Approved by the order of the Chairman of the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan

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no. 125

**Methodology for assessing the volume of illegal activities**

**Chapter 1. General provisions**

1. Methodology for assessing the volume of illegal activities   
(hereinafter - Methodology) refers to the statistical methodology, formed in accordance with international standards and approved in accordance with the Law of the Republic of Kazakhstan dated March 19, 2010 "On State Statistics".

2. This Methodology is applied by the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan (hereinafter **-** the Committee) in assessing the volume of illegal activities in accordance with international standards and for the purposes of the System of National Accounts (hereinafter - SNA).

3. The purpose of this Methodology is to assess the impact of illegal activities on sectors of the economy.

4. The SNA of 2008 prepared by the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations and the World Bank, and the unified Commodity Nomenclature of Foreign Economic Activity of the Eurasian Economic Union, approved by the Decision of the Council of the Eurasian Economic commission dated July 16, 2012 No. 54.

5. The following definitions are used in this Methodology:

1) intermediate consumption - the cost of goods and services that are transformed or completely consumed in the production process in the reporting period;

2) gross value added (hereinafter - GVA) - characterizes the final result of production activity and represents the value added by processing in this production process. Calculated at the level of industries as the difference between output and intermediate consumption, includes the cost of fixed capital consumed in the production process;

3) gross domestic product (hereinafter - GDP) - one of the most important indicators of the system of national accounts, characterizing the final result of the country's economic activity;

4) institutional unit - an economic unit that is capable of owning assets on its own behalf, incurring liabilities, participating in economic activities and entering into transactions with other units;

5) SNA - is a system of statistical indicators, built in the form of a specific set of accounts and tables that characterize the results of the country's economic activity.

6. The information base for assessing the volume of illegal activities are:

1) official statistical information;

2) administrative data from administrative sources.

**Chapter 2. Methodological approach to estimating the volume of illegal activities in accordance with the System of National Accounts 2008**

7. Non-observed activities include production activities that are not captured in the collection of information from the main sources used in the compilation of national accounts.

8. Unobserved activities are divided into the following groups: hidden (shadow), illegal, informal.

9. Illegal activities include the production of goods and services that are prohibited by law or which are illegal, when they are carried out by producers who do not have an appropriate license (permit) .

10. The criteria for illegal activity are the general criteria for classifying the type of activity in GDP calculations. The criteria for classifying activities as illegal are as follows:

1) coverage of the type of activity by the boundaries of the SNA production area:

the production of individual or collective goods and services provided to institutional units that are not their producers or intended to be provided, including the production of goods and services used in the production of goods and services;

production for own final use of goods held by their producers for own final consumption or gross capital formation;

production for own final consumption of housing services by persons living in their own dwellings, as well as domestic and personal services provided by hired paid servants;

2) violation of the legislation of the Republic of Kazakhstan.

11. Illegal activities are classified into the following two categories:

1) production of goods and services, the sale or possession of which is prohibited by the legislation of the Republic of Kazakhstan;

2) production of goods and services by producers who do not have an appropriate license (permit) or are not registered in the manner established by the legislation of the Republic of Kazakhstan.

**Chapter 3. Estimating the volume of illegal activities**

**Paragraph 1. Calculation of indicators of production of goods and services, the sale or possession of which is prohibited by the legislation of the Republic of Kazakhstan**

12. This Methodology considers the following types of production of goods and services, the sale or possession of which is prohibited by the legislation of the Republic of Kazakhstan:

drug business (production and distribution of heroin, cannabinoids, opium);

prostitution.

13. Illicit drug-related activities include domestic drug production, export and import, and drug delivery and sale to consumers.

14. Calculation of heroin consumption volumes:

, (1)

where:

**– drug consumption by all drug addicts per year (grams);

– number of drug addicts (persons);

– the average amount of narcotic drugs consumed per year by one drug addict (grams).

Next, the volume of imports into the country is estimated :

, (2)

where:

– import (grams);

– heroin consumption (grams);

– street purity of heroin (%);

– wholesale purity of heroin (%).

The main resulting indicator that is compared with GDP is GVA:

, (3)

where:

GVA - GVA (million tenge);

TM - trade margin (million tenge);

IC - intermediate consumption (million tenge).

Intermediate consumption in the drug business is negligible and is estimated at 10% of the trade margin.

To determine the trade margin, drug consumption and imports are recalculated in value terms. Drug imports are valued at wholesale prices, consumption is valued at retail prices.

, (4)

where:

TM - trade margin (tenge);

C - consumption (grams);

I – import of heroin (grams);

P r – retail price (tenge per gram);

P w - wholesale price (tenge per gram);

15. The calculation of the release of cannabinoids is formed with the condition that all domestic consumption of cannabinoids is met by domestic production.

, (5)

where:

– domestic production of marijuana and marijuana (tenge);

– number of drug addicts (persons);

– average amount of narcotic drugs consumed per year by one drug addict (grams);

– wholesale price of marijuana and marijuana (tenge per gram).

, (6)

where:

– GVA (million tenge);

– domestic production (million tenge);

– trade margin (million tenge);

– intermediate consumption (million tenge).

, (7)

where:

TM - trade margin (tenge);

C - consumption (grams);

P r – retail price (tenge per gram);

P w - wholesale price (tenge per gram);

16. The calculation of the output of opium is formed with the condition that the volume of drugs consumed is completely imported.

, (8)

where:

– import of opium (tenge);

– number of drug addicts (persons);

– average amount of narcotic drugs consumed per year by one drug addict (grams);

– wholesale price (tenge per gram).

The approach to determining the GVA and the trade margin is similar, as in other types of drugs.

, (9)

where:

– GVA (million tenge);

– trade margin (million tenge);

– intermediate consumption (million tenge).

, (10)

where:

TM - trade margin (tenge);

– import (grams);

– retail price (tenge per gram);

– wholesale price (tenge per gram).

17. Illicit activities related to prostitution are calculated on the basis of indicators: gross output, intermediate consumption, GVA.

Calculations are made from the bottom up due to the difference in prices for this type of service between different regions.

The main way to determine the output of prostitution services is to determine it from the supply side (resources) on the basis of data on the number of workers and their average earnings.

The release of prostitution services is determined in the amount of proceeds for the services rendered.

, (eleven)

where:

– release of prostitution services (tenge);

– number of employees (persons);

– average price for the service (tenge);

– number of visits per year (units).

The calculations use official data on registered and registered employees and adjustments for the number of people who are most likely to be employed in this type of activity.

Intermediate consumption of prostitution includes:

1) rent for a rented apartment used for customer service;

2) rent for premises, which is paid by the owners of   
sex salons, saunas, massage parlors;

3) expenses for clothes, cosmetics, contraceptives and special equipment;

4) expenses for transport, equipment and advertising (newspaper ads, website maintenance).

The share of intermediate consumption for this type of service is estimated at 30% of output. GVA is determined by subtracting intermediate consumption from output. The calculation of the production of narcotic goods and prostitution services is given in Appendix 1 to this Methodology.

**Paragraph 2. Calculation of indicators of production of goods and services by producers who do not have a license (permit) for this or are not registered in the manner established by the legislation of the Republic of Kazakhstan**

18. This Methodology considers the following types of production of goods and services by manufacturers who do not have an appropriate license (permit) or are not duly registered:

poaching;

production of illegal alcoholic products;

production of unauthorized copies of creative originals;

smuggling.

19. Poaching. This type of activity is divided into the following subtypes:

1. illegal logging;
2. illegal hunting;
3. illegal fishing.

Based on data on seized products (timber, animals), taking into account market prices, the output of illegal logging and illegal hunting is estimated.

, (12)

where:

– issue (tenge);

- the volume of confiscated products (m 3 or pieces);

- average price (tenge per 1 m 3 or piece).

As a share of intermediate consumption, data on intermediate consumption in the legal production of the relevant industry are used. GVA is calculated as the difference between output and intermediate consumption.

Estimates of illegal fishing are made on the basis of data on the production, export, import and consumption of fish in the country. By comparing consumption on the one hand (use) and the balance of domestic exports and production on the other (resources), data on illegal fishing are calculated.

The products under consideration include the following headings: "Live fish", "Fish fresh or chilled, with the exception of fish fillets and other fish meat", “Frozen fish, except for fish fillets and other fish meat”, “Fish fillets and other fish meat (including minced meat), fresh, chilled or frozen”, “Dried, salted or in brine fish; hot or cold smoked fish; fine and coarse fish meal and fish pellets suitable for Person consumption.

When determining production, data on the production of products in the manufacturing industry for the position “Fish, fresh, chilled or frozen” are used.

When calculating the volume of illegal fishing, the volume of legal production of fish products is determined:

, (13)

where:

– legal production of fish products in the country (thousand tons);

– domestic production (thousand tons);

– import (thousand tons);

– export (thousand tons);

– fish catch (thousand tons).

The total consumption of fish products in the country is determined based on per capita fish consumption data.

, (14)

where:

– illegal fishing (thousand tons);

– total fish consumption in the country (thousand tons);

– legal production of fish products in the country (thousand tons).

When distributing illegal fishing by region, the structure of fish consumption obtained from household surveys is used.

When assessing illegal fishing in value terms, an expert assessment of the cost of fish is used. When calculating intermediate consumption, the share of intermediate consumption by type of activity "Fisheries and aquaculture" is used. GVA is defined as the difference between gross output and intermediate consumption.

20. Production of illegal alcoholic products. The assessment of illegal production of alcoholic beverages is based on data on the production, export, import and consumption of alcoholic beverages in the country. By comparing consumption on the one hand (use) and the balance of exports and domestic production on the other hand (resources), data on the illegal production of alcoholic beverages are calculated.

When assessing the illegal production of alcoholic products, the following commodity items are considered: Whiskey, Rum and Taffia, Gin and Juniper tincture, Other alcoholic beverages.

The physical volume of alcoholic products is converted into alcohol with   
40% alcohol content.

When calculating the volume of illegal production of alcoholic products, the volume of legal production of alcoholic products is determined:

, (15)

where:

– legal production of alcoholic beverages in the country (thousand liters);

– domestic production (thousand liters);

– import (thousand liters);

– export (thousand liters).

, (16)

where:

– illegal production (thousand liters);

– total consumption (thousand liters);

– legal production (thousand liters).

When distributing illegal production of alcoholic beverages by region, the structure of household expenditures on alcohol, obtained as a result of household surveys, is used.

In value terms, illegal production of alcoholic beverages is estimated by regions at vodka prices below market prices. When calculating intermediate consumption, the proportion of intermediate consumption for the type of activity "Production of beverages" is used. GVA is defined as the difference between gross output and intermediate consumption. The calculation of indicators of the production of goods and services by producers who do not have a license (permit) for this or who are not duly registered is given in Appendix 2 to this Methodology.

21. Production of unauthorized copies of creative originals. The SNA covers illegal copying of copyrighted material for the purpose of resale. The release is the value of the seized counterfeit products seized in accordance with the legislation of the Republic of Kazakhstan. When calculating intermediate consumption, the shares of intermediate consumption from legal production in the Information and Communications sector are used. GVA is determined by the difference between output and intermediate consumption.

22. Smuggling. As a release, data on the amount of seized goods are used. The intermediate consumption of trade in smuggled goods is estimated as a share of output, and the corresponding GVA value as the difference between output and intermediate consumption. When calculating the intermediate consumption of contraband, the share of intermediate consumption from the industry “Wholesale and retail trade; car and motorcycle repair. The calculation of indicators of seized counterfeit goods and unauthorized copies of creative originals and seized contraband is given in Appendix 3 to this Methodology.

Appendix 1

to the Methodology for assessing the volume of illegal activities

**Calculation of the production of narcotic goods and services of prostitution**

***1) Heroin***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Heroin** | Number of drug addicts | Dose | Average amount of narcotic drug consumed per year by one drug addict | Consumption | Street cleanliness | Purity wholesale | wholesale price | retail price |
| Person | gram | gram | gram | % | % | tenge | tenge |
| 1 | 2 | 3=365 days×2 | 4=1×3 | 5 | 6 | 7 | 8 |

*continuation*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Heroin** | Import volume | Import | Trade margin | final consumption | Intermediate consumption expenditure | GVA |
| gram | million tenge | million tenge | million tenge | million tenge | million tenge |
| 9=4×(5/6) | 10=9×7/1000000 | 11=(4×8 - 7×9)/ 1000000 | 12=4×8/1000000 | 13=11×0.1 | 14=11 - 13 |

***2) Cannabinoids (hashish, marijuana)***

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Cannabinoids (hashish, marijuana)** | Population aged 7-55 | 1.4% of the population aged 7-55 | The number of drug addicts who use cannabinoids intensively | Number of drug addicts who use cannabinoids regularly | Dose for drug addicts who use cannabinoids intensively | Dose for drug addicts who use cannabinoids regularly | Average amount of drug consumed per year by one drug addict (intensive) | Average amount of drug consumed per year by one drug addict (regularly) |
| Person | Person | Person | Person | gram | gram | grams  (6 times a week) | grams  (1 time per week) |
| 1 | 2 | 3 | 4=2-3 | 5 | 6 | 7=312 days×5 | 8=52 days×6 |

*continuation*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Consumption | wholesale price | retail price | domestic production | Trade margin | final consumption | Intermediate consumption expenditure | GVA |
| gram | tenge | tenge | million tenge | million tenge | million tenge | million tenge | million tenge |
| 9=3×7+4×8 | 10 | eleven | 12=9×10/1000000 | 13=9×(11 - 10)/ 1000000 | 14=9×11/1000000 | 15=13×0.1 | 16=12+13 - 15 |

***3) Opium***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Opium** | Number of drug addicts | Dose | Average amount of drug consumed per year by one drug addict | Consumption | wholesale price | retail price |
| Person | gram | gram | gram | tenge | tenge |
| 1 | 2 | 3=365 days×2 | 4=1×3 | 5 | 6 |

*continuation*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Opium** | Import | Trade margin | final consumption | PP expenses | GVA |
| million tenge | million tenge | million tenge | million tenge | million tenge |
| 7=4×5/1000000 | 8=4×(6-5)/1000000 | 9=4×6/1000000 | 10=9×0.1 | 11=8-10 |

***4) Prostitution***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Prostitution** | Persons engaged in prostitution | Average price per service | Number of visits per year (expert) | Release | Intermediate consumption | GVA |
| Person | tenge | units | million tenge | million tenge | million tenge |
| 1 | 2 | 3= 300 days×3 visits per day | 4=1×2×3/1000000 | 5=4×30% | 6=4 - 5 |

Appendix 2

to the Methodology for assessing the volume of illegal activities

**Calculation of indicators of production of goods and services by producers who do not have a license (   
permit ) for this or are not registered in the prescribed manner**

**Poaching**

***1) Illegal logging***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Illegal logging** | Volume of seized wood | Average price per m 3 of wood | The cost of the removed wood | Share of intermediate consumption | Intermediate consumption | GVA |
| m 3 | tenge | tenge | % | tenge | million tenge |
| 1 | 2 | 3=1×2 | 4 | 5=3×4% | 6=(5 - 3)/1000000 |

***2) Illegal hunting***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **illegal hunting** | Number of seized saiga horns | Average price for 1 piece | The value of seized saiga horns | Share of intermediate consumption | Intermediate consumption | GVA |
| things | tenge | tenge | % | tenge | million tenge |
| 1 | 2 | 3=1×2 | 4 | 5=3×4% | 6=(5-3)/1000000 |

***3) Illegal fishing***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Illegal fishing** | Fish production | Fish export | Import of fish | fish catch | Legal production of fish | Fish consumption in the country | Illegal fishing |
| thousand tons | thousand tons | thousand tons | thousand tons | thousand tons | thousand tons | thousand tons |
| 1 | 2 | 3 | 4 | 5=1-2+3+4 | 6 | 7=6-5 |

*continuation*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Illegal fishing** | Average price per 1 kg of fish | Structure of fish consumption by regions | Illegal production | Illegal production | Share of intermediate consumption (% of legal production) | Intermediate consumption | GVA |
| tenge | % | thousand tons | million tenge | % | million tenge | million tenge |
| 8 | 9 | 10=7×9% | 11=10×8×1000/1000000 | 12 | 13=11×12% | 14=11-13 |

**Production of illegal alcoholic products**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Production of illegal alcoholic products** | Production of 40% alcohol | Export of 40% alcohol | Import of 40% alcohol | Legal production of 40% alcohol | Consumption of 40% alcohol per capita | Population aged 15 and over | Alcohol consumption | Illegal production |
| thousand liters | thousand liters | thousand liters | thousand liters | liter | Person | thousand liters | thousand liters |
| 1 | 2 | 3 | 4=1-2+3 | 5 | 6 | 7=5×6/1000 | 8=7-4 |

*continuation*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Production of illegal alcoholic products** | Average price for 1 liter of vodka | Average price for 1 liter of vodka (expert assessment) | Structure of household expenditures on alcohol by regions from total expenditures in the country | Illegal production | Illegal production | Share of intermediate consumption (% of legal production) | Intermediate consumption | GVA |
| tenge | tenge | % | thousand liters | million tenge | % | million tenge | million tenge |
| 9 | 10=9×0.9 | eleven | 12=11×8% | 13=10×12×1000/1000000 | 14 | 15=14×13% | 16=13-15 |

Appendix 3

to the Methodology for assessing the volume of illegal activities

**Calculation of seized counterfeit goods and unauthorized copies of creative originals and seized contraband**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seized counterfeit goods and unauthorized copies of creative originals** | The cost of seized counterfeit products | Share of intermediate consumption | Intermediate consumption | GVA |
| million tenge | % | million tenge | million tenge |
| 1 | 2 | 3=1×2% | 4=1 - 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Seized contraband** | The value of the seized products | Share of intermediate consumption | Intermediate consumption | GVA |
| million tenge | % | million tenge | million tenge |
| 1 | 2 | 3=1×2% | 4=1 - 3 |