

## **Supply and use tables in Azerbaijan**

### **I. Introduction**

1. Being one of the main components of the integrated structure of national accounts, supply and use tables are considered as an effective tool for improvement of economic information systems and reconciliation of data obtained from various sources.

2. These tables are used for the calculation of series of major analytical indicators, recalculation of the System of National Accounts (SNA) aggregates at constant prices, elaboration of satellite accounts, as well as clarification of the parameters of the non-observed economy. Additionally, compilation of supply and use tables is an important step for constructing input-output tables.

3. The first analogue of input-output tables, or as it was called in the old Balance of National (BNE) Economy System – intersectoral balance of production and distribution of social products, was composed for the economy of Azerbaijan in 1966.

4. The second intersectoral balance was constructed in 1972 and it covered 107 branches of material production and 6 non-material production sectors. After this, intersectoral balance tables were constructed on a regular basis at intervals of five years until 1987.

5. In 1991, the Republic of Azerbaijan gained its status of an independent state, after almost 70 years being a part of the Soviet Union.

6. During this processes of establishing of an independent state, in the conditions of breaking the intersectoral relations typical for the centrally planned economy, the formation of the new property-legal relations of the market economy, as well as the crisis of the enterprises and organizations integrated into all-union economy system, it became impractical to continue to compile balances from the standpoint of quality and obtained results. But given the fact that input-output tables system is an irreplaceable tool for analysis of economic processes and management of the economy, the question of compiling these tables always remained in the spotlight of statisticians. In the context of the more stable, dynamic development of the economy, which started in the second half of the 90s, it was decided to resume working on input-output tables and create cross-sectoral balance according for the 2001 base year.

7. A survey on the costs of production and services in all sectors of the economy was conducted in order to obtain the information required to compile these tables. The survey involved more than seven thousands enterprises and organizations operating within the territory of the country. The methodology for constructing tables was based on the international practice and the principles of the 1993 SNA. The product classification was based on the national version of CPA.

8. The symmetric input-output table for 2001 was drawn up by groups of 107 kinds of products and services.

9. Considering the time that passed since the last compilation of balance tables and the significant changes that have taken place during that time in statistical methodology and information sources (including the transition from the BNE system to the system of national accounts) we faced a number of problems while working on the tables. These included for examples the problem of

adequate distribution of trade and transport margins, taxes and subsidies on production. In addition, it was almost impossible to obtain correct information about the usage of imported raw materials in the production due to the lack of appropriate accounting in the enterprises. But, despite all the difficulties and shortcomings, thanks to the accomplished work we have managed to initiate the periodic compilation of supply and use tables and the application of commodity flow method to harmonize the statistical information produced by different units of the statistical office, estimating the components of non-observed economy and improving the quality of statistics.

## **II. Data sources for SUT**

10. The main data source for compilation of supply and use tables are the surveys of the cost structure of enterprises and organizations for the production of goods and services, information from structural statistics.

11. The survey on the structure of production costs of goods and services is carried out every five years and covers the enterprises and organizations of all kinds of activities. The survey provides data on the structure of intermediate consumption by main and secondary activities, gross fixed capital formation, changes in inventories in breakdowns according to the CPA 2008 codes (see. Appendix).

12. Foreign trade statistics, balance of payments, public finance and data received from the Tax Ministry are also used for the compilation of the supply and use tables.

13. To generate the vector of final consumption of households mainly data from the household budget survey, trade and services statistics.

14. Export and import vectors are prepared using merchandise trade statistics, as well as balance of payment. Balance of payment statistics is compiled by the Central Bank in line with the BPM6 methodology.

15. Indicators of government consumption are formed according to the report on the state budget execution from the Ministry of Finance, as well as the aforementioned cost structure survey on production of goods and services.

## **III. Supply and use tables for 2011**

16. The most recent supply and use tables, which were constructed on the basis of the special surveys on structure of production costs, were produced in 2013 for the base year 2011 and comprised of the following tables and matrices:

- table of resources of goods and services;
- use table of goods and services at purchasers' prices;
- use table of goods and services at basic prices;
- matrix of trade margins;
- matrix of transport margin;
- matrix of net taxes on products;
- import matrix;
- use table of goods and services by domestic production.

17. The supply table consisted of production matrix, the vectors of imports of goods and services, trade and transport margins, taxes on products and subsidies.

18.. Production matrix contained information on 107 groups of goods and services, including 54 groups of goods and 53 groups of services which were grouped according to the Classification of products (CPA 2008) and 96 branches in accordance with NACE Rev.2.

19. Submatrix of intermediate consumption in the use of tables was also presented in breakdown by 107 product groups and 96 industries.

20. The final demand submatrix presented the following elements:

- Households' final consumption
- Final consumption expenditure of non-profit organisations, serving households
- Final consumption expenditure by government ;
- Fixed capital formation ;
- Changes in inventories;
- export of goods and services;
- CIF/ FOB adjustments.

21. The use table indicated the income elements of added value (Compensation of employees, other taxes less subsidies on production (Taxes less subsidies), consumption of fixed assets, gross profit (gross mixed income)).

22. As mentioned above, matrix of trade and transport margins, net taxes matrix on products were used for conversion from use table at purchasers' prices to the use table at basic prices. Import matrix and use table of goods and services of domestic production were developed as well.

23. Due to the lack of direct information on the value of trade and transport margins by specific product groups, matrix margins were prepared on the basis of information by commodity turnover, the structure of production and use of products as well as certain estimates and assumptions about the level of margins on certain groups of goods.

24. The matrix of net taxes on products was compiled using the information received from the Ministry of Taxes and the Ministry of Finance, such as taxes, accrued in the reporting period by type of activity, subsidies on products, excise tax rates and tax incentives for certain goods, as well as the share of goods and services produced by payers of simplified tax in the total production.

25. In the formation of import matrix, the import vector of goods and services from the supply tables was distributed to the intermediate consumption and final demand.

#### **IV. Development perspectives of supply and use tables in Azerbaijan**

26. Given the fact that supply and use tables are an indispensable tool for harmonizing, balancing and ensuring exhaustiveness of national accounts indicators, their regular compilation and integration into the production process is a necessary condition for keeping the quality of national accounts statistics.

27. Taking into account this fact and the experience in compilation of supply and use tables, accumulated over the past years, the State Statistical Committee of Azerbaijan started to work on annual supply and use tables.

28. Due the limited resources and data sources, the first annual tables were designed for 44 groups of goods and services. The structure of the annual tables has been agreed with the main users of national accounts statistics

29. The information sources for constructing the annual use tables are the structural business statistics, the data of foreign trade statistics, balance of payments and public finances, as well as the structure of intermediate consumption of the use table for the last year for which results of the special survey on the cost structure of production of goods and services were available.

30. The initial structure of intermediate consumption used to generate annual tables is adjusted on the base of the data available with annual periodicity.

31. In perspective, improving of the existing system of supply and use tables will be pursued in the following directions:

- regular compilation of supply and use tables at current and constant prices;
- implementation of the double deflation method;
- enlargement of the table dimension;
- improving of data sources;
- expansion of the list of data available with the annual periodicity
- initiatives for implementation of international statistical classifications in the accounting system at enterprises.

## **Appendix**

### **Questionnaire form of survey on cost of goods and services production, carried out according to the results of 2011**

#### **Official Statistical one-time survey**

***CONFIDENTIALITY OF THE RECEIVED PRIMARY INFORMATION IS GUARANTEED***

**Enterprise (organization) name:**

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**Form № 1-IMT**

**Address** \_\_\_\_\_

\_\_\_\_\_

Presents by all the enterprises (organisations) operating in the territory of the Republic of Azerbaijan regardless of their organizational-legal form and type of ownership to the regional statistical offices

<b>The identification code of the enterprise (organization)</b>	<b>Taxpayer Identification Number</b>

**According to the results of 201\_\_\_\_year**

**ABOUT THE STRUCTURE OF PRODUCTION COST**

№ lines	Indicator name	Product code (servi ces)	Costs on production		Stocks of raw materials, fuel, purchased semi-finished products and components	
			total	by main activity	For the beginning of the year	For the end of the year
A	B	C	1	2	3	4
1.	Products and services of agriculture and hunting	01.000				
2.	Products of forestry, logging and related services	02.000				
3.	Fish and other products of fishing and fish farming; services incidental to fishing and fish farming	03.000				
4.	Coal and lignite	05.000				
5.	Crude petroleum and natural gas	06.000				
6.	including: - crude petroleum	06.100				
7.	- natural gas, liquefied or in gaseous state	06.200				
8.	Metal ores	07.000				
9.	Other mining and quarrying products	08.000				
10.	Mining support services	09.000				
11.	Food products	10.000				
12.	Beverages	11.000				
13.	Tobacco products	12.000				
14.	Textiles and textile products	13.000				
15.	Wearing apparel	14.000				
16.	Leather and leather products	15.000				
17.	Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	16.000				
18.	Paper and paper products	17.000				
19.	Printing services ; Reproduction services of sound recording, video recording, software	18.000				
20.	Coke and refined petroleum products	19.000				
21.	including: - refined petroleum products	19.200				
22.	Chemicals and chemical products	20.000				
23.	Basic pharmaceutical products and pharmaceutical preparations	21.000				
24.	Rubber and plastic articles	22.000				
25.	Other non-metallic products	23.000				
26.	including: - glass and glass products	23.100				
27.	- refractory products	23.200				
28.	- clay building materials	23.300				
29.	- other porcelain and ceramic products	23.400				
30.	- cement, lime and plaster	23.500				
31.	- articles of concrete, cement and plaster	23.600				
32.	- cut, shaped and finished stone	23.700				
33.	- other non-metallic mineral products	23.900				

№ lines	Indicator name	Product code (servi ces)	Costs on production		Stocks of raw materials, fuel, purchased semi-finished products and components	
			total	by main activity	For the beginning of the year	For the end of the year
A	B	C	1	2	3	4
34.	Basic metals	24.000				
35.	<i>including:</i> - basic iron and steel and ferro-alloys	24.100				
36.	- tubes, pipes, hollow profiles and related fittings, of steel	24.200				
37.	- other products of the first processing of steel	24.300				
38.	- basic precious and other non-ferrous metals	24.400				
39.	- casting services of metals	24.500				
40.	Fabricated metal products, except machinery and equipment	25.000				
41.	Computer, electronic and optical products	26.000				
42.	Electrical equipment	27.000				
43.	Machinery and equipment, not specified or included elsewhere in this chapter (n.e.c.)	28.000				
44.	motor vehicles, trailers and semi-trailers	29.000				
45.	Other transport equipment	30.000				
46.	Furniture	31.000				
47.	Other manufactured goods	32.000				
48.	Repair and installation services of machinery and equipment	33.000			x	x
49.	Electricity, gas, steam and air conditioning supply	35.000			x	x
50.	<i>Including:</i> - electricity, transmission and distribution services	35.100			x	x
51.	- manufactured gas; distribution services of gaseous fuels through mains	35.200			x	x
52.	- steam and air conditioning supply services	35.300			x	x
53.	Natural water; water treatment and supply services	36.000			x	x
54.	Sewerage services; sewage sludge	37.000			x	x
55.	Waste collection, treatment and disposal services; materials recovery services	38.000			x	x
56.	Remediation services and other waste management services	39.000			x	x
57.	Buildings and building construction works	41.000			x	x
58.	Wholesale and retail trade and repair services of motor vehicles and motorcycles	45.000			x	x
59.	Land transport services and transport services via pipelines	49.000			x	x
60.	Water transport services	50.000			x	x
61.	Air transport and space transport services	51.000			x	x
62.	Warehousing and support services for transportation	52.000			x	x
63.	Postal and courier activities	53.000			x	x
64.	Accommodation services	55.000			x	x

№ lines	Indicator name	Product code (servi ces)	Costs on production		Stocks of raw materials, fuel, purchased semi-finished products and components	
			total	by main activity	For the beginning of the year	For the end of the year
A	B	C	1	2	3	4
65.	Food and beverage serving services	56.000			x	x
66.	Publishing services	58.000			x	x
67.	Motion picture, video and television programme production services, sound recording and music publishing	59.000			x	x
68.	Programming and broadcasting services	60.000			x	x
69.	Telecommunications services	61.000			x	x
70.	Computer programming, consultancy and related services	62.000			x	x
71.	Information services	63.000			x	x
72.	Financial services, except insurance and pension funding	64.000			x	x
73.	Insurance, reinsurance and pension funding services, except compulsory social security	65.000			x	x
74.	Services auxiliary to financial services and insurance services	66.000			x	x
75.	Real estate services	68.000			x	x
76.	Legal and accounting services	69.000			x	x
77.	Services of head offices; management consultancy activities	70.000			x	x
78.	Architectural and engineering services; technical testing and analysis services	71.000			x	x
79.	Scientific research and experimental development	72.000			x	x
80.	Advertising and market research	73.000			x	x
81.	Other professional, scientific and technical activities	74.000			x	x
82.	Veterinary activities	75.000			x	x
83.	Rental and leasing activities	77.000			x	x
84.	Employment services	78.000			x	x
85.	Travel agency, tour operator and other reservation service and related services	79.000			x	x
86.	Security and investigation activities	80.000			x	x
87.	Services to buildings and landscape	81.000			x	x
88.	Office administrative, office support and other business support services	82.000			x	x
89.	Public administration and defence; compulsory social security	84.000			x	x
90.	Education services	85.000			x	x
91.	Human health services	86.000			x	x
92.	Residential care activities	87.000			x	x
93.	Social work services without accommodation	88.000			x	x
94.	Creative, arts and entertainment services	90.000			x	x
95.	Library, archive, museum and other cultural services	91.000			x	x
96.	Gambling and betting activities	92.000			x	x



№ lines	Indicator name	Product code (servi ces)	Costs on production		Stocks of raw materials, fuel, purchased semi-finished products and components	
			total	by main activity	For the beginning of the year	For the end of the year
A	B	C	1	2	3	4
97.	Sporting services and amusement and recreation services	93.000			x	x
98.	Services furnished by membership organisations	94.000			x	x
99.	Repair services of computers and personal and household goods	95.000			x	x
100.	Other personal services	96.000			x	x
101.	<b>Total expenditure on goods and services (p. 01-100)</b>	x			x	x
102.	Salary	x			x	x
103.	Social insurance	x			x	x
104.	Amortization	x			x	x
105.	Taxes deducted from income	x			x	x
106.	Other payments	x				
107.	<b>Total expenses (p. 101-106)</b>	x			x	x
108.	VAT charged	x			x	x
109.	Excise taxes	x			x	x
110.	VAT paid	x			x	x
111.	Other taxes	x			x	x
112.	<i>as well as:</i> income tax	x			x	x
113.	Property tax	x			x	x
114.	Profit tax	x			x	x
115.	Simplified tax	x			x	x
116.	Land tax	x			x	x

## Official Statistical one-time survey

**CONFIDENTIALITY OF THE PRELIMINARY INFORMATION IS GUARANTEED**

**Enterprise (organization) name:**

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**Address** \_\_\_\_\_

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**Form № 1-A**  
(appendix to the form № 1-İMT)

Presents by all the enterprises (organizations) operating in the territory of the Republic of Azerbaijan regardless of their organizational-legal form and type of ownership to the regional statistical offices

The identification code of the enterprise (organization)	Secondary activity code	Taxpayer Identification Number

**According to the results of 201\_\_year**

### **ABOUT THE STRUCTURE OF PRODUCTION COSTS ON SECONDARY ACTIVITIES**

№ lines	Indicator name	Product code (services)	Sum of expenses
A	B	C	1
1.	Products and services of agriculture and hunting	01.000	
2.	Products of forestry, logging and related services	02.000	
3.	Fish and other products of fishing and fish farming; services incidental to fishing and fish farming	03.000	
4.	Coal and lignite	05.000	
5.	Crude petroleum and natural gas	06.000	
6.	including: - crude petroleum	06.100	
7.	- natural gas, liquefied or in gaseous state	06.200	
8.	Metal ores	07.000	
9.	Other mining and quarrying products	08.000	
10.	Mining support services	09.000	
11.	Food products	10.000	
12.	Beverages	11.000	
13.	Tobacco products	12.000	
14.	Textiles and textile products	13.000	
15.	Wearing apparel	14.000	
16.	Leather and leather products	15.000	
17.	Wood and of products of wood and cork, except furniture; articles of straw and plaiting materials	16.000	
18.	Paper and paper products	17.000	
19.	Printing services ; Reproduction services of sound recording, video recording, software	18.000	
20.	Coke and refined petroleum products	19.000	
21.	including: - refined petroleum products	19.200	
22.	Chemicals and chemical products	20.000	
23.	Basic pharmaceutical products and pharmaceutical preparations	21.000	
24.	Rubber and plastic articles	22.000	
25.	Other non-metallic products	23.000	
26.	including: - glass and glass products	23.100	
27.	- refractory products	23.200	
28.	- clay building materials	23.300	
29.	- other porcelain and ceramic products	23.400	
30.	- cement, lime and plaster	23.500	
31.	- articles of concrete, cement and plaster	23.600	
32.	- cut, shaped and finished stone	23.700	
33.	- other non-metallic mineral products	23.900	
34.	Basic metals	24.000	
35.	<i>including:</i> - basic iron and steel and ferro-alloys	24.100	
36.	- tubes, pipes, hollow profiles and related fittings, of steel	24.200	

37.	- other products of the first processing of steel	24.300	
№ lines	Indicator name	Product code (services)	Sum of expenses
A	B	C	1
38.	- basic precious and other non-ferrous metals	24.400	
39.	- casting services of metals	24.500	
40.	Fabricated metal products, except machinery and equipment	25.000	
41.	Computer, electronic and optical products	26.000	
42.	Electrical equipment	27.000	
43.	Machinery and equipment, not specified or included elsewhere in this chapter (n.e.c.)	28.000	
44.	motor vehicles, trailers and semi-trailers	29.000	
45.	Other transport equipment	30.000	
46.	Furniture	31.000	
47.	Other manufactured goods	32.000	
48.	Repair and installation services of machinery and equipment	33.000	
49.	Electricity, gas, steam and air conditioning supply	35.000	
50.	<i>Including:</i> - electricity, transmission and distribution services	35.100	
51.	- manufactured gas; distribution services of gaseous fuels through mains	35.200	
52.	- steam and air conditioning supply services	35.300	
53.	Natural water; water treatment and supply services	36.000	
54.	Sewerage services; sewage sludge	37.000	
55.	Waste collection, treatment and disposal services; materials recovery services	38.000	
56.	Remediation services and other waste management services	39.000	
57.	Buildings and building construction works	41.000	
58.	Wholesale and retail trade and repair services of motor vehicles and motorcycles	45.000	
59.	Land transport services and transport services via pipelines	49.000	
60.	Water transport services	50.000	
61.	Air transport and space transport services	51.000	
62.	Warehousing and support services for transportation	52.000	
63.	Postal and courier activities	53.000	
64.	Accommodation services	55.000	
65.	Food and beverage serving services	56.000	
66.	Publishing services	58.000	
67.	Motion picture, video and television programme production services, sound recording and music publishing	59.000	
68.	Programming and broadcasting services	60.000	
69.	Telecommunications services	61.000	
70.	Computer programming, consultancy and related services	62.000	
71.	Information services	63.000	
72.	Financial services, except insurance and pension funding	64.000	
73.	Insurance, reinsurance and pension funding services, except compulsory social security	65.000	
74.	Services auxiliary to financial services and insurance services	66.000	
75.	Real estate services	68.000	

76.	Legal and accounting services	69.000	
№ lines	Indicator name	Product code (services)	Sum of expenses
A	B	C	1
77.	Services of head offices; management consultancy activities	70.000	
78.	Architectural and engineering services; technical testing and analysis services	71.000	
79.	Scientific research and experimental development	72.000	
80.	Advertising and market research	73.000	
81.	Other professional, scientific and technical activities	74.000	
82.	Veterinary activities	75.000	
83.	Rental and leasing activities	77.000	
84.	Employment services	78.000	
85.	Travel agency, tour operator and other reservation service and related services	79.000	
86.	Security and investigation activities	80.000	
87.	Services to buildings and landscape	81.000	
88.	Office administrative, office support and other business support services	82.000	
89.	Public administration and defence; compulsory social security	84.000	
90.	Education services	85.000	
91.	Human health services	86.000	
92.	Residential care activities	87.000	
93.	Social work services without accommodation	88.000	
94.	Creative, arts and entertainment services	90.000	
95.	Library, archive, museum and other cultural services	91.000	
96.	Gambling and betting activities	92.000	
97.	Sporting services and amusement and recreation services	93.000	
98.	Services furnished by membership organisations	94.000	
99.	Repair services of computers and personal and household goods	95.000	
100.	Other personal services	96.000	
101.	<b>Total expenditure on goods and services (p. 01-100)</b>	x	
102.	Salary	x	
103.	Social insurance	x	
104.	Amortization	x	
105.	Taxes deducted from income	x	
106.	Other payments	x	
107.	<b>Total expenses (p. 101-106)</b>	x	
108.	VAT charged	x	
109.	Excise taxes	x	
110.	VAT paid	x	
111.	Other taxes	x	

## Official Statistical one-time survey

***CONFIDENTIALITY OF THE PRELIMINARY INFORMATION IS GUARANTEED***

**Enterprise (organization) name:**

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**Address** \_\_\_\_\_

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**Form № 1-AF**  
(appendix to the form № 1-İMT)

Presents by all the enterprises (organizations) operating in the territory of the Republic of Azerbaijan regardless of their organizational-legal form and type of ownership to the regional statistical offices

The identification code of the enterprise (organization)	Taxpayer Identification Number

**According to the results of 201\_\_year**

**About the expenditure on acquisition and capital repair of fixed assets**

in thsd. manats

№ lines	Indicator name	Product code	Expenditure on acquisition of tangible fixed assets (excluding land and mineral resources) in the reporting year	including:		Expenditu- re on capital repair of fixed assets realised third-party	of them: services of non- residents	Market value of written- off fixed assets	Lifespan of the written- off fixed assets
				new fixed assets, manufactu red in the country	imported fixed assets				
A	B	C	1	2	3	4	5	6	7
1.	Expenditure on acquisition and capital repair of fixed assets, total	X							
2.	As well as, by types of fixed assets: Live animals and animal products	01.400							
3.	Structural metal products	25.100							
4.	Tanks, reservoirs and containers of metal	25.200							
5.	Steam generators, except central heating hot water boilers	25.300							
6.	Weapons and ammunition	25.400							
7.	Other fabricated metal products	25.900							
8.	Computers and peripheral equipment	26.200							
9.	Communication equipment	26.300							
10.	Consumer electronics	26.400							
11.	Measuring, testing and navigating equipment; watches and clocks	26.500							
12.	Irradiation, electromedical and electrotherapeutic equipment	26.600							
13.	Optical instruments and photographic equipment	26.700							
14.	Magnetic and optical media	26.800							
15.	Electric motors, generators, transformers and electricity distribution and control apparatus	27.100							
16.	Batteries and accumulators	27.200							

