



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

**The Services Survey – 2011  
User's Guide**

## **Table of Contents**

Concepts and Definition

Survey Questionnaire

Data Set linkage

Target Population

Sample and Frame

Weighting and Estimation

Calculation of Variance

Reference Date

Data Collecting

Response Rate

Data Quality

## Concepts and Definitions

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

### **Statistical Unit:**

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

### **Employed Persons:**

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, those on assignments outside the enterprises, or on long unpaid leave.

### **Output:**

This is the value of the final products of goods and services produced by an establishment, which is used by other units as 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:**

The value of the goods and services consumed as inputs and used or transformed during the production process. It is measured during a specific period of 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 gross intermediate consumption with respect to the total economy is the same whether calculated by purchase or producers' price. However, on a 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.

### **Compensation 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:**

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

**Assets:**

These are tangible or intangible (computer software, artistic, original) and are an output of the production process. They are used frequently or continuously in other production processes for longer than a one-year period.

**Depreciation:**

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

**Gross Fixed Capital Formation:**

This is the total value of producers' acquisitions less disposals of fixed assets during the accounting period, plus certain additions to the value of non-produced assets released by the productive activity of institutional units. Fixed assets are tangible or intangible assets produced from the production process that are themselves used repeatedly or continuously in other processes of production for more than one year.

**Main Economic Activity:**

This is the main work of the enterprise based on the (ISIC, rev4) and that contribute to the large proportion of the value added, whenever more than one activity exists in the enterprise.

## Survey Questionnaire

They are one forms of the services survey questionnaire 2011 of the Palestinian Territory, it's related to household and branches, and the non-financial companies sector. The questionnaire contains the following main variables:

1. The persons engaged in enterprise and compensation of these employees.
2. Value of output from the main activity and secondary activity.
3. Production inputs of goods and services.
4. Payments and transfers.
5. Taxes on production.
6. Assets and capital formation.

## Data Sets Linkage

In this CD-ROM there are 12 data file of Services questionnaire, related with one key variable (enterprises number ) in each file to allow the linkage between these files. The following table describes the files names content and identification variables.

<b>File Name</b>	<b>Content</b>	<b>Identification Variables</b>
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 Compensation	Employed persons 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
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
Various Transfers and Revenues	Various transfers and revenues	Est_no: enterprises number
Fuel and oil	Fuel and oil	Est_no: enterprises number

## **Target Population**

PCBS depends on the International and Industrial Classification of all economic activities, version 4, (ISIC – 4) 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 – 4).

The services survey covers the following activities:

1. Hotels and restaurants activities.
2. Real estate activities.
3. Professional, scientific and technical activities.
4. Administrative and support service activities.
5. Education.
6. Human health and social work activities.
7. Arts, entertainment and recreation activities.
8. Other 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). Four levels of strata were used to arrive at an efficient representative sample (i.e. economic activity, size of employment and geographical levels. The kind profit or non profit).

**This methodology was used to draw a sample middle enterprises and whole frame for large enterprises based on the framework of large and middle enterprises alone; for small enterprises data were estimated based on a time series of the results of economic surveys.**

## 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:

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

$\hat{Y}_{AD}$  : 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

### Variance Account of Services Survey of Large and Middle Enterprises over the Palestinian Territory, 2011

Variable	Estimate		Standard Error	CV	95% Confidence Interval	
	Unit	Value			Lower	Upper
Number of Employed Persons	Number	43,382	1,179.2	2.7%	41,070.5	45,694.7
Output	US\$ 1000	810,322.3	30,521.8	3.8%	750,477.4	870,167.2
Gross Value Added	US\$ 1000	146,952.5	6,258.8	4.3%	134,680.7	159,224.3
Intermediate Consumption	US\$ 1000	663,369.8	27,679.7	4.2%	609,097.5	717,642.2

## Reference Date

It is the period which data are gathered about, the period of this data is 2011 ( 1/1/2011 – 31/12/2011).

## 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 – 4), then the questionnaire is transferred to data entry.

## Response Rate

**A: Non response:**

1. Completely closed after or through 2011.
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. Completely closed before 2011.
2. Enterprises practice economic activities out of the survey.
3. Repeated
4. Central government
5. Agricultural Appropriation
6. Branch Keep No Records
7. Isn't an enterprise as Recognized

**C: Net Sample** = Sample – 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% - non response ratio

**Response rate values:**

- Sample size in 2011 of services sector was 1,406 enterprises (including economic activity change) in the Palestinian Territory:
- Non-response cases: 243
- Over coverage cases: 150
- Net sample: 1,406- 150= 1,256

- Response rate: 80.7%
- Non-response rate: 19.3%.

## **Data Quality**

### **1. Accuracy of the Data:**

#### **1.1 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.

#### **2.1 Non-Statistical Errors**

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

### **2. Comparability**

The data are compatible with ISIC-4 on economic activities, whereas previous reports published adhered to ISIC-3 of economic activities.

### **3. Data Quality Control**

#### **1.3 Fieldwork**

- A specialized fieldwork team with a background in economics was selected and, trained theoretically and practically on the surveys' questionnaire.
- The main fieldwork team was selected based on skills acquired from the training course.
- Field work visits were made by both fieldwork and project management staff to monitor and follow up the data collection process and the progress of work. Around 95% of completed questionnaires were 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 with monitoring responsibilities.)
- Project management received a daily report on progress and response rates
- A refresher training course was conducted during the stage of data collection to reinforce the main points made in training and to answer questions by fieldworkers about issues faced in the field.
- Some institutions were visited by field workers for a second time to confirm the accuracy of the data obtained in the first interview. These institutions were selected at random by

withdrawing a random sample of seven percent of the original sample of the survey and these data were compared with data from the series surveys.

### **2.3 Data Processing**

To ensure the quality and consistency of data, a set of measures was introduced as follows:

- Creation of a data entry program prior to the collection of data to ensure this would be ready.
- A set of validation rules were applied to the program to check the consistency of data.
- The efficiency of the program was pre-tested by entering a few questionnaires, including incorrect information, and checking its efficiency in capturing the incorrect information.
- Well-trained data entry personnel were selected and trained for main data entry.
- Weekly data files were received by project management to be checked for accuracy and consistency: correction notes were provided to data entry management for implementation.

### **4. Notes on Data**

1. Financial data were collected in NIS, US \$ and JD.
2. The services survey covers profit, non-profit enterprises, and output of non-profit enterprises in the National Accounts System 1993 (SNA 93) equal to the value of intermediate consumption and the value of employee compensation, in addition to the value of net taxes and fees on production and the value of depreciation of fixed assets.
3. Data were rehabilitate services activities for large and middle enterprises only, while small enterprises not rehabilitating data because it were estimated based on a time series of the results of economic surveys. and not collect there data from fieldwork.

### **5. Exchange rates**

US \$ / NIS = 3.5784

US \$ / JD = 0.7056