

Quality report on research of the level of population food accessibility

Item No	Concept Name	Description
1	Contact	
1.1	Contact organisation	State Statistical Committee of the Republic of Azerbaijan
1.2	Contact organisation unit	Department of Quality of Life Statistics
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2	Statistical presentation	
2.1	Data description	The main purpose of the research of population food accessibility is statistical assessment of economic and physical accessibility of the different strata of population to food.
2.2	Classification system	Classification of administrative territorial division, 2019 (https://www.stat.gov.az/menu/5/classifications/source/Inzibati_tes_2020.pdf) https://www.azstat.org/tesnifat/
2.3	Sector coverage	The survey is conducted in 10200 households by covering all economic regions of the county.

2.4	Statistical concepts and definitions	Economic accessibility to food is an opportunity to obtain food products of sufficient quality at retail market prices by the population in volume and variety, not less than the norms of consumption. Physical accessibility to food is characterized by the level of development of the trade infrastructure that provides food products to the population.
2.5	Statistical unit	Households are taken as basis for sampling unit.
2.6	Statistical population	Total population, sampling network. Population indicators are obtained by implicating population of the country based on the representability of 10200 households sampled once a year.
2.7	Reference area	All households covered by survey.
2.8	Time coverage	Once a year
2.9	Base period	2019
3	Statistical processing	
3.1	Source data	Primary data are conducted in the form of statistical survey No. 1-food accessibility on "Quality report on research of the level of population food accessibility".
3.2	Frequency of data collection	Data collection is conducted once a year.
3.3	Data collection	Data is included in the database in real time via tablet computers by the consultants conducting the survey.
3.4	Data validation	Data processing is conducted after the data is included in the database in real time.. The SPSS software is used to check the data and the consultants conducting household research are informed about the detected discrepancies and discrepancies are clarified.
3.5	Data compilation	If discrepancies are detected during the online database observation, local statistical bodies, including consultants, are informed about this and appropriate amendments are made through recurring the household survey. Editing of discrepancies detected during Data Quality Control is also carried out at the macro level, i.e., descriptive statistics of individual indicators are calculated.
3.6	Adjustment	Seasonal adjustments are not conducted.

4	Quality management	
4.1	Quality assurance	<p>The quality management system is implemented in the State Statistical Committee in accordance with international standard ISO 9001, in 2013 an external audit of the quality management system was conducted, and in August of the same year the State Statistical Committee first received a certificate of international compliance ISO 9001:2008 in the field of “Production and dissemination of the official statistical data”. After the change in the international standard in 2015, all documents of the quality management system had been revised in accordance with the requirements of the international standard ISO 9001:2015. According to the results of the certification audit carried out on 09-10 March 2017, the administration of the State Statistical Committee and 13 local statistical bodies applying QMS, and then according to the results of the re-certification audit conducted on 02-06 March 2020, the administration of the State Statistical Committee and additional 17 local statistical bodies applying QMS were awarded international certificate of compliance ISO 9001:2015 in the field of “Production and dissemination of the official statistical data.” (http://www.stat.gov.az/menu/2/quality/az/sertifikat_2015.pdf).</p> <p>For the aim to standardize the production of statistical products, “Generic Statistical Business Process Model” (GSBPM) has been applied since 2012. Based on the national version of the “Generic Statistical Business Process Model” a description of statistical processes on Population life quality and household research statistics was developed. (https://www.stat.gov.az/menu/2/quality/az/gsbpm/hs01_sb.pdf).</p> <p>Seminars on QMS are organized for employees of structural units of the administration and local statistical bodies not less than once a year. In 2010 and 2017, a Global Assessment of the National Statistical System of the Republic of Azerbaijan was carried out by the European Statistical Office (Eurostat), United Nations Economic Commission for Europe (UNECE) and the European Free Trade Association (EFTA). According to recommendations of experts, improvements are being carried out in this area.</p>
4.2	Quality assessment	<p>Based on the “Audit program” approved annually, internal audits are carried out in the departments of the administration and local statistical bodies applying QMS. Audit teams are organized for conducting audits and an individual audit plan is approved for each structural unit. The audit team carries out the control according to the audit plan. Internal monitoring of quality aspects in the State Statistical Committee is carried out in a centralized manner by the competent structural unit (Quality Management and Metadata Department) and every year a document</p>

		<p>“Analysis by the top management” on the results of the conducted audits is prepared and submitted to the top management. Before every audit the audit team members (auditors) are instructed by the chief auditor and through seminars organized not less than once a year.</p> <p>Compliance of the activities of the State Statistical Committee with the requirements of the international standard “Quality management systems. Requirements” ISO 9001:2015 is considered one of the strengths. The increase of the workload due to the incomplete transition to electronic documentation and alongside this, keeping paper document circulation, the late adaptation of the staff (employees) to the new standards requirements are considered the weaknesses.</p>
5	Relevance	
5.1	User Needs	Once a year, a meeting is held with the representatives of the Ministry of Economy, Ministry of Labour and Social Protection of Population, Ministry of Education, Ministry of Industry and Azerbaijan National Academy of Sciences and proposals are taken into account..
5.2	User Satisfaction	No information was received on meeting user demand. Users also enter to the official web-page at http://www.stat.gov.az and reply to the questions for users regarding main areas of statistics in the section "survey on provision of users with statistical data".
5.3	Completeness	Statistical data are fully completed.
5.3.1	Data completeness - rate	Statistical data are fully completed. The requested data is 100% available.
6	Accuracy and reliability	
6.1	Accuracy - overall	Representation is provided in all regions of the country. First of all, the department continues methodological work to improve the quality of primary data received from local statistical bodies. Regular seminars are organized with consultants, control surveys are conducted in places and consultants are promptly informed if any methodological updates occur.

6.2	Sampling error	In primary data collected on the total population, sampling error is calculated by CSRSI, by country and economic regions.																																																																																																											
		Quantitative interval of variation coefficient (%)		Threshold of 95% of the sample error (%)		Requirements for statistical data processing on sections																																																																																																							
		< 5		< 9,8		Country level																																																																																																							
		5-10		9,8-19,6		Regional level																																																																																																							
		10-15		19,6-29,4		Regional level: some indicators and sections are applicable																																																																																																							
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<table border="1"> <thead> <tr> <th>Code of region</th> <th>Name of region</th> <th>Number of households</th> <th>Number of population</th> <th>Average quantity by the size of household</th> <th>Standard deviation</th> <th>Dispersion</th> <th>Standard error of average quantity</th> <th>Variation coefficient</th> </tr> </thead> <tbody> <tr> <td>00</td> <td>Baku city</td> <td>504245</td> <td>2099854</td> <td>4.16</td> <td>2.01</td> <td>4.04</td> <td>0.003</td> <td>48.2</td> </tr> <tr> <td>01</td> <td>Absheron economic region</td> <td>125756</td> <td>573195</td> <td>4.56</td> <td>1.90</td> <td>3.62</td> <td>0.005</td> <td>41.7</td> </tr> <tr> <td>02</td> <td>Ganja-Gazakh economic region</td> <td>247604</td> <td>1169148</td> <td>4.72</td> <td>2.00</td> <td>4.02</td> <td>0.004</td> <td>42.4</td> </tr> <tr> <td>03</td> <td>Sheki-Zagatala economic region</td> <td>122305</td> <td>559602</td> <td>4.58</td> <td>1.90</td> <td>3.62</td> <td>0.005</td> <td>41.5</td> </tr> <tr> <td>04</td> <td>Lankaran economic region</td> <td>140354</td> <td>731767</td> <td>5.21</td> <td>2.15</td> <td>4.63</td> <td>0.006</td> <td>41.2</td> </tr> <tr> <td>05</td> <td>Guba-Khachmaz economic region</td> <td>99041</td> <td>474284</td> <td>4.79</td> <td>1.96</td> <td>3.85</td> <td>0.006</td> <td>40.9</td> </tr> <tr> <td>06</td> <td>Aran economic region</td> <td>377967</td> <td>1846610</td> <td>4.89</td> <td>2.01</td> <td>4.04</td> <td>0.003</td> <td>41.7</td> </tr> <tr> <td>07</td> <td>Upper Garabagh economic region</td> <td>46701</td> <td>218085</td> <td>4.67</td> <td>1.95</td> <td>3.79</td> <td>0.009</td> <td>41.7</td> </tr> <tr> <td>09</td> <td>Mountainous Shirvan economic region</td> <td>53934</td> <td>266695</td> <td>4.94</td> <td>2.18</td> <td>4.73</td> <td>0.009</td> <td>44.0</td> </tr> <tr> <td>10</td> <td>Nakhchivan economic region</td> <td>98831</td> <td>389232</td> <td>3.94</td> <td>1.97</td> <td>3.87</td> <td>0.006</td> <td>49.9</td> </tr> </tbody> </table>											Code of region	Name of region	Number of households	Number of population	Average quantity by the size of household	Standard deviation	Dispersion	Standard error of average quantity	Variation coefficient	00	Baku city	504245	2099854	4.16	2.01	4.04	0.003	48.2	01	Absheron economic region	125756	573195	4.56	1.90	3.62	0.005	41.7	02	Ganja-Gazakh economic region	247604	1169148	4.72	2.00	4.02	0.004	42.4	03	Sheki-Zagatala economic region	122305	559602	4.58	1.90	3.62	0.005	41.5	04	Lankaran economic region	140354	731767	5.21	2.15	4.63	0.006	41.2	05	Guba-Khachmaz economic region	99041	474284	4.79	1.96	3.85	0.006	40.9	06	Aran economic region	377967	1846610	4.89	2.01	4.04	0.003	41.7	07	Upper Garabagh economic region	46701	218085	4.67	1.95	3.79	0.009	41.7	09	Mountainous Shirvan economic region	53934	266695	4.94	2.18	4.73	0.009	44.0	10	Nakhchivan economic region	98831	389232	3.94	1.97	3.87	0.006	49.9
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The sampling error reflects the deviation of sampling of the average characteristics of the sampled population from the average characteristics of the general population. Accordingly, it expresses the deviation of the results of the sample survey from the actual prices of the general population data.																																																																																																													
6.2.1	Sampling error - indicators	<p>Number of households by the sampling stations, average cost, standard deviation. (Step 1)</p> <p>For the aim to increase the representativeness of the data reflecting population living standards and poverty level in the country the sampling network for household budget survey has been reached to 0.5% of the total population, and that minimizes the sampling error and makes it unimportant.</p>																																																																																																											
6.3	Non-sampling error	Non-sampling error is carried out in accordance with the "Rules for classification and elimination of errors in the reporting data" approved by the decision of the State Statistical Committee No. 9/3 dated October 30,																																																																																																											

		2019. Seminars-consultations and practical assistance are accordingly provided to reduce various types of errors. https://www.stat.gov.az/menu/2/quality/az/00_5.pdf
6.3.1	Coverage error	There was no coverage error since the households are represented for 100% in the household survey.
6.3.1.1	Over-coverage - rate	The coverage ratio has already become unified since all activities were implemented in accordance with the sampling design. Excess coverage - 0%.
6.3.1.2	Common units - proportion	Not applied, because here there is no combination of survey data and administrative data.
6.3.2	Measurement error	Primary data are entered in real time regime by the interviewers, and the micro-level editing of data is carried out by local statistical bodies, and the macro-editing is carried out by employees of the Life Quality Statistics Department. During macro editing, statistical characteristics of key indicators at different levels (district, city, village) are calculated and studies on indicators with high coefficient of variation are conducted and edited by establishing counter relation if necessary.
6.3.3	Non response error	Errors occurred during the calculation, reading and editing of data (figures) are promptly eliminated.
6.3.3.1	Unit non-response - rate	It is taken into account and all respondents reply to the questionnaire, so there is no unit that does not respond, that is, the ratio is 0.
6.3.3.2	Item non-response - rate	Questionnaire was answered by all respondents.
6.3.4	Processing error	No significant processing error occurred.
6.3.4.1	Imputation - rate	Imputation is not performed.
6.3.5	Model assumption error	Indicators are processed on the basis of SSPS software package and final tables are obtained.
6.4	Seasonal adjustment	Seasonal adjustments are not applied.
6.5	Data revision - policy	Data updating policy is implemented based on the "Regulation on review of data on main statistical indicators" approved by order of the State Statistical Committee dated 10.05.2016, No 60/t. http://www.stat.gov.az/menu/6/information_regulations/reg_05_2016.pdf
6.6	Data revision - practice	Clarification of data is not needed. Because it is calculated on the basis of final data.
6.6.1	Data revision - average size	Not applied.

7	Timeliness and punctuality	
7.1	Timeliness	Carried out based on “Statistical Works Program” of the State Statistical Committee of the Republic of Azerbaijan.
7.1.1	Time lag - first result	Time lag is 40 days between obtaining of primary data and preparation of final results.
7.1.2	Time lag - final result	Time lag is 57 days between the last day of reporting period and publication of final results. (T2=40)
7.2	Punctuality	Carried out timely based on “Statistical Works Program”.
7.2.1	Punctuality - delivery and publication	Cases of delay are equal to zero (P3=0).
8	Coherence and comparability	
8.1	Comparability - geographical	Calculated by urban and rural areas and economic regions in total.
8.1.1	Asymmetry for mirror flow statistics - coefficient	Not applied.
8.2	Comparability - over time	The indicators have been calculated since 2019.
8.2.1	Length of comparable time series	2 years
8.3	Coherence - cross domain	Since it is selective statistical survey compatibility with other areas is not carried out.
8.4	Coherence - sub annual and annual statistics	Survey is conducted once a year.
8.5	Coherence - National Accounts	Compliance with the national system of accounts is carried out.

8.6	Daxili uyğunluq	Internal coherence is provided.
9	Accessibility and clarity	
9.1	News release	Final data is sent to users in the form of bulletin and is openly posted for everyone in the official website.
9.2	Publications	The bulletin in which the final data is published is posted in the official website. https://www.stat.gov.az/source/budget_households/az/bul/bul_erzag_2020.pdf
9.3	Online database	Not included in the online database on the official website of the Committee.
9.3.1	Data tables - consultations	15485 views (1.94% of total views on all sections) on households budget was registered for 09.06.2021. http://www.stat.gov.az/link_click_counter/
9.4	Microdata access	Access to microdata is prohibited. Primary data could be used only according to "Rules on submission of microdata to users for research purposes" approved by the chairman of the State Statistical Committee on 13.06.2011. https://www.stat.gov.az/menu/6/personal_info/micro_inf.pdf
9.5	Other	Access to data is provided simultaneously for all users. All data are free of charge for users. User requests are responded in electron and written form.
9.6	Documentation on methodology	Guidelines on filling in reporting form have been developed and information on that is posted on the relevant section of the webpage of the SSC: http://www.stat.gov.az/menu/4/e-reports/az/03/003_p.php
9.7	Quality documentation	https://www.stat.gov.az/menu/2/quality/
9.7.1	Metadata completeness - rate	100%. Information on all applied metadata elements is provided.
9.7.2	Metadata - consultations	Record of the number of appeals on metadata is not implemented.
10	Cost and Burden	Providing consultants with tablet computers, along with ensuring the efficiency of transmission of data collected during the survey process, minimized the printing of questionnaires in paper format.
11	Confidentiality	

11.1	Confidentiality policy	<ul style="list-style-type: none"> • According to the “Law on Official Statistics of the Republic of Azerbaijan” (Article 15) submission of primary data is prohibited. http://www.stat.gov.az/menu/3/Legislation/law_az.pdf • Access to microdata is regulated by “Rules on submission of microdata to users for research purposes” approved by the chairman of the State Statistical Committee on 13.06.2011. http://www.stat.gov.az/menu/6/personal_info/micro_inf.pdf • There are guidelines “How to work with private data and how to protect their confidentiality?” approved by the decree of the State Statistical Committee dated 19 February 2014, No 7/02s. http://www.stat.gov.az/menu/6/personal_info/personal_information.pdf • Protection of primary (private) data confidentiality is approved by the decree of the State Statistical Committee dated 23 November 2016, No 19/07s and reflected in the document “Policy of the State Statistical Committee of the Republic of Azerbaijan on protection of confidential statistical data”. http://www.stat.gov.az/menu/2/quality/az/mexfilik.pdf
11.2	Confidentiality - data treatment	Official Statistics must not be disseminated to users, if they contain or reveal confidential data. Aggregates shall comprise at least three units and the share of one unit in an aggregate must not exceed 85% of the total.
12	Comment	No additional comments.