

APPENDIX I

MAIN METHODOLOGICAL ASPECTS OF THE NATIONAL SURVEY ON CONSUMPTION AND EXPENDITURES OF THE HOUSEHOLDS 2000/2001

To know households' expenditures and consumption, sample surveys are valuable sources of information. This kind of survey has become more and more important both in economic analysis and planning works. Indeed, these statistical operations provide basic data about households' standard of living and disparities among the various social strata and areas of the country. They also allow for revealing trends of households' demand and updating some socioeconomic indicators that are necessary for the economic management of the country, such as consumer price indexes, households' private consumption estimate, etc ... In addition, in view of the infrequency of reliable sources of information about incomes in developing countries, these surveys make for approaching income sharing.

The last survey about households' consumption and expenditures, made in 1984/85, provided exceedingly pertinent statistical information. However, considering the different socioeconomic changes in the country since that date, available data no longer reflect the current reality. Hence carrying out a new survey, in order to bring up to date available data and update some socioeconomic indicators.

The survey about households' consumption and expenditures (ENCDM 2000/2001) has been carried out from November 1st, 2000 to October 31st, 2001. Main basic elements related to this operation's conception, methodology and performance are set hereunder.

1. Review of surveys about households' consumption and expenditures made in Morocco

Until 1959, no survey representing all the Moroccan population has been carried out. Some case studies limited to a reduced number of areas and to particular population strata have been made. Before the country became independent, the only great sample survey was carried out in 1955. Among the 3036 sample households, only 1406 were surveyed. These case studies have not allowed for any comparison in time and space.

The first operation, of a really national range, was carried out in 1959/60 (4325 households), the second in 1970/71 (6459 households) and the third in 1984/85 (14 500 households). The statistical operations results served in the various social and economic planning and programming works, as well as in developing some basic socioeconomic indicators (living cost index, national accounts aggregates, ...).

The different socioeconomic changes that have occurred since 1985 and the necessity to level the information national system led to making a new survey in 2000/2001 (14 500 households) to update available data.

Moreover, it should be noted that data about households' expenditures have been collected within the framework of both surveys on the standards of living carried out in 1990/91 (sample: 3360 households) and in 1998/99 (sample: 5180 households).

2. Survey objects

The diversity of their objects, their complexity and the fact that they are carried out less frequently made that moroccan surveys on the subject have looked for a compromise that can meet the needs for a survey about budget (or expenditures) as well the needs for a survey about food consumption.

The survey's main aim is to collect information, which provides a detailed description of living standards, as well as an essential data basis to help define and assess the social development national strategy.

Analyses and studies, which we can make from information provided by the survey, are plenty. In this respect, the main objects of this nationally recognized operation are as follows:

2.1. At the level of expenditures

- Determining the various commodities' ownership expenses pursuant to ownership modes (purchase, home-consumed production, received grants, ...) and according to the main socioeconomic determinants.
- Providing data necessary to update living cost index (ICV) balancing factor and some National Accounts aggregates.

2.2. At the level of food consumption

- Appraising the quantity of food consumed per capita and per household, according to the nature of food products.
- Analyzing food consumption according to the origin of each product (purchase, home-consumed production, received grants, ...) and the principal features, demographic and socioeconomic, of consumer households.
- Knowing the Moroccan households' food behavior.
- Assessing the population's nutritional situation.

2.3. At the level of socioeconomic analyses and studies

The survey shall provide basic data that allow for making analyses and studies about some particular aspects of the population's living conditions, namely those related to:

- Market survey and goods and services demand analysis.
- Sharing consumption expenditures among the various socioeconomic groups.
- The analysis of disparities in view of consumption expenditures.
- The study of poverty pattern at the national and regional level.

3. Survey form

Five kinds of forms are used:

3.1. Form A

Intended to collect at the same time data related to the individual characteristics of surveyed people and households (demography, schooling, health, employment, housing, socioeconomic spillover, ...), this form includes the following modules :

- Household's geographic environment features ;
- Household members' demographic features ;
- Absent members' demographic features ;
- Housing ;
- Investment in housing ;
- Energy ;
- Economic activity ;
- Education ;
- Health ;
- Family solidarity ;
- Transfers among households ;
- Characteristics of computers owned by the household ;
- Householders' opinion about the development of their household's standard of living during the 10 years preceding the survey date;
- Nature of household's incomes.

3.2. Form B about food expenses

This form aims at collecting information related to households' food expenses, individual ownerships, to meal sharing and to household members' anthropometrical measures.

3.3. Form C about non-food expenses

This form is intended to collect information connected with all households' non-food expenses and with their durable equipment.

3.4. Statement of waste

This statement is an important tool to analyze population nutrition. It allows for assessing, for all the components of meals cooked by households, the total quantity to be consumed, the quantity of waste at the meal cooking time and the quantity of waste after taking meal. This information is likely to draw the quantity of the component effectively consumed by the household's members. Only one household per primary unit is included in this statement, i.e. a total sample of about 1250 households.

3.5. Community forms

These forms aim at collecting data about available utilities and the degree of access of population to these utilities. "Community variables", defined at an aggregation level that is higher than that of the individual or the household, are also determinants, not less important, of population's living conditions. The knowledge of these community variables is necessary to a better explanation of individual behaviors.

4. Sampling

The ENCDM 2000/01 sampling plan comes within the framework of the master-sample, put in 1983 and updated in 1994, to meet sampling needs of post-poll tax surveys.

The main features of this drilling plan are summed up as follows:

4.1 Master-sample:

The 'master-sample' expression refers to a set of geographic zones or « primary units » (UP), within which samples to carry out the various surveys with households are chosen.

To elaborate the master-sample, a set of 2 or 3 adjacent survey districts (DR) has been considered as a primary unit (UP); in other words, a primary unit is then defined as an average-sized geographic area with 300 households, characterized by clear limits that allow for field-localizing it, without any ambiguity.

The 1994 population survey districts allowed thus to set up a survey basis made up of 14 948 stratified primary units (8 533 in the city and 6 415 in the countryside).

Master-sample survey basis units have been stratified. Stratification is so desirable that it enables the various users making survey plans that meet efficiently their surveys' objects by ensuring:

- Optimum sample size;
- A significant cost cut ;
- A substantial improvement of estimators' accuracy.

To free oneself from drawdown contingencies, a first dichotomous stratification, which we introduce generally in survey plans in Morocco, is the distinction between the urban and the rural, insofar as socioeconomic phenomena are not the same in both of them. On the other hand, it should also be noted that survey unit's stratification criteria vary according to the residence environment. Used criteria are:

- i/ Administrative tranching of the national territory into regions and provinces
- ii/ Predominant « housing standard » for urban zones. These criteria allowed for distinguishing the following five strata: “luxurious”, “modern”, “old medina”, “new medina” and “underground” (including precarious housing).

Survey plan follows one degree stratified sampling principles with remission unequal probabilities. Primary units of the survey basis within each residence environment have been proportionally divided according to the various strata in each environment.

The scheme allowed therefore for making up a 1 575 primary units (911 in the city and 664 in the countryside) master-sample.

4.2 Main features of the ENCDM 2000/01 survey plan :

The sample of the concerned survey has been taken from the master-sample and follows two degrees stratified sampling principles. This kind of survey shows more than one advantage. It reduces the survey cost and allows also for improving coverage, works field supervision and the quantity of collected data. Sample selection work can also be reduced.

However, the main drawback is that this survey relatively reduces the sample's efficiency.

The main characteristics of the ENCDM 2000/01 survey are the following:

i/ Survey unit : the l'ENCDM 2000/01 survey plan involved a sample selection in two stages :

- . first degree : it is about the above-defined sample primary units. For ENCDM needs, a 1250 primary units sample has been selected among the 1575 of the master-sample, i.e. 710 urban units and 540 rural ones
- . second degree : the « household » has constituted the secondary unit of the applied survey. Within the framework of the elaboration of the master-sample, lists of households from the various primary units have been established. At the level of each primary unit, a systematic drawdown allowed for selecting 12 households.

ii/ Sample size : considering budgetary constraints and the issues linked with the available human and financial means, the sample size is set at 15 000 households. This size was considered sufficient to have reliable estimates according to the residence environment (urban/rural), different socioeconomic categories of the country and the most important regions and provinces (in terms of population).

Sample size pursuant to the residence environment is divided up as follows:

Environment	Sample size	Survey fraction
Urban	8 520	1/294
Rural	6 480	1/294
National	15 000	1/294

5. Collection of data in the field

For a survey as complex and as delicate as that about households' consumption and expenditures, the success of the operation depends a lot on the organization of field works. Failure of staff to collect data in performing their planning can be detrimental to the good process of the operation and may distort results.

5.1. Interview method

Observation method relies, to a large extent, on the mobilized human and financial means. Sample households are observed in one passage during a one-week survey.

Therefore, each team made up of three surveyors and a supervisor work within a primary unit during 12 days divided up as follows:

- The first day is intended for the contact with the household to be surveyed , explaining objects and observing demographic characteristics and dwelling conditions of the surveyed household.
- From the 2nd to the 8th day: forms are filled
- 9th, 10th and 11th days are devoted to the surveyor in charge of the collection to encode forms.
- The 12th day is intended for traveling among primary units to be surveyed.

The surveyor's work planning includes a fixed part, which is to note daily all household members' purchases and a variable part for which he/she is induced to study all the other themes related to the various aspects tackled by the survey.

For households who accept to collaborate, « aide-memoirs » are put at their disposal so that they report daily their current purchases during the “week survey”. The surveyor daily observes, during 8 days, four sample-households.

5.2. Field works fulfillment duration

To take into account the impact of seasonal variations in some observed variables, particularly expenditures and consumption, the survey carrying out duration is spread out on a full year.

Sampling is then made in time and space. In order that this becomes possible, sample households have also been divided all over the year. Dividing up the sample in time requires that at each time, chosen households represent the various categories and regions of the country.

5.3. Survey staff training

Staff selected to carry out the field works of this operation is made up of experienced agents and technicians depending on regional departments of the Plan High Commission. Staff has been chosen among agents who have already participated in similar surveys made by the Statistics Department. Chosen staff training has been organized in two stages:

i/ training of facilitators (regional supervisors) at the Statistics Department. This training has been provided by the central team during five weeks;

ii/ training of surveyors and controllers at the level of Regional Departments. This training has been provided by regional supervisors during to months.

This theoretical training was followed by a practical training about filling forms (white test). This test lasted for one month and concerned all survey facility (data collection, anthropometrical measures, encoding, responses coherence).

6. Carrying out the survey in the field

6.1. Surveyed households sensitizing

Sample households behaved very satisfactorily towards this survey and their full collaboration contributed much in respecting norms and preestablished planning. Awareness campaigns adopted for this operation consisted in carrying out the following actions:

- Broadcasting a commercial on both national channels. This commercial was designed by an agency specialized in communication;
- Producing exclusive audiovisual programs for the range of this operation ;
- Advertising the launch of the survey and presenting its methodology by executives from the Statistics Department, at the level of the various audiovisual bodies and national press;
- Publishing articles about the survey by the various bodies of national press (survey interest, objects, used modes and expected results) ;
- Creating a folder that give an idea about this survey's main characteristics and responses to questions that can be asked by the households. This folder was distributed to all households constituting the survey sample;
- Sending a letter to the Minister of State to the Interior, asking him to ensure the collaboration of local authorities of survey zones within their competence.

The set of actions undertaken within the framework of this campaign allowed for informing the population about the conditions of the survey course, sensitizing the citizen on the importance of the operation, clearing away his/her fears by reassuring him/her about the survey process (confidentiality of information, anonymity of people ...) and the use thereof; which is likely to urge him/her for a better collaboration.

The analyses of the coherence of collected data are satisfactory and indicate the noticeable effort made by the collection staff, as well as the survey households.

6.2. Data collection in the field

The survey was carried out by the households' survey division at the Statistics Department with, however, a decentralization of data collection and question encoding requiring return to nomenclatures. Thus, each one of the regional departments was in charge of making the survey in the sample zones within its territorial field.

Field data collection works started on November 1st, 2000 and ended on October 31st, 2001.

The human (including reserve) and financial means mobilized to carry out this operation are made up of : 16 supervisors, 43 controllers, 128 surveyors, 43 drivers and 43 vehicles.

The following chart shows the dividing up of the human and financial means mobilized to carry out the ENCDM 2000/200, according to the regional Departments.

Chart 1 : Human and financial means mobilized for the survey according to the regional Departments

Regions	Human means					Vehicles
	Super.	Contr.	Surv.	Driv.	Total	
Oued-Eddahab- Lagouira-Laâyoune-Boujdour	1	1	3	1	6	1
Guelmim-Es Semara	1	1	3	1	6	1
Souss- Massa Draâ	1	4	12	4	21	4
Gharb-Chrarda- Beni Hssen	1	2	6	2	11	2
Chaouia-Ouadigha	1	2	6	2	11	2
Marrakech-Tensift-Haouz	1	5	14	5	25	4
Oriental	1	3	9	3	16	3
Grand Casablanca	1	5	15	5	27	5
Rabat-Salé-Zemmour-Zaër	1	5	15	5	26	5
Doukkala-Abda	1	3	9	3	16	3
Tadla-Azilal	1	2	6	2	11	2
Méknès-Tafilalet	1	3	9	3	16	3
Fès-Boulemane	1	2	6	2	11	2
Taza-Hoceima-Taounate	1	2	6	2	11	2
Tangier -Tétouan	1	3	9	3	16	3
Total	16	43	128	43	230	43

- Driv. : driver

- Super. : supervisor

- Contr. : controller

- Surv : surveyor

7. Data processing, balancing and operating

Every statistical operation goes through several stages: conceptual and methodological phase, data collection phase and results processing, balancing, operating and broadcasting.

Within this framework, Regional Departments have been charged with collecting data in the field and encoding answers to questions requiring the return to nomenclatures. The processing phase has been centralized at the level of the Statistics Department.

A processing schedule has been elaborated to process survey data. It comprises a control program that makes an automatic check as soon as information is recorded.

Survey documents processing started on May 16, 2001 and came to an end on September 24, 2002.

The last batch of processed documents reached the households' survey Division in about October 2002, i.e. a full year after the field data collection works have been achieved.

Once data processed, service managers in charge of carrying out this operation conducted the encoding of files after having gone through training about the software used for this task and about practical techniques to control the various collected data coherence tests.

Survey files encoding required elaborating a special data coherence control program that hinge on the following points:

- Control of identifiers (geographical code) ;
- Surveyed UP exhaustiveness control ;
- Coupling the different files ;
- Compulsory cards' presence control ;
- Household members' presence control ;
- Control by returning to basis documents
- Control of forms on expenditures;
- Control of expenditures quality (price, quantity, ...) ;
- Automatic correction phase.

These various control programs are launched one by one, in a list or grouped in a functional way in specified procedures. Due to the interactive correction that they should undergo, data files are all converted from the beginning of this phase in the work station where the expected adjustments at the level of the organization of settled procedures are made.

8. Survey's final file situation

In a 15000 households initial sample, 14243 complete forms have been operated, i.e. a 5% non-response rate (7,7% in the city and 1,6% in the countryside).

Non operated forms (757) are divided up between a group of non-received forms (317), namely because concerned households refuse to collaborate and a set of incomplete forms (440) that turned out to be difficult to process. The last kind brings

together mainly forms related to households that could not carry on the interview till the last day of the survey (trip, unavailability, unexpected event, ...). Processed information turned out to be not enough to report these households' consumption and expenditure behavior.

Chart 2 : **Surveyed households and non-response rate per region**

Regions	Expected Households	Surveyed households	Non-response rate
Oued-Eddahab-Lagouira-Laâyoune-Boujdour ; Guelmim-Es Semara	336	293	12,7
Souss- Massa-Draâ	1 464	1 410	3,7
Gharb-Chrarda-Beni Hssen	864	853	1,3
Chaouia-Ouadigha	840	821	2,3
Marrakech-Tensift-Haouz	1 536	1 512	1,6
Oriental	996	975	2,1
Grand Casablanca	1 920	1 580	17,7
Rabat-Salé-Zemmour-Zaër	1 260	1 127	10,6
Doukkala-Abda	1 020	1 001	1,9
Tadla-Azilal	720	709	1,5
Méknès-Tafilalet	1 104	1 082	2,0
Fès-Boulemane	792	784	1,0
Taza-Hoceima-Taounate	912	900	1,3
Tangier-Tétouan	1 236	1 196	3,2
Total	15 000	14 243	5,0

The analysis of the non response rate per region shows that this phenomena arises more at the level of the most developed regions with a mainly urban population. Indeed, the district of Grand Casa knows the highest rate (17,7%), compared to the other districts of the Kingdom, followed in the second place by the Saharan districts (12,7%), whilst the district of Rabat-Salé-Zemmour-Zaër comes third (10,6%). On the other hand, the weakest rate is recorded at the level of the district of Fès-Boulemane (1,0%).

APPENDIX 2

CONCEPTS, DEFINITIONS ET METHODS

The objective reading of the results of a statistical survey requires that one has a specific knowledge of the forms filling conditions, basic concepts and methods used to collect data, as well as adopted classifications.

1. Demography

1.1. Household

A household is a group of people, relatives or not, that usually sleep in the same main home and, to a more or less large extent, cater commonly for their essential living needs (housing, food, clothing and mainly medication expenses).

A household can be a one person household (individual household) or multiple (made up of several persons). It should also be noted that the way a multiple household members bring together their incomes and their expenditures can vary from one household to the other.

A household can occupy:

- One (or a part of) accommodation ;
- Several accommodations ;
- a hotel room, "fendak" or a comparable institution ;
- Professional premises (case of a shop owner who resides in his/her shop) ;
- An accommodation within an establishment (firm, school, administration, etc...).

1.2. Main Home

It is a housing unit (one or several rooms, an accommodation, etc...) occupied by the household as a main home. One household cannot have more than one main home.

We mean by « usually occupy a main home » the fact that one resides or has the intention to settle down therein for a period equal to or higher than six months. As a result, shall not be considered as “residing”, any person:

i/ who resides in an establishment intended for collective households for six months or more, even though he/she is with the interviewed household at the survey time ;

ii/ temporarily : visitor, guest, a maid who does not spend the night at the household's.

1.3. Second home

It is a housing unit of a household that is put at its disposal at any time of the year and which is not (or cannot) be used but during the holidays, weekends, etc.... by the members of this owning household.

1.4. Household member

Is considered to be a household member, any person, who at the survey time, meets the following conditions:

- i/ his/her main home is that of the surveyed household ;
- ii/ he/she depends economically on the household, i.e. expenses incurred for his/her vital food and non-food needs are common with those of the household.

A household member can be:

- i/ present : if present in the main home at the survey time.
- ii/ temporarily absent : if absent from his/her main home for less than six months.

It should be noted that:

- i/ a lodger (a person lodged and having at least lunch or dinner with the household) is considered to be a household member.
- ii/ a servant lodged and having his/her meals with the household is a member thereof.
- iii/ persons, present at the survey time, in public facilities considered separately and intending to be absent for less than six months, are also considered as household absent members.
- iv/ pupils and students who are absent at the survey time, but who are on boarding schools or campuses, are considered to be household members.

1.5. Householder

Is « householder » (C.M.) every person considered by the household members as such, who generally contributes, to a great extent, to the household's expenditures (economic support) and who is generally responsible for the management of his/her expenses.

1.6. Age

It is the age counted in years gone by corresponding to the age reached at the last birthday preceding the survey date.

1.7. Marital status

It is the marital status in the legal sense of the term, i.e. the position of people vis-à-vis the laws governing marriage. A person can be classified either:

i/ single : person who has never been married before. Engaged people are considered to be married only after the celebration of marriage.

ii/ married in a monogamy situation : a legally married person to only one woman, even if married is not yet consummated.

iii/ married in a polygamy situation : a male person legally married to more than one woman. Wives may or may not live together with the husband.

iv/ divorcee : person has broken off his/her last married through « legal divorce ».

v/ widow/widower : person whose last marriage partner is deceased.

2. Housing

2.1 Accommodation

An accommodation is house made up of one or several dwelling rooms with one or several direct entrances. It is considered to be direct any entrance leading to a corridor, stairs, a yard, professional premises, a public way, a road, a “derb”, a bare ground ... etc.

Eventually, any room (or a set of rooms) whose occupants can directly enter into their house without going through the space individually occupied by another household, is considered to be an accommodation.

The part of an industrial or commercial building (back-shop for example) used for residence is considered to be an accommodation, though not intended at first for that purpose. The garage used for residence is also considered to be an accommodation. As regards the accommodation used as both place of residence and professional premises, it is considered as a residential unit.

2.2. Type of accommodation

The following modalities are distinguished:

i/ villa: it is the villa (or a floor thereof) in its normal concept, i.e. a built residential unit of one tenant, which is isolated in the plan structure point of view, comprising at the most two accommodations and two floors, with, possibly, a garden.

ii/ Flat in a building: It is an accommodation within a building as normally conceived. Is considered to be a building any construction intended for collective residence (many dwellers) and comprising, at least, three floors. Professional premises, located in the first floor, are not taken into account.

iii/ Traditional Moroccan house: this type of houses are generally located in the old Medina. It comprises a central yard in the middle and surrounding rooms to live in.

iv/ Modern Moroccan house: a construction with a separate structure, comprising one or several floors, generally used for dwelling. This structure is not similar neither to that of a building, to that of a villa, not to that of a traditional house.

v/ Room in an establishment (place not intended initially for housing): it is a room within an establishment (hotel, factory, mosque, school, ...) used to live in at the survey time.

vi/ Pad/scanty settlements: a construction generally built with salvage equipment (wood, zinc, canes, ...). This kind of construction is generally located in the urban outskirts or within slums.

vii/ rural house constructed with pisé, dry stones, stones covered with clay: It is a construction characterized by:

- * A stonework made of clayey land, mixed with stones and straw (pisé house);
- * Randomly-shaped stones without concrete;
- * Stones covered with clay.

viii/ solid rural house: a residential unit, built for one tenant and made in stonework generally in a traditional style.

ix/ others : Any other forms different from the aforementioned (hut, tent, ...).

2.3. Occupation status : The following modalities are distinguished :

i/ owner : any household that resides in an accommodation that it owns.

ii/ in the process of ownership : any household who is paying back the credit that a financial body granted to it to become owner.

iii/ tenant : any household who is residing in an accommodation and paying the rent thereof. The word “tenant” means that the accommodation is not owned by any member of the household.

iv/ tenant who has the key money : any tenant who pays a sum of money upon signing the lease, to be able to rent the accommodation where he/she resides. Paid rent remains relatively moderate as compared to the current price in the rent market.

v/ mortgage : if the household occupies an accommodation that is mortgaged by the owner for a given time, against a sum of money put at his/her disposal for a determined period of time. Some households occupying mortgaged accommodations pay also a rent, which is quite low as compared to the prices practiced in the rent markets.

vi/ staff house : it is an accommodation put for free (or against a nominal rent) at the disposal of a household member by private or public employing bodies.

vii/ accommodated for free: it is a household who resides in an accommodation that it does not own, without paying the rent.

viii/ others : all other cases that are different from the abovementioned.

2.3. Accommodation ownership mode

It is about reporting the mode through which the occupying household became owner of its main home. The following modalities are distinguished:

- i/ Inherited: if the household owns its residence by way of inheritance;
- ii/ Constructed out of the householder's own pocket: if the household constructed its accommodation out of the householder's own pocket.
- iii/ Constructed out of the householder's own pocket and by means of a credit: if the owning household built its accommodation partly out of the householder's own pocket and partly by means of a credit. These credits are generally granted by banks, employers, family or non-relatives.
- iv/ Purchased out of the householder's own pocket: if the owning household purchased the accommodation out of its own pocket.
- v/ Purchased out of the householder's own pocket and by means of a credit: if the owning household financed its place of residence out of the householder's own pocket (savings) and by means of a credit granted by a bank, employers, family or non-relatives.
- vi/ others : all other cases that are different from the abovementioned.

2.4. Kitchen

It is a room where the household prepares food and does the washing up. If meals are prepared in the living room, the house should be considered as lacking a kitchen. A household is considered as having a kitchen only if it has an independent room intended exclusively for cooking and washing up.

2.5. Liquid sanitation

It is about examining how the households drain off waste water. We generally distinguish between the following means:

- i/ Sewage network: if the WC is linked to public sewage pipes.
- ii/ Steel hole: if the WC is linked to a sanitation system, which the household draws periodically.
- iii/ Cesspool, latrines: if the WC is a hole through which waters go underground or into nature.
- iv/ Drainage into nature: if the household drains off waste water directly into nature.

2.6. Garbage disposal

It is about drawing the means used by households to dispose of their domestic waste. We distinguish between the following modalities:

i/ community garbage can : it is a metal can put in the various corners of streets and avenues of the cities, at the disposal of households to dispose of their garbage therein. Commune services generally locate these cans in relation to the density of residing population.

ii/ direct collection by the town truck: if the household waits for the truck intended to directly collect garbage to come by.

iii/ thrown into nature: if domestic waste is disposed of directly into nature.

iv/ others : if the household resorts to a process different from the abovementioned modes to dispose of its garbage.

2.7. Drinking water supply source

Sources used by the households to get supplies of drinking water, no matter what is the water source or the extraction method. The following water sources are distinguished:

i/ connection : it is the case of households whose accommodations are connected to the city water network through internal pipes (faucets) and the water consumption of which is paid to a company, to an authority or to a local collectivity. Connection can be by an individual installation or by means of a collective water meter.

ii/ public water place : the following sources providing water collectively shared by the users :

- fire hydrants (free or paying);
- fitted collective water place;
- collective "métfia";
- private "métfia";
- unfitted collective well ;
- private well ;
- oued ;
- "segua" ;
- water carrier ;
- tank truck.

3. Activity, employment and unemployment

3.1. Main concepts of the type of activity

« Type of activity » observation constitutes the core of this part. It is about dividing up the total population according to the following categories:

- busy working population ;
- unemployed active population ;
- non-working population.

Working population concept: includes all the people forming the manpower available to produce goods and services. Working population is made up of busy working population (busy working persons) and unemployed working population (unemployed).

i) Busy working population : includes all the people aged 7 years minimum who participate in producing goods and services, if only for one hour, during a brief specified reference period, and all the people normally with a job, but who are absent from work. It is a large concept that incorporates all kinds of employment, including casual work, part-time job and all forms of irregular employment.

ii) Unemployed working population: includes all the people, aged 15 years minimum, with no employment, but who are looking for and/or are available for a job.

3.2 Non-working population concept

Is considered to be non-working any person who is neither busy working, nor unemployed. Non-working people are classified according to the reason behind their non-working (“non-working type”); i.e. the following categories: youth, pupil or student, housewife, retiree, recipient of a allowance, disabled or sick person, elderly and other non-working persons.

3.3. Professional characteristics of working population

The main professional characteristics of the working population observed within the framework of the survey are summed up as follows:

Usual main occupation: We mean by usual occupation the kind of job that constitutes the main occupation of busy working persons during the last 12 months preceding the date of the survey. The statements of the surveyed are classified pursuant to the following 11 major groups:

- Member of the legislative body, the local councillors, public function line officers, Management directors and executives ;
- senior managers and members of the liberal professions ;
- Middle managers ;
- Employees ;
- Tradespersons, commercial and financial middlemen ;
- Farmers, fishermen, foresters, hunters et similar workers ;

- Craftsmen et craft qualified laborers (excluding agricultural laborers) ;
- Agricultural and fishing workers and laborers (including qualified workers) ;
- Installation and machine operators and assembly workers
- non agricultural laborers, packers and small job workers
- People who cannot be classified according to the occupation.

Usual situation in the occupation (or usual professional status) : The usual situation in the occupation conveys the nature of the link between the busy working person and usual main occupation. For the unemployed who have already worked, it is the situation in the last occupation that is noted. Retained definitions for the modalities of the usual situation in the occupation are as follows:

- *Salaried employee* : any person who has mainly worked for somebody else against a salary in cash and/or in kind during the last 12 months preceding the date of the survey.
- *Free standing*: any person who has mainly carried out a job on his/her behalf, using his/her own establishment or practicing a trade without permanently calling on salaried employees during the last 12 months preceding the survey date.
- *Employer* : any person who has mainly worked on his/her own behalf, using his/her own firm, or carrying out a job and permanently employing, at least, one salaried employee during the last 12 months preceding the survey date
- *Home worker* : any active person who is working alone at home on his/her behalf of for somebody else. Working persons at home who permanently employ, at least, one salaried employee, are considered to employers
- *Home help* : any busy working person, working in one (or several) firms, or a member of his/her family without compensation.
- *Apprentices* : any busy person working for an employer with the aim of learning a trade. He/she can receive a nominal compensation.
- *Partner or cooperative member* : any person who doing his/her main job in an activity within a cooperative society or an association as a member and shares the activity profits with the other members.
- *Other* : any person who cannot be classified according to the above-quoted modalities.

Usual economic activity branch: We mean by the main economic activity the nature of the main product manufactured or service provided by the establishment where the surveyed works or has worked if he/she is unemployed at the survey time. Information about the usual main economic activity related to the situation that prevailed during the last 12 months before the survey date are generally presented according to two classification types :

i/ Classification of the economic activity branches in 11 positions :

- agriculture, forest and fishing;
- industry (including craft) ;
- building and public works ;
- commerce ;
- transports, warehouses et communications ;

- repair ;
- general administration ;
- social services provided to the community (education, health and social action, collective and social services) ;
- other services ;
- ill-defined activities;
- unemployed looking for their first employment.

ii/ Classification in economic activity sectors :

- primary ;
- secondary ;
- tertiary ;
- ill-defined activities;
- unemployed looking for their first employment.

4. Households' expenditures and living standard measure

The well-being of a person is ordinarily assimilated to his/her living standard, which is generally characterized by the average real income per capita. However, the direct collection of reliable data from households about incomes remains a very hard task to perform.

In view of this difficulty, the « expense » variable remains the most recommended alternative to draw a population's living standards dividing up structure. Expense is generally used as a “proxy-variable” of the income allowing to approach the living standard, supposing that the well-being stems from the satisfaction provided through the consumption of goods and services.

4.1. Concept of the expense used within the framework of the survey about households' consumption and living expenses

One of the objects of the survey is to be able to link up the various domains related to the households' behavior : demography, education, health, employment, expenses, etc ... This integration becomes necessary from the moment that we look for analyzing the impact of development policies on the population's living conditions.

All the household's expenditures are observed except for those considered as « household's investment » or « capital transfer » or those concerning it financial transactions. Thus, all the households' expenditures are noted except for those concerning:

- i/ the purchase or the construction of residential accommodations, (including ownership costs, such as middlemen's commissions, registration fees and other expenses incurred through the purchase or the construction of an accommodation).
- ii/ purchase of plots of land.
- iii/ bank savings and deposits.
- iv/ purchase of financial securities : shares, bonds and Treasury bonds.
- v/ lent sums of money.
- vi/ repayment credits (including interests) to purchase capital elements (repayment of credits to purchase a residential accommodation).
- vii/ capital transfers : are considered to be capital transfers, the following elements :

- Important value legacies and donations to some institutions, such as the Ministry of Habous, Moroccan Red Cross, Jamaâ, etc.....
- Legacies and donations made by households among themselves (inheritance for example).
- Seizure,.....

Total expenses observed within the framework of the survey include the following two components :

4.1.1 Consumption expenditures

By consumption expenditures, we mean the expenses incurred by the households to met their essential living needs. Home-consumed products, rental values of accommodation occupied by their owners, goods and services received in kind and the estimated value of advantages in kind received by some categories of employees (housing, water, electricity, telephone, ...) are taken into account in estimating this aggregate. These elements are integrated with the concern to approach better the real living standard of people making use of these advantages.

This category of expenses has a major importance to determine and estimate clearly the current living standard. The following groups of goods and services nomenclature are included therein:

i/ food, drinks : expenses concerning cereals and cereal-based products, milk and dairy products, eggs, greasy substances, meat, fish, vegetables and fruits, sugar and sugar products, tea and other aromatic plants, soft and alcoholic drinks, food and drinks taken outside.

ii/ clothing : expenses related to cloths and shoes re (including repair and confection services).

iii/ residence and energy expenses : rent and rental charges, house maintenance and repair, heating, lighting, water, energy expenses.

iv/ domestic fittings : furniture and household linen, kitchen utensils, domestic appliances, goods and services for the maintenance of domestic fittings.

v/ Hygiene and medication : expenses intended for washing, hygiene and medication products and services.

vi/ transport and communication : purchase and expenses incurred to operate and repair private means of transport, price of tickets and additional costs related to public transport, telecommunication services (post, telephone, etc ...) invoicing.

vii/ leisure and culture : expenditures concerning leisure and entertainment durable goods, recreation supports, entertainment and cultural expenses and tuition fees, etc ...

viii/ other goods and services : tobacco and cigarettes, purchase of jewels and watches, personal items, insurance fees, subscription and other various expenses.

4.1.2 Expenses not intended for consumption

These are all expenses that have the effect of reducing the household's available income, without the latter taking directly advantage of disbursement. The following elements are classified in this group of expenses:

- Tax payments not linked to the professional activity performance;
- Money transfers that are not characterized as transfer of capital.

4.2. Some methodological elements related to the observation of expenses

4.2.1 Estimate of the rental values of houses occupied by their owners

This assessment has been entrusted to the controller, who is basing his/her evaluation on the statement of rents of four similar houses in the same neighborhood and having identical features connected with:

- the type of construction ;
- the housing stratum ;
- the number of rooms.

To assess the fictitious rent of non-tenant households, an average rent should then be applied on the basis of four collected pieces of information.

In the countryside where there is no rental market and where rent is still a rare phenomena, estimates stated by households have been retained, except for permanent housing for which, the same procedure of the city has been applied.

The resulting estimate of fictitious rents appeared to be high due to the fact that it is based on the rent prices applied at the survey time. On the other hand, the level of real rents observed for tenant households depends, to a large extent, on the period of residence.

Therefore, the assessment of the rental value of houses occupied by their owners could entail an artificial increase of their living standards. Thus, in order to standardize rental values (fictitious or real), stated fictitious rents have been adjusted pursuant to the place of residence.

In the city, the fictitious rents adjustment procedure lead to devaluating collected rental values by applying a correction index to them. These are established on the basis of the average real rents, after elimination of values considered to be too weak, broken down according to the type of housing and the number of rooms occupied by the household.

In the countryside, a similar adjustment has taken place only for permanent housing.

Fictitious rents thus adjusted are supposed to be reflecting housing conditions and rental level at the time of access to houses, which guaranties comparing them with real rents.

4.2.2 Estimate of housing costs for households making use for free of electricity, water and telephone

Water, electricity and telephone fictitious costs are estimated by attributing to the concerned household the average value observed for the households that have the same characteristics (housing type, number of rooms, place of residence, economic region).

4.2.3 Estimate of other received advantages

To be able to approach the real standard of living of households, we evaluated:

- transportation ensured for the household members by their employer.
- received advantages in kind ;
- donations received from administrations and private institutions.

4.2.4 Home-consumed production of food and non-food

Many households, especially in the countryside, meet a part of their needs from the goods and services they produce. It is evident that any study that suggests measuring a population's standard of living must take into account home-consumed production when estimating the overall consumption.

The various types of home-consumed production observed by the survey are the following :

i) Home-consumed production of food : these are farming products consumed by the households without a monetary transaction taking place. These products have been recorded when consumed and estimated at the local market price.

ii) Home-consumed production of non-food: these are products manufactured by the households for their own consumption needs. These goods have been recorded at their cost price.

4.2.5 Self-sufficiency

It is the consumption of products taken by the household from its professional activities, generally trade (case of a tradesperson who meets some of his/her needs from products of his/her trade).

Self-supplied Food and non-food have been recorded at their consumption time. In addition, they have been evaluated at the market price.

4.2.6 Consumed salary in kind

If surveyed households consume products received in the form of wages in kind that are earned for a provided work. These products have been assessed at the market price.

4.2.7 Received donations

All the products consumed by the households and which have been offered to them by residing households, by public and private institutions, or by households abroad, are classified in this line item.

4.3. Households' expenditures observation mode: reference periods and type of statements

As far as expenditures are concerned, it is essential that collected information related to a full year, so that seasonal variations do not alter results. However, asking surveyed households to provide, retrospectively over one year, specific data about their expenditures does not at all ensure that reliable data collection be successful. Mistakes caused by memory faults are likely to reduce seriously the value of results. The impact of these mistakes depends on the how frequent the products, for which annual statement are required, are purchased. Indeed, surveyed households are certainly unable to give reliable annual estimates for products that they purchase daily. On the other hand, these estimates will be more exact for products the purchase date of which is separated by long intervals, for example the purchase of durables.

To reduce the impact of the memory effect, we have had recourse to the reference period concept, period to which are related information provided by the surveyed at the interview time. The period is chosen according to the products purchase frequency in order to reduce observation errors.

The main statements used by the ENCDM 2000/2001 survey to measure households' expenditures are described hereunder:

4.3.1 Food expenses

At the level of this expense category, statements are as follows:

i) Retrospective statement over one year of foodstuffs intended for the supply: it is about processing annual provisions made by the households to meet their long time consumption. This statement concerned mainly grains, legumes, olive oil, etc...

ii) Retrospective statement over two months of wholesale products : it is about stating purchased and stored wholesale products to meet monthly and fortnightly consumption needs. It is, for example, the case of salaried employees who make their procurement at the end of each month (at the pay time) or a household who is used to buy foodstuffs in big quantities (flour, sugar, ...) to meet its current consumption needs. This statement is made to reduce the sampling variance caused by purchase in big quantities, when the observation period is limited to seven days. To remove any ambiguity and avoid the double use between the different statements, a threshold has been set up to define well what we mean by "purchase in big quantities". These thresholds vary according to the nature of products.

iii) Retrospective statement over one week of current purchases : this statement is made to estimate well current consumption foodstuff purchases that are not covered by the annual or fortnightly statements.

iv) Daily statements (7) of current foodstuff purchases.

v) Statement of Individual expenses: So as not to omit some individual purchases by members of the household and which the informer does not generally know, we ask each member of the household aged 15 years minimum about his/her individual purchases, such as meals and drinks taken outside. These expenses have been retrospectively stated over one week.

This individual statement concerned also non-foodstuff individual expenses (leisure fees, transportation, cigarettes, maintenance costs, communication expenses, ...).

vi) Evaluation of home-consumed food or products received in the form of wage in kind: it has been made through the weighting mode. To have reliable information, surveyors daily visit the households according to their meal-cooking habits.

Prices adopted for value determining are those of the market (souk) where the households is used to go shopping, or the nearest grocer in case of difficulties. Price statements are made daily by the controllers during the survey week.

4.3.2 Non-food expenses

For this category of expenses, statements are as follows:

i/ Retrospective statements of the individual expenses over one week : it is about stating some maintenance, transportation, short term trips, leisure products purchase personal expenses and individual ones ;

- retrospective statements of individual expenses over one month;
- retrospective statements of periodical expenses ;
- retrospective statements of non-food purchases according to the nature of goods and services, over one, two and twelve months;
- retrospective statements of clothing expenses over three months.

ii/ « Thematic » statements : at the level of each theme treated by the survey, data collection related to the variables approached by the theme in question should be integrated and any kind of expenses that can be incurred through the presence of one of these variables should be mentioned. This approach allows for a better control of the households' statements about expenditures, by linking them to the other objective data.

Therefore, by approaching, for example, the housing theme, we should underline the presence of a tenant to ensure reporting the rental value at the level of periodic expenses or if the household had repaired (electricity, plumbing, ...) its house during the last two months, to record respective expenses in the concerned retrospective statement.

4.4. Classification of the average annual expenses per capita

One of the determinants used to analyze and present results is the average annual expenses per capita. This variable is subdivided into five (or ten) categories of equal sizes, in terms of persons, called quintiles or deciles. These categories are as follows:

i/ Classification according to quintile categories : the first quintile reflects the 20% of the most underprivileged population, whereas the fifth quintile indicates the 20% of the best-off population ;

1. Less than 3 542 DH
2. From 3 542 DH to less than 5 032 DH
3. From 5 032 DH to less than 7 046 DH
4. From 7 046 DH to less than 10 881 DH
5. 10 881 DH and more.

ii/ Classification according to decile categories : the first decile contains the 10% of the least well-to-do population and the tenth decile represents the 10% of the most privileged population.

1. Less than 2 783 DH
2. From 2 783 DH to less than 3 542 DH
3. From 3 542 DH to less than 4 231 DH
4. From 4 231 DH to less than 5 032 DH
5. From 5 032 DH to less than 5 958 DH
6. From 5 958 DH to less than 7 046 DH
7. From 7 046 DH to less than 8 596 DH
8. From 8 596 DH to less than 10 881 DH
9. From 10 881 DH to less than 15 548 DH
10. 15 548 DH and more

Sub-appendix 1

Content of form A

Form A of the survey about consumption and expenditures is presented in the form of modules. Each one of these comprises generally one or several parts.

Module	Part	Description
1. Demography	-	- Demographic characteristics of the household members
2. Absent members	-	- Characteristics of absent members living in collective households
3. Housing	-	- Housing conditions
4. Investment in housing	-	- Investment in housing during the last five years
5. Energy	-	- Energy consumption and expenses
6. Activity	-	- Determining the type of activity and characteristics of working persons
7. Education	A B	- Schooling status of all household members - Characteristics of the general education provided to the absent members aged less than 35 years
8. Health	A B C D E F G H I	- Medication demand - Dental care - Medical analyses and X-rays - Medical care - Purchase of medicinal plants - Purchase of medicines - Purchase of medical appliances - Medico social coverage - Vaccination
9. Family solidarity	-	- Services received for free
10. Transfers	A B C D	- Transfers received in cash - Transfers received in kind - Transfers made in cash - Transfers made in kind
11. Owned computers' characteristics	-	- Owned computers' characteristics
12. Repercussions	-	- Repercussions on the household's socioeconomic situation
13. Income	-	- Household's income source

Sub-appendix 2

Content of form B

The main object of this form is to estimate foodstuff expenses of the household, as well as the collection of information related to the composition of the food unit and regime of children under 2.

The fact of asking surveyed households to provide, retrospectively over one year, specific information about their goods and service expenditures does not at all ensure that the part related to expenses be successful. Indeed, surveyed households are certainly unable to make reliable statements about their annual expenses for items that they purchase daily. Therefore, to reduce the impact of the memory effect on the statements of the surveyed, we have recourse to the reference period concept, i.e. period to which are related information provided by the surveyed at the interview time.

The period is chosen according to the products purchase frequency in order to reduce observation errors. It is thus that several types of statements are established for the various purchases of the households. These statements are the following:

- Retrospective statement over one year: annual food provisions;
- Retrospective statement over two months: food purchases in big quantities;
- Retrospective statement over one week: current food purchases;
- Daily statements of current food purchases;
- Retrospective statement over one week of individual purchases;
- Retrospective statement over on month of individual.

Form B concerns also the food unit composition through :

- ☐ Statement of anthropometrical measures of all members of the household;
- ☐ The degree of participation to the various meals.

Similarly, this form introduces two other aspects, which are not less important, of the life of children, to wit:

- ☐ Breastfeeding and weaning children aged less than 2 years;
- ☐ Food regime of children, aged less than 2 years.

Sub-appendix 3

Content of form C

This form aims mainly at collecting information about all non-food expenses. A special module is incorporated at the level of this form to deal with durables owned by the household, as well as these goods purchased during the last two years.

The various forms of statements are as follows:

- ☐ Statement of periodic purchases : water, electricity, rent, schooling, ... and other similar expenses ;
- ☐ Retrospective statement over one month: small items for odd jobs, periodic energy expenses, ...;
- ☐ Retrospective statement over two months: kitchenware, medicines, ...;
- ☐ Retrospective statement over three months: clothing;
- ☐ Retrospective statement over twelve months: medical care, holiday trip fees, ...;
- ☐ Statement of the main home's durables ;
- ☐ Statement of the second home's durables ;
- ☐ Statement of the household's sales.

Sub-appendix 4

Community forms

The study of the population's economic and social situation through the apprehension of some indicators related to its housing, education, activities, ... is generally not always enough to find out better about the level of its well-being. Also, the socioeconomic and cultural environment proves to be an important determinant to be taken into consideration when evaluating the economic and social conditions of the households in their places of residence. This environment's constituents can be: climactic and geographical specificities, the existing economic and social infrastructure, and the characteristics of the prevailing economic activity.

In the same way as to the main form, two other community forms have been introduced to approach the influence of this environment on the population's living conditions. The expected object by introducing these forms is then to get the characteristics that are common to all households in their own places of residence.

1. Douar form

This form aims at studying the level of each douar sheltering sample-households, degree of availability of equipment and infrastructures, such as primary school, free clinic, administrative departments, drinking water, electricity, tarred roads, etc... They also provide the possibility to study other community aspects (means of transportation used by the population, main practiced activities, ...) Modules comprising this form are:

- General information about the douar;
- Some characteristics of the households living in the douar ;
- Access to the administrative departments ;
- Access to other collective equipment;
- Other aspects of the living conditions ;
- Employment market.

2. Neighborhood form

This form gives information about each urban primary unit constituting the survey sample. By analogy with the douar form, this one, which is related to the neighborhood, is concerned with the study of the households' living conditions in the urban neighborhoods and to the availability or not of some collective equipment.

It is also possible through data collected at the level of this form to have an idea about the degree of participation of the residing population in neighborhood maintenance works and approach the level of satisfaction of the households about their people around them and the safety in the neighborhood. Modules of the neighborhood form are:

- Households' living conditions in the neighborhood;
- Availability of collective services and equipment;
- Other aspects of the living conditions of neighborhood households.