



**Palestinian National Authority
Palestinian Central Bureau of Statistics
Economic Statistics Directorate**

**The Services Survey – 2008
User's Guide Raw Data**

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Concepts and Definitions

This chapter presents the definitions of the concepts used in the preparation of the survey tools on which data collection and processing are based. These concepts and their definitions are based on international recommendations in the fields of economic statistics and national accounts while taking into account the particular aspects of the Palestinian Territory.

Statistical Unit

It is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities.

Persons Engaged

Males and females working in the enterprise including owners, self-employed, unpaid family members, or waged workers who receive their compensations in cash or in kind during a specific reference period. However, this term does not include trainees or those on assignments outside the enterprises or in long unpaid leaves.

Output

It is the value of the final products of goods and services produced by a certain establishment which is used by other units for self-consumed or for the purposes of self gross fixed capital formation. Production includes two categories: Final products and the so-called (under operating products). Production can be classified as follows: Market outputs, Outputs of private account, and other non-market outputs.

Intermediate Consumption

It is the value of the goods and services consumed as inputs, used up or transformed during the production process. It is measured during a specific period in time in a way similar to measuring production. Intermediate consumption is estimated by purchase price, which is defined as the producers' price plus transportation and wholesale and retail trade margins. The value of the gross intermediate consumption on the level of the total economy is the same whether calculated by purchase or producers' price. However, on the detailed level, the two evaluations vary.

Value Added

Value added is a central concept of production and refers to the generated value of any unit that carries out any productive activity. Gross value added is defined as the value of gross production less the value of intermediate consumption.

Compensations of Employees

Compensation of employees is the total remuneration, in cash or in kind, including social security contributions, payable by an enterprise to an employee in return for work done by the latter.

Taxes on Product

Those are taxes that are compulsory cash or in kind payments payable by producers to the general government. It consists of taxes on products payable on goods and services at production, sale, or exchange and other taxes payable on production by resident producers as a result of carrying out the production process.

Assets

It is tangible or intangible (computer software, artistic original) that comes as an output of the production process .It is used frequently or continuously in other production process for more than one year period.

Depreciation

It is the value of the assets which can be reproduced and depreciated during the year, depreciation is calculated on the current substitutive value.

Operating surplus

Value added minus (compensation of employees plus net taxes on production minus subsidies and custom fees plus depreciation).

Gross Fixed Capital Formation

It is the value of what producers own less what they spend on new and used capital goods.

Main Economic Activity

Is the main work of the enterprise based on the (ISIC, rev3) and that contribute by the large proportion of the value added, whenever more than one activity exist in the enterprise.

West Bank:

Means West Bank excluding those parts of Jerusalem which were annexed by Israel in 1967.

Jerusalem (J1):

those parts of Jerusalem which were annexed by Israel in 1967.

Survey Questionnaire

They are tow forms of the services survey questionnaire 2008 of West Bank , the first one is related to household and branches, and the second is related to non-finance companies sector.

The questionnaire contains of the following main variables:

1. Number of employees in a company and their compensations.
2. The output of the main and second activities.
3. Goods production inputs.
4. Various payments and transfers.
5. Indirect taxes.
6. Enterprises assets.

Due to the political conditions in Gaza Strip and Jerusalem (J1), there was a very brief model of the questionnaire, in order to collect basic data required for national accounts and without any details.

Data Sets Linkage

Consists of the data file in this CD-ROM from three groups:

1.) There are 13 data file for west bank in this CD-ROM, with one key variable in each file to allow the linkage between these files. The following table describes the files names content and identification variables.

File Name	Content	Identification Variables
Identification data	Identification data	Est_no: enterprises number
Fixed Assets	Data about enterprise assets.	Est_no: enterprises number
Good purchased for resale	Purchasing goods for selling purpose.	Est_no: enterprises number
Employment and remuneration	Persons engaged and their compensations	Est_no: enterprises number
Various payments and Transfers	Various payments and transfers	Est_no: enterprises number
Other Production expenditures	Other output expenses	Est_no: enterprises number
Commodity Product	Goods productions	Est_no: enterprises number
Other Production Inputs	Goods Production Inputs	Est_no: enterprises number
Revenues of services Rendered to Others	Revenues of Services Rendered to Others	Est_no: enterprises number
Taxes on production and fees	Taxes on production and fees	Est_no: enterprises number
Fuel and Oil	Production Inputs Fuel and oil	Est_no: enterprises number
Various Transfers and Revenues	Various transfers and revenues	Est_no: enterprises number
Electricity and water	Electricity and water	Est_no: enterprises number

2.) Data for Gaza Strip, it collect 9 data file with one key variable in each file to allow the linkage between these files. The following table describes the files names content and identification variables.

File Name	Content	Identification Variables
Identification Data	Identification data	Est_no: Enterprise Number
Fixed Assets	Data about enterprise Fixed assets.	Est_no: Enterprise Number
Goods Purchased for Resale	Purchasing goods for selling purpose.	Est_no: Enterprise Number
Employment and Remuneration	Persons engaged and their compensations	Est_no: Enterprise Number
Other Production Expenditures	Other output expenses	Est_no: Enterprise Number
Commodity Product	Goods productions	Est_no: Enterprise Number
Other Production Inputs	Goods Production Inputs	Est_no: Enterprise Number
Revenues of Services Rendered to Others	Revenues of Services Rendered to Others	Est_no: Enterprise Number
Taxes on production and fees	Taxes on production and fees	Est_no: enterprises number

3.) Jerusalem (J1), it collect 8 data file with one key variable in each file to allow the linkage between these files. The following table describes the files names content and identification variables.

File Name	Content	Identification Variables
Identification Data	Identification data	Est_no: Enterprise Number
Fixed Assets	Data about enterprise Fixed assets.	Est_no: Enterprise Number
Goods Purchased for Resale	Purchasing goods for selling purpose.	Est_no: Enterprise Number
Employment and Remuneration	Persons engaged and their compensations	Est_no: Enterprise Number
Other Production Expenditures	Other output expenses	Est_no: Enterprise Number
Other Production Inputs	Goods Production Inputs	Est_no: Enterprise Number
Revenues of Services Rendered to Others	Revenues of Services Rendered to Others	Est_no: Enterprise Number
Taxes on production and fees	Taxes on production and fees	Est_no: enterprises number

Target Population

PCBS depends on the International and Industrial Classification of all economic activities, version 3, (ISIC – 3) by the United Nation to classify the economic activities. All enterprises and establishments are classified according to the Establishments Census 2007, which works in agreement with (ISIC – 3).

The services survey covers the following activities:

1. Hotels and Restaurants
2. Real Estate, Renting and Business Activities
3. Education
4. Health and Social Work
5. Other Community, Social and Personal Service Activities

Sample and Frame

The sample of the Services Survey is a single-stage stratified random - systematic sample in which the enterprise constitutes the primary sampling unit (PSU). Three levels of strata were used to arrive at an efficient representative sample (i.e. economic activity, size of employment and geographical levels). The sample size amounted to (2,370) enterprises out of the (24,277) enterprises that comprise the survey frame in the Palestinian Territory.

Weighting and Estimation

Weighting Procedure:

The sampling weight of the enterprise is the mathematical turned of the possibility selection of that enterprise. It is necessary to use weights in the estimation of the survey society because of the differentiation in the possibility of enterprises' selection from another one.

Estimation Procedure:

To calculate a variable as Y in a partial society as A on a study as D, we use the following:

$$\hat{Y}_{AD} = \sum_h^D \sum_{J \in A} W_{hj} Y_{hj} \dots (1)$$

\hat{Y}_{AD} : it the estimated sum of the variable Y in a partial society A in a study D.

h: Strata code.

J: the register code in the data file of the partial society A.

A: a partial group from the registers related to a specific partial society.

D: a study scope as a specific governorate.

W_{hj} : the weight of the analytical unit No. "j" in a partial society A in a strata h in a study

D.

Calculation of Variance

It is necessary to associate with an estimated statistical number by a sampling survey another one, which refers to the existing accuracy in the estimation.

The variance differ from one variable to another depending on:

1. Sample size.
2. The extent of the real variance for all society units unknown and could be estimated by comprehensive census for all society units, sample survey or pilot survey.
3. Sample design: Simple random sample or stratified random sample

CENVAR program is used for estimation. The following measures are used for the main economic indicators:

1. Standard Error: The error appeared as a result of sample survey not comprehensive survey.
2. Coefficient of Variation = $\frac{\text{Standard Error}}{\text{Estimation}}$
3. DEFF = $\frac{\text{The variance by a compound sample}}{\text{The variance by a simple random sample}}$
4. 95% Confidence Interval: Whether the survey is performed once or many times the confidence interval will remain the 95%

Reference Date

It is the period which data are gathered about, the period of this data is 2008 (1/1/2008 – 31/12/2008).

Data Collecting

Workers Selection and Training:

The interviewers in the fieldwork are selected from the experienced ones in the statistical work and they are also trained theoretically and practically.

Fieldwork operations:

They are initiated after the recruitment and training of qualified interviewers. The PCBS's Fieldwork Directorate administers fieldwork activities including interviewing activities.

Data Gathering Method:

Data are gathered by using an interview with the enterprise owner or general manager by applying the survey questionnaire.

Fieldwork Editing:

The interviewer and supervisor firstly edit technically the questionnaire according to editing rules.

Office Editing:

The office editor also edits the questionnaire in order to be ready to be sent to coding and data entry.

Coding:

After the editor finishes editing the questionnaire, a coding are used according to (ISIC – 3), then the questionnaire is transferred to data entry.

Response Rate**A: Non response:**

1. Completely Closed.
2. Temporarily closed
3. Could not reach the address
4. Refusal
5. The Balance isn't ready
6. Israeli Ownership
7. Different Ownership
8. Other

B: Over Coverage:

1. Enterprises practice economic activities out of the survey.
2. Repeated
3. Central government
4. Agricultural Appropriation
5. Branch Keep No Records
6. Isn't an Establishment as Recognized
7. Branch Keeps Records & the Center Out of the Sample

C: Net Sample

$$= \text{Sample} - \text{Over Coverage}$$

D: Over coverage ratio mistakes

$$= \frac{\text{sum of over coverage stages}}{\text{Sample stages}} * 100\%$$

E: Non response

$$= \frac{\text{non response stages}}{\text{Net sample}} * 100\%$$

F: Response ratio

$$= 100\% - \text{non response ratio}$$

Values of Response Rates:

The original sample of the Palestinian Territory is (2,388) enterprise with transfer establishments from other activities. and the number of completed questionnaires are (1886).

- The response ratio is (83.5%).
- The over coverage ratio is (5.4%).
- The non response ratio is (16.5%).

Data Quality

Accuracy of the Data:

Statistical Errors:

The findings of the survey are affected by statistical errors due to using sampling in conducting the survey for the units of the target population, which increases the chances of having variances from the actual values we expect to obtain from the data had we conducted the survey using comprehensive enumeration.. The variance of the key goods in the survey was computed and dissemination was carried out on the level of the Palestinian Territory for reasons related to sample design and computation of the variance of the different indicators.

Variance Account of Services Survey in the Palestinian Territory Level, 2008

Variable	Estimate		Standard Error	CV	95% Confidence interval	
	Unit	Value			Lower	Upper
Number of Persons Engaged	Number	73431	1480.4	0.020	70527	76334
Output	US\$ 1000	895223.5	45992.9	0.051	805016.8	985430.2
Gross Value Added	US\$ 1000	659032.8	41572.9	0.044	577495.1	740570.6
Intermediate Consumption	US\$ 1000	236190.6	10395.8	0.063	215801.1	256580.1

The preceding table shows the variation of the most distinct variables, where it indicates to institutions with activities that have been withdrawn sample for the Palestinian Territory.

Non-Statistical Errors

These types of errors could appear on one or all the survey stages that include data collection and data entry:

Response rate values:

- Sample size was 2,388 institution in the Palestinian Territory.
- Non-response cases was 373.
- Over coverage cases was 129.
- Net sample= 2,388-129= 2,259.

Response errors: these types of errors are related to, responders, fieldworkers, and data entry personnel's. And to avoid mistakes and reduce the impact has been a series of actions that would enhance the accuracy of the data through a process of data collection from the field and the data processing.

Fieldwork

- Selection of specialized fieldwork team of economic back ground, the team was trained theoretically and practically on the survey questionnaire.
- The main fieldwork team was selected according to the training course.
- Field work visits by both fieldwork and project management staff for monitoring and following up data collection process and progress of work, An average of two visits for each governorate, a bout 90% of completed questionnaires was reviewed and corrected if needed, comments and notes were directed to the team accordingly.
- Different levels of supervision and monitoring took place according to the following division:
 - Fieldworkers
 - Fieldworkers supervisors
 - Fieldwork coordinator. (Each of them has responsibilities in monitoring)
- Project management receive a daily progress report about completeness and response.
- Conducting a refreshment training course during the stage of data collection for emphasizing the main issues of training and answering questions of fieldworkers about issues faced them in the field.
- We made another visit to some institutions which were visited by the researchers to confirm the accuracy of the data that have been given to researchers and that called the interview, these institutions has been selected randomly by withdrawing a random sample of 5% of the original sample of the survey, and then the data were compared with data from series surveys.

Data processing:

For insuring quality and consistency of data a set of measures were taken into account for strengthening accuracy of data as follows:

- Preparing data entry program before data collection for checking readiness of the program for data entry.
- A set of validation rules were applied on the program for checking consistency of data.
- Efficiency of the program was checked through pre-testing in entering few questionnaires, including incorrect information for checking its efficiency, in capturing these information.
- Well trained data keyers were selected and trained for the main data entry.
- Weekly or biweekly data files were received by project management for checking accuracy and consistency, notes of correction are provided for data entry management for correction.

Notes on Data:

1. Note that there are some economic activities to reduce second ISIC has been collecting data with the previous activity, due to maintain the confidentiality of data provided by the law of statistics for 2000.
2. Financial data was collected by NIS, US \$ and JD.

Exchange rates:

$$\text{US \$ / NIS} = 3.5816$$

$$\text{US \$ / JD} = 0.7045$$

Derived Variables

- Compensation per paid employee $= \frac{\text{Compensation of Employees}}{\text{No. of paid employees}}$
- Output per person engaged $= \frac{\text{Output}}{\text{Persons engaged}}$
- Output per paid employee $= \frac{\text{Output}}{\text{No. of paid employees}}$
- Value added per person engaged $= \frac{\text{Value added}}{\text{No. of persons engaged}}$
- Value added per paid employee $= \frac{\text{Value added}}{\text{No. of paid employees}}$
- Value added to output $= \frac{\text{Value added}}{\text{Output}} \times 100$
- Compensation to value added $= \frac{\text{Compensation of employees}}{\text{Value added}} \times 100$
- Depreciation to output $= \frac{\text{Annual depreciation}}{\text{Output}} \times 100$