

Methodology

Household Income, Expenditure and Consumption Survey (HIECS)

Egypt

2008/2009

SECTION 1

General Introduction

In response of the considerations of credibility and transparency of official statistics, It is deemed important for users of statistics to get acquainted with the different methodologies and standards applied for the production of such statistics. In this context, the methodology of implementing the 2008/2009 Income, Expenditure and Consumption Survey and adopted concepts and definitions are presented in this volume, which consists of the following sections:

- First : General introduction
- Second. : Sample design and selection
- Third . : Survey tools and instruments
- Fourth : Definitions and concepts
- Fifth : Implementation stages

First: Historical Review

- 1- The first survey of income and expenditure, planned to be pilot, was undertaken in 1955. It was planned and carried out by the Committee of Statistic in three villages of Giza governorate (4000 households) a sample of 750 households.
- 2- In 1958/59, the first national survey was conducted in all governorates of Egypt on a sample of 6376 households distributed between urban and rural areas with a percentage of 51.5% and 48.5% respectively. All sample households were observed for the entire survey period (12 month).
- 3- In 1964/65, the second survey was held on a sample of 13818 households allocated between urban and rural areas such as 67.6% for urban and 32.4%for rural households. With the aim of reducing the burden on surveyed households, the whole sample was divided into four sub-samples where households of each sub-sample were observed for only three consecutive months.
- 4- In 1974/75, the third survey was carried out on a sample of 11995 households allocated between urban and rural areas in a similar way as the second survey. Like the second survey, households were observed only for three successive months.

- 5- In 1981/82, the fourth survey was conducted on a sample of 17000 households distributed equally between urban and rural areas. A new observation methodology, combining fixed and changeable observation of surveyed households, has been applied. A sub- sample of 1000 households were observed allover the survey period (12 months) while the remaining 16000 households were observed on a changeable basis.
- 6- In 1990/91, the name of household budgetary survey changed to income, expenditure and consumption survey. Under the new name, the fifth survey was conducted on a sample of 15000 households distributed between urban and rural areas with the percentage of 60% for urban and 40% for rural. The entire sample was divided into 12 sub-samples, each were observed for only one month.
- 7- In 1995/96, the sixth survey was conducted on a sample of 15090 households allocated between urban and rural areas such as 45.1% in urban and 54.9% in rural. The same observation scheme of the previous survey was applied, i.e., households were observed for one month only.
- 8- In 1999/2000, the seventh survey was conducted on a sample of 48000 households (4000 household monthly) distributed between urban and rural areas with the percentage of 60% for urban and 40% for rural.(households were observed for one month only).
- 9- In 2004/2005, the eighth survey was conducted on a sample of 48000 households (4000 households monthly) distributed in urban and rural areas with the percentage of 46.4% for urban and 53.6% rural (households were observed for one month only).
- 10- The latest survey 2008/2009 the ninth in the series was conducted on a sample of 48658 households (2000 households every 15 days) distributed between urban and rural areas with the percentage of 47.2% for urban and 52.8% rural (households were observed every 15 days).

Second: Survey Objectives

- 1- To identify expenditure levels and patterns of population as well as socio- economic and demographic differentials.
- 2- To estimate the quantities, values of commodities and services consumed by households during the survey period to determine the levels of consumption and estimate the current demand which is important to predict future demands.
- 3- To measure mean household and per-capita expenditure for various expenditure items along with socio-economic correlates.
- 4- To define percentage distribution of expenditure for various items used in compiling consumer price indices which is considered important indicator for measuring inflation.
- 5- To define mean household and per-capita income from different sources.
- 6- To provide data necessary to measure standard of living for households and individuals. Poverty analysis and setting up a basis for social welfare assistance are highly dependant on the results of this survey.
- 7- To provide essential data to measure elasticity which reflects the percentage change in expenditure for various commodity and service groups against the percentage change in total expenditure for the purpose of predicting the levels of expenditure and consumption for different commodity and service items in urban and rural areas.
- 8- To provide data essential for comparing change in expenditure against change in income to measure income elasticity of expenditure.
- 9- To study the relationships between demographic, geographical, housing characteristics of households and their income and expenditure for commodities and services.
- 10- To provide data necessary for national accounts especially in compiling inputs and outputs tables.
- 11- To identify consumers behavior changes among socio-economic groups in urban and rural areas.
- 12- To identify per capita food consumption and its main components of calories, proteins and fats according to its sources and the levels of expenditure in both urban and rural areas.
- 13- To identify the value of expenditure for food according to sources, either from household production or not, in addition to household expenditure for non food commodities and services.
- 14- To identify distribution of households according to the possession of some appliances and equipments such as (cars, satellites, mobiles ...) in urban and rural areas.
- 15- To identify the percentage distribution of income recipients according to some background variables such as housing conditions, size of household and characteristics of head of household.

Third: Peculiarities of the present Survey

- 1- Doubling the number of area segments from 1200 in the previous survey to 2526 segments with decreasing the number of households selected from each segment to be (20) households instead of (40) in the previous survey to ensure appropriate representatives in the society.
- 2- Changing the survey period to 15 days instead of one month in the previous one 2004/2005, to lighten the respondent burden and encourage more cooperation.
- 3- Adding some additional questions:
 - a- Participation or the benefits gained from pension and social security system.
 - b- Participation in health insurance system.
- 4- Increasing quality control Procedures especially for field work to ensure data accuracy and avoid any errors in suitable time.

Fourth: Survey Implementation

The Preparation stage for the survey has started on 1/1/2008; the coordination among all stages of survey implementation has been taken into consideration. The activities of office editing, coding, data processing and validation were held at the same time with data collection, preliminary tabulations have been generated quarterly for the purpose of checking survey results which have been contrasted with the corresponding results of the previous survey.

Results are published bilingually (Arabic and English) in six volumes as follows:

- 1- Survey methodology.
- 2- Characteristics of households, individuals and housing conditions.
- 3- Patterns of household expenditure according to socio-economic characteristics of households.
- 4- Average of household expenditure according to socio economic characteristics of households.
- 5- Average of household income and percentage distribution of income according to household social and economic characteristics.
- 6- Patterns of household expenditure and income according to socio-economic characteristics of households by governorates.

SECTION 2

Sample Design and Selection

The sample of HIECS, 2008-2009 is a two-stage stratified cluster sample, approximately self-weighted, of nearly 48000 households. The main elements of the sampling design are described in the following.

1- Sample Size

It has been deemed important to retain the same sample size of the previous two HIECS rounds. Thus, a sample of about 48000 households has been considered. The justification of maintaining the sample size at this level is to have estimates with levels of precision similar to those of the previous two rounds: therefore trend analysis with the previous two surveys will not be distorted by substantial changes in sampling errors from round to another. In addition, this relatively large national sample implies proportional samples of reasonable sizes for smaller governorates. Nonetheless, over-sampling has been introduced to raise the sample size of small governorates to about 1000 households. As a result, reasonably precise estimates could be extracted for those governorates. The over-sampling has resulted in a slight increase in the national sample to 48658 households.

2- Cluster size

An important lesson learned from the previous two HIECS rounds is that the cluster size applied in both surveys is found to be too large to yield an accepted design effect estimates. The cluster size was 40 households in the 2004-2005 round, descending from 80 households in the 1999-2000 round. The estimates of the design effect (deft) for most survey measures of the latest round were extraordinary large. As a result, it has been decided to decrease the cluster size to only 19 households (20 households in urban governorates to account for anticipated non-response in those governorates: in view of past experience non-response is almost nil in rural governorates).

3- Sampling stages

A-First stage sample

(1) Primary Sampling Unit:

The 2006 Population Census provided, in a very convenient way, adequate census data at the level of the Enumeration Area (EA). The electronic list of EA's represented the frame of the first stage sample; the corresponding number of census households is taken as a measure of size. The size of an EA is about 200 household in average, yet some variability in EA's sizes must be expected. The size of first stage national sample was initially estimated as of 2400 EA's, however it has been increased to 2526 as a result of over sampling some governorates.

(2) Sample Allocation among Governorates:

The primary stratifying variable is the governorate of residence, which in turn is divided into urban and rural sub-strata, whenever applicable. The first stage sample was initially allocated proportionally among governorates and between the urban and rural parts of each. Nonetheless, a decision was made to increase the first stage sample share of smaller governorates to the extent that would produce nearly 1000 households. The first stage sample size of these governorates was raised to about 52 EA's or 50 EA's in some governorates, in case if the proportional sample size was found to be under that level. The over-sampled governorates are Port-Said, Suez, Damietta, Ismailia, Aswan, and Frontier governorates altogether. Over sampling was made proportionally for urban and rural parts of the mentioned governorates. The process of over sampling has resulted in an increase of the size of first stage national sample to 2526 EA's instead of the initially estimated size of 2400 EA's. Since there is some deviation from the proportional allocation for some governorates, the sample is approximately self-weighted at the national level, though it is strictly self-weighted at the governorate level. Table 1 shows the allocation of first stage sample over governorates.

Table (1): Allocation of First Stage Sample over Governorates

Governorate	Urban	Rural	Total
Cairo	285	-	285
Alexandria	149	-	149
Port-said	50	-	50
Suez	50	-	50
Damietta	20	32	52
Dakahlia	50	126	176
sharkia	42	133	175
kalyoubia	56	89	145
Kafr-E1-Sheikh	20	65	85
Gharbia	44	95	139
Menoufia	23	84	107
Behera	31	121	152
Ismailia	25	27	52
Giza	130	85	215
Beni-Suef	17	52	69
Fayoum	19	59	78
Menia	26	102	128
Asyout	28	73	101
Souhag	25	89	114
Qena	20	68	88
Aswan	22	30	52
Luxur city	7	7	14
Red Sea	11	2	13
El-Wadi El-Gidid	4	4	8
Matrouh	8	3	11
North Sinai	8	6	14
South Sinai	3	1	4
Total	1173	1353	2526

(3) First Stage Sample frame:

The census lists of EA's for each substratum coupled with the corresponding number of census households constitute the frame of the first stage sample. The identification information appears on the EA's list includes District code, Shiakha/Village code, Census Supervisor number, and Enumerator number. Census Supervisor number is unique at the level of (Shiakha/Village), while the enumerator number is unique within the enumeration assignment of the census supervisor.

On investigating the list of EA's with regard to the number of households associated with each EA, it has been found that a few number of EA's are substantially below the average of 200 households. The reason for that is the work assignment of some enumerators included institutional households which have been screened out: only private households are included. As a result, a decision was made to adjoin any EA with less than 100 HH to an adjacent one. Thus, in those exceptional cases the Primary Sampling Units (PSU) consists of two EA's.

Prior to the selection of the first stage sample, the frame was arranged in such a way so as to provide implicit stratification with regard to the geographic location. The urban frame of each governorate was ordered in a serpentine fashion according to the geographic location of kism/ district capitals. The same sort of ordering was made on the rural frame, but according to the district location. The systematic selection of EA 's sample from such a sorted frame will ensure a balanced spread of the sample over the area of respective governorates.

The sample was selected with Probability Proportional to Size (PPS), with the number of census households taken as a Measure of Size (MOS).

B- Second Stage Sample:

This is the final stage sample, in which a sample of 19 (20) households is to be drawn from each EA selected in the first stage sample. Normally, the next to the last stage sample is to be updated prior to the selection of the ultimate sample. Nonetheless, due to the relatively recent census counts (the reference point of the 2006 census is 21/22 November, 2006) and in response to the cost-benefit considerations, it has been decided not to update the frame of the final stage sample. The census lists of households have been relied upon to select the household sample, guided by the tenable assumption that the period elapsed since the census is too short for tangible changes to occur in the household constituents of the enumeration areas. Neither is it expected that remarkable construction expansion has occurred at the outskirts of big cities during this short period.

Prior to the selection of household sample it has been deemed useful to implicitly stratify the frame according to the educational status of household head. Educational attainment is a grass-root issue underpinning the wide range of socio-economic and demographic characteristics of the population. To say the least, the household size is expectedly associated with the educational attainment of the household head, giving everything else constant: the larger household size the lower educational attainment of the household head is expected. For each sample EA, the list of households was sorted according to the educational status of household head. Sorting was done ascending in one EA and descending in the following one, and so alternatively till the last EA in the first stage sample of the governorate substratum.

The sample household was then selected from each sample EA with equal probability, using the systematic selection method.

4- Sample Allocation over the Survey Period

The survey period of the 2008-2009 HIECS extends over 12 month - period, starting from April 2008 and ending in March 2009. Households were observed for two continuous weeks only, to collect information on food expenditure, instead of one month as was followed in the previous rounds of the HIECS. The observation period was shortened in this HIECS round to lighten the respondent burden and thus encourage more cooperation.

Conventionally, the entire survey period is divided into four exclusive quarters, the first quarter includes the first three months (April, May, and June); the second quarter consists of the following three months, and so on till the fourth quarter. The rationale behind this division scheme is to extract preliminary results on each quarter independently, for the purpose of either assessing the quality of survey results, especially in its early stages of implementation, or to conduct meaningful comparative analysis with the similar quarter of previous HIECS rounds once the preliminary results were judged acceptable.

In response to the requirements mentioned above, the entire sample is to be divided among the four quarters. A decision was made to cover the whole first stage sample (2526 EA's) in all the survey quarters, but with a sample of 4 or 5 households to be observed from each EA in each quarter.

In order to accomplish an appropriate allocation scheme of the sample over the entire survey period, the first stage sample was randomly divided into six equal (or approximately equal) sub-samples; each of these sub-samples was assigned to a certain 2-week survey period. The first sub-sample had been observed in the first two weeks of April; the second sub-sample in the second two week of April; the third sub- sample in the first 2 weeks of May; and so on till the sixth sub-sample which is to observed in the last two weeks of June. Considerations are also made such that the EA's which are to be observed in the first two weeks of any month in the first quarter are to be observed in the second two weeks of the corresponding month in the second quarter, and conversely for EA's observed in the second 2 week of any month in the first quarter. Evidently, the sample allocation over the six 2-week periods of the first and second quarters will be repeated in the third and fourth quarters respectively. As a result of this allocation scheme, each sample EA will be observed two times in the first 2 weeks and two times in the second 2 weeks of the corresponding months.

As mentioned before, only 5 and sometimes 4 sample households are to be observed from each EA in each of the survey quarters. The list of the whole cluster of 19 (20) households was divided, into a sub-sample of 5 or 4 households, each of which will be observed in the successive survey quarters. Table (2) displays the allocation of first stage sample over the six 2 week periods of survey, and table (3) displays designed and surveyed sample and response rate according to governorates.

Table (2): First Stage Sample Allocation over the Six 2 week periods of survey

Gover.	Urban/ Rural	1st period	2nd period	3rd period	4th period	5th period	6th period	Total
Cairo	U	47	48	47	48	47	48	285
	R					-	-	-
	T	47	48	47	48	47	48	285
Alexandria	U	25	25	24	25	25	25	149
	R	-	-	-	-	-	-	-
	T	25	25	24	25	25	25	149
Port-said	U	8	8	8	8	9	9	50
	R	-	-	-	-	-	-	-
	T	8	8	8	8	9	9	50
Suez	U	8	8	8	8	9	9	50
	R	-	-	-	-	-	-	-
	T	8	8	8	8	9	9	50
Damietta	U	3	3	3	4	3	4	20
	R	5	6	5	6	5	5	32
	T	8	9	8	10	8	9	52
Dakahlia	U	8	8	8	8	9	9	50
	R	21	21	21	21	21	21	126
	T	29	29	29	29	30	30	176
sharkia	U	7	7	7	7	7	7	42
	R	22	22	22	22	22	23	133
	T	29	29	29	29	29	30	175
kalyoubia	U	9	10	9	10	9	9	56
	R	14	15	15	15	15	15	89
	T	23	25	24	25	24	24	145
Kafr EISheikh	U	3	4	3	4	3	3	20
	R	10	11	11	11	11	11	65
	T	13	15	14	15	14	14	85
Gharbia	U	7	8	7	8	7	7	44
	R	15	16	16	16	16	16	95
	T	22	24	23	24	23	23	139
Menoufia	U	4	5	5	5	5	6	23
	R	14	20	20	20	20	21	84
	T	18	25	25	25	25	27	107
Behera	U	5	5	5	5	5	6	31
	R	20	20	20	20	20	21	121
	T	25	25	25	25	25	27	152
Ismailia	U	4	4	4	4	4	5	25
	R	4	4	5	4	5	5	27
	T	8	8	9	8	9	10	52

Table (3) Designed and surveyed Sample and Response Rate According to Governorate

Goer.	Designed Sample			surveyed Sample			Response rate%		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Cairo	5700	-	5700	5194	-	5194	91.12	-	91.12
Alexandria	2980	-	2980	2801	-	2801	93.99	-	93.99
Port-said	1000	-	1000	925	-	925	92.50	-	92.50
Suez	1000	-	1000	951	-	951	95.10	-	95.10
Damietta	380	608	988	362	597	959	95.26	98.19	97.06
Dakahlia	950	2394	3344	920	2369	3289	96.84	98.96	98.36
sharkia	798	2527	3325	760	2502	3262	95.24	99.01	98.11
kalyoubia	1064	1691	2755	1023	1645	2668	96.15	97.28	96.84
Kafr-E1-Sheikh	380	1235	1615	355	1192	1547	93.42	96.52	95.79
Gharbia	836	1805	2641	795	1789	2584	95.10	99.11	97.84
Menoufia	437	1596	2033	410	1567	1977	93.82	98.18	97.25
Behera	589	2299	2888	581	2290	2871	98.64	99.61	99.41
Ismailia	475	513	988	465	502	967	97.89	97.86	97.87
Giza	2600	1615	4215	2380	1559	3939	91.54	96.53	93.45
Beni-Suef	323	988	1311	322	972	1294	99.69	98.38	98.70
Fayoum	361	1121	1482	358	1108	1466	99.17	98.84	98.92
Menia	494	1938	2432	465	1906	2371	94.13	98.35	97.49
Asyout	532	1387	1919	512	1360	1872	96.24	98.05	97.55
Suhag	475	1691	2166	465	1680	2145	97.89	99.35	99.03
Qena	380	1292	1672	359	1269	1628	94.47	98.22	97.37
Aswan	418	570	988	415	563	978	99.28	98.77	98.99
Luxury city	133	133	266	131	132	263	98.50	99.25	98.87
Red Sea	209	38	247	202	37	239	96.65	97.37	96.76
El-Wadi El-Gidid	76	76	152	72	74	146	94.74	97.37	96.05
Matrouh	152	57	209	152	57	209	100.00	100.00	100.00
North Sinai	152	114	266	136	107	243	89.47	93.86	91.35
South Sinai	57	19	76	51	18	69	89.47	94.74	90.79
Total	22951	25707	48658	21562	25295	46857	93.95	98.40	96.30

5- Estimation Procedures

To obtain unbiased estimates from the HIECS data it was necessary to apply appropriate weights to the sample data based on the probabilities of selection. Given the sample design, these weights will vary to some extent for the over-sampled governorates compared with the others. It is also important to calculate measures of sampling variability for key survey estimates. The procedures for calculating the weights and variances are specified in the following sections.

A- Weighting Procedures

In order for the sample estimates for the HIECS to be representative of the population, it is necessary to multiply the data by a sampling weight, or expansion factor. The basic weight for each sample household would be equal to the inverse of its probability of selection (calculated by multiplying the probabilities at each sampling stage). The HIECS sample is approximately self-weighting at national level and strictly self-weighting at the governorate level, it should be easy to attach a weight to each sample household record in the computer files, and the tabulation programs can weight the data automatically. The sampling probabilities at each stage of selection will be maintained in an Excel spreadsheet so that the overall probability and corresponding weight can be calculated for each sample cluster.

The selection probabilities of urban and rural samples are presented in the following:

(1) First stage sample for each 2governorate (urban/rural substrata)

$$P_{\alpha} = \frac{\lambda M_{\alpha}}{\sum M_{\alpha}} \quad , \text{ where}$$

P_{α} = Probability of selection of the α^{th} PSU (EA) in the sample

M_{α} = Number of census households of the α^{th} PSU

λ = Number of PSUs to be selected from the substratum

(2) Second stage sample

$$P_{\beta/\alpha} = \frac{19(20)}{M_{\alpha}}, \text{ where}$$

$P_{\beta/\alpha}$ = the conditional probability of selecting the β^{th} household given that the α^{th} PSU was elected

Note that the cluster size is 19 households in all governorates with the exception of urban governorates and the urban component of Giza governorate, where the cluster size is 20 households for reasons explained above.

Thus the overall sampling probability is $P_{\alpha\beta} = P_{\alpha} \times P_{\beta/\alpha}$

The weight, for all the households in a given cluster, is equal to the reciprocal of the overall sampling probability stated above.

The sample weights may be adjusted to account for varying response rates over the clusters. The adjusted weights would be normalized so as the weighted total of surveyed households (summation of the weights in the data file) would be made equivalent to the number of actually surveyed households.

B- Survey estimates

All estimates that will be derived from the HIECS are in the form of percentage distributions, proportions, ratios, or means. Estimates can be generated by using a standard statistical package (e.g. SPSS, STATA). Survey data must be weighted before generating above estimates.

(1) Mean Household Expenditure (Income)

Let $\gamma_{\gamma 1}$ denotes the annual expenditure (income) of the γ^{th} household, then the weighted mean household expenditure (income),

\overline{Y}_1 , is estimated as follows:

$$\overline{Y}_1 = \frac{\sum_{\gamma} W_{\gamma} \gamma_{\gamma 1}}{\sum_{\gamma} W_{\gamma}}$$

where W_{γ} denotes the weight associated with the γ^{th} household, i.e., the weight of the area segment to which the γ^{th} household belongs.

(2) Mean household size

Let $\gamma_{\gamma 2}$ denotes the size of the γ^{th} household, then the weighted mean household size, \overline{Y}_2 , is estimated as follows:

$$\overline{Y}_2 = \frac{\sum_{\gamma} W_{\gamma} \gamma_{\gamma 2}}{\sum_{\gamma} W_{\gamma}}$$

(3) Per capita Expenditure (Income)

Let \overline{Y}_3 denotes the per-capita expenditure (income), then:

$$\overline{Y}_3 = \frac{\overline{Y}_1}{\overline{Y}_2}$$

where \overline{Y}_1 and \overline{Y}_2 are as defined in subsection 7-1 and 7-2 respectively.

(4) Percentage distribution of households according to categories of expenditure (income) values

Let $X_{\gamma i}$ be a dummy variable that takes 1 if the γ^{th} household falls in a certain expenditure (income) category (the i^{th} category), and takes zero otherwise, then the weighted proportion of households that fall in the i^{th} category is:

$$P_i = \frac{\sum_{\gamma} W_{\gamma} X_{\gamma i}}{\sum_{\gamma} W_{\gamma}}$$

The same statistical formula has been applied in estimating the percentage distributions of households according to several household characteristics.

(5) Sampling Error Estimation

The sampling error of major survey estimates has been derived using the Ultimate Cluster Method as applied in the CENVAR Module of the Integrated Microcomputer Processing System (IMPS) Package. In addition to the estimate of sampling error, the output includes estimates of coefficient of variation, design effect (deff) and 95% confidence intervals.

SECTION 3

Survey Instruments and Tools

First: Questionnaires used in the survey

Three different questionnaires have been designed as following:

- 1- Expenditure and consumption questionnaire.
- 2- Diary questionnaire for expenditure and consumption.
- 3- Income questionnaire.

In designing the questionnaires of expenditure, consumption and income, we were taking into our consideration the following:

- Using the recent concepts and definitions of International Labor Organization approved in the International Convention of Labor Statisticians held in Geneva, 2003.
- Using the recent Classification of Individual Consumption according to Purpose (COICOP).
- Using more than one approach of expenditure measurement to serve many purposes of the survey.

A brief description of each questionnaire is given next:

1- Expenditure and Consumption Questionnaire

This questionnaire comprises 14 tables in addition to identification and geographic data of household on the cover page. The questionnaire is divided into two main sections.

Section one: Household schedule and other information

It includes:

- 1- Demographic characteristics and basic data for all household individuals consisting of 18 questions for every person.
- 2- Members of household who are currently working abroad.
- 3- The household ration card.
- 4- The main outlets that provide food and beverage.
- 5- Domestic and foreign tourism.
- 6- The housing conditions including 15 questions.
- 7- Means of transportation used to go to work or school.
- 8- The household possession of appliances and means of transportation.

This section includes some questions which help to define the social and economic level of households which in turn, help interviewers to check the plausibility of expenditure, consumption and income data.

Section two: Expenditure and consumption data It includes 14 tables as follows:

- 1- The quantity and value of food and beverages commodities actually consumed.
- 2- The quantity and value of the actual consumption of alcoholic beverages, tobacco and narcotics.
- 3- The quantity and value of the clothing and footwear.
- 4- The household expenditure for housing.
- 5- The household expenditure for furnishings, household equipment and routine maintenance of the house.
- 6- The household expenditure for health care services.
- 7- The household expenditure for transportation.
- 8- The household expenditure for communication.
- 9- The household expenditure for recreation and culture
- 10- The household expenditure for education.
- 11- The household expenditure at restaurants and hotels.
- 12- The household expenditure for miscellaneous goods and services.
- 13- Transfer payments.
- 14- Total annual household expenditure (prepared in office)

The tables from 1 to 13 include all types of commodities and services (771 items), 47 Sub-group and 12 Main groups in addition to transfer payments.

This questionnaire has been designed to be pre coded for all expenditure items and household characteristics except occupation and industry. Whenever relevant, the questionnaire provides spaces for different reference periods such as two weeks, monthly, quarterly and annually.

The total number of items is increased to 771 commodity and service compared with 746 in the last survey as follows:

Main and Sub-Groups of Goods and Services

Main and Sub-Groups	No. of Goods & Services
Food and non-alcoholic beverages:	
Bread and cereals.	39
Meat.	34
Fish and sea food.	10
Milk, cheese and eggs.	25
Oils and fats.	15
Fruit.	73
Vegetables.	81
Sugar, jam, honey, chocolate and confectionery.	15
Food products n.e.c.	9
Non-alcoholic beverages	17
Alcoholic beverages tobacco and narcotics:	
Alcoholic beverages.	3
Tobacco.	9
Narcotics.	1
Clothing and footwear:	
Clothing materials.	8
Garments.	54
Other articles of clothing and clothing accessories.	6
Cleaning, repair and hire of clothing.	8
Footwear.	11
Used garments.	1
Housing, water, electricity, gas and other fuels:	
Actual rentals for housing.	6
Imputed rentals for housing.	3
Maintenance and repair of the dwelling.	2
Water supply and miscellaneous services relating to the dwelling.	8
Electricity, gas and other fuels.	8
Furnishings, household equipment and routine household maintenance:	
Furniture and furnishings, carpets and other floor coverings.	8
Household textiles.	11
Household appliances.	21
Glassware, tableware and household utensils.	9
Tools and equipment for house and garden.	10
Goods and services for routine household maintenance.	18
Used furniture and furnishings and household equipments.	1
Health:	
Medical products, appliances and equipment.	6
Outpatient services.	18
Hospital services.	6
Transport :	
Purchase of vehicles.	8
Operation of personal transport equipment.	15
Transport services.	12

(Cont.) Main and Sub-Groups of Goods and Services

Main and Sub-Groups	No. of Goods & Services
Communication:	
Postal services.	1
Telephone and telefax equipment.	6
Telephone and telefax services.	8
Recreation and culture:	
Audio-visual, photographic and information processing equipment.	22
Other major durables for recreation and culture.	8
Other recreational items and equipment, gardens and pets.	18
Recreational and cultural services.	15
Newspapers, books and stationery.	13
Package holidays.	6
Used major durables for recreation and culture.	1
Education	
Pre-primary and Primary education.	9
Secondary education.	5
Post-secondary non-tertiary education.	4
Tertiary education.	5
Education not definable by level.	4
Restaurants and hotels	
Catering services.	11
Accommodation services.	4
Miscellaneous goods and services	
Personal care.	10
Personal effects N.E.C.	14
Other services (not classified).	10
Transfer payments	8
Total	771

2 - Diary Questionnaire

It has been prepared to help households recording — on a daily basis- the quantity and value of what have been consumed of food and beverages during the reference period (15 days).

The interviewers are instructed to check what households have recorded in the preceding three days. In case of the inability of some households to record their daily expenditure, the interviewer has to do so.

The questionnaire includes:

- a- Letter addressed to the head of household to inform him/her about the importance of survey so that his/her cooperation may be stimulated.
- b- Instructions of data recording for households and interviewers.
- c-A group of modules to record daily consumption of household as follows:

Module (A): Includes twenty pages to record the daily consumed quantity and value of food and beverages including:

- Date.
- source of commodities
- quantity
- value

Module (B): Includes eight pages to record the value of expenditure for meals and tobacco outside the house, in addition to the value of expenditure for food prepared outside the house and consumed inside the house.

Module (C): Includes ten pages to record the total of quantity and value of consumed food and beverages according to source, either from household production or not.

Module (E1): Includes two pages to record total expenditure on food and beverages consumed outside home.

3- Income questionnaire

It includes household income data according to income sources.

It consists of several tables; each is designated to a specific income source. These sources are:

- a- Wages and salaries for wage/salary earners among household members.
- b- Agriculture projects.
- c- Non Agriculture projects.
- d- Financial properties.
- e- Non- financial properties.
- f- Imputed rent of owner-occupied dwellings.
- g- Received cash and in kind transfers

Starting from 2004/2005 survey, A new table has been added for absent household members who spent a part of the survey year with the household and contributed in its aggregated income during that period. Absence of a household member can be for several reasons such as traveling, marriage, death, etc.

Second: Classifications

1- Classification of Occupation

The occupational classification for 2005 which is derived from the 1988 International Standard Classification of Occupation (ISCO) has been used in coding occupations into six digits after being slightly modified to better suit Egypt's conditions.

2- Classification of Industry

The industry classification for 2007 which is derived from the International Standard Industry Classification (ISIC)- Revision 4 - has been followed in the coding process at the level of four digits. Hence classification of industry cannot be made lower than the four-digit level. In this respect, the industry of persons working outside establishments has been deduced from their occupation. For example, the industry assigned to a mason working outside establishment is construction and so on for similar cases level.

3- Administrative Classification

The 2007 Administrative Classification has been used in coding statistical data geographically according to governorates, kism, Marks and villages as well as the new cities, established inside all governorates.

4- Classification of Individual Consumption according to Purpose (COICOP)

Classification of Individual Consumption according to Purpose (COICOP) has been used. It is adopted by the United Nations Statistical Commission for use with the SNA (UNSD, 1993). This classification system is a functional classification of expenditures by the purposes or objectives for which household expenditures occurred. It is used for analysis at national level; especially for purposes of compiling consumer price indices. It consists of 12 divisions and 47 groups.

SECTION 4

Definitions and Concepts

First: Survey Unit

The household has been taken as the survey unit. It is defined as: one person or a group of persons who share the living (food and house) regardless of whether they are in kinship or marriage relationship. The de jure enumeration is applied. Visitors and guests were included amongst household members only if their stay duration extended to 6 months or more.

According to this definition, household members include:

- 1- Persons who are usually living with the household and present at the time of survey.
- 2- Persons who are usually living with the household but temporarily absent at time of survey.
- 3- Military persons; and civilians working for the military force and police staff whether present or absent at survey time.
- 4- Students who are living away of their families such as those who are staying in public dwellings e.g., guest houses, dormitories and hostels.
- 5- Servants who are sharing the household food and accommodation.

Second: Survey Periods

Survey period is the duration of data collection from households included in the survey sample (15 days), The fieldwork has extended one year starting from April 2008 till march 2009.

Third: Reference Period

Reference period vary according to the type of data item as follows:

15 days: for expenditure on food and beverages.

Month: ended by the end of survey period as alcoholic beverages, tobacco and narcotics, housing and its accessories goods and services for routine household maintenance, health, operation of personal transport equipments, transport services, restaurants and hotels, personal care and other services n.e.c.

Quarterly: ended by the end of survey period as, expenditure on health, Communication.

Annually: ended by the end of survey period as, expenditure for clothing and footwear, housing and its accessories, furnishings, household equipments and routine maintenance of the house , health, transport, communication, recreation and culture ,education, restaurants and hotels and miscellaneous goods and services.

It is worth noting that in some cases the groups of commodities or services include more than one period such as health which has monthly, quarterly and annually items depending upon the consumption frequency of these items.

Fourth: Basic Definitions and Concept

1- Household Head

The head of a household is defined as the one considered as such by the rest of household members irrespective of his age and sex. Usually, the household head is responsible for supporting the household and taking expenditure decisions.

2- Housing unit

The place where the household live and it might be

a- Ordinary dwellings

The units or places prepared for housing such as (apartment, villa, rural house, room or more in a dwelling, separate room or more).

b- Unordinary dwellings

The places which are not mainly prepared for housing but occupied by households such as (stores, garages, etc.).

3- Educational Status

It refers to the status of a person (10 years +) with regard to the highest attained educational level. It includes the following categories:

- a- Below age.
- b- Illiterate.
- c- Read and write.
- d- Literacy certificate.
- e- Below intermediate.
- f- General secondary certificate.
- g- Technical secondary certificate.
- h- Above intermediate & less than university.
- i- University degree and over.
- j- Above university degree.

4- Marital Status

It refers to the status of persons aged (18+ for males and 16+ for females) with regard to marriage and divorce laws and customs. It includes the following categories:

- a- Below age
- b- Never married
- c- Contract
- d- Married
- e- Divorced
- f- Widowed

5- Work Status

It refers to the person status concerning his/her work relationship during the week preceding the interviewer first visit. It includes the following categories

A- Working Population

They are the individuals (6 years +) who perform any economic activity for some time (one hour at least) during the reference period (one week) whether inside or outside establishments. Included in this definition: individuals having jobs but temporally absent from their work during the reference period because of illness; annual leave; training or study leave; labor dispute; or irregularity of work in the establishment for temporary reasons or due to the nature of the establishment activity.

B- Unemployment

They are individual, aged (6-64 years) who are physically able to work , willing to work and actively seeking work, but did not find it during the survey week, Unemployment is divided into:

(1) Ever worked unemployed

This applies to a person who has ever worked before but found unemployed in the reference period according to above criteria.

(2) Never worked unemployed

This refers to the new entrants to the labor market for the first time such as graduates who have not started their working life yet.

C- Working student

Full time student but working during the survey week

D- Working house keeper

Females engaged in ordinary house work and duties but found having a gainful work during the survey week.

E- Individuals out of labor force:

They are the individuals in the age span 6-64 years who are physically able to work but did not practice any gainful work during the reference period for some reasons such as:

- (1) Family's circumstances (dedicated to home work).
- (2) Preparation for entering into the labor market (full time students).
- (3) No work desire (not interested).
- (4) Retired persons.
- (5) The disability that temporary prevents individual from work.
- (6) Persons are in unpaid leaves for one year or more and don't work.
- (7) Individuals who are in compulsory military service or perform public service.
- (8) Hospitalized persons who are not engaged in work.
- (9) Prisoners.
- (10) Persons (16 -12 years) who are not working or studying.

F- Individual Outside Man power

- (1) Children (less than 6 years)
- (2) Persons of 65 years or more, not work.
- (3) Totally disabled persons aged (6-64 years).

6- Employment Status

It refers to the status of the working person with regard to the nature of his/her work relationship during the reference period. It includes the following categories:

a- Wage worker:

This is the person who works for others in return of regular monetary or in kind wages/salaries during the reference period.

b- Employer:

This is the person who operates his/her own business (Agricultural, Industrial, Commercial or services) and hire one or more employees.

c- Own account worker:

This is the person who operates his/her own business or engages independently in a profession or trade and hires nobody.

d- Unpaid family worker:

This person, who works for others, usually relatives, without receiving any kind of regular payments.

e- Unpaid Worker:

This is the person who works for others (nonfamily persons) without any kind of regular payments, they are usually newly graduates like those who trained in lawyer offices or those who learned handcrafts.

7- Main Occupation (6+ years)

It refers to the kind of the main work done by a currently working person or the last work performed by an ever - worked unemployed person in which he/she spent most of his/her time regardless of the industry of the establishment to which he/she belongs.

8- Economic Activity

- A- It indicates the major field of production practiced by the establishment for which the currently working person works or by the latest establishment for which the ever- worked unemployed was working.
- B- For persons working outside establishments the economic activity is deduced from the occupation, for instance, the economic activity assigned to vegetable mobile vendors is retail trade of vegetables and for fanners is agriculture.
- C - For Military persons, the economic activity is governmental services.

9- Sector

It refers to the economic sector of the establishment for which currently working person works, or of the latest establishment for which an ever- worked unemployed person was working.

It comprises of the following categories:

- Governmental
- Public / Public Business.
- Private investment.
- Private.
- Joint.
- Co-operative
- Non- Governmental Organizations (NGOs).
- Others
- Outside establishments

10- Main job

This is the job in which the worker spent most of his/her time during the reference week. In case if the person has multiple jobs and allocates his/her working time among them equally, the one with highest return is considered the main job. As an exception of this definition, if the person works for the government or the public sector and has other jobs the former considered the main job irrespective of time and return criteria.

11- Secondary job

This refers to the second job that the person might have had during the reference period. As mentioned above, the secondary job is considered as such if the person spent in it less time or received less return, In case of equal time allocation between the main and secondary jobs, the work place of the secondary job must be different from that of the main job. However, the work for government or public sector is never considered secondary job.

12- Household Consumption Expenditure

Household consumption expenditure is the value of consumer goods and services acquired, used or paid for by a household through direct monetary purchases, own-account production, barter or as income in-kind for the satisfaction of the needs and wants of its members.

13- The actual final consumption

The actual final consumption of a household is the sum of its household consumption expenditure and the value of consumer goods and services acquired or used by the household through transfers from government, non-profit institutions or other households.

14- Transfer payments

It refers to cash or in kind transfers paid by household to others either inside or outside Egypt. It is the value of expenses paid by the household to non household individuals such as gifts, assistance charity, It includes also direct taxes on income.

15- Household Expenditure

Household expenditure is defined as the sum of household consumption, expenditure and the non-consumption expenditures of the household. The latter are those expenditures incurred by a household as transfers made to government, non-profit institutions and other households, without acquiring any goods or services in return for the satisfaction of the needs of its members. Household expenditure represents the total outlay that a household has to make to satisfy its needs and meet its "legal" commitments.

16 - Measurement of Household Expenditure

Consumption Expenditure may be measured in terms of:

A- Use approach

Implies the total value of all goods and services actually consumed during the reference period irrespective of whether they were acquired during that period or not, and whether the full payment was made during that period or not. Here, we used this approach in food and non alcoholic beverages and alcoholic beverages, tobacco and narcotics.

B- Acquisition approach

Implies the total value of goods and services delivered during the reference period, whether the full payment for the goods and services was made during that period or not, and whether they were used during that period or not. Here we used this approach in clothing and footwear.

C- Payment approach

Implies the total payment made for goods and services during the reference period irrespective of whether the goods and services paid for were fully delivered during that period or not, and whether they were used during that period or not. Here we used this approach in housing and its accessories, health, operation of personal transport equipments, transport services, communications, other recreational items and equipments, gardens and pets, recreational and cultural services, newspapers, books and stationery, package holidays, education, restaurants and hotels and personal care.

Acquisition and payments approaches are used here in furnishings, household equipments and routine maintenance of the house, purchase of vehicles and some items of recreation and culture such as audio- visual, photographic and information processing equipments and other major durables recreation and culture. the purpose of applying acquisition and payment approaches to durable and semi-durable items is to serve for both the compilation of consumer price index (acquisition) and welfare analysis (payment).

17- Household Income

It consists of all receipts whether monetary or in kind (goods and services) that are received by the household or by individual members of the household at annual or more frequent intervals, but exclude servant income and windfall gains and other such irregular and typically one-time receipts.

18- Income Sources

A- Income from employment

It comprises receipt for participation in economic activities in a strictly employment-related capacity. It consists of:

(1) *Employee income*

It comprises direct wages and salaries for time worked and work done, cash bonuses and gratuities, commissions and tips, directors' fees, profit-sharing bonuses and other forms of profit-related pay, remuneration for time not worked as well as free or subsidized goods and services from an employer. It may include severance and termination pay as well as employers' social insurance contribution.

(2) *Income from self-employment*

It is income received by individuals, over a given reference period, as a result of their involvement in self-employment jobs.

B- Property Income

It is defined as receipts that arise from the ownership of assets (return for use of assets) that are provided to others for their use. These are returns, usually monetary, from financial assets (interests, dividends), from non-financial assets (rents and from royalties (return for services of patented or copyright material).

C- Income from Household Production of Services for Own Consumption

It consists of the net estimated value of housing services provided by owner-occupied dwellings, of unpaid domestic services and of services from household consumer durables. Because of measurement issues, only owner-occupied dwellings is considered.

D- Transfer Incomes

Transfers are receipts for which the recipient does not give anything to the donor in direct return for the receipts. Transfers can consist of cash (in the monetary sense), of goods or of services. Current transfers are those that usually recur regularly (relative to the reference year), tend to be small and are also mostly available for use during the reference period.

SECTION 5

Implementation Stages

First : Field work

- 1-The field staff was selected from among the efficient experienced persons working in CAPMAS and new graduates specially females.
- 2-Intensive training program for supervisors was conducted at CAPMAS in Cairo and locally in governorates for interviewers and field editors.
- 3-Supervision program was implemented (each 15 days) in all governorates to check the field work to overcome the field problems.
- 4-Data were collected by using personal interview method for household in dwelling and it had been obtained from the head of household or wife or any eligible person in case of their absence.
- 5-Duties and responsibilities of all levels of field staff (interviewer, editor and supervisor) were defined to insure the accuracy and timing. These are outlined next:

A- Interviewers

Every one of them was responsible for data collection of five households during 15 days with six visits as follows:

(1) First visit

- (a) It started before the survey period by one or two days. Its purpose is to ensure the existence of the household, meet the head of household, present herself and her CAPMAS card to him. She also gives the household a simple idea about the survey (its objectives, importance and required data especially expenditure and consumption data).
- (b) Showing households the methods of recording their daily data and knowing the suitable time for visiting them. Also delivering the diary book to the household.
- (c) In case of the household refusal of cooperating with the interviewer, she has to convince them and if she failed she must inform her supervisor.

(2) Second visit

This visit is made in the middle of the first week of the survey period and it includes the following:

- (a) Editing the recorded data of expenditure and consumption in the diary book by the household.
- (b) Completing the data of the third table related with the quantity and value of clothing and footwear that the household obtained and table four related to household expenditure on housing, water, electricity, gas, and other fuel.

(3) Third visits

It is the same as the previous visit but made in the second part of the first week. In addition to checking household recording of expenditure, the interviewer has to complete the following tables:

The Fifth table: related to household expenditure on furnishings, household equipment and routine maintenance of the house.

The Sixth table : related to household expenditure on health.

The Seventh table: related to household expenditure on transportation.

(4) Fourth visit

This visit was in the first part of second week and it includes the following:

- (a) Recording or editing the recorded data of expenditure and consumption during the first week and following up recording data of expenditure outside the home on catering services.
- (b) Completing these tables:

The Eighth table : related to household expenditure on communication.

The Ninth table : related to household expenditure on recreation and cultural services.

The Tenth table : related to household expenditure on education.

(5) Fifth visit

This visit was in the middle of the second week .It included the followings:

- (a) Recording or editing the recorded data of expenditure and consumption of commodities and services in diary questionnaire during the following days of previous visit.
- (b) Following up recording the data of expenditure on restaurants, coffees and hotels.
- (c) Completing the data of the Eleventh table related to household consumption on restaurants, coffees and hotels and completing the data of the Twelfth table related to household expenditure on miscellaneous goods and services and the Second table related to actual household consumption of alcoholic beverages, tobacco and narcotics.
- (d) Completing the first Table related to the quantity and value of food and beverages actually consumed during the survey period.
- (e) Completing the thirteenth table related to transfer payments during the year ended with survey period.
- (f) Editing data of expenditure and writing clarification notes of any inconsistencies in the data.

(6) Sixth visit

It is made in the beginning of the days following the survey period. It includes the following:

- (a) Completing the missing data.
- (b) Filling down the income data for individuals having income in the household except servants.

B- Editor

The Editor was responsible for checking the work of the interviewers working immediately under his guidance.

C- Supervisor

They were responsible for financial and technical aspects of all the survey stages especially:

- (1) Selecting interviewers (females) and editors (males) and send the list of their names to the administration of survey.
- (2) Attending the central training in Cairo.
- (3) Training the interviewers on field work .

Second: Office Editing and Coding

1- Office Editing

It is one of the main stages of the survey. It started as soon as the questioners were received from the field and accomplished by selected work groups. It includes:

- a- Editing of coverage and completeness
- b-Editing of consistency
- c- Arithmetic editing of quantities and values.

2- Coding

Specialized staff has coded the data of industry, occupation and geographical identification.

Third: Data Processing and preparing final results

It included machine data entry, data validation and tabulation and preparing final survey volumes

Fourth: Quality Control Procedures

The precision of survey results depends to a large extent on how the survey has been prepared for. As such, it was deemed crucial to exert much effort and to take necessary actions towards rigorous preparation for the present survey. The preparatory activities, extended over 3 months, included forming Technical Committee. The Committee has set up the general framework of survey implementation such as:

- 1- Applying the recent international recommendations of different concepts and definitions of income and expenditure considering maintaining the consistency with the previous surveys in order to compare and study the changes in pertinent indicators.
- 2- Evaluating the quality of data in all different Implementation stages to avoid or minimize errors to the lowest extent possible through:
 - a- Implementing field editing after finishing data collection for households in governorates to avoid any errors in suitable time.
 - b- Setting up a program for the Survey Technical Committee Members and survey staff for visiting field work in all governorates (each 15 days) to solve any problem in the proper time.
 - c- Re-interviewing a sample of households by Quality Control Department and examining the differences with the original responses.
 - d- For the purpose of quality assurance, tables were generated for each survey round where internal consistency checks were performed to study the plausibility of mean household expenditure on major expenditure commodity groups and its variability over major geographic regions.