Guidelines for the Notes on National Accounts Methodology

In addition to the national accounts data, metadata on the national accounts methodology is published in the United Nations publication: "National Accounts Statistics: Main Aggregates and Detailed Tables". The notes on national accounts methodology (in short Methodology Notes) describe the sources and compilation methodology of gross domestic product and the compilation of the integrated economic accounts.

The Methodology Notes are divided into three parts, namely, the "Sources" of national accounts data; "General notes" on the scope of the national accounts data; and "Methodology notes", which provide more specific information on the compilation of national accounts data.

Please review and update the Methodology Notes reported with your last submission of the National Accounts Questionnaire. In order to enhance the comparability of the Methodology Notes you are requested to use the guidelines provided below.

In the annex to these guidelines are the Methodology Notes of Kyrgyzstan, which may serve as an example.

1.   Methodology Notes

1.1   Sources

In this section please provide information on the institution(s) that are compiling and disseminating the official national accounts statistics of your country.

- Provide the name of the institution responsible for the compilation of official national accounts statistics (e.g. Central Bank, Bureau of Statistics, or Division/Department within the structure of a Ministry).

- If different institutions are responsible for the compilation of specific parts of the national accounts, please provide the names of the institutions and their respective responsibilities.

- List the publications used for disseminating official national accounts statistics (e.g. Bulletins, Yearbook, and Newsletters). If data are available online, please indicate the website, too.

1.2   General

The general notes describe the country-specific treatments of the national accounts data for the tables provided to the United Nations Statistics Division (UNSD).

Indicate which version of the System of National Accounts (SNA) is used for the compilation of the national accounts statistics (e.g. 1968 or 1993 SNA). If the 1993 SNA is used, also indicate when it was adopted and describe the extent of methodological compliance with the 1993 SNA.

- List the recent publications containing information on the national accounts methodology used in your country.

- Briefly describe the release calendar of annual and quarterly national accounts.

- If the national accounts methodology has changed since the last submission of data, please describe briefly the reasons for the revision (base year change, new data sources, currency change, change in fiscal year, etc.).

- Specify the fiscal year (e.g. calendar year, or 1 April to 31 March, etc.). If the fiscal years differ from table to table, please indicate the respective fiscal years for each table.

- Please indicate whether national accounts aggregates in constant prices are reported in the form of chain volume measures or volume measures with a fixed base year. In the latter case, please specify the base year.

2. Methodology

2.1 Overview of the compilation of gross domestic product

In this section please provide an overview of the **approaches** used for the compilation of gross domestic product (GDP).

- Indicate the main approach to compile GDP.
- Describe any country-specific treatment of national accounts aggregates (valuation of value added with or without FISIM, output and value added at producers' prices or factor values, the classification of taxes, classification of industries, etc.).

2.2 Detail of GDP compilation (Expenditure-, Income-, and Production approach)

Please provide more **detailed** information about the **methods** and data **sources** used in the compilation of the GDP in this section.

2.2.1 Expenditure approach

- Please provide a short description of the methodology and major sources of information to compile:
    - final consumption expenditure by households;
    - final consumption expenditure by general government;
    - gross fixed capital formation;
    - changes in inventories; and
    - imports and exports of goods and services.

- Please describe how data at constant prices with a fixed base year or with chain volume measures are calculated.

2.2.2 Income approach

- Please provide a short description of the methodology and major sources of information by industry to compile:
  - compensation of employees;
  - taxes and subsidies on production; and
  - operating surplus/mixed income.

- Please describe the treatment of household enterprises, particularly how operating surplus and mixed income are distinguished for these household enterprises in an industry breakdown.
- Please describe how data at constant prices with a fixed base year or with chain volume measures are calculated.

2.2.3 Production approach

- Please provide a short description of the methodology and major sources of information by industry to compile:
  - output;
  - intermediate consumption; and
  - value added.
- Please describe how data at constant prices with a fixed base year or with chain volume measures are calculated.

2.3   Overview of the compilation of the integrated economic accounts

Please provide an overview of the scope and data sources used in the compilation of the integrated economic accounts (IEA).

- List the institutional (sub) sectors and accounts of the sequence of accounts for which national accounts data are compiled in your country.
- Provide a short description of the methodology and major sources of information by institutional sector to compile the main aggregates not covered in the description of the compilation of the GDP above.
- Kindly indicate those institutional sectors for which the sequence of accounts is compiled independently, including the total economy and those institutional sectors which are treated as a residual.
- Regarding net lending/net borrowing, please indicate whether the capital account is adjusted to the financial account or vice versa, or whether no adjustment between these two accounts is made and therefore two different values are reported for net lending/net borrowing.
- Describe any country-specific treatment with regard to the institutional sectors of the IEA (combination of institutional sectors, treatment of enterprises owned by households, etc.).
- Please describe any particular difficulties regarding the compilation, collection or processing of statistics by institutional sector in your country.
- If data for the IEA are not compiled, please indicate whether your country is planning to prepare data by institutional sector and the tentative date when this will happen.

Example Notes on National Accounts Methodology: Kyrgyzstan

Source

National accounts are compiled and disseminated by the National Statistical Committee of the Kyrgyz Republic. Annual and quarterly national accounts of the Kyrgyz Republic are compiled and disseminated in annual and quarterly publications on the social and economic situation and the yearbook of the Kyrgyz Republic, "Kyrgyzstan in figures". Monthly estimates are posted on the internet at www.stat.kg. Additionally, revised quarterly data on GDP and annual national accounts are published in the annual survey of national accounts of the Kyrgyz Republic. Data on GDP from the production approach and the expenditure approach are also posted on the website of the National Statistical Committee: www.stat.kg.

General

The system of national accounts used in the Kyrgyz Republic is based on the methodological framework of the 1993 System of National Accounts (1993 SNA). Since 1993, GDP estimates have been calculated using 1993 SNA indicators. Prior to 1993, the Kyrgyz Republic used the concept of National Economic Balance (NEB). Experts from the Organization for Economic Cooperation and Development (OECD) (1993-1997) and the resident statistical adviser from the International Monetary Fund (IMF) (1995-1998) helped with the introduction of the 1993 SNA. From 1990 through 1999, economic activity was classified according to the All-Union Classification of Branches of the National Economy; as of 2000, the State Classification of Types of Economic Activity (GKED) was used. GKED is based on the Statistical Classification of Economic Activities in the European Community (NACE). Macroeconomic indicators are calculated for 15 types of economic activity. Data are also compiled on the intersectoral balance of production and consumption of goods and services (input-output tables). The

concise version consists of a 34 x 34 matrix, while the expanded version covers 52 types of economic activity and 91 kinds of goods and services (usually produced every five years, based on sample surveys of enterprises, the most recent data being from 2003). The Classification of Individual Consumption According to Purpose (COICOP), the Classification of the Functions of Government (COFOG), the State Statistical Classification of Products (goods and services) (GSKP), and the Standard International Trade Classification (SITC) are used to calculate GDP from the expenditure side. The National Statistical Committee published its methodology for compiling national accounts in 2008 in a special publication on the national accounts of the Kyrgyz Republic for the period 2002-2006. When the Kyrgyz Republic subscribed to the Special Data Dissemination Standard (SDDS) of the International Monetary Fund (IMF), brief methodological notes were posted on the IMF website. Preliminary monthly estimates of GDP are prepared using the production approach and disseminated by the National Statistical Committee two weeks after the end of the reporting period (year). Preliminary quarterly estimates of GDP are calculated using the production and consumption approaches 90 days after the end of the reporting period and are posted on the IMF website. The quarterly data are also calculated in average prices of the previous year and, using the production approach, also in average annual 2000 prices. The full set of indicators of the national accounts system is published in the annual compendium on the national accounts of the Kyrgyz Republic which is issued every year in the December following the reporting year. This publication contains revised indices for institutional sectors of the economy and types of economic activity, in current and comparable prices. It also contains revised quarterly GDP data based on production and final use. The reporting period is the calendar year and there are consistent time series of data beginning in 1990. They cover all economic activity carried out in the Kyrgyz Republic and include estimates of the underground economy. The base year for the compilation of data in comparable prices is the previous year. The base year for calculations of indices in constant prices is 2000.

Overview of GDP Compilation

In the Kyrgyz Republic GDP is calculated using three approaches: production, expenditure and income. The main method of compiling GDP indicators is the production approach. Production-based GDP is calculated at market prices as the sum of the gross value added generated by resident producers plus net taxes (excluding subsidies) on products. Using the expenditure approach, GDP is calculated as all final expenditure in purchasers' prices plus gross fixed capital formation and net exports of goods and services. Using the income method, GDP is calculated as the sum of employees' compensation, gross profit, gross mixed income and taxes less subsidies on production and imports. GDP data are disseminated in current and comparable (previous year's) prices. Quarterly GDP is compiled and disseminated in current prices, previous year's prices and also constant 2000 prices, and covers the entire economy of the Kyrgyz Republic. The calculation is made in market prices. Estimates of the underground economy are added to GDP. No seasonal adjustments are made to GDP data. The data are compiled using the methodology set out in the 1993 System of National Accounts (1993 SNA) and classified according to GKED (NACE). Disaggregated GDP data obtained using the production method are presented in both current and constant prices: 1. Gross value added disaggregated by type of economic activity (15 types of activity) at basic prices; 2. Financial intermediation services indirectly measured (FISIM) (calculated separately and not distributed by type of economic activity); 3. Taxes on products less subsidies on products (in accordance with the 2001 Government Finance Statistics Manual of IMF (GFSM 2001)). Most transactions are recorded on an accrual basis, in accordance with the general principle of the 1993 SNA, with the exception of current expenditure and income of government agencies which are recorded on a cash basis. Output is estimated in basic prices. Intermediate and final consumption are valued at market prices. Gross fixed capital accumulation is recorded in market prices. Non-market production is estimated on the basis of current expenditure, adding information on changes (increase or reduction) in arrears in wages. Imports and exports of goods and services are estimated at unit prices (f.o.b.). Indicators of GDP based on the production method and categories of expenditure are estimated at current and comparable prices of

the previous year; using the income method, the categories are estimated only at current prices.

Expenditure Approach

The main sources of data are household budget surveys, trade and consumer market statistics, the state budget performance report, balance of payments data and investment statistics. The calculation of household expenditure on goods and services for final consumption is based on data on the volume of retail turnover and the provision of commercial services. The volumes of retail turnover and commercial services are calculated at actual prices, including VAT, excise and tax on sales of goods and services. Volume indicators for retail sales of goods and services are adjusted for concealed sales volumes. Expenditure of households on consumer goods is determined from retail turnover less purchases of goods by households and enterprises for intermediate consumption or accumulation. Expenditure on commercial services is estimated as the total sum of the value of services acquired by households, less purchases of services used for intermediate consumption (living expenses when traveling on business, construction and repair services, and so on). The total sum of services acquired by households is calculated on the basis of reports from enterprises providing paid services to households, adjusted for non-reporting enterprises and services provided by individuals (the adjustment is made from data from household budget surveys). The value of agricultural output for own consumption is determined on the basis of the balances of agricultural output in private household plots and farm holdings, calculated for each product in money and in kind. Data on final consumption by government agencies are compiled on the basis of current expenditure of the State budget (GFSM 2001). The value of total expenditure on final consumption by government agencies is estimated on the basis of the production account for that sector. Final consumption by government agencies is equivalent to the gross output of that sector, calculated from the production account (that is, it is transferred from the production account) deducting final consumption by government agencies which provide collective and individual services. Collective services include: agricultural services (including ploughing and chemical soil treatment),

forestry and hunting, science and basic research, administration (with the addition of data on technical assistance from the balance of payments), defence and roads; individual services include: housing and public utilities, health care and sport, social security, education, culture and art. Non-recurring sales of goods and services are then subtracted from the amounts obtained, and the remaining amounts represent government expenditure on final consumption. Expenditure on final consumption of non-profit institutions serving households (NPISH) consists of expenditure of those institutions on consumer goods and services provided to households free of charge or at prices that are not economically significant. The main sources of financing for their expenditure are members' contributions, donations and other transfers. NPISH expenditure on final consumption includes that of trade unions, foundations, associations, political parties, religious organizations and independent departments of enterprises and organizations. Data on gross fixed capital formation is compiled from capital investments, calculated from the clients' side, geological prospecting, increase in the value of the main livestock herds and planted forests; expenditure on the creation and acquisition of software, acquisitions of originals of literary and artistic works and major repairs of fixed assets, and also expenditure on the purchase of equipment and instruments, non-expendable items and books for libraries, costs of ownership transfer of non produced assets; and changes in inventories of equipment not yet installed. Gross fixed capital formation also includes cost-free fixed capital flows; retired assets are deducted. The increase in the value of livestock herds is determined from the balance of fixed assets taking the remaining value (adjusted for depreciation) as the difference between acquisitions and disposals. Expenditure on the purchase of equipment and instruments, non-expendable items and books for libraries by State-financed organizations using budgetary resources is valued on the basis of the State budget performance report. Data on cost-free capital flows are obtained from the balance of payments. Consumption of fixed capital is reflected in the balance of fixed assets (after a deduction for depreciation). Changes in inventories of tangible current assets include changes in inventories of supplies and materials, finished goods and work in process. Estimated changes in inventories of tangible current assets are based on statistical reports. In addition, changes in inventories of agricultural production in private household plots and farm holdings are calculated on

the basis of the balances of agricultural products. When calculating changes in inventories at current prices, the reporting data are adjusted to exclude the influence of price changes over the reporting period. All inventories are converted to the average annual prices for the current year. Data on the acquisition of valuables are compiled from data on the sale of jewellery to households. The net acquisition of valuables is equivalent to purchases of jewellery. The volume of exports and imports of goods and services in current prices is determined on the basis of data from the balance of payments. Both exports and imports are expressed at f.o.b. prices. The balance-of-payments data are expressed in United States dollars; the value in soms can be obtained by multiplying the quarterly indicators by the average quarterly exchange rate of the som to the dollar, while the annual value is obtained from the sum of the quarterly figures. The GDP estimate based on the expenditure approach is at previous year's prices. Consumer goods and services consumed by households are converted to the previous year's prices by deflation, using the consumer price index for the corresponding goods and services. Agricultural output produced by households for their own final consumption is converted to the previous year's prices using the deflator index for agricultural output. The value of housing services consumed by owner occupiers is converted to the previous year's prices using the deflator index for housing production (production account). Goods and services obtained from agricultural enterprises as payment in kind for labour are converted to the previous year's prices using the agricultural output price index. Final consumption by government agencies providing individual and collective goods and services are converted to the previous year's prices using the deflator indices established for the output of the corresponding types of economic activity in the production account. The consumer price index deflation method is used to convert to the previous year's prices the value of goods and services purchased by government agencies for transfer to households (non-recurring sales). Expenditure on final consumption by NPISH are converted to the previous year's prices using the deflator index obtained from the output of that sector in the production account. Gross fixed capital formation, changes in inventories of tangible current assets and the net acquisition of valuables are deflated using the price index for fixed capital investment, the livestock price index and the corresponding producer and

consumer price indices. Exports and imports of goods and services are converted using the corresponding price indices.

Income Approach

The income-based GDP estimate reflects the payment of primary income by institutional units which participate directly in the production of goods and services. A special feature of calculating GDP using the income method, rather than the production or expenditure methods, is that one of its components (gross profit and gross mixed income) represents a balancing item and is calculated by the balance method, that is, as the difference between GDP and other components (employee compensation and taxes on production and imports). Information on income generation is collected from comprehensive statistical reports of enterprises, organizations and institutions with all forms of ownership and the sample survey of household budgets and also from the results of surveys, questionnaires and expert estimates of the underground economy. The main sources for estimating employee compensation are the reports of enterprises and organizations on labour and employment statistics and also, for State-financed institutions, the reports of the Ministry of Finance and the Social Fund. Social insurance contributions made by employers for the economy as a whole and by type of economic activity are valued on the basis of the report on labour and compensation and these data are adjusted on the basis of the report of the Social Fund. Nominal social insurance contributions for the economy as a whole and by type of economic activity are valued as the amount of actual payments for social benefits by enterprises and organizations according to the data from the statistical reporting form for labour and compensation and also from credit and insurance institutions and the Social Fund. The main source of data on taxes and subsidies on production and imports is the report of the Ministry of Finance on State budget performance. Income-based GDP is calculated only on an annual basis and at current prices.

Production Approach

Using the production method, GDP is calculated in market prices. Its value is obtained by calculating the sum of the gross value added in each sector (in basic prices) plus net taxes (less subsidies) on products and imports. Gross value added is a production indicator defined as output less intermediate consumption for the corresponding type of activity (sector). The primary data sources are: (a) The annual and quarterly reports on income and expenditure of State and private enterprises, which includes all types of enterprises that are legal entities and all types of economic activity in the open sector of the economy; (b) The integrated household and labour force survey and other surveys carried out by the National Statistical Committee; (c) Employment and wage surveys; (d) Banking statistics provided by the National Bank of the Kyrgyz Republic and commercial banks; (e) The report on State budget performance prepared by the Ministry of Finance; (f) Customs payments and tax reports provided by the tax and customs services, respectively. Special sample surveys of farm holdings and private household plots are carried out by statistical agencies, and data from administrative sources (aiyl okmotu, or rural councils) are also used. The output indicator is determined on the basis of sectoral statistical data (statistics on industry; agriculture; construction; commerce; transport and communications and so on) and business statistics, and the content is harmonized with the SNA production boundaries. GDP estimates at previous year's prices are based on volume indicators calculated in previous year's prices. For individual types of economic activity, the extrapolation method using volume or employment indices is used. The deflation method includes commercial services (CPI components). Quarterly data in average annual prices are obtained by deflation with the established quarterly price indicators for each type of economic activity. The base year is 2000, and the average value of the indicators for each quarter of the base year is taken; thus the quarterly data for 2000 are calculated in average 2000 prices. On the basis of average values of the base year and using the volume index, the chain-link method is used to calculate quarterly data for the period 2000-2007.

Overview of the Compilation of the Integrated Economic Accounts

In accordance with the concepts of the 1993 SNA, the data processed include the set of accounts for the economy as a whole, the five institutional sectors of the domestic economy and the rest of the world. Flows (transactions) between institutional units are recorded at the time when claims and obligations arise, are transformed or are cancelled, that is, on an accrual basis. Indicators of flows between institutional units and stocks (assets) are estimated at current market prices as agreed by the participants. Calculations of production, income generation, income use and capital transactions are performed directly for institutional sectors of the domestic economy. The "rest of the world" accounts are compiled on the basis of data from the balance of payments. Net lending or net borrowing is calculated from the capital account only. There are no mutual adjustments with items of the financial account as the relevant expertise is not available in the Kyrgyz Republic. The national accounts estimates include a full set of accounts for each of the five institutional sectors. All the indicators, from the production account to the capital account, are calculated for each sector of the economy (non-financial corporations, financial institutions, general government, NPISH and households). The "rest of the world" accounts are compiled separately. Data for non-financial corporations are based on the annual reports on income and expenditure of State and private sector corporations. Data on financial institutions are based on the annual statistical reports of commercial banks and the insurance industry. Data on general government are based on the annual performance reports for the State budget and for extrabudgetary funds. Data on households and NPISHs are based on the annual household budget surveys and other specialized surveys. The "rest of the world" data are based on the balance of payments of the Kyrgyz Republic. One of the main problems in the collection and compilation of FISIM is its allocation to intermediate consumption, final consumption by households, and exports.