

Statistical product – Population Census

Processes	Sub-processes	Sub-process description
<i>1 Specify needs</i>		
	1.1 Identify needs	<p>The necessity to maintain the Population Census is primarily stipulated by the need to ensure the periodical update the calculations related to the population number, gender and age structures and main demographic indicators by administrative and territorial division, as well as by the constantly growing demand of users of statistical information and structural units of the Armstat.</p> <p>The results of Population Census statistical indicators, in case of need, are provided to the statistical data users: the state and local government bodies of RA, scientific and academic institutions, international organizations and other interested institutions, following the legislative requirements on their confidentiality. The information on Population Census is used in the socio-demographic, as well as economic and financial field in order to develop strategies, solve the strategic tasks, to reveal the development trends and other purposes.</p>
	1.2 Consult and confirm needs	<p>The Draft Annual Statistical Program is submitted to 147 (due to financial restrictions) main statistical information users (government agencies, educational institutions, judicial bodies, banking system, business sphere, NGOs, international organizations and mass media) selected by the sampling method in order to study their opinions.</p> <p>The users' opinions about statistical information are studied by business discussions as well as through the "User satisfaction survey questionnaire" which is available on Armstat website (see: https://www.armstat.am/am/?nid=131).</p>
	1.3 Establish output objectives	<p>The statistical program is the basis for the implementation of statistics in the territory of RA. The five years program is</p>

		<p>developed for the determination of the directions of the statistical activity and the annual program is developed to determine the measures to ensure the realization of these directions.</p> <p>The program sets by Statistical Committee of the RA and by other state institutions, Armstat overall coordinates the list of indicators of the statistical observation (and their collection, processing, summarizing, publishing activities), as well as it improves the calculation works.</p> <p>The directions of activities and actions envisaged by the Annual and Five-Year Statistical Programs should take into account the comparability of country indicators with the international statistical standards, provide with possible stable periodicity of trends from the viewpoint of their revealing during the long term and provide with the proportion of resources foreseen for statistics on annual basis.</p>
	<p>1.4 Identify needs</p>	<p>The current estimate of population number is produced on the basis of the last population census results, plus annual number of live births and arrivals, minus number 2 of deaths and departures from the given territory. In addition, the information on migration of the population (registration, write out) received from the RA Police is subject to revision (statistical adjustment), taking into account the fact, that they don't fully cover the population movements, the migration assessments received by the results of Integrated living conditions survey (ILCS) of households of the year preceding the reporting period are taken into account.</p> <p>The current estimate of population number is produced on the basis of the last population census results, plus annual number of live births and arrivals, minus number of deaths and departures from the given territory. The current estimate of population number for the intercensal period has been verified through making retrospective recalculations based on the last population census results. The distribution of population by urban/rural breakdown is made by their place of residence (registration).</p> <p>Urban settlements are considered those which are determined as cities/towns by RA Law "On RA Administrative-territorial</p>

		<p>Distribution”, and all other settlements determined as villages are considered rural.</p> <p>Two categories of population are taken into account during population census, they are as follows:</p> <ul style="list-style-type: none"> • De jure population number of population of the given territory covering permanent residents including those present and temporarily absent during the registration, • De facto population, number of population of the given territory covering permanent residents including those present and temporarily residing during the registration. <p>The temporarily absent population is those individuals who were registered as residents but were absent less than 1 year from the place of their main 3 (permanent) residence as of the census time. The temporarily present population is those individuals who were not residents and were present in the given territory less than 1 year as of the census time.</p>
	1.5 Check data availability	<p>Data collection is carried out by order prescribed by the Law on «Population Census» every ten years, through the Population Census Questionnaire based on “The Population Census program” defined by the Resolution of RA Government which is approved by RA State Council on Statistics according to annual and five year statistical programs.</p> <p>The other administrative and non statistical sources for information collection are not available.</p>
	1.6 Prepare business case	<p>Before the adoption of the “Population Census Questionnaire”, the working discussions related to the included data are carried out with the different interested bodies, scientific organizations, users, as well as the UN relevant recommendations and international expert’s consultations are taken into account. The questionnaires and experience of other countries are studied.</p>
<i>2Design</i>		
	2.1 Design output	<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</p>

		for the collection of statistical data” dated 20 June 2016 and Resolution “On Approval of Annual Statistical Program”.
	2.2 Design variable description	<p>The variables formed by the result of Population Census are:</p> <ul style="list-style-type: none"> • population number by administrative- territorial distribution/ sex, age, current and permanent population, village / town /, • demographic characteristics of the population / marital status, birth rate, educational level, literacy /, • economic characteristics of the population / economic activity, employment, type of economic activity /, • national population composition, native language and religious affiliation /, • population movements / continuity of residence, birthplace, citizenship /, • households by type, composition and other characteristics/, • housing conditions of the population / type of residential building, construction period, renovation, form of ownership, computer availability /.
	2.3 Design collection	Statistical data is collected through the Population Census Questionnaire approved by RA Government based on “The Population Census program”, which is approved by RA State Council on Statistics. Data collection is carried out in paper form.
	2.4 Design frame and sample	The collection of information is implemented by the widespread method including both individual and group household members.
	2.5 Design processing and analysis	Within the deadline established by the Statistical program based on electronic database formed in the result of the digital coding and checking, input of population census data, the statistical indicators undergo computer processing (logical and completeness controls) then the output data defined by the census program are derived by RA marzes, regions (city /village).
	2.6 Design production systems and workflow	The preparatory work is carried out for all processes from the collection of information and until its publication, particularly, related to the appropriate notification of population, the necessary professional training of the staff through professional courses (the relevant instructing is organized for the field works staff) etc. preparation of schematic plans for cities and villages with 5000 and more population, organizing and conducting pilot census, and so

		on. In order to implement the Census fieldwork, the census, supervisory and enumeration areas with the norms defined by the organizational and methodological provisions of the census are formed, involving relevant number of Population Census area managers and their assistants, supervisors-controller and enumerators.
<i>Build</i>		
	3.1 Build collection instrument	The information written in the Census questionnaires completed by the enumerators is the Population Census data collection tool, which after statistical processing (digital coding and logical checking) is input into computers. As a result, electronic databases are formed, which are subjected to electronic processing through the appropriate software and the derivation of output data is implemented by formats defined by the Population Census Program in the deadline defined by “Annual Statistical Program”.
	3.2 Build or enhance process components	-
	3.3 Build or enhance dissemination components	<p>The main users of statistical information are the RA government, academic and non-governmental organizations and individuals, regional institutions and local self-government bodies, marz and structural units of the Armstat, as well as international organizations.</p> <p>According to the requirements of the Statistical Program, statistical data received on the result of Population Census are summerized in the publications of the Republic of Armenia on the marzes and the city of Yerevan. The information is provided to the users in the case of official requests keeping the statistical confidentiality.</p>
	3.4 Configure workflows	<p>The derivation of statistical product is carried out by the following successive stages:</p> <ol style="list-style-type: none"> 1. data derivation 2. data coding and checking 3. data input and electronic database design 4. arithmetical and logical checkings and adjustments, 5. classification by administrative –territorial divisions units 6. comparison of received data with the corresponding

		<p>time series and other sources</p> <p>7. The application of information for Armstat internal purposes,</p> <p>8. Preparation of publications,</p> <p>9. The provision of summary statistical data to users.</p>
	3.5 Test production system	The preparation of the comparative results of output indicators from data warehouse formed by the results of Population Census.
	3.6 Test statistical business process	Testing of methodological, organizational and data mechanical processing software and technologies of Population Census were implemented through Pilot Population Census, where about one percent of the country's population was included.
	3.7 Finalize production system	-
<i>Collection</i>		
	4.1 Create frame and select sample	The general population of information is formed in the result of widespread observation of data collection of Population Census that includes statistical information collected from private and group households.
	4.2 Set up collection	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".
	4.3 Run collection	Data collection is carried out by the Armstat territorial units, marz/Yerevan city department, as well as by temporarily formed operational department of the preparation and conduction of the Population Census according to the provisions of the Resolution of RA State Council on Statistics No 05-N on the "Approval of the Procedure of the collection of Statistical Data" dated 20 June 2016.
	4.4 Finalize collection	The collected data, after arithmetical and logical checkings and the answers of relevant questions are subjected to digital coding and are input in the electronic environment. Mechanical method is used to input data.
<i>5 Elaboration</i>		

	5.1. Integrate data	The unification of relevant data received from the Armstat marz (regional) agencies in one common database is implemented.
	5.2 Classify and code	<p>The collected data is classified and encoded</p> <ul style="list-style-type: none"> • The regions, towns and villages of RA according to the “Classification of Division of administrative-territorial units”. • Nationalities according to the “Handbook on classifications of nationalities”, that has been jointly developed by the Chair of Ethnography of Yerevan State University, Institute of Archaeology and Ethnography of National Academy of Sciences of the Republic of Armenia and Statistical Committee of RA and approved by the Resolution No. 69 of the RA State Council on Statistics dated 10 September 2001. • Occupations according to the “Occupations’ Model Dictionary”, by the first main digit classification, developed by the Interstate Statistical Committee of the Commonwealth of Independent States and approved by the Resolution N44 of RA State Statistical Council on Statistics dated 10 September 2001. • Education according to the predefined coding order.
	5.3 Review and approval	The analysis of indicators in order to identify the integrity and the accuracy on logical chains of different output tables is implemented.
	5.4 Edit and impute	Data on Population Census during the processing can be edited and updated (Imputation).
	5.5 Derive new variables and units	After conducting census, the imputations and assessments are carried out.
	5.6 Calculate weight	–
	5.7 Calculate aggregates	The derivation of summary data by RA marzes, regions, cities/villages is implemented on the basis of the received and processed summary data.
	5.8 Finalize data files	Often, based on the needs of users (including international organizations), to obtain additional statistical data , the derivation of complex groups based on the information available in the database is implemented, using simultaneously some combinations

		of indicators available in database of the Population Census (registered and deregistered).
<i>Analysis</i>		
	6.1 Prepare draft outputs	The creation of groups, indicators, as well as time series of statistical indicators is implemented based on obtained statistical summary data.
	6.2 Validate outputs	The methodological requirements to the received indicators are strictly followed during the whole process of receiving according to the pre-defined classifications, methodological guidelines and the instruction on completing the statistical reporting form.
	6.3 Interpret and explain of outputs	The logical analysis of the received summary indicators is carried out taking into account the dynamics of the indicators from the previous Census and received data from other available sources.
	6.4 Apply disclosure control	The confidentiality of statistical indicators (not containing individual (personal) data) that is subject to publication, as well as requested by the users of statistical information is strictly followed according to the Law on Official Statistics and the Resolution of the SCS No 53 " Approval of the Order on Protection of Statistical Confidentiality" dated 25 June 2001, and only summarized data are provided (see: https://www.armstat.am/file/doc/99454478.pdf).
	6.5 Finalize outputs	Before the dissemination of the summary data, the analysis of the indicators of the population is carried out.
<i>Elaboration</i>		
	7.1 Update output system	The work on the derivation and final checking of relevant tables of statistical indicators that are subject to publication is carried out, as well as the time series update is 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 the production steps are implemented for the disseminating products: preparation of explanatory text, tables, charts and other materials, editing of these products and making them compliant with publishing standards. The information on the statistical indicators is published in electronic formats in Armenian, Russian, English.

		Handbooks and publications are available on official website of Armstat (http://www.armstat.am/am/?nid=45 http://www.armstat.am/am/?nid=80):
	7.3 Manage release of dissemination products	In the 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.
	7.4 Promote dissemination products	-
	7.5 Manage user support	In case of the official request by the users of statistical information, the information is provided at possible extend following the principle of confidentiality of statistical information.
<i>Evaluation</i>		
	8.1 Gather evaluation input	After the end of 2011 RA Population Census the supervisors together with the enumerators of their area carried out random control round during the period 22-26 October.
	8.2 Conduct evaluation	Results of Population Census are evaluated through post-census random control round by enumerators to check the completeness and correctness of population enumeration. It was carried out in all the enumeration areas, including 10 percent of the dwelling units (buildings) in each one. During random control round of 10% dwelling units (buildings) the information on not enumerated 2913 persons was restored (2960-47 persons) that comprised around 0.1 % of population in RA.
	8.3 Agree an action plan	-