



**The Hashemite Kingdom of Jordan**



# **Household Expenditures & Income Survey 2008**

**October 2009**

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## **Preface**

The Department of Statistics (DoS) takes the pleasure in publishing this report containing the results of the Household's Expenditures and Income Survey 2008, conducted during the period 1/3/2008 – 28/2/2009. The survey covered a sample of 12768 households distributed all over the governorates of the Kingdom in a way that ensures representativeness of data at sub-district level. The sample design was based on the households' frame provided by the 2004 Population and Housing Census.

The survey focused on studying the characteristics of the housing unit, and demographic characteristics of the population, in addition to expenditures on various goods and services. The survey has given a special attention to data on household's incomes from all possible sources: income from employment, income of own-account workers' and of employers from various economic activities, rent income, property income, transfer income and income from any other source.

The Report includes the detailed objectives of the survey and its methodology, which consists of sample design and description of the preparatory works, field works, tabulation and extraction of results. The Report also includes details of the most important results of the survey.

The Department of Statistics would like to express its deep thanks to the interviewed households whose cooperation with the DoS staff made this survey a success. The DoS would like also to thank all those who participated in accomplishing this job, whether from within the DoS or from outside. The DoS hopes that data included in this Report will be useful to those who are interested in policy formulation and decision making, particularly in the economic field, at both the public and private levels.

**Director General**

**Dr. Haidar Fraihat**

## **1. General Background of the Survey**

### **1.1 Introduction**

Surveys related to household's budget are considered the most important surveys carried out by the DoS, as they provide data reflecting households' and individuals' expenditures and incomes and the relationship of expenditure and income with various variables. Thus, many countries are keen to conduct periodical household's expenditure and income surveys.

Since its establishment, the DoS conducted several surveys on Household's Expenditures and Income, in the years 1966, 1980, 1986/1987, 1992, 1997, 2002/2003 and 2006. In view of the continuous changes in expenditure norms, income and price levels, in addition to internal and external population movements, it is necessary to update the household's income and expenditure data from time to time. Accordingly, it was essential to conduct the Household's Expenditure and Income Survey in 2008.

This Report includes the survey objectives and methodology which includes a description of the preparatory stages of the survey, such as the questionnaire design, sample design and withdrawal, preparation of instructions and definitions manual, preparation of reminding booklets and edit rules, training of the survey staff on data collection, in addition to the arrangements of office and field requirements. Moreover, it gives a short description of the field work and data processing.

### **1.2 Objectives of the Survey**

1. Provide necessary data on income and expenditure for calculating poverty indicators, defining the characteristics of the poor and preparing poverty maps.
2. provide data on weights that reflect the relative importance of consumption expenditure items which are used to compile the consumer price indices.
3. Provide data on the final consumption and income of the households sector which are needed to calculate the national accounts.
4. Provide data necessary to conduct, follow up and evaluate the socio-economic development programs, including those directed towards solving poverty.
5. Identify the prevailing consumption expenditure patterns in the society and the effect of the demographic, social and economic variables on them.
6. Calculate the average annual income of the household and individual, and show the relationship of various socio-economic factors with income, such as occupation, educational level of the household head ....etc.
7. Study the distribution of individuals and households by income and expenditure groups and analyze the related factors.

### **1.3 Survey Frame**

The 2004 General Population and Housing Census provided a detailed frame for housing units and households at the various administrative levels of the Kingdom. The Kingdom is administratively divided into 12 governorates; each includes a number of districts, each of which comprises at least one sub-district. In every sub-district, there is a number of localities (cities and villages). The locality was divided into blocks, each has a number of housing units ranging from 60–100 in most cases. Nomads and individuals residing in collective housing units such as hotels, hospitals, jails, ...etc. were excluded.

### **1.4 Survey Sample**

#### **1.4.1 Sample Design**

The 2008 Household's Expenditure and Income Survey sample was designed to serve its main objectives. Accordingly, a sample with an appropriate size that can be represented at sub-district level was designed, for drawing a poverty map for Jordan.

The sample of this survey was designed using two-stage cluster stratified sampling method. In the first stage, the primary sampling units (PSUs), the blocks, were drawn using probability proportionate to the size, through considering the number of households in each block to be the block size. The second stage included drawing the household sample (8 households from each PSU) using the systematic sampling method. Fourth substitute households from each PSU were drawn, using the systematic sampling method, to be used on the first visit to the block in case that any of the main sample households was not visited for any reason.

To achieve the objective of representative results at sub-district level, for the purpose of dividing the survey stratum the population & housing census frame 2004 was used.

To estimate the sample size, the coefficient of variation and design effect in each sub-district were calculated for the expenditure variable from data of the 2006 Household's Income and Expenditure Survey. This results was used to estimate the sample size at sub-district level, provided that the coefficient of variation of the expenditure variable at the sub-district level did not exceed 10%, with a minimum number of clusters that should not be less than 6 at the district level, that is to ensure good clusters representation in the administrative areas to enable drawing poverty pockets.

It is worth mentioning that the expected non-response in addition to areas where poor families are concentrated in the major cities were taken into consideration in designing the sample. Therefore, a larger sample size was taken from these areas compared to other ones, in order to help in reaching the poverty pockets and covering them in a good way. Table (A) shows the distribution of PSUs (clusters) and the number of households in the sample by governorate.

**Table A. Number of PSUs (Cluster) and number of households in the sample by governorate.**

Governorate	No. of Clusters	No. of HHs
Amman	873	6984
Balqa	63	504
Zarqa	115	920
Madaba	42	336
Irbid	227	1816
Ma'raq	84	672
Jarash	18	144
Ajloun	24	192
Karak	60	480
Tafileh	18	144
Ma'an	48	384
Aqaba	24	192
<b>Total</b>	<b>1596</b>	<b>12768</b>

#### 1.4.2 Completed Questionnaires

Field work results indicated that all sample households have been visited in each round of the survey. Table (B) shows the distribution of completed questionnaires by governorates. Non-response is attributed to departure of the household during the survey or unwillingness to continue providing data.

**Table B. Distribution of Completed Questionnaires during the Survey Rounds by Governorate**

Governorate	No. of Households in the sample	Characteristics of Housing Unit and Individuals Questionnaire	Expenditure on food and Recurring Commodities questionnaire				Expenditure on Non- food and Commodities questionnaire				Income Questionnaire	
			R1	R2	R3	R4	R1	R2	R3	R4	R1	R2
Amman	6984	6984	6812	6354	6188	5983	6838	6456	6233	6047	6273	5940
Balqa	504	504	501	487	477	472	501	492	479	473	482	468
Zarqa	920	920	909	871	855	833	914	880	858	836	864	826
Madaba	336	336	335	330	324	313	335	330	325	313	324	309
Irbid	1816	1816	1792	1695	1633	1580	1796	1715	1647	1596	1667	1578
Ma'raq	672	672	660	633	621	607	665	646	623	611	625	602
Jarash	144	144	144	143	141	139	144	143	141	140	141	138
Ajloun	192	192	189	185	180	178	191	185	181	179	182	178
Karak	480	480	479	468	460	456	479	470	461	457	465	453
Tafeila	144	144	138	134	129	125	139	135	129	125	130	124
Ma'an	384	384	379	359	343	329	380	361	341	326	350	324
Aqaba	192	192	192	181	183	179	191	185	183	179	183	179
<b>Kingdom</b>	12768	12768	12530	11840	11534	11194	12573	11998	11601	11282	11686	11119
<b>Response rate</b>		<b>100</b>	<b>98.1</b>	<b>92.7</b>	<b>90.3</b>	<b>87.7</b>	<b>98.5</b>	<b>94.0</b>	<b>90.9</b>	<b>88.4</b>	<b>91.5</b>	<b>87.1</b>

## **1.5 Computation of Averages**

Three important points were taken into consideration in calculating the averages.

- representation of the computed average at the required level from sampling and mathematical points of view.
- number of responding households in each round in order to be benefit from the largest possible number of responding households.
- keep various tables including expenditure/ income averages consistent with each other as possible.

kindly note slight differences in the totals of some tables are due to weighting procedures and rounding of figures.

## **2. The Preparatory Stage**

The preparatory stage started 1/10/2007 This stage is considered as one of the most important statistical works. It comprised a set of correlated and integrated processes that required cooperation among the subject–matter staff to prepare the work plan, timetable, recruitment and training of the survey staff and distribution of tasks and work places.

This stage also included designing of the survey sample, which required defining the sample size and selecting the drawing method. Afterwards, primary sampling units (clusters) were drawn and then updated in the field in order to draw the second sampling units (households). It also included the preparation of concepts and definitions, finalization of the questionnaires and instruction manuals, provision of maps and listing of buildings and housing units according to the statistical and administrative divisions adopted by the DoS. Furthermore, electronic execution programs and implementation procedures were prepared for the purposes of data entry, verification and debugging for final cross – tabulation.

### **2.1 Main Documents of the Survey**

The documents comprised the survey questionnaires, instruction manuals for supervisors and interviewers, office and electronic edit rules and household reminder booklet. These documents are summarized as follows:

#### **2.1.1 The Survey Questionnaires**

To achieve the objectives of the survey, a set of 3 integrated questionnaires were designed and finalized upon revision by the DoS technical subject-matter staff, taking

into consideration facilitation of electronic data entry and verification. These questionnaires are:

## **1. General Questionnaire**

### **a. The Housing Unit Characteristics**

This questionnaire included introductory data, such as the name of governorate, district, sub-district, locality, urban-rural, block number, cluster number, serial number of a household in the cluster, name of household head. It also included data on the housing unit its type, area, predominant construction materials of the outer walls, type of ownership, amount of monthly rent or estimated rent, main source of water, lighting, heating, cooking fuel, type of sewage, water closet, number of rooms in the housing unit according to utilization, in addition to the availability of domestic goods and private car.

### **b. The Household Members' Characteristics**

This questionnaire concentrated on the social characteristics of the household members, such as their relationship with the household head, sex, age, education and marital status. It also dealt with economic characteristics, such as economic activity, main occupation, employment status and work sector. The questionnaire also included questions on the continuation of the individuals' stay with his household, in order to update data at the end of each of the four rounds of the survey.

### **C. The Income it is comprised of three parts:**

#### **• Household Ownership of Assets**

This part concentrated on the household ownership of any non-financial assets, such as residential and non-residential buildings, whether rented or for the household use, or ownership of financial assets such as deposits in banks, shares, bills, bonds ...etc. It also included questions relating to household ownership of any other income sources i.e., taxi, bus, truck, garden or livestock.

#### **• Household Productive Activities**

This part contained a group of questions on whether the household or one of its members engaged in any productive activity such as agriculture, livestock production, sewing, embroidery, or any other activity that generates income for the household.

#### **• Current Income Sources**

This part concentrated on current income of household members according to its various sources, such as income from employment (which includes wages, salaries, in-kind benefits such as food, housing, clothing...etc), incomes of own-account workers,



income from rent of buildings and others, property incomes (such as land rent, interests on bank deposits and bonds, premiums, shares and partnership in addition to any other property income), current transfer incomes (such as pension, social security, insurance compensations and in cash and in-kind gifts), transfers by residents whether governmental or non- governmental (the National Aid Fund, and any other governmental institution, or households or non- profit institution) and transfers by non-residents.

## **2. Expenditure on Food Items and Recurring Goods Questionnaire**

This questionnaire contained data of the expenditure on 17 consumer groups. Each group included a number of food items except for the last group which was limited to certain non-food goods and services because it has a daily recurring attribute like food items. For extracting the results, the last group has been shifted to expenditure on non-food goods and services which had a separated questionnaire. Moreover, the questionnaire contained parts on production of goods for own consumption, in-kind food gifts to and from the related household, and expenditure (on food items) of servants residing with households on themselves from their own wages.

## **3. Expenditure on Non-Food Items Questionnaire**

This questionnaire included 11 expenditure groups on non-food items and five expenditure groups on services, in addition to a group of consumer expenditures that was not mentioned within the previous groups, and a group of non-consumer expenditures (transfers). The questionnaire also included parts on self-consumption, in-kind non-food gifts from and to the household, servants' non-food expenditures on themselves from their own wages.

### **2.1.2 Household Reminder Booklet**

The booklet was designed to record expenditure on food items and goods and services, separately, to help households remembering the required information and record it daily. This booklet contained the same expenditure items mentioned in the expenditure questionnaire on food and the expenditure questionnaire on non-food commodities, it also included the item name, its measurement unit, purchased quantity and its total value.

### **2.1.3 Instructions and Editing Rules Manual**

The booklet contained detailed definitions and instructions related to the survey, as well as editing rules to be applied by office and field workers at various supervisory and executive levels. It also contained a detailed explanation of all questionnaires'

questions, and how to obtain the data in a manner that ensures the highest degree of data accuracy. The booklet contained the editing rules and the steps that should be followed by editors while checking the questionnaires in the field or in the office for ensuring completeness and consistency. It also contained important instructions to interviewers on their duties and to supervisors concerning their duties, in addition to a summary of the survey objectives.

#### **2.1.4 Coding Manuals**

While designing the questionnaires, it was taken into consideration that all questions should be pre-coded, except those related to the educational specialization, occupation and economic activity. For this purpose, the related international classifications under use for various surveys and censuses conducted by the DoS, were used. These are:

- The International Standard Industrial Classification, revision 3 (ISIC3).
- The International Standard Classification of all Occupations (ISCO), issued by the International Labor Organization in 1988.
- As for the educational specialization, the classification adopted in all the surveys carried out by the DoS and issued by the UNESCO was used.

#### **2.2 Definitions and Classifications**

**Household Current Income:** It refers to all recurring in cash or in-kind incomes. In this survey, data on current income of each member of the household, who stayed or intended to stay for 45 days or more with the household, were obtained. It is worth to note that obtaining this kind of data was based on the accrual basis. This means that if a household member deserved a specific income, during the reference period of the income data (6 months), this income will be registered in the questionnaire even if he did not receive it during that period, but actually it is accruing.

However, current income of any household (or individual) generally consists of six types as follows:

**A. Income from Employment:** It consists of income from in cash salaries and wages, and in-kind benefits. It is divided into:

- **In cash wages and salaries:** It consists of cash income accruing to a person in return for work he performs to others, whether that work is major or secondary, including any kind of allowances and remunerations. Severance pay and wages and salaries during illness leaves exceeding one month including maternity leaves, are excluded from in cash wages and salaries. In cash salaries and wages also include

the accruals to individuals in return for part time job performed to others, such as private tuition teacher, or accountants for short periods...etc.

In this survey, a distinction was made between total salary and net salary, which is the salary after deducting the contribution of the employee in pension, medical insurance and the like. Deductions do not include any due installments or debts on the employee for flat, car installments...etc.

- **In-kind benefits:** It consists of estimated cash values for in kind items provided by **employers** to his employees as an alternative or in addition to in cash salaries or wages, such as housing for work, meals, transportation from and to work, travel tickets, and the like.
- **Income of Own-Account Workers and of Employers:** It is the mixed cash income from wages and ownership accruing to any household member from an establishment he owns. These incomes (net income after deducting the production intermediaries) are realized from private professions, such as doctors, engineers, lawyers, and from non-organized private family establishments whether commercial, industrial or agricultural ... etc.

**C. Rent Incomes:** It consist of:

- **Buildings' rents:** Cash amounts payable to an individual as a result of renting a building or more he owns to others, whether the building was built for residential, commercial or for any other purpose. It includes the estimated rent value of the housing unit in which the owner is residing.
- **Other rents:** Cash amounts payable to any household member as a result of renting his non-buildings property, such as machines and equipments, cars, buses, or leasing a farm, carpenter shop, blacksmithery...etc.

**D. Property Incomes:** Payments due to an owner of a financial or non-financial asset in return for providing money or keeping the non-financial asset under disposal of others. It consists of:

- **Land rent:** Payments due to a landlord in return for waiving the right of utilization to others. It could be in cash or in-kind according to an agreement between the owner and tenant, such as sharing of the crop. The main criterion is that the land should be barren, like the ones used for mining, sand and stone quarrying, or for extracting water. Moreover, if the land is arboled, the income received by the owner is considered as "other rents"
- **Interests:** A form of property incomes payable to owners of financial assets of certain types such as deposits, bonds and loans. Therefore, the interest is the amounts to be paid by the debtor to creditor during a time period pursuant to

accepted conditions without reducing the amount of the standing debt. The interest rate is usually pre-defined.

- **Dividends and profits of shares and partnerships:** Cash amounts payable to shareholders, during the survey period, for keeping their money under the disposal of companies. These companies could be share holding, therefore the due income are the paid dividends, or could be non-share holding companies, therefore the due income is the profit distributed among partners.
- E. Transfer Incomes:** Total cash amounts plus estimated cash value of goods and services received by a household from others, without any commitment to work or providing financial or non-financial asset (free of charge). These amounts are usually transferred periodically for financing the consumption expenditure of the household. They are divided into:
- **Pension income:** Income received by a person in return for a previous employment inside Jordan as a salary after retiring from his/her job. This salary could be provided by the government or any other corporation, such as the Social Security Corporation, professional unions...etc. If the pension salary was provided by a foreign party, it is treated as transfers by non-residents which will be discussed later.
  - **Social security dues:** A lump sum amount paid, during the reference period (6 months), by the Social Security Corporation to a worker or an employee of an engaged establishment after the termination of his/her services or as a result of an occupational accident.
  - **Accrual insurance compensations:** The accrual amount to a person from an insurance **company** as a compensation for damage loss, death ...etc. (unrelated to work) caused to him or to his personal belongings, such as compensation for physical injury, house fire or car damage.
  - **Gifts:** Gifts **come** in two forms, in cash and in-kind. They represent cash amounts or estimated cash value of in-kind gifts received from any person or household residing in Jordan, such as cash money or in-kind gifts upon marriage, birth, feasts...etc.
  - **Other Current Transfers:** Cash amounts received by a household member, not as a gift, **or** in return for previous work or damage caused to him, but basically for assistance. These transfers could be from resident or non-resident parties.
- F. Other Incomes:** Cash amounts or the estimated cash value of what presented in-kind to a household from income sources other than those mentioned earlier, such as in cash or in-kind prizes.

**Capital Transactions:** The value of capital assets and liabilities of a household, by which it is possible to define the method adopted by the household to cover the deficit between its income and expenditure, and to identify the accrual surplus when income surpasses current expenditure.

- a. **Household Expenditure:** The expenditure of any household member on goods and services, whether these for the household as a whole, such as house rent, water and electricity consumption, or for some household members, such as clothing, personal items, and children requirements. In defining the expenditure.

Current household expenditure is divided into two types:

- a. Consumption expenditure or “consumption expenses”, it is divided into two categories:
  - **Expenditure** on goods purchased frequently or semi-daily, such as food stuff, drinks, tobacco and the like.
  - **Expenditure** on the rest of goods purchased at longer intervals, including services.
- b. Non-consumption expenditure or “non-consumption expenses”.

### **2.3 Selection and Training of staff**

After designing and preparing all survey documents and logistics including the instructions related to the used concepts, classifications and how to complete the questionnaire; the number of interviewers required to implement the survey within the set period of time was defined. While selecting the interviewers, experience, efficiency and good performance were taken into consideration.

A plan to train the interviewers, supervisors and inspectors was prepared which covered the survey objectives, data collection procedures, confidentiality of data, and how to deal with the households and overcome expected difficulties during various stages. The training program also included detailed explanation of the questionnaires’ inputs, used concepts and instructions related to data collection and field editing. They were trained on supervisory methods, organization of work and defining responsibility for each one of them.

### **3. Data Collection Stage**

The field work stage consists of visiting the selected households in the sample to collect data from them, because its data collection stage has to cover one full year, which started 1/3/2008 and ended in 28/2/2009.

A field work program for each round showing the daily work of each team was prepared. A daily field work plan was set in consistency with the reference periods of the survey.

The following plans for data collection were adopted to reduce the burden on households and to minimize the number of visits by interviewers:

- The **Housing** Unit Characteristics Questionnaire: Its data were collected at the beginning of the first round.
- The **Household** Members Characteristics Questionnaire: Its data were collected at the beginning of the first round. However, at the beginning of the second, at the third and fourth round, the items related to the continuity of residence of each household member or the arrival of new members to the household were updated.
- The **Questionnaire** on Income and its Sources: Its data were collected on two stage, each covers six months.
- The Expenditure Questionnaire on food–stuff and other recurring commodities: Its data were collected for one week in each round, where quantity and value of goods purchased by the household were recorded for each day of the week.
- The **Expenditure** Questionnaire on non food commodities: Its data were collected monthly at the end of each month.
- The Capital transactions Questionnaire: Its data were collected once at the end of the fourth round which covered the whole survey year.

#### **4. Data Processing Stage**

##### **4.1 The Office Processing**

###### **4.1.1 Questionnaires Archiving**

Organizing the questionnaires after data collection is considered as an essential and vital matter, particularly in substantial surveys like the Household’s Expenditure and Income Survey, since there are a sequence operations awaiting execution. Therefore, a special archiving system for classifying the questionnaires was made, according to each round throughout the year, in harmony with the nature of the subsequent processes and to facilitate taking out and returning the questionnaires at a standard time upon request for data processing. A special record showing various processing stages such as editing, coding, final editing and data entry to the computer and retrieving was prepared.

###### **4.1.2 Office Editing**

This stage took place simultaneously with the data collection stage, where completed questionnaires were sent for editing by the office team to ensure data consistency, completeness and rationality.

### **4.1.3 Coding**

A special team was formed to give codes (guide) to the descriptive data in the questionnaires, which were limited to the educational specialization, occupation and type of economic activity. Specific international manuals and classifications were used for each item. As for the other questionnaire items, on non-descriptive data, every question had a pre-defined code.

### **4.2 Electronic Processing**

This stage began by defining the electronic processing team, which consists of a system analyst, programmers and data entry staff. Work of the system analyst and programmers began in parallel with the work of the survey staff; starting by designing the questionnaire in a form that facilitates and ensures accuracy of data entry, preparing the required programs, then testing them by using hypothetical data and finalizing them before data entry. A liaison officer was appointed to provide the entry division with office-processed questionnaires which were returned in the form of batches to the archive upon completing data entry process.

As for data entry, the data analyst of the survey trained a group of data entry staff on already prepared programs and systems. A set of data entry editing rules for all fields of the questionnaires were compiled. It included checking the permitted range of the value and quantity of each entered field and ensuring consistency between value and quantity of the field, and the related values and quantities of fields related to it in other questionnaires. The consistency rules were applied directly during the entry on various questionnaire items. That is, to ensure that entered data were consistent with each other and logical on the one hand, and conformed to given instructions related to the questionnaires' data on the other hand.

After completing the data entry process, special lists of data were printed. They were edited to reassure the correct entry and rectification of errors (if any).

### **4.3 Tabulation and Dissemination of Results**

Upon finalization of all office and electronic processing operations, the actual survey results were tabulated using the ORACLE package. The results were checked by extracting similar reports using the SPSS package to ensure that the results are correct and free of errors. This required checking the formality and phrasing of the used titles and concepts, in addition to editing of all data in each table according to its details and consistency within the same table and with other tables. The final report was then prepared, containing detailed tabulations, as well as, the methodology of the survey.