



Palestinian Central Bureau of Statistics
Economic Surveys Series

Construction Contractors' Survey – 2011

User's Guide

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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 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 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

All of the economic surveys series used the same questionnaire, with a few different characteristics for each survey. The design of the 2011 questionnaire takes into account the major economic variables pertaining to the sector examined and the needs to be met to compile the National Accounts for Palestine.

The questionnaire included these 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 Set Linkage

Data in this CD-ROM divided for two group: Data for questionnaire, it collect 14 data file with one key variable (Enterprise number) 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
Good purchased for resale	Purchasing goods for selling purpose.	Est_no: Enterprise number
Employment & Employees Compensations	Employed Persons and their compensations	Est_no: Enterprise number
Various payments and transfers	Various payments and transfers	Est_no: Enterprise number
Other Production Expenditures	Other output expenses	Est_no: Enterprise number
Goods 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
Fees and Taxes on Production	Taxes on Production	Est_no: Enterprise number
Various payments and transfers	Various transfers and revenues	Est_no: Enterprise number
Fuel and Oil	OIL and fuel	Est_no: Enterprise number
Commodity Products	Commodity Products	Est_no: Enterprise number
Dues of the contractors branches during the year survey	Data about dues of the contractors branches during the year survey	Est_no: Enterprise number
Output from the main activity	Data about output from the main activity	Est_no: Enterprise 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).

Construction survey covers all establishments of the following main activities:

1. Construction of buildings (41).
2. Civil engineering (42).
3. Specialized construction activities (43).

Sample and Frame

The sample of the economic surveys series 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 draw up an efficient representative sample (i.e., economic activity, size of workforce and geographical location).

This methodology was used to draw a sample of 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 Calculation:

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 Calculation:

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

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

\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.

Whj: the weight of the analytical unit No. "j" in a partial society A in a strata h in a study D.

Variance Calculation

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.

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

Variable	Estimate		Standard Error	C.V	95% Confidence Interval	
	Unit	Value			Lower	Upper
Number of Employed Persons	Number	5,786	336.9	5.8%	5,125.9	6,446.9
Output	US\$ 1000	342,719.6	17,557.4	5.1%	308,294.3	377,144.8
Gross Value Added	US\$ 1000	196,462.1	12,149.7	6.2%	172,640.0	220,284.2
Intermediate Consumption	US\$ 1000	146,257.5	7,832.3	5.4%	130,900.4	161,614.5

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 of which:

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 of which:

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 Establishment as Recognized

C: Net Sample = Sample – Over Coverage

D: Over coverage ratio mistakes = $\frac{\text{sum of over coverage stages}}{\text{Sample}} * 100\%$

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 was 164 enterprises (including economic activity change) in the Palestinian Territory:
- Non-response cases: 28
- Over coverage cases: 8
- Net sample: 164-8= 156
- Response rate: 82.1%
- Non-response rate: 17.9%

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 Palestinian Territory for reasons related to sample design and computation of the variance of the different indicators.

1.2 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

3.1 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 original sample of the survey and these data were compared with data from the series surveys.

3.2 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, USD and JD.
2. Data were rehabilitate Industrial 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

USD / NIS = 3.5784

USD / JD = 0.7056