



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

**The Palestinian Expenditure and Consumption  
Survey (PECS) 2007**

## **Table of Contents**

Concepts and Definition  
Survey Questionnaire  
Data Set Linkage  
Target Population  
Sample and Frame  
Estimation and weights Procedure  
Calculation of Variance  
Reference Date  
Data Collection  
Data Processing  
Response Rate  
Data Quality  
Derived variables

## Concepts and Definitions

### **Household:**

One person or group of two or more persons with or without a family relationship who live in the same dwelling unit, who share meals and make joint provisions for food and other essentials of living.

### **Head of household:**

The person who usually lives with the household and is recognized as head of household by its other members. Often, he/she is the main decision-maker and is responsible for financial support and welfare of the household.

### **Expenditure:**

Includes the following:

- Cash spent on purchase of goods and services for living purposes.
- The value of goods and services payments or part of payments received from the employer.
- Cash expenditure spent as taxes (non-commercial or non-industrial), gifts, contributions, interests on debts and other non-consumption items.

### **Consumption:**

Includes the following:

- Cash spent on purchase of goods and services for living purposes.
- The value of goods and service payments or part of payments received from the employer.
- Own-produced goods and food, including consumed quantities during the recording period.
- Estimated rent value of the owned dwelling.

### **Survey period:**

This survey was executed through the period 15/1/2007 and 14/1/2008, the survey period is one sunny moon for each household, start at the middle of the month and end in the next month middle.

### **Recording period:**

The temporal point during which data on household expenditure and consumption are recorded. It includes one month for record keeping, and twelve months for the last visit interview on durable goods.

### **Dependency ratio:**

It is number of dependent household members divided by number of independent household members.

*dependent:* household members 14 years of age old or less and members 65 years of age or more

*independent:* household members' between 15 years of age and 64 years of age

### **Level of Living:**

= Food Consumption divided by Total Consumption.

This indicator is based on the following assumption: the Level of Living is identified by the proportion of consumption on food out of the total consumption (Angles Law of Poverty).

It is distributed to three categories:

- Better-off: "Food Consumption to Total Consumption less than 30%"
- Middle category: "Food Consumption to Total Consumption between 30-44%"
- Worse-off: "Food Consumption to Total Consumption between 45-100%"

**Other non-consumption expenditure:**

Interests on loans, fees and taxes.

**Other non-food consumption, goods and services expenditure:**

Financial and legal services, advertisement fees, copy services, translation and printing, writing and drawing equipment, tickets for traveling abroad, jewelry, watches, precious stones, etc.

**Income:**

Cash or in kind revenues for individual or household within period of time could be a week or a month or a year

**Main Source of Income:**

The more Consistency and regularity income. The sources of income are:

- Wages and Salaries.
- Net Income for employers or self employed.
- Net property Income.
- Net current Transfers.

**Lorenz Curve:**

It is usually used to measure inequalities in the distribution of wealth or income. To plot the curve, the units are first either arrayed individually or grouped in class intervals according to the appropriate independent variate. Then the cumulative percentage of the number of areas (Y) is plotted against the cumulative percentage of population (X). For comparison a diagonal line is drawn at 45 degree to show the condition of equal distribution. The Gini concentration ratio measures the proportion of the total area under the diagonal that lies in the area between the diagonal and the Lorenz Curve.

## Survey Questionnaire

The PECS questionnaire consists of two main sections:

**First section:**

Certain articles / provisions of the form filled at the beginning of the month, and the remainder filled out at the end of the month. The questionnaire includes the following provisions:

**Cover sheet:** It contains detailed and particulars of the family, date of visit, particular of the field/office work team, number/sex of the family members.

**Statement of the family members:** Contains social, economic and demographic particulars of the selected family.

**Statement of the long-lasting commodities and income generation activities:**

Includes a number of basic and indispensable items (i.e., Livestock, or agricultural lands).

**Housing Characteristics:** Includes information and data pertaining to the housing conditions, including type of shelter, number of rooms, ownership, rent, water, electricity supply, connection to the sewer system, source of cooking and heating fuel, and remoteness/proximity of the house to education and health facilities.

**Monthly and Annual Income:** Data pertaining to the income of the family is collected from different sources at the end of the registration / recording period.

**Assistance and poverty:** includes questions about household conditions and assistances that got through the the past month.

**Second section:**

The second section of the questionnaire includes a list of 55 consumption and expenditure groups itemized and serially numbered according to its importance to the family. Each of these groups contains important commodities. The number of commodities items in each for all groups stood at 667 commodities and services items. Groups 1-21 include food, drink, and cigarettes. Group 22 includes homemade commodities. Groups 23-45 include all items except for food, drink and cigarettes. Groups 50-55 include all of the long-lasting commodities. Data on each of these groups was collected over different intervals of time so as to reflect expenditure over a period of one full year, except the cars group the data of which was collected for three previous years.

These data was abotained from the recording book which is covered a period of month for each household.

**Data Set Linkage**

There are 6 data files in this CD-ROM, with one key variable in each file to allow the linkage between these files, namely: ID00 variable (household number). The following table describes the file names, content and identification variables.

File Name	Content	Key Variables
cover	Identification data	ID00: Questionnaire serial no. in sample
roster	Roster	ID00: Questionnaire serial no. in sample D1: Unique individual number
maingrpsNIS	Monthly household expenditure in JD by main groups	ID00: Questionnaire serial no. in sample
assis	Assistances	ID00: Questionnaire serial no. in sample
dwelling	Dwelling conditions	ID00: Questionnaire serial no. in sample
Items	Monthly household expenditure and quantities consumption by product	ID00: Questionnaire serial no. in sample

**Target Population**

It consists of all the Palestinian households who are a usual residence in the Palestinian Territory.

## Sample and Frame

The sampling frame consists of all enumeration areas which enumerated in 1997 and the numeration area consists of buildings and housing units and has in average about 150 households in it. We use the enumeration areas as primary sampling units PSUs in the first stage of the sampling selection. The enumeration areas of the master sample were updated in 2003.

### Sample Design:

The sample is stratified cluster systematic random sample with two stages:

### Sample Size:

The calculated sample size is 1,714 households, the completed households were 1,231 (812 in the west bank and 419 in the Gaza strip).

**first stage:** selection a systematic random sample of 120 enumeration areas.

**Second stage:** selection a systematic random sample of 12-18 households from each enumeration area selected in the first stage.

### Sample strata:

We divided the population by:

- 1- Region (North West Bank, Middle West Bank, South West Bank, Gaza Strip)
- 2- Type of Locality (urban, rural, refugee camps)

### Target cluster size

The next important issue in the sample design is the target cluster size or “sample-take” which is the average number of households to be selected per PSU. In this survey, the sample take is around 12 households.

## Estimation and weights Procedure

Calculation of Households Weights:

First we calculate the primary weight for the household from stratum  $h$  by the design of sample by dividing the # of households in stratum  $h$  on the sample size of households in stratum  $h$  by the following equation (1):

$$1. \quad W_{ih} = \frac{M_h}{n_h}$$

Therefore:

$h$ : the code of household stratum

$h$

$W_{ih}$ : the weight of household  $i$  in stratum  $h$

$W_{ih}$

$M_h$ : the # of households in stratum  $h$  by from the population census frame in 1997 :

$M_h$

$n_h$ : the sample size of households in stratum  $h$  :

$n_h$

Then we adjust the weights for the respondents to compensate for the non response of

households by calculate the factor of weights adjustment by dividing the sample size of household from stratum  $h$  on the # of the respondent households from stratum  $h$  ,

by the following equation (2) :

$$2. \quad f_h = \frac{n_h}{r_h}$$

.the factor of weights adjustments in stratum h :  $f_h$   
.the sample size of households in stratum h :  $n_h$   
.the # respondent households in stratum h :  $r_h$

Then the final weight for the households is a multiplications of the factor of the weights adjustment by the primary weights for the household by the following equation (3):

$$3. \quad w'_h = w_h f_h$$

### **Calculation of Variance**

It is very important to calculate standard errors for the main survey estimations, so that the user can identify the accuracy of estimations and the survey reliability. Total errors of the survey can be divided into two kinds: statistical errors, and non-statistical errors. Non-statistical errors are related to the procedures of statistical work at different stages, such as the failure to explain questions in the questionnaire, unwillingness or inability to provide correct responses, bad statistical coverage, etc. These errors depend on the nature of the work, training, supervision, and conducting of all the various related activities.

The work team spared no effort at the different stages to minimize non-statistical errors; however, it is difficult to estimate numerically such errors due to absence of technical computation methods based on theoretical principles to tackle them.

On the other hand, statistical errors can be measured. Frequently they are measured by the standard error, which is the positive square root of the variance. The variance of this survey has been computed by using the “programming package” CENVAR.

### **Reference Date**

The temporal point during which data on household expenditure and consumption are recorded. It includes one month for record keeping, and twelve months for the last visit interview on durable goods. except cars group which is reference period the last 3 years.

## **Data Collection**

### **Field Operations:**

Four teams of female interviewers, three in the West Bank and one in the Gaza Strip carried out data collection. Each team consisted of a supervisor, a field editor, and 1-2 interviewers. Fieldwork teams were distributed to different districts according to sample allocation.

All field staff received a training session combining general theoretical and practical components. Interviewers, supervisors and editors for the survey were selected from those who worked on the previous rounds of PECS Surveys. Fieldwork procedures and organization were designed to ensure adequate supervision and the collection of high quality data. To this end, several quality control measures were used throughout fieldwork. An interviewer undertook between 120 and 150 household visits in a month. The households were asked to keep daily records in a diary during their recording month. The interviewer transferred the records in a questionnaire on a weekly basis. Data on durable goods were captured by the recall method for the last 12 months (rounds), in order to avoid large variance in estimates when the one-month approach is used.

## **Data processing**

Both data entry and tabulation were performed using the ACCESS and SPSS software programs. Data entry was organized in 6 files, corresponding to the main parts of the questionnaire. A data entry template was designed to reflect an exact image of the questionnaire, and included various electronic checks: logical check, range checks, consisting checks and cross-validation. Complete manual inspection of results after data entry was performed, and questionnaires containing field-related errors were sent back to the field for corrections.

## **Response Rate**

The survey sample consists of about 1,714 households interviewed over a twelve months period between (January 2007-January 2008).1,231 households completed the interview, of which 812 were from the West Bank and 419 households in Gaza Strip; the response rate was 71.8% in the Palestinian Territory.

## **Data Quality**

Sample surveys are exposed to two types of errors: statistical errors resulting from studying a given part of the society and from not including all the sections of the society. Since the households' expenditure and consumption survey is conducted by using a sample method, statistical errors are unavoidable. Therefore, a potential sample of suitable design has been employed whereby each unit of the society has a high chance of selection. The second type of errors is the non-statistical errors that relates to the design of the survey, mechanisms of data collection, management and analysis of data. Members of the work Commission were trained on all possible mechanisms to tackle such potential problems, as well as on how to address cases in which there were no responses (9.9%).

## Derived variables

Variable Name	Variable Description
Grp1	Bread and Cereals
Grp2	Meat and Poultry
Grp3	Fish and Sea Products
Grp4	Dairy Products and Eggs
Grp5	Oils and Fats
Grp6	Fruits and Nuts
Grp7	Vegetables, legumes and tubers
Grp8	Sugar and confectionery
Grp9	Non alcoholic beverages
Grp10	Salt, spices and other food
Grp11	Take away food and meals in restaurant
Grp12	Own produced food in Kind
<b>Total food consumption</b>	(grp1-grp12)
Grp13	Clothing and footwear
Grp14	Housing
Grp15	Furniture and utensils
Grp16	Household operations
Grp17	Medical care
Grp18	Transport & communication
Grp19	Education
Grp20	Recreation
Grp21	Personal care
Grp22	Tobacco
Grp23	Alcohol beverage
Grp24	Other non-food consumption expenditure
Grp25	Other than food
Grp26	Imputed rent
Grp27	remittances in cash
Grp28	taxes in cash
Grp29	other cash non-consumption expenditure
Grp30	Social security
<b>Total consumption</b>	(( grp1-grp26)+grp30)