

Global Assessment of the National Statistical System of Azerbaijan

November 2017

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List of abbreviations

BoP	Balance of payments
BPM6	The sixth edition of Balance of Payments and International Investment Position Manual
CIS	Commonwealth of Independent States
COICOP	Classification of individual consumption by purpose
CPA	Statistical Classification of Products by Activity
CPI	Consumer Price Index
DCMI	Dublin Core Metadata Initiative
DESAP	Development of a Self-Assessment Programme
ENPI	European Neighbourhood and Partnership Instrument
ESCoP	European Statistics Code of Practice
ESMS	Euro-SDMX Metadata Structure
ESS	European Statistical System
ESQRS	ESS Standard for Quality Reports Structure
EU	European Union
GA	Global Assessment
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GIS	Geographic Information System
GLOS	Generic law on official Statistics
GSBPM	Generic Statistical Business Process Model
HBS	Household Budget Survey
HQ	Headquarters
ICD	International Classification of Diseases
ICT	Information Communication Technologies
IEA	International Energy Agency
ILO	International Labour Organisation
IMF	International Monetary Fund
IRES	International Recommendations for Energy Statistic
ISCED	International Standard Classification of Education
ISO	International Organisation for Standardisation
IT	Information Technology
ITU	International Telecommunication Union
MCC	Main Computing Centre
MoU	Memorandum of Understanding
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne (Statistical classification of economic activities in the European Community)
NoE	Non-Observed Economy

NSI	National Statistical Institute
NSS	National Statistical System
OECD	Organisation for Economic Co-operation and Development
PHC	Population and Housing Census
PPP	Purchasing Power Parity
PRODCOM	PRODUCTION COMMUNAUTAIRE (Community Production) for mining, quarrying and manufacturing
R&D	Research and Development statistics
RSO	Regional Statistical Office
SAS	Statistical Analysis Software
SDDS	Special Data Dissemination Standard
SDG	Sustainable Development Goals
SDMX	Statistical Data and Metadata Exchange
SILC	Survey on Income and Living Conditions
SIMS	Single Integrated Metadata Structure
SITS	Standard International Trade Classification
SNA	System of National Accounts
SPSS	Statistical Package for the Social Sciences
SSC	State Statistical Committee
STATA	Data Analysis and Statistical Software
TAC	Quality Control Tables
TUS	Time Use Survey
QMS	Quality management system
QCT	Quality control tables
UIS	UNESCO Institute for Statistics
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
UNWTO	United Nations World Tourism Organisation

Preface

The Global Assessment (AGA) of the national statistical system (NSS) of the Republic of Azerbaijan was undertaken within the framework of the Eurostat-funded project *“The provision of global assessments, sector assessments and light peer reviews for enlargement and ENP countries”*. DevStat in consortium with Statistics Lithuania, contracted by Eurostat, organised all activities and tasks related to the GA.

Eurostat initiated the GA following an official request by the State Statistics Committee of the Republic of Azerbaijan (hereinafter SSC). The assessment was conducted by the following experts: Mr Gerard O’Hanlon (independent consultant), who was the leading expert, and Ms Bronislava Kaminskiene (independent consultant) and accompanied by Ms Claudia Junker (Eurostat), Ms Vera Herrmann (EFTA) and Mr Carsten Boldsen (UNECE). Ms Irina Kangro from the State Statistical Committee of the Republic of Belarus and Mr Iurie Mocanu from the National Bureau of Statistics of Moldova participated in the assessment as an observer.

The assessment findings are based on an extensive review performed during the assessment missions, which took place on 12-16 September 2016 and on 6-9 February 2017 in Baku.

Prior to the first mission, SSC staff completed a self-assessment questionnaire (SAQ) and returned it with other relevant supporting documents, which served as a starting point for the assessment. The results of the assessment are based on the analysis of the documents provided by the SSC, documents available on their website, and information collected and discussed during the in-country missions. Missing documentation was also provided by the SSC after both missions in electronic format.

The collaboration between the assessment experts and the team of the SSC was constructive throughout all phases of the GA.

Executive Summary

The main goal of the Global Assessment (GA) of the National Statistical System (NSS) of Azerbaijan is to evaluate the level of conformity with European statistical standards, with particular reference to compliance with the European statistics Code of Practice (ESCoP) and, for specified sectors, with the Eurostat Statistical Requirements Compendium.

Since the previous global assessment of the NSS of Azerbaijan in 2010, many of the improvement recommendations issued during that assessment have been implemented and have supported the SSC to modernise its production and dissemination of official statistics and at the same time to increasingly comply with European and international standards in a number of statistical domains. The SSC and other producers of official statistics are confronted with an increasing demand from the government, the business sector, international organisations and the public at large for timely, reliable and internationally comparable statistics for monitoring economic, social and environment policies. The SSC, as the major producer of official statistics and the coordinating body of the NSS, is committed to maintain trust and public confidence in official statistics by producing it in a professionally independent manner. This report provides an assessment of the state of development of official statistics in Azerbaijan, the progress achieved during recent years and provides recommendations for further improvement in the near and long-term

All official statistics in Azerbaijan are covered by the Law on Official Statistics (adopted for the first time in February 1994 and most recently amended in November 2011) and included in the Annual Work Programme that is prepared by State Statistical Committee (SSC), agreed with the Cabinet of Ministers, and published on the SSC website. Around 80% of all official statistics in Azerbaijan are produced and disseminated by SSC on the basis of direct statistical surveys conducted by the Committee or administrative data received from Ministries and other public agencies. Accordingly, the focus of the GA has been to a large extent but not exclusively on the work and performance of the SSC.

The results of the Global Assessment confirm that the National Statistical System of Azerbaijan mainly complies international and European standards. The recommendations provided by the assessment team support the NSI on its way to full compliance and aim at further improvement of the National Statistical System, including the activities of SSC.

Compliance with ESCoP

Principle 1 – Professional Independence

In general, the Assessment Team found that there is a good understanding of, and adherence to, the principle, demonstrated not only in the provisions of the Law on Official Statistics but also in the management and operation of the SSC and other statistical bodies.

However, the assessment team believes that the opportunity should be taken to address a number of shortcomings and potential anomalies in the existing legal texts in the context of reviewing the statistical legislation to align it more closely with the recently adopted Generic Law on Official Statistics recommended for Eastern European, Caucasus and Central Asian countries in the 64th Plenary Session of the Conference of European Statistics of the United Nations Economic Commission for Europe on 27-29 April 2016. These relate primarily to the professional role of the Chairman of the SSC and the need to have a more inclusive definition of official statistics.

Currently the Chairman, as a Member of the Cabinet of Ministers, is appointed and dismissed by the President of Azerbaijan in line with the constitutional procedures specified for Ministers in general. This set-up guarantees among other things a higher organisational status for the SSC and is hence, in the interest of official statistics in Azerbaijan. Therefore, the Team believes that, in order to closely align with the ESCoP, the emphasis should be on explicitly strengthening the professional role of the Chairman through the adoption of appropriate legal and other measures.

Certain important statistics produced outside the SSC, such as Government Finance Statistics, are not considered as being official statistics subject to the Law on Official Statistics. Accordingly, the definition of official statistics should be reviewed to ensure that all relevant statistics are included within the scope and coverage and that the provisions of the Law apply in full to all such statistics irrespective of who the statistical producer is and what methodologies and sources are used.

Recommendations

The SSC is encouraged to:

- Define the principle of Professional Independence explicitly with particular regard to how it should apply in practice to: SSC, the Chairperson of SSC, and other statistical producers. (ESCoP Principle 1, indicators 1.1, 1.3 and 1.4)
- Define the professional and managerial duties and responsibilities of the Chairperson of SSC in line with those specified for Chief Statisticians in the GLOS. (ESCoP Principle 1, indicators 1.3 and 1.4)
- In the context of retaining the status of the SSC and the status of the Chairperson of the SSC as a Member of the Cabinet of Ministers, define all means for further strengthening professional independence through appropriate legal and other measures. (ESCoP Principle 1, indicators 1.2 and 1.8)
- Review the current approach towards the definition of “official statistics” in order to ensure that all relevant statistics – independently on who the producer is - are included within the scope and coverage having regard to national and international statistical practices and requirements and are included in the respective statistical work programmes – see GLOS for guidance. (ESCoP Principle 1, indicator 1.5)
- Ensure that the statistical law applies in a comprehensive manner to all aspects of the production and dissemination of official statistics in Azerbaijan, irrespective of who the statistical producer is and what methodologies and sources are used. (ESCoP Principle 1, indicator 1.5)

Principle 2 – Mandate for data collection:

Compliance with this principle is very well covered by the Law on Official Statistics as the SSC and other state authorities producing official statistics are legally mandated to: conduct surveys, access administrative data for statistical purposes, and impose sanctions for non-response.

Use of administrative data for statistical purposes is still relatively under-developed in Azerbaijan and the SSC is pursuing a strategic objective to double the proportion of official statistics based on administrative data, from 20% to 40%, in the medium term. Towards this end the Assessment Team would make the following recommendations.

Recommendations

The SSC is encouraged to:

- Clarify in practice the right of the SSC to get full access for statistical purposes to administrative data records and sources (including to direct identifiers, where required); and confirm explicitly the precedence of the statistical law over other legislation in this regard (see GLOS for guidance).
- Be pro-active in promoting the benefits of using administrative records for statistical purposes with a view to obtaining greater co-operation from the holders of administrative data.
- Further develop contact with all ministries and government agencies on the increased use of administrative data sources for statistical purposes and on the introduction of common identifiers for all statistical units / enterprises and individuals.
- Conclude multi-annual framework agreements or Memorandums of Understanding (MoUs) with the most important providers of administrative data required for statistical purposes, covering in particular data coverage, scope, frequency, quality criteria and data exchange arrangements and thus formalising the data exchange.

Principle 3 – Adequacy of resources (including human resources, recruitment and training of employees)

Overall staff numbers, and their disposition between the central, regional and local offices, have changed very little since the previous GA in 2010. However, this masks significant changes in the composition of the staff and the work they are required to undertake. The Main Computing Centre (MCC), which previously undertook a large element of data processing for SSC and also provided IT services and support, was abolished and two thirds of the staff positions were allocated to SSC. Very few of the former staff of the MCC transferred over to SSC – instead most of the new staff positions were filled by the recruitment of young recently qualified graduates. As a result, around one third of the current staff complement in SSC is relatively young and with short-term experience in statistics with a consequential requirement for training and staff development, including planned mobility.

Currently, only about a quarter of the staff positions are allocated to the central office and this largely reflects the traditional practice of collecting the data through an interviewer network in the local and regional offices. However, electronic reporting was introduced in recent years and for business surveys approximately 95% of the returns are now received directly in the central office. Furthermore, the planned increased use of administrative sources should also result in a decreased involvement of the regional and local offices in data collection.

An ongoing review of the IT infrastructure and systems by an external consultant is likely to recommend that a fundamental reform be undertaken to modernise the current platform. The Team would tend to agree in general with this assessment and would also point to the need to ensure that there are adequate in-house skilled IT resources available to support the new environment.

The developments listed above taken together have major implications for the future organisational structure and staffing resources, particularly the deployment of staff and tasks between the central and regional/local offices.

Recommendations

The SSC is encouraged to:

- Embark on a fundamental reform and modernisation of the IT infrastructure and systems to meet current and future needs for a modern statistical processing environment. In the context of

modernising the IT platform and moving towards greater use of administrative records for statistical purposes, the management of SSC should reflect on the implications for its organisational structure and resources of these initiatives. Two issues arise in particular:

- It will be essential to identify the most cost-effective deployment of staff within the SSC HQ, the Nakhchivan AR SSC and between Regional and Local Statistical Offices.
- Furthermore, while a number of IT development tasks are currently outsourced, it will be necessary to ensure through training and recruitment that adequate in-house staff resources with the necessary experience and skills are available as required for the regular statistical production and maintenance of the statistical system.
- Seek the support from the government to acquire additional resources to modernise the organisation and to meet new statistical demands, particularly in emerging areas such as: SDGs, innovation, knowledge based economy, green economy, renewable energy, development of the non-oil based sectors, SMEs, etc, though current human and financial resources are adequate to meet current needs.
- Consider the need for greater mobility of staff both inside the HQ and among RSOs. In the long term and if the appropriate legal provisions are in place, deployment could also be envisaged between the SSC HQ and the Regional and Local Statistical Offices.
- Consider the introduction of a time recording system in order to measure the labour input required for the production of the various statistical outputs at a detailed level. Such information is essential for evaluating the costs of the statistical programme and hence for negotiations on budgets and resources for the SSC as well as for analysing the production processes with a view to achieving efficiencies.
- Further develop the training programme to meet the specific needs of the high number of new recruits in terms of language and subject matter knowledge.
- Examine and put in place the necessary promotion and other career development measures to attract and retain sufficient numbers of high quality staff - this is particularly relevant in regard to the large number of recently recruited staff.
- Consider introducing a system of flexible working hours, maybe on a pilot basis, to increase staff motivation and cater for better work-life balance.
- Acquire more high-end IT statistical tools such as SPSS and SAS and provide training so that statistical staff can use them in an effective manner.

Principle 4 – Commitment to Quality

The SSC has made significant progress in developing quality procedures and processes since the 2010 Global Assessment. These have included the establishment of a Department of Quality Management and Metadata in 2012 and the adoption and subsequent publication on the website, with annual updating, of a formal Quality Policy and related Quality Objectives. Self-assessment, following the DESAP approach, of statistical surveys is undertaken by SSC departments while a timetable for the conduct of internal audits was adopted in 2016. A software tool, Quality Control Tables, has also been developed for validating the accuracy and consistency of statistical returns. Finally, quality reports, following the ESMS and ESQRS templates, are prepared and published on the website.

A measure of the overall progress in this area is the fact that SSC was certified in 2013 as conforming to the ISO 9001:2008 standard in respect of its Quality Management System for the “Production and Dissemination of Official Statistical Data”, and in 2017 as conforming to the ISO 9001:2015 standard.

The Assessment Team was impressed with the progress made by SSC in assuring the quality of its outputs since the last GA but would recommend a number of improvements as follows.

Recommendations

The SSC is encouraged to:

- Continue implementation of the quality management system in all Regional Statistical Offices of the SSC in accordance with the requirements of ISO 9001:2015 “Quality Management Systems. Requirements”;
- Complement the DESAP based self-assessment of surveys, and the ISO related documentation audits, with targeted audits of statistical processes and methodologies to be implemented through a programme of statistical audits (sector reviews) focusing on methodology, including the use of benchmarking and the participation of external experts as appropriate, for a regular assessment of key statistical outputs (see Indicator 4.4 of the ESCoP).
- Encourage other producers of official statistics to apply quality assurance procedures and consider the introduction of quality labelling and / or certification of other producers.

Principle 5 – Statistical Confidentiality

The principle of statistical confidentiality is well respected in the laws and in the practices adopted by official statistical producers in Azerbaijan. The Law on Official Statistics absolutely guarantees the privacy of data providers (households, enterprises, organizations and other respondents), together with the confidentiality of the information they provide, and stipulates that the individual data can be used for statistical purposes only. All permanent and temporary employees of the SSC (including interviewers and contract workers) sign written commitments in accordance with the Law to respect statistical confidentiality. The Law lays down fines and other sanctions for any breaches of statistical confidentiality. Furthermore, appropriate IT and other technical procedures and protocols are in place to ensure the security and integrity of confidential statistical data. Researchers can obtain limited access to confidential data, but only when anonymised, for scientific purposes.

Recommendation

The SSC is encouraged to:

- Develop an approach (including necessary legal provisions), consistent with the principle of Statistical Confidentiality, enabling the dissemination of key national statistics where the activities are undertaken by monopoly enterprises (e.g. statistics on railway transport).
- Develop a similar approach for application at regional level for the dissemination of regional statistics ensuring that it is strictly observed by all Regional Statistical Offices (RSOs) in a uniform manner.
- Develop a policy and related procedures as well as the necessary IT and other facilities for enabling and promoting greater access to anonymised micro-data for research purposes by the scientific community.

Principle 6 – Impartiality and objectivity

Many practices and protocols are in place to ensure the impartiality and objectivity of the statistical outputs produced by SSC. Statistical sources and methods are coordinated by the Department of Coordination of Statistical Works and Strategic Planning and discussed by the Scientific and Methodological Council prior to application. Protocols and procedures have been prepared and published on the website relating to the treatment of errors and the dissemination of statistical outputs. The dissemination of statistical results is handled centrally by the Department of Information and Public Relations in order to guard against leaks and to ensure equality of access to all users. Press releases are prepared, and press conferences organised on a periodic basis, to assist users in understanding the data. Such releases and conferences are confined to the facts and do not include any policy assessments. Press releases are issued strictly in accordance with the analytical work plan, which is approved quarterly by the Board of the SSC, they are published at a standard fixed daytime on the website, distributed to users at the same time and also printed for the mass media (see <https://www.stat.gov.az/menu/4/publications/#004>).

Recommendations

The SSC is encouraged to:

- Consider more frequent organisation of press-conferences for the announcement of main indicators (inflation, GDP, unemployment) and other interesting statistics.

Principle 7 – Sound Methodology

SSC adopts international standards and methodologies in a consistent manner to the maximum extent.

The Centre for Scientific Research and Statistical Innovation, which is an independent body subordinated to the SSC, contributes to the research and development of statistical methodology in line with international standards and recommendations. The Scientific and Methodological Council, which is composed of the heads of SSC departments and some external experts, ensures consistency through its examination of new methodologies prior to their submission for adoption by the Chairman of SSC. In all, 31 national statistical classifications have been developed – 24 of them in line with international recommendations and 7 based on national legislation.

Recruitment of suitably qualified candidates is organised through the State Examination Centre and a training programme is approved annually by the Chairman of SSC. The training programme involves both in-house training and collaboration with external agencies based in Azerbaijan and abroad.

The Assessment Team would agree with SSC management that more resources are required for training and it would recommend that priority should be given to the specific needs of the high number of new employees.

Recommendations

The SSC is encouraged to:

- Create a staff development programme that responds to the needs of a more process based organisational structure.
- Further develop the training programme with a specific focus on methodology to meet the specific needs of the high number of new employees.

Principle 8 – Appropriate Statistical Procedures

SSC has been increasingly using the GSBPM to develop its statistical procedures in a consistent and integrated manner across the statistical value chain. A number of major changes have been initiated in recent years that will have a major impact on the development and adoption of appropriate statistical procedures. These include the closure of the Main Computing Centre and the adoption of the strategic objective to double the proportion of statistics based on administrative data in the medium term.

In the context of making greater use of administrative data for statistical purposes, the Assessment Team would recommend the following.

Recommendations

The SSC is encouraged to:

- Develop a mechanism for assessing and monitoring the quality of administrative data.
- Integrate the existing and accessible administrative data into the databases and registers of the SSC.
- Continue the modernisation of the SSC in terms of process orientation and reflect on the optimal approach towards the extension of the application of the GSBPM to the whole organisation taking into account the pros and cons of such a change.
- Continue the very good cooperation with the Ministry of Taxes in meeting SSC needs for access to key administrative data held by the ministry (e.g. tax declaration data).
- Establish the right of the SSC to be consulted on the design of new administrative data sources or on the introduction of changes to existing administrative data sources
- Consider moving towards a greater use of sample surveys and replace exhaustive surveys to increase the efficiency of the system.

Principle 9 – Non-excessive burden on respondents

Although a large number of surveys are still exhaustive, response rates for official statistical surveys are high in Azerbaijan. This would seem to imply that there is a nation-wide culture according to which citizens or businesses that have been asked to participate in an official survey or to deliver data for state authorities feel obliged to respond positively to such a demand. Therefore, there is no real pressure for burden reduction in the field of official statistics as it is the case in EU Member States.

Nevertheless, SSC is conscious of the need to reduce the burden on respondents and has adopted a number of measures towards this end. These include: the structured measurement of the burden; the greater use of administrative data for statistical purposes; the development of an electronic reporting system for enterprise surveys; and the use of rotating sampling plans, particularly for household surveys.

The Assessment Team would encourage SSC to continue, and to expand, its efforts to reduce the burden on respondents. This would be to the advantage not only of respondents but also to SSC itself by reducing the effort involved in data collection, thus freeing up resources for other activities such as greater data analysis.

Recommendations

The SSC is encouraged to:

- To implement the strategy on the (better) use of administrative data;

- To extend the number of agreements on data exchange and thus to formalise data exchange with the owners of administrative data sources;
- To further reduce the number of exhaustive surveys or their frequency (e.g. PRODCOM for SME) and the number of questionnaires forms wherever possible;
- To create a structural (centralised) unit for the reception and transfer of administrative data; and
- To improve data quality and increase the amount of available statistical information by matching survey data with register data.

Principle 10 – Cost effectiveness

The use of resources is measured, based on the general requirements for a government–financed institution like the SSC and many other state organisations, certainly with room for development. The measurement of resources is impacted by the rules in place for requesting a budget from the government and for reporting on its use. No specific action on the monitoring of cost-effectiveness is included in the current five-year Strategic Plan (Development of Official Statistics 2013-2017) and neither in the Annual Statistical Work Programme. Cost accounting of statistical products has not yet been established.

As in all other state agencies, the use of resources in SSC is measured through annual financial reports based on a budget audit every three years, other budget and performance audits, staff performance assessments, a staff satisfaction survey and similar.

Recommendations

The SSC is encouraged to:

- Conclude MoU with the most important providers of administrative data sources required for statistical purposes, including in particular data coverage, scope, frequency, and quality criteria
- Consider the handling (e.g. the receipt and internal distribution of the datasets) of administrative data sources in the SSC in order to avoid duplication of requests; ensure full compliance with confidentiality requirements; promote the integration of administrative data into SSC databases through the use of common identifiers
- Establish a cost accounting system to define costs for each statistical product
- Increase electronic reporting further and extend it to other than enterprise surveys
- Continue promoting standardisation of processes through the development of process maps and extending the GSBPM to an increasing number of processes and surveys, including on the level of the regional statistical offices.

Principle 11 – Relevance (user consultations)

SSC employs a number of means to identify the needs of users and the relevance of the statistical work programme. The Statistical Council, which is representative of a broad range of the main users, is mandated under the Law on Official Statistics to provide a formal opinion on the draft Annual Statistical Work Programme. Each statistical department consults with its main users at least on an annual basis and also forms working groups consisting of users to conduct more detailed assessments. The Department of Information and Public Relations monitors the use of the SSC website and references to statistics in the media. User satisfaction is also measured through an online survey of users accessing the SSC website and a user satisfaction index is compiled.

The Assessment Team would recommend that the existing work to assess the needs of users might be enhanced by implementing the following recommendations.

Recommendations

The SSC is encouraged to:

- Develop a system for monitoring the relevance and practical benefits of available data in comparison with the user needs to identify priorities for future.
- Continue to periodically conduct a general user satisfaction survey to capture not only the views of the existing users but also the opinion of the potential users.

Principle 15 – Accessibility and clarity

As already mentioned above (under Principle 11), SSC has developed a number of approaches for consulting its users and this includes seeking views on the accessibility and clarity of its outputs. A dissemination policy has been developed and is available on the SSC website.

The SSC website is now the main means of disseminating statistics and providing information on statistical activities. The website contains databases, metadata, publications of the various SSC Departments, press releases as well as information on SSC activities. In addition to electronic dissemination, a range of traditional paper publications are produced. For improving statistical literacy a booklet “*What is Statistics?*” was prepared and published in 2016, the content of which was agreed with the Ministry of Education, so as to distribute it to elementary schools in September 2016 at the occasion of the start of the school year. In order to meet user requests in the fastest way possible, a “hotline” was established in the Department of Information and Public Relations.

While scientific analysis is not prepared directly by the departments of the SSC, customised research is undertaken by the Centre for Scientific Research and Statistical Innovation. Access by researchers to anonymised micro-data is possible for scientific purposes but the facilities for supporting such access are underdeveloped as there are no safe centres and remote access is not possible.

Metadata is prepared in accordance with the DCMI and ESMS standards.

The following recommendations are proposed to further improve accessibility and clarity.

Recommendations

The SSC is encouraged to:

- Publish all official statistics on the website of the SSC or provide a clear link to the official statistical information, produced by other State authorities (e.g. Central Bank)
- Periodically conduct a general user satisfaction survey to explore opinions not only of existing users but also of potential users.
- Develop more visual illustration tools for the presentation of data (graphs, charts, interactive tables etc.).
- Improve the existing keyword search facility for easier access to statistics on the website.
- Include more comparisons with data from other countries as a standard component of statistical press releases.
- Consider the implementation of educational programmes in conjunction with teachers and other educationalists to improve statistical literacy in the country.

Organisational and structural aspects

Organisation of the State Statistical Committee

The SSC has a clear mandate to coordinate and organize the system of official statistics. The Law does not mention any other authority than the SSC as producer of official statistics. Therefore, the determination of which institutions other than the SSC are considered to be official statistical bodies is not clear. It seems difficult to define which data (published by public institutions other than SSC) are to be considered as official statistics (being processed according to the strong rules of the Law on Official Statistics), and which data are merely administrative data that are not subject to official statistics' principles and rules.

The rules of cooperation seem to be well-defined, with some memoranda of understanding serving as a reference.

Though well-reflected, the recent reorganisation of the SSC, the incorporation of the former main computing centre with the loss of its human manpower and the training of the newly recruited staff, is a challenge. As competition was high, the newly recruited staff are certainly well qualified.

Nonetheless, the staff changes resulting from this restructuring process will lead to changes in the staff composition and potentially also to some redundancies.

In contrast, statistical units in other public authorities (with the exception of the Central Bank) seem to be rather small and most likely lacking professional expertise.

The management system of the SSC corresponds to the requirements of the ISO 9001:2008 standard in respect of its Quality Management System for the "Production and Dissemination of official statistical data" and the ISO 9001-2015 standard as certified in 2017 by "SGS". GSBPM is applied as business process model within the SSC.

Recommendations

The SSC is encouraged to:

- Define the delimitation of the National Statistical System because the Law and the current programme do not make completely clear which institutions are producing official statistical information and which of the institutions mentioned in the statistical work programmes are producers and which are providers of administrative data.
- Precisely determine in the Annual Statistical Work Programme, which public bodies are producers of official statistics and belong to the National Statistical System.
- Consider reducing the number of other producers of official statistics and to centralise production of official statistics in the SSC.
- Continue implementing the provisions of the Law on Official Statistics (the SSC receives full access to administrative data sources of all official authorities and has the right to be consulted on the design of new registers or the re-design of existing administrative data sources) into practice.
- Develop the needed technical infrastructure to easily integrate data from administrative sources into the databases of the SSC.

Regional structure

The SSC of the Nakhchivan AR and Regional Statistical Offices (RSOs) in Azerbaijan execute data collection at regional level; their permanent staff and the interviewers assist businesses in fulfilling their reporting obligations and function as a bridge between the SSC (as a Government authority) and the citizens in the regions. In particular, the interviewers are able to obtain reliable insights into the production conditions of enterprises and the working conditions of their employees as well as of the living conditions of the interviewees. Based on these personal ties that can be built up over time, the participation in surveys might not be considered as burdensome which explains the high response rates.

Nonetheless, the current form of process organisation and the division of responsibility between the RSOs and the headquarters need to be considered from time to time to evaluate whether they are still needed and adequate. The Assessment Team recognised some elements for streamlining the process: the more modern communication channels are used, the more registers are built up and data exchanged among regional and national government authorities. In particular, a shift away from the current input orientation, which finds its expression in the large number of (exhaustive) surveys, towards an output orientation would be useful. Such a shift would set free resources for more elaborated statistical analyses combining surveys with administrative data. As a result, RSOs could be built up as a centre for regional research providing services and in-depth analyses for regional policy and development.

Recommendations

The SSC is encouraged to:

- Promote a mobility scheme of staff among the RSOs.
- Consider the transfer of know-how and responsibility from the central to the regional units (given the current number of staff in regional offices) or to consider cutting the number of RSO and the number of staff in the RSO accompanied by a simultaneous increase in the number of staff in the HQ who will be responsible for the development of (further) statistical information at regional level.
- Consider extending the existing dissemination policy to address dissemination of statistical information broken down by regions and therefore to avoid the publication of confidential (individual) data in publications by the RSOs (given the limited number of enterprises in the region).

Coordination

Coordination (and Programming) of the National Statistical System (NSS)

The procedure on how the National Statistical System should be coordinated is not specified in law but such procedures are in place. The same applies to the multi-annual and annual programming process. All statistics covered by the Annual Statistical Work Programme are considered official statistics. Therefore, the Programme also includes statistics of other government authorities than the SSC. The most important other producers include: the Central Bank; Ministry of Finance; Ministry of Labour and Social Protection; Ministry of Ecology and Natural Resources; Ministry of Justice; Ministry of Internal Affairs; Ministry of Culture and Tourism; and the Customs Committee.

Recommendations

The SSC is encouraged to:

- Conclude comprehensive memoranda of understanding as soon as possible with all other official statistical bodies. These should include the other authority's guarantee to comply with the ESCoP and to provide human and financial resources for the implementation of their statistics, along with the establishment of a working group for the coordination of activities and the use of tools for an integrated quality check of input data. The SSC should take a pro-active role in promoting adherence to the European statistics Code of Practice (ESCoP) principles throughout the National Statistical System (NSS).
- Create greater clarity to distinguish between data providers who undertake some initial processing of the basic data, and producers of official statistics who are responsible for all aspects of the statistical processing chain including dissemination. The Ministries of Health and Education are examples of data providers who provide basic data for the production of certain statistics by the SSC (but are in fact not a producer of official statistics). In these cases, SSC should develop and share tools for ensuring that quality checks are undertaken by these providers of data in an integrated and consistent manner across the statistical processing chain.
- Evaluate regularly the most appropriate allocation of responsibilities for the production of statistics within the existing rules and procedures of coordination (e.g. various working groups or bilateral meetings with Ministries and Agencies).

Coordination of international cooperation and donors

The SSC is mandated under the Law on Official Statistics (Article 5) to “*establish links with the statistical authorities of foreign countries and with international organisations on matters within its competence*”. International cooperation is coordinated through a central unit and SSC was, and is, involved in a wide range of cooperation projects with other NSIs and international statistical organisations. The Assessment Team would encourage the SSC to further develop its linkages and to improve its capacity to benefit from such contacts.

Recommendations

The SSC is encouraged to:

- Continue its efforts to ensure donor coordination with international donors in the area of official statistics, possibly through a donor coordination committee or working group.
- Deploy efforts to increase the knowledge of foreign languages among its staff to better follow development at European and international levels.
- Increase its efforts to become THE coordinating body in Azerbaijan for providing official statistics to international organisations.

Sustainable development goals and indicators

Azerbaijan is committed at the highest level to achieving the Sustainable Development Goals (SDGs) and a National Coordination Council for Sustainable Development of the Republic of Azerbaijan was established by Presidential decree of 6 October 2016. Within the national monitoring system, SSC has been assigned responsibility for: the production of statistical data and metadata for the SDG indicators; developing the indicators; defining new data sources; sharing information; and quality control and data

checking. A Department for Sustainable Development has been established and three working groups including staff from relevant government agencies has been put in place to advance the work.

Recommendation

The SSC is encouraged to:

- Use the SDGs as a catalyser and mechanism to increase its coordinating role in the provision of official statistics in the country and to international bodies.

Macroeconomic Statistics

National Accounts

The national accounts in general appear to be in line with the recommendations of the SNA 1993 and good practices are applied. Improvements since the 2010 Adapted Global assessment were observed, including the production of institutional sector accounts, quality assurance and the provision of suitable data series to users of the national accounts statistics.

Substantial resources have been allocated to prepare the changeover to the SNA 2008, which has been a main priority in recent years. A full implementation of SNA 2008 is expected within the next two years. Time series back to 2001 compiled according to the revised standards are planned to be published by the end of 2018.

Recommendations

The SSC is encouraged to:

- Ensure the complete changeover to SNA 2008 and publication of national accounts series compiled according to SNA 2008.
- Continue is cooperation with the Ministry of Finance and investigate the possibility of retrieving data on accrual basis contrary to receiving data on cash basis from the Ministry of Finance.
- Consider publishing discrete annual GDP time series in prices of a fixed reference year and discrete quarterly GDP time series from the expenditure side in the prices of a fixed reference period in order to meet user needs and facilitate analysis.
- Publish seasonally adjusted quarterly GDP series.
- Re-consider the production of monthly GDP figures. Possible user demands for short term indicators may be meet by providing monthly indicators for the main sectors of the economy and, possibly, a flash GDP.
- Continue working with the Central Bank of Azerbaijan bank to receive data earlier for the production of national accounts series.

Government Finance Statistics

Government Finance Statistics (GFS) are compiled and published by the Ministry of Finance (MOF), based on the Governments Finance Statistics Manual (IMF 2001/2014).

The GFS is produced as part of the ministry's work to compile the state budget of Azerbaijan. The number of staff is sufficient. GFS are produced under the law on the state budget and compiled broadly following the recommendations of the GFS manual. GFS are not produced under the national statistical law.

GFS statistics are released by the MOF, after approval of the Deputy Minister. This practice is not in line with the principles of official statistics, which require that statistics should be compiled on an objective basis determined by statistical considerations only and released to all users at the same time together with information on methods and procedures.

Government transactions are recorded on a cash basis and hence not in line with the recommendations of the GFS Manual and not fully suitable for direct introduction into the national accounts.

Recommendations

The SSC is encouraged to:

- Make sure – together with the MoF - that GFS statistics as an essential part of official statistics are produced under the national statistical law to ensure that the principles of official statistics are adhered to.
- Publish– together with the MoF – monthly discrete figures in addition to cumulative data.
- Consider– together with the MoF – the most appropriate allocation of responsibilities for the production of government finance statistics, e.g. by the SSC or by the Ministry of Finance.

The MoF is encouraged to

- Investigate the possibility to compile government transactions on accrual basis to be in line with the recommendations of the GFS manual
- Take measures to ensure alignment with the requirements for general government sector statistics, including investigating the possibility of compiling government transactions on an accrual basis.

External Trade Statistics

Foreign trade statistics for commodities are compiled by the Department of Trade Statistics mainly on the basis of custom declarations collected and processed by the State Customs Committee in relation to the import and export of goods. Methods are based on the International Merchandise Trade Statistics: Concepts and Methods, with the Harmonised System (HS 2012) used for the recording and aggregation of commodities and also the Standard International Trade Classification (SITC) used for disseminating results. Annual, quarterly and cumulative monthly data are published on the SSC website.

Foreign trade statistics for services are compiled and published by the Central Bank of Azerbaijan and follow the recommendations of the Balance of Payments Manual (BPM6).

Recommendations

The SSC is encouraged to:

- Continue discussing with the State Customs Committee the possibility to receive information from the customs declarations that allow SSC to identify the importing / exporting unit.
- Consider publication of discrete monthly series. Monthly data on foreign trade are now published as cumulated series, while recommended practice is to publish discrete series.
- Consider publishing key figures of the balance of payments at the SSC website, or as a minimum provide a link (easy to find) to the Central Bank where information can be found.

Balance of Payments Statistics

Balance of Payments statistics are compiled on a quarterly basis by the NBA and are reported to be compiled in accordance with the recommendations of the BPM6 Manual.

Recommendations

The NBA is encouraged to:

- Consider publishing discrete quarterly time series.

Consumer Price Index (including PPP and house prices)

The CPI is calculated on the basis of methodological principles, concepts and definitions specified in the Manual on the Consumer Price Index: Theory and Practice (ILO, IMF, OECD, Eurostat, UNECE, World Bank). For goods and services the national version of the COICOP classification, developed on the basis of the international version and having identical structure, is used. The SSC participates in the programme of GDP international comparisons based on the PPP exchange, organised by the World Bank. In 2008, as a result of a 2 weeks assessment mission, the IMF concluded that the CPI calculations fully comply with international standards.

Recommendations

The SSC is encouraged to:

- Analyse the impact of annual changes of both expenditure weights and the basket of priced products on the CPI.
- Investigate the possibility to use scanner data (product barcode) for the calculation of the CPI.

Business Statistics

Statistical Business Register

The SSC has established a good basis for business statistics with the State register of statistical units being regularly updated with the help of a number of administrative data sources. Regular quality checks are implemented and the use of an increasing number of administrative data sources for updates is a welcomed development.

The business register increasingly conforms to European standards but compliance can be further enhanced by implementing the provisions on the statistical units and by including enterprise groups.

Recommendations

The SSC is encouraged to:

- Consider gradually applying the definition of statistical units as contained in the Council Regulation (EEC) No 696/93 of 1993 to the State register of statistical units.
- Consider expanding the list of indicators on SMEs according to the EU/OECD definition
- Continue efforts to identify and use administrative data sources for maintaining and updating the State register of statistical units.

Structural Business Statistics

Structural business statistics have been well developed over a number of years. The SSC is in a position to provide most of the indicators specified in the EU regulation on SBS. This relates to the annexes of the regulation on industry, construction, trade, services and demography, while for the financial annexes on insurances and banks (and for pension funds once they are established in Azerbaijan) some more work is needed.

Recommendations

The SSC is encouraged to:

- Continue the reform on integrating the production of structural business statistics in terms of content and organisation.
- Integrate business surveys in an overall production model.
- Produce the quality report in English.
- Expand the coverage of indicators requested by the EU regulation on structural business statistics.
- Eliminate duplication of questions in survey questionnaires.
- Explore the use of additional administrative data sources.

Short Term Statistics (including PPI)

The compilation of short-term statistics is broadly compliant with European standards, in terms of methodology, concepts and coverage of indicators. Most of the indicators are available except seasonally adjusted data. Publication deadlines correspond to the deadlines in the EU regulation.

Recommendations

The SSC is encouraged to:

- Start publishing available seasonally adjusted short-term indicators.
- Rationalise surveys for the production of short-term statistics, including the optimisation of survey questionnaires.
- Improve quality control at all stages of statistical production.
- Consider increasing the use of administrative data sources such as the tax register and data from the Ministry of Taxes and the Ministry of Labour and Social Protection of Population to reduce response burden.
- Consider improving the institutional organisation of data collection and processing.
- Produce producer price indices for information technology, advertising and banking services in accordance with the STS regulation.

Production of manufactures goods (PMG)

Prodcum statistics are produced on the basis of the 2009 Prodcum list and broadly in line with European standards but face some challenges due to differences in products on the market in Azerbaijan and the EU.

Recommendations

The SSC is encouraged to:

- Adopt the newest version of the PRODCOM list.
- To continue back-casting of data to increase the comparability of data.

Social and demographic statistics

Population Register

A State Population Register was created by the Ministry of Justice but the SSC was not involved in its creation. However, as a follow-up of the population census in 2019 measures will be taken to reconcile the population data received by the SSC and corresponding data from the register. Furthermore, arrangements will be put in place to provide direct on-line access to the register information system by SSC.

Population Registers of this type play a central role in the statistical systems of many developed countries. While full access to the register for statistical purposes is already enabled by the general provisions of Article 13 of the Law on Official Statistics, the Assessment Team also considers that the new Law on Official Statistics should explicitly recognise the key role registers can play in underpinning the overall development of statistics based on administrative sources. Moreover, to emphasise its central importance, the Team recommends that the SSC investigates, develops and uses a population register for statistical purposes as a strategic priority.

Recommendations

The SSC is encouraged to:

- Make sure that the revised Law on Official Statistics explicitly recognises the key role the Population Register can play in underpinning the development of statistics based on administrative sources.
- As a strategic priority, actively promote, and develop the Population Register for statistical purposes.

Demographic Statistics

Overall, the Assessment Team concluded that SSC has a comprehensive system of demographic statistics based on European/international standards.

Population and Housing Census

The availability of the new Population Register should be taken into consideration in the design and implementation of the census methodology. On the one hand, the availability of an up-to-date population register should be an advantage in the efficient organisation of the fieldwork. On the other hand, the availability of detailed population data from the census should provide a good opportunity to check the quality and accuracy of the population registration system.

Recommendation

The SSC is encouraged to:

- Actively explore the use of the Population Register (and other relevant administrative registers) in the conduct of the next Census of Population in 2019, and the use of census data to assess the quality of the Register.

Labour Market Statistics

The Department of Labour Statistics collects and processes labour market data according to international methodological standards, ILO conventions and/or Eurostat recommendations. However, in a number of areas the available statistics are not really compliant with the current EU standards.

The available statistics on earnings, labour costs and job vacancies, which are produced in line with international recommendations, cover only those workers with written contracts of employment. Since these workers account for no more than one third of the total number of people in employment, there is an urgent need to obtain comparable information on other categories of workers such as those with oral contracts only, the self-employed and workers in the informal sector. Furthermore, as those workers with written contracts are likely to have better conditions of employment, including significantly higher wages and salaries, the available data are likely to represent a biased view of the overall labour force.

The Assessment Team would therefore recommend that priority be given to developing statistical sources to improve the information on the overall labour force. A sector review of its labour market statistics, involving international experts, might be sought in order to get advice on methodological issues.

Recommendations

The SSC is encouraged to:

- Integrate data on oral contracts and on self-employed into the survey on wages and labour costs.
- Get access to external data sources (e.g. administrative data from the Ministry of Taxes, the Ministry of Labour and Social Protection or other authorities) that might provide further statistical information on salaries, working conditions and vacancies.
- Link administrative data and survey data from different sources and/or re-design existing reporting forms or surveys in order to get better information of the formal and to picture the informal sector.
- Consider the implementation of a sector review of labour market statistics, including the labour force survey, in order to get advice on methodological issues.

Living Conditions Statistics

The methodology, inputs, processes and outputs of the Living Conditions statistics are broadly compliant with EU standards

The main survey is the Household Budget Survey (HBS), which is conducted on a quarterly basis and includes more than 10,200 households or 0.5% of the population. A Time Use Survey was conducted in 2012 and will be repeated in 2022 following the UN “International Classification of Activities for Time Use Statistics (ICATUS 2016)” methodology and an income and living conditions survey, following the EU SILC methodology, will be undertaken in 2017.

The Assessment Team was impressed by the progress made (since the last global assessment): for example, a determination of the “middle class population” had been made, based on a multifactor statistical analysis approach, and a study on the working and living situation of children in deprived parental care.

The Assessment Team was impressed with the resources available for the conduct of surveys on living conditions and income and on the progress made in recent years. It believes that further progress and synergies can be made through greater use of the population register and other administrative sources in the conduct of the surveys. It would also suggest that greater integration of all household surveys conducted by SSC should be examined, perhaps in the context of the EU model for integrated social statistics.

Recommendations

The SSC is encouraged to:

- Intensify cooperation with the Ministry of Justice in order to obtain full access to its register data and to complete the population register, not only in view of the next population census round but also for a better utilisation of existing data. Other data bases (e.g. on migration) should also be made available to the SSC and technical issues regarding data exchange should be solved in order to make a more effective use of all (official) data, thus reducing cost and burden.
- Integrate all household surveys and data collection, following the Eurostat model of integrated social statistics.

Education Statistics

A broad range of basic data on the educational system, in line with international recommendations, is collected and published by SSC in conjunction with the Ministry of Education. The SSC and the Ministry should rationalise the collection of the data from schools and other educational establishments and address any gaps in the coverage. Statistics on educational attainment, vocational training, life-long learning and the transition from education to working life should be further developed.

Recommendations

The SSC is encouraged to:

- Rationalise together with the Ministry of Education the collection of basic data on the educational system and address any gaps in coverage.
- Further develop surveys of the general population to produce periodic information on educational attainment, vocational training, lifelong learning and on the transition from education to working life.

Health Statistics

While the availability of basic health data can be considered to be satisfactory, more sophisticated statistical information on the health sector was not available, incomplete or produced without fully considering user needs. This would include: population surveys to measure health status (including subjective well-being), level of disability and health determinants; and consolidated information on health expenditure and outcomes (e.g. Health Satellite Accounts).; While the Assessment Team accepts that developments of this nature must, of necessity, be seen as longer term objectives, it would

recommend that the SSC determines the priorities in consultation with users as a first step towards implementing a developmental programme.

Recommendations

The SSC is encouraged to:

- Develop together with the Ministry of Health a more integrated approach towards quality assurance across the whole statistical process chain.
- Identify in consultation with users priorities for the longer-term development of health statistics.

Agricultural statistics

The methodology, inputs, processes and outputs of Agricultural statistics are partially compliant with international, and to a lesser extent, with EU standards.

The Assessment Team was impressed by the work that was done when preparing, conducting and analysing data from the recent agricultural census, which was conducted in 2015. There is no doubt that data are of high quality and can certainly be used for setting up a farm register, as intended, and for more scientific analysis of the agricultural structure.

The SSC also produces a broad range of regular information on agriculture, forestry and fishing at national and regional levels. The information is largely compiled on the basis of reports prepared by a network of local agricultural reporters – the statistical output covers information on: land use, agricultural products, production and selling prices, and the structure of the production expenditures.

The Assessment Team would like to see a greater focus on the production of analyses on the structure of agricultural holdings and also on the characteristics of the farm labour force in terms of the labour input they provide.

Recommendations

The SSC is encouraged to:

- Evaluate the potential for streamlining data collection (in particular after having set up the farm register)
- Reconsider the modernisation of the dissemination of agricultural statistics (e.g. presenting graphs and interactive data bases also by integrating the huge amount of tables)
- Focus on the structure of agriculture rather than on its production when analysing and disseminating statistical information regarding this sector, combining it with other available data sources (such as the population census or LFS or SILC).
- Include indicators on agriculture in a system of indicators for the green economy.

Multi-domain statistics

Transport statistics

The report of the global assessment in 2010 noted that the available transport statistics cover all modes of transport and are well developed in Azerbaijan. Since then special attention has been paid to the issues of a systematic approach to transport statistics and to improving data quality. In response to the recommendations of the previous global assessment the following has been implemented: an electronic database on transport statistics data has been created; ongoing work related to the

methodology of railways census to obtain the necessary statistics on the rail network and the intensity of the movement and the census is scheduled for 2017. Statistical surveys to obtain new data on the carriage of passengers by road by private entrepreneurs and physical persons were also conducted.

Recommendations

The SSC is encouraged to:

- Together with the JSC “Azerbaijan Railways” develop methodology and conduct a railway census;
- Introduce a sample survey on cargo and passenger transportation by road.

Tourism statistics

The compilation and dissemination of tourism statistics appears to be in line with European and international recommendations and standards and Tourism Satellite Accounts have been prepared in 2015. In the future it is planned to improve the questionnaires.

Recommendation

The SSC is encouraged to:

- Consider publishing sub-annual series.

Energy statistics

SSC follows the methodologies of the International Energy Agency (IEA) and Eurostat in the compilation of energy statistics. An energy balance is compiled since 2011 in accordance with the Recommendations for Energy Statistics, adopted by the United Nations Statistical Commission. Energy satellite accounts have been produced based on data for 2015.

The data on energy statistics are published in the yearbook "Energy of Azerbaijan"; in the annual book "Statistical Indicators of Azerbaijan"; in the quarterly and annual Statistical Bulletin and placed on the SSC website. Overall, the system of energy statistics is well developed in Azerbaijan.

Recommendations

The SSC is encouraged to:

- Unify and optimise the number of indicators in questionnaires to collect data on energy statistics.
- Improve energy efficiency statistics.

Environment statistics

The main environmental indicators system was developed in accordance with the UNECE Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia. There are currently 13 reporting forms used by the SSC to cover environmental areas of interest including: protection of the atmosphere (pollutant and greenhouse gas emissions); generation and disposal of waste; geological exploration; environment protection expenditures; protected areas (e.g. areas having special ecological, scientific or aesthetic value); hazardous wastes (including those controlled under the Basel Convention); and water resources. In addition, information from administrative sources is obtained from Ministries and State Agencies.

While a considerable amount of information on the environment is compiled and published by SSC, further development work needs to be undertaken to comply with international standards and to meet emerging needs.

Recommendations

The SSC is encouraged to:

- Revise statistical reporting on waste.
- Transit to the new version of the international statistical classification on wastes categories.
- Develop environment accounts.

Research and Development (R&D) statistics

Methods and classifications are based on the recommendations of the UNESCO Institute for Statistics and the Frascati Manual. Hence, concepts, definitions and classifications follow in general European and international standards.

Recommendations

The SSC is encouraged to:

- Assess user needs for R&D statistics and cost / benefits of producing the statistics. On this basis, the SSC should consider what R&D statistics to produce.

Information and Communication Technologies (ICT) statistics

Methods applied are based on manuals and guidelines on ICT statistics and the information economy issued by the International Telecommunication Union (ITU) and the United Nations Conference on Trade and Development (UNCTAD). Hence, concepts, definitions and classifications would appear to be in line with European and international standards.

Recommendations

The SSC is encouraged to:

- Consider further possible reductions of response burden by, e.g. optimising survey sampling and increasing the use of administrative sources.

General assessment of principles, national statistical system and specific statistical domains

Chapter 1: P1 – Professional independence

General assessment

The 2010 GA found that the Law on Official Statistics provided a sound legal basis for the production and dissemination of official statistics in Azerbaijan in line with the internationally accepted statistical principles. Specifically, it noted that the principle of Professional independence was recognised by the Law.

In the current GA, the extent to which the State Statistical Committee (SSC) and the other statistical producers are compliant with the principle of professional independence was assessed in detail by reference to the indicators elaborated for this principle in the European statistics Code of Practice (ESCoP).

In general, the assessment team found that there is a good understanding of, and adherence to, the principle, demonstrated not only in the provisions of the Law on Official Statistics but also in the management and operation of the SSC and other statistical bodies.

However, the Assessment Team believes that the opportunity should be taken to address a number of shortcomings and potential anomalies in the existing legal texts in the context of reviewing the statistical legislation to align it more closely with the recently adopted Generic Law on Official Statistics (GLOS) recommended for Eastern European, Caucasus and Central Asia countries in the Plenary Session of the Conference of European Statistics of the United Nations Economic Commission for Europe on 27-29 April 2016, These relate primarily to the professional role and procedures to appoint and dismiss the Chairman of the SSC.

Assessment per indicator

ESCoP indicator 1.1: The independence of the National Statistical Institutes and Eurostat from political and other external interference in developing, producing and disseminating statistics is specified in law and assured for other statistical authorities.

The independence of SSC and other statistical bodies from external interference is explicitly addressed in Article 10 of the Law on Official Statistics. Article 10 states that the state statistical bodies “...are autonomous and do not seek or take instructions from state and local bodies notably in the selection of data sources and statistical methods, in (deciding on the) content, form and time of dissemination and in the application of statistical confidentiality”. State and non-governmental organisations are also explicitly prohibited under Article 10 from interfering with the statistical bodies or influencing the staff of these bodies in the performance of their tasks.

Article 10 therefore provides a very strong legal underpinning for the professional independence of the SSC. One possible inconsistency in the interpretation of the legal texts applying to statistics is the wording of the second clause of the first section of the Statute of the State Statistical Committee. This clause states that “SSC keeps the guidance of the Constitution of the Republic of Azerbaijan, Laws of the Republic of Azerbaijan, decrees and orders of the President of the Republic of Azerbaijan, decisions and orders of the Cabinet of Ministers of the Republic of Azerbaijan, international treaties, to which Azerbaijan is a party and this Statute”. While this may be a provision applying to all state

agencies, its status vis-à-vis the professional autonomy granted under Article 10 of the Law should be explicitly clarified. This is, perhaps, particularly important in respect of decisions and orders of the Cabinet of Ministers in view of the fact that the Chairman of SSC is also a member of the Cabinet.

ESCoP indicator 1.2: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. They are of the highest professional calibre.

The SSC is led by a Chairman who is appointed by the President of the Republic of Azerbaijan and, as head of the SSC, is also appointed as a member of the Cabinet of Ministers. Under the Azerbaijani Constitution (Article 114), the Cabinet of Ministers is designated as the highest executive body established by, and reporting to, the President of Azerbaijan in the exercise of his powers. In this way, the head of the SSC has the highest hierarchical standing and has direct high-level access to policy authorities and administrative bodies. In effect, the Chairman is equivalent to a Minister and this is seen as a particular strength for the SSC to be led directly by a person of this rank.

The appointment process for the Chairman is that laid down generally in the Constitution for appointing members of the Cabinet of Ministers and thus there is no explicit requirement on the qualifications required for an appointee. Therefore, in the view of the assessment team it is recommended – in order to align the professional role of the Chairman of the SSC to the ESCoP requirements – to strengthening this role by the adoption of appropriate legal and other measures.

ESCoP indicator 1.3: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner.

The Law on Official Statistics does not address directly the professional independence of the Chairman of the SSC. Indeed, the position of Chairman is not mentioned at all in the Law. Instead, the position of Chairman is mentioned in the Statute of the SSC, which is confirmed by a decree of the President of the Republic of Azerbaijan.

In Clause 12 of the Statute it is stated that the Chairman “*carries responsibility for the implementation of the duties and rights entrusted to the SSC of Azerbaijan*”. In this way, it is contended that the Chairman is in effect the guarantor of the implementation of the Law on Official Statistics, which includes the requirement that the SSC acts in an independent manner in the production and dissemination of official statistics (as stated in Article 10 of the Law). The Assessment Team noted that in the detailed specifications of the duties and rights of the SSC (Sections III and IV respectively) no explicit reference is made to the requirement of professional independence. Moreover, the tasks entrusted to the Chairman in Clause 14 of the Decree make no mention of professional independence.

The Assessment Team is satisfied that in practice the Chairman has responsibility for ensuring that official statistics are developed, produced and disseminated in an independent manner and that there is a legal underpinning for this. However, it believes that this could be improved by addressing the issue of professional independence, for both the SSC and its Chairman, in a more explicit manner in the revised statistical law. It would recommend that the relevant guidelines in the generic law on official statistics, developed by the Conference of European Statistics, should be followed in this respect.

ESCoP indicator 1.4: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have the sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases

As outlined above in respect of Indicator 1.3, the Chairman in practice has sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases. However, the Assessment Team would recommend assigning this responsibility and giving it a more explicit legal basis during the forthcoming amendment of the “Law on official statistics” of the Republic of Azerbaijan, as is already envisaged.

ESCoP indicator 1.5 Statistical work programmes are published and periodic reports describe progress made.

In accordance with the Law on Official Statistics (Article 3) an Annual Statistical Work Programme is prepared by SSC, agreed with the Cabinet of Ministers, and published on the website. All official statistics are listed in the programme with details on: the SSC department responsible (or other statistical producer such as the Central Bank); the statistics produced; the periodicity; and the deadline for producing results. An annual report on the implementation of the programme is also prepared by SSC, submitted to the Cabinet of Ministers and published on the website. The preparation of the annual report is required under Clause 8.5 of the Statute on the SSC.

The Statistical Council, established under Article 8 of the Law on Official Statistics, is mandated to offer opinions and recommendations in the preparation of the Programme and to offer advice on its implementation. The Council has a wide membership, drawn from the public, private and academic sectors and thus has an important role in ensuring that the views of stakeholders are taken into account in preparing the Programme and monitoring its implementation.

The “State Programme on Development of Official Statistics in the Republic of Azerbaijan in 2013-2017” was approved by the decree of the President of the Republic of Azerbaijan No 2621, dated 21 December 2012. The measures as envisaged in the State Programme for every year are subsequently included into the Annual Statistical Work Programme.

A four-years Strategic Plan is also prepared and published by SSC, the most recent one covering the period 2014 to 2017 inclusive and an English version is available here http://www.stat.gov.az/menu/2/strategy/strategy_plan_en.pdf. The Strategic Plan identifies statistical priorities and therefore provides a strategic reference framework for the preparation of the Annual Statistical Work Programme.

The Assessment Team concluded that the procedures in place in regard to statistical programmes (five-year State Programme, four-year Strategic Plan) and annual reports in regard to their implementation are broadly in line with international recommendations and provide a solid basis for developing, coordinating and monitoring the production and dissemination of official statistics in Azerbaijan. The opportunity of the revision of the "Law on Official Statistics" should, however, be considered as an opportunity to align the procedures more closely with the guidelines in the GLOS.

The Annual Statistical Work Programme, in accordance with the provisions of the Law on Official Statistics, defines the scope and coverage of official statistics insofar as they are currently understood in Azerbaijan. Since certain important statistics such as the Government Finance Statistics (which are produced by the Ministry of Finance) and a small part of statistics produced by the Ministry of Health are not included in the Annual Statistical Work Programme, they are currently not considered to be part of official statistics, although at international level government finance statistics and the small

part of health statistics mentioned above are considered being part of official statistics. The Assessment Team would therefore, recommend that a more objective basis might be developed for defining the scope and content of official statistics having regard to national and international statistical practice and requirements. This would also be particularly useful in the context of introducing procedures for developing new statistical series in areas of emerging interest. Furthermore, it would be desirable to make it clear in the Annual Statistical Work Programme what bodies are responsible for individual statistical outputs and to stipulate in the Law on Official Statistics that these bodies must comply with all aspects of the Law when contributing to the production of official statistics.

ESCoP indicator 1.6: Statistical releases are clearly distinguished and issued separately from political/policy statements.

Statistical releases are clearly labelled as products of the SSC and do not contain any political or policy statements. Since 2011 a calendar for releases and publications is posted on the website.

ESCoP indicator 1.7: The National Statistical Institute and Eurostat and, where appropriate, other statistical authorities, comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable.

The SSC is legally enabled under Article 6.6 of the Law on Official Statistics to rectify erroneous interpretation of statistical results by users, including the media.

In 2014, the SSC prepared and published on its website: *“Rules regulating the actions of the Committee in the case of misinterpretation of statistical information by users”*. These rules were formally adopted by the SSC (Order No. 12/02 from the 4/4/2014) and set out in detail the procedure to be followed when erroneous interpretations etc. are discovered. In brief, the procedures involve the preparation of material correcting the errors, its publication on the SSC website and contact with the media as appropriate to require publication of the correction. The SSC also indicated that it is prepared to respond publicly to criticism where such criticism is unfounded and has done so in several cases by publishing correct information in the mass media.

ESCoP indicator 1.8: The appointment of the heads of the National Statistical Institutes and Eurostat and, where appropriate, of other statistical authorities, is based on professional competence only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

The Chairman of the SSC as a member of the Cabinet of Ministers is appointed and dismissed by the President of the Republic of Azerbaijan in line with the procedures set down in the Constitution for Cabinet Members. The President is elected every five years and, after assuming office, the outgoing Cabinet of Ministers resigns (Article 116 of the Constitution) and new ministerial and other cabinet appointments are made by the incoming President. It is totally at the discretion of the new President to re-appoint an outgoing member to his previous position or to choose a new candidate. In addition, the President may dismiss a member during the term of a Cabinet without giving a reason.

For appointment as a member of the Cabinet of Ministers it is necessary for a candidate to satisfy the following conditions: be eligible to vote; hold a university qualification; and not have any liabilities in other states (Article 121). Furthermore, Cabinet Ministers are precluded under Article 122 of the

Constitution from being involved in business, commercial or other payable activity except scientific, pedagogical or creative activities.

In the previous GA it was considered that it would be advisable “...to define the rules for the appointment of the Chairman and possible reasons for dismissal as well as the fixed term of his office”. The Assessment Team would agree with the intention of the recommendation in the context of strengthening compliance with Principle 1 of the ESCoP. However, as the Chairman is currently appointed and dismissed following the procedures in place under the Constitution for Cabinet Ministers generally, appropriate means should be explored to improve the recognition of the professional independence dimension of the Chairman’s role in line with the ESCoP.

Recommendations

The SSC is encouraged to:

- Define the principle of Professional Independence explicitly with particular regard to how it should apply in practice to: SSC, the Chairperson of SSC, and other statistical producers. (ESCoP Principle 1, indicators 1.1, 1.3 and 1.4)
- Define the professional and managerial duties and responsibilities of the Chairperson of SSC in line with those specified for Chief Statisticians in the GLOS. (ESCoP Principle 1, indicators 1.3 and 1.4)
- In the context of retaining the status of the SSC and the status of the Chairperson of the SSC as a Member of the Cabinet of Ministers, explore all means by which the professional dimension of the role can be further recognised and strengthened through appropriate legal and other measures. (ESCoP Principle 1, indicators 1.2 and 1.8)
- Review the current approach towards the definition of “official statistics” in order to ensure that all relevant statistics – independently on who the producer is – are included within the scope and coverage having regard to national and international statistical practices and requirements and are included in the respective statistical work programmes – see GLOS for guidance. (ESCoP Principle 1, indicator 1.5)
- Ensure that the statistical law applies in a comprehensive manner to all aspects of the production and dissemination of official statistics in Azerbaijan, irrespective of who the statistical producer is and what methodologies and sources are used. (ESCoP Principle 1, indicator 1.5)

Chapter 2: P2 – Mandate for data collection

General assessment

The Law on Official Statistics, Article 7, states that state statistical bodies have the right and power to receive substantial and reliable statistical data in a defined way, volume and period, free of charge, from executive bodies, legal entities (their representative and branch offices), regardless their type of property and organizational-legal form of the Republic of Azerbaijan, from legal entities of the Republic located outside the borders of the Republic of Azerbaijan and from representatives of foreign legal entities and branches acting in the territory of the Republic, as well as from citizens and natural persons of the Republic of Azerbaijan, according to legislative acts, determined by the SSC of Azerbaijan, thus providing a very clear mandate to state statistical bodies to collect data that are required for the purpose of compiling official statistics.

Article 13 of the same Law allows the SSC to have access to administrative data sources collected, processed and stored by relevant executive authorities in the domain of their respective competencies, notably to registers and other data files, in order to produce official statistics. In addition, under Article 14, the SSC can influence the compilation of statistics by administrative data producers (e.g. by specifying the classifications to be used) and require these statistics to be submitted to it for publication and dissemination.

Response is mandatory and compliance is generally very good by international standards. Under Article 27 of the Law, persons responsible for non or late submission of data required for the production of Official Statistics, for misrepresentation of reports, as well as for not providing access to administrative data sources are brought to account in accordance with the procedure set out in the legislation. Penalties are applied in accordance with the Code on Administrative Offences.

The SSC is pursuing a strategic policy to increase the use of administrative data and Memoranda of Understanding have been signed with some state bodies. Some problems do exist in obtaining identification numbers (identifiers) in some situations as other legislation is cited as precluding such access. Moreover, the responsibility of holders of new administrative data sources to consult with the SSC on the design of new administrative data systems, or on major re-designs of existing administrative systems, needs to be clarified. This is necessary to ensure, inter alia, that the administrative data meet statistical needs to the maximum extent and that the supply of relevant data for statistical purposes is not interrupted due to unexpected changes to the administrative sources.

Assessment per indicator

ESCoP indicator 2.1: The mandate of the statistical authorities to collect information for the development, production and dissemination of European Statistics is specified in law.

The Law on Official Statistics, Article 7, states that state statistical bodies have the right and power to receive substantial and reliable statistical data in a defined way, volume and period, free of charge, from executive bodies, legal entities (their representative and branch offices), regardless their type of property and organizational-legal form of the Republic of Azerbaijan, from legal entities of the Republic located outside the borders of the Republic of Azerbaijan and from representatives of foreign legal entities and branches acting in the territory of the Republic, as well as from citizens and natural persons of the Republic of Azerbaijan, according to legislative acts, determined by the SSC of Azerbaijan.

ESCoP indicator 2.2: The statistical authorities are allowed by law to use administrative data for statistical purposes.

The Law on Official Statistics has two articles devoted to ensuring appropriate access to administrative data (including registers) for the purposes of compiling official statistics and these articles were amended in 2011 to take account of the recommendations of the 2010 GA.

Article 13, allows SSC to have access to administrative data sources collected, processed and stored by relevant executive authorities in the domain of their respective competencies, notably to registers and other data files, in order to produce official statistics. Article 14 obliges producers of administrative data to co-ordinate their questionnaires with the SSC. However, the Assessment Team was informed that full access, particularly to direct identifiers, was not always granted on the basis that other legislation sometimes precluded or restricted the granting of access for statistical purposes.

Despite the legal provisions, the use of administrative data for statistical purposes is still relatively underdeveloped in Azerbaijan. The Assessment Team was informed that currently around 20% of statistical outputs are based on administrative data and that the SSC has a strategic objective to raise this to 40% in the medium term. While supporting this objective, the Assessment Team concluded that a number of steps need to be taken to facilitate the achievement of this objective in an optimal manner.

Firstly, the SSC should have its legal right of unrestricted access to administrative data sources, and in particular to direct identifiers where required, unambiguously clarified in practice. In particular, any claimed restrictions or legal obstacles to this under other legislation should be addressed in the revised statistical law e.g. by giving explicit precedence to the latter in any cases of conflict. Second, the SSC needs to adopt a more proactive approach in promoting the use of administrative data for statistical purposes with a view to obtaining greater cooperation from data holders. Third, it must be recognised that the ability to link administrative datasets, using common identifiers, greatly enhances their statistical potential. Thus, the use of common identifiers by government agencies should be actively encouraged by the SSC. Finally, the relationships between the statistical bodies and administrative data holders should be streamlined and formalised. The SSC has recently signed a Memorandum of Understanding with the Ministry of Taxes and this might serve as a template for similar agreements with other important holders of administrative data. The SSC should also move from using individual letters of request covering data exchange towards concluding multi-annual framework agreements.

ESCoP indicator 2.3: On the basis of a legal act, the statistical authorities may compel response to statistical surveys.

Article 11 of the Law on Statistics makes it mandatory to respond to statistical surveys and Article 27 stipulates that penalties may be applied in the case of non-compliance. Such penalties are set under the Code on Administrative Offences and currently range from 330 to 500 Manats (165 to 250 euro) for each breach.

Recommendations

The SSC is encouraged to:

- Clarify in practice the right of the SSC to get full access for statistical purposes to administrative data records and sources (including to direct identifiers, where required); and confirm explicitly the precedence of the statistical law over other legislation in this regard (see GLOS for guidance).
- Be pro-active in promoting the benefits of using administrative records for statistical purposes with a view to obtaining greater co-operation from the holders of administrative data.
- Further develop contact with all ministries and government agencies on the increased use of administrative data sources for statistical purposes and on the introduction of common identifiers for all statistical units / enterprises and individuals.
- Conclude multi-annual framework agreements or Memorandums of Understanding (MoUs) with the most important providers of administrative data required for statistical purposes, covering in particular data coverage, scope, frequency, quality criteria and data exchange arrangements and thus formalising the data exchange.

Chapter 3: P3 – Adequacy of resources

General assessment

Compared to the situation in 2009 (information from the previous global assessment) the number of staff has slightly increased (2009: 1216 positions, 2016: 1380 positions). Quite a considerable change has taken place in 2016 with a significant impact on staff numbers and staff characteristics, namely the abolishment of the main computing centre and the integration of around 2/3 of the staff positions into the head-quarters (SSC). As there was no one-to-one integration of people into the headquarters but rather a standard recruitment procedure applied based on the civil service law, very few staff from the computing centre was integrated and all other positions were filled with young graduates from universities. This brought a renewal of staff composition with around 1/3 of the current staff in the SSC being recruited recently and being rather young and hence, with a considerable need for training.

The overall staff number of the SSC and its territorial bodies is determined by the fact that a lot of face-to-face interviewing is present for household, price and economic activity surveys and hence the need of the statisticians to be close to the respondent units. Electronic reporting is being introduced for business surveys and has reached coverage of 95%. These electronic reports go directly to the SSC without the regional offices seeing them, while paper questionnaires are processed by the regional offices. With the move towards electronic reporting the need for staff in the regional offices is decreasing. The SSC has the authority to move staff from one regional office to another one but this right is not extensively used. The SSC is in the process of preparing for improving the efficiency of its regional office structure through integrating local offices into regional offices. This initiative will be continued once the results of the first pilot are evaluated. In the long term this may reduce staff in the local and regional offices with hopefully freeing positions to be relocated to the head-quarters for work on methodology, production of new statistics and improving quality of existing statistics.

The qualifications of staff are adequate but due to the recent recruitment of a rather large proportion of new and young staff, the need for formal and on-the-job training in statistical matters has increased considerably. This poses a certain challenge to the SSC as current work needs to be implemented at the same time as training this rather large inflow of new staff.

All staff is regularly trained internally by colleagues from the same unit of the SSC and has the possibility to take short-term courses for professional development. Furthermore, staff is allowed receiving additional master degrees in the Academy of State Administration/Management under the President of Azerbaijan in the following subjects: “Administration / Management at state and municipal levels” and “Management of sustainable development”. At present 8 staff members of the SSC have received such a degree at the academy.

The current salary levels are higher than the average salary in the country and comparable to those in Ministries and seem adequate. The SSC reported that there is no large turnover and loss of staff to Ministries as salaries are equal. On the contrary, in recent recruitments the SSC has received a large number of candidatures for the published vacancies, with on average 3 candidates for one vacant post.

Recruitment procedures are implemented in accordance with the civil service law and competence based.

ESCoP indicator 3.1: Staff, financial, and computing resources, adequate both in magnitude and in quality, are available to meet current statistical needs.

Human resources

The State Statistical Committee (SSC) including its regional and other structures has a total of 1380 positions of which as of 1 February 2017 1266 positions were filled while 114 positions were vacant. Out of the 1380 positions 284 are located in the central office, 105 in the Autonomous Republic of Nakhichevan (including the statistical committee and regional offices) and 954 in the regional/local offices. Of the latter around 400 are interviewers for regular surveys of households (HBS and LFS), price collection and surveys on economic activities and they are civil servants. An additional 550 people are hired on a temporary basis for ad-hoc surveys such as on ICT, market research, education and others as defined in the “State Programme of Development of Official Statistics in the Republic of Azerbaijan in 2013-2017”. They are not civil servants and are hired on a contract basis for 1-2 months for carrying out the interviews.

The gender distribution of staff is almost balanced with 52% of male and 48% female staff. Roughly 1/3 of the staff is in the age group under 35 years. 77% of the staff has higher education.

The structure and characteristics of staff have changed considerably in 2016 because of two reasons: 1) a new pension law to be adopted and reducing pensions so that people at retirement age left the SSC at the end of 2015 to still benefit from the previous pension law with higher level pensions and 2) the abolishment of the main computing centre with its 178 positions and the right of the SSC to hire 106 people based on a competitive procedure. Staff in the computing centre had different profiles than staff in the head-quarters as they were mainly dealing with data processing and validation while in the head-quarters the focus is on the development and implementation of methodology and survey instruments. The 106 positions in the SSC were filled via open and standard recruitment procedures (see below) and specific training was organised by the SSC to help staff from the computing centre to pass the recruitment test, however only 25 staff managed to pass this official recruitment procedure. The result of this large inflow of staff based on open recruitment procedures was that around 80 new and mostly young staff entered the SSC, meaning that the staff at the SSC was renewed by roughly 1/3. This had and still has an impact on the work processes and training needs as the new staff needs to receive both formal training in statistical matters and on-the-job training by their supervisors/experts in the departments.

The SSC receives annually an overall budget for staff and is allowed to manage it flexibly in accordance with its needs, the only limitation being that the number of posts in certain categories is fixed by the Cabinet of Ministers. Therefore, mobility internally in the SSC as well as in the regional offices and between regional offices and the SSC is legally possible (respecting the limits of staff positions overall) but is rarely used. However, when positions become vacant, the SSC publishes them first internally to recruit current staff before they are given to the State Examination Centre. This may be considered as mobility.

The SSC monitors the performance of its employees on an annual basis. According to Article 30-1 of the Law of the Republic of Azerbaijan “On Civil Service” and in accordance with the “Rules for Evaluating the Performance of a Civil Servant”, the manager of the staff member annually completes an appraisal form for each of the staff members on the basis of the following criteria:

1. Professional knowledge;
2. Fulfilment of official duties;
3. Ability to conduct analysis, solve problems and take decisions;

4. Creativity and innovation;
5. Punctuality and timeliness;
6. Work experience and openness to the exchange of experience;
7. Ability to work in a team, sociability, relationships with employees as well as with senior management;
8. Analytical skills;
9. Management;
10. Team work;
11. The ability to create a team.

The assessment levels are excellent, good, satisfactory or unsatisfactory. The results of the assessment are included into the file of each employee. The purpose of the assessment is to determine the level of performance of staff during the year, to assess the correspondence of the staff member to the position held, to provide trainings to employees who received low ratings and to define the development potential.

At the end of the year the SSC aggregates all the information and sends it to the State Examination Centre on public administration (state services). The summary evaluation is also used for the performance assessment of staff. The SSC has a number of incentives at hand that could be considered alongside promotions, such as the handing out of bonuses (premiums), an award/medal at the occasions of the day of the civil servants or the World Statistics Day, etc. The SSC implements annually a staff opinion survey, results are used to improve working conditions, provision of equipment, internal rules and other aspects of staff satisfaction.

Part-time is not a work pattern that is very present in the SSC structures, it is more understood as working on a contract/temporary basis. Other flexible ways of working are also not applied.

In the meeting with the junior staff it was confirmed that a more flexible system of working may be helpful for some staff members, though not all of them.

Recruitment procedures

Any recruitment is based on the civil service law from 2001 and implemented according to the standard procedures applied by the State Examination Centre. When a vacancy occurs, the SSC informs the State Examination Centre and publishes it on the website while the State Examination Centre announces it officially. People have 30 days to apply for the post, after these 30 days the State Examination Centre organises a competition consisting of computer-based tests and interviews. If the candidate passes these two tests, another interview is held by a special board. Those passing this interview successfully, are proposed to the SSC, which finally chooses and appoints the candidates to their posts. If the number of candidates is more than one, SSC selects one of them, recruits the person for a probation period of 6 months and assigns a supervisor. The supervisor steers the work of the probationer and monitors his/her activity. After completion of the probation period, the supervisor provides an opinion to the Chairman on whether the candidate is to be recommended to be hired in the civil service. In case of a positive recommendation, a contract is signed with the candidate who is recruited for a trial period of three months. In case the contract is not terminated during the trial period, the candidate is recruited as a permanent civil servant and receives a contract with an unlimited time.

There are also recruitments on the basis of interviews for people with a track record in the public administration who want to return to the SSC (general interviews) and for staff with the ambition to grow in the organisation and to be promoted to higher level posts (internal interviews).

Since 2007 some 610 people went through these two systems of competitions and interviews, 434 were hired through competitions (145 in the SSC and 289 in the regional offices), 51 were hired through general interviews (9 in the SSC and 42 in the regional offices) and 125 got promoted through internal interviews (62 in the SSC and 43 in the regional offices).

For the top management, the recruitment takes place as follows. The Chairman of the SSC and his/her deputies are appointed by the President of Azerbaijan, in accordance with the status of the SSC in the government and the relevant provisions in the Constitution of Azerbaijan. The President of the SSC appoints and dismisses the heads of regional offices according to the statute of the SSC.

Training

Each unit has its own specific training programme, mainly for newly recruited staff lasting for one year and consisting of several regular training sessions of minimum one hour focusing on general issues such as legal matters and on subject-related matters in statistics. These sessions are given by the experts and head of the same unit. At the end of the training programme, the level of knowledge of the recruited staff is assessed by the head of unit.

In addition, each of the young recruits undergoes a specific training programme together with his / her mentor (every week) and a general training on statistics organised centrally by the SSC.

The SSC also has the possibility for expert staff to attend international seminars and workshops and to participate in longer term training courses.

Training is organised in both the SSC and in the regional offices. In January, every year a training programme is approved for the regional statistical offices. Heads of regional statistical offices organise the training for their staff and report on a monthly basis to the department of human resources and law of the SSC.

Training needs are determined based on the need to increase knowledge and skills in particular areas, according to the results of the annual assessments mentioned above.

No language courses were organised during the past two years, due to lack of financing. However, training courses on foreign languages were organized internally by employees of the SSC with good knowledge of foreign languages to train other employees on a voluntary basis.

Financial resources

The budget of the SSC is provided by the State budget and has developed between 2010 and 2016 as illustrated below:

Breakdown	2010			2016		
	Manat	Euro / USD	Expenditure structure %	Manat	Euro / USD	Expenditure structure %
Salaries	5755287	5414702 / 7170804	41,6	10343235	5857203 / 6481130	57,6
IT expenditure	911177	857256 / 1135282	6,6	1460530	827074 / 915176	8,1
Interviewer costs	111200	104619 / 138550	0,8	289794	164106 / 181587	1,6

Breakdown	2010			2016		
	Manat	Euro / USD	Expenditure structure %	Manat	Euro / USD	Expenditure structure %
Research	238353	224248 / 296976	1,7	350000	198199 / 219312	2,0
Pensions/social benefits	91912	86473 / 114518	0,6	133092	75368 / 83396	0,7
Procurement	3568514	3357337 / 4446192	25,8	1572188	890304 / 985142	8,8
Other operational costs	2271695	2137261 / 2830420	16,4	3813503	2159524 / 2389563	21,2
Census (if applicable)	897628	844508 / 1118400	6,5	0	0 / 0	0
Total	13845766	13026405 / 17251141	100	17962342	10171778 / 11255305	100

According to the rules on civil service, the SSC experienced a salary increase between 25-60% since 2013.

The budget provided to the SSC also includes resources for the construction and renovation of premises/buildings for the regional offices.

The budget is planned on the basis of the five-year State Programme and current/forthcoming needs, including for software development, acquisition of hardware and equipment for the regional offices. The budget needs are transferred to the Ministry of Finance in the framework of the annual budget request and subsequently negotiated with the Ministry. The budget granted by the Ministry of Finance is just sufficient to cover salary costs, payment of utilities and other current costs, it is not sufficient for infrastructure development.

The usual budget granted to the SSC is sufficient to cater for current needs but does not provide funding for larger scale investments into the technical infrastructure or for a reform of the IT infrastructure. Such funding has to be covered by loans or other budget sources.

The SSC does not receive any other revenues from selling publications or renting buildings.

The SSC has not yet started to introduce cost accounting for its statistical products.

Information technology resources

- *Organisation of IT*

The integration of the computer centre into the SSC structures in early 2016 impacted the organisation of IT in the SSC to quite some extent. A department of information technology exists in the SSC and its tasks are:

- the provision of relevant software packages for statistical production; however due to the fact that this task was previously implemented by the computer centre, the SSC is currently outsourcing most of the software development but intends to internalise this in the future when it will receive the keys for the software,
- the development of technical specifications for software to be applied in statistical processes,
- the organisation of software in the NSS,
- the assurance of the relevant hardware,

- the development and maintenance of web-based survey questionnaires,
- the maintenance and further improvement of the website,
- the introduction of modern data transmission tools such as SDMX (already used for transmitting trade data to international organisations),
- developing, management and maintaining databases,
- maintain the quality control tables,
- - updating data in information systems, archiving and provision of data security,
- assuring the technology basis for statistical confidentiality,
- providing the technical basis for an integrated metadata system,
- improving the quality and content of e-services for users.

- *IT policy*

The department of information technology is responsible for the development of an IT strategy to be sourced possibly by a loan from the World Bank aiming at renewing and modernising the entire IT infrastructure.

- *Hardware and software*

With regard to the IT hardware, the SSC and its regional offices have at their disposal 1351 PC, which means that every employee has a PC at his/her disposal. Internet access is available for all staff. The general IT renewal policy of the government is that a PC is replaced after 9 years. The SSC keeps the older generation of PCs to make them available in the library for users. In 2016, the SSC acquired 70 new PCs and 140 tablets for surveys as well as 2 new servers.

As for software, the usual applications are available as well as 16 licenses for SPSS, out of which 5 are used for household surveys by the Department of Life Quality Statistics. The overall number of applications used in the SSC is 256.

The planned project with the World Bank will provide a substantial renewal not only of the hardware but also for software, database development, integration of data coming from administrative data sources, training of staff and the development of a metadata driven infrastructure.

- *Human and financial resources*

There are currently 25 staff in the department of information technology, out of which 3 are vacant. Keeping well trained IT specialists is a challenge for the SSC due to higher salaries in the private sector.

- *IT network between the SSC and the regional offices*

All regional and local offices are connected to the SSC through the Internet.

Recommendations

The SSC is encouraged to:

- Embark on a fundamental reform and modernisation of the IT infrastructure and systems to meet current and future needs for a modern statistical processing environment. In the context of

modernising the IT platform and moving towards greater use of administrative records for statistical purposes, the management of SSC should reflect on the implications for its organisational structure and resources of these initiatives. Two issues arise in particular:

- It will be essential to identify the most cost-effective deployment of staff within the SSC HQ, the Nakhchivan AR SSC and between the Regional and Local Statistical Offices.
- Furthermore, while a number of IT development tasks are outsourced, it will be necessary to ensure through training and recruitment that adequate in-house staff resources with the necessary experience and skills are available as required for the regular statistical production and maintenance of the statistical system.
- Seek the support from the government to acquire additional resources to modernise the organisation and to meet new statistical demands, particularly in emerging areas such as: SDGs, innovation, knowledge based economy, green economy, renewable energy, development of the non-oil based sectors, SMEs, etc, though current human and financial resources are adequate to meet current needs.
- Consider the need for greater mobility of staff both inside the HQ and among RSOs. In the long term and if the appropriate legal provisions are in place, deployment could also be envisaged between the SSC HQ and the Regional and Local Statistical Offices.
- Consider the introduction of a time recording system in order to measure the labour input required for the production of the various statistical outputs at a detailed level. Such information is essential for evaluating the costs of the statistical programme and hence for a negotiation on budgets and resources for the SSC as well as for analysing the production processes with a view to achieving efficiencies.
- Further develop the training programme to meet the specific needs of the high number of new recruits in terms of language and subject matter knowledge.
- Examine and put in place the necessary promotion and other career development measures to attract and retain sufficient numbers of high quality staff – this is particularly relevant in regard to the large number of recently recruited staff.
- Consider introducing a system of flexible working hours, maybe on a pilot basis, to increase staff motivation and cater for better work-life balance.
- Acquire more high-end IT statistical tools such as SPSS and SAS and provide training so that statistical staff can use them in an effective manner.

Chapter 4: P4 – Commitment to Quality

General assessment

Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and product quality.

Based on the results of the 2010 Global Assessment of the national statistical system of Azerbaijan the need to create a quality management system has been recognised in order to improve the quality of statistical products and improve the efficiency of the statistical production process. At the beginning of 2012, the State Statistics Committee established the Department of Quality Management and Metadata.

The State Statistics Committee leadership has proclaimed a Quality policy and based on the policy defined its Quality objectives, which are reviewed annually. In December 2015, the Quality policy as

well as the Quality objectives for 2016 were approved and made available to the public on the website. Both the Quality policy and the Quality objectives are communicated to the staff and are available in each office. Based on the European statistics Code of Practice a Code of Practice for the State statistics bodies of the Azerbaijan Republic was developed and approved by Statistical Council of the SSC.

A remarkable achievement of the SSC in the area of quality is the fact that the activity “Production and dissemination of official statistics” was certified according to the requirements of international standards ISO 9001:2008 “Quality Management Systems. Requirements” in August 2013 and according to ISO 9001:2015 in April 2017. The SSC was the first public authority in Azerbaijan receiving an ISO certificate.

In order to promote the experience of Azerbaijan world-wide, statistical documentation prepared by the structural divisions of the SSC in their areas of competence has been placed on the website of the United Nations Statistics Division: <http://unstats.un.org/unsd/dnss/SearchResults.aspx>.

Assessment per indicator

ESCoP indicator 4.1: Quality policy is defined and made available to the public. An organisational structure and tools are in place to deal with quality management.

In 2010, the senior management of the SSC of the Republic of Azerbaijan proclaimed a Quality policy and its Quality objectives, which are reviewed annually. Both the Quality policy and the Quality objectives have been introduced to the SSC staff and posted in each office. In December 2015, the Quality policy and the Quality objectives for 2016 were approved (by the decree of the Chairman of the SCC No. 21/07s) and placed on the website. Main documents of the Quality management system (QMS) were published:

The Quality policy of the SSC for 2016 (in Azeri and English) is available at <http://www.stat.gov.az/menu/2/quality/index.php?mode=desktop>;

Quality objectives of the SSC for 2016 (in Azeri and English) are available at <http://www.stat.gov.az/menu/2/quality/?lang=en>.

The Quality manual (QMS 01-16), was approved by the order of the SSC No 07/07s, dated 25 May 2016. It should be noted that this document was prepared for the first time in 2010 and is updated regularly, as needed. The final version of the document took into account the requirements of ISO 9001: 2015.

Since the beginning of 2012, the Department of Quality Management and Metadata operates as an independent unit with 9 staff. The department consists of two sectors – the Sector of Quality Management and Internal Audit and the Sector of Metadata and Classifications.

Its tasks include: organisation of quality management in the statistical system, internal audit, assurance of compliance with international standards in the development of national classifications and metadata, preparation of the Quality management system (QMS) for certification, maintenance of the system operation, etc.

Since 2010, a Coordination Council for quality is operating in accordance with the Regulations in the field of quality management. The main objectives of this Coordination Council: the development of the quality policy; decision making in the field of Quality management within its mandate, coordination of quality activities implemented by the SSC.

In each department of the SSC a person was made responsible for quality issues. In accordance with the action plan, approved by the Board of the SSC, at least once a year seminars are organised for the

department staff dealing with quality issues and for the staff of regional and local statistical offices. Each of those regional statistical offices using the QMS also has appointed a person responsible for quality issues. The Chairman of the SSC annually approves the training programme for the staff.

The SSC uses internet-based questionnaires that implement quality checks of the input data while questionnaires are filled in, standardised editing procedures and standardised statistical analysis of the data so as to ensure effective data collection and processing.

A number of methodological documents are prepared and serve as metadata: Statistical Metadata in a Corporate Context, Metadata Concepts, Standards, Models and Registries, Standards for quality reports etc. They are made available to the public on the website of the SSC.

ESCoP indicator 4.2. Procedures are in place to plan and monitor the quality of the statistical production process.

The Department of Quality Management and Metadata is responsible for quality management, internal audit, the introduction of international standards in the development of national statistical classifications and metadata and for monitoring the implementation of decisions taken in these areas. The Department of Information Technology is responsible for introducing information technology and security in the collection, processing and dissemination of statistical information. The Sector of Accountability and Coordination of Statistical Methodologies (being a part of the Department of Coordination of Statistical Work and Strategic Planning) coordinates methodological work in accordance with the plan.

The procedure of internal audits is documented since 2010 and a revised version of the document was approved by the Decree of the SSC No. 04/07, dated 22 February 2016.

With regard to the principles of the European statistics Code of Practice (ESCoP), standards and guidelines for drawing up quality reports for statistical products were approved through the order of the SSC No. 101/07s of 17 December 2012. Since 2013 the statistical departments and divisions of the SSC prepare quality reports for main statistical products according to this document. Since 2014 quality reports are prepared based on the structure of the ESQRS 1.0 and since 2016 the revised version ESQRS 2.0 is applied. The final version of the document corresponds to the requirements of the ISO 9001:2015. Standards for processes management and statistical process maps were developed for each structural subdivision and approved by Decree of the SSC No. 09/07s of 1 August 2016.

Quality Control Tables (QCT) were developed as an efficient tool to ensure the quality of data processing and validation. They provide the possibility to keep track of inconsistencies in the production database. QCTs are specially developed software based on error identification rules and possible inconsistencies in data collected from respondents. Compared with some standard software, QCTs are more flexible and better adapted to the structure of the existing database. Thus, the SSC, in addition to traditional methods for monitoring the comparability of data started to apply this new quality control tool.

ESCoP indicator 4.3: Product quality is regularly monitored, assessed with regard to possible trade-offs, and reported according to the quality criteria for European Statistics.

The procedure of internal audits is documented (SSC QMS 03-12) in accordance with the ISO requirements, and a revised version was approved by the Decree of the SSC No. 04/07, dated 22 February 2016. The procedure for Internal Audits (SSC QMS 02-16) determines the rules for planning, preparing and implementing internal audits of the quality management system. The results

of this internal audit are analysed by the Department of Quality Management and Metadata. Internal audits are implemented in all departments on the basis of the programme of audits approved every year.

Standards and Guidelines for drawing up quality reports of the statistical products are prepared. In accordance with this document, since 2013, quality reports of statistical products are prepared by the statistical departments of the SSC. Since 2014 quality reports are prepared based on ESQRS 1.0 in excel format and since 2016 based on ESQRS 2.0.

The document “Analysis of the QMS by the SSC Management” (SSC QMS 05-16) in its revised version as approved by the Decree of the SSC No. 06/07s, dated 14 March 2016 is used for analysing the results of the QMS for the SSC as a whole.

Customer satisfaction surveys are regularly implemented via the website surveying the satisfaction of users with the website and with the statistical information provided. In March 2014, the SSC also implemented a satisfaction survey among its respondents. The results of these satisfaction surveys are summarised, analysed and published on the SSC website (in Azeri and English):

<http://www.stat.gov.az/source/others/Sorqu.pdf>

http://www.stat.gov.az/source/others/s_en.pdf

http://www.stat.gov.az/source/others/sorqu-yekun_24.12.2015.pdf

http://www.stat.gov.az/source/others/sorqu-yekun_07.12.2016.pdf

Brief information about the results of these satisfaction surveys for the most recent statistical surveys is also included in the quality reports of the SSC.

ESCoP indicator 4.4: There is a regular and thorough review of the key statistical outputs using also external experts where appropriate.

Starting from 2013 the metadata according to ESMS 1.0 (<http://www.azstat.org/MetaDataG/>) as well as reports on statistical surveys and indicators are prepared by the subject matter units and published on the website of the SSC (<http://www.stat.gov.az/menu/2/quality/index.php?mode=desktop>).

The “Audit Programme for the departments of the State Statistical Committee of the Republic of Azerbaijan” was approved by the Chairman of the SSC on 10 February 2016. These audits evaluate the application of the documentation required by the QMS, as is required by the ISO 9001:2015 standard. For each department, an audit plan is approved. Before embarking on the audit, the members of the audit team and the Chief Auditor hold seminars; this is done at least once a year. The Chief Auditor is certified by “AZTEST”, functioning under the State Committee for Standardisation, Metrology and Patents. The SSC applies a documented procedure for internal audits (SSC QMS 02-16), which is approved by order of the SSC No. 04/07s, dated 22 February 2016. The documented procedure and the Handbook for the internal audits of the QMS (prepared in 2013) are used as the basis for training internal auditors of the SSC.

In 2013, the company “Bureau Veritas” and in 2017 the company “SGS” conducted an external certification of all structural divisions of the SSC and confirmed the compliance that the QMS of the SSC is in line with the International Standard ISO 9001:2008 and ISO 9001:2015. Each year tracking audits are conducted. Comments and inconsistencies identified by these audits promote the improvement of process and product quality <http://www.stat.gov.az/index.php?mode=desktop>; <http://www.stat.gov.az/?lang=en>.

All audit results are documented through a report and the non-compliance act. Based on these documents, the SSC decides on improvement actions to eliminate non-compliance cases. The date of the next audit is established as well. User comments are taken into account in preparing the act of non-compliance and the audit report.

The results of satisfaction surveys of respondents and users are taken into account when planning improvement to the design and functioning of the website, the format of data dissemination, etc.

Recommendations

The SSC is encouraged to:

- Continue implementation of the quality management system in all Regional Statistical Offices of the SSC in accordance with the requirements of ISO 9001:2015 “Quality Management Systems. Requirements”;
- Complement the DESAP based self-assessment of surveys, and the ISO related documentation audits, with targeted audits of statistical processes and methodologies to be implemented through a programme of statistical audits (sector reviews) focusing on methodology, including the use of benchmarking and the participation of external experts as appropriate, for a regular assessment of key statistical outputs (see Indicator 4.4 of the ESCoP).
- Encourage other producers of official statistics to apply quality assurance procedures and consider the introduction of quality labelling and / or certification of other producers.

Chapter 5: P5 – Statistical confidentiality

General assessment

The legal basis for protecting statistical confidentiality is laid down in the Law on Official Statistics. The law strictly prohibits the disclosure of confidential statistical information.

Section VI of the Law on Official statistics on “Primary statistical data and their confidentiality” consists of 6 articles containing clear provisions on statistical confidentiality. Article 16 states that primary data of statistical units collected for the production of official statistics are confidential. Furthermore, Article 22 specifies that aggregates shall comprise at least three units and the share of one unit in an aggregate must not exceed 85% of the total.

Confidential statistical data are not available to the public. According to Articles 17 and 18 of the Law on Official Statistics confidential statistical data should be used exclusively for the production of Official Statistic or, if they do not allow direct identification, for exceptional scientific purposes ensuring the anonymity of statistical units, in accordance with the provisions of the Law (eliminating means which allow identification), unless the respondents have unambiguously given their consent to the use for any other purposes and to the conditions thereof.

All employees of the state statistics bodies, as well as temporary workers, interviewers engaged for statistical surveys, sample surveys and censuses sign a written commitment to comply with statistical confidentiality. They are responsible for non-disclosure of statistical secrecy not only during the time working in the state statistics bodies, but also after the end of their work / duties, in accordance with Article 28 of the Law on Official statistics. In accordance with Article 26 Responsibility for violation of the statistical law, violation of the legislation on statistics causes disciplinary, administrative and criminal liability.

A Confidentiality policy is published. Rules on working with non-aggregated data were laid down in the handbook “How to work with the raw data, how to preserve their confidentiality” approved by the resolution of the SSC No. 7/02s, dated 19 February 2014, and placed on the intranet of the SSC.

Assessment per indicator

ESCoP indicator 5.1: Statistical confidentiality is guaranteed in law.

Section 6 of the Law on Official Statistics consists of 6 articles containing clear provisions in respect of statistical confidentiality. Article 16 of the Law states, that primary data of statistical units collected for the production of official statistics, are confidential. Furthermore, Article 22 specifies that aggregates shall comprise at least three units and the share of one unit in an aggregate must not exceed 85% of the total (Law on Official Statistics of 18 February 1994, as amended on 15 November 2011).

ESCoP indicator 5.2: Staffs sign legal confidentiality commitments on appointment.

All employees of state statistical bodies, as well as temporary workers, interviewers involved in statistical surveys, sample surveys and censuses sign a written commitment to comply with the principle of statistical confidentiality. They are responsible for non-disclosure of statistical secrecy not only during the time working in the state statistics bodies, but also after the end of their work/duties, in accordance with Article 28 of the Law on Official statistics. http://www.stat.gov.az/menu/3/Legislation/law_az.pdf.

ESCoP indicator 5.3: Penalties are prescribed for any wilful breaches of statistical confidentiality.

In accordance with the Article 26 of the Law on Official statistics, responsibility for violation of the legislation on statistics causes disciplinary, administrative and criminal liability. In accordance with Article 390 of the Code of Administrative Offences of the Azerbaijan Republic, the dissemination of individual/primary data without the knowledge of legal or natural persons, the provision of their data to public bodies, companies or individuals leads to a fine of 100-200 Manat for individuals, of 300-500 Manat for officials and 1000-2500 Manat for legal entities. For the publication of confidential data in the press, individuals are fined with 200-300 Manat, officials with 500-700 Manat and legal entities with 2,000-3,500 Manat.

ESCoP indicator 5.4: Guidelines and instructions are provided to staff on the protection of statistical confidentiality in the production and dissemination processes. The confidentiality policy is made known to the public.

The confidentiality policy is published. The policy is developed and updated by the Department of Quality Management and Metadata and technical issues related to ensuring and improving the confidentiality of statistical data are resolved by the Information Technology Department.

Rules on working with non-aggregated data were laid down in the handbook “How to work with the raw data, how to preserve their confidentiality” approved by the resolution of the SSC No. 7/02s, dated 19 February 2014, on and placed on the intranet of the SSC.

Rules on anonymising primary data to follow the legal provision of providing micro-data for scientific purposes are available on the SSC website in the section Statistical publication, at current in Azeri language only (once translated, they will be available also in English). SSC staff participates in seminars in the field of statistical confidentiality.

For the purpose of improved access to micro-data for research purposes, a corresponding policy as well as procedures and tools are being developed. Based on international best practice, the SSC will – in the long-term - develop the necessary IT and other facilities for enabling greater access to micro-data by researchers.

ESCoP indicator 5.5: Physical, technological and organisational provisions are in place to protect the security and integrity of statistical databases

The Order of the SSC No. 197/t “On internal disciplinary rules for information security in the National Statistical System”, was adopted in 16 November 2012 and each employee is familiar with these rules. Primary data of the legal and natural persons are protected by the above-mentioned means. At the top of each questionnaire and form for statistical surveys (reports) it is mentioned in large font that “the confidentiality of primary data is guaranteed”.

Staff working with primary data is informed about the existing data confidentiality regulations and signs commitments to comply with them.

The protection of security and integrity of statistical databases is guaranteed through the following measures:

- Login is allowed only on presentation of the login and password.
- Access rights to primary and grouped information differ in accordance with the group of users.
- A three-tier client-server technology is used to access the programmes and the data (WEB server-Application Server-Database Server). The programme is stored and run only on the Application Server. The only possibility to start the programme is through the site on the WEB-server. Access to the programmes and the data from beyond the firewall is not possible / allowed.
- Data are stored on the Database Server.
- All servers are fully protected from unauthorised access.

The State Agency for Services to Citizens and Social Innovations under the President of Azerbaijan Republic annually carries out a data security system audit in the SSC. The results of the audit are documented; based on the recommendations, necessary improvements are implemented.

According to the Decree of the President No. 654 of 19 June 2012 internet resources and e-mail addresses of all State bodies, including the SSC, are placed in the Resource and Information centre of the Special State Protection Service of the Republic of Azerbaijan. Therefore, the security of the SSC website is guaranteed by the Resource and Information Centre of the State Service and checked on a regular basis with the help of special IT programmes.

SSC experts regularly monitor the security of all system components. All system servers are located in a secure server room. Access to the room is strictly limited and monitored by video surveillance. All working copies and data files are stored in secure locations. Access to the statistical databases is possible only through the applications that are on the Application server. Queries for data are recorded in the relevant logs. Direct access to the database is open only to the administrators of these databases. Administrator actions are documented and tracked. Special programmes for creating and updating user account information exist.

ESCoP indicator 5.6: Strict protocols apply to external users accessing statistical microdata for research purposes.

According to the Article 18 (Scientific research) of the Law on Official Statistics, if the research results do not allow identification of individual statistical units, the SSC allows access to confidential data for implementation of specific scientific-research projects. Access to this information is possible only in case the protection of confidential data is guaranteed within these scientific-research projects.

The SSC developed the Regulation allowing access to micro-data for the scientific purpose and approved it on 13 June 2011.

Article 20 (Measures for protection of primary data) of the Law on Official Statistics envisages that all measures of administrative, technical and organisational nature are taken to protect confidential statistical data against unlawful access, disclosure or use. Rules on working with non-aggregated data were reflected in the handbook “How to work with the raw data, how to preserve their confidentiality” approved by the resolution of the SSC No. 7/02s, dated 19 February 2014 and placed on the intranet of the SSC

Access to micro-data for research purposes is provided based on a contract through which the applicant guarantees to respects the obligations.

Recommendations

The SSC is encouraged to:

- Develop an approach (including necessary legal provisions), consistent with the principle of Statistical Confidentiality, enabling the dissemination of key national statistics where the activities are undertaken by monopoly enterprises (e.g. statistics on railway transport).
- Develop a similar approach for application at regional level for the dissemination of regional statistics ensuring that it is strictly observed by all Regional Statistical Offices (RSOs) in a uniform manner.
- Develop a policy and related procedures as well as the necessary IT and other facilities for enabling and promoting greater access to micro-data for research purposes by the scientific community.

Chapter 6: P6 – Impartiality and objectivity

General assessment

Statistical authorities develop, produce and disseminate Official Statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

All information is published on the website and thus publicly available. Statistical publications and press releases are based on facts and do not contain the policy assessments. The popularity and usefulness of the website can be seen in the growing number of visitors. This may be an indirect confirmation of the objectivity of the SSC.

A preferential access to data by high level government officials is not mentioned in the calendar of publishing statistics and press releases.

Through the website of the SSC and new sections such as Metadata, the society has become more informed on methods and procedures used by the SSC.

Assessment per indicator

ESCoP indicator 6.1: Statistics are compiled on an objective basis determined by statistical considerations.

Statisticians are well aware of the need to comply with the principle of impartiality and objectivity, as one of the United Nations (UN) fundamental principles of Official Statistics and the ESCoP and its actions are guided solely by statistical needs.

The principle of impartiality and objectivity of the civil servants is determined in the Law of Azerbaijan Republic on the Rules of Ethical Conduct for Civil Servants (Article 18.2).

The principle of impartiality and objectivity is introduced in all statistical departments of the SSC. The Department of Coordination of Statistical Works and Strategic Planning consists of 3 sectors, one of which is the Sector of Sample Surveys and Registers of Statistical Units. This sector is responsible for the impartial and objective sample-based survey design, structural departments are responsible for the impartial and objective preparation and production of data, the Division of Information and Public Relations is responsible for the observance of this principle in the dissemination of the data.

Regional statistical offices are engaged in the recruitment of temporary employees and interviewers to conduct statistical surveys, but the written selection criteria are determined by the SSC. Usually the 2 most important criteria are: higher education and experience in similar work.

All potential candidates are notified about the criteria; requirements for temporary workers are established by the regional statistical offices.

ESCoP indicator 6.2: Choices of sources and statistical methods as well as decisions about the dissemination of statistics are informed by statistical considerations

Selection of data sources is determined by the objectives of the specific statistical survey and the needs of statistics and depends on access to different data sources. For example, determining a new data source as appropriate to use, implies a check of its compliance with the international methodologies, guidelines, definitions and relevance for statistical purposes.

New data sources are used if their accuracy is acceptable or confirmed by other sources. The SSC developed a policy on dissemination of official statistics, which is available on the website.

Quality reports, regularly prepared by the SSC structural subdivisions, reflect information about the organisation of sample surveys and statistical methods (in Azeri). The structure of the quality reports is as follows:

- | | |
|-------------------------------------|---------------------------------------------|
| 1. Contact person | 8. Compliance (coherence) and comparability |
| 2. Presentation of statistical data | 9. Availability and clarity |
| 3. Statistical processing | 10. Cost and burden |
| 4. Quality Management | 11. Confidentiality |
| 5. Relevance | 12. Notes |
| 6. Accuracy and reliability | |
| 7. Timeliness and punctuality | |

<http://www.stat.gov.az/menu/2/quality/index.php?mode=desktop>.

The methods of data collection and the method used in all statistics domains are discussed in the Scientific and Methodological Council prior to their application. Approved methods for data collection

are based on the situation in the country and the SSC (road infrastructure, access to means of communication, budget, etc.). Estimates made confirm the correctness of the chosen methods for data collection and methodology.

All statistical output is open and freely available to the public. When publishing preliminary data, a note is given that the data are preliminary and may change later.

ESCoP indicator 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised.

Rules on the correction of detected errors in disseminated (published) official statistics are approved by the Decree of the SSC No. 67/07, on 7 September 2012. Rules for classification and elimination of errors detected in published data are approved by the order of the SSC No. 4/t, dated 15 January 2013.

According to these Rules the following steps to eliminate statistical errors are taken:

1. Registration of error;
2. Informing the person responsible for the error;
3. Determination of the significance of the error;
4. Implementing necessary adjustments depending on the significance of the error;
5. Correction of the error according to the rules on correction of errors in published and disseminated official statistics http://www.stat.gov.az/menu/2/quality/az/00_1.pdf.

In such cases, the information is published under the heading “News” on the website of the SSC.

ESCoP indicator 6.4: Information on the methods and procedures used is publicly available.

Metadata on most statistical products and processes are public. Metadata on statistical processes correspond to the GSBPM, and metadata on products to SIMS standards, SDMX and Dublin Core.

ESCoP indicator 6.5: Statistical release dates and times are pre-announced

A calendar of release of statistics and press releases is available on the SSC website but it does not contain an exact date and time of the publication. The release calendar fixes the date of publication as a certain number of days/months after the reference period.

ESCoP indicator 6.6: Advance notice is given on major revisions or changes in methodologies.

Rules on the revision of main statistical indicators are placed on the SSC website: http://www.stat.gov.az/menu/6/information_regulations/regulations_en.pdf.

A chapter on revisions to the statistical methodology as well as information about all updates and changes made are included, too.

If a component is removed from the register due to the loss of its significance, then metadata on this index are also excluded from the methodology in return providing the new metadata parameters.

ESCoP indicator 6.7: All users have equal access to statistical releases at the same time. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur pre-release arrangements are revised so as to ensure impartiality

According to the Law on Official Statistics (the Article 21 Access to statistical information), the SSC ensures that statistics are disseminated in such a way, that all users have simultaneous access to the disseminated data in the framework of unified rules, legal regulation and time to those data that are specified in the Programme of statistics. Access to statistical publications is provided for all groups of users at the same time. All publications, press releases are placed on the website when indicators and releases become available and hence, equal access is ensured for all users.

To prevent any leak, all information for external users is concentrated in the Department of Information and Public Relations. Other departments of the SSC have no authority for data dissemination without the approval of this department.

ESCoP indicator 6.8: Statistical releases and statements made in press conferences are objective and non-partisan.

The SSC is following the UN fundamental principles of official statistics as well as the ESCoP. Statistical publications, press releases, etc. are based on facts and do not contain political assessments. The SSC developed and approved a standard for the compilation of statistical bulletins and press releases through the “Guideline on design of statistical releases in order to provide unified stylistics of compilation” on 11 November 2009 (Decree No. 21/4 of Decision of the Board of the SSC). In accordance with these documents, statistical bulletins, press releases are prepared by the departments, and signed by the chairman of the SSC and then distributed to users.

From 1 January 2016, the Sector of Public Relations, is functioning as a part of the Department of Information and Public Relations, whose responsibilities include organization and conduction of press conferences.

Press releases are issued in strict accordance with the analytical work plan, which is approved quarterly by the Board of the SSC. They are also published in the same daytime on the website and distributed to users simultaneously at 13:00, and also printed in the media. A calendar of statistical indicators and press releases are placed on the following website: <http://www.stat.gov.az/menu/4/publications/indexen.php>.

As an established practice, press conferences are held each quarter, journalists from leading newspapers, news agencies and TV channels are invited. During the press conferences, political events are not commented.

Recommendations

The SSC is encouraged to:

- Consider more frequent organisation of press-conferences for the announcement of main indicators (inflation, GDP, unemployment) and other interesting statistics.

Chapter 7: P7 – Sound methodology

General assessment

Sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

There is a state policy to support the transition of official statistics to international standards and methodologies. The national classification system is fully in line with European and international standards, and this is known to be the main condition for cross-country and international comparisons. The methodology used broadly complies with international and increasingly also with European standards.

The Scientific and Methodological Council provides a consistent application of standard definitions and classifications across the structure of the SSC. The adoption of new or improved methodologies must pass all the stages of the standard procedure, which is a guarantee of its quality.

For provision of information support for measuring the achievement of the Sustainable Development Goals, approved at the 47th session of the United Nations Statistical Commission, the Sustainable Development Statistics Department was established in the structure of the SSC. This department will ensure the consistent application of standard concepts, definitions, classifications in the field of Sustainable Development Goals, therefore their international comparability.

The management of the SSC encourages training on methodology. It is expected that the rejuvenation and renewal of the staff by 30% will stimulate innovation and improve the efficiency of the statistical process. Vocational training of young employees recruited recently is crucial.

Assessment per indicator

ESCoP indicator 7.1: The overall methodological framework used for European Statistics follows European and other international standards, guidelines, and good practices.

Methodology is based on international and European standards. The frequency of updates depends on international and European standards and changes in the national legislation.

There is a standard document including the principles of statistical activities and describing the structure of 4 types of methodologies: 1) selective statistical survey methodology (11), 2) statistics formation and calculation methodology (8), 3) indicators system (3), 4) guidance for completing the questionnaire (6).

In national statistical methodological approaches, there are some cases of deviations of national statistical approaches from international recommendations. For example, in the first years of independence, as a result of land reform, agricultural lands were given to the peasants as property for free. According to the national legislation, a land owner is considered as employed, even if he/she does not work at all. However, by the definition of ILO it is not the case. In order to eliminate these contradictions, it is required to amend the national legislation.

ESCoP indicator 7.2: Procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the statistical authority.

Creation and management of classifications are carried out in accordance with the Law on Standardisation and Law on Official Statistics (Article 12).

The process of developing national classifications consists of:

1. Translation of the international classifications into Azeri;
2. Consideration of the national characteristics;
3. Discussion at the Scientific and Methodological Council;
4. Coordination with the relevant ministries and departments;
5. Discussion and approval of the classification by the Board of the SSC;
6. Registration of the classification on the basis of the Law on Standardisation in the State Committee for Standardisation, Metrology and Patents;
7. Placement of the classification on the following website: <http://www.azstat.org/tesnifat/>.

In each methodological document and instructions for completing questionnaires there are definitions. Classifications are documented in accordance with the procedure described above. The SSC uses as much as possible internationally adopted standards. The SSC has developed 31 classifications (24 of them – on the basis of the international analogues, 7 – on the basis of the national legislation).

The Centre for Scientific Research and Statistical Innovation is subordinated to the SSC.

A Scientific and Methodological Council, composed of the heads of departments of the SSC and representatives of the Ministry of Economy, the National Academy of Sciences and Azerbaijan State Economic University operates in the SSC. All methodological documents are submitted to the Chairman of the SSC for approval only after their discussion and approval by the Scientific and Methodological Council.

New methodology is developed through the following procedure:

1. Elaboration of a draft methodology version, based on the international methodology;
2. Consideration and discussion in the Scientific and Methodological Council;
3. Submission of the draft methodology to the Ministry of Economy and other interested agencies for consultation;
4. Discussion of the document and consideration of the comments received in the Scientific and Methodological Council, decision making (recommendation for the Chairman of SSC to approve or reject the methodology);
5. Approval of the methodology by the decision (decree) of the SSC;
6. Registration in the Ministry of Justice (as a technical normative legal act);
7. Application of the approved methodologies by the SSC sectoral departments;
8. Monitoring the implementation and application.

ESCoP indicator 7.3: The business register and the frame for population surveys are regularly evaluated and adjusted if necessary in order to ensure high quality.

See also chapters 16.1 and 17.1

For example, a sampling frame for quarterly household budget surveys is updated (rotated) annually by 25%.

ESCoP indicator 7.4: Detailed concordance exists between national classifications systems and the corresponding European systems.

The national classifications comply with the European and international classification system. The SSC was among the first CIS countries' NSIs that introduced NACE in 1996, and PRODCOM in 2000.

Methodological materials and explanations about classifications are prepared for users. For the transition to new classifications so-called "transition keys" are developed. All of them are placed on the website.

ESCoP indicator 7.5: Graduates in the relevant academic disciplines are recruited.

Employees of the SSC are civil servants and their activities are regulated by the Law on Civil Service. According to the law, the recruitment by State statistics bodies, as well as by other State bodies, is implemented by an independent body, the State Examination Centre (former Civil Service Commission). The procedure consists of 2 steps (test and interview) and is open, transparent and objective. If for one vacant position 2 or more persons compete, the SSC has the right to choose one of them at its discretion.

Recruitment of the qualified and appropriate personnel depends on the SSC qualification requirements for each position.

Required qualifications for all positions are determined and published in detail on the website of the State Examination Centre.

ESCoP indicator 7.6: Statistical authorities implement a policy of continuous vocational training for their staff

The Chairman of the SSC annually approves the staff training programme. According to the order of the SSC No. 206/t, dated 11 December 2012 and the schedule approved in 2013, 111 employees from all 77 regional offices were on short-term internships in the SSC sectoral departments. Supervisors were appointed to train trainees, according to a predetermined training programme in each statistical area. All costs were covered by the State budget, allocated to the SSC. Unfortunately, due to budgetary constraints, the SSC could not implement such a training scheme in 2014-2015. When being sponsored by international organisations, staff of the SSC uses the opportunity and attends training courses.

As of 1 January 2016, the Centre of Scientific Research and Statistical Innovation started its activities in the SSC. Among other functions this Centre was assigned with the task to provide training to employees of State statistical bodies. In addition, the Centre has an agreement on cooperation with the National Academy of Statistics, Accounting and Auditing of Ukraine.

For those employees who are willing to study, for example, in the Joint Vienna Institute of IMF and other similar institutions, the SSC creates all conditions, preserving the salary during their absence from the workplace.

After participating in international seminars, staff is holding workshops to inform other employees about the content and possible innovations (the so-called multiplier effect).

SSC experts participate in all (with rare exceptions) international conferences, when invitations are received.

ESCoP indicator 7.7: Co-operation with the scientific community is organised to improve methodology, the effectiveness of the methods implemented and to promote better tools, when feasible

In October 2015, the first scientific-practical journal “Bulletin of statistics” was published. It is planned to publish it on a quarterly basis. The editorial board (leading scientists in the field of economics and statistics) closely cooperates with the Centre for Scientific Research and Statistical Innovation. Creating a journal demonstrates the intention of the SSC to focus on statistical innovations. The journal, which has passed the international accreditation, is a new platform to discuss relevant issues of statistics with the scientific community. Articles may be published in 3 languages (Azeri, English and Russian), and a brief summary of each article is provided in all three languages.

SSC staff actively participates in international seminars, bilateral meetings, EU twinning projects. Seven employees of the SSC are members of international working / expert groups on various statistical issues (http://www.stat.gov.az/menu/2/international_coop/?lang=en).

Each year, more than 40 specialists from the SSC participate in events sponsored by international organisations and deliver presentations. Over the past three years, the SSC organised three international and two national conferences.

In order to increase interest in the science of statistics and to involve highly-qualified scientific staff in the system of statistics, the subject of economic statistics has been included in the list of subjects for a doctorate degree, based on an initiative by SSC which in turn was based on the Decision of the Cabinet of Ministers of the Republic of Azerbaijan no 284, dated 25 July 2016.

Recommendations

The SSC is encouraged to:

- Create a staff development programme that responds to the needs of a more process based organisational structure.
- Further develop the training programme with a specific focus on methodology to meet the specific needs of the high number of new employees.

Chapter 8: P8 – Appropriate statistical procedures

General assessment

In 2012, the SSC established a quality management system complying with the ISO 9001:2015 standard and introduced a statistical process model corresponding to the GSBPM. For each survey process maps are developed in accordance with the GSBPM.

Essential reorganisation of the statistical production process was made in 2016. Before the reorganisation, the Main Computing Centre (subordinate organisation of the SSC) was responsible for collecting and processing statistical data. The SSC HQ took care of the other phases of the statistical business process. In the framework of the structural reforms of the system, the Main Computing Centre was eliminated and all stages of the statistical production (from data collection to dissemination) were integrated in the SSC. Thus, the structure of the SSC became more modern and efficient and will have a positive effect on the validity of statistical procedures.

Agreements with owners of the administrative data exist and their number is increasing; a strategy of using administrative data was prepared.

Assessment per indicator

ESCoP Indicator 8.1: When European statistics are based on administrative data, definitions and concepts used for the administrative purposes area a good approximation to those required for statistical purposes.

The SSC lacks information on the procedures and data processing methodologies used by other central executive authorities that collect statistical data within their mandate for performing administrative tasks. Existing national legislation of these authorities does not contain provisions on the responsibility of the SSC for processing administrative data for the purpose of official statistics. The SSC has also no right to influence the design and content of these administrative data.

As the other executive authorities lack knowledge about the processing of data, they consult with the SSC. According to the Law on Official Statistics all statistical report forms have to be approved by the SSC. Discussions and meetings with the owners of administrative data take place on a regular basis. A strategy on the use of administrative data has been prepared and adopted by the SSC in 2014. (http://www.stat.gov.az/menu/2/strategy/ad_strategy_plan_en.pdf).

There are no (documented) rules and procedures for checking the correctness of administrative data and the SSC does not have the mandate to do so. Administrative data received by the SSC are compared with statistical data hold by the SSC and if differences are found, the owners of administrative data are informed.

In Azerbaijan 16 state organisations are holding a total of 32 different registers. At present the SSC examines their suitability for statistical purposes.

ESCoP Indicator 8.2: In the case of statistical surveys, questionnaires are systematically tested prior to the data collection.

Prior to approving and implementing a new questionnaire, it is discussed with stakeholders and members of the Scientific and Methodological Council. New questionnaires are also sent to respondents, e.g. large enterprises for feedback. Opinions and proposals of the members of the Council are taken into consideration, before the SSC approves the questionnaire by an SSC order. All of these procedures are documented. Standards for processes management and statistical process maps for each structural subdivision were approved by Decree of the SSC No. 09/07s of 1 August 2016. The SSC has experience in testing questionnaires and did so for the questionnaires to be used in the agriculture and population censuses. The responsible department of the SSC tests the questionnaires (e.g. for the population census a pilot survey was carried out), the IT departments checks all IT related aspects and the Department of Quality Management and Metadata also evaluates the questionnaire. A procedure

for testing questionnaires exists, but the SSC has not tried testing in laboratories as they exist in some European countries because of the lack of such laboratories.

ESCoP Indicator 8.3: Survey designs, sample selections and estimation methods are well based and regularly reviewed and revised as required.

In order to ensure the unity of methodological approaches in the SSC departments, many methodological tasks including all issues related to the formation of the sample population for all sample surveys, the extrapolation of the data to the entire population, etc. were transferred to the Centre of Scientific Research and Statistical Innovation. Samples are selected according to the appropriate methodologies and standards. Coordination of the sample selection is carried out by the Department of the Organisation of Statistical Works and Strategic Planning, and more specifically by its sector of Registries and Organisation of Sampling Survey on the basis of a documented procedure (in Azeri language). The department e.g. checks if a new questionnaire does not contain the same questions already asked in other surveys.

Before implementing a statistical survey, all methodological questions such as the principles of sampling, sample design, the coherence between the questionnaire and the methodology, etc. are discussed with stakeholders and the Centre of Scientific Research and Statistical Innovation.

Once a year, in October/November, all SSC requests for sample schemes for all sample surveys to be implemented in the following year are collected and transmitted to the Centre, discussed and proposed to the Board of the SSC for approval. It needs to be mentioned however, that sampling is used for only 16 surveys out of a total of 266, (mainly for household based surveys).

A statistical assessment of sampling errors and accuracy is included in the quality reports placed on the website of the SSC. The quality of the sample design is checked by the indicator Design Effect (example). Using the SPSS software package, the quality of the database is controlled. Detailed information on the samples and the methodology is placed on the SSC website in the form of standard quality reports.

There is a method for seasonal adjustments that is accessible to users for their own application.

ESCoP Indicator 8.4: Data collection, data entry and coding are routinely monitored and revised as required.

In order to reduce costs and response burden, the SSC deploys efforts to optimize the data collection process. A major effort covered the work to make all questionnaires, especially those for enterprises, available electronically and move towards online data collection, resulted in the fact that nowadays most data are collected online. Respondents receive all the necessary documents, instructions and metadata as well as methodological support for the filling in questionnaire.

Quality indicators related to the data collection are calculated and analysed in accordance with the quality plan.

ESCoP Indicator 8.5: Appropriate editing and imputation methods are used and regularly reviewed, revised or updated as required.

Technical specifications for data editing and processing and the relevant IT tools are prepared by the subject matter departments of the SSC. The Centre of Scientific Research and Statistical Innovations prepares the methodological document (Scientific Research Concept for imputing respondents' missing primary data based on the relevant (imputation, recovery) calculation method) for data editing

and imputation according to the information on imputation method included in the quality reports and approved by the Decree of the SSC No. 52/14, dated 27.10.2010.

ESCoP Indicator 8.6: Revisions follow standard, well-established and transparent procedures.

The regulation on data revision of the main statistical indicators was approved by the SSC order No. 60/t dated 10 May 2016 (http://www.stat.gov.az/menu/6/information_regulations/regulations_en.pdf). Revisions on significant changes in methodology (based on new standards) are not announced in advance.

ESCoP Indicator 8.7: Statistical authorities are involved in the design of administrative data in order to make administrative data more suitable for statistical purposes.

In accordance with the Law on Official Statistics all questionnaires used for collecting data for administrative purposes, are checked by the SSC. If necessary, recommendations for changes / improvements are given and adjustments requested before the SSC approves them.

The SSC has established a procedure for monitoring changes in normative-legal acts about the changes to existing administrative data sources/registers. Although the SSC has no mandate / power to influence the design of administrative data sources, it sends comments according the procedure to the relevant Ministry/agency. Very recently a case appeared with the Ministry of taxes where the SSC requested considerable changes.

The SSC regularly organizes seminars for providers of administrative data.

ESCoP Indicator 8.8: Agreements are made with owners of administrative data which set out their shared commitment to use of these data for statistical purposes.

Agreements on data exchange were signed with the Ministry of Taxes, the Central Bank and the State Social Protection Fund under the Ministry of Labour and Social Protection of Population. In June 2016, the SSC formally applied to all owners of administrative data with a proposal to establish joint working groups to examine the possibilities of integrating their administrative data in the SSC databases. A total of 27 state agencies agreed and three working groups were formed (one on population, labour, education, culture, sport, health, crime and migration; one on finance, banking, agriculture, transport, tourism; one on industry, construction, ecology, environment, trade). The working groups meet regularly and document their discussions in protocols. Relevant measures are taken by the SSC towards extending the use of administrative data sources for statistical purposes and concluding MoU with the relevant institutions.

ESCoP Indicator 8.9: Statistical authorities co-operate with owners of administrative data to ensure data quality.

Cooperation with the owners of administrative data is regulated by the Law on Official Statistics. Administrative data is provided in an online mode but not yet integrated into databases and registers. An error control system exists. If necessary, errors are notified to the respective organisation and corresponding measures are taken.

Activities to adjust administrative data sources in state agencies to the GSBPM are included in the “State Programme on Development of Official Statistics in the Republic of Azerbaijan in 2018-2025”.

Recommendations

The SSC is encouraged to:

- Develop a mechanism for assessing and monitoring the quality of administrative data.
- Integrate the existing and accessible administrative data into the databases and registers of the SSC.
- Continue the modernisation of the SSC in terms of process orientation and reflect on the optimal approach towards the extension of the application of the GSBPM to the whole organisation taking into account the pros and cons of such a change.
- Continue the very good cooperation with the Ministry of Taxes in meeting SSC needs for access to key administrative data held by the ministry (e.g. tax declaration data).
- Establish the right of the SSC to be consulted on the design of new administrative data sources or on the introduction of changes to existing administrative data sources.
- Consider moving towards a greater use of sample surveys and replace exhaustive surveys to increase the efficiency of the system.

Chapter 9: P9 – Non-excessive burden of respondents

General assessment

All activities on reducing response burden are based on the current five-year Strategic Plan which includes a section devoted to activities aiming at the reduction of response burden and a greater use of administrative data sources. Although a large number of surveys are still exhaustive, response rates for official statistical surveys are high in Azerbaijan. A nation-wide tradition / mentality exists according to which citizens or businesses that have been asked to participate in an official survey or to deliver data for state authorities feel obliged to respond positively to such a demand. Therefore, no real need for burden reduction in the field of official statistics is felt by the SSC as is the case in EU Member States.

However, since 2012, the SSC has been measuring the burden on respondents in a structured and systematic manner (with additional questions at the end of each questionnaire) and analysing the responses by statistical domain.

A long-term strategy on the use of administrative data has been developed and was approved by the SSC.

As a result of the recommendations made during the last global assessment, amendments to the Law on Official Statistics have been implemented that entitle governmental statistical authorities to build up administrative databases and registers in order to avoid duplicating requests for information. 27 authorities have been identified as holding some administrative data sources / registers of relevance for statistics but few agreements between the SSC and other data providers regarding the access to these data are in place by now. However, working groups of government officials (with representatives of each party) were established in 2016 that discuss agreements and procedures of data exchange. Although these are remarkable efforts, the SSC has started this process to make use of existing data sources in the country and to establish data partnerships.

Assessment per indicator

ESCoP indicator 9.1: The range and detail of European Statistics demands is limited to what is absolutely necessary.

The SSC measures the burden on respondents in a systematic way through including a question on the time spent for filling in the questionnaire into each survey questionnaire. Responses are summarised and analysed. On the basis of this information the SSC considers the number and scope of data collected for producing statistical indicators and decides potentially on the elimination of certain data collection. This work is part of the SSC "Concept to reduce the statistical response burden" approved by the order of the SSC No. 16/07s dated 30 April 2014.

ESCoP indicator 9.2: The reporting burden is spread as widely as possible over survey populations.

For household sample surveys a sampling plan is in use, and for surveys conducted on an annual basis, 25% of the households are replaced (rotated) each year. The same rule applies to small businesses in order to spread the burden among the defined survey population. Furthermore, the number of questionnaires is constantly being reduced, from 317 in 2009 to 261 in 2016.

In 2010 / 2011 the SSC surveyed respondents to obtain more information on the general burden and on the origin of reporting burden. It turned out that 50% of the overall reporting burden on respondents stems from statistics while the other 50% come from other information requests.

ESCoP indicator 9.3: The information sought from businesses is, as far as possible, readily available from their accounts and electronic means are used where possible to facilitate its return.

Since 2012 the SSC started introducing an electronic reporting system for data collection from statistical units. Now all questionnaires are made available online and according to the information of the SSC, about 95% of the business respondents submit their questionnaires online. These arrangements lead to a more efficient and less error-prone data collection and reduce the burden on respondents considerably.

Household surveys are implemented through face-to-face interviews but with the help of tables. The Department of Coordination of Statistical Works and Strategic Planning ensures during the sample design process that a household is not chosen for more than one survey.

ESCoP indicator 9.4: Administrative sources are used whenever possible to avoid duplicating requests for information.

Within the "State Programme on Development of Official Statistics in the Republic of Azerbaijan in 2013-2017", improvement actions are scheduled that aim to reduce the burden on respondents by a more extensive use and exchange of administrative data. Work has started to establish and make use of working groups with state agencies that are owners of administrative data in order to discuss access arrangements and conclude formal agreements to regularise the access to these administrative data sources. This work is based on the "Long term strategy on the use of administrative data" approved by the order of the SSC No. 31/01s dated 26 September 2014.

ESCoP indicator 9.5: Data sharing within statistical authorities is generalised in order to avoid multiplication of surveys.

According to the Law on Official Statistics (article 14), statistical reports produced by administrative data holders are approved by the SSC in order to avoid duplication of work as well as to ensure the use of unified classification and methods and the correspondence of the results with those of Official Statistics. The respective administrative data holders submit the report to the body involved in official statistics by a defined time and in the agreed volume. All authorities, including non-statistical bodies, have to consult the SSC before implementing an (official) survey in order to avoid duplication of data collection.

ESCoP indicator 9.6: Statistical authorities promote measures that enable the linking of data sources in order to reduce reporting burden.

Agreements between the SSC and the Central Bank, the State Social Protection Fund under the Ministry of Labour and Social Protection of Population and the Ministry of Taxes have been made or are underway with other authorities aiming at the provision of existing administrative data to the SSC in order to avoid repeated data collection.

Recommendations

The SSC is encouraged to:

- Implement the strategy on the (better) use of administrative data;
- Extend the number of agreements on data exchange and thus to formalise data exchange with the owners of administrative data sources;
- Further reduce the number of exhaustive surveys or their frequency (e.g. PRODCOM for SME) and the number of questionnaires forms wherever possible;
- Create a structural (centralised) unit for the reception and transfer of administrative data; and
- Improve data quality and increase the amount of available statistical information by matching survey data with register data.

Chapter 10: P10 – Cost effectiveness

General assessment

The use of resources is measured, also based on the general requirements for a government – financed institution like the SSC and many other state organisations. The measurement of resources is impacted by the rules in place for requesting budget from the government and for reporting on its use. No specific action on the monitoring of cost-effectiveness is included in the current five-year Strategic Plan (Development of Official Statistics in 2013-2017) and neither in the Annual Statistical Work Programme. Cost accounting of statistical products has not yet been established.

As in all other state agencies, the use of resources in SSC is measured through annual financial reports based on a budget audit every three years, other budget and performance audits, staff performance assessments, a staff satisfaction survey and similar.

Assessment per indicator

ESCoP indicator 10.1: Internal and independent external measures monitor the statistical authority's use of resources.

The use of financial resources by the SSC is monitored and even audited by the Court of auditors every three years with the audit report being provided to the senior management of the SSC. The SSC compiles an annual financial report that is provided to the Ministry of Finance and the Court of Auditors. Audit are both performance and budget oriented, so that the use of the budget provided by the government and the budget provided for investments is audited as well as the financing of the state programme for statistics, meaning whether the state programme has been fulfilled by the SSC (performance-based).

The spending of financial resources is reported on according to the budget classification applicable for all state organisations.

Human resources are monitored based on the “Strategy on staff management and capacity building and Action Plan on its implementation” (order of AAC No 170/t dated 14 December 2011), an annual action plan and annual staff opinion surveys.

The IT structure was evaluated by a World Bank financed project in 2015.

No time accounting system measuring the time used for statistical activities and production exists yet. Hence, no cost accounting for statistical products is available.

ESCoP indicator 10.2: The productivity potential of information and communications technology is being optimised for data collection, processing and dissemination.

As of January 2016, the main computer centre was integrated into the SSC and an IT department was created inside the SSC. This IT department is tasked with innovations, maintenance and development of the website and IT advice to the subject matter departments. The SSC has conceptualised the future IT development, based on the IT review of the World Bank, including hardware, software and data processing structures.

Statistical processing is mostly automated according to the steps of the GSBPM. The sub-steps of the GSBPM described on paper with the corresponding allocation of human resources to those sub-steps but the system has not yet been put in place. No classification of activities exists to finalise this allocation. So, while the GSBPM steps data collection and dissemination are already automated, others are not yet.

Electronic reporting has increased in recent years and around 95% of enterprises report their data online through electronic questionnaires. However, there is potential to rationalise this process further if data can be generated directly from the accounts of the enterprises. Household surveys are implemented with the help of tables thus benefitting from technology development and increasing efficiency of data collection and production.

Regional offices are linked to the SSC through the corporative network but only transmit data collected by them through interviews. Enterprise data collected online are directly transmitted to the SSC HQ.

SSC carries out e-services as follows:

- Presentation of official statistical questionnaires;
- Presentation of the release calendar of statistical data and distribution calendar of published data;

- Presentation of statistical data (indicators);
- Online selling of statistical publications (books);
- Online payment of administrative penalties for violation of rules of submission of statistical data.

Based on the above-mentioned e-services, a statistical unit (legal and physical entity) submits all official statistical reports in an electronic form without physically visiting the statistical bodies, users can obtain press releases from the SSC, as well as other interested statistical data in an electronic form, users can buy statistical publications paying them online and a legal or physical entity that violated the rules of submission of statistical data pay the penalty online.

4 of the e-service are interactive while one is informative.

Some measurement of the productivity potential takes place but not in a systematic way and the lack of resources and concepts hinders a more regular and systematic way of identifying and using productivity potentials.

ESCoP indicator 10.3: Proactive efforts are made to improve the statistical potential of administrative data and to limit recourse to direct surveys.

The SSC has signed a number of agreements with holders of administrative data sources with the Ministry of Taxes, the Ministry of Labour and Social Protection of Population and the Central Bank, other ones with other state agencies are in the process of being signed. These agreements are reviewed and updated, if necessary. The agreements nominate a person responsible for the transfer and receipt of the data. If changes in the administrative data are envisaged by the authority, these are discussed and if the changes are implemented, the agreement is updated accordingly.

Three working groups were created with organisations in the possession of 27 different administrative data sources. The access to these data sources and their integration into the SSC databases are the main objectives of these working groups. This is an essential objective as in some statistical domains state agencies keep their own registers/databases while the data is not integrated into the SSC databases.

Before developing a new survey to satisfy new data needs, the SSC assesses all available administrative data sources to make sure the data do not yet exist and need to be collected via statistical surveys. This is possible because the Ministry of Transport and the Ministry of Communication and High Technologies maintain a register of all administrative data sources with the information on who is responsible for this data source and what information/data does it contain.

The SSC does link and integrate data from different sources respecting at the same time confidentiality and data security aspects.

ESCoP indicator 10.4: Statistical authorities promote and implement standardised solutions that increase effectiveness and efficiency.

Since 2012 the GSBPM is used as a basis for standardising processes. All departments have developed and maintain their process maps. For new surveys as well as for some important processes like GDP process maps are requested, however not for all the existing surveys. For other surveys process maps are developed for a group of surveys like grouping together short-term statistics surveys in industry, construction and trade. A total of 50 process maps exist.

These process maps contain information on the input needed for the process, the work/activities to be done, documentation, and the output. Processes are monitored on the basis of the process maps by the Department of Quality Management and Metadata and through audits. The process maps are

developed and maintained in a computer based system, however they are not as detailed as they were in the main computing centre.

Standardisation is also promoted through the use of international classifications.

The SSC started working on establishment of quality management and metadata system in 2012/2013 and this has helped promoting standardisation of processes.

The SSC starts to develop process maps for data collection and validation to further encourage standardisation of processes.

Recommendations

The SSC is encouraged to:

- Conclude MoU with the most important providers of administrative data sources required for statistical purposes, including in particular data coverage, scope, frequency, and quality criteria
- Consider the handling (e.g. the receipt and internal distribution of the datasets) of administrative data sources in the SSC in order to avoid duplication of requests; ensure full compliance with confidentiality requirements; promote the integration of administrative data sources to SSC database through the use of common identifiers for statistical purposes
- Establish a cost accounting system for each statistical product
- Increase electronic reporting further and consider extending it to other than enterprise surveys
- Continue promoting standardisation of processes through the development of process maps and extending the GSBPM to an increasing number of processes and surveys, including on the level of the regional statistical offices.

Chapter 11: P11 – Relevance

General assessment

Official Statistics meet the needs of users.

The SSC has implemented a system of monitoring the relevance and practical utility of existing statistical data as compared to user needs. The monitoring system consists of a number of organisational structures and measures:

- Advisory bodies – the Statistical Council and the Scientific and Methodological Council;
- Mentioning the monitoring of statistics in the mass media;
- Procedure of evaluation of users' opinions.

The SSC compiles a user satisfaction index, questions of relevance of statistics will be assessed by a quantitative measurement until the end of 2017.

Assessment per indicator

ESCoP indicator 11.1: Processes are in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities.

Article 8 of the Law on Official Statistics is devoted to the Statistics Council, which is composed of users and representatives of state bodies. Regular consultations with users take place. Users participate in three working groups organised by the statistical departments of the SSC.

The Scientific and Methodological Council is composed of the SSC Heads of Departments, representatives of the Ministry of Economy, National Academy of Sciences and the Azerbaijan State Economic University.

Statistical Departments of the SSC systematically, at least once a year, meet with their users, to analyse their questions and problems. The quality of the statistical outputs is also discussed with users at the meetings of the Statistical Council and the Scientific and Methodological council.

The Department of Information and Public Relations analyses the use of statistics and monitors the mentioning of statistics in the media.

There is a list of the main users for each statistical data domain and procedures for carrying out consultations with them (for example, in industry, prices, labour statistics, etc.).

ESCoP indicator 11.2: Priority needs are being met and reflected in the work programme.

The Programmes of Statistical Works include the goals and objectives for each year and are published on the website of the SSC, the latest being the Programme for Statistical Works for 2017. The programme includes all the data collected and published on the social, economic, demographic and environmental phenomena of the country that are produced by the relevant bodies and other state bodies on the basis of the official statistical methodology.

The Statistical Works Programme is placed on the SSC website during the year. Users provide their proposals and requests, which are annually discussed and considered by the Scientific and Methodological Council in June each year.

Statistics Departments of the SSC systematically, at least once a year, meet with users to discuss problems and the quality of the statistical output. As a result, new needs are identified, proposals to the management are prepared and a decision to include them or not in the Statistical Work Programme is taken.

ESCoP indicator 11.3: User satisfaction is monitored on a regular basis and is systematically followed up.

For evaluating user satisfaction and compiling the user satisfaction index, an online survey is carried out via the SSC website for the whole year. Survey results are published.

Results of measuring user opinions (in Azeri and English languages) are available at: <http://www.stat.gov.az/source/others/Sorqu.pdf>; http://www.stat.gov.az/source/others/s_en.pdf.

Results of the online survey (in Azeri language) are placed at: http://www.stat.gov.az/source/others/sorqu-yekun_24.12.2015.pdf.

The methodology for calculating the user satisfaction index was prepared and discussed by the Scientific and Methodological Council. It turned out that in order to calculate this index, some additional indicators are required and will be added to the existing questionnaire.

Provision of customised analyses, on a cost recovery basis, to meet the needs of users is carried out by the Centre for Scientific Research and Statistical Innovations.

Recommendations

The SSC is encouraged to:

- Develop a system for monitoring the relevance and practical benefits of available data in comparison with the user needs to identify priorities for future.
- Continue to periodically conduct a general user satisfaction survey to capture not only the views of the existing users but also the opinion of the potential users.

Chapter 12: P15 – Accessibility and clarity

General assessment

Official Statistics are presented in a clear and understandable form, released in a suitable and convenient manner, available and accessible on an impartial basis with supporting metadata and guidance.

The SSC is improving relations with the public, the users of statistical information through the activities of the newly established sector of Public Relations in the structure of the SSC.

For users, in addition to metadata, the SSC has also developed a dictionary containing definitions for 3768 statistical concepts and posted it on the website of the SSC.

Great attention is paid to improving statistical literacy, booklets and brochures. For example, in 2016 a colourful booklet “*What is Statistics?*” was prepared and published, agreed upon with the Ministry of Education, and was distributed to elementary schools in September 2016 at the beginning of the school year. Before the end of 2016 a similar brochure was published for university students.

Though many metadata are available, the lack of awareness of their existence by users sometimes leads to unnecessary rejection or misinterpretation of statistical data.

Assessment per indicator

ESCoP indicator 15.1: Statistics and the corresponding metadata are presented, and archived, in a form that facilitates proper interpretation and meaningful comparisons

A dissemination policy for Official statistics is available on the SSC website http://www.stat.gov.az/menu/6/dissemination_policy/DissPolicy_en_2014.pdf.

The main groups of users are members of the Statistical Council, Scientific and Methodological Council with representatives of the Ministry of Economy, National Academy of Sciences and the Azerbaijan State Economic University. The main users are also members of numerous sectoral working groups. Statistical issues as well as dissemination issues are discussed with them. The Statistical Council meets every 3 months, the Scientific and Methodological Council every month, the sectoral working groups – on request.

Once a year every SSC Department holds meetings with its major users to review and discuss their questions of interest.

The SSC has approved standards on how to draft press releases and statistical publications by a decision of the Board No 21/4, dated 11 November 2009.

Electronic archiving is conducted in accordance with the “Rules on formation, use and archiving of databases”, approved by the SSC decree No 17/t, dated 14 February 2013. The daily archiving of statistical databases is done automatically.

ESCoP indicator 15.2: Dissemination services use modern information and communication technology and, if appropriate, traditional hard copy.

The SSC website contains databases, metadata, publications of the Departments, press releases, news, as well as information on the SSC activities: <http://www.stat.gov.az/menu/13/?lang=en>

There is an additional page containing interactive tables in a user-friendly way: <http://www.stat.gov.az/menu/14/?land=en>.

A “Hotline” operates in the Department of Information and Public Relations <http://www.stat.gov.az/menu/8/?lang=en>.

The publications catalogue is available on the website in the public domain http://www.stat.gov.az/menu/6/catalogue_st_p/catalogue_2016.pdf

Press releases, ready tables, graphs and maps connected to statistics, metadata are placed on the SSC website. The Geographic Information System (GIS) is also integrated in the website: <http://stat.gov.az/>.

In addition to electronic data dissemination, traditional paper publications are available.

ESCoP indicator 15.3: Custom-designed analyses are provided when feasible and the public is informed.

Customised research is conducted by the Centre of Scientific Research and Statistical Innovation, subordinated to the SSC upon request and provided to the customer.

ESCoP indicator 15.4: Access to micro-data is allowed for research purposes and is subject to specific rules or protocols.

Access to micro-data is possible but only for research purposes and in accordance with the rules that the personal data of respondents have to be anonymised. Safe Centres do not exist. Remote access to micro data is not possible.

ESCoP indicator 15.5: Metadata are documented according to standardised metadata systems.

Metadata on statistical indicators and statistical reports are placed on the SSC website in the section Metadata and can be printed. <http://www.azstat.org/MetaDataG/>. All metadata are divided into 2 groups – metadata by indicators and metadata by questionnaires. Metadata by questionnaires contain information on periodicity, deadline for the submission of the questionnaire, the groups of statistical units for which this questionnaire is relevant, etc. A total of 1709 metadata on indicators are prepared (341 are based on the ESMS structure, 1368 are based on the DCMI standard). A total of 247 metadata related to the questionnaires are available based on the DCMI standard.

Information according to the Metadata Structure (ESMS) contains the following information:

1. Contact person
2. Metadata updating
3. Statistical data presentation
4. Measurement unit
5. Accountability period
6. Institutional mandate
7. Confidentiality
8. Dissemination policy
9. Dissemination frequency
10. Accessibility and clarity
11. Quality management
12. Urgency
13. Accuracy and reliability
14. Timeliness and punctuality
15. Compliance (coherence) and comparability
16. Costs and burden on respondents
17. Clarification of information
18. Statistical data processing
19. Notes

In accordance with the approved Audit programme the website is monitored during the annual internal audits and, if necessary, metadata are updated. Updated methodology, changes in the data collecting and processing process, information about the changes of the responsible person or subdivision, etc. can be added.

Users who have questions about the metadata can call a “Hotline”. The “Hotline” manager provides a link to the appropriate structural subdivision <http://www.stat.gov.az/menu/8/>; <http://www.stat.gov.az/menu/8/?lang=en>.

ESCoP indicator 15.7: Users are kept informed about the quality of statistical outputs with respect to the quality criteria for European Statistics

Quality reports are developed and posted on the website of the SSC <http://www.stat.gov.az/menu/2/quality/>.

Recommendations

The SSC is encouraged to:

- Publish all official statistics on the website of the SSC or provide a clear link to the official statistical information, produced by other State authorities (e.g. Central Bank).
- Periodically conduct a general user satisfaction survey to explore opinions not only of existing users but also of potential users.
- Develop more visual illustration tools for the presentation of data (graphs, charts, interactive tables etc.).
- Improve the existing keyword search facility for easier access to statistics on the website.
- Include more comparisons with data from other countries as a standard component of statistical press releases.
- Consider the implementation of educational programmes in conjunction with teachers and other educationalists to improve statistical literacy in the country.

Chapter 13: Organisational and structural aspects

13.1 Organisation of the State Statistical Committee

The SSC itself is part of the system of the central executive bodies of the Republic of Azerbaijan with the Chair of the SSC being a member of the Cabinet. The SSC organises all official statistics within the five-year Strategic Plan adopted by the decree of the President of the country (“State Programme on Development of Official Statistics in the Republic of Azerbaijan in 2013-2017”) and the Annual Statistical Work Programme; a state programme for the period 2018-2025 is currently being prepared. In order to ensure the quality of official statistics, article 9 of the Law on Official Statistics defines that the organisation and implementation of the Programme of Statistical Works is governed by the principles of reliability, objectivity, relevance in present situation, statistical confidentiality and transparency, and article 10 guarantees its autonomy: *“the state and non-government organisations shall not interfere to the implementation of powers of the state statistical bodies and not influence the staff of the statistical authorities in the performance of their tasks”*.

The headquarters of the SSC comprises 284 positions with the legal status of civil servant. About half of them are occupied by women of whom 20 hold a managerial position, all statisticians have a degree from a higher educational institution.

The SSC is led by the Board of the State Statistical Committee, which was established in 1920. It is organised in line with the *“Statute on the State Statistical Committee of the Republic of Azerbaijan”* confirmed by the Decree of the President of the Republic of Azerbaijan No 115, dated 24 June 2009. The Board consists of the Chairman of the SSC (also Chairman of the Board), Deputy Chairmen, the Chairman of the State Statistical Committee of Nakhchivan AR, other persons in charge of crucial SSC units and subordinated bodies; 11 in total.

The number and structure of the members of the Board of the SSC is confirmed by the Cabinet of Ministers of the Republic of Azerbaijan. It is responsible for the planning of the SSC activities and the control of the implementation of the decisions adopted by them. Board meetings are held at least once a month.

In connection with the institutional reforms of 1 January 2016 the Main Computing Centre was abolished and its functions of collecting and processing statistical data were transferred to the SSC. During this process of reorganisation, most of its former staff left, but 106 positions were granted to the SSC and hence 106 persons (under age 35) have been recruited recently within a government-wide competition according to the provisions of the Law on Civil Service.

In addition, the Centre for Scientific Research and Statistical Innovation (with 37 persons) was established and five new departments were created in the Headquarters of the SSC (the Department of Energy and Environment Statistics with 8 persons, the Department of International Cooperation with 8 persons, the Department of Sustainable Development Statistics with 8 persons, the Department of Social Statistics with 15 persons and the Department of Information Technology with 25 persons).

Currently the SSC headquarters consists of 21 departments and 48 sectors.

Before reorganising the SSC, the organizational structure of the national statistical institutes of Norway, Lithuania, Austria and other European countries were studied.

The new organisational chart:

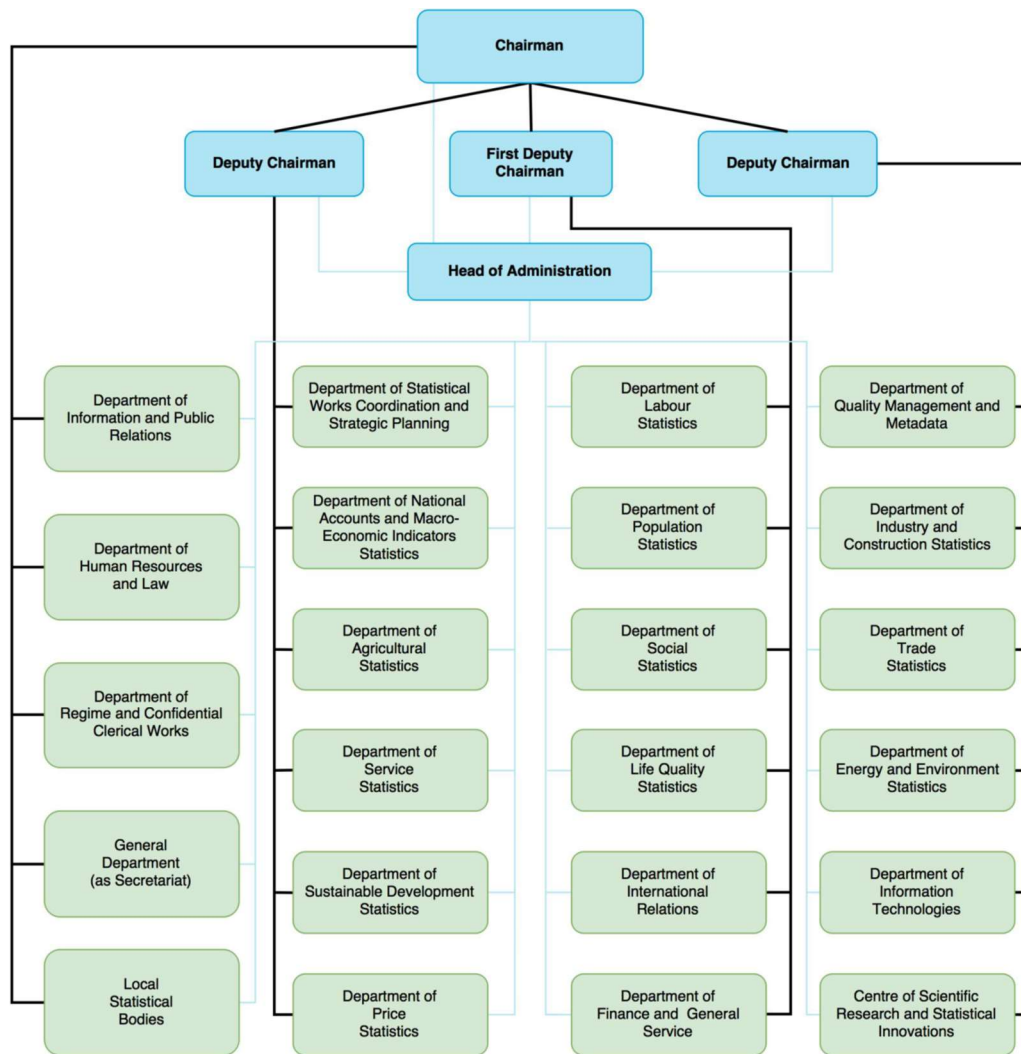


Figure 1: The new organisational chart of the SSC

General assessment

The SSC has a clear mandate to coordinate and organize the system of official statistics. The Law does not mention any other authority than the SSC as producer of official statistics.

Therefore, the determination of which institutions other than the SSC are considered to be official statistical bodies is not clear. It seems difficult to define which data (published by public institutions other than SSC) are to be considered as official statistics (being processed according to the strong rules of the Law on Official Statistics), and which data are merely administrative data that are not subject to official statistics’ principles and rules.

The rules of cooperation seem to be well-defined, with some memoranda of understanding serving as a reference.

Though well-reflected, the recent reorganisation of the SSC, the incorporation of the former main computing centre with the loss of its human manpower and the training of the newly recruited staff, is a challenge. As competition was high, the newly recruited staff are certainly well qualified.

Nonetheless, the staff changes resulting from this restructuring process will lead to changes in the staff composition and potentially also to some redundancies.

In contrast, statistical units in other public authorities (with the exception of the Central Bank) seem to be rather small and most likely lacking professional expertise.

The quality management system of the SSC corresponds to the requirements of ISO 9001:2015 in the field of production and dissemination of official statistics (as issued by “SGS” in 2017) and the GSBPM is applied as business process model within the SSC.

Recommendations

The SSC is encouraged to:

- Define the delineation of the national statistical system because the Law and the current programme do not make completely clear which institutions are producing official statistical information and which of the institutions mentioned in the programmes are producers and providers of administrative data.
- Precisely determine in the Annual Statistical Work Programme which public bodies are official statistical bodies and belong to the National Statistical System.
- Consider reducing the number of other producers of official statistics and centralising production of official statistics in the SSC.
- Continue implementing these provisions of the Law on Official Statistics (the SSC receives full access to administrative data sources of all official authorities and has the right to be consulted on the design of new registers or the re-design of existing administrative data sources) into practice.
- Develop the needed technical infrastructure to easily integrate data from administrative sources into the databases of the SSC.

13.2 Regional structure

Azerbaijan is subdivided into 9 (economic) regions, and each region has a number of districts which are considered as the lowest administrative division. The Nakhchivan Autonomous Republic forms a separate (the 10th) economic region. The SSC has an office in each of the 83 administrative divisions (rayons). Their 954 employees are civil servants. The SSC also has 11 offices within Baku city but intends to merge them in one office in Baku, whose new administrative building is under construction.

These territorial statistical bodies work under the control and supervision of the SSC. Whereas SSC staff in the headquarters (HQ) define the methodology, develop the instructions and instruments for data collection and surveys, compile indicators and indices and implement necessary quality checks, the basic functions of the Regional Statistical Offices (RSO) include the collection, entry and processing of primary data in the regions as well as some initial checking of the data. For this work each territorial office receives the list of surveys to be implemented in a given year and the enterprises / households to be covered in the sample surveys from the central office. Thus, the RSO are responsible for providing the raw input data for their regions whereas the HQ is in charge of the processing of data and the dissemination of statistical information, also of those with regional breakdowns.

In addition to the Annual Statistical Work Programme defined by the SSC, regional statistical offices provide statistical information on socio-economic development to the local executive authorities, arrange events to inform the public on special surveys and their outcome or organize press conferences

on topics that are of specific interest (such as agriculture, which is an important part of the regional economy in rural areas). They also provide data or specific analyses at the request of other regional authorities but they do not conduct any surveys other than those specified in the Annual Statistical Work Programme of the SSC and do not provide advice to or act on behalf of other regional authorities.

Staff composition in RSOs regarding sex and age is similar to that in the HQ; slightly less (about 73%) have a higher educational degree. There is no rotation policy and little (regional) mobility.

General assessment

The SSC of the Nakhchivan AR and RSOs in Azerbaijan execute data collection at regional level; their permanent staff and the interviewers assist businesses in fulfilling their reporting obligations and function as a bridge between the SSC (as a Government authority) and the citizens in the regions. In particular, the interviewers are able to obtain reliable insights into the production conditions of enterprises and the working conditions of their employees as well as of the living conditions of the interviewees. Based on these personal ties that can be built up over time, the participation in surveys might not be considered as burdensome which explains the high response rates.

Nonetheless, the current form of process organisation and the division of responsibility between the RSOs and the headquarters need to be considered from time to time to evaluate whether they are still needed and adequate. The Assessment Team recognised some elements for streamlining the process: the more modern communication channels are used, the more registers are built up and data exchanged among regional and national government authorities. In particular, a shift away from the current input orientation, which finds its expression in the large number of (exhaustive) surveys, towards an output orientation would be useful. Such a shift would set free resources for more elaborated statistical analyses combining surveys with administrative data. As a result, RSOs could be built up as a centre for regional research providing services and in-depth analyses for regional policy and development.

Recommendations

The SSC is encouraged to:

- Promote a mobility scheme of staff among the RSOs.
- Consider the transfer of know-how and responsibility from the central to the regional units (given the current number of staff in regional offices) or to consider cutting the number of RSO and the number of staff in the RSO accompanied by a simultaneous increase in the number of staff in the HQ who will be responsible for the development of (further) statistical information at regional level.
- Consider extending the existing dissemination policy to address dissemination of statistical information broken down by regions and the publication of confidential (individual) data in publications by the RSOs (given the limited number of enterprises in the region).

13.3 Other subordinated bodies – Centre for Scientific Research and Statistical Innovation

According to the Resolution of the Cabinet of Ministers of the Republic of Azerbaijan of November 19, 2015, No. 364, the Centre for Scientific Research and Statistical Innovations was established based on the State Scientific and Research and Design and Technology Centre for Statistical Information of the SSC. The Centre conducts research and development work, creating selective collections and new

sampling frames (databases) for statistical observations. At the same time, the Centre publishes a quarterly scientific and practical journal “Statistical news”.

Chapter 14: Coordination

14.1 Coordination (and Programming) of the National Statistical System (NSS)

The procedure on how the National Statistical System should be coordinated is not specified in law but such procedures are in place. The same applies to the multi-annual and annual programming process. All statistics covered by the Programme of Statistical Works are considered official statistics. Therefore, the Programme also includes statistics of other government authorities than the SSC.

The Law on Official Statistics of the Republic of Azerbaijan, approved on 18 February 1994 and last amended in November 2011, sets out legal provisions on Official Statistics and defines the powers and functions of the state statistical bodies. According to Article 3, the system of Official Statistics “*is a single, centralised, country-wide system*”. The organisation of the system of official statistics is the task of the State Statistical Committee (SSC) and the local statistical bodies that “*shall be obedient only to the SSC of Azerbaijan*”.

The Law also refers to “*state statistical bodies that provide the corresponding bodies with systematic information on the results of their work, on the state of the reporting system and economic and social processes occurring in the country and in its regions and organize the production of Official Statistics within the country, monitor submission and accuracy of reports in time and manner prescribed by the statistical bodies*” (Art. 5).

Though they are not mentioned in the Law explicitly, the most important other producers of official statistics are according to the SSC:

- the Central Bank of Azerbaijan, responsible for the balance of payments and for statistics on the financial sector with 29 staff in the relevant department(s);
- the Ministry of Finance, responsible for government finance statistics, budget revenues and expenditures, external debts of the state with 6 staff in the relevant department;
- the Ministry of Labour and Social Protection responsible for statistics on disability statistics with 3 staff;
- Ministry of Ecology and Natural Resources, responsible for indicators on the state of the environment with 5 staff;
- Ministry of Justice responsible for judicial statistics with 25 staff in the relevant department(s);
- Ministry of Internal Affairs responsible for crime statistics with 7 staff in the relevant department;
- Ministry of Culture and Tourism, responsible for culture statistics with 3 staff in the relevant department;
- The State Customs Committee with 31 staff in the relevant department.

The State Migration Service (5 staff), the Prosecutors office (5 staff), the Ministry of Health (16 staff), the Ministry of Education (3 staff) and the Ministry of Sport and Youth (3 staff) are among the providers of data.

As mentioned earlier, the list of producers of official statistics seems to be quite long and it would need to be assessed in more detail on whether these Ministries and agencies indeed are producers of official statistics and thus follow the provisions of the ESCoP or are providers of data to the SSC (see the relevant recommendation under principle 1).

The SSC has the role of the coordinator of the statistical system of Azerbaijan and is also the main producer of official statistics, according to the information from the SSC, it is responsible for about 80% of the official statistics. The system of official statistics in Azerbaijan is highly centralised: out of approximately 1500 civil servants working with official statistics in governmental authorities, 1380 work under the umbrella of the SSC; however, most of them are situated in local statistical units.

Also by law (acc. Art. 8), a statistical council (hereinafter referred to as the Council) has been established in order to give advice on the preparation and implementation of the Annual Statistical Work Programmes and to advise on the further development of official statistics. It is composed of experts in the fields of statistics, finance, banking and economy, of representatives of the private enterprises, trade unions and the academic society, mass media and of users of official statistics. It is composed of 15 people - 14 members and the Chairperson of the SSC- are approved by a decision of the Cabinet of Ministers. The work of the Council is public; it meets 4-5 times a year.

A well-defined process exists for developing the Annual Statistical Work Programme. After discussion with relevant ministries and departments and with the Statistical Council, the programme is agreed with the Cabinet of Ministers and adopted by the SSC. The preparation, coordination, approval and implementation process of multi-annual state programmes are also well-defined. These state programmes are approved by the President of the Republic of Azerbaijan. An annual progress report is provided to the President and the Cabinet of Ministers. The draft of the "State Programme on *Development of Official Statistics in the Republic of Azerbaijan from 2018 to 2025*" is being prepared.

According to Art. 7 of the Law on Official Statistics, the state statistical bodies have the right and power to receive substantial and reliable statistical data in a defined way, volume and period from executive bodies and legal entities, free of charge. In doing so, they have to ensure that a single methodology for the compilation of statistics is set up and that international or national classifications are used. They also have the right to draft questionnaires and to set deadlines and procedures for the collection of data and the submission of reports.

The SSC has developed a business register, the register of legal entities and natural persons, as well as a register of households. An advisory body, the Research and Methodological Council was already established in 1960, and has met regularly ever since.

Other instruments of coordination of the NSS include:

- Working groups in some of the statistical domains in order to hold a systematic dialogue with other producers.
- Memoranda of understanding with some of the other producers of official statistics, notably with the State Social Protection Fund (under the Ministry of Labour and Social Protection of Population) and the Central Bank.

Recommendations

The SSC is encouraged to:

- Conclude comprehensive memoranda of understanding as soon as possible with all other official statistical bodies. These should include the other authority's guarantee to comply with the ESCoP and to provide human and financial resources for the implementation of their statistics, along with the establishment of a working group for the coordination of activities and the use of tools for an integrated quality check of input data. The SSC should take a pro-active role in promoting adherence to the European Statistics Code of Practice (ESCoP) principles throughout the National Statistical System (NSS).

- Create greater clarity to distinguish between data providers who undertake some initial processing of the basic data, and producers of official statistics who are responsible for all aspects of the statistical processing chain including dissemination. The Ministries of Health and Education are examples of data providers who provide basic data for the production of certain statistics by the SSC (but are in fact not a producer of official statistics). In these cases, SSC should develop and share tools for ensuring that quality checks are undertaken by these providers of data in an integrated and consistent manner across the statistical processing chain.
- Evaluate regularly the most appropriate allocation of responsibilities for the production of statistics within the existing rules and procedures of coordination (e.g. various working groups or bilateral meetings with Ministries and Agencies).

14.2 Coordination of international cooperation and donors

The organisation, coordination and planning of the system of official statistics is the task of the State Statistical Committee. Art. 5 of the Law on Official Statistics authorises the SSC *“by the established procedure and in accordance with international legal standards to establish links with the statistical authorities of foreign countries and with international organisations on matters within its competence, to conclude cooperation agreements with them and act as a representative of the Republic of Azerbaijan, to organize conferences, meetings and seminars at international level and to take part in the meetings organised by intergovernmental and non-governmental international organisations, according to international agreements”, and finally to “receive statistical information from foreign countries with a view to comparing the economic, demographic, social and environmental situation of the Republic of Azerbaijan with that of other countries”.*

International cooperation of the SSC is organised through its separate Department of International Relations, created in January 2016 and sub-ordinated to the 1st Deputy Chairman of the SSC while previously it was part of the Department of Coordination of Statistical Works and Strategic Planning. The department has 8 staff and consists of 2 sectors, one on organization of international cooperation (3 staff + 1 head) and international exchange of data (2 staff and 1 head). Its work is regulated by the general legal framework of the country and the SSC but also by its own statute. According to the latter it is tasked with the coordination of relations with international organisations and government entities of foreign countries as well as with the coordination of data delivery to international organisations. In this respect, the department also monitors the performance of the SSC in the framework of its obligations under international treaties. International cooperation is mentioned in the regulation on the SSC as well as in the strategic plan of the SSC for the period 2014-2017.

The SSC strives to implement international and European standards in statistics and this orientation is also confirmed by the President of Azerbaijan.

The SSC was and is involved in a number of cooperation projects and is an active partner in international cooperation using different instruments such as TAIEX and Twinning projects (EU funded) and projects with the World Bank, IMF, GIZ, TIKA, SIDA, ILO, UNDP, UNICEF, UNFPA. EU funded projects started back in the early 1990ies with the so-called TACIS Statistics 2, 4, 6, 8 and 10 programmes dealing with the establishment of registers, implementation of European and international classifications, demography statistics, delivery of IT equipment, business statistics, labour market statistics, non-observed economy involving the NSIs from Germany, the Netherlands, Finland, Poland and Sweden. In 2007 a new EU policy, the European Neighbourhood Policy came into force providing for two subsequent twinning projects, both with DESTATIS as the leading partner. While the first twinning project from 2009-2011 focused on projects in national accounts, the non-observed economy, business statistics and producer price indices, the second one for 2015-2017,

currently ongoing, addresses areas such as the development of a quality management system, metadata, GIS, EU SILC, disability and invalidity statistics. The first project focused on specific statistical domains while the second also includes cross-cutting areas and projects that extend to other producers of official statistics, this extending the cooperation also to other actors in the national statistical system.

Current projects with other international organisations and bilateral partners include gender statistics (UNFPA), development of SDG indicators (UNDP), development of a “National Strategy Project on Development of Statistics for 2018-2030 including comprehensive institutional, human resources and information and communication technologies capacity building plans in the Republic of Azerbaijan for 2018-2022” (WB), living conditions and disability of children (UNICEF), labour statistics (ILO), etc. The SSC is also active in bilateral projects and has signed Memoranda of Understanding with many countries, among them Turkey, Uzbekistan, Bulgaria, Kazakhstan, Russia, Moldova, Jordan, Tajikistan, Hungary, Iran, Germany, Belarus, Georgia.

Donor coordination is implemented by the SSC and efforts have been made to involve certain international organisation in regular meetings but this could be further improved.

Moreover, the SSC has launched an initiative to use the “Slivek” Training and Qualification Centre of the NSI of Bulgaria, is negotiating with the NSIs of Ukraine and Korea on the use of their training centres / possibilities aiming in particular to create and implement training opportunities for the newly recruited staff.

For the transmission of data to international organisations the SSC tries to coordinate the requests but at times it is not even informed if requests are sent directly to Ministries and other organizations. Usually requests on official statistics are channelled through the SSC. When requests concern data that are not covered by official statistics, then the SSC delegates the responsibility to the assigned government agency. In case of frequent requests for the same kind of data from international organisations that are not part of the annual work programme of the SSC, the SSC assesses whether the data requests concern official statistics and if so, includes it into the next annual work programme, so that the responsibility is clearly assigned to the SSC.

For participation of SSC staff in international meetings, the SSC analyses each request and assesses whether the topic is relevant and of interest for the current and future work of the SSC. If this is the case, the responsible unit recommends the most relevant expert, recently there is a tendency to nominate mainly new staff members to attend meetings in order for them to broaden their perspective and knowledge base. When the topics of the meeting allow for that, the SSC proposes to present its experience at the meetings and the presentations are prepared together beforehand, which also constitutes a good learning opportunity for new staff members. Staff members attending international meetings, seminars and training courses are requested to report to the senior management and share their experience back home. A summary of important meetings such as sessions of the UN Statistical Commission is discussed in the meetings of the Board, decisions are taken and action plans are approved. The SSC participates in these international meetings based on external and own sources of funding. Its experience and knowledge in certain domains is recognised by the fact that the SSC is a member of 14 different task forces / expert groups / working groups in the international arena.

In principle, the new staff members, mostly young graduates, should be able to speak foreign languages. However, as evidenced during the assessment, the level of spoken language is rather low and not wide-spread among staff in the SSC. In order to follow international developments and being able to actively participate in international meetings, it is therefore, important to increase language capacities of staff.

Recommendations

The SSC is encouraged to:

- Continue its efforts to ensure donor coordination with international donors in the area of official statistics, possibly through a donor coordination committee or working group.
- Deploy efforts to increase the knowledge of foreign languages among its staff in order to better follow development at European and international levels.
- Increase its efforts to become THE coordinating body in Azerbaijan for providing official statistics to international organisations.

14.3 Sustainable development goals and indicators

In order to address the challenges in providing statistical indicators to measure and monitor the Sustainable Development Goals, approved at the 47th session of the United Nations Statistical Commission, the Department for Sustainable Development Statistics was established in the structure of the SSC as of 2016. This department will ensure the consistent application of standard concepts, definitions, classifications in the field of Sustainable Development Goals, supporting their international comparability.

Azerbaijan as a country has already established the relevant structures and bodies to work on reaching the SDGs and to provide the statistical information in order to monitor their achievement. A National Coordination Council for Sustainable Development of the Republic of Azerbaijan was established at the highest level by a Presidential decree of 6 October 2016.

The SSC has analysed the SDG indicators to define their availability at national level. It turned out that 70 indicators are available and for another 86 the capacity exists to produce them. The SSC has further classified the indicators according to statistical domains, determined the data sources at national level and defined the responsible person in the relevant government agencies.

On the basis of the analysis prepared the SSC stated that for goals 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16 and also 17 a number of indicators are available and for goals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16 and 17 for many indicators the capacity to produce them exists. Out of the 70 available indicators a total of 47 come from official statistics, 19 from administrative data and another 4 from other sources (calculations of international organizations). Azerbaijan intends to send the first report on the SDGs for the country to the UN in June 2017.

The SDGs carry a huge potential for an NSI to establish and improve coordination mechanisms. The SSC has used this potential and created 3 working groups including staff from the relevant government agencies to eliminate duplication of data, enlarge the use of administrative data sources in producing official statistics and to integrate administrative data into the statistical databases of the SSC.

Within the national monitoring mechanism, the SSC is made responsible for the production of statistical data and coordination, development of metadata for SDG indicators, for defining new data sources, sharing information, quality control and data checking. These responsibilities and tasks will also be included into the strategic action plans for the future.

More specifically, in order to achieve the SDGs, there is a need the SSC needs to analyse existing administrative data sources existing in the country, define a unified identification system, establish statistical register, establish an administrative data section, establish the relevant IT structures, integrate statistics data with data from administrative data sources into the databases held by the SSC

and most of all, assure the quality of the data. For that purpose, capacity building will be needed in the future.

Recommendations

The SSC is encouraged to:

- Use the SDGs as a catalyser and mechanisms to increase its coordinating role in the provision of official statistics in the country and to international bodies.

Chapter 15: Macroeconomic statistics

15.1 National Accounts

General assessment

The national accounts in general appear to be in line with the recommendations of the SNA 1993 and good practices are applied.

Improvements since the 2010 Adapted Global assessment are observed, including in the production of institutional sector accounts, quality assurance and provision of suitable data series to users of the national accounts statistics.

Substantial resources have been allocated to prepare the changeover to the SNA 2008, which has been a main priority over the previous years. A full implementation of SNA 2008 is expected within the next two years. Time series back to 2001 compiled according to the revised standards are planned to be published by end of 2018.

Main future challenges will be to ensure the complete implementation of SNA 2008, improve balance sheets of assets and liabilities and improve input-output tables.

Description

National accounts statistics are compiled by the Department of National Accounts and Macro Economic Indicators Statistics. A total of 15 persons are involved in the production and dissemination of national accounts statistics. Of these, 5 persons are involved in the production of annual GDP (including at regional level), 2 persons in producing monthly and quarterly GDP, 5 persons in producing sector accounts, and 3 persons in producing supply and use tables and input output tables.

Annual GDP and institutional sector accounts are produced according to the SNA 1993. Industries and products are classified according to the national classification of economic activities based on NACE rev. 2 and CPA 2008. The annual GDP is compiled by the production, expenditure and income approach in current prices and constant prices of previous year. Supply and use and input / output tables are compiled in accordance with the SNA 1993 and the Manual of Supply, Use and Input-Output Tables (Eurostat).

Quarterly GDP statistics is compiled by the production approach in current prices and constant prices with a base year of 2005. Quarterly GDP is also estimated on the basis of the expenditure approach in current prices. While seasonally adjusted series are calculated, these are not published. Monthly cumulative GDP in current and constant prices are also compiled and published.

GDP covers all non-financial transactions and all resident units, including producers engaged in unrecorded activities. Estimates of the NOE are included in the national accounts in accordance with

the SNA 1993. In recent years the non-observed economy (NOE) is estimated to account for about 9% of GDP.

Government Finance Statistics (GFS) is compiled by the Ministry of Finance. Transactions data received from the MoF are compiled on cash basis. The SSC adjusts to accrual basis to the extent possible before their inclusion in the national accounts.

Check and Validation of data is carried out through use of quality control tables (TAC) developed by SSC to detect outliers and inconsistencies. Quarterly data are aligned with annual series. Consistency with other statistics, e.g. business and employment statistics, balance of payments and public finances, is ensured.

The SSC subscribes to the GDDS of the IMF for national accounts. SSC also plans to apply for subscription to the Special Data Dissemination Standard (SDDS). This, however, requires provision of data on external debts on private sector which are still lacking.

A wide range of data sources are used for the compilation of the national accounts, including primary statistics, business surveys and economic censuses, the statistical business register and administrative sources. The National Bank of the Republic of Azerbaijan (NBA) provides data for the financial sector and for net export (derived from customs data adjusted according to BoP recommendations). The Ministry of Finance provides data for the general government sector. Government transactions data (income and expenditures) received from the Ministry of Finance are recorded on cash basis.

The Department has a good and close cooperation with the relevant departments of SSC as well as with external partners, including the National Bank and the Ministry of Finance.

Timeliness in general is good. Annual data is published 10 months after the reference year, quarterly data within three months after the reference quarter. The monthly estimates are published around 15 days after the reference month. A pre-release calendar including revisions dates is available to the public from the SSC website.

Annual time series are published in regular SSC publications and in electronic form in the online statistical database and tables available from the SSC website. Discrete annual time series are published in current prices and in prices of the previous year. Quarterly national accounts series are published in the Quarterly Statistical Bulletin and in excel sheets available from the SSC website. The quarterly series are published in current prices and in constant prices with base year 2005. While seasonally adjusted series are calculated, these are not published. Monthly GDP estimates on cumulative basis are published on the website under Monthly Macroeconomic Indicators.

Recommendations

The SSC is encouraged to:

- Ensure the complete changeover to SNA 2008 and publication of national accounts series compiled according to SNA 2008.
- Continue its cooperation with the Ministry of Finance and investigate the possibility of retrieving data on accrual basis contrary to receiving data on cash basis from the Ministry of Finance..
- Consider publishing discrete annual GDP time series in prices of a fixed reference year and discrete quarterly GDP time series from the expenditure side in the prices of a fixed reference period in order to meet user needs and facilitate analysis.
- Publish seasonally adjusted quarterly GDP series.

- Re-consider the production of monthly GDP figures. Possible user demands for short term indicators may be met by providing monthly indicators for the main sectors of the economy and, possibly, a flash GDP.
- Continue working with the Central Bank of the Republic of Azerbaijan to receive data earlier for the production of national accounts series.

15.2 Government Finance statistics (GFS)

General assessment

Government Finance Statistics (GFS) is compiled and published by the Ministry of Finance, based on the Governments Finance Statistics Manual (previously based on the 2001 IMF Manual and more recently based on the 2014 Manual). Government transactions are recorded on cash basis and hence not fully suitable for direct use in national accounts. The SSC adjusts to accrual basis to the extent possible before their inclusion in the national accounts.

GFS is produced by the MoF as part of the ministry's work to compile the state budget of Azerbaijan. The number of staff is sufficient. GFS is produced under the law on the state budget and compiled broadly following the recommendations of the GFS manual. GFS is not produced under the official statistical law.

GFS statistics are released by the MoF, after approval by the Deputy Minister, a practice which is not in line with the principles of official statistics, according to which statistics should be compiled on an objective basis determined by statistical considerations, be released to all users at the same time and information on methods and procedures be publicly available.

Government transactions are recorded on cash basis and hence not in line with the recommendations of the GFS Manual and not fully suitable for introducing them directly in the national accounts.

Description

The Ministry of Finance of the Republic of Azerbaijan is the main body that collects and processes data that form the basis of the Government Finance Statistics (GFS). According to the law "On Budget System" of the Republic of Azerbaijan, the Ministry of Finance has the authority to obtain data from government agencies and other legal entities necessary to carry out its functions, including developing and implementing financial, budgetary policies of the state, public debt management policies, execution of state and consolidated budgets, accounting for public debt.

At the same time, the Ministry of Finance has no obligation to disseminate statistics in this area to a wide range of users. However, it publishes monthly operational data on the execution of the state budget and quarterly information on government debt balances on its website <http://maliyye.gov.az/en>, <http://maliyye.gov.az/node/1695>. In addition, it annually provides some GFS indicators to the International Monetary Fund by completing a specific questionnaire.

The data on the execution of the state budget and the budget of the Autonomous Republic of Nakhichevan are developed on a cash basis using the Unified Budget Classification, including the Classification of Budget Revenues, the Functional Classification of Budget Expenditures and the Economic Classification of Budget Expenditures agreed with the relevant RGFS classifications.

The data on the cash execution of the state budget and the budget of the Autonomous Republic of Nakhichevan are provided to the SSC monthly on the 25th day after the reporting period in the context of the revenue classification, economic and functional classifications of expenditures, as well as more

detailed data for each year for 7 months after the reporting year in the context of classification of income and cross-classification of expenditures. In addition, data on the implementation of the consolidated budget of the general government sector are provided annually.

Data on assets and operations of local self-government bodies are collected directly by the SSC from municipal authorities in the framework of statistical observations.

According to the Annual Statistical Work Programme agreed with the Cabinet of Ministers, the SSC of the Republic of Azerbaijan compiles and publishes monthly, quarterly and annual data on the execution of the state budget (central government budget), the budget of the Autonomous Republic of Nakhichevan (regional government budget), and also quarterly data on the execution of budgets of local self-government bodies (municipalities).

The revenue statistics are published at the level of 3 digits of the RGFS Classification of incomes (2001, 2014) with details of up to 4 digits for some components, expenditure statistics are published at the level of 3 digits. Classification of expenses by functions of the RGFS government bodies are used (2001, 2014).

Other information provided to the SSC by the Ministry of Finance, the Ministry of Taxes, the State Customs Committee and other state bodies is used to compile SNA indicators, including accounts for the general government sector.

Data are published on the website of the SSC <http://www.stat.gov.az/source/finance>, as well as in the monthly report on the country's socio-economic development, quarterly bulletins, the annual directory "Azerbaijan in Figures" and the Yearbook "Statistical Indicators of Azerbaijan".

http://www.stat.gov.az/menu/6/statistical_yearbooks/?lang=en

The Ministry of Finance (MoF) compiles Government Finance Statistics (GFS) as part of its compilation of the state budget. 23 staff of the State Treasury Agency of the MoF work on the production of GFS. The legal obligation for the Ministry of Finance to produce GFS stems from the Law on the state budget. A decree of the President provides the MoF with the right to carry out the activities necessary for compiling the budget and GFS.

The MoF subscribes to IMF's General Data Dissemination System (GDDS) for Central Government Operations and Central Government Gross Debt. GFS is compiled according to IMF's 2001 Government Finance Statistics Manual. During a recent visit to Azerbaijan the IMF instructed the MoF to implement the updated 2014 version of the Manual. The latest figures for 2015 are compiled according to the 2014 GFS Manual.

Accounting of the government transactions is conducted on cash basis, based on records of actual transactions maintained by the State Treasury Agency. The MoF has agreed on steps to develop GFS based on accrual accounting; however, with no specific time plan. However, data are also used for other purposes than GFS, possible legal issues have to be clarified and systems and software have to be adapted or developed.

The MoF cooperates with the SSC and other organisations for exchange of relevant information for the compilation of the GFS. However, there is no formal memorandum of understanding between the MoF and the SSC related to the production of GFS.

When the GFS is compiled, the management of the Treasury evaluates the data. After the evaluation and approval of the State Treasury Agency, the data are presented to the Deputy Minister. Data are only published after the approval of the Deputy Minister. The approval may take a few days but may

take longer. The MoF is not required to publish GFS, but figures for total revenue, total expenditure, budget surplus/deficit and some other documentation are available on the MoF website.

The SSC publishes annual data for government expenditure and revenue, broken down by main types of expenditure and type of revenue (type of tax), respectively. Quarterly and monthly data for government income and consumption expenditure are provided. Overall, data are published in a timely manner, but metadata are not published. Monthly data are published on cumulative basis on the SSC website and a link to the MoF website is provided.

Recommendations

The SSC is encouraged to:

- Make sure – together with the MoF - that GFS statistics as an essential part of official statistics are produced under the national statistical law to ensure that the principles of official statistics are adhered to.
- Publish – together with the MoF - monthly discrete figures in addition to cumulative data.
- Consider – together with the MoF - the most appropriate allocation of responsibilities for the production of government finance statistics, e.g. by the SSC or by the Ministry of Finance.

The MoF is encouraged to:

- Investigate the possibility to compile government transactions on accrual basis to be in line with the recommendations of the GFS manual.
- Take measures to ensure alignment with the requirements for general government sector statistics, including investigating the possibility of compiling government transactions on an accrual basis.

15.3 External Trade statistics

General assessment

Trade statistics for commodities follows international recommendations and applies international or international comparable classifications (the HS is applied).

Description

External trade statistics for commodities is produced by the sector of foreign trade statistics in the SSC consisting of 12 persons while foreign trade in services is compiled by the Central Bank of Azerbaijan.

The recording and aggregation of commodities is based on the Harmonised System (HS2012). The main source of foreign trade statistics is the customs declarations from the State Customs Committee, who collects and reviews information on exports and imports of goods. Customs data is in general thought to be exhaustive and adequate for the compilation of foreign trade statistics, and there is a good cooperation between the State Customs Committee and the SSC. Customs data is complemented with information from other sources, including enterprise and business surveys. Methods are based on the International Merchandise Trade Statistics: Concepts and Definitions (2010) and the Methodology of the Foreign Trade Customs Statistics of the Republic of Azerbaijan (2015).

Quality assurance includes the checking of customs declarations (validation of classification, codes of goods and countries etc.). To validate the statistical reliability, comparison over countries, groups of products, types of transport, and over periods (months, quarters, years) is performed through the quality control software of the SSC.

External trade statistics provide input to BoP statistics and national accounts. The SSC has some limited experience with producing mirror statistics (with Georgia and Ukraine) but plans to undertake further work on this in the future.

Timeliness of foreign trade statistics is good and in line with international recommendations. Annual data broken down by countries and products (HS and SITC (standard international trade classification, SITC)) are available from the SSC website.

Monthly aggregates for foreign trade (exports and imports) are published on the SSC website, on cumulative basis, although source data provided from the State Customs Committee are discrete monthly data.

Nine staff of the Central Bank work in foreign trade in services. As from 2014 methods and classifications are reported to be in line with the recommendations of the BPM6. Data are published by the Central Bank on its website. Quarterly data are published on the 75th day after the end of the reference period; annual data are published on the 90th day after the reference period.

Recommendations

The SSC is encouraged to:

- Continue discussing with the State Customs Committee the possibility to receive information from the customs declarations that allow SSC to identify the importing / exporting unit.
- Consider publication of discrete monthly series. Monthly data on foreign trade are now published as cumulated series, while recommended practice is to publish discrete series.
- Consider publishing key figures of the balance of payments at the SSC website, or as a minimum provide a link (easy to find) to the Central Bank where information can be found.

15.4 Balance of Payment statistics (BOP)

General assessment

Balance of Payments statistics are compiled on a quarterly basis by the NBA and are reported to be compiled in accordance with the recommendations of the sixth edition of “Balance of Payment and International Investment Position Manual” (BPM6).

Description

Balance of Payments (BoP) statistics is compiled and disseminated by the Central Bank of Azerbaijan under the Law on the Central Bank of Azerbaijan, Article 5. Nine staff of the Central Bank work on the production and dissemination of BoP statistics. A Memorandum of Understanding exists between the SSC and the Central Bank.

The main data sources include the SSC, the State Customs Committee, the Ministry of Finance and commercial financial institutions. BoP for services is compiled on the basis of a special survey on foreign transactions in services and investments that is developed in cooperation between the SSC and the Central Bank. Data are compared with existing data from financial and banking statistics, discrepancies are analysed, and if necessary, brought into conformity.

The BoP is reported to be compiled in accordance with the BPM6. Hence, concepts, definitions and classifications follow European and international standards and guidelines. The BoP statistics records the current account (including exports and imports of goods, services, primary and secondary income),

the capital account and the financial account (net acquisition of financial assets, net incurrence of liabilities and changes in reserves). The SSC subscribes to the IMF GDDS, where more detailed documentation about BoP statistics is provided. The latest revision of the BoP took place in 2014 linked to the transition to the BPM6 Manual.

BoP statistics, including documentation of methods, are published on the official website of the Central Bank of Azerbaijan, the Statistical Bulletin and the Annual Report of the Central Bank. Quarterly BoP series are published around 75 days after the reference period, on cumulative basis.

Recommendations

The NBA is encouraged to:

- Consider publishing discrete quarterly time series.

15.5 Consumer Prices Index (CPI), including PPP and housing prices

General assessment

The CPI is calculated on the basis of methodological principles, concepts and definitions specified in the Manual on the Consumer Price Index: Theory and Practice (ILO, IMF, OECD, Eurostat, UNECE, World Bank). For goods and services the national version of the COICOP classification, developed on the basis of the international version and having identical structure, is used. The SSC participates in the programme of GDP international comparisons based on the PPP exchange, organised by the World Bank. In 2008, as a result of a 2 weeks assessment mission, the IMF concluded that the CPI calculations fully comply with international standards.

Description

Production and dissemination of CPI data involves 6 people at the central level and 89 people at the regional level. Financial (state budget) and computer resources are sufficient to meet the current needs.

Data on consumer prices for goods and services, as well as data on household final consumption expenditure are obtained from statistical surveys and from the household budget surveys – HBS (classification of individual consumption by purpose).

Measures are taken to cover the entire geographical area of the country and the full range of representative goods (services) in the consumer basket. The sample of outlets is made in such a way that it is represented by a sufficiently large number of representative goods and that these goods are sold within sufficiently long time. Every year, the consumer basket is reviewed and updated on the basis of data on household consumer expenditures and the consumer basket is adjusted accordingly; statistical questionnaires and instructions for filling them in as well as metadata are constantly being improved.

Based on the development of country's economy and of information and communication technologies, based on the increasing living standards of the population and their purchasing power, the appearance of new products and services on the market and the establishment of new trade and services enterprises, there is a need to include new data sources for collecting information on consumer goods and services (products) prices. These new data sources are primarily analysed and evaluated in terms of their compliance with international methodologies, guidelines and definitions, validated and subsequently the most accurate sources are used to collect information on the prices. New data sources are used in case if their reliability does not cause doubts or are confirmed by the other sources.

Representative-goods (services) which are mostly consumed by the population are selected from the list of classification of products, goods and services used for individual consumption in households and grouped in the consumer basket. While composing the consumer basket, local conditions are considered. The structure of the consumer basket is discussed every year at the Scientific and Methodological Council and when required corresponding changes are made.

After the global assessment in 2010, rentals of owner-occupiers for housing services and the rental paid by tenants were included in consumer basket to improve the consumer price index. Price statistics covering periods of the current and previous years were placed on the website of the SSC.

The sampling frame for the price collection includes enterprises and organisations of all ownership forms, legal organisation forms and private entrepreneurs, regularly operating in the field of retail trade. Huge work is carried out to cover the entire country (all regions). Selection of trade enterprises is made in a way to present a large number of representative-goods, sold for a long time. The sampling frame includes: trade objects (stores, department stores, kiosks); public catering objects; markets (food, non-food, mixed); enterprises rendering paid services to the population; private entrepreneurs, regularly operating in the field of retail trade and services.

Prices registration is carried out in trade enterprises in real-time mode using tablet computers according to the pre-planned schedule and observing the time interval. Food products are registered three times a month (each 10 days), no-food products and paid services rendered to population are registered once a month in the third decade of each month.

In case of the doubts in primary data entered into the database, the reliability these data is verified and if necessary, corresponding changes are made. The control of data collected is carried out timely detecting and identifying possible mistakes. Mechanical mistakes are checked and corrected. Data are edited according to the procedures and methodology of statistical data editing, approved by the relevant resolutions of the SSC. Based on the data control results, the work of the price collectors is monitored and assessed. Seminars for price collectors are organised to improve the quality of primary data and practical assistance on price registration issues is provided.

Imputed prices are used to eliminate the impact of seasonal factors on the CPI and to provide the continuity of calculations for goods disappearing from sale during some periods of the year. When using imputed prices, the price for the period preceding the disappearance of goods and services (products) is corrected on the basis of a geometrical mean of individual price indices of similar goods or of groups of similar goods and services.

Average retail prices for each type of goods and services, included in a consumer basket, are calculated as a geometrical mean of individual prices. Average prices are calculated for the country and by regions (cities). Average prices for each type of goods (services) are calculated totally and for imported and domestic products separately.

Price indices are calculated by chain method: at the first stage – individual price indices are calculated; at the second stage – aggregated price indices are calculated. Individual price indices are calculated for each individual good (service) in each observed trade enterprise. Composite price indices are calculated according to the modified Laspeyres formula.

Data obtained from the HBS constitute the source of information for the structure of household consumption expenditure (expenditure on food, non-food products and paid services). In order to obtain data on consumption of products included in the consumer basket for observing prices but not covered by the household budget survey, data from the sale of goods in retail trade are referred to and

used. Information on the structure of household consumption expenditures is used as weights in the CPI calculation.

In 2008, as a result of a 2 weeks assessment mission, the IMF concluded that the CPI calculations fully comply with international standards.

The SSC participates in the programme of GDP international comparisons based on the PPPs organised by the World Bank.

Data and metadata on the CPI are distributed according to the IMF general data dissemination standard. The CPI data are published in the yearbook "Prices in Azerbaijan", in the yearbook "Statistical Indicators of Azerbaijan", in the monthly Statistical Bulletin and are also placed on the website http://www.stat.gov.az/source/price_tarif/.

Based on the use of a common international methodology and the CPI classification, data remain comparable since 1995 <http://www.azstat.org/MetaDataG/>

Recommendations

The SSC is encouraged to:

- Analyse the impact of annual changes of both expenditure weights and the basket of priced products on the CPI.
- Investigate the possibility to use of scanner data (product barcode) for the calculation of the CPI.

Chapter 16: Business statistics

16.1 Statistical Business Register (SBR)

General assessment

The SSC has established a good basis for business statistics with the State register of statistical units being regularly updated with the help of a number of administrative data sources. Regular quality checks are implemented and the use of an increasing number of administrative data sources for updates is a welcomed development.

The business register increasingly conforms to European standards but compliance can be further enhanced by implementing the provisions of the legislation on statistical units and by the inclusion of enterprise groups.

Description

The sector of the register of statistical units and sampling surveys in the division of Coordination of Statistical Work and Strategic Planning is responsible for the State register of statistical units and has 6 staff working on the register. In each of the 77 regional offices one person deals with register issues but is also occupied by other matters. Overall the resource situation for maintaining the register is satisfactory both for human and financial resources.

The State register of statistical units was established by the decision of the Cabinet of Ministers of the Republic of Azerbaijan of 9 September 1992. This decision and the law on official statistics provide the legal basis for the maintenance of the register. . The business register consists of three parts:

- the register of legal units, including the legal units that went through the official registration process and their local units as well as the branches of foreign companies acting in the territory of Azerbaijan (around 107,400 units)
- the register of physical units, including individual entrepreneurs (around 685,400 units)
- the register of farmers, including land owners who received a cost-free land plot as a result of the land reform in the mid 1990ies (around 850,000 units).

The business register therefore covers all enterprises, institutions, offices, non-government and religious organisations, cooperatives, banks, exchanges and brokerage offices and other units, independently of ownership and type of activity. At the same time, the register covers all structural and local branches, affiliates and representative offices of registered businesses in Azerbaijan.

The business register is used to create statistical units, to define samples, to obtain data on enterprises, to analyse business demography and etc. Administrative data is periodically checked with the help of the register. In particular data from the tax register from the Ministry of Taxes do not always match the data from the SSC for the economic activity codes (business provide a different economic activity when they register, change the activity later but do not inform the Ministry of Taxes about such changes).

The business register contains data such as the statistical code, the ID code as tax payer, the name, address, contact information, the economic activity code, a code for the type of property, the code for the territory, the number of employees, turnover and others. All statistical units are classified according to NACE rev. 2.

The SSC uses a number of other data sources to update the business register, mainly the tax register from the Ministry of Taxes. This is done because it is the main source of data due to the obligation of legal entities and individual entrepreneurs to register in the Ministry of Taxes. For an update of economic indicators in the banking sector, data from the Central Bank are used while for non-commercial organizations data from the Ministry of Justice and the State Committee for work with religious organisations are used.

Since 1997 the register is updated on an annual basis and in addition to administrative data sources, data from subject matter departments, regional offices of the SSC and survey data are used. During the update, information on the contact information for the unit is checked, the main and secondary activity code, whether the unit is active or sleeping, the number of employees, the annual turnover and some other indicators.

The SSC uses the available European and international recommendations on business registers but does not apply all the provisions of the regulation on statistical units from 1993, e.g. enterprise groups are not included in the register.

The SSC categorises the units according to their size classes, with however different criteria than in the respective EU regulation to better accommodate national needs. Instead, the SSC classifies enterprises according to the criteria adopted by the Cabinet of Ministers of 5 July 2015, where it is defined that small enterprises have less than 25 employees and less than 200,000 Manat turnover, medium enterprises have between 25 and 125 employees and a turnover between 200,000 and 1,250,000 Manat and big enterprises have more than n 125 employees and more than 1,250,000 Manat turnover. Although the definition differs from the EU definition, the SSC can group enterprises according to the size classes of the EU regulation but only for a limited number of indicators. The respective questionnaires from the OECD can be filled but the SSC does not publish the data on its website.

As for the quality of the register data, the SSC implemented a survey of small businesses-entrepreneurs on a sample basis in order to assess the quality in 2015. The SSC also started analysing all kinds of administrative data available in other government agencies in order to identify additional data sources for updating the register and improving its quality. The SSC identified a total of 27 agencies that could potentially provide data and created a working group to study the data sources (e.g. the population register in the Ministry of Justice, the register of car owners in the Ministry of Internal Affairs, etc.) in more detail as well as their suitability for statistical purposes. It seems however that none of the data sources contains data on the turnover, except for the tax register but the definition of turnover differs from the statistical definition. Data on the number of employees could potentially be taken from the Ministry of Labour.

In next five-year Strategic Plan for 2018-2022 the SSC intends to oblige all those owners of administrative data to provide access to them for the SSC. In the context of the next State Programme on improving official statistics for the period 2018-2025, it is planned to integrate data from databases held by other state authorities/agencies/offices with the data contained in the databases of the SSC and to conduct an assessment on whether the administrative data are produced/processed in compliance with the GSBPM. The implementation of these actions will help to improve the quality of the register data.

For the future, the SSC plans to improve the software used for maintaining the register, thereby enabling to ensure that the regional statistical offices to enter information on local units into the register, to enhance and deepen the use of administrative data for the update and maintenance of the register and to integrate / link administrative data with the register.

Recommendations

The SSC is encouraged to:

- Consider gradually applying the definition of statistical units as contained in the Council Regulation (EEC) 696/93 of 1993 to the State register of statistical units.
- Consider expanding the list of indicators on SMEs according to the EU/OECD definition.
- Continue efforts to identify and use administrative data sources for maintaining and updating the business register.

16.2 Structural Business statistics (SBS)

General assessment

Structural business statistics is well developed since a number of years. For most of the indicators contained in the EU regulation on SBS, the SSC is in the position to provide them. This relates to the annexes of the regulation on industry, construction, trade, services and business demography, while for the financial annexes on insurances and banks (and for pension funds once they are established in Azerbaijan) some more work is needed.

Description

As of January 2016, the sector of business statistics was integrated into the department of national accounts and macro-economic indicators in order to support its organisational and subject integration and provide unified management. This can be seen as an important step towards an integrated business

statistics and will increase efficiency compared to business statistics developed by separate subject matter departments as was the case until recently.

The sector has 3 staff in the head-quarters as well as 82 staff in the regional offices, who take care of data on businesses and some other tasks. Until the organisational integration is completed, staff in other units also contributes to the production of business statistics, such as the unit of industry and construction statistics, the unit of service statistics, the sector of trade statistics and the unit of labour statistics.

For most of the indicators requested by the EU regulation on SBS, the SSC is in the position to produce and provide the data except for the annexes on pension funds, banks and insurance companies. For pension funds, no data are available on private pension funds (because of non-existence), for insurance companies data are not produced in all the required breakdowns and for banks not all the required indicators are produced. For all these financial institutions a specific reporting format is used.

For the other areas of business statistics (industry, construction, trade and services) the data sources used are surveys of non-financial incorporated enterprises, local units and self-employed entrepreneurs, business register data, data from the tax register, the Central Bank and the authority supervising financial markets. Enterprises with a simplified accounting system receive a shorter questionnaire and credit institutions and insurances receive yet another questionnaire compared to large enterprises. For the sectors of industry, construction and services, the surveys are exhaustive for all legal units while for legal units engaged in trade sample surveys are used. For all self-employed entrepreneurs sample surveys are used. In total, approximately 25000 enterprises are surveyed. The form 1-E on production activity, financial findings and property of the enterprise is used for legal units while local units provide their information in the surveys implemented by the branch departments of the SSC. The list of enterprises / units surveyed is fixed for the year and updates for newly created/found enterprises are only included in the next year's survey.

While the survey of legal units is carried out by the SBS sector, the survey of self-employed entrepreneurs is carried out by the branch units, so the integration of all structural business surveys is not yet fully implemented. Data on the number of employees, such as on wages and salaries is provided by the unit on labour statistics. Questions on the salaries are contained in both questionnaires.

Structural business statistics are compiled using NAEC rev. 2 since 2009 and CPA 2008 since 2011. Quality control is implemented with the help of quality control tables, which is a specific quality control software used throughout the SSC. A quality report on the SBS is also produced and available in Azeri language.

SBS data are published in the 1) Statistical Indicators of Azerbaijan, 2) Industry in Azerbaijan, 3) Small entrepreneurs in Azerbaijan, 4) Construction in Azerbaijan, 5) Transport in Azerbaijan, 6) Telecommunications and post in Azerbaijan, 7) Trade in Azerbaijan, 8) Labor market, 9) Paid services in Azerbaijan and are posted on the official web page of the SSC

http://www.stat.gov.az/menu/6/statistical_yearbooks/?lang=en

<http://www.stat.gov.az/source/labour/>

<http://www.stat.gov.az/source/industry/>

<http://www.stat.gov.az/source/construction/>

<http://www.stat.gov.az/source/trade/>

<http://www.stat.gov.az/source/transport/>

<http://www.stat.gov.az/source/communication/>

<http://www.stat.gov.az/source/finance/>

<http://www.stat.gov.az/source/catering/>

Plans for the next five years include the completion of the organisational and substance integration of SBS leading ideally and gradually to the use of a unified questionnaire, a maximum of centralisation of data collection, processing and validation and a reduction of response burden.

Recommendations

The SSC is encouraged to:

- Continue the reform on the integration of structural business statistics in terms of content and organisation.
- Integrate business surveys in an overall production model.
- Produce the quality report in English.
- Expand the coverage of indicators requested by the EU regulation on SBS.
- Eliminate duplication of questions in survey questionnaires.
- Explore the use of additional administrative data sources.

16.3 Short Term Statistics (STS) including PPI

General assessment

Short-term statistics is broadly compliant with the European standards, in terms of methodology, concepts and coverage of indicators. Most of the indicators are available except seasonally adjusted data. Publication deadlines correspond to the deadlines in the respective EU regulation.

Description

Short-term statistics is produced in a decentralised way by several units in the SSC, such as the unit of national accounts and macro-economic indicators, the unit of industry and construction statistics, the unit of trade statistics, the unit of statistics on services, the unit of labour statistics and the unit of price statistics. Altogether 10 staff are work on short-term statistics in the head-quarters and another 77 in the regional offices with one person per regional / district office working on industry statistics and other domains.

The SSC surveys all statistical units with an activity in the NACE rev. 2 sections B-N and P-S. All indicators are produced except seasonally adjusted data. Short-term statistics are therefore compliant with European standards in terms of classifications, scope of indicators and timeliness.

Data sources used for the compilation of short-term statistics are surveys of legal and local units, surveys of individual entrepreneurs and information from the state statistical business register. Surveys are carried out on a monthly and/or quarterly basis and are exhaustive or sample surveys depending on the sector of the economy and the size classes of the statistical units. A common/unified questionnaire is used for all data needed to calculate value indicators while separate forms per sector of the economy are used to calculate physical indicators. All survey forms are available online for respondents to fill in. The surveys of individual entrepreneurs as well as for price and labour indicators are carried out by the respective units of the SSC.

Industry

For short-term indicators on industry all big and medium enterprises / legal units are surveyed monthly through an exhaustive survey (roughly 1000 units). Small enterprises are surveyed on a quarterly basis exhaustively (roughly 1600 units) while individual entrepreneurs are surveyed also on a quarterly basis but through a sample (roughly 2200 units). Monthly and quarterly reports are submitted by legal entities and individual entrepreneurs online through the SSC website.

Quality of the data is controlled already at the stage of the reporting from respondents through the online version of the questionnaires and through the application of quality control tables, specific software developed by the SSC for controlling the answers of respondents.

Almost all indicators are produced on the basis of the provision in EU regulation on STS, except seasonally adjusted data, e.g. production, turnover broken down by domestic and non-domestic market, new orders received broken down by domestic and non-domestic markets, number of persons employed, hours worked, gross wages and salaries, are all available.

Seasonally adjusted data are produced but only for internal use. Users are apparently not asking for seasonally adjusted data and moreover, quarterly GDP is not yet seasonally adjusted. As seasonally adjusted short-term indicators are used for the compilation of quarterly GDP, the inconsistency of the data would create confusion among users.

Data are published in press-releases as well as in the monthly report of the SSC on the socio-economic development of the country and in the respective monthly and quarterly bulletins of the branches as well as on the SSC website. Timeliness of publication for all produced indicators corresponds to the deadlines set in the European regulations.

Construction

As for short-term indicators on construction all big and medium enterprises/legal units are surveyed monthly through an exhaustive survey (roughly 760 units). Small enterprises are surveyed on a quarterly basis exhaustively (roughly 1700 units) while individual entrepreneurs are surveyed also on a quarterly basis but through a sample (roughly 900 units). Monthly and quarterly reports are submitted by legal entities and individual entrepreneurs online through the SSC website.

Quality of the data is controlled already at the stage of the reporting from respondents through the online version of the questionnaires and through the application of quality control tables, specific software developed by the SSC for controlling the answers of respondents.

All indicators are produced entirely on the basis of the provision of the EU regulation on STS, except seasonally adjusted data, e.g. production broken down for building construction and civil engineering, new orders received broken down for building construction and civil engineering, number of persons employed, hours worked, gross wages and salaries, material costs, labour costs, building permits: number of dwellings and square metres of useful floor area.

Seasonally adjusted data are produced but only for internal use. Users are apparently not asking for seasonally adjusted data and moreover, quarterly GDP is not yet seasonally adjusted. As seasonally adjusted short-term indicators are used for the compilation of the quarterly GDP, the inconsistency of the data would create confusion among the users.

Data are published in press-releases as well as in the monthly report of the SSC on the socio-economic development of the country and in the respective monthly and quarterly bulletins of the branches as

well as on the SSC website. Timeliness of publication for all indicators corresponds to the deadlines set in the European regulations.

Trade

As for short-term indicators on trade all big and medium enterprises/legal units are surveyed monthly through an exhaustive survey (roughly 1060 units). Small enterprises (roughly 1600 units) and individual entrepreneurs (roughly 13600 units) are surveyed on a quarterly basis through a sample. Monthly and quarterly reports are submitted by legal entities and individual entrepreneurs online through the SSC website.

Quality of the data is controlled already at the stage of the reporting from respondents through the online version of the questionnaires and through the application of quality control tables, specific software developed by the SSC for controlling the answers of respondents.

The following data are produced: turnover, number of persons employed, goods in storage, the number and area of retail stores, revenues from intermediation, etc. Indices with a base year 2010 are produced each month and seasonally adjusted data is calculated but not published.

Data are published in press-releases as well as in the monthly report of the SSC on the socio-economic development of the country and in the respective monthly and quarterly bulletins of the branches as well as on the SSC website. Timeliness of publication corresponds to the deadlines set in the European regulations.

Services

As for short-term indicators on services all big and medium enterprises/legal units are surveyed monthly through an exhaustive survey (roughly 1088 units). Small enterprises are surveyed on a quarterly basis exhaustively (roughly 3642 units) while individual entrepreneurs are surveyed also on a quarterly basis but through a sample (roughly 4200 units). Monthly and quarterly reports are submitted by legal entities and individual entrepreneurs online through the SSC website. For banks and insurance companies turnover data are collected on a quarterly basis through exhaustive surveys while data on the number of persons employed and wages / salaries are collected on a monthly basis exhaustively for big and medium size enterprises and quarterly for big, medium and small enterprises also exhaustively.

Quality of the data is controlled already at the stage of the reporting from respondents through the online version of the questionnaires and through the application of quality control tables, specific software developed by the SSC for controlling the answers of respondents.

The following indicators are produced: turnover, number of persons employed. Seasonally adjusted data are not yet produced.

Data are published in press-releases as well as in the monthly report of the SSC on the socio-economic development of the country and in the respective monthly and quarterly bulletins of the branches as well as on the SSC website. Timeliness of publication corresponds to the deadlines set in the European regulations.

Producer price indices

Industrial PPIs and PPIs for agriculture / fishing / wood industry are produced in line with the recommendations of the "Producer Price Index Manual – Theory and Practice" (2004) as adopted by the ILO, IMF, OECD, UN, World Bank.

Industrial producer price indices are calculated for the relevant sections of NACE rev. 2 (mining industry; manufacturing industry; production, distribution and supply of electricity, gas and steam; water supply, treatment and processing of waste). For the classification of products and services the national statistical classification of industrial products, based on the PRODCOM list, is used. Data are produced on the basis of harmonised methodology and classifications and are therefore internationally comparable.

Industrial producer price indices are calculated since 2000 on the basis of information on producer prices of industrial products and sales volumes coming from the department of price statistics and information on the volume of sold products in value terms by type of economic activity (for the weights) coming from the department of industry and construction statistics. Data are collected from industrial enterprises.

Producer price indices for agriculture, fishing and the wood industry are calculated for the relevant section of NACE rev. 2 (agriculture, fishing and wood industry). For the classification of products the national statistical classification of products is used developed on the basis of CPA. Data are produced on the basis of harmonised methodology and classifications and are therefore internationally comparable.

Producer price indices for agriculture, fishing and the wood industry are calculated since 2003 on the basis of information on producer prices of agriculture products and sales volumes from the department of price statistics and on the basis of information on the volume of products produced in value terms by type of economic activity (for the weights) from the department of agriculture statistics. Data are collected from agriculture enterprises, private land owners, farms and households – those producing agriculture products.

Producer price indices for construction and installation works are calculated for the relevant section of NACE rev. 2 (construction). For the classification of products, the national statistical classification of products is used developed on the basis of CPA. Data are produced on the basis of harmonised methodology and classifications and are therefore internationally comparable.

Producer price indices for construction and installation works are calculated since 2010 on the basis of information on producer prices of construction and installation works from the department of price statistics and on the basis of information on the volume of services provided in value terms by type of economic activity (for the weights) from the department of industry and construction statistics. Data are collected from construction enterprises.

Producer price indices for transport services are produced since 2005, for postal services since 2004 and for communication services since 2008.

Producer price indices for trade are calculated using prices from the shops and the CPI as deflator. Producer price indices for wholesale trade are no longer produced as of 2017, because such an index is not produced according to international practice.

Primary data are provided by the relevant enterprises online through the website of the SSC. Quality controls and checks of the data are done by the Nakhchivan AR and regional and local statistical

offices (for the individual enterprise data) and afterwards by the SSC (for the entire database). Local staff responsible for collection of price data may contact the enterprise in case of doubts.

Price indices are calculated using the chain method and the base year is changed every year. Weights for the calculation of aggregate price indices by type of products are based on the information provided by the enterprises on the sales value of products (services) within a year. Weights for the calculation of aggregate price indices by type of economic activity are based on the information on sales value of products (services) by type of economic activity.

Individual price indices are calculated for each product (service) and the composite price index is calculated according to the modified Laspeyres formula. PPIs are produced by type of product (service) and by type of economic activities. Imputed prices are used for eliminating seasonality.

PPIs are published in monthly bulletins, the yearbook and on the website, in the section of price statistics.

Recommendations

The SSC is encouraged to:

- Start publishing available seasonally adjusted short-term indicators
- Rationalise surveys for the production of short-term statistics, including the optimisation of the survey questionnaires
- Improve quality control at all stages of statistical production
- Consider increasing the use of administrative data sources such as the tax register and data from the Ministry of Taxes and the Ministry of Labour and Social Protection of Population to reduce response burden
- Consider improving the institutional organisation of the data collection and processing.
- Produce producer price indices for information technology, advertising and banking services in accordance with the STS regulation.

16.4 Production of manufactured goods (PMG)

General assessment

Statistical indicators are produced on the basis of the national 2009 PRODCOM list and broadly in line with European standards.

Description

Statistics on the production of manufactured goods is the responsibility of the Department of Industry and Construction statistics.

The PRODCOM related survey is implemented since 2001 and includes all industrial products produced in the country allowing following up on nearly 100% of the production. Data are collected for NACE rev 2 sections B, C, D and E based on the 2009 PRODCOM list. Products are comparable with the HS to the 8th digit and the SSC has transition keys available. The methodology for the current survey was developed in 2010. Data based on previous lists of PRODCOM are back-casted according to the latest list until 2005 and further efforts are made to back-cast data to 2000. Classifications used are NACE, CPA and PRODCOM.

The PRODCOM survey is broadly in line with the European standards in terms of classifications, indicator of volume of production, output, etc. – apart from the fact that a rather old PRODCOM list from 2009 is used while there were several updates in the meantime.

Data sources are reports from enterprises which need to provide data on production for essential and non-essential types of activity for the current and the previous months. Big and medium enterprises are surveyed monthly and small enterprises are surveyed on a quarterly basis. The annual survey covers both industry and the second activity of the enterprise.

Main challenges are related to the back-casting of time series on product types after implementation of new classification.

Data are published in yearbooks and monthly statistical bulletins, as well as on the website.

Recommendations

The SSC is encouraged to:

- To adopt the newest version of the PRODCOM list.
- To continue back-casting of data to increase the comparability of data.

Chapter 17: Social and demographic statistics

17.1 Population Register

General assessment

The existence and use of a population register is of a critical importance for the NSI in any country to produce high quality population statistics.

A State Population Register was created by the Ministry of Justice but the SSC was not involved in its creation. However, as a follow-up of the population census in 2019 measures will be taken to reconcile the population data received by the SSC and corresponding data from the register. Furthermore, arrangements will be put in place to provide direct on-line access to the register information system by SSC.

Population Registers of this type play a central role in the statistical systems of many developed countries. While full access to the register for statistical purposes is already enabled by the general provisions of Article 13 of the Law on Official Statistics, the Assessment Team also considers that the new Law on Official Statistics should explicitly recognise the key role registers can play in underpinning the overall development of statistics based on administrative sources. Moreover, to emphasise its central importance, the Team recommends that the SSC investigates, develops and uses a population register for statistical purposes as a strategic priority.

Description

A Population Register has been developed between 2006 and 2015 as part of a three-stage agreement between Azerbaijan, represented by the Ministry of Justice, and the United Nations Development Programme. The legal basis for the construction of the register is the Law of the Azerbaijan Republic “*On the State Register of Population*” (21.04.2006, No. 24 III-Q) and the “*Regulations on the Procedure of the State Register of Population of the Azerbaijan Republic*” (Decree of the President of the Azerbaijan Republic No. 134 of 14.10.2004).

A special unit, consisting of 35 persons, within the Ministry of Justice is responsible for the establishment and updates of the register and draws on the following information sources:

- Registration information collected by the Ministry of Justice;
- Registration of births and deaths from the Ministry of Health;
- Information on migration from the State Migration Service; and
- Information on external “entries and exits” from the Ministry of the Interior.

A wide range of individual and family related information is included in the register, as follows:

- Name, surname, patronymic and unique identification number;
- Date of birth, place of birth and citizenship;
- Number of the identity document (e.g. birth certificate number);
- Place of residence (and deregistration from the place of residence);
- Family situation;
- Unique identification number of husband (wife), his (her) name, surname, patronymic, date and place of birth, citizenship and number of identity document;
- Unique identification number of the parents, their names, surnames, patronymics, dates and places of birth, citizenship and numbers of identity document;
- Unique identification number of child, his (her) name, surname, patronymic, date and place of birth, citizenship and number of identity document;
- Photo of person under 16 years of age; and
- Biometric data (blood type, eye colour and height) for persons over 16 years of age.

Recommendations

The SSC is encouraged to:

- Make sure that the revised Law on Official Statistics explicitly recognises the key role the Population Register can play in underpinning the development of statistics based on administrative sources.
- As a strategic priority, actively promote, and develop the Population Register for statistical purposes.

17.2 Demographic statistics

General assessment

Overall, the Assessment Team concluded that SSC has a comprehensive system of demographic statistics based on European/international standards.

Description

Demographic statistics in Azerbaijan are based on the decennial Censuses of Population (last census conducted in 2009) and data on births, deaths, marriages, divorces and migration compiled from administrative sources. The main sources of the latter are the Ministry of Justice, Ministry of Health, Ministry of Interior and the State Migration Service.

Within the SSC the Department of Population Statistics is responsible for the production of annual and more frequent vital statistics and migration and gender statistics. Currently there are seven people working on demographic and migration statistics and three on gender statistics. Since 2013 primary data on vital statistics is received by the SSC in electronic form via the registration information system developed in the Ministry of Justice.

Current annual population estimates are based on the most recent census data that are updated using annual data on births, deaths and migration. At the national level, annual population estimates are published by the following breakdowns: sex, detailed age group, ethnic group, educational level, languages spoken and living in urban or rural areas. The annual population estimates are retrospectively adjusted when the results of the next census become available.

Annual and sub-annual data on births, deaths, marriage and divorces are compiled and disseminated together with a wide range of corresponding fertility, mortality and other demographic indicators. In addition, SSC publishes the following consolidated thematic publications on the population: “Demographics of Azerbaijan”, “Children in Azerbaijan”, “Women and Men in Azerbaijan”, “Youth of Azerbaijan” as well as the Statistical Bulletin “The Population of Azerbaijan”.

Recommendations

No recommendations

17.3 Population and Housing Census (previous/next)

General assessment

The availability of the new Population Register should be taken into consideration in the design and implementation of the census methodology. On the one hand, the availability of an up-to-date population register should be an advantage in the efficient organisation of the fieldwork. On the other hand, the availability of detailed population data from the census provides a good opportunity to check the quality and accuracy of the population registration system.

Description

The last Population and Housing Census was undertaken in April 2009 following the traditional census method identifying and enumerating each household in the country using a large field-force of enumerators. Approximately 28 000 enumerators were engaged on census activities in 2009 and the census was considered to have been completed in a highly satisfactory manner.

A Decree has been issued by the President of Azerbaijan (No. 1040 of 07 September 2016) requiring that the next census be undertaken in 2019. Preparatory work has commenced and the census will be conducted in line with the Recommendations of the *Conference of European Statisticians for the Censuses of Population and Housing 2020 (UN 2015)*.

Recommendations

The SSC is encouraged to:

- Actively explore the use of the Population Register (and other relevant administrative registers) in the conduct of the next Census of Population in 2019, and the use of census data to assess the quality of the Register.

17.4 Labour Market statistics

General assessment

The Department of Labour Statistics collects and processes labour market data according to international methodological standards, ILO conventions and/or Eurostat recommendations. However, in a number of areas the available statistics are not really compliant with the current EU standards.

The available statistics on earnings, labour costs and job vacancies, which are produced in line with international recommendations, cover only those workers with written contracts of employment. Since these workers account for no more than one third of the total number of people in employment, there is an urgent need comparable information on other categories of workers such as those with oral contracts only, the self-employed and workers in the informal sector. Furthermore, as those workers with written contracts are likely to have better conditions of employment, including significantly higher wages and salaries, the available data are likely to represent a biased view of the overall labour force.

The Assessment Team would therefore recommend that priority be given to developing statistical sources to improve the information on the overall labour force. A sector review of its labour market statistics, involving international experts, might be sought in order to get advice on methodological issues.

Description

The Department of Labour Statistics, composed of two sections with a total staff number of 13 in the SSC and numerous interviewers in the local statistical units, collects and processes labour market data according to international methodological standards, ILO conventions and/or Eurostat recommendations.

The main sources are the business register (in accordance with NACE rev. 2), administrative data (e.g. on unemployment) or statistical reports submitted by enterprises and public organisations with information on earnings and labour cost, the Labour Force Survey and some other thematic sample surveys, such as the one on the economic activities of youth or the study on decent work whose sampling is based on the population census.

As for other statistics, a tool for data quality control is used in order to detect and eliminate errors and inaccuracies in the collected data.

During the past years, special attention was given to the informal employment and decent work, and within recent years to youth employment, also taking into account the special information needs of users (such as the Committee of Family, Women and Children Affairs that needed information in respect to the “State Programme on education of Azerbaijani youth in foreign countries”).

Based on a survey on earnings, labour cost and job vacancies undertaken among enterprises on a monthly (for large and medium-sized enterprises), quarterly (for small enterprises) or annual basis (for all types of enterprises), indicators and indices on earnings and the labour cost can be calculated based on a methodology which is in compliance with the EU regulation concerning structural statistics on earnings and on labour cost.

The available statistics on earnings, labour costs and job vacancies, which are produced in line with international recommendations, cover only those workers with written contracts of employment. Since these workers account for no more than one third of the total number of people in employment, there

is urgent need comparable information on other categories of workers such as those with oral contracts only, the self-employed and workers in the informal sector. Furthermore, as those workers with written contracts are likely to have better conditions of employment, including significantly higher wages and salaries, the available data are likely to represent a biased view of the overall labour force.

Extensive time series of comparable data, including international comparisons, statistics on wages, vacancies and labour cost by regions, economic activities, property forms, occupation and position, as well as labour market indicators are published in bulletins, in the annual yearbook and on the website.

Recommendations

The SSC is encouraged to:

- Integrate data on oral contracts and on self-employed into the survey on wages and labour costs.
- Get access to external data sources (e.g. administrative data from the Ministry of Taxes, the Ministry of Labour and Social Protection or other authorities) that might provide further statistical information on salaries, working conditions and vacancies.
- Link administrative data and survey data from different sources and/or to re-design existing reporting forms or surveys in order to get better information of the formal and informal sector.
- Consider the implementation of a sector review of labour market statistics, including the labour force survey, in order to get advice on methodological issues.

17.5 Living Conditions statistics

General assessment

Methodology, input, process and output of Living Conditions statistics during surveys conducted by the Department of Life Quality Statistics are broadly compliant with EU standards.

The Assessment Team was impressed by the progress made (since the last global assessment): for example, a determination of the “middle class population” had been made, based on a multifactor statistical analysis approach, and a study on deprived children and their working and living situation had been undertaken.

The Assessment Team was also impressed with the resources available for the conduct of surveys on living conditions and income and on the progress made in recent years. It believes that further progress and synergies can be made through greater use of the population register and other administrative sources in the conduct of the surveys. It would also suggest that greater integration of all household surveys conducted by SSC should be examined, perhaps in the context of the Eurostat model for integrated social statistics. Furthermore, the Team had the impression that administrative data are not used yet to the extent possible, be it for quality control or as an input for further research on special topics, and moreover, users reported that the population register is far from being completed.

Description

The Department on Life Quality Statistics, composed of two sections with 10 persons engaged in the SSC and 76 in the regions, assisted by 255 interviewers, is responsible for the implementation of the Household Budget Survey (HBS), conduct of the Survey on Income and Living Conditions (SILC) and the Time Use Survey according to the Eurostat methodology. Modern technology tools are used

for the collection and processing of input data (no paper version but tablets, SPSS and STATA software package, etc.).

These sample surveys are the main data source for the dissemination of the statistics on living conditions. Sampling is based on the e-database of households established based on population census outputs, taking into account different population groups.

The HBS is conducted on a quarterly basis and includes more than 10,000 households with about 41,000 persons which is equal to 0.5 % of the entire population. Simple random sampling is used in each area and measures are in place to ensure comparability and quality of data. In accordance with the EU regulation, the main questionnaire including data for each member of the household has to be filled in at the beginning of the survey, followed by diaries listing all expenses made during two weeks and a quarterly questionnaire on income and expenses by all household members. Results are grouped by types of households, by decile and quintal groups of population, by level of income and expenses of families (with and without children), and by selected social variables about the head of the household.

In 2012, the first Time Use Survey was carried out, a survey which will be repeated in 2022, in order to obtain information related to time allocation during work time (paid or unpaid) and after work and to complete information about time use of people living in urban and rural areas and of different population groups.

The Survey on Income and Living Conditions will be conducted in 2017 for the first time based on the recommendations of the last global assessment conducted in 2010 and the guidelines that have been developed within a twinning project with partner organisations from Germany, Bulgaria and Slovenia and the regulations set by Eurostat. In addition, SILC will take into account and on board some specific issues regarding the situation of the Azerbaijani society.

Recommendations

The SSC is encouraged to:

- Intensify cooperation with the Ministry of Justice in order to obtain full access to its register data and to complete the population register, not only in view of the next population census round but also for a better utilisation of existing data. Other data bases (e.g. on migration) should also be made available to the SSC and technical issues regarding data exchange should be solved in order to make a more effective use of all (official) data, thus reducing cost and burden.
- Integrate all household surveys and data collection, following the Eurostat model of integrated social statistics.

17.6 Education statistics

General assessment

A broad range of basic data on the educational system, in line with international recommendations, is collected and published by the SSC in conjunction with the Ministry of Education. The SSC and the Ministry should rationalise the collection of the data from schools and other educational establishments. Statistics on educational attainment, vocational training, life-long learning and the transition from education to working life should be further developed and address any gaps in the coverage.

Description

The SSC produces a broad range of statistics relating to the educational system, essentially meeting the UNESCO Institute for Statistics (UIS) requirements in that regard and following the ISCED classification. These include details on: the number of students and graduates by sex, age group, level and type of education; admissions, releases and numbers of students in specialities; characteristics of teachers employed by level; and the characteristics of foreign students. Indeed, the only notable omission on the UIS educational statistical profile for Azerbaijan is the absence of data on the expenditure per pupil in primary and secondary education.

Most of the basic data are collected directly from schools and other educational establishments by the SSC but in some cases the primary collection is undertaken by the Ministry of Education. The SSC and the Ministry intend to review and rationalise the current collection system.

For census years, statistics are compiled on the educational attainment level of the population aged 15 years and over, while for non-census years, corresponding estimates are calculated using the results of the sample survey on the economic activity of population. Relevant questions about the educational attainment of respondents are included in the questionnaire.

The Continuous Vocational Training Survey and the Adult Education Survey were conducted in 2009 and 2014. However, no statistics on vocational training, lifelong learning or the transfer from education to employment are available on the SSC website.

SSC has indicated that it intends to develop indicators for the sustainable development goals relating to education.

Recommendations

The SSC is encouraged to:

- Rationalise together with the Ministry of Education the collection of basic data on the educational system and address any gaps in coverage.
- Further develop surveys of the general population to produce periodic information on educational attainment, vocational training, lifelong learning and on the transition from education to working life.

17.7 Health Statistics

General assessment

While the availability of basic health data can be considered to be satisfactory, more sophisticated statistical information on the health sector was not available, incomplete or produced without fully considering user needs. This would include: population surveys to measure health status (including subjective well-being), level of disability and health determinants; and consolidated information on health expenditure and outcomes (e.g. Health Satellite Accounts). While the Team accepts that developments of this nature must, of necessity, be seen as longer term objectives, it would recommend that the SSC determines the priorities in consultation with users as a first step towards implementing a developmental programme. The SSC and the Ministry should also examine how a more integrated approach might be adopted towards quality assurance across the whole statistical process chain.

Description

The SSC publishes a range of basic health statistics on its website on mortality, morbidity, on medical and other health staff and on the availability and use of health care facilities. In general, the statistics are compiled by the SSC on the basis of detailed reports submitted by medical practitioners and other health care staff via the Ministry of Health. Where appropriate, international classifications such as ICD 10 are used in the preparation of the data. In addition, annual data on occupational injuries and diseases and on safety at work are published by the Department of Labour Statistics on the SSC website.

Periodic household surveys have also been undertaken on public health and disability and it is planned to include questions on disability in the next population census. Statistics on healthcare expenditure from the State budget are also compiled. Moreover, the Team was informed that some pilot work relating to the development of health sector accounts is being undertaken by the Ministry of Health but this is not classified as official statistics as it is not covered by the Annual Statistical Work Programme.

In presentations to the Assessment Team the Ministry of Health was classified as a statistical producer. However, it transpired that the SSC is usually responsible for the macro-editing of the basic health data reports and ultimately for the publication of the derived statistics. In this context, the Team concluded that the Ministry should be more correctly described as a data provider with SSC categorised as the producer of health statistics in Azerbaijan.

Recommendations

The SSC is encouraged to:

- Develop together with the Ministry of Health a more integrated approach towards quality assurance across the whole statistical process chain.
- Identify in consultation with users priorities for the longer-term development of health statistics.

Chapter 18: Agricultural statistics

General assessment

Methodology, input, process and output of Agricultural statistics are partially compliant with international and less with EU standards.

The Assessment Team was impressed by the work that has been done when preparing, conducting and analysing data from the agricultural census. There is no doubt that data are of high quality and can certainly be used for setting up a farm register, as intended, and for more scientific analysis on the agricultural structure.

According to the methodology of FAO, food balances on the main products are compiled once a year, national analogies of NACE rev. 2 and CPA classifications are used.

According to European standards a more prominent look at the structure of agriculture with basic information on the number of units classified according to farm type and size would be valuable in order to better describe the sector's development and impact, thereby using time series or other visualisation tools. Moreover, some more focus should be put on the analysis of agricultural enterprises and characteristics of agricultural staff working in them.

Description

The SSC produces wide range statistics on agriculture, forestry and fishing on regional and country level. The data is mainly compiled based on the information sent by local registration units submitting agricultural reports – land use, agricultural production, producer and consumer prices, structure of industrial costs, etc.

Though the share of agriculture as part of the national economy is decreasing over the last 15 years, its importance is high as according to recent census data, there are 1.3 million farms with about 3.5 million persons engaged in agriculture (approx. 13% of the active population).

The Department of Agriculture at the SSC, composed of three thematic sections with 20 employees in the SSC and about 70 people in regional units, is responsible for the data collection, processing, production and dissemination. Main data sources are:

- The Farm register (based on the Agricultural Census)
- The Register of private entrepreneurs (in agriculture)
- About 30 official statistical report forms (with data that enter into the registers or other databases)
- Other administrative sources of the Ministry of Agriculture
- The Agricultural Census
- Household and other sample surveys.

Progress (since last global assessment in 2010) is reported regarding the review of classifications and the quality and detail of input data, e.g. a sample survey on bee keeping products, a survey on costs of livestock and poultry feeding and a survey on supply of forest products had been conducted, and the registration of sown areas has been completed in the meantime.

A special tool, the so-called quality control tables, is used in order to detect and eliminate errors and inaccuracies in the collection of data.

18.1 Farm Register

A farm register is going to be set up, based on recent census (2015) data. It will mainly be used for methodological improvements and the re-design of sample surveys in agriculture as well as for reporting on structural changes in agricultural between census periods. Other kind of administrative sources are: 1) e-register of agricultural machinery of famers and 2) turnover of pesticides biological preparations and agro-chemical substances submitted by the Ministry of Agriculture to the SSC

18.2 Agricultural census

In 2005, the first agricultural census was conducted, in June 2015 the second, taking into account some countries' experiences, and following the recommendations and guidelines of the UN Food and Agriculture Organization (FAO) and the CIS Statistical Committee for the improvement of the agricultural census. It focused on statistical information regarding the sector's structure and the use of land and (human) capacity. Data on agricultural production has not been part of the census as this information is available from current reports on a regular basis.

The SSC has been responsible for the conduct of the Agricultural Census, involving more than 13,000 persons temporarily and its total cost was approx. €4.2m.

The census questionnaire included issues concerning the property and organisational-legal form of farming, land use, equipment, agricultural buildings and technology as well as data concerning the labour force engaged in agriculture.

As a result, indicators regarding the structure and the effectiveness of agricultural production can be calculated. By the time of the assessment, unfortunately working hours (for those engaged in agriculture) have not been reported, which would have allowed the calculation of employment in full-time equivalents in agriculture (NB: later in 2017 this information has been published). This is considered to be a better economic indicator than counted heads with regard to labour force investment, an indicator commonly used in all other sectors of the economy.

All data from the agricultural census data have been analysed broadly and 13 volumes of publications have been issued.

Data from the census will be used for improving the statistical database in agriculture and for setting up a farm register.

18.3 Agricultural statistics

The SSC produces a broad range of statistical information on agriculture, forestry and fishery at regional and national (but not local) level.

The statistical output focuses on information on livestock, land use, agricultural products, production and selling prices, and the structure of the production expenditure, differentiated by two main categories: the agricultural enterprises (joint stock companies, collective enterprises, production cooperatives, etc.) and the privately-owned farms of different property forms, family peasant, household farms or other.

Agricultural statistical output regarding the primary sector has already been improved based on census data, and further development is underway.

Recommendations

The SSC is encouraged to:

- Evaluate the potential for streamlining data collection (in particular after having set up the farm register)
- Reconsider the modernisation of the dissemination of agricultural statistics (e.g. presenting graphs and interactive data bases also by integrating the huge amount of tables)
- Focus on the structure of agriculture rather than on its production when analysing and disseminating statistical information regarding this sector, combining it with other available data sources (such as the population census or LFS or SILC).
- Include indicators on agriculture in a system of indicators for the green economy.

Chapter 19: Multi-domain statistics

19.1 Transport statistics

General assessment

The concepts, definitions and classifications used in transport statistics broadly comply with European / international standards.

The report of the global assessment in 2010 noted that the available transport statistics cover all modes of transport and are well developed in Azerbaijan. Since then special attention has been paid to the issues of a systematic approach to transport statistics and to improving data quality. In response to the recommendations of the previous global assessment the following has been implemented: an electronic database on transport statistics data has been created; ongoing work related to the methodology of railways census to obtain the necessary statistics on the rail network and the intensity of the movement and the census is scheduled for 2017. Statistical surveys to obtain new data on the carriage of passengers by private entrepreneurs and natural persons were also conducted.

Description

The legal basis for the collection and dissemination of transport statistics is the Law on Official Statistics and the Regulation on the SSC approved by the Decree No. 115 of the President of the Republic of Azerbaijan on 24 June 2009.

At the SSC one employee is working on the production and dissemination of transport statistics and 1 at the regional level 77 employees, who at the same time work on other areas of statistics as well.

Financial (state budget) and computer resources are sufficient to meet the current needs.

Production of transport statistics is based on administrative data (Azerbaijani Railways; Azerbaijan airlines; Azeravtoyol; Azerbaijan Caspian Shipping Company; Main State Traffic Police Department of the Ministry of Interior of the Republic of Azerbaijan; Baku Metropolitan; Baku International Sea Trade Port), statistical data received from individual entrepreneurs and sample statistical survey <http://www.azstat.org/MetaDataW>; <http://www.azstat.org/MetaDataG/>.

The methodology used for the production of transport statistics is based on the recommendations of the EU: Aviation and Maritime statistics in the EU candidate countries, Luxembourg 2002; Glossary for Transport Statistics, 4th edition, Eurostat 2009; and of CIS: Recommendations for the improvement of cargo transportation by road transport in accordance with international practice, Moscow 1997.

The following classifications are used: standard goods classification for transport statistics – NST 2007; classification of types of products; classification of property types; classification of administrative and territorial division.

The following indicators are collected: main indicators of the operational work of railways; data on the volume of traffic in the non-transport sector by railway transport; main indicators of the metro; data on the work of transport in the Transport Corridor Europe-Caucasus-Asia within the country, on the carriage of goods by type of transport; basic data on air transport and its operational park; main economic indicators of water transport activities; data on the number of vessels and their characteristics; data on loading, work of sea ports; length of roads; key indicators on road and traffic public facilities; data on the number and on the technical conditions of vehicles, motorcycles, trailers for their brands and types; data on road accidents; data on road safety, vehicle registration; data on the overall economic performance of pipelines.

Respondents can submit their reports electronically on the website and in online regime.

In 2014 a sample survey “In the field of cargo auto-transport” was conducted to study the status of cargo auto-transport. The main aim of the survey was to obtain data on the work of transport, on their fleet, on technical status, obtaining representative information on the use and economic activities of transport. The data collected on trucks surveyed in this sample survey and collected from owners/consumers of trucks should fully reflect the situation in the country and in the regions. The total population in the survey are trucks that have been registered in the territory of the country. These

trucks were identified according to the register of vehicles. When determining the sample size, the provision of the Council regulation on statistical return in respect of the carriage of goods by road of May 1998 were taken into account. The total population consists of 133,600 units, and a sample of 9,500 units (7.1%) was drawn. During the survey, 9401 (98.9%) of the trucks reported their data.

Transport statistics data are published in yearbooks "Statistical Indicators of Azerbaijan" and "Transport of Azerbaijan"; in the monthly Statistical Bulletin (on the main indicators of transport and communications) and on the website.

Concepts, definitions and classifications used in the different transport statistics domains are harmonised with those used in transport statistics as a whole <http://www.azstat.org/tesnifat/>; <http://www.azstat.org/MetaDataInd/>.

Monthly transport data correspond to quarterly and annual data. Long time series with comparable data are available. When changing classifications, calculation methodology or the coverage of indicators, data are back-casted. Data obtained from the surveys are compared with the existing administrative data, reasons for discrepancies are identified and analysed and, if necessary, brought to conformity http://www.stat.gov.az/menu/7/other_metadata/?land=en

In the next State Programme on Official statistics the SSC plans to implement the following activities:

- to identify and better exploit new administrative data sources
- to implement surveys on transport of goods and passengers every five years.

Recommendations

The SSC is encouraged to:

- Together with the JSC "Azerbaijan Railways" develop methodology and conduct a railway census;
- Introduce a sample survey on cargo and passenger transportation by road.

19.2 Tourism statistics

General assessment

The compilation and dissemination of tourism statistics appears to be in line with European and international recommendations and standards, a Tourism Satellite Account has been prepared in 2015 and it is noted that it is planned to improve the questionnaires.

Description

Tourism statistics is produced by the Department of Service Statistics. Four staff members are engaged in the production of tourism statistics in the SSC while 77 employees work on tourism and other statistical domains in the regional offices.

Data sources include surveys of hotels, travel agencies and tour operators, household surveys, surveys on foreign nationals crossing the border, as well as administrative data.

Procedures are in place to evaluate the quality of data sources. Survey data are compared with administrative data, adjustments are made to ensure conformity.

Methods, concepts and definitions are based on the International Recommendations for Tourism Statistics 2008 (World Tourism Organization), the "Tourism Satellite Account: Recommended

Methodological Framework 2008” (World Tourism Organization) and the national classification of Economic Activities based on NACE rev. 2.

Main indicators of tourism (employment, turnover, number of tourists) and detailed series broken down by types of hotels and accommodation, type of travel etc. are published on the website. Only annual data are published.

Planned developments include the improvement of survey questionnaires and preparation of the Tourism Satellite Accounts (with assistance from Eurostat).

Recommendations

The SSC is encouraged to:

- Consider publishing sub-annual series.

19.3 Energy statistics

General assessment

The SSC follows the methodologies of the International Energy Agency (IEA) and Eurostat in the compilation of energy statistics. An energy balance is compiled since 2011 in accordance with the Recommendations for Energy Statistics, adopted by the United Nations Statistical Commission. An Energy Satellite Account is established based on data for 2015. Overall, the system of energy statistics is well developed in Azerbaijan.

Actions implemented after GA in 2010:

- All official statistical reporting forms on energy statistics and methodology on their filling in had been reviewed after gaining agreement with relevant state agencies and included in the State Register of Legal Acts of the Republic of Azerbaijan;
- New official statistical reporting form on alternative and renewable sources of energy has been developed;
- Official statistical reporting form on use of electricity and heat which includes indicators on solar energy, consumption of electric and heating energy at regional level has been improved;
- At present a sample survey on consumption of energy products by households and private entrepreneurs is conducted to calculate indicators of energy efficiency.

Description

The legal framework of energy statistics is the Law on Official statistics, the Regulation of the SSC approved by the decree of the President of the Republic of Azerbaijan, No. 115, dated 24 June 2009; the Law on Energy No. 541-II, 24 November 1998 and other legislative acts and international agreements.

In the SSC 4 people work on production and dissemination of energy statistics while 77 people work at the regional level for energy statistics and other domains as well.

Financial (state budget) and computer resources are sufficient to meet the current needs.

According to the Law on Official Statistics, the SSC is allowed to use administrative data for statistical purposes. Energy statistics is produced based on the reporting from Azerishig, Azerenergy, Azeristiliktechizat and the State Oil Company SOCAR as well as on reporting from enterprises.

All official statistical reporting forms for energy statistics as well as methodologies, are revised and, after coordination with the relevant State agencies, approved and included into the State Register of Legal Acts of the Republic of Azerbaijan. A new statistical reporting form on alternative and renewable sources of energy is developed. In total 13 statistical reporting forms are used for information on: Extraction of crude oil and natural gas; Activity of hydroelectric power plants; Production of oil products; Production of electricity and heat and gas processing; Report of refineries on energy; Crude oil; Supply of oil refining products; Energy products flow; Electricity and heat resources; Natural gas delivery and distribution; Use of energy carriers in households; Use of alternative and renewable energy sources; Production and use of energy by private entrepreneurs. All forms of official statistical reporting are accompanied by methodological explanations on their filling in; metadata on indicators are compiled.

Producing energy statistics, the SSC uses the classification of types of economic activity – NACE rev. 2 and the national classification of energy products (based on IRES). The SSC has developed a system of energy statistics indicators, based on methodologies issued by the UN, the International Energy Agency, Eurostat and other international organisations. The Energy Statistics Manual (IEA, Eurostat, OECD, 2007) is used.

Azerbaijan (the SSC) is among the first among CIS countries, which compiled an energy balance based on the Eurostat standards. Since 2007 the energy balance is compiled in accordance with the Eurostat methodological manual, while since 2011 it is based on the international Recommendations for Energy Statistics (IRES), adopted by the UN Statistical Commission, following the structure recommended by IEA.

Energy balances characterise the volume and structure of domestic fuel and energy resources, including their extraction, production, exports and imports, fuel consumption for electricity and heat generation, final fuel and energy consumption by economic activities and by households http://www.stat.gov.az/source/balance_fuel/?lang=en. The compilation of the energy balance is based on the statistical reporting indicated above. Statistical reports from enterprises are received online within the indicated deadlines.

Energy statistics is harmonised: the quarterly data are consistent with the annual data.

Producing energy statistics the SSC cooperates with several organisations at national level: Ministry of Energy; Ministry of Economy; Ministry of Ecology and Natural Resources; State Oil Company SOCAR; National Academy of Sciences; State Agency for Alternative and Renewable Energy Sources; Production Association Azerigas; Open Joint Stock Company Azerenergy; Open Joint Stock Company Azerishig; Open Joint Stock Company Azeristiliktechizat and at international level: UN Statistical Division; International Energy Agency; JODI (Joint Oil Data Initiative); OSLO group on Energy Statistics; INOGATE (Cooperation Programme between the European Union and Eastern Europe, Caucasus and Central Asia in the field of energy).

Data sources and intermediate results are monitored and evaluated using quality control tables. Quality reports are available: <http://www.stat.gov.az/menu/4/e-reports/az/07/007.php> and <http://www.stat.gov.az/menu/2/quality>.

Energy statistics are published in yearbook "Energy of Azerbaijan"; in the annual book "Statistical Indicators of Azerbaijan" and in the quarterly and annual Statistical Bulletin and are placed on the website.

Recommendations

The SSC is encouraged to:

- Optimise the number of indicators in questionnaires to collect data on energy statistics.
- Improve energy efficiency statistics.

19.4 Environment statistics

General assessment

The main environmental indicators system was developed in accordance with the UNECE Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia. There are currently 13 reporting forms used by the SSC to cover environmental areas of interest including: protection of the atmosphere (pollutant and greenhouse gas emissions); generation and disposal of waste; geological exploration; national parks and reserves; environment protection expenditures; protected areas (e.g. areas having special ecological, scientific or aesthetic value); hazardous wastes (including those controlled under the Basel Convention); and water resources. In addition, information from administrative sources is obtained from Ministries and State Agencies.

While a considerable amount of information on the environment is compiled and published by SSC, further development work needs to be undertaken to comply with international standards and to meet emerging needs.

Description

The legal basis for producing environment statistics is: Law on Official Statistics; Regulation of the SSC No. 115, 24 June 2009; Law on Environmental Protection No. 678-1Q, June 8, 1999; Law on Ecological Safety No. 677-1Q, June 8, 1999; Law on Production and Consumer Wastes, No. 514-1Q, June 30, 1998; Water Code of the Republic of Azerbaijan (1997); Decisions of the Cabinet of Ministers of the Republic of Azerbaijan; other laws and normative acts in the field. The Republic of Azerbaijan has joined 20 international conventions in the field of ecology.

Based on the global assessment report of 2010, the responsibility for waste statistics was transferred to the sector on environment statistics in 2012, which in turn belongs to the Department of agriculture statistics. Since January 2016 environment statistics is located in the Department of Energy and Environment statistics.

In the SSC 3 people are working on the production and dissemination of environment statistics (emission of pollutants into the atmosphere, water resources, biodiversity, waste, costs of environmental protection) while 77 people work in this area at the regional level but are at the same time working on other statistical domains as well.

Financial (state budget) and computer resources are sufficient to meet the current needs.

A unified classification system, harmonised with relevant European classifications, is used: Classification of types of economic activity – NACE rev. 2; Classification of waste; Classification of types of activity on environmental protection and expenditures and others.

The system of environmental indicators was developed in accordance with the UNECE Guidelines for the Application of Environmental Indicators in Eastern Europe, Caucasus and Central Asia.

Environment Statistics is produced on the basis of statistical reports submitted by the Ministry of Ecology and Natural Resources as well as administrative data from other ministries and departments. Together with the 13 reporting forms, approved by the SSC, the following data are collected:

- Protection of atmosphere: pollutant emission from stationary sources, their disposal (utilisation), greenhouse gas emissions – broken down by regions and by types of economic activity;
- Generation, utilisation, maintenance and disposal of waste – in regional breakdown, by type of economic activity;
- Geological exploration measures;
- Environment protection expenditure;
- Air pollution - as the total amount of pollutant emissions by motor vehicle;
- Protected areas – a part of the country’s territory with a unique, or other valuable natural complexes and objects having special ecological, scientific and (or) the aesthetic value, for which a special protection regime is established and used. These areas include reserves, national parks and game reserves;
- The volumes of waste are comprised of waste generated in the course of economic activity (production, energy, works and services), by-products and related mining and mineral processing;
- The amount of municipal solid waste including municipal solid waste generated by population and by legal entities and diverted to the disposal of solid municipal waste treatment enterprises;
- Hazardous wastes include waste that is controlled under the Basel Convention;
- Forest land - defined as the land covered by forest (forest stands) or not covered by forest (cleared areas, perished stands, forest meadows, nurseries, seed-plots, seed orchards and raw shrubbery and plantations). Forest land may be designated for forestry or conservation purposes;
- Water resources including reserves of surface and underground waters bodies, which are used or may be used.

Data from administrative sources provide the following indicators:

- Abstraction and use of water resources in different directions (drinking and household, industrial, irrigation and agricultural needs), discharge of sewage waters by treatment categories, losses – from the Melioration and Water Management OJSC broken down by regions and by types of economic activity;
- Pollutant emission from motor vehicle into the atmosphere – from the Ministry of Ecology and Natural Resources; broken down by regions;
- Environmental Control – from the Ministry of Ecology and Natural Resources;
- Meteorological stations data – from the Ministry of Ecology and Natural Resources; by stations;
- Sanitary Control of state of atmosphere, water resources, land – from the Ministry of Health;
- Medical waste – from the Ministry of Health.

Methodological explanations for filling in the reporting forms are available and indicators are compiled in SDMX format.

A number of measures are implemented to improve environment statistics. All official statistical reporting forms for environment statistics as well as methodologies were revised and, after coordination with the relevant State agencies, approved and included into the State Register of Legal Acts of the Republic of Azerbaijan. The official statistical reporting forms on national parks and reserves include indicators on tourism activity. According to the Basel Convention, the reporting form

on hazardous wastes was revised. Environment statistics are harmonised with the branch statistics data and administrative data of a number of public services. Within the framework of ENPI-SEIS project, an information database on indicators, included in the main environmental indicators system, was developed and placed on the SSC webpage in Azeri and English languages. The database is updated annually. A methodology on pollutant emissions and greenhouse gases from usage of fuel for domestic needs in households was developed and approved (decision of the SSC No. 12/12s, dated 19 August 2016).

According to the State Programme on Development of Official Statistics in the Republic of Azerbaijan in 2013-2017, a system of statistical indicators on “greenhouse” was developed and agreed with the relevant authorities.

Long time series with comparable data exist. When changing the classifications, calculation methodology or the coverage of indicators, the data are updated. Data obtained from the surveys are compared with the existing administrative data, reasons for discrepancies are identified and analysed and, if necessary, data are brought into conformity.

Data on environmental statistics are published in the yearbook “Environment in Azerbaijan”, the yearbook “Statistical indicators of Azerbaijan”, “Regions of Azerbaijan”, as well as in three annual Statistical bulletins and are posted on the website.

Recommendations

The SSC is encouraged to:

- Revise statistical reporting on waste.
- Transit to the new version of international statistical classification on waste categories.
- Develop environment accounts.

19.5 Research and Development (R&D) statistics

General assessment

Methods and classifications are based on recommendations of the UNESCO Institute for Statistics and the Frascati Manual. Hence, concepts, definitions and classifications correspond to European and international standards and follow in general the main international recommendations and guidelines for producing R&D statistics.

Description

Statistics on research and development (R&D) is produced by the Department of Social Statistics. The compilation and dissemination of R&D statistics involves 2 staff members in the SSC. Staff in regional offices is involved in data collection for the statistics.

Since 2011 it has been possible to report electronically using the SSC web-based online data reporting facility.

The key data source is an annual survey of research institutions and enterprises engaged in innovation activities, the survey on “Information on the innovation activity of enterprises”. The survey covers enterprises with more than 25 employees and annual return above 200 000 Manat. The survey collects information on 7 topics (section), including expenditure on R&D, production, development or transfer of new technologies, and organisational and marketing innovations.

“Main indicators system on innovation activity of enterprises” is revised and updated considering the comments and proposals of the National Academy of Sciences and approved by the decree of the SSC No 24/09s, dated 30 December 2015.

Quality control tables (QCT) produced by a software programme developed by the SSC are used to ensure the detection of outliers and possible errors. Errors are corrected. The SSC works with respondents to improve questionnaires and the instructions for filling them in. Information is validated against the statistical business register.

Since new criteria on defining the size of enterprises came into force in 2015, a new grouping of enterprises into three groups, small, medium and large enterprises was introduced (based on number of employees and revenue). In practice, however, it has proved difficult to identify small and medium size enterprises involved in R&D. Because of data sources and issues with identifying enterprises involved in R&D, the quality of the statistics has not been as good as expected. The relevance and usefulness of the statistics has also been questioned.

R&D statistics is published in various yearbooks: “Industry of Azerbaijan”, “Telecommunication and mail in Azerbaijan” and “Education, science and culture in Azerbaijan”. Data on R&D are also available from the website. A pre-release calendar is available from the website (http://www.stat.gov.az/menu/6/calendar_y/?lang=en), which indicates the date of the publication.

Recommendations

The SSC is encouraged to:

- Assess user needs for R&D statistics and cost / benefits of producing the statistics. On this basis, the SSC should consider what R&D statistics to produce.

19.6 Information and Communication Technologies (ICT) statistics

General assessment

Methods applied are based on manuals and guidelines on ICT and the information economy by the International Telecommunication Union (ITU) and United Nations Conference on Trade and Development (UNCTAD). Hence, concepts, definitions and classifications are in line with European and international standards.

Description

Statistics on information and communication technologies (ICT) is compiled in the Service Statistics Department of SSC. The compilation and dissemination of ICT statistics involves two staff members in the SSC. Staff in regional offices (77 employees) are involved in data collection for the statistics but have also other tasks.

The two main data sources for the ICT statistics is the annual enterprise survey and sample survey on households’ use of ICT (Internet access, use of telephones and mobile phones, use of computers, etc.) and an annual survey of use of ICT by enterprises. The information from the survey is complemented by relevant information from other sources, including enterprises. Quality control tables (QCT) produced by a software programme developed by the SSC are used to ensure the detection of outliers and possible errors. ICT data from surveys are compared with information from administrative sources. Discrepancies are identified and, if necessary, adjustments are made.

SSC works with respondents to improve questionnaires and instructions for completing the questionnaires. Respondents can reply through online questionnaires.

Future priorities include the development of SDG indicators, elaboration of the household budget survey to better catch information on ICT and examination of user demands for new ICT indicators.

ICT statistics is published in the yearbooks “Statistical indicators of Azerbaijan” and “Information Society in Azerbaijan”, and available from the online statistical database. A pre-release calendar is available from the SSC website (http://www.stat.gov.az/menu/6/calendar_y/?lang=en), which indicates the date of the publication.

Recommendations

The SSC is encouraged to:

- Consider further possible reductions of response burden by, e.g. optimising survey sampling and increasing the use of administrative sources.