

National Accounts, Gross Domestic Product

Statistical product – National Accounts (GDP preliminary estimate by production approach at current and constant prices –(quarterly), GDP preliminary estimate by expenditure approach at current and constant prices (quarterly), annual accounts (yearly), annual sector accounts (yearly), gross value added by subsectors of non-financial and financial corporations sectors (yearly), gross national income (yearly))

Processes	Sub-processes	Sub-process description
<i>1.Specify needs</i>		
		<p>The scope of main users of the statistical information on quarterly and annual GDP estimates by cost, production and income approach is rather broad. Among main users are public agencies in charge of the country’s economic policy and economic forecasts, other public administration and local self-government bodies, public, scientific-educational, financial organizations, business community, mass media, international organizations, etc. Data is used for analysis, modeling and forecasting purposes.</p>
	1.1 Identify needs	<p>Estimates are based on different sources, mainly findings of Armstat statistical observations. Monthly, quarterly and annual observations of organizations are used during estimation of some components of GDP estimated by production approach. In addition, findings of household living standard complete and labor force sample surveys conducted by Armstat, information provided by the Ministry of Finance of the Republic of Armenia (MB), data from the Central Bank of Armenia (CB), Armstat departments and other agencies are also used.</p> <p>For deflation purposes consumer price indices, producer price indices, product import-export indices are used.</p>

	1.2 Consult and confirm needs	The calculation of annual and quarterly gross domestic product by production, expenditure and income formation approach has started since 1992 when the country adopted the economic system change policy aimed at development of liberated economic relations, transition to which implied introduction of relevant estimate system based on internationally recognized concepts, principles, definitions, classification and accounting rules (SNA-93, SNA-2008 and ESA-95 since 2012).
	1.3 Establish output objectives	All functions defined in SNA are covered. GDP estimate includes all market transactions, including barter. The entire economy of the Republic of Armenia is covered.
	1.4 Identify concepts	GDP is compiled annually and quarterly at current, at average annual prices of the previous year and at average annual prices of the reference year. For the calculation of quarterly data by comparable prices double deflators are used. For estimation by comparable prices the prices and the extrapolation method of calculation is used. For this purpose the number of employees and other volume indicators characterizing economic activity types are used. Data is adjusted according to households integrated living conditions survey results, as well as general balance necessity between GDP calculated by production and expenditure approaches is partly taken into consideration. Estimates according to last year prices are made by current prices according to deflation of final consumption and cumulative components by using relevant price indexes.
	1.5 Check data availability	The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program".
	1.6 Prepare business case	-
2.Design		

	2.1 Design output	The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program".
	2.2 Design variable description	
	2.3 Design data collection	<p>The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program". Data collection is carried out according to different sources, mainly based on the data of statistical observations carried out by the Armstat. Monthly, quarterly and annual monitoring of organizations is carried out for all types of business activities, except for agriculture. Data on the agriculture are collected from 340.000 farms selected from sampled 12090 households, as well as data from 100 commercial organizations. In addition to the above-mentioned sources of information, the data on households' living standards and labor force sample surveys are also used by the Armstat.</p> <p>The data provided by the RA Ministry of Finance are used to calculate services of public administration bodies, as well as tax revenues and subsidies. The data obtained from the Central Bank of Armenia (CBA) are used for the issuance of financial activity, indirectly measured services of financial intermediation and for the calculation of the financial sector of the economy. Consumer price index (CPI), Producer Price Index (PDI), commodity export and import indicators are used for deflation.</p>
	2.4 Design frame and sample	National Accounts of Armenia are compiled in accordance with the National Classifications System (NCS-2008) basic classifications, definitions and concepts, as well as other methodological foundations.
	2.5 Design	After the collection of data the statistical indicators are subject to

	processing and analysis	arithmetic and logical checks, and based on them, in case of necessity, the appropriate adjustments are carried out, also through means of communications for presenting information if required.
	2.6 Design production systems and workflow	Preparatory work on all procedures starting from collection of information to its publication, particularly related to the appropriate notification of respondents, the training of the staff through professional courses and etc. is carried out.
3. Build		
	3.1 Build collection instrument	Estimates are based on different sources, mainly on findings of statistical observations carried out by Armstat. Monthly, quarterly and annual observations of organizations are used during estimation of some components of GDP. In addition, the findings of integrated household living conditions and labor force sample surveys conducted by the Armstat, as well as data provided by the Ministry of Finance (MB) and the RA Central Bank (CB) are used.
	3.2 Build or enhance process components	The methodological guidelines and instructions necessary for information verification are available.
	3.3 Build or enhance dissemination components	The dissemination of information is possible in both paper and electronic form of publication of information on monthly basis, in accordance with the Annual Statistical Program.
	3.4 Configure workflows	The derivation of statistical product is carried out by the following successive stages: <ol style="list-style-type: none"> 1. Collection of data, 2. Arithmetical and logical checks and adjustments, 3. Comparison of obtained summary data with the corresponding time series, 4. Dissemination of data in both paper and electronic forms through the yearbooks, data reports, statistical handbooks, as well as through the official response letters to the official requests
	3.5 Test production system	
	3.6 Test statistical	

	business process	
	3.7 Finalize production system	The consents with data providers achieved on indicators during work discussions are summarized.
4.Collection		
	4.1 Create frame and select sample	All functions defined in SNA are covered. GDP estimate includes all market transactions, including barter. The entire economy of the Republic of Armenia is covered.
	4.2 Set up collection	-
	4.3 Run collection	-
	4.4 Finalize collection	The collected data, after being arithmetically and logically checked, is input in the electronic environment. Data is input using both mechanical and electronic methods.
5.Process		
	5.1 Integrate data	-
	5.2 Classify and code	-
	5.3 Review and validate	The verification of incomplete and corrupted presented data, as well as the conformity of incorrect data is made.
	5.4 Edit and impute	-
	5.5 Derive new variables and units	-
	5.6 Calculate weights	-
	5.7 Calculate aggregates	The summary data by separate statistical indicators are derived based on the input data.
	5.8 Finalize data files	Often basing on the necessity of retrieving operative statistical data, calculation of preliminary indicators is carried out based on preliminary information which is subject to further adjustment.
6.Analyze		
	6.1. Prepare draft outputs	The construction of dynamic groups and groupings of statistical indicators is carried out based on the summarized information.
	6.2 Validate outputs	The methodological requirements of the received indicators are strictly followed during the whole process of receiving in

		<p>accordance with the pre-defined classifications and methodological guidelines.</p> <p>Production data on unregistered activity and shadow/informal/economy are under verification. Given incomplete coverage of the data, failure to present the information or presenting unreliable information, the estimations are based on data about production of commodities, number of employed and participants of production, which are received regularly from statistical reports, as well as from complete surveys on household living standards and sample surveys on labor force. Share of participation in GDP of informal sector is currently estimated based on findings of the 2009 Survey on Informal Sector and Informal Employment in Armenia. In addition, indirect macroeconomic methods are applied, using estimated of sector surveys conducted in different years and other information sources.</p>
	6.3 Interpret and explain of outputs	The logical analysis of summary indicators is carried out after their derivation using the impact of various economic phenomena on GDP.
	6.4 Apply disclosure control	Brief methodological explanations on indexes are published in quarterly issues of “Socioeconomic Situation of the Republic of Armenia” monthly informative report (Armenian and Russian), and more detailed information is available in the National Accounts of Armenia statistical book.
	6.5 Finalize outputs	Before the dissemination of summary data, the analysis of summary indicators on GDP is made.
7. Dissemination		.
	7.1 Update output	The work on the derivation and final checking of relevant tables of statistical indicators that are subject to publication, as well as the time series update are implemented. In case of the need the changes and/ or additions are made in the concepts and methodological explanations of the relevant indicator.
	7.2 Produce dissemination products	All production steps for dissemination products are carried out; preparation of explanation text, tables, figures and other

		<p>materials, editing of that products and their conformity to publication standards.</p> <p>The data on monetary intermediation system is published in Armenian, Russian, English through the yearbooks, statistical handbooks and monthly data reports:</p> <ul style="list-style-type: none"> • “Statistical Yearbook of Armenia” (Armenian, Russian, English) • “Armenia in Figures”, statistics summary (Armenian, English) • National Accounts of Armenia, statistical summary (Armenian and English) <p>Databases:</p> <p>https://armstatbank.am/pxweb/en/ArmStatBank/?rxid=602c2fcf-531f-4ed9-b9ad-42a1c546a1b6,602c2fcf-531f-4ed9-b9ad-42a1c546a1b6</p> <p><i>Electronic version</i></p> <p>Electronic versions of publications are available in Armenian (full), Russian, English at the following address: http://www.armstat.am/</p> <p>Data on national accounts are published at National Accounts found in Database section at http://www.armstat.am/am/?nid=202:</p>
	<p>7.3 Manage release of dissemination products</p>	<p>The dissemination of statistical information is carried out according to the schedule envisaged by the Five-Year and Annual Statistical Programs. In case of the changes and adjustments made in the indicators provided by the providers of statistical information the indicators already published by the Armstat are also being changed and adjusted correspondingly.</p>
	<p>7.4 Promote dissemination products</p>	<p>Providing distribution products. Use tools to manage communication with consumers. Use of site, facebook and other resources.</p>
	<p>7.5 Manage user support</p>	<p>In case of the official request of the users of statistical data related to the data not being published, the calculation of additional</p>

		indicators is carried out at possible extend and submitted to them at the same time following the principle of statistical data confidentiality.
8. Evaluation		
	8.1 Gather evaluation input	Production data on unregistered activity and shadow/informal/economy are under verification. Given incomplete coverage of the data, failure to present the information or presenting unreliable information, the estimations are based on data about production of commodities, number of employed and participants of production, which are received regularly from statistical reports, as well as from complete surveys on household living standards and sample surveys on labor force. Share of participation in GDP of informal sector is currently estimated based on findings of the 2009 "Survey on Informal Sector and Informal Employment in Armenia". Indirect macroeconomic methods are applied, using estimates of sector surveys conducted in different years and other information sources, as well as the results of integrated household living conditions and workforce sample surveys.
	8.2 Conduct evaluation	The possible inaccuracy in national accountsa may be because of inaccuracy of data received from different sources.
	8.3 Agree an action plan	Difference between GDP calculated in production and expenditure approaches is reflected in accounts as a statistical discrepancy.