sum of the benchmarked quarterly series.

77. Estimates for ***private education*** are also produced by level of education. The quarterly constant price trend growth rate in household consumption expenditure on

education fees between the 2005/06 and 2009/10 UNHS is used to derive the constant price GO estimates, given the data gaps in the private sector enrolments and teaching staff data. The benchmark IC/GO ratio is used to derive the constant price IC estimates. The constant price GO estimates is reflated using CPI education fees by level of education to develop value indices to extrapolate the benchmark GO estimates to compile current price GO estimates. A composite IC price index is used to reflate the constant price IC estimates to develop a value index to extrapolate the benchmark IC estimates to compile current price IC estimates. The GVA estimates are derived as residuals.

Q. Human Health and Social Work Activities

78. The methodology discussed above for public administration is used for estimating ***public health*** GO, IC and GVA in the in the *ISIC Q – Human Health and Social Work Activities.xls* file. The worksheets for public health integrate the annual fiscal year benchmarks with the quarterly GO, IC and GVA series. The calendar year estimates are estimated using the sum of the benchmarked quarterly series.

79. For ***private health***, quarterly constant price trend growth rate in household consumption expenditure on doctor consultation and hospital services fees between the 2005/06 and 2009/10 UNHS is used to derive the constant price GO estimates, given the data gaps in the private sector health data. The benchmark IC/GO ratio is used to derive the constant price IC estimate. The constant price GO estimates are reflated using CPI for medical charges to develop value indices to extrapolate the benchmark GO estimates to compile current price GO estimates. A composite IC price index is used to reflate the constant price IC estimates to develop a value index to extrapolate the benchmark IC estimates to compile current price IC estimates. The GVA estimates are derived as residuals.

80. For ***social work activities***, the benchmark GO estimates are extrapolated to compile constant price GO estimates using a composite volume index based on the various groups of client populations receiving these services (e.g., disabled persons, orphans, elderly) based on data from the Demographic Health Surveys for 2006 and 2011 (with a quarterly trend growth rate of around 0.47 percent). The benchmark IC/GO ratio is used to derive the constant price IC estimate. The constant price GO estimates are reflated using the services CPI to develop value indices to extrapolate the benchmark GO estimates to compile current price GO estimates. Similarly, a composite IC price index is used to reflate the constant price IC estimates to develop a value index to extrapolate the benchmark IC estimates to compile current price IC estimates. GVA estimates are derived as residuals.

R. Arts, Entertainment and Recreation

81. Composite volume indices based on population and tourist numbers, and deflated VAT turnover data are used to extrapolate the benchmark GO estimates to derive constant price GO estimates in the *ISIC R - Arts, Entertainment and*

Recreation.xls file. Composite value indices derived by reflating the volume indices using the services CPI are used to extrapolate the benchmark GO estimates to compile the current price GO estimates. The value indices are converted to volume indices using the CPI for recreation services and other services in order to derive the constant price GO estimates. The benchmark IC/GO ratios is then applied to compile the constant price IC estimates, with the GVA estimates derived as residuals. Composite IC price indices are used to develop the IC value indices to compile the current price IC estimates. The GVA estimates are derived as residuals.

S. Other Service Activities

82. Composite volume indices based on population and tourist numbers, and deflated VAT turnover data are used to extrapolate the benchmark GO estimates to derive constant price GO estimates in the *ISIC S – Other Service Activities.xls* file. Composite value indices derived by reflating the volume indices using the services CPI are used to extrapolate the benchmark GO estimates to compile the current price GO estimates. The benchmark IC/GO ratio is used to derive the constant price IC estimate. The constant price GO estimates are reflated using CPI for other services to develop value indices to extrapolate the benchmark GO estimates to compile current price GO estimates. A composite IC price index is used to reflate the constant price IC estimates to develop a value index to extrapolate the benchmark IC estimates to compile current price IC estimates. GVA estimates are derived as residuals.

T. Activities of Households as Employers

83. The *ISIC T –Activities of Households as Employers.xls* file now includes the final benchmark estimates and should be updated for the latest periods. The benchmark GO and GVA estimates for domestic staff in urban and rural households are extrapolated using the quarterly trend growth rates in urban and rural household formation between the 2005/06 and 2009/10 UNHS to derive the constant price GO estimate, given the lack of data or indicators for these activities. This activity does not have IC, only GVA (i.e., labor). The constant price GO and GVA estimates are reflated using CPI for other services to develop value indices to extrapolate the benchmark estimates to compile current price estimates.

U. Taxes less Subsidies on Products

84. Current price estimates are compiled from monthly URA data provided to the compiler for taxes on products. The annual methodology has been improved by using deflated import values (or quantity revaluation of imports using 2009/10 average prices) as a volume indicator to extrapolate the benchmark estimate for import duties and VAT at a disaggregated level. For excise taxes on selected imports (e.g., alcohol, fuel and tobacco), where the imports are homogeneous use the quantities imported as volume indicators otherwise use the method above. For taxes on domestic products, the constant price monetary GO estimate for the relevant goods and services subject to excise or VAT is used. There are currently no subsides on products.

V. GDP BY EXPENDITURE

85. The annual methodology for compiling GDP by expenditure has been improved and linked to the new quarterly methodology for expenditure components other than for Household Final Consumption Expenditure (HFCE). The estimates have been rebased from 2002 to 2009/10 prices.

A. Government Final Consumption Expenditure

86. The quarterly current price value and constant price value indicators for Government Final Consumption Expenditure **(**FCE) are derived by deducting quarterly Government sales revenue from the Government output estimates. The indicators are then used to extrapolate the 2009/10 benchmark estimates of Government FCE to compile the annual and quarterly estimates. The coverage has been expanded from the previous methodology to full coverage of General Government expenditure.

B. Final Consumption Expenditure of NPISH

87. The coverage of FCE has been expanded in the new methodology to include new estimates of FCE of Non-Profit Institutions Serving Households (NPISH). These estimates are compiled by extrapolating the 2009/10 benchmark FCE estimates using the quarterly current and constant price output of NPISH (i.e., Agriculture Support Services; Education; Human Health and Social Work; Arts, Entertainment and recreation; and Services of Membership Organizations).

C. Household Final Consumption Expenditure

88. The estimates for HFCE are still being derived as a residual and, therefore, include any errors and omissions in other expenditure components and GDP by economic activity. The development of independent estimates for HFCE is expected to be undertaken during 2015.

D. Gross Fixed Capital Formation

89. The coverage of Gross Fixed Capital Formation (GFCF) has been expanded to include improved estimates of biological assets; new research and development, and mineral exploration estimates. The WIP compilation methodology is used to compile the estimates for biological assets and construction GFCF; and the commodity flow approach is used for durable equipment and machinery. The estimates for research and development; and mineral exploration are derived by extrapolating the 2009/10 benchmark GFCF estimates using the output for Mining and Quarrying and scientific research and development.

E. Changes in Inventories

90. There is still significant scope to improve the coverage of changes in inventories. The current methodology only estimates changes in biological assets.

F. Acquisitions less Disposals of Valuables

91. For Acquisitions less Disposals of Valuables, imports of precious metals and stones, antiques and collectibles are used to extrapolate the 2009/10 benchmark estimate to derive current price estimates. The general CPI is used to deflate the current price estimates to derive the constant price estimates.

G. Exports and Imports of Goods and Services

92. Other than rebasing the estimates from the 2002 base year to the 2009/10 base year, there has been no changes made to the methodology used previously. Uganda Revenue Authority external trade data and Bank of Uganda balance of payments (BOP) data are used to compile the current rice estimates. The Goods estimates are deflated using unit prices, while composite deflators are used for services (including trading partner inflation rates and USD exchange rate for Services imports). Further improvements to the estimates for Exports and Imports of Goods and Services are expected to be made undertaken during 2015.

APPENDIX I: REBASED GDP ESTIMATES

Table 1: GDP by Economic Activity at Current Prices in Billions of Shillings

Indusrty	ISIC	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP at market prices		**34,504**	**40,946**	**47,078**	**59,420**	**63,905**	**68,407**
Agriculture, forestry and fishing	A	**8,968**	**10,732**	**11,649**	**15,737**	**16,144**	**16,941**
Cash crops	AA	830	784	1,111	1,214	1,101	979
Food crops	AB	4,641	5,917	5,875	8,031	7,897	8,520
Livestock	AC	1,638	1,857	1,981	2,703	2,968	3,025
Agriculture Support Services	AD	10	12	16	23	24	25
Forestry	AE	1,349	1,574	1,871	2,814	3,169	3,200
Fishing	AF	500	587	794	953	986	1,193
Industry		**6,361**	**7,424**	**9,586**	**12,633**	**13,267**	**14,083**
Mining & quarrying	B	396	464	423	562	549	582
Manufacturing	C	3,180	3,481	4,815	6,473	6,400	6,395
Electricity	D	326	349	358	463	584	595
Water	E	652	769	839	917	983	1,159
Construction	F	1,806	2,360	3,151	4,217	4,751	5,351
Services		**16,568**	**19,861**	**22,458**	**27,017**	**29,925**	**32,190**
Trade and Repairs	G	4,547	5,298	6,752	8,920	9,069	8,918
Transportation and Storage	H	995	1,069	1,163	1,486	1,774	1,886
Accommodation and Food Service	I	635	934	1,204	1,489	1,781	2,199
Information and Communication	J	1,987	2,265	1,775	1,573	1,935	2,078
Financial and Insurance Activities	K	813	940	1,200	1,619	1,694	1,735
Real Estate Activities	L	1,437	2,194	1,831	2,106	2,499	2,886
Professional, Scientific and Technical	M	1,161	1,323	1,636	1,809	1,853	1,830
Administrative and Support Service	N	508	630	880	984	947	989
Public Administration	O	952	1,201	1,529	1,745	1,866	2,079
Education	P	1,812	2,031	2,359	2,769	3,436	4,047
Human Health and Social Work	Q	1,131	1,231	1,355	1,494	1,910	2,251
Arts, Entertainment and Recreation	R	103	124	137	173	184	206
Other Service Activities	S	331	401	441	604	711	792
Activities of Households as Employers	T	156	221	195	246	267	295
Adjustments		**2,607**	**2,930**	**3,385**	**4,033**	**4,569**	**5,193**
Taxes on products		2,607	2,930	3,385	4,033	4,569	5,193

Table 2: GDP by Economic Activity at Constant 2009/10 Prices in Billions of Shillings

Industry	ISIC	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP at market prices		**38,933**	**40,946**	**44,907**	**46,888**	**48,422**	**50,605**
Agriculture, forestry and fishing	**A**	**10,403**	**10,732**	**11,045**	**11,165**	**11,364**	**11,539**
Cash crops	AA	907	784	753	849	832	827
Food crops	AB	5,625	5,917	6,040	5,975	5,910	5,960
Livestock	AC	1,815	1,857	1,902	1,944	1,993	2,048
Agriculture Support Services	AD	12	12	13	12	12	12
Forestry	AE	1,472	1,574	1,753	1,791	2,003	2,100
Fishing	AF	571	587	585	595	614	592
Industry		**6,885**	**7,424**	**8,267**	**8,519**	**8,890**	**9,275**
Mining & quarrying	B	428	464	600	566	631	666
Manufacturing	C	3,331	3,481	3,753	3,854	3,759	3,863
Electricity	D	302	349	383	412	453	461
Water	E	726	769	816	866	921	979
Construction	F	2,097	2,360	2,715	2,821	3,127	3,306
Services		**18,748**	**19,861**	**22,318**	**23,419**	**24,366**	**25,400**
Trade and Repairs	G	5,258	5,298	5,749	5,831	5,899	5,851
Transportation and Storage	H	1,004	1,069	1,157	1,250	1,301	1,348
Accommodation and Food Service	I	808	934	998	1,092	1,146	1,276
Information and Communication	J	2,011	2,265	2,826	3,353	3,917	4,350
Financial and Insurance Activities	K	899	940	1,123	1,130	1,198	1,190
Real Estate Activities	L	2,092	2,194	2,263	2,352	2,477	2,628
Professional, Scientific and Technical	M	1,226	1,323	1,575	1,519	1,527	1,526
Administrative and Support Service	N	545	630	857	846	729	711
Public Administration	O	1,019	1,201	1,482	1,488	1,432	1,493
Education	P	2,016	2,031	2,218	2,358	2,470	2,624
Human Health and Social Work	Q	1,160	1,231	1,295	1,365	1,413	1,498
Arts, Entertainment and Recreation	R	112	124	134	150	142	148
Other Service Activities	S	387	401	414	454	481	514
Activities of Households as	T	212	221	226	230	235	241
Adjustments		**2,899**	**2,930**	**3,278**	**3,785**	**3,802**	**4,391**
Taxes on products		2,899	2,930	3,278	3,785	3,802	4,391

Table 3: GDP by Expenditure at Current Prices in Billions of Shillings

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP at Market Prices	**34,504**	**40,946**	**47,078**	**59,420**	**63,905**	**68,407**
Final Consumption Expenditure	**28,691**	**34,477**	**40,783**	**50,377**	**51,593**	**55,029**
General Government FCE	3,235	3,929	5,994	4,860	5,095	6,249
NPISH FCE	661	715	783	901	1,095	1,237
Household FCE	24,795	29,833	34,005	44,616	45,403	47,542
Gross Fixed Capital Formation	**9,161**	**10,846**	**13,248**	**16,552**	**18,597**	**19,477**
Dwellings	2,256	2,620	3,301	4,252	4,508	5,197
Other Buildings	2,957	3,667	4,559	5,844	6,275	7,097
Other Structures	436	550	648	850	918	1,025
Transport Equipment	696	794	1,230	1,374	1,565	1,603
ICT Equipment	548	448	580	672	617	639
Other Machinery and Equipment	1,656	2,122	2,223	2,659	3,645	2,744
Biological Resources	54	57	65	94	113	133
Reasearch and Development	492	512	557	693	840	913
Mineral and Petroleum Exploration	67	77	86	113	117	126
Changes in Inventories	**124**	**132**	**149**	**215**	**264**	**316**
Acquisitions less Disposals of Valuables	**4**	**4**	**8**	**9**	**7**	**3**
Exports less Imports of Goods and Services	**- 3,476**	**- 4,512**	**- 7,109**	**- 7,733**	**- 6,557**	**- 6,418**
Exports	**6,837**	**7,148**	**8,680**	**11,830**	**12,932**	**13,570**
Goods	5,142	4,683	5,351	6,794	7,547	6,875
Services	1,695	2,465	3,329	5,036	5,385	6,694
Less Imports	**10,313**	**11,660**	**15,789**	**19,563**	**19,489**	**19,988**
Goods	7,771	8,162	10,760	13,449	13,050	12,809
Services	2,542	3,499	5,029	6,113	6,438	7,179

Table 4: GDP by Expenditure at Constant 2009/10 Prices in Billions of Shillings

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
GDP at Market Prices	**38,933**	**40,946**	**44,907**	**46,888**	**48,422**	**50,605**
Final Consumption Expenditure	**32,189**	**34,477**	**38,651**	**40,199**	**39,949**	**40,583**
General Government FCE	3,452	3,929	5,730	4,012	3,845	4,380
NPISH FCE	689	715	740	765	789	817
Household FCE	28,048	29,833	32,181	35,422	35,316	35,386
Gross Fixed Capital Formation	**9,940**	**10,846**	**12,258**	**12,472**	**13,591**	**14,062**
Dwellings	2,427	2,620	3,072	3,209	3,314	3,786
Other Buildings	3,179	3,667	4,211	4,348	4,554	5,096
Other Structures	460	550	594	627	659	727
Transport Equipment	785	794	1,125	1,032	1,133	1,149
ICT Equipment	563	448	524	512	466	486
Other Machinery and Equipment	1,873	2,122	2,041	1,992	2,645	1,968
Biological Resources	58	57	56	60	70	81
Reasearch and Development	525	512	539	590	644	656
Mineral and Petroleum Exploration	70	77	94	100	106	112
Changes in Inventories	**132**	**132**	**129**	**139**	**164**	**193**
Acquisitions less Disposals of Valuables	**4**	**4**	**7**	**7**	**5**	**2**
Exports less Imports of Goods and Services	**- 3,332**	**- 4,512**	**- 6,138**	**- 5,929**	**- 5,287**	**- 4,234**
Exports	**8,624**	**7,148**	**7,182**	**8,347**	**9,006**	**9,513**
Goods	6,573	4,683	4,378	4,748	5,222	4,980
Services	2,052	2,465	2,804	3,599	3,784	4,534
Less Imports	**11,956**	**11,660**	**13,319**	**14,275**	**14,293**	**13,748**
Goods	9,021	8,162	9,068	9,741	9,468	8,329
Services	2,935	3,499	4,251	4,535	4,825	5,419

APPENDIX II: ACTION PLAN FOR THE SUT/GDP REBASE

This section sets out in tabular form the revised action plan to compile the SUT and benchmark estimates for 2009/10 and to rebase the NAS for Uganda.

OBJECTIVES

Objectives	Verifiable Indicators	Completion Date	Assumptions
Compile SUT and rebase GDP estimates to 2009/10.	SUT compiled and GDP estimates rebased to 2009/10.	11/28/2014	The authorities ensure that appropriate staff and other resources, including TA, are available to implement this action plan.

ACTIVITIES/OUTPUTS

DQAF	Priority	Outputs	Verifiable Indicators	Completion Date	Assumptions/Implementation Status
0.1 and 0.2	**H**	**Improve institutional infrastructure and operational capacity to compile NAS.**	**Institutional infrastructure and operational capacity to compile NAS improved.**	**06/30/2014**	
0.1.4	M	Improve data reporting enforcement procedures for business surveys.	Improved business survey response rates, including improved quality of reported data.	06/30/2014	Revised Statistics Law has been drafted.
0.2.1	H	Build technical capacity of NAS compilers.	Technical knowledge and skills improved through on-the-job learning and training.	06/30/2014	Training provided during MSA missions.
0.2.2	H	Secure additional TA to assist with source data extraction, quality assurance and mapping to SUT activities/products.	Additional TA secured for the project.	12/31/2011	Funding through FINMAP secured and consultants have been selected.
0.2.3	H	Ensure adequate staff and other resources are redeployed to collect the additional data needed for the SUT and rebase.	An additional three statisticians recruited to NAS Unit.	12/31/2013	Completed.
0.2.4	H	Strengthen project management for the SUT/rebase exercise.	Direct management of the project by the MES Director.	12/31/2010	Implemented.

DQAF	Priority	Outputs	Verifiable Indicators	Completion Date	Assumptions/Implementation Status
0.2.5	H	Establishment of the NAS Technical Committee to improve data coordination and project implementation.	Committee established and meeting on a monthly basis.	11/28/2014	Delayed. To be established by MES Director.
3.1	**H**	**Ensure appropriate source data are available to compile the SUT and revised estimates.**	**The required source data are available and fit for use.**	**11/30/2012**	
3.1.1	H	Complete initial data assessment and stock take of available source data.	Initial assessment of data sources completed.	08/31/2010	Completed by NAS counterparts and MSA.
3.1.2	H	Data extraction, quality assurance and mapping to SUT activities and products from the Agriculture Census 2008/09.	Data extraction, quality assurance and mapping to SUT activities and products completed.	05/31/2013	Completed.
3.1.3	H	Data extraction, quality assurance and mapping to SUT activities and products from the Livestock Census 2008.	Data extraction, quality assurance and mapping to SUT activities and products completed.	05/31/2013	Completed.
3.1.4	H	Data extraction, quality assurance and mapping to SUT activities and products from the 2009/10 UNHS.	Data extraction, quality assurance and mapping to SUT activities and products completed.	06/30/2013	Completed.
3.1.5	H	Data extraction, quality assurance and mapping to SUT activities and products from the 2009/10 UNPS.	Data extraction, quality assurance and mapping to SUT activities and products completed.	06/30/2013	Not Done.
3.1.6	H	Conduct the 2009/10 NPIS and complete data extraction, quality assurance and mapping to SUT.	NPIS conducted and data extraction, quality assurance and mapping to SUT activities and products completed.	11/16/2012	Completed.
3.1.7	H	Conduct the 2009/10 ITSS and complete data extraction, quality assurance and mapping to SUT.	ITSS conducted and data extraction, quality assurance and mapping to SUT activities and products completed.	11/02/2012	Has now been conducted, but results not yet available.
3.1.8	H	Data extraction, quality assurance and mapping to SUT activities and products from the 2009/10 business register data.	Data extraction, quality assurance and mapping to SUT activities and products completed.	06/30/2013	Completed.
3.1.9	H	Ensure that the questionnaire and sample design for the 2009/10 Business Inquiry meet NAS data requirements.	Questionnaires and survey sample address NAS data needs.	05/31/2013	Completed.

DQAF	Priority	Outputs	Verifiable Indicators	Completion Date	Assumptions/Implementation Status
3.1.10	H	International Merchandise Trade Statistics for 2009/10 extracted and mapped to SUT activities and products.	Data extraction, quality assurance and mapping to SUT activities and products completed.	05/31/2013	Completed.
3.1.11	H	VAT and income tax data for 2009/10 extracted, validated and mapped to SUT activities and products.	Data extraction, quality assurance and mapping to SUT activities and products completed.	06/30/2013	Completed but not used directly in SUT.
3.1.12	H	Collect 2009/10 data from Ministry of Agriculture, National Forestry Authority and development authorities.	Data on output, IC, GFCF, inventories and farm gate prices for livestock, tea, coffee and forestry collected.	05/31/2013	Completed.
3.1.13	M	Collect 2009/10 data from the Department of Geology on mining and quarrying activities.	Output volume and other available data on mining and quarrying collected.	05/31/2013	Completed.
3.1.14	H	Collect 2008/09 and 2009/10 annual reports for state-owned enterprises.	Data extraction, quality assurance and mapping to SUT completed.	05/31/2013	Completed.
3.2.15	M	Collect 2008/09 and 2009/10 annual reports for publicly listed enterprises.	Data extraction, quality assurance and mapping to SUT completed.	06/30/2013	Partially completed.
3.1.16	H	Collect data from BOU on the activities of the Central Bank and other financial intermediaries for 2009/10.	Data extraction, quality assurance and mapping to SUT activities and products completed.	06/30/2013	Completed.
3.1.17	H	Collect detailed BOP data from BOU for 2009/10.	Data extraction, quality assurance and mapping to SUT activities completed.	05/31/2013	Completed.
3.1.18	H	Collect data from MFPED and local governments for the General Government for 2008/09 and 2009/10.	Data extraction, quality assurance and mapping to SUT activities and products completed.	05/31/2013	Completed.
3.1.19	H	Collect other administrative data and conduct small-scale surveys to produce adjustment factors and indicators.	Adjustment factors and indicators available for transport and trade margins (TTM), c.i.f./f.o.b., etc.	05/31/2013	Completed.
3.1.20	H	Collect any other value, prices and volume data and indicators required for the compilation of revised annual and quarterly estimates.	Relevant data collected.	10/31/2013	Completed.
3.3.2	**H**	**Compile the SUT, produce benchmark estimates and rebase the NAS.**	**SUT and benchmark estimates compiled, and NAS rebased.**	**11/28/2014**	Completed.

DQAF	Priority	Outputs	Verifiable Indicators	Completion Date	Assumptions/Implementation Status
3.3.2.1	H	An initial assessment of the level of detail for economic activities and products to be included in the SUT.	Assessment completed.	08/31/2010	Completed by NAS counterparts and MSA.
3.3.2.2	H	Amend the SUT templates, as appropriate, based on feedback from data users and providers.	SUT activities and products modified, as appropriate.	06/30/2011	Completed during June 2011 mission.
3.3.2.3	H	Fill in the I-O and SUT sector and total tables with the initial estimates.	Tables compiled using initial estimates.	05/31/2014	Completed. Final SUT compiled.
3.3.2.4	H	Adjust initial estimates to overall size of the different activities using the UNHS employment and other control data.	The initial estimates adjusted to the overall size of the different activities.	05/31/2014	Completed. Final SUT compiled.
3.3.2.5	H	Balancing of the SUT estimates.	SUT estimates balanced.	05/31/2014	Completed. Final SUT compiled.
3.3.2.6	H	Compilation of symmetric tables and coefficient matrices.	Symmetric tables and coefficient matrices compiled.	05/31/2014	Completed. Final SUT compiled.
3.3.2.7	H	Redevelop the NAS compilation system.	NAS compilation system redeveloped.	09/30/2014	Completed.
3.3.2.8	H	Compilation of rebased and expanded estimates for 2009/10 onwards.	Rebased estimates compiled.	11/28/2014	Completed.
3.3.2.9	H	Linking of the 1997/98, 2002 and 2009/10 series.	Linked series compiled.	11/28/2014	Completed.
4.0/5.0	**H**	**Improve dissemination of NAS.**	**Dissemination of NAS improved.**	**11/28/2014**	Completed.
4.1.1	H	Public release of QNA within three months after the reference quarter.	Public dissemination and improved timeliness of QNA.	11/28/2014	UBOS plan to improve timeliness to two months.
5.1.1	H	Expand the range of NA aggregates and accounts disseminated.	Expanded dissemination of quarterly and annual NAS.	11/28/2014	Completed.
5.2.1	H	Update Concepts, Sources and Methods Manual.	Revised Manual disseminated.	11/28/2014	Completed. Methodology included in ANA Bulletin.

Priority Scale: H - High M - Medium O - Other