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THE INTEGRATED HOUSEHOLD SURVEY

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THE INTEGRATED HOUSEHOLD SURVEY*

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ABBREVIATIONS AND ACRONYMS

AI	Adult Illiteracy Rate
ALI	Adult Literacy Index
ALR	Adult Literacy Rate
BHM	Population below Half Median Income (50 per cent of median income)
CCA	Common Country Assessment
CGER	Combined (primary, secondary and tertiary) Gross Enrolment Ratio
DW	Percentage of people lacking access to safe drinking water
EFS	Expenditure and Food Survey
EI	Education Index
ESCWA	Economic and Social Commission for Western Asia
FES	Family Expenditure Survey
FHS	Food and Health Survey
FI	Adult Functional Illiteracy
FSU	Final Sampling Units
GDP	Gross Domestic Product
GEI	Gross Enrolment Index
GHS	General Household Survey
HDI	Human Development Index
HPI-1	Human Poverty Index 1
HPI-2	Human Poverty Index 2
IHS	Integrated Household Survey
LCI	Living Conditions Index
LEI	Life Expectancy Index
LFS	Labour Force Survey
LGHS	Longitudinal General Household Survey
LSMS	Living Standard Measurement Survey
LU	Long-term Unemployment
MSS	Modular Survey System
NFS	National Food Survey
NS40	Probability at birth of not surviving to age 40
NS60	Probability at birth of not surviving to age 60
OMN	Omnibus Survey
PPP	Purchasing Power Parity
PPS	Probability Proportional to Size
PSU	Primary Sampling Units
SSU	Secondary Sampling Units
TSU	Tertiary Sampling Units
UBN	Unsatisfied Basic Needs method
UBN	Unsatisfied Basic Needs
UNDAF	United Nations Development Assistance Framework

FOREWORD

This paper aims to demonstrate the importance of combining a number of statistical household surveys into a single, integrated survey that can provide access to a wide variety of demographic, social, economic and health-related data.

The study consists of ten chapters. Chapters I through III discuss the basic components and objectives of the Integrated Household Survey (which will be abbreviated as IHS throughout this survey) as well as the steps involved in its design. Topics examined in this section include the wide variety and large number of surveys that the IHS encompasses, and the possibility of adding topics, variables and questions.

Chapter IV takes stock of the advantages and disadvantages of the IHS, while chapter V examines the connection between the IHS and the study of poverty, enumerating a series of approaches to the latter that includes three indices calculated at the national level and the Living Conditions Index, which is calculated at the household level.

Chapter VI features a preliminary list of variables and questions that may be included in the IHS questionnaire. That list was derived from the contents of numerous general and specialized survey questionnaires that cover household, dwelling and household members. Chapter VII examines the Living Standards Measurement Study Survey and the key topics it may include.

Chapter VIII gives an overview of several types of surveys that facilitate the study of various aspects of the phenomenon of poverty, as cited by the International Household Survey Network (IHSN), while chapter IX examines the models, objectives and contents of the integrated household surveys conducted in Malawi and South Africa.

In chapter X, the study concludes by asserting the importance of gaining a more precise, detailed understanding of various poverty-related issues, also underscoring the vital role of statistical household surveys in elaborating, implementing and evaluating economic and social plans and programmes. Chapter X also provides a number of recommendations for developing statistical systems and mechanisms, along with requirements for building the IHS.

Annexes to the study describe a number of statistical sampling techniques that the IHS may make use of, such as sampling error values or confidence intervals relative to the percentage of sample results. The annexes also outline how to use the systematic drawing method in random sample selection and explain how the human development index and human poverty indices 1 and 2 are calculated, in addition to listing fields and indicators used in Iraq, Lebanon, and in the comparative study on poverty and deprivation in some Arab countries. The final annex contains an extended list of variables and questions that might be helpful in developing the IHS.

I. BASIC COMPONENTS

Several kinds of statistical household surveys exist, and they all require an extensive amount of comparable data, in particular, demographic data and data on households and their dwellings. When carried out by individual entities, such surveys entail considerable costs, tools and human expertise, resources that may not be available in some countries.

Building and conducting an integrated household survey would therefore constitute a practical step towards both lowering the costs involved in conducting statistical surveys and making optimal use of the human expertise and tools available to countries.

The Integrated Household Survey (IHS) encompasses different models used in household surveys. The IHS combines the objectives and components of four main surveys,[1] namely, the Labour Force Survey (LFS), the General Household Survey (GHS), the Expenditure and Food Survey (EFS), and the Omnibus Survey (OMN). Additionally, the IHS is based on two other kinds of social surveys: the Community Survey and the Prices Survey.

A. LABOUR FORCE SURVEY

The Labour Force Survey gathers detailed data[2] on employment and unemployment among household members, including information on current and past employment, duration and type of work. Data on working conditions, income, type of institution and industry sector are also compiled. In addition, the survey collects demographic and educational data, both of which are considered fundamental for statistical analysis of survey data.

The LFS is carried out periodically (every three months) on the same sample, in order to consistently monitor employment and unemployment trends in an ongoing manner.

B. GENERAL HOUSEHOLD SURVEY[3]

The General Household Survey collects basic demographic, educational, health-related and vocational data on individual household members, as well as basic information on the household and dwelling (namely, dwelling address; type of dwelling; dwelling characteristics; occupancy; dwelling fixtures; access to electrical grids, health-care networks and other available service networks; the cleanliness, noise levels, lighting and other features of the immediate environs of the dwelling). The General Household Survey is normally conducted once a year.

C. EXPENDITURE AND FOOD SURVEY

The Expenditure and Food Survey covers three key areas, namely, household income, household expenditure and food consumption. The EFS is conducted using two methods of data collection: a questionnaire addressed to the household to gather information on the household, household members and dwelling, and a diary of all personal expenditure distributed to all household members aged 16 years and above, to be kept for two weeks and in which they are to record purchase of food products and other personal consumption (specifying the amounts, weights and sizes of all food products purchased or consumed).

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[1] National Statistics, Consultation Paper (2004). *Proposals for a Continuous Population Survey*, UK National Statistics, Office for National Statistics, UK Statistics Authority, United Kingdom.

[2] Annex 9, Preliminary list of variables and questions that may be of use in developing the Integrated Household Survey.

[3] When conducting this survey, countries often use the same sample over several years or time periods (Wave Panel Interview) in order to monitor and follow up on the evolution of household living and social conditions over time. In such cases the survey is known as a household longitudinal (or panel) survey.

Non-response rates on the EFS are on the rise, particularly in the case of the diaries, which up to a third of respondents do not keep.

The Office for National Statistics in England introduced the EFS in 2001, as a replacement for the Family Expenditure Survey (FES) and the National Food Survey (NFS).

The variables and questions used in the Living Conditions Survey and the Food and Health Survey might be useful in developing the Expenditure and Food Survey.

D. Omnibus Survey[4]

The Omnibus Survey collects statistical data on a variety of topics that, for economic reasons, do not warrant a survey of their own, in order to deliver cost-effective and rapid access to reliable statistical results.

The Omnibus Survey was incorporated into the Integrated Household Survey because it adds information on the views of individuals regarding various social, educational, health-related, political and other topics, to the body of demographic and social data collected by means of the first three types of surveys. The survey is conducted by randomly selecting an adult household member for interview from the household being surveyed.

E. Community Survey

The Community Survey gathers general data on the geographic area in which the household is based, covering a number of fields, including demographic data on the number of households and household members residing in a given geographic area, and on the availability of educational institutions, health-care centres, entertainments and other establishments within the area. The Community Survey also collects multiple data on the economic activities, the state of agriculture, and the availability of infrastructure services, such as roads, water, electricity and sanitation, among others.

F. Prices Survey

Given that the living standards of a household of a certain income are linked to the price of commodities in its geographic area, it is necessary to obtain information on the state of prices of a selected list of food and non-food commodities in different geographic areas.

G. Other Surveys

The six surveys described above serve as the basis for IHS. However, the logic adopted in developing this kind of survey would leave room to add, as needed, contents and variables from other statistical household surveys, such as the following:

1. *Surveys on the situation of children*

These surveys cover data on the dwelling, in addition to demographic, educational and professional data on household members, classified as follows:

(a) Data on breastfeeding and types of foods fed to children under two years old;
(b) Data on vaccinations administered to children under the age of two;

[4] An abstract of the objectives and contents of this category of survey is set forth in publications issued by the Office for National Statistics, UK Statistics Authority, and can be found on the following website: http://www.statistics.gov.uk.

(c) Data on widespread diseases and domestic accidents affecting newborns and children under the age of five;

(d) Data on child deaths.

2. *Surveys on food and health*

These surveys cover demographic and housing data, divided into the following categories:

(a) Data on household members' weight, health situation, and degree of satisfaction with own health situation;

(b) Data on household members' athletic activities and the repercussions of physical effort exerted at the workplace during the day;

(c) Data on types of food and drink consumed, their degree of healthfulness, and food allergies of household members, if any;

(d) Data on methods used in the household to preserve foods, in particular, involving the use of a refrigerator or freezer, and freezing and refreezing of foods;

(e) Data on the washing and sterilization of fruits and vegetables, and on cooking methods.

3. *Surveys on household health*

This category of surveys considers female reproductive health, health and social care given to the elderly, and problems and issues facing youth.

4. *Surveys on cultural and artistic activities*

This type of survey examines how often household members participate in cultural activities, what kind of activities they participate in, how often they visit public libraries, theatres, art exhibitions, cinemas and other cultural establishments, and what type of literary or artistic hobbies and activities they pursue. It also looks at how often they listen to music and watch television, as well as at the kind of music listened to and television programmes watched. Also addressed are the obstacles that prevent household members from partaking of cultural and artistic activities and the factors that encourage their participation in such activities.

6. *Surveys on persons with special needs and disabled persons*

These surveys consider the health care received by persons with special needs and disabled persons, along with the extent of their participation in all manner of community activities and in the labour force. The extent to which the public and private sectors attend to this demographic is also examined.

II. BASIC OBJECTIVES

The basic objectives of IHS are described in the following passages.

A. Building a survey system

The IHS is made up of sets of questions, grouped by topical module. The topics considered include: education; health; employment and unemployment; household expenditure; income and property; dwelling environs and facilities available within them; household loans, debts and savings; safety and security levels in the immediate environs; social welfare available to the household; household poverty and deprivation levels, and so forth. This topical approach will yield detailed and statistically reliable knowledge on different aspects of the household and household members.

B. Collecting statistical data

The survey collects statistical data under each topical module, not only at the national level but also at the level of geographic areas within a country (namely, state, governorate, district), given that development work is likewise conducted, and plans and programmes put in place at both levels. It is therefore necessary to analyse and measure poverty at the geographic area level in order to map it more effectively and clearly, as well as to link household characteristics to the most recent population and housing censuses.

C. Determining the contents of topical modules

It will be necessary to take a flexible approach to determining topical module contents, so that the content will benefit as many users as possible, and so that it can be developed and expanded, as needed, to include additional variables and questions that stakeholders may require. Variables and questions should be added once their practical benefit in terms of meeting user needs has been ascertained.

D. Standardizing concepts

In order to accomplish the necessary task of standardizing the concepts used in the different surveys, a single authority should conduct the surveys that make up the IHS.

E. Conducting statistical analysis

A perspective that calls for comprehensive recommendations should be adopted in order to conduct statistical analyses of results at the level of individual geographic areas within the country. It will be necessary to employ a more complex methodology involving statistical intersections across different fields, topics and variables, in addition to multivariate statistical analysis techniques. The variety and availability of demographic, social, economic and health-related variables within a single database makes it possible to do so.

F. Reaching statistical precision levels

Statistical precision levels can be reached by using sampling techniques that make it possible to attain equal sampling error values across the different geographic areas being surveyed.

G. Building a statistical sample or sub-samples

It will be necessary to build a statistical sample or sub-samples, corresponding to the needs arising from the different topics contained in the IHS, and to the requirements for reaching equal statistical precision levels in the results.

H. Updating the sampling frame

The sampling frame should be updated periodically for each geographic area in order to ensure that the random samples being built remain precise and reliable.

I. Conducting the Integrated Household Survey periodically and continuously

The Integrated Household Survey should be conducted periodically and continuously in order to enable stakeholders to follow the development of demographic, social and economic conditions; to assess periodically the success of programmes and plans executed by various Government departments; and to assess and monitor the progress made towards achieving the Millennium Development Goals (MDGs), in particular the goal of eradicating extreme poverty and hunger.

J. Making use of allocated funds

Optimal use should be made of the funds allocated for the surveys, the technical equipment and human expertise required to develop and conduct statistical surveys.

As demonstrated above, the IHS, owing to its objectives and components, is characterized by a comprehensiveness that surpasses that of individual surveys on specific topics, such as the Labour Force Survey, the General Household Survey, the Expenditure and Food Survey or other such surveys.

III. BASIC STEPS

Given the varied and numerous surveys that make up IHS, and the possibility of adding topics, variables and questions to the survey's basic components, carrying out the IHS will entail a number of steps.

DETERMINING SURVEY TOPICS AND CONTENTS

During this fundamental preparatory phase, the different topics to be included in IHS will be selected, taking into account the objectives and purposes of the survey. Those purposes may include the preparation and assessment of development plans and programmes for official ministries and departments, and the study and measurement of specific social and economic phenomena affecting the household. Other possible survey purposes and objectives include monitoring and following up on the progress achieved towards implementing the recommendations of different international conferences and the development programmes proposed under the United Nations Development Assistance Framework (UNDAF),[5] which is usually formulated according to a common assessment of country needs, also known as the Common Country Assessment (CCA).[6]

The process of deciding which topics will be covered in the Integrated Household Survey is linked to the six basic surveys that make up the IHS, namely, the Labour Force Survey, the General Household Survey, the Expenditure and Food Survey, the Omnibus Survey, the Community Survey and the Prices Survey. Defining IHS topics and variables is also directly tied to the fields and indicators used to measure poverty and deprivation levels. These indicators are, in turn, related to the types of variables and questions included on survey questionnaires.

This phase requires consultations with all relevant authorities or with those using the results of the IHS, a detailed examination of their statistical data needs, and discussion of those needs at bilateral or multilateral meetings. The consultation process is a necessary part of preparing the topical modules that the IHS will include, as well as of setting forth in detail the variables and questions required by each topic, which are to be included in survey questionnaires. It is worth noting that the existence of a council for national statistics[7] that encompasses the main authorities responsible for the production and use of statistics in the public and private sectors, could facilitate and expedite the process of determining survey topics and contents.

1. *Determining the geographical levels at which the IHS is to be conducted*

In order to put in place development plans and programmes, it will be necessary to analyse the results of surveys at the national level, as well as at the level of administrative departments and geographical areas within the given country. Determining the level of the administrative and geographical units at which this analysis will be carried out will, in turn, be crucial in determining sampling error, whole sample size and the sizes of its component sub-samples. The administrative units and geographical areas should therefore be defined in advance, in coordination with Government ministry and department officials, and according to the level, be it regional, state, governorate or district, at which the development plans and programmes are to be put in place.

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[5] The United Nations Development Assistance Framework (UNDAF) organizes cooperation between different United Nations organizations active in the field of development and national ministries and departments, with a view to establishing social, economic, and health development projects.

[6] The Common Country Assessment studies and assesses a country's development needs, elaborates the indicators needed to conduct the assessment. The CCA and its special list of indicators are considered an essential part of elaborating the UNDAF.

[7] The establishment of a council for national statistics, encompassing the largest number of statistics users and producers in a given country, is considered a fundamental step towards modernizing and rationalizing national statistical systems.

2. *Defining a plan for conducting the Integrated Household Survey*

The multitude of survey topics and of variables and questions contained in survey topical modules would significantly hinder attempts to conduct the IHS all at once.[8] Therefore, a plan to conduct the survey has been devised, and it entails the following measures:

(a) Building a core module out of a core group of variables and questions, in particular questions on demographic, educational, professional and health-related characteristics;

(b) Building topical modules out of a detailed and extensive set of related variables and questions. The topical modules may cover the following areas: education; health; employment and unemployment; household expenditure, income and property; immediate dwelling environs and facilities available within them; household loans, debts and savings; safety and security levels in the dwelling environs; social welfare available to the household; and levels of poverty and deprivation faced by the household;

(c) Formulating several survey questionnaires that contain a series of questions from the core module, as well as a series of questions from each of the specialized topical modules;

(d) Dividing the whole survey sample into sub-samples, and including each topical module in one of the questionnaires mentioned in paragraph (c) above;

(e) Taking into account the nature of the topical module being considered in terms of the frequency of data collection.[9]

Conducting the integrated survey in this manner will make filling out questionnaires less burdensome a task for respondents, thereby making it less likely that they either refuse to fill out the questionnaire outright or that they fail to complete all survey questions.

3. *Building, discussing and testing preliminary model questionnaires and instruction manuals*

Once the topical modules have been compiled within multiple questionnaires, preliminary model questionnaires are formulated and sent to the parties who participated in defining survey topics and contents, so that those parties may give their final opinion on the extent to which questionnaire contents conform to their statistical data needs.

The preliminary questionnaires are then amended and used to formulate the detailed instruction manuals, which clarify the questions contained therein and indicate how to fill out, verify and encode the questionnaires.

Data entry programmes are elaborated for the relevant questionnaires, in particular auto-audit programmes that logically verify the data entered in order to avoid contradictions.[10]

Small groups of investigators, auditors, encoding and data entry personnel are selected and trained to carry out their respective tasks. After field surveys are conducted on a specific number of households, the data auditing, encoding and entry operations proceed, statistical tables are extracted and relevant indicators are built in order to test the clarity of survey questions, to expose difficulties that investigators may have encountered in filling them out, as well as to determine how long it takes to complete them and how clear the data verifying, encoding and entry processes are.

[8] Despite the large number of variables and questions involved, many countries do conduct the entire IHS at once.

[9] Some types of surveys need to be conducted yearly (e.g. GHS), every three months (e.g. EFS) or monthly (e.g. OMN).

[10] Examples of comparisons that can be included in the logic audit programmes: age and level of education, age and marital status, educational level and profession, type of dwelling and monthly rent.

It is worth noting that, given the importance of this experimental phase, throughout which the preliminary sample questionnaires and instruction manuals are to be assembled and tested, a complete enactment of all the steps involved in conducting the survey must be carried out, leading to the issuance of statistical tables based on preliminary questionnaire responses, in order to avoid any errors or gaps that may arise in the actual conduct of the IHS.

4. *Building final model questionnaires and instruction manuals*

The results of the experimental phase are reviewed in order to assess the clarity of the questions on the preliminary questionnaire, the difficulty of each question and the time required to complete it, as well as the clarity of the instructions on verification, encoding and data entry.

Based on this review, the final survey questionnaires are formulated, as are the final indicator models for filling in, verifying, encoding and entry of questionnaire data.

5. *Building the whole sample needed to conduct the survey*

Statistical surveys often use probability (random) sampling to reduce financial costs. The main sampling methods used in household surveys include three-stage or two-stage stratified sampling, clustered or non-clustered sampling, and sampling using a uniform sampling rate or equal sample size (see annex 1 for details of sample types).

Most surveys use a stratified clustered sampling technique because it is less costly and more practical in terms of filling out field surveys, insofar as it is more economical and less time-consuming to transport investigators from dwelling to dwelling. However, this sampling technique also has its disadvantages, in terms of the similarities in the dwelling environs, within a single cluster, such as the availability of public health and education services or sources of annoyance in the environs in question. Therefore, two-stage stratified unclustered sampling is the best option for conducting the IHS, material conditions permitting. As for the specific type of sample, a uniform sample size should be used, given the required levels of statistical precision in terms of equal results across different geographical areas.

The whole sample size and the size of sub-samples shall be defined according to the number of administrative units or geographical areas on the basis of which the sample will be built and the statistical analysis conducted, and also in light of the number of sub-samples for which a questionnaire will be filled out, each questionnaire containing a set of questions that also appear in the core survey module and in one or more of the specialized topical survey modules. A sub-sample size of 1,000 households is proposed for each geographical area, and in each topical survey module. Sampling error or confidence intervals in percentages reached in simple samples range from 0.9 per cent in cases where the percentage value of a particular variable category in the sample is equal to two per cent, and three per cent in cases where the value of this percentage equals 50 per cent (see annex 2, chart 2).

Lastly, it is worth noting that the proposed course of action is in accordance with an overall approach that should be further developed and fleshed out in light of additional considerations and characteristics, including the kind of agglomerations (urban, rural or Bedouin), as well as the way in which dwellings are organized (communal dwellings and buildings or individual dwellings spread out over a large land area), and the living standards in the particular geographical agglomeration (high, average or low living standard).

6. *Forming and training the teams*

Given the multitude and variety of topics and questions on IHS questionnaires, it will be necessary to form competent teams to work on the surveys on a regular, rather than an occasional, basis. To that end, workers should have a secondary- or university-level education. Listed below are some of the steps that

must be taken to put together and train the teams to carry out data collection, verification, encoding and data entry:

(a) Accepting candidates' applications for different job positions, based on the personal application form submitted for each task (namely, data collection, data verification, data encoding, data entry);

(b) Selecting more candidates than are actually needed for each position, in order to train those candidates and subsequently choose the strongest among them, taking into account the possibility that some field or office trainees or workers might drop out at a later stage;

(c) Organizing detailed and in-depth training sessions for the field workers, the auditors and the encoding and data entry personnel. It should be noted here that the encoding of certain variables, such as answers relating to occupation or type of economic activity, might require candidates possessing special qualifications;

(d) Testing the trainees in their fields of expertise and selecting the strongest ones.

7. *Field and office work*

The Integrated Household Survey is conducted at two levels, in the field and in office, according to the following sequence of steps:

(a) Prior to conducting the field work (e.g. filling out questionnaires), a large-scale campaign is launched to inform the citizenry of the statistical integrated household survey to be conducted and its objectives, with a view to encouraging participating households to facilitate the work of field investigators;

(b) Teams of investigators assigned to geographic areas and headed by experienced leaders carry out the field work;

(c) Investigators receive and submit questionnaires as indicated on receipt and submission rosters, under the team leader's supervision;

(d) The team leader reviews the completed questionnaires to confirm that they have been completed properly and to rule out any major problems;

(e) Random field auditing techniques are employed by an independent team to ensure that field questionnaires have been filled out properly and to detect any error or fraud that may have been committed by team members filling out questionnaires;

(f) Questionnaires are sent to the main survey administration office, where they are reviewed by the auditing teams;

(g) Questionnaires that fail to meet the established requirements are returned to the field team for completion or correction;

(h) Questionnaires that meet the established requirements are forwarded to the auditing and encoding teams, who then pass them on to the data entry teams, according to the receipt and delivery roster, under the supervision of the auditing and encoding team leaders;

(i) Data entered into the computer system are cleaned[11] before the statistical data mining process begins;

(j) The results are then screened, analysed and mined to formulate and evaluate plans and programmes, and to build various indicators.

[11] The data cleaning process takes place after the bi-variable statistical tables have been produced, verifying that no numerical values appear in table boxes where they do not logically belong. This is the final operation in the office auditing and logical auto-audit processes.

IV. ADVANTAGES AND DISADVANTAGES OF THE INTEGRATED HOUSEHOLD SURVEY

The Integrated Household Survey draws upon the components of the Labour Force Survey, the General Household Survey, the Expenditure and Food Survey and the Omnibus Survey. The IHS also takes into account the objectives of development plans and programmes operating in different fields, as well as the needs specific to the measurement and study of poverty and deprivation. Moreover, IHS considers the lists of recommendations, indicators and variables contained in the reports of various international conferences, UNDAF and the Common Country Assessment. Conducting a survey that encompasses objectives and topics as numerous and as varied as those included in IHS will necessarily have advantages and disadvantages.

1. *Advantages*

(a) The survey questionnaires encompass a wide range of variables and questions, providing a comprehensive and rich statistical portrait of the state of the dwelling, the household and household members from social, economic, educational, health, nutritional and other standpoints;

(b) Integrated Household Surveys facilitate a more comprehensive and in-depth analysis by means of the statistical intersections between multiple variables contained in a single database; that interaction makes it possible to highlight the connections and correlations between different demographic, social, economic, health and other variables;

(c) These surveys also include composite indicators that span demographic, social, health and economic fields and that can be used in assessing and monitoring progress made towards achieving national development goals; following up on implementation of national economic and social programmes; and assessing and monitoring progress made towards achieving the MDGs, particularly the goal of eradicating extreme poverty and hunger.

1. *Disadvantages*

The following problems might stem from the inordinate number of questions in the survey questionnaires:

(a) A rise in the number of respondents who refuse to answer all the questions;

(b) Failure on the part of respondents to complete the questionnaire because of fatigue or boredom;

(c) Attempts on the part of respondents to complete the questionnaire as quickly as possible by giving incorrect or inaccurate answers;

(d) The possibility that the questionnaire will yield inaccurate results, raising the question of whether it might be preferable to conduct the individual surveys that make up the IHS separately, or instead to conduct the IHS and run the risk of generating results that lack the desired precision;

(e) Spending an entire year designing and conducting the IHS.

In light of the above, the contents of the survey and the number and type of question on survey questionnaires should be determined, with a view to gathering the widest possible range of data while also bearing in mind the length of the questionnaire, as an inordinate number of questions increases both the likelihood of refusal on the part of respondents to complete the questionnaire and the rate of respondents who provide incorrect or inaccurate answers in their haste to complete it.

V. THE INTEGRATED HOUSEHOLD SURVEY AND THE STUDY OF POVERTY

Eradicating extreme poverty and hunger is the first of the Millennium Development Goals. The study of poverty requires detailed demographic, social and economic data such as that provided by statistical surveys, in particular, the IHS.

A. DEFINITION OF POVERTY AND APPROACHES TO ITS STUDY

Definitions of poverty abound, as do poverty measurement methods. Doctor Mohammed Hussein Baker[12] identifies poverty as "a state of material deprivation primarily characterized by meagre food consumption; deterioration of health, education and housing conditions; deprivation of ownership of durable goods and other financial assets; loss of reserves or security needed to confront difficulties, such as those arising from illness, disability, unemployment, catastrophes and crises".

Dr. Heba Laithy[13] notes that individual living standards are closely tied to ownership of assets in general, and of the following kinds of assets in particular:

(a) Economic assets, such as land, livestock, housing, skills, sound health, employment and other material factors that provide a basis for production and income-generating activities;

(b) Social assets (or social capital), which allow families and individuals to rely on their ties to others in difficult circumstances;

(c) Infrastructural assets related to education, knowledge, health, telecommunications, transport and other services typically provided by the State.

Dr. Laithy also enumerates the different kinds of poverty as defined by varying criteria:

(a) Poverty defined by the kind of deprivation involved, such as material poverty, participatory poverty, poverty in terms of access to independence or security, human poverty and capability poverty;

(b) Poverty defined in terms of duration, such as temporary poverty, seasonal poverty, permanent poverty, potential poverty based on a family's vulnerability in terms of its capacity to confront crises and shocks;

(c) Poverty defined by measurement method, such as relative poverty, absolute poverty, extreme poverty, and subjective poverty.

With respect to poverty measurement, Dr. Baker states that "the first attempts to measure poverty were based on direct indicators related to household capacity for income generation or consumption, chief among them total household or per capita income or expenditures; consumer unit share of overall expenditures; rate of spending on food and per capita food-energy share". Nevertheless, poverty measurement methods have developed significantly of late, one of the most noteworthy being the Unsatisfied Basic Needs (UBN) method, which "relies on direct observation of satisfaction of basic needs, unlike the poverty threshold method, which assesses the income-generating capacity that allows the household to meet those needs. In addition to integrating basic needs that do not rely on household income, this method relies on data that is more readily available and accurate than that gathered to measure poverty using the threshold method.

[12] Mohamed Hussein Baker, *Applied Poverty Measurement*, 2007.

[13] Heba Laithy, *Challenges in Measuring Poverty in ESCWA Region*, Expert Group Meeting on Poverty Measurement, Beirut, 28-29 April 2009.

Moreover, when using the UBN method, it is not necessary to draw upon household income and expenditure surveys, or to break down expenditures or income data from other sources, as that provided by the general population census or household surveys will suffice".

A monetary approach to defining and measuring poverty[14] indicates that such approaches and methods are not merely theoretical and methodological in nature, but practical as well, linked as they are to policies and interventions aimed at poverty eradication. The measurement approaches and methods used must therefore address the phenomenon of poverty in all its multidimensional, dynamic complexity.

The above points underscore the importance of adopting multidimensional approaches and measurement methods. Doing so will facilitate a more comprehensive understanding, analysis and measurement of poverty-related issues. Multidimensional methodologies and indicators used to study poverty include three indices calculated at the national level: the human development index (HDI), the human poverty index for developing countries (HPI-1), and the human poverty index for developed countries (HPI-2). In addition, an index for household living standards is calculated using the Unsatisfied Basic Needs method.

1. *Human development index*

The human development index (HDI) is a composite index established by the United Nations Development Programme (UNDP) in 1990 to assess the human development level in developing and industrial countries, based on three indices:

The health and lifespan index, as measured by life expectancy at birth. This index is also supposed to measure indirectly the level of satisfaction of the individual's basic material needs, such as healthy/healthful food, safe drinking water, decent housing, hygiene and medical care.

The knowledge or educational level index, as measured by the adult literacy rate (15 years and above) and the combined primary, secondary and tertiary gross (or net) enrolment ratio.[15]

The living standards index, as measured by gross domestic product (GDP) per capita in purchasing power parity (PPP) terms. The country's GDP directly reflects the wealth of the country as a whole.

The HDI value ranges from zero to one. Countries with an HDI exceeding 0.8 are considered to have high human development levels, whereas those with an HDI ranging from 0.5 to 0.8 fall in the category of medium human development countries. Lastly, countries with an HDI below 0.5 are considered to represent low human development (refer to annex 4 for methods and equations used to calculate HDI and indices).

2. *Human poverty indices for developed and developing countries (HPI-1 and HPI-2)*

The HPI-1 measures the deprivation rate in developing countries, while the HPI-2 measures the deprivation rate in industrialized countries. Owing to the socioeconomic differences between developing and industrialized nations, UNDP used different indicators to elaborate each index.

The indicators used to calculate the human poverty index for developing countries (HPI-1) include the following:

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[14] Adib Nehmeh, *Multidimensional poverty: definitions and measurement methodologies*, Expert Group Meeting on Poverty Measurement, Beirut, 28-29 April 2009.

[15] The total enrolment ratio of the three levels is equal to the number of enrolled students in all three levels regardless of age, divided by the total number of school-age persons in the three levels, multiplied by 100.

The lifespan indicator for developing countries, as measured by the probability at birth of not surviving to age 40 (percentage of population).

Adult illiteracy indicator, as measured by the percentage of illiterates out of the total population aged 15 and above.

Living conditions indicator, as measured by three sub-indicators:

(a) Percentage of the population lacking access to safe water;
(b) Percentage of the population lacking access to health services;
(c) Percentage of children under five who are moderately or severely under weight-for-age.

The following four indicators are used to calculate the human poverty index for industrialized countries (HPI-2):

The lifespan indicator for industrialized countries, as measured by the probability at birth of not surviving to age 60 (percentage of population).

Adult functional illiteracy indicator, as measured by the percentage of adults (ages 16-65) lacking functional literacy skills.

Indicator reflecting the percentage of population below income poverty line, as measured by the percentage of household members earning 50 per cent of median adjusted household disposable income.

Long-term unemployment indicator, as measured by the rate of long-term unemployment (12 months or more) within the overall labour force.

In sum, HPI-1 yields the percentage of households and of the population suffering from deprivation in developing countries, while HPI-2 reflects the percentage of households and of the population suffering from poverty in industrialized nations. The method by which each index is calculated is set forth in annex 5 of this paper.

3. *Unsatisfied Basic Needs Method and the Household Living Standard Index*

The three human development indices outlined above (HDI, HPI-1 and HPI-2) make it possible to measure poverty at the national level. The UBN method facilitates the establishment of an index that measures different dimensions of poverty and deprivation, first, at the household level, and then at the national, district, regional and State levels, should stakeholders wish to do so.

In his report on applied poverty measurement, Dr. Baker explains that:

"The UBN method can be applied by calculating a statistical index of unsatisfied basic needs. In order to calculate the index, one must first define the fields in which basic needs are assessed, and select a number of representative indicators for each field. Each indicator is assigned a score ranging from 0 to 2, 0 for cases of total deprivation of basic needs, and 2 for cases of total satisfaction of basic needs. A score of 1 represents the basic needs deprivation threshold; a score less than 1 indicates that the basic needs of an individual or household are unsatisfied".

The UBN method approaches poverty and deprivation as complex phenomena that both affect and are affected by a number of social, economic, cultural, environmental and other factors and variables. The diversity of the dimensions and indicators used in the UBN method surpasses that of the components of the three indices described above.

It is a known fact that researchers and stakeholders tackling poverty-related issues use a number of socio-economic variables and indicators, and they do so in the context of analyzing the characteristics of poor societies and households and proposing poverty eradication policies, instead of approaching those variables and indicators as tools for multidimensional measurement of poverty and deprivation. The UBN method relies on a number of demographic, social, health-related, environmental and other variables as tools to measure poverty and deprivation in their different dimensions, using those variables (e.g. questionnaires) to build a series of indicators that facilitate the measurement of satisfaction or deprivation levels in various social, economic, and health-related areas.

This method was used for the first time in Lebanon, within the framework of the mapping of living conditions in that country,[16] using the data yielded by the Population and Housing Survey.[17] The UBN was used in Lebanon a second time in the mapping of human poverty and living conditions,[18] using the data gathered by the National Survey of Household Living Conditions conducted in 2004.[19]

The UBN method was used in Iraq in the framework of the mapping of deprivation and living standards,[20] which used data collected by the Living Conditions Survey conducted in Iraq in 2004.[21]

In each case, the UBN method worked with raw data on the country. The use of previously available data limits the number, variety and potential of the indicators used to measure household satisfaction levels in different areas.

Using the UBN method to study the multiple dimensions of poverty raises a number of problems that must be resolved, including the following:

(a) Define what is meant by basic needs, and then define those needs and their respective fields in detail, taking into account the characteristics of countries and geographic areas;

(b) Determine which indicators[22] and fields are to be used to measure the level of satisfaction or deprivation in households and among their members;

(c) Define the satisfaction and deprivation thresholds, which could include an approved reference framework (such as the MDGs);

(d) Define the scoring systems for the various indicators and indices within the satisfaction and deprivation categories;

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[16] Ministry of Social Affairs, Lebanon, in cooperation with the United Nations Development Programme (UNDP), *Mapping of Living Conditions in Lebanon, an analytical study of the results of the Population and Housing Survey*, 1998.

[17] Ministry of Social Affairs, Lebanon, in cooperation with the United Nations Population Fund (UNFPA), *Population and Housing Survey project, basic data questionnaire on population and housing*, 1995.

[18] Ministry of Social Affairs, Lebanon, in cooperation with UNDP and the Capacity Building for Poverty Reduction Project, *Mapping of Human Poverty and Living Conditions in Lebanon 2004*.

[19] Central Administration for Statistics and Ministry of Social Affairs, Lebanon, in conjunction with UNDP, *National Survey of Household Living Conditions 2004, questionnaire on living conditions.*

[20] Ministry of Planning and Development Cooperation, Iraq, in cooperation with UNDP, *Mapping of Deprivation and Living Standards in Iraq*, 2004.

[21] Ministry of Planning and Development Cooperation, Iraq, in cooperation with UNDP, *Iraq Living Conditions Survey 2004*.

[22] League of Arab States, in cooperation with the United Nations Development Programme (UNDP) and the Pan Arab Project for Family Health, *Poverty and Deprivation in Some Arab Countries*, a comparative study in light of the results of family health surveys conducted in Arab countries (Algeria, Djibouti, Lebanon, Morocco, Syrian Arab Republic, Tunisia, Yemen). Annexes 6, 7 and 8 discuss the fields and indicators used in Iraq, Lebanon and the Arab States considered in the comparative study.

(e) Determine whether satisfaction or deprivation will be measured (that is to say, whether the above mentioned thresholds and scoring systems will be defined) in an overarching manner that does not take into consideration the particular characteristics of countries and geographic areas, or whether such specificities will indeed be considered in that process;

(f) Determine how to build scores that reflect the level of satisfaction or deprivation in different fields, based on composite indicator scores/the scores of their component indicators, in addition to determining the weights of variables in each field of basic need;

(g) Determine how to build scores that reflect satisfaction of the basic needs of the household, based on scores for different fields, in addition to defining the weights to be assigned to each area of basic need;

(h) Determine the bases on which the probability samples needed for study will be built, taking into account the levels at which analysis will subsequently be conducted; determining, for instance, whether said analysis will be conducted at the broader national level or at the geographical area level (namely, regional, state, governorate or district);

(i) Determine which variables and questions are to be included on the relevant questionnaires, as well as those that will be used to build indicators for measuring satisfaction in different fields, taking into account the indicators proposed by experts for the UBN method. It is worth noting that these variables may include dwelling, external dwelling environs, the household as a whole, the individual household member, the underage household member (taking into account the child's specificity, around which specific questions might have to be formulated), the mother in the household (to whom variables on reproductive health, among other variables, apply), the elderly, the disabled, and persons suffering from chronic illnesses (each of whom have special needs and requirements).

B. The relationship between the Integrated Household Survey and poverty measurement

The Integrated Household Survey yields a large and varied amount of data that facilitate poverty measurement through the use of Human Poverty Indices 1 and 2 and the household living standards index.

The data culled from the various fields and topics covered in IHS makes it possible to conduct extensive and varied analysis of the specific characteristics of the poor in, but not limited to, the following categories:

(a) Demographic, educational, professional and health-related characteristics;

(b) Physical and/or mental disabilities;

(c) Reproductive health issues;

(d) Food-related issues;

(e) Type of athletic and social activities undertaken by the poor;

(f) Child mortality rates among the poor;

(g) Dwelling characteristics, fixtures, and availability of basic services in the immediate environs;

(h) Sources of annoyance in dwelling environs;

(i) Estimated expenditure in poor households, percentage of distribution among the different expense categories, and estimates of income and sources of income.

Measuring the poverty level of households, collecting related data in various fields, and following the evolution over time of the degree to which the needs of poor households are satisfied[23] can assist in designing and developing Government and civil sector poverty reduction plans and programmes. To that end, IHS can make an important contribution by providing the data needed to measure poverty periodically and continuously.

[23] Following the evolution of need satisfaction in poor households necessitates the use of panel samples, which means that the study must be conducted on the same household sample over several years.

VI. PRELIMINARY LIST OF VARIABLES AND QUESTIONS

The variables and questions[24] included on the list were formulated on the basis of the contents of numerous general and specialized survey questionnaires that cover information on households, dwelling and household members. The preliminary list in annex 9 does not include the contents of the IHS questionnaires in their entirety. Moreover, many variables and questions can be added to the list successively, in response to the specific objectives and needs of the civil sector and government authorities that may benefit from access to the statistical data garnered by the surveys; to kinds of approaches to poverty and poverty measurement methods; and to the demographic, social, and economic fields and variables to be used by those involved in the study of poverty.

This preliminary list constitutes the core of a bank of variables and questions relating to households, their members, dwelling, neighbourhood and external environment. That core can be expanded as the objectives and needs of development programmes and plans require it; in response to the needs and problems related to dwelling, household and household members that field studies reveal; and in the light of the approaches, measurement methods and indicators adopted for the study of poverty.

At a later stage, it may be possible to link the questions and variables used in the aforementioned "question bank" with the various indicators required to put in place and evaluate national programmes and plans, or to monitor the progress made towards achieving the goals and recommendations adopted at various conferences on development and population issues.

The list includes variables and questions arranged under the following main frameworks:

(a) Definition of the survey and identification of the entities conducting it;
(b) Dwelling address;
(c) Data identifying household members;
(d) Demographic data and data on the residency status of household members;
(e) Data on educational achievement;
(f) Data on economic activity;
(g) Data on vocational training;
(h) Data on the health situation of household members and health insurance;
(i) Data on physically or mentally disabled household members;
(j) Data on reproductive health;
(k) Data on nutrition;
(l) Data on sports and social activities;
(m) Data on deaths in the household in the last 24 months;
(n) Data on primary household dwelling and its characteristics;
(o) Data on household properties;
(p) Data on secondary dwellings owned or rented by the household;
(q) Data on household expenditures in the past 12 months;
(r) Data on household income in the past 12 months;
(s) Data on annoyances in dwelling environs;
(t) Data on the availability of services in dwelling environs;
(u) Data on the process of completing, checking and classifying the questionnaire.

[24] Composing the list of questions constitutes the first stage in the process of building the survey questionnaires, a process which will entail additional tasks, such as defining the types of questions; classifying responses to each question as 'vague' or premature; and classifying responses in terms of their relevance to analytical processes and to the formulation of poverty measurement indicators. This can be achieved by conducting an experimental study, as recommended by the Expert Group Meeting on Poverty Measurement, held in Beirut on 27-29 April 2009.

VII. THE INTEGRATED HOUSEHOLD SURVEY AND THELIVING STANDARDS MEASUREMENT STUDY SURVEY

The Living Standards Measurement Study[25] (LSMS) was established by the World Bank in 1980 in order to measure and understand poverty in developing countries; to evaluate the effects of Government policies on living conditions in households; and to improve communications between statisticians who collect data, data analysts and policymakers. The tools and methods employed in the study make it possible to measure and analyse living standards, as well as to monitor changes in living standards.

Multi-topic LSMS questionnaires are designed to study multiple aspects of household welfare and behaviour. LSMS surveys employ several kinds of questionnaires, specifically the following:

(a) The household questionnaire is used to gather data on the household, household members and dwelling. It collects information on a wide range of topics, including demographic characteristics of household members; education; employment; health; nutrition; migration; dwelling and dwelling characteristics; and household expenses, income and savings;

(b) The community questionnaire aims to reduce the number of variables included in the household questionnaire by gathering information on local conditions. The information covered by the questionnaire usually includes the quality of health services and schools and the availability of electricity, water, sanitation services and public transport;

(c) The price questionnaire is used in cases where prices vary considerably among regions, in order to establish a correlation between household expenditures and prices in a given region;

(d) Special facility questionnaires can, in principle, supplement community questionnaires in the event that very detailed information is needed on schools, health facilities or other services provided in a given community.[26]

The World Bank website[27] lists 28 key topics that can be included in LSMS survey questionnaires, in addition to the variables that each topic is comprised of, bringing the total number of potential LSMS survey variables to several hundred. These include:

(i) Agriculture;
(ii) Assets;
(iii) Community;
(iv) Consumption;
(v) Credit and Borrowing;
(vi) Deaths in the Household;
(vii) Demography;
(viii) Education;
(ix) Employment;
(x) Environment;
(xi) Expenses;
(xii) Facilities Questionnaires;
(xiii) Government Programmes;

[25] *A Guide to Living Standards Measurement Study Surveys and Their Data Sets*, Margaret E. Grosh and Paul Glewwe, Poverty and Human Resources Division, World Bank, 1995.

[26] This type of questionnaire was employed in Tanzania in 1991 in the conduct of a detailed study on education, health, traditional healers and civil society organizations.

[27] Available at: http://iresearch.worldbank.org/lsms/lsmssurveyFinder.htm.

(xiv) NGO Programmes;
(xv) Health and Fertility;
(xvi) Housing;
(xvii) Income;
(xviii) Intra-Family Relationships;
(xix) Migration;
(xx) Millennium Development Goals;
(xxi) Non-Farm Household Businesses;
(xxiii) Savings;
(xxiv) Services;
(xxv) Shocks;
(xxvi) Social Capital;
(xxvii) Subjective Assessments;
(xxviii) Time Use;
(xxix) Vulnerability.

The aims and working mechanisms of the IHS resemble those of the LSMS to a great extent. Both surveys gather a large amount of data across various fields in order to facilitate more comprehensive and in-depth statistical analysis with respect to the connection between those fields and the independent variables required to understand, analyse and measure the phenomenon of poverty.

The fields and topics covered by both surveys make it possible to compile a broader, more comprehensive list of variables and questions, one that researchers can draw upon more easily to build questionnaires on any of those topics.

VIII. TYPES OF SURVEYS AND THE STUDY OF THE PHENOMENON OF POVERTY

Many different surveys count the study of poverty as one of their objectives. On its website, the International Survey Network[28] highlights types of surveys that gather data that facilitate the study of several aspects and dimensions of the phenomenon of poverty. The website also features an exhaustive listing of the types of surveys conducted in all countries from 1950 to 2009, and provides basic information on each survey, including but not limited to the following:

(a) Name, address and telephone number of primary investigator;
(b) Investigator website (where available);
(c) Extent of coverage;
(d) Sampling method (where relevant information is available);
(e) Sample size;
(f) Text of survey questionnaire (where available).

The following is a listing of types of poverty-related surveys featured on the IHSN website:

(i) Core Welfare Indicator Survey;
(ii) Food Security Baseline Survey;
(iii) Household Budget Survey;
(iv) Expenditure and Food Survey;
(v) Household Income and Expenditure Survey;
(vi) Integrated Household Survey;
(vii) Living Conditions Survey;
(viii) Living Standards Measurement Study Survey;
(ix) Multiple Indicator Cluster Survey;
(x) National Risk and Vulnerability Assessment Survey;
(xi) Poverty Monitoring Survey;
(xii) Vulnerability Survey.

The contents of these surveys and their corresponding questionnaires and sampling methods help define fields and variables, and, in so doing, usefully inform approaches to the study of poverty, in addition to providing a resource that can be drawn upon to build topical modules for the Integrated Household Survey and its variables.

[28] Available at: http://www.internationalsurveynetwork.org/home/?1v11=activities&1v12=catalog&1v13=surveys.

IX. SAMPLE OBJECTIVES AND CONTENTS FROM INTEGRATED HOUSEHOLD SURVEYS CONDUCTED IN MALAWI AND SOUTH AFRICA

A. OBJECTIVES AND CONTENTS OF THE MALAWI INTEGRATED HOUSEHOLD SURVEY

An Integrated Household Survey was conducted in Malawi[29] in cooperation with the World Bank. The survey took roughly a year to complete (March 2004 to April 2005), so as to reflect seasonal variations in household spending throughout the calendar year, a prerequisite for gathering data on household budget and expenses, one of the components of the survey. The survey's chief objective was the collection of data that would enable the Government to monitor the progress of the Malawi Poverty Reduction Strategy and to continue working towards achieving the MDGs.

The survey was based on two questionnaires, one on household characteristics and the other on the community in which households are based. In terms of their contents and organization, both questionnaires provide a good model and can be drawn upon to build sample questionnaires for use in conducting the pilot study recommended by the Expert Group Meeting on Poverty Measurement, held in Beirut on 28 and 29 April 2009. A detailed report on the Malawi IHS was published in late 2005, and includes an analytical exposition of the contents and topical modules included in the survey questionnaires. The report also measures basic household needs in a chapter on household welfare, while the chapter on poverty defines the poverty threshold.

The household questionnaire used in the Malawi IHS contains 31 topical modules and 518 variables, distributed as follows:

Topical modules in Malawi household questionnaire	Number of variables
1. Household identification	12
2. Survey staff details	15
3. Household roster	29
4. Education	30
5. Health	38
6. Time use and labour	31
7. Security and safety	23
8. Dwelling	41
9. Consumption of selected food over last three days (6 items)	5
10. Consumption of selected food over past one week (115 items)	7
11. Non-food expenditures–past one week and one month (24 items)	3
12. Non-food expenditures–past three months (39 items)	3
13. Non-food expenditures–past 12 months (17 items)	3
14. Durable goods (36 items)	7
15. Agriculture–general	30
16. Agriculture–rainfed cultivation	22
17. Agriculture–rainfed crop sales (28 items)	11
18. Agriculture–tobacco	35
19. Agriculture–dry-season (Dimba) cultivation	23
20. Agriculture–dry-season (Dimba) crop sales	9
21. Agriculture–tree crop production and sales (9 items)	11
22. Agriculture–livestock and livestock sales (8 items)	19
23. Household enterprises	19
24. Other income	14

[29] National Statistical Office, Government of Malawi. *Second Integrated Household Survey, 2004, Household questionnaire and community questionnaire.*

Topical modules in Malawi household questionnaire	Number of variables
25. Gifts received and given by household	8
26. Social safety nets	5
27. Credit	14
28. Subjective assessment of well-being	17
29. Recent shocks to household welfare (18 items)	7
30. Deaths in household	14
31. Child anthropometry	13
Number of variables on Malawi family questionnaire	518

The community questionnaire used in the Malawi survey contains nine topical modules and 203 variables, distributed as indicated in the following table, for a grand total of 721 variables.

Topical modules in Malawi community questionnaire	Number of variables
1. Definition of community	4
2. Survey staff details	20
3. Roster of informants	6
4. Basic physical and demographic characteristics of the community	16
5. Access to basic services	61
6. Economic activities	15
7. Agriculture	25
8. Changes in the community in recent years	52
9. List of commodity prices in the community (47 items)	4
Number of variables on Malawi community questionnaire	203
Number of variables on Malawi family and community questionnaires	721

B. Objectives and contents of the South African Integrated Household Survey[30]

An Integrated Household Survey was carried out in South Africa in cooperation with the World Bank. One of the goals of the survey was to put in place active strategies to combat poverty in the country. Survey questionnaires were built in the context of the World Bank's experience with comparable surveys and studies in other countries. The South African IHS household questionnaire contained 19 topical modules and 286 variables, which were distributed as follows:

Topical modules on South African household questionnaire	Number of variables
1. Data on dwelling and staff conducting survey	21
2. Household roster and demographic data	14
3. Dwelling and facilities	26
4. Food spending and consumption (31 items)	5
5. Non-food spending (46 items)	3
6. Household debt (12 items)	3
7. Education	12
8. Remittances and marital maintenance	12
9. Land access and use	32
10. Employment status	15
11. Regular employment	18
12. Wage work: casual or temporary	20
13. Transport	3

[30] Southern Africa Labour and Development Research Unit. *Project for Statistics on Living Standards and Development.*

Topical modules on South African household questionnaire	Number of variables
14. Agricultural production	48
15. Other forms of self-employment	8
16. Income from non-employment sources	3
17. Perceived quality of life	12
18. Health	20
19. Anthropometry	11
Total number of variables on South African household questionnaire	286

The South African IHS community questionnaire encompassed eight topical modules and 91 variables, distributed as indicated by the following chart, bringing the total number of variables included in the survey to 377.

Topical modules on South African community questionnaire	Number of variables
1. Definition of community	2
2. Demographic data	2
3. Economy and infrastructure	9
4. Education	22
5. Health	20
6. Agriculture	14
7. Recreational facilities	8
8. Shops and commodity prices (51 items)	6
Total number of variables on South African community questionnaire	91
Total number of variables on South African household and community questionnaires	377

X. CONCLUDING REMARKS AND RECOMMENDATIONS

A. CONCLUDING REMARKS ON THE STUDY OF POVERTY

Several indicators should be established in order to facilitate understanding of the different aspects of poverty-related issues, whether in terms of poverty measurement; of demonstrating the different kinds of factors that cause poverty and the importance of each one; in terms of the geographic distribution of the phenomenon or of its consideration in the context of different age groups and social groups, thereby illustrating the kinds of approaches and methods that must be employed to reduce poverty or eradicate it altogether. It is therefore necessary to gather statistical data, including variables, to be added to the preliminary list of variables and questions in annex 9. Moreover, in addition to statistical data on the household and its members, the study of poverty entails the collection of other data, such as the following:

1. Data on different events in the life of the household over time, such as births, deaths, household members migrating abroad, marriages and divorces.

2. Data on the links between poverty and a given household member's capabilities and educational, professional, intellectual, physical and other potential (human capital); ties that individual household members or households have with others (social capital), and financial potential (monetary capital).

3. Data on developments in the labour market structure and the operational mechanisms of economic institutions.

4. Data on the nature of State interventions for the provision of educational, health and other services.

Furthermore, for the purposes of international and regional comparisons on poverty-related issues, it would be useful to define variable fields for the study of poverty at two distinct levels, described as follows:

(a) The first level would feature a basic, common core containing variables and indicators to be collected in all countries under comparison;

(b) The second level would contain variables and indicators related to the particular characteristics of each country.

B. CONCLUSIONS AND RECOMMENDATIONS

Statistical surveys relating to the household and its members constitute an indispensable asset for securing precise statistical data in different fields. Such surveys are regarded as the foundation upon which economic and social plans and programmes are established, pursued and evaluated. The fact of the matter is that statistical sample surveys are more than mere alternatives to population censuses or administrative records systems; such surveys also facilitate the collection of data that are both more abundant and more varied than that gathered through censuses or records.

The use of IHS therefore represents a methodological step forward in terms of producing demographic and social data. Adopting the IHS makes it possible to define all the variables needed for the study of demographic, social and other topics in a precise and thorough manner, by applying the concept of flexible topic modules. Adopting the IHS also allows for the consolidation of concepts used in individual surveys, and for the production of statistical data in a constant, periodic manner at the level of geographic area modules and at a high level of statistical precision, thereby providing officials, planners and other stakeholders with a constant, reliable and precise flow of statistical information that can help them formulate and evaluate plans and programmes.

While this study demonstrates the many advantages of adopting the IHS principle or method, a number of measures must be taken in order to mitigate the aforementioned restrictions and disadvantages that may result from this course of action.

Additionally, States wishing to adopt the IHS method should develop the components of their statistical systems, as well as their mechanisms for coordinating statistical activities, taking a deliberate, thorough approach to planning all stages of the IHS through its successful execution.

In order to develop those statistical systems and coordinating mechanisms, a series of measures must be adopted, including the following:

(a) Creating a national authority on statistical information, which shall be responsible for coordinating the production and dissemination of comprehensive, reliable and precise statistical data that supports the objectives and meets the needs of the various government ministries and departments, as well as the needs of the public and private sectors. Many countries establish national councils on statistical information; these councils elaborate public policies on statistical activities in the given country, coordinating, monitoring and following up on statistical activities;

(b) Detailed studies of the situation of statistics institutions within the relevant government ministries and departments, as well as of their scientific capacities (at the human and technological levels), with a view to developing ways, tools and mechanisms for producing, distributing and benefiting from statistics;

(c) Conducting regular consultation processes between statistics users and government departments[31] tasked with statistical data production and administrative data collection. The purpose of such consultations is to determine user needs in terms of type of statistical data, in addition to determining the possibility of coordinating data production using as few field surveys as possible;

(d) Devising an integrated action plan on the production of statistics and their storage in a central information bank, as well as on how to mine, analyse and disseminate statistics among users and stakeholders in the public and private sectors;

(e) Developing the contents of cards and questionnaires used to collect administrative statistics – a task carried out by the relevant specialized departments, such as departments of civil status, public security directorates and services, and ministries of education – in order to make maximum use of the data that may be included on these cards and questionnaires;

(f) Utilizing and analysing administrative statistical data collected through departments;

(g) Updating the laws that govern statistical activities and statistical confidentiality;

(h) Unifying, updating and classifying, as needed, standards, concepts and classification and encoding regulations relating to different economic, social, health-related, administrative and other aspects and activities;

(i) Modernizing the equipment, programmes and information systems relied upon by the government departments involved with the production and collection of statistical data, as well as strengthening the departments' financial capacities and technical expertise. As the entities fundamentally responsible for the production and dissemination of statistical data, the central administrations for statistics should devote particular attention to these tasks;

[31] Examples of such departments include the Central Administration for Statistics, the Department of Civil Status, the Public Security Directorate and the Ministry of Higher Education.

(j) Creating statistical databases or information banks that contain individual statistical data, statistical charts (in economic, social, and health-related areas), and sampling bases. Furthermore, the contents of these information banks should be made available to users, subject to certain conditions and fees;

(k) Consolidating the use of statistics by States and ministries in formulating public policy in all sectors;

(l) Conducting a regular scientific evaluation that examines the processes, limitations and results of statistical surveys, with a view to developing the surveys further and circumventing these limitations.

In the course of establishing the requirements for conducting the Integrated Household Survey, a series of measures need to be taken, including mainly:

(a) Securing the funding and information technology (IT) and office equipment needed to conduct the survey;

(b) Establishing the link between needs and the contents of survey questionnaires, in consultation and coordination with different ministries and departments in order to determine their statistical needs, and incorporating those needs into topical survey modules;

(c) Benefiting from technical support programmes and expertise beyond those to which the State has access, additional resources which specialized United Nations bodies can ensure;

(d) Putting in place a detailed action plan that sets forth the requirements for carrying out the survey, in terms of material costs, human expertise, equipment and programmes; drawing up a timetable that outlines the step-by-step process of formulating the components of the integrated survey, within the various topical modules, and conducting the survey;

(e) Selecting workers, in a careful and deliberate manner, to collect, verify, encode and enter data into the computer system. Staff must receive thorough and detailed training so as to avoid the errors that may result from a lack thereof; financial incentives must also be guaranteed so that workers possessing a secondary- or university-level education can be hired to carry out field and office work;

(f) Creating a survey database that contains raw data and making the database available to users enabling them to prepare charts and perform statistical analyses, as needed;

(g) Updating databases periodically and continuously to reflect successive surveys as they are conducted;

(h) Updating sampling bases periodically and designing statistical survey sampling, taking into account both the needs of local area analysis and the required levels of statistical precision.

Additional references

Adib Nehmeh, *Definition and Measurement of Poverty in Gulf Cooperation Council Countries*, Roundtable discussion on poverty and varying measurements in Gulf Cooperation Council countries, in the light of the Millennium Development Goals (MDGs), Sana'a, 6-7 May 2008.

Central Administration for Statistics, Lebanon, and United Nations Children's Fund, *State of the Children in Lebanon 2000, Household Questionnaire.*

Enquête nationale sur le budget et la consommation des ménages 2007, Questionnaire ménage, Institut national de la statistique, Ministère de l'économie et des finances, République du Niger.

Enquête sur les budgets des ménages 2005, Questionnaire ménage, statistique et information économique, Unité "Enquêtes budgets des ménages", Service Public Federal Economie, PME, Classes moyennes et Énergie, Belgique.

Enquête emploi du temps 1998-1999, Questionnaire individu (de 15 ans et plus), Institut national de la statistique et des études économiques, France.

Enquête permanente sur les conditions de vie des ménages, Enquête d'octobre 2004, Institut national de la statistique et des études économiques, France.

Enquête de consommation alimentaire, Belgique, 2004, Questionnaire général Face à face, Direction générale de statistique et de l'information économique, Institut scientifique de Santé publique, Service Public Fédéral Économie, PME., Classes moyennes et Énergie, Service Public Fédéral, Santé publique, Sécurité de la Chaine alimentaire et Environnement, Belgique.

Enquête Emploi en continu 2007, Fichier detail, Institut national de la statistique et des études économiques, France.

Gilles Pronovost, Université du Québec à Trois Rivières. *Les enquêtes de participation culturelle*, Une comparaison France-Québec-États-Unis, Rapport remis à l'Observatoire de la culture et des communications, Institut de la statistique du Québec et au Ministère de la culture et des communications du Québec, septembre 2002.

International Food Information Council Foundation, *2007 Food & Health Survey*, *Consumer Attitudes toward Food, Nutrition & Health.*

Proposals for an Integrated Household Survey, (Continuous Population Survey), UK National Statistics, UK Statistics Authority, United Kingdom, October 2005.

Annex I

STATISTICAL SAMPLING TECHNIQUES USED IN THE INTEGRATED HOUSEHOLD SURVEY

1. *Stratified sampling*

The population is divided into partial samples, each of which represents a given statistical sub-population or geographic area (such as a particular Lebanese governorate). Stratified sampling can be done using a uniform sampling rate or equal sample sizes.

(a) *Stratified sampling technique with a uniform sampling rate*

When stratified sampling is done using a uniform sampling rate, the household sample in each governorate is selected based on the percentage of households within it. If the size of the whole sample selected in Lebanon was 6,000 households, the total population is distributed among the governorates using the uniform sampling rate, as demonstrated in table 1 below. The following observations are of note:

(i) Sample sizes vary from governorate to governorate; the largest sample is that of Mount Lebanon, with 2,532 households, and the smallest that of Nabatieh, containing 357 households;

(ii) Sampling errors, or confidence intervals, are larger at the level of a smaller sample, such as that of South Lebanon, when its results are generalized to the whole statistical population, than they would be for a larger sample, such as that of Mount Lebanon;

(iii) This sampling technique is self-weighted, in that generalizing the results of the sample to the larger population (in principle)[1] requires a uniform weighting factor equal to the inverse of the sampling fraction in each governorate.

TABLE 1. SAMPLING RATE, SAMPLE SIZES AND SELF-WEIGHTING FACTOR IN EACH GOVERNORATE, USING A UNIFORM SAMPLING RATE

Governorate (Mohafaza)	Actual number of households	Number of households in the sample	Uniform sampling rate (percentage)	Self-weighted factor
Beirut	101 695	693	0.68	146.7
Mount Lebanon	371 289	2 532	0.68	146.6
North Lebanon	162 344	1 107	0.68	146.7
Bekaa	102 797	701	0.68	146.6
South Lebanon	89 423	610	0.68	146.6
Nabatieh	52 306	357	0.68	146.5
Lebanon	879 854	6 000	0.68	146.6

(b) *Stratified sampling technique with samples of equal size*

The stratified sampling technique can be applied with samples of equal size, in that the household samples selected in each governorate shall contain an equal number of households. If the size of the whole household sample selected for Lebanon is 6,000 households, those households are then distributed equally among the governorates, as shown in table 2 below. The following features of the stratified sampling technique with samples of equal size should be noted:

[1] Weighting takes into account other data, such as non-response rates in each governorate.

(i) Sampling errors,[2] or confidence intervals, are practically equal from governorate to governorate, as a result of equal sample sizes;

(ii) This sampling technique requires different weights or weighting factors, equal (in principle) to the inverse of the sampling fraction in each governorate (refer to table 2).

TABLE 2. SAMPLING RATES, SAMPLE SIZES AND WEIGHTING FACTORS, GIVEN SAMPLES OF EQUAL SIZE FOR EACH GOVERNORATE

Governorate (Mohafaza)	Actual number of households	Number of households in the sample	Varied sampling rate (percentage)	Weighting factor (in principle)
Beirut	101 695	1 000	0.98	101.7
Mount Lebanon	371 289	1 000	0.27	371.3
North Lebanon	162 344	1 000	0.62	162.3
Bekaa	102 797	1 000	0.97	102.8
South Lebanon	89 423	1 000	1.12	89.4
Nabatieh	52 306	1 000	1.91	52.3
Lebanon	879 854	6 000	0.68	146.6

2. *Three-stage stratified sampling technique*

The three-stage stratified sampling technique proceeds as follows:

(a) Statistical samples in each governorate are considered separately (meaning an independent sample for the Beirut, Mount Lebanon, North Lebanon, Bekaa, South Lebanon and Nabatieh governorates);

(b) An exhaustive list is generated of the cities and towns that make up each governorate, with the corresponding number of primary dwellings in each city or town;

(c) A sample is selected from the cities and towns of each governorate using the probability proportional to size technique (size being determined in terms of the number of primary dwellings in each city or town). The list of cities and towns thus selected constitutes the primary sampling units (PSU);

(d) The cities and towns that make up the primary sampling unit are divided up into geographic islets roughly equal in size, in terms of the number of primary dwellings in them (at this point, those towns that are not selected in the PSU sample are not considered);

(e) A sample is then chosen from the cities and towns divided up into geographic islets, using the equal probability sampling technique (meaning that each geographic islet has an equal chance of being selected in the sample). The islets chosen in a given governorate then constitute the secondary sampling units (SSU);

(f) An exhaustive listing[3] of primary dwellings is conducted for each geographic islet on the secondary sample, which was selected at random (at this point, geographic islets that are not selected in the probability sample of secondary sampling units are not considered);

[2] Refer to Annex 2 for examples of sampling error values (or confidence intervals) in percentages given to results, depending on whether the sampling rate is uniform or whether the samples are of equal size.

[3] This listing is only conducted when the sampling base in a given geographic islet has to be updated.

(g) A defined number of primary dwellings is chosen from each geographic islet (e.g. 60 dwellings), so that the total number of dwellings chosen at random from the primary sample of cities and towns should equal the required sample of households from each governorate. The primary dwellings[4] selected make up the tertiary (TSU) or final sampling units (FSU).

It is worth noting that the systematic sampling method[5] is used to select sample units at each of the three stages.

3. *The two-stage stratified clustered sampling technique*

The two-stage stratified clustered sampling technique operates in the following manner:

(a) Statistical samples are built and treated separately for each governorate (meaning an independent sample for the Beirut, Mount Lebanon, North Lebanon, Bekaa, South Lebanon and Nabatieh governorates);

(b) Each city or town in the governorate is divided into geographic islets of roughly equal size in terms of the number of primary households;

(c) A sample is selected from the geographic islets in each governorate, using the equal probability of selection method (meaning that each geographic islet in a city or town has an equal chance of being selected in the sample). The islets selected in the given governorate constitute the primary sampling units;

(d) A exhaustive listing[6] of primary dwellings is conducted for each geographic islet on the primary sample, which was selected at random (at this point, geographic islets not selected in the probability drawing of primary sampling units are not considered);

(e) For each geographic islet, a defined number of primary dwellings is selected and considered as a cluster (e.g. 20 dwellings). The total number of dwellings in the geographic islet selected at random in the primary sample should equal the required sample size of households from each governorate. The primary dwellings[7] selected in the given geographic islets constitute the secondary sampling units or the final sampling units.

It should be noted that sample units are selected using the systematic drawing method at both stages.

4. *Two-stage stratified unclustered sampling technique*

The two-stage stratified unclustered sampling technique consists of the following:

(a) The statistical sample from each governorate is treated individually (meaning an independent sample for the Beirut, Mount Lebanon, North Lebanon, Bekaa, South Lebanon and Nabatieh governorates);

(b) An exhaustive listing is generated of cities and towns that make up each governorate, with the corresponding number of primary residences in each city or town;

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[4] Given that it is more practical to select primary dwellings than it is to select households, primary dwellings are the chosen statistical unit. The household residing in the primary dwelling – which, on rare occasions, is home to more than one household – then proceeds to fill out the questionnaires.

[5] Annex 3 provides an example of use of the systematic sampling technique.

[6] This listing is only conducted when the sampling base in a given geographic islet has to be updated.

[7] Given that it is more practical to select primary dwellings than it is to select households, primary dwellings are the chosen statistical unit. The household residing in the primary dwelling – which, on rare occasions, is home to more than one household – then proceeds to fill out the questionnaires.

(c) A sample of cities and towns is chosen from each governorate, using the probability proportional to size sampling technique (PPS) (size being determined in terms of the number of primary dwellings in each city or town). The sample of cities and towns thus chosen at this stage constitutes the primary sampling units;

(d) In each city or town selected as a primary sampling unit, a defined number of households is selected (taking into account the size of the city or town). The total number of primary dwellings in these cities and towns should equal the required sample size of households in the governorate. The primary dwellings[8] selected from the given geographic islets constitute the secondary sampling units or final sampling units.

It should be noted that sample units are selected using the systematic sampling technique at both stages.

[8] Given that it is more practical to select primary dwellings than it is to select households, primary dwellings are the chosen statistical unit. The household residing in the primary dwelling – which, on rare occasions, is home to more than one household – then proceeds to fill out the questionnaires.

Annex II

EXAMPLE OF SAMPLING ERROR VALUES (OR CONFIDENCE INTERVALS), IN PERCENTAGES, GIVEN TO SAMPLE RESULTS, DEPENDING ON WHETHER THE SAMPLING RATE IS UNIFORM OR WHETHER THE SAMPLES ARE OF EQUAL SIZE

The values of statistical results obtained using statistical sampling, by and large, reflect a confidence level that can be calculated using the appropriate statistical formulas. To illustrate the difference between sampling using a uniform sampling rate, and sampling in which the samples are of equal size, in this section the confidence interval will be calculated in percentages, arrived at by generalizing (sample) results to the whole statistical population.

A confidence interval in percentage (PS) of the sample (with a 95 per cent confidence level and a 5 per cent chance of error), amounts to the following, as indicated in equation 1 below:

Equation 1: Sampling error (or confidence interval) in percentage of sample P_S with a confidence level of 95 per cent and a 5 per cent chance of error

$$+1.96 \left[\sqrt{\frac{P_S(100-P_S)}{N}} \right] - \left[\sqrt{\frac{N_P - N_S}{N_P - 1}} \right]$$

where N_S is the sample size and NP is the total population size. In the event that a percentage in a sample for which PS stands for the percentage of households using the public network as a primary source of drinking water, that would mean, practically speaking, that the percentage of these households at the level of the total population from which the sample was selected (where PP stands for that percentage), equals, at a 95 per cent confidence level or 5 per cent chance of error, what is represented in equation 2 below:

Equation 2: Value of percentage of the total statistical population at a confidence level of 95 per cent or a 5 per cent chance of error

$$Pp = Ps \pm 1.96 \left[\sqrt{\frac{P_s(100-P_s)}{N_s}} \right] - \left[\sqrt{\frac{N_p - N_s}{N_p - 1}} \right]$$

TABLE 1. SAMPLING ERROR (OR CONFIDENCE INTERVAL) PERCENTAGE IN SAMPLES SELECTED FROM THE NABATIEH AND MOUNT LEBANON GOVERNORATES, USING A UNIFORM SAMPLING RATE

Percentage	2%	5%	10%	30%	50%	70%	90%
Sampling error in Nabatieh governorate (sample size=357 households; total number of households=52,306)	1.45%	2.25%	3.10%	4.74%	5.17%	4.74%	3.10%
Sampling error in Mount Lebanon governorate (sample size=2,532 households; total number of households=371,289)	0.54%	0.85%	1.16%	1.78%	1.94%	1.78%	1.16%
Number of times difference in sampling error values between Nabatieh and Mount Lebanon at a uniform sampling rate	2.7 times	2.7 times	2.7 times	2.7 times	2.7 times	2.7 times	2.7 times

TABLE 1 (*continued*)

Percentage	2%	5%	10%	30%	50%	70%	90%
Range of estimated values, from low to high limits for each proportion in the sample, for the statistical population of Nabatieh	0.55% 3.45%	2.75% 7.25%	6.90% 13.10%	25.26% 34.74%	44.83% 55.17%	65.26% 74.74%	86.90% 93.10%
Range of estimated values, from low to high limits for each proportion in the sample, for the statistical population of Mount Lebanon	1.46% 2.54%	4.15% 5.85%	8.84% 11.16%	28.22% 31.78%	48.06% 51.94%	68.22% 71.78%	88.84% 91.16%

TABLE 2. SAMPLING ERROR (OR CONFIDENCE INTERVAL) PERCENTAGES IN THE SAMPLE FROM NABATIEH AND MOUNT LEBANON GOVERNORATES, USING EQUAL SAMPLE SIZE METHOD

Percentage	2%	5%	10%	30%	50%	70%	90%
Sampling error for Nabatieh (sample size=1,000 households out of a total of 52,306)	0.86%	1.34%	1.84%	2.81%	3.07%	2.81%	1.84%
Sampling error for Mount Lebanon (sample size=1,000 households out of a total of 371,289)	0.87%	1.35%	1.86%	2.84%	3.09%	2.84%	1.86%
Number of times of difference between sampling error estimates in the two governorates	0.99 times	0.99 times	0.99 times	0.99 times	0.99 times	0.99 times	0.99 times

Annex III

ILLUSTRATION OF HOW TO SELECT RANDOM SAMPLE UNITS USING THE SYSTEMATIC SAMPLING TECHNIQUE

Selecting random sample units with equal probability is done as follows, supposing, for the purpose of illustration, that the total population size is 200 and the desired sample is to contain 40 statistical units:

1. *Calculating the value of the sampling interval*:[9] The sampling interval equals the total population size divided by the desired sample size (in the present example, 200 divided by 40=5).

2. *Choosing the starting point in a systematic drawing series*: The starting point is a number between one and the value of the sampling interval (5, in this case), and is chosen randomly with the help of the computer (yielding, for the purposes of the present example, 3 as the starting point).

3. *Selecting the series of systematic sample units*: The series begins with the starting point (in this case, 3) and proceeds in regular intervals, using the sampling interval (5, in the present example). Out of the total population, the systematic sample will comprise the following numbers: 3–8–13–18–23–28–…–193-198.

[9] The sampling interval is equal to the inverse of the sampling fraction, which is 1/5 in the present example.

Annex IV

METHOD OF CALCULATING THE HUMAN DEVELOPMENT INDEX

The human development index (HDI) of a given country is calculated using the equations in the chart below, and taking into account minimum and maximum values for each index, as defined in the equations.

Equation tocalculate index	$XI = \frac{X - \min(X)}{\max(X) - \min(X)}$	Sample case: Jordan
Life Expectancy Index	$LEI = \frac{LE - 25}{85 - 25}$	$LEI = \frac{72.2 - 25}{60} = 0.787$
Adult LiteracyIndex	$ALI = \frac{ALR - 0}{100 - 0}$	$ALI = \frac{92.7 - 0}{100 - 0} = 0.927$
Gross Enrolment Index	$GEI = \frac{CGER - 0}{100 - 0}$	$GEI = \frac{78.7 - 0}{100 - 0} = 0.787$
Education Index	$EI = \frac{2}{3}ALI + \frac{1}{3}GEI$	$EI = \frac{2}{3}0.927 + \frac{1}{3}0.787 = 0.88$
GDP per capita Index	$GDPI = \frac{\log(GDPpc) - \log(100)}{\log(40000) - \log(100)}$	$GDPI = \frac{\log(4654\$) - 2}{2.60206}$
GDP per capita Index	$GDPI = \frac{\log(GDPpc) - 2}{4.60206 - 2}$	$GDPI = \frac{3.66783 - 2}{2.60206} = 0.641$
Human Development Index	$HDI = \frac{LEI + EI + GDPI}{3}$	$HDI = \frac{0.787 + 0.880 + 0.641}{3} = 0.769$

Annex V

HUMAN POVERTY INDEX 1 AND HUMAN POVERTY INDEX 2

Human Poverty Index 1 in a country is estimated as follows:

Equation 1 calculates the Living Conditions Index (LCI) for the country, which is equal to the arithmetic average of the percentage of the population lacking access to safe drinking water (DW), the percentage of the population lacking access to health services (HS), and the percentage of children under 5 years of age who are (moderately or severely) under weight-for-age (UW).

Equation 1: Calculating the Living Conditions Index in a country

$$\text{LCI} = \frac{DW + HS + UW}{3}$$

Equation 2 computes Human Poverty Index 1, which is equal to the cube root of the cubed arithmetic average of the following three indicators: the indicator for the percentage of the population with a life expectancy under 40 years, $(\text{NS40})^3$, the adult illiteracy indicator, AI, and the Living Conditions Index, which was calculated using equation 1 above.

Equation 2: Calculating Human Poverty Index 1

$$\text{HPI}_1 = \sqrt[3]{\frac{(NS_{40}) + (AI)^3 + (LCI)^3}{3}}$$

Human Poverty Index 2 for a country is calculated using equation 3 below. HPI-2 is equal to the cube root of the arithmetic average of four cubed indicators: the indicator of the percentage of the population with a life expectancy of less than 60 years $(\text{NS60})^3$, the adult functional illiteracy indicator $(\text{FI})^3$, the indicator of the percentage of the population with household incomes below the half median household income in the given country $(\text{BHM})^3$, and the long-term unemployment indicator $(\text{LU})^3$.

Equation 3: Calculating Human Poverty Index 2

$$\text{HPI}_2 = \sqrt[3]{\frac{(NS_{60})^3 + (FI)^3 + (BHM)^3 + (LU)^3}{4}}$$

The following provides a illustrative example of how to calculate the value of HPI-2 for Sweden for the year 2007-2008, using the $\log_{10}$ logarithm, based on the following equation and set forth in detail in the table below.

Calculating Human Poverty Index 2 for Sweden

$$\text{HPI}_2 = \sqrt[3]{\frac{(6.7)^3 + (7.5)^3 + (6.5)^3 + (1.1)^3}{4}}$$

DETAILED TABLE ILLUSTRATING THE STEPS INVOLVED
IN CALCULATING HPI-2 FOR SWEDEN

Indicators	Indicator values	Cubed indicator values
Percentage of population with a life expectancy of 60 years at birth	$NS_{60} = 6.7$	300,763
Functional illiteracy indicator	FI = 7.5	421,875
Proportion of the population with income below the half median among households	BHM = 6.5	274,625
Long-term unemployment indicator	LU = 1.1	1,331
Sum of cubed indicator values		998,594
Average of cubed indicator values		249,6485
Logarithm of the average of cubed indicator values		2,397328961
Logarithm of the average of cubed indicator values divided by three		0,79911
HPI-2 = $10^{(0.79911)}$		6,30

Annex VI

FIELDS AND INDICATORS ADOPTED IN THE UNSATISFIED BASIC NEEDS METHOD IN LEBANON

1. *Identifying fields and indicators*

Five fields and 24 indicators were taken into account, as grouped below:

(a) *Education-related indicators*

(i) Pursuit of studies and school enrolment for children aged six years and above;
(ii) Enrolment in kindergarten for children aged four to six years;
(iii) Highest level of education attained by adults aged 15 years and above;
(iv) Foreign language proficiency for adults aged 15 years and above.

(b) *Health-related indicators*

(i) Health insurance;
(ii) Chronic illnesses and health problems (half-weight);
(iii) Working conditions and occupational hazards (half-weight);
(iv) Availability of health-care services, bearing in mind travel time between the home and service provider centres (half-weight).

(c) *Dwelling-related indicators*

(i) Household member's share of rooms in dwelling (half-weight);
(ii) Household member's share of built area of dwelling (half-weight);
(iii) Main material out of which the flooring is made;
(iv) Principal means of heating in primary dwelling.

(d) *Water, electricity- and sanitation-related indicators*

(i) Main source of drinking water;
(ii) Main source of service water (half-weight);
(iii) Extent of availability of service water from the water supply network;
(iv) Extent of availability of electric current from the public electricity network;
(v) Type of sanitation;
(vi) Waste disposal methods.

(e) *Indicators related to household economic conditions*

(i) Average daily income of household member;

(ii) Economic dependency ratio;

(iii) Basic situation of household members (in terms of employment or unemployment status, inability to work) (half-weight);

(iv) Ownership of electrical and audiovisual appliances in household (half weight);

(v) Ownership of private modes of transport, such as a car, bus or motorcycle (half-weight);

(vi) Number of telephone lines (namely, landline telephone in primary dwelling, and cellular telephone line belonging to head of household) (half-weight).

2. *Methodological basis for calculating the Living Conditions Index in Lebanon*[10]

Most of the components of the Living Conditions Index (LCI) were based on the fields, indicators, scores and weights that appeared in the National Survey of Household Living Conditions 2004. Data that pertained to a question on the survey questionnaire – data from which an indicator might be extracted – were verified. Various types of scores and question structures were tested for each indicator. A considerable amount of time and effort was expended, owing to the limited number of survey variables from which an indicator might be formed, and also to the difficulties relating to the data and to methodological factors that call for ruling out some of the variables selected as indicators.

In theory, a single indicator can be extracted from each of the 103 questions on the Living Conditions Questionnaire, which are used to calculate the indicator. In other words, it would have been possible to design an index that would contain 103 indicators instead of 24. However, the sheer number of indicators and their narrow scope of meaning are to blame for inflating and disrupting the processes of measurement, comparison and analysis, as well as for the emergence of bias in favour of some areas and at the expense of others. The index thus attempted to cover the broadest range of household conditions, by means of the data that appeared in the National Survey on Household Living Conditions 2004, using as few indicators as possible.

Composite indicators were adopted, each of which were calculated using a specific number of questions from the survey questionnaire, with each indicator representing one of the main areas within the relevant field.

Some of the questions posed on the Living Conditions Questionnaire (which was used to prepare the National Survey on Household Living Conditions 2004) appeared to be suitable for the extraction of indicators. However, those questions were ruled out after a review of some of their specifics or a listing of their actual values brought to light the fact that they were not suitable for building indicators. Indicators from each field were then selected, bearing in mind the need to strike a balance between the number of indicators, the importance of the areas under each field and the types of household included. Some indicators do not belong in a set of indicators within a given field if they are to be taken in isolation, given that their inclusion could introduce a bias in representation of a particular area within the field, at the expense of the remaining areas.

It is necessary to focus on the fields and on the general Living Conditions Index, rather than on indicator values, as each indicator does not constitute an independent, integrated component in and of itself. Rather, the role of the individual indicator is defined, for the most part, by the statistical representation of a particular area within the field in question. The fact of the matter is that deprivation rates may be higher at the level of indicators related to a particular field than at the level of the Living Conditions Index. Similarly, deprivation rates might be lower at the level of specific variables than at the level of the Living Conditions Index, as is the case in the income-related field.[11]

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[10] Mohammed Hussein Baker, *Mapping of Human Poverty and Living Conditions in Lebanon, Methodological Basis for Calculating the Living Conditions Index in Lebanon*, supra. The text that discusses the methodological basis contains five detailed tables that explain the scores assigned to each indicator, in light of household responses to questions on indicators.

[11] If a given household received a score of zero in one of the indicators in this field, and received a score of 1.1 in the five other fields, supposing the indicators are weighted equally (to simplify the calculation process/operation), the household indicator in the field of economic situation is calculated as follows: 0 + (1.1 X 0) divided by 6. The result is an economic situation indicator value less than one. The household is thus considered to be deprived in that particular field, even if it was not deprived according to the five remaining indicators.

The relationship between indicator values within a particular field depends on the extent to which those indicators express satisfaction of interchangeable needs, or the extent to which interrelated indicators express different aspects of the level of satisfaction of particular kinds of needs.

With regard to indicators that apply to individual household members but not to the entire household, such as the indicators on pursuit of studies and level of education attained by adults, and on foreign language proficiency, within the field of education, the overall household score is equal to the average of individual household members' scores. Concerning variables that apply to only a segment of the household, such as the indicator on the level of education attained by adults, an indicator that does not apply to household members under 15 years of age, the indicator value extracted at the household level is equal to the average of the indicator values of household members to whom the indicator pertains.

As for the field indices, they are computed by taking the simple arithmetic average of the scores for each indicator within the given field, not counting the few cases in which some indicators were assigned half-weight, an exception that is explicitly addressed when field indicators are introduced. Those few cases aside, the equal-weighting method is applied when the index for each field is calculated, based on the scores for each indicator represented within the field. This method is opted for in light of the lack of evidence of varying degrees of importance among fully-weighted indicators. Even if convincing reasons for such variance were found, there would be no method capable of estimating indicator weights with sufficient precision.

If the value of an indicator is not available for a given household, the relevant field index shall be calculated based on the values of the remaining indicators within that field. The indicator value for a given household may be unavailable, either because there is insufficient data to calculate the indicator, or because the indicator does not apply to the household, as would be the case with the indicator on household working conditions in a household with no working members.

A household's Living Conditions Index is equal to the average of the values of the indices in the five fields, each field being fully weighted.

The guiding principle in setting indicator scores has been the idea of diminishing satisfaction, given that the quantity of basic need itself has a lesser impact on need satisfaction at higher degrees of satisfaction, in comparison to lower degrees of satisfaction. For instance, the greater the overall number of appliances, the lesser the effect of an additional appliance in satisfying household needs. Once the number of appliances reaches a given limit, that effect approaches zero as a result of the impact of appliances on the satisfaction of household needs.

The following is a description of the five indicators whose scores fall outside the range of "zero" to "2":

Foreign language proficiency indicator: Insofar as foreign language proficiency is not a basic need per se, and as the lack of proficiency does not amount to deprivation, a low-end score of "1" was deemed appropriate for this indicator. This indicator can be useful for distinguishing between households enjoying a high standard of living and households whose standard of living is average.

Health insurance indicator: The low-end score of this indicator was set at zero because the lack of official or stable health insurance does not necessarily mean that a person will be unable to secure any kind of health coverage. One alternative scenario would be the case of a household member receiving health services either free of charge or subsidized by government or private entities; in another, an individual might receive financial support from family members, relatives, an employer or some other party, enabling the individual to defray health-care costs. In yet another case, a household's financial situation might open up the possibility of obtaining some level of coverage for routine health services.

Health services indicator: A low-end score of "0.4" was set for this indicator because the distance between the home and the health service facility does not constitute total deprivation of care.

Indicator on primary material out of which flooring is made: A low-end score of "0.5" was set for this indicator. The related question on the Living Conditions Questionnaire does not provide data that makes it possible to personally identify the household, to whom the most rudimentary situation is attributed, namely that of living in a dwelling where stone or earthen floors have not been covered or evened out as they should. The question about such situations was adapted to also address other situations that represent varying levels of satisfaction with flooring.

Chronic illness indicator: The high-end score for this indicator is less than "2" in the absence of a situation that represents the highest possible degree of satisfaction. "1.5" is considered the highest score possible because it has been extracted from questions on a situation marked by deprivation and illness. However, these questions do not identify the most satisfactory situation possible. The absence of chronic illness in a household member does not necessarily entail an improvement in health condition that will lead to the highest degree of satisfaction possible in that area.

Annex VII

FIELDS AND INDICATORS ADOPTED IN THE UNSATISFIED BASIC NEEDS METHOD IN IRAQ

Six fields and 42 indicators were used in the Unsatisfied Basic Needs method in Iraq, that were organized as follows:

(a) *Education-related indicators*

(v) Pursuit of studies and enrolment in school;
(ii) Level of education attained (for adult household members);
(iii) Time needed to reach primary school (half-weight);
(iv) Time needed to reach secondary school (half-weight);
(v) Degree of satisfaction with school.

(b) *Health-related indicators*

(i) Number of household members suffering from chronic illness or health problems;
(ii) Child malnutrition, determined by measuring weight-for-age (half-weight);
(iii) Dwarfism, determined by measuring height-for-age (half-weight);
(iv) Health-care consultation during last pregnancy;
(v) Time needed to reach a public hospital (half-weight);
(vi) Time needed to reach a primary health-care centre (half-weight);
(vii) Degree of satisfaction with health services.

(c) *Infrastructure-related indicators*

(i) Main source of drinking water;
(ii) Availability of drinking water;
(iii) Degree of satisfaction with water quality;
(iv) Availability of electrical current;
(v) Durability of electric current from the main network;
(vi) Sanitation method;
(vii) Waste disposal method.

(d) *Dwelling-related indicators*

(i) Material out of which the ceiling is made;

(ii) Household member's share of rooms in dwelling;

(iii) Type of energy powering water heater;

(iv) Degree of satisfaction with dwelling (in terms of the surface area, peculiarities, expenses, lighting, indoor environment);

(v) Indoor pollutants.

(e) *Indicators on immediate environs*

(i) Degree of satisfaction with public transport and traffic;

(ii) Condition of the road leading to the dwelling;

(iii) Accessibility of the dwelling to ambulances and fire trucks;

(iv) Degree of satisfaction with availability of shops and markets;

(v) Degree of satisfaction with cleanliness and absence of pollution outdoors;

(vi) Number of outdoor pollutants (out of a total of five: garbage and overall squalor, water leakage, smoke, wrecked military vehicles, weapons storehouses);

(vii) Number of undesired sites in proximity of the dwelling (out of a total of eight: river, railroad, high-speed highway, industrial zone, high-pressure area, slope, valley opening);

(viii) Degree of satisfaction with outdoor child safety;

(ix) Firing of gunshots in proximity to the dwelling.

(f) *Indicators of household economic condition*

(i) Average income of individual household member;

(ii) Possibility of making 100,000 dinars in a week;

(iii) Degree of satisfaction with employment and job opportunities;

(iv) Working conditions of household members;

(v) Dependency ratio (size of household over number of household members who are working);

(vi) Number of durable goods (out of a total of 16);

(vii) Ownership of assets (dwelling, car, real estate);

(viii) Number of everyday needs that can be met (out of a total of six: warmth inside the house during winter, cool climate inside the house during summer, spending a night outside the house at the weekend, buying new furniture, shopping for clothes, consuming meat or fish);

(ix) Overall assessment of the household's economic conditions.

Annex VIII

FIELDS AND INDICATORS ADOPTED IN THE UNSATISFIED BASIC NEEDS METHOD AS APPLIED IN THE COMPARATIVE STUDY ON POVERTY AND DEPRIVATION IN SOME ARAB COUNTRIES[12]

Five fields and 17 indicators were used to examine poverty and deprivation in some Arab countries, using the Unsatisfied Basic Needs method, grouped as follows:

(a) *Education-related indicators*

(i) Pursuit of studies;
(ii) Highest educational level attained by adults.

(b) *Health-related indicators*

(i) Chronic illnesses;
(ii) Child malnutrition, determined by measuring weight-for-age (half-weight);
(iii) Dwarfism or giantism, determined by measuring height-for-age (half-weight);
(iv) Health-care consultation during last pregnancy (half-weight);
(v) Place where pregnant women gave birth (half-weight).

(c) *Dwelling-related indicators*

(i) Household member's share of rooms;
(ii) Availability of toilet.

(d) *Indicators on household needs*

(i) Main source of drinking water;
(ii) Main source of lighting (half-weight);
(iii) Types of cooking fuel used (half-weight);
(iv) Waste disposal method.

(e) *Indicators of household economic condition*

(i) Economic dependency ratios;
(ii) Working conditions of household members;
(iii) Ownership of household and audiovisual appliances (half-weight);
(iv) Ownership of assets[13] (half-weight).

[12] Ibid.

[13] This indicator covers household ownership of three types of assets, namely, motorcycles, private cars and dwellings.

Annex IX

PRELIMINARY LIST OF VARIABLES AND QUESTIONS THAT CAN BE USED IN DEVELOPING THE INTEGRATED HOUSEHOLD SURVEY

A	Identification of survey and entities conducting survey
A 1	Entities conducting survey
A 2	Title of survey
A 3	Brief description of survey objectives
A 4	Assurance that information provided will remain confidential

B	Dwelling address
B 1	State/or province or district
B 2	City or town
B 3	Block number
B 4	Street name
B 5	Building name
B 6	Number of building on block
B 7	Building entrance number
B 8	Floor number
B 9	Apartment number

C	Identifying information on household
C 1	Household number
C 2	Name of head of household
C 3	Number of household members
C 4	Name of respondent
C 5	Series number of respondent, on list of names of household members
C 6	Telephone number

D	Demographic data and residency status data on household members
D	Data on household members
D 1	Household member number
D 2	First name of household member (and surname – optional)
D 3	Relationship to head of household
D 4	Gender
D 5	Date of birth (day/month/year)
D 6	Age in whole years
D	Data on household members under the age of 15
D 7	Line number of father/or deceased, divorced, or living away from home
D 8	Line number of mother/or deceased, divorced, or living away from home
D	Data on household members 11 years of age and older
D 9	Civil (or marital) status
D10	Blood ties between spouses
D11	Age at first marriage
D12	Number of times married
D13	For women presently married, number of co-wives (if any)
D	Data on all household members
D14	Nature of residence in dwelling (permanent, living away from home, non-resident)
D15	If living away from home, name current place of residence
D16	If living away from home, cite primary reason (study/hospitalization/military service/…)

D17	Birthplace
D18	Place of registration according to identity card (if foreign, cite nationality)
D19	Religion and denomination
D20	For citizens of the country in question (if holders of foreign nationality)
D21	If so, name primary foreign nationality
D22	If so, name secondary foreign nationality

E	Data on education
E	Data on children under 6 years of age
E 1	Is the child sent to a kindergarten or to a day care centre?
E 2	If not yet enrolled in any educational institution, cite main reason
E 3	If enrolled, cite main reason (maternal employment…)
E 4	If enrolled, how far from the dwelling is the kindergarten or day care centre located?
E 5	If enrolled, how long does it take to reach the kindergarten or day care centre?
E 6	If enrolled, how many hours per week does the child spend at the kindergarten or day care centre?
E	Data on household members 6 years and older
E 7	Is the household member currently pursuing studies?
E 8	If so, cite grade and class (and specify whether study is general or vocational)
E 9	If so, give name of educational institution
E 10	If so, type of educational institution (public or private school)
E 11	If private, what kind of entity administers the educational institution (secular/religious/party-affiliated/civil-society-affiliated)?
E 12	If so, location of educational institution (within or outside municipality)
E 13	If so, location of educational institution (within or outside State)
E 14	If within State, distance from institution to dwelling (in kilometres)
E 15	If within State, amount of time needed to reach institution (in minutes)
E 16	If within State, arrangements for transport between home and institution (public transport/transport privately owned by the institution/other – specify/possible to commute to and from school on foot)
E	Data on household members 6 years of age and older, not presently pursuing a course of study
E 17	Has household member ever attended school?
E 18	If not, why not?
E 19	If not, is household member capable of reading letters, newspapers or comparable material?
E 20	If not, is household member capable of writing letters or comparable documents?
E 21	If household member interrupted or abandoned studies, what were his/her reasons for doing so?
E 22	If household member interrupted or abandoned studies, what level and class had he/she reached, in what year did he/she abandon studies, and did he/she receive a passing or failing grade in the class?
E 23	If household member interrupted or abandoned studies, what was the most advanced degree earned and in what area of specialization was it earned?
E	Data on household members 15 years of age or older
E 24	Language proficiency: Arabic/French/English/other/level of proficiency in each

F	Data on field of economic activity of household members 6 years of age or older (6 years specified as the minimum age because of the possible existence of child labour in some countries)
F 1	Household member's involvement in the labour force or basic status: working/first-time job-seeker/unemployed and seeking employment/previously employed and not presently seeking employment/not working
F 2	Date of initial entry into job market (began working)

F 3	If not working, cite main reason: retirement/chronic illness/disability/searching for work/pursuing course of study/operating a home-based business/other reason
F 4	If household member interrupted or abandoned work after having been employed (whether he/she decided to do so voluntarily or was forced to do so): reason for interrupting work/date of interruption/has household member undertaken any income-generating casual work whilst unemployed?
F 5	Has household member had stable, income-generating employment in the last week?
F 6	If not, is it due to a temporary leave of absence from usual job?
F 7	If not, will household member be prepared to work in the next two weeks?
F 8	If not, please state reason?
F 9	Has household member looked for work in the last four weeks?
F 10	If so, describe means by which household member looked for work in the last four weeks
F 11	If not, please state reason?
F 12	Had household member attempted to look for employment at any time prior to the last four weeks?
F 13	Difficulties encountered by household member in securing employment and reasons behind difficulties, in household member's view
F 14	Type of employment household member is seeking
F 15	Lowest monthly salary household member is willing to accept for type of employment sought
F	Household member's primary employment at present or in past if previously but not currently employed
F 16	Detailed description of employment or profession
F 17	Institutional context of employment or profession (formal or informal sector)
F 18	Employment location: at home/on self-owned farmland/on farmland owned by other(s)/outside the home
F 19	Employment location: within municipality/outside municipality/nature of employment requires commuting within and outside municipality
F	If employed in formal sector
F 20	Name of economic establishment or institution
F 21	Economic sector to which the institution belongs: kind of production or services provided
F 22	Type of ownership: private sector/public sector/civil sector/international organization/other
F 23	Is establishment registered in the trade register?
F 24	Distance between economic establishment/workplace and dwelling
F 25	Duration of commute to economic establishment or workplace (in minutes)
F 26	Available arrangements for transport to economic establishment or workplace: public transport/private transport owned by establishment/other (describe)/possible to walk to work
F 27	Employment situation
F 28	Continuity of employment
F 29	Working hours: number of work days per week/daytime shifts, nighttime shifts, or day/night rotation/average number of work hours per day/average number of hours worked per week
F 30	If work hours incomplete, cite main reason
F 31	If the number of work hours exceeds 50 hours a week, cite reason for increase in work hours
F 32	How was position obtained?
F 33	Employment start date
F 34	How was profession learned?
F 35	Negative repercussions of work
F 36	Monthly salary/income
F 37	Total financial benefits from sources other than salary
F 38	Does household member have the right to retire or receive compensation upon termination of employment?
F 39	Is household member affiliated with a trade union, trade association or similar institution?

F -	Presently employed household members only
F 40	Number of hours worked last week
F 41	In-kind donations received in the context of primary employment in the last 12 months: free housing/free transport/free meals at workplace/free clothing
F 42	Does household member have employer-provided accident insurance?
F 43	Is household member attempting to work extra hours at current position?
F 44	Is household member attempting to find a different position?
F 45	Extent to which practical or vocational preparation was suited to nature of work, in household member's opinion
F 46	Current level of satisfaction with position
F 47	Is household member engaged in secondary employment?
F 48	If not, is he/she looking for secondary employment?
F 49	If so, in which sector?
F 50	If so, what kind of secondary employment?
F -	If household member is currently engaged in secondary employment
F 51	Describe, in detail, kind of secondary employment
F 52	Institutional context of secondary employment (formal sector/informal sector)
F 53	Place of secondary employment: at home/on self-owned farmland/on farmland owned by other(s)/outside the home
F 54	Place of secondary employment: within municipality/outside municipality/nature of employment requires commuting within and outside municipality
F	If secondary employment is within the formal sector
F 55	Name of economic establishment or institution for which household member is working
F 56	Economic sector: primary type of production or services provided
F 57	Type of ownership: public sector/private sector/civil sector/international organization/other
F 58	Is establishment registered in the trade register?
F 59	Distance between economic institution or place of secondary employment and dwelling (in kilometres)
F 60	Duration of commute between economic institution or place of secondary employment and dwelling (in kilometres)
F 61	Available arrangements for transport to economic establishment or place of secondary employment: public transport/private transport owned by establishment/other (describe)/possible to walk to work
F 62	Secondary employment situation
F 63	Continuity of secondary employment
F 64	Working hours: number of work days per week/daytime shifts, nighttime shifts, or day/night rotation/average number of work hours per day/average number of hours worked per week
F 65	Number of hours worked in the last week
F 66	How was secondary employment secured?
F 67	Start date
F 68	How was profession learned?
F 69	Negative repercussions of secondary employment
F 70	Monthly salary/income earned from secondary employment
F 71	Total financial benefits, besides salary, received from secondary employment
F 72	Other benefits received in the context of secondary employment in the last 12 months: free housing/free transport/free meals at workplace/free clothing
F 73	Does household member have employer-provided occupational accident insurance?
F 74	Extent to which practical or vocational preparation was suited to nature of work, in household member's opinion
F 75	Level of satisfaction with secondary employment

G	Data on subject of professional training received by household members either currently employed or looking for employment
G 1	As a trainee, did household member participate in any training courses in the last three years?
G 2	If so, cite subject of last training course
G 3	If so, cite length of last training course (in days)
G 4	If yes, cite name of institution organizing last training course
G 5	Does household member wish to participate in additional training courses, and if so, in what subject area?

H	Data on the health situation and health-insurance status of household members
H 1	Weight and height
H 2	Has household member suffered from any illnesses in the last 12 months?
H 3	Number of times household member underwent medical examination for treatment of illness(es) listed
H 4	Where was examination performed: at a physician's clinic/at a free clinic/at a private clinic
H 5	Has household member (a) taken medication/(b) not needed to take medication/(c) been unable to afford medication due to hardship?
H 6	Does household member undergo regular examinations or health checkups? If so, how frequent are visits (how many months between visits)?
H 7	Does household member visit traditional healers/acupuncturists/comparable practitioners?
H 8	Does household member take herbal remedies prescribed by traditional healers?
H 9	Does household member take medicine not prescribed by a doctor, and if so, by whom is he/she advised to do so?
H 10	Has household member had any dental problems in the last 12 months?
H 11	Has household member been to a dentist to have those problems treated?
H 12	Does household member see a dentist regularly? If so, how frequent are visits (how many months between visits)?
H 13	Has household member had laboratory tests or x-rays done in the last 12 months?
H 14	Where were tests or x-rays done: at private laboratory/at clinic/in hospital?
H 15	Has household member had to be hospitalized in the last 12 months?
H 16	Was hospital a public sector hospital/private sector hospital/civil sector hospital/other?
H 17	Has household member been subjected/exposed to violence in the home/outside the home in the last 12 months, and if so, what kind of violence?
H 18	Does household member suffer from any chronic illnesses?
H 19	If so, specify which chronic illnesses
H 20	Is household member a participant in a health insurance scheme, or a beneficiary thereof, or neither?
H 21	If so, name primary type of health insurance or coverage household member is a participant in or a beneficiary of, by source of sponsorship: social security fund/cooperative for State employees/army and security forces/municipality/employer-funded private insurance/self-funded private insurance/cooperative fund
H 22	If so, name secondary type of health insurance or coverage scheme household member is enrolled in or a beneficiary of, by source of sponsorship: social security fund/cooperative for State employees/army and security forces/municipality/employer-funded private insurance/self-funded private insurance/cooperative fund
H 23	Types of services covered under health insurance schemes (primary and secondary combined): hospitalization (degree)/medical examinations/medication/laboratory tests/x-rays/other (describe)
H 24	Type of smoking (cigarettes, pipe, cigars, nargileh), frequency of smoking and amount smoked: number of cigarettes in a day/number of days per week
H 25	Has household member ever smoked before?
H 26	Respondent's subjective evaluation of own health situation: excellent/good/average/poor/very poor

H 27	Does respondent have any physical or mental disabilities?

I	Data on household members with physical or mental disabilities
I 1	If suffering from a disability, specify whether physical, mental, or both
I 2	Age at which disability occurred
I 3	Primary cause of disability
I 4	Does disabled household member benefit from training or rehabilitation programmes targeting the impairment?
I 5	Primary entity covering programme costs
I 6	Does disabled household member benefit from vocational training or rehabilitation programmes enabling him/her to work in a given field?
I 7	Primary entity covering programme costs
I 8	Does disabled household member have access to adaptive disability-related equipment or accessories?
I 9	If not, what three specific articles of equipment or accessories is household member most in need of?

J	Data on children five years of age and under
J 1	Weight and height
J 2	Current weight of child (give exact weight)
J 3	Current height of child (give exact height)
J 4	Has child been in a dangerous accident in the last year? If so, what kind of accident – what caused accident – where did accident occur – how were after-effects or side effects of accident treated?

K	Data on children aged 12 to 23 months
K 1	Does child have a vaccination or health record card?
K 2	Type of vaccinations administered to child
K 3	Place where vaccinations were administered
K 4	Duration of breastfeeding

L	Data on reproductive health of currently or previously married women as well as women under age 55
L 1	Is the married woman currently pregnant?
L 2	Did the pregnant woman gain weight as a result of the pregnancy?
L 3	Did the woman attempt, or is she presently attempting, to maintain or lose weight?
L 4	Who advised the woman to lose weight: a family physician/a specialist/a nutritionist/media sources/friends or relatives/chose to lose weight of her own volition/other?
L 5	Total number of live births (male/female); total number of children living (male/female); total number of infant deaths before one year (male/female), and of those, total number of infant deaths before five weeks (male/female)
L 6	Number of pregnancies ending in stillbirths
L 7	Number of pregnancies ending in abortion or miscarriage
L 8	If ending in abortion, who performed the abortion?
L 9	What health complications did the woman experience as a result of the abortion?
L 10	Number of live births in the last 12 months
L 11	Date of woman's first live birth from any husband
L 12	Date of most recent live birth, whether child has since died or is still living
L 13	Extent of woman's familiarity with traditional and modern contraceptive methods
L 14	Does the woman use some method to delay or avoid becoming pregnant, and if so, which method?
L	Data on most recent pregnancy in the last five years
L 15	Number of months pregnant

L 16	Did you undergo a prenatal exam during your pregnancy?
L 17	If so, who performed the exam: a physician/a nurse/a midwife/other (specify)?
L 18	In what month of your pregnancy did you undergo your first prenatal examination?
L 19	What was your main reason for scheduling the first prenatal examination?
L 20	Number of prenatal examinations undergone during pregnancy and parties who performed the exam
L 21	If no prenatal examinations undergone, cite main reason
L 22	Place of delivery: physician's clinic/private hospital/public hospital/private clinic/public clinic/home/another person's house/other (specify)
L 23	If delivery did not take place in hospital or health centre, explain why child was not delivered in a health care institution
L 24	Who oversaw or assisted in delivery: a physician/a nurse/a midwife/female relatives or friends/other (specify)?
L 25	In the six weeks following delivery, has woman elected to undergo a health exam?
L 26	If so, where was the exam performed: physician's clinic/private hospital/public hospital/private clinic/public clinic/at home/?
L 27	Who performed the exam: a physician/a nurse/a midwife/other (specify)?
L 28	If woman has not elected to undergo a health exam in the six weeks following delivery, give main reason

M	Data on nutrition pertaining to household members up to 3 years of age
M 1	Diet/what foods are consumed in the morning, at noon and in the evening?/amount and type of food (if possible, calculate number of units of food energy consumed daily)
M 2	Is the household member a vegetarian/non-meat eater?
M 3	Does s/he have any allergies to specific foods?
M 4	Amount of sweets and sugar-rich foods consumed daily
M 5	Amount of vegetables and fruits consumed daily
M 6	Number of cups of coffee and/or tea consumed daily
M 7	Does he/she wash her/his hands with soap and water before and after meals?
M	Data on nutrition pertaining to household members 16 years and above
M 8	What is the most important consideration when buying or consuming a food product? nutritional value/price/flavour/some other consideration – specify

N	Data on athletic and social activities undertaken by household members 11 years and above
N 1	Athletic activities undertaken regularly; daily or weekly frequency/walking/jogging/ swimming/Swedish exercises/Yoga/bodybuilding/cycling/…
N 2	Leisure and social activities undertaken; daily, weekly, monthly or yearly frequency: attending theatre performances/going to the cinema/going to concerts/art exhibitions/watching television programmes/listening to the radio/listening to music/visiting family/visiting friends/restaurants and coffeehouses
N 3	Activities related to reading books, magazines and newspapers (frequency and time spent reading daily or weekly)
N 4	Activities related to computer and internet use (frequency, time spent daily or weekly, and purpose of use, professional and/or for information and/or for communication and/or for entertainment)
N 5	Travel abroad, frequency in the past 12 months, motives for travel (tourism/business/study), and modes of transport (plane/train/car/…), duration of trip and travel destination

O	Data on deaths in the household in the past 24 months (not counting pregnancies ending in stillbirth, miscarriage or abortion)
O 1	Number of household member on the death register/list of deaths
O 2	First name of household member
O 3	Relationship to head of household

O 4	Gender
O 5	Date of birth (day/month/year)
O 6	Age in whole years
O 7	Date of death (day/month/year)
O 8	Age at death (if deceased is a child, give age in years, months and days)
O 9	Cause of death
O 10	Medical attention received prior to death

P	Data on primary dwelling
P 1	Type of dwelling
P 2	Total number of rooms in dwelling (not counting kitchen, hallways, toilets or baths)
P 3	Number of rooms in dwelling in terms of primary use (sleep/receiving company/ sitting/eating/other/rooms set aside for economic activity)
P 4	Number of baths/toilets/kitchens
P 5	Total built area of dwelling (except areas without a roof, sealed areas or uncovered areas such as balconies) (in m^2)
P 6	Of that total area, how much of it is in rooms set aside for economic activity? (in m^2)
P 7	How much of the total area is uncovered or sealed off, including balconies? (in m^2)
P 8	Does the primary dwelling have built extensions (storage rooms, or quarters for maids, chauffeurs or other staff)?
P 9	If so, give the total area of these extensions (in m^2)
P 10	Does the primary dwelling have a private garage? (covered/uncovered)
P 11	Is there a garden on the premises?
P 12	How old is the primary dwelling?
P 13	Does the building in which the primary dwelling is located contain ground floor spaces where manufacturing/trade/office activities are performed?
P 14	Does the building in which the primary building is located contain apartments (beyond apartments in or constituting the primary dwelling) in which manufacturing, trade or office activities are performed?
P 15	Name the primary material used to build walls (stone/concrete/wood/tin)
P 16	Name the primary material used to build ceiling (stone/concrete/wood/tin)
P 17	Name the primary material used to build flooring (marble/cobblestones/wood/vinyl/cement/earth)
P 18	Answer only if there is no toilet available within the dwelling – is there a toilet available outside it?
P 19	Answer only if there is no kitchen available within the dwelling – is there a kitchen available outside it?
P 20	Household occupancy of dwelling (own/rent/free occupancy/…), (furnished apartment/ conventional…)
P 21	Date of household move into primary dwelling (year)
P 22	If household owns dwelling
P 23	Type of ownership and date of purchase
P 24	Estimated value of dwelling at present
P 25	Annual rental value of dwelling
P -	Services provided to primary dwelling
P 26	Different sources of service water available in order of priority or importance
P 27	Frequency with which water supply network provides service water
P 28	Available sources of drinking water in order of priority or importance
P 29	Drinking water sterilization or purification methods (if household uses such methods or is obliged to do so)
P 30	Different available energy sources for lighting used by the household in terms of priority or importance

P 31	Frequency of energy availability from public electricity networks only (without taking into account any other sources of energy, whether electrical or non-electrical)
P 32	Different available sources of energy used for cooking in the primary dwelling in order of priority and importance
P 33	Available sanitation method
P 34	Chief method of sewage disposal available
P 35	Periodic disposal of household waste
P -	Number of the following appliances available in household
P 36	Refrigerator
P 37	Refrigerator/freezer
P 38	Freezer
P 39	Coal or wood stove
P 40	Gas stove without oven
P 41	Gas stove with oven
P 42	Electric stove
P 43	Electric oven
P 44	Microwave oven
P 45	Electric water heater
P 46	Gas or coal water heater
P 47	Electric washing machine (non-automatic)
P 48	Electric washing machine (automatic)
P 49	Electric clothes dryer
P 50	Electric automatic dishwasher
P 51	Coal fireplace
P 52	Gas fireplace
P 53	Electric fireplace
P 54	Air-conditioner
P 55	Fan
P 56	Landline telephone
P 57	Cellular phone
P 58	Radio
P 59	Television
P 60	Satellite dish
P 61	Cable television subscription
P 62	Videocassette player
P 63	DVD player
P 64	Computer
P 65	Computer printer
P 66	Computer scanner
P 67	Internet service subscription
P 68	Vacuum cleaner
P 69	Electrical generator for dwelling
P 70	Home burglar alarm

Q	Data on household property
Q 1	Film or digital photographic camera
Q 2	Video camera
Q 3	Musical instruments
Q 4	Car purchased new
Q 5	Car purchased used
Q 6	Caravan

Q 7	Motorcycle purchased (new)
Q 8	Motorcycle purchased (used)
Q 9	Vespa purchased (new)
Q 10	Vespa purchased (used)
Q 11	Bicycle
Q 12	Tractor
Q 13	Boat
Q 14	Yacht
Q 15	Factories
Q 16	Stores
Q 17	Farms (cows, sheep, chickens)
Q	Total area (in m^2) of property of the following kinds owned by household
Q 18	Pre-construction real property
Q 19	Agricultural land

R	Data on secondary dwellings owned or rented by household
R 1	Number of secondary dwellings owned by household (within country/outside country)
R 2	Number of secondary dwellings rented by household (within country/outside country)
R 3	Uses of secondary residence (multiple responses)

S	Data on household expenditures in last 12 months (where necessary, expenses relating to the primary and secondary dwelling shall be calculated together). Expenditure concerns household consumption, not consumption in terms of such necessary work-related purchases as raw materials, namely, purchase of fabric to manufacture tailor-made t-shirts
S	Rental and service expenses
S 1	Rental of primary dwelling (before services)
S 2	Money spent on shared services or responsibilities (concierge/cleaning of common areas/elevator electricity supply, etc…)
S 3	Rental of secondary dwellings (before services)
S 4	Charge for shared services or responsibilities in secondary dwelling
S 5	Charge for rental of lands and real estate, use notwithstanding
S 6	Charge for rental of student housing for household members
S 7	Charge for parking space rental
S	Amount spent on fixed assets, machinery, household appliances and clothing
S 8	Projected drop in value on purchase of primary dwelling
S 9	Projected drop in value on purchase of secondary dwelling
S 10	Projected drop in value on purchase of built or pre-construction real property

S	Salaries and expenses of domestic workers employed by household
S 50	Salaries paid to all workers employed by the household, type of work notwithstanding
S 51	Charge for household workers' residency and work permit fees, travel, health insurance, and uniforms
S	Other expenses
S 52	Property-related and other taxes and fees incurred by the household
S 53	Other expenses

T	Data on household income in the past 12 months (categorized as follows):
T 1	Salaries
T 2	Income earned by employers or self-employed individuals
T 3	Income from real-estate property (rent payments)
T 4	Income from financial assets (interest from deposits, treasury bonds or dividends)

T 5	Retirement pensions
T 6	Family allowances
T 7	Termination indemnities
T 8	Health indemnity compensations
T 9	Educational grants
T 10	Payments from insurance companies
T 11	Government aid
T 12	Aid from civil society organizations
T 13	Aid or remittances from individuals, relatives or friends
T 14	Sale of household property, kind of property notwithstanding
T 15	Other income
T	Additional data on household income and subjective assessment of living standards
T 16	In which bracket does average monthly household income fall, generally speaking (income and sources of income of all household members to be taken into account)?
T 17	Does the family consider itself: very rich/rich/average/poor/very poor?
T 18	Roughly what percentage of household income is spent on the following: housing/ food/health/education/debt repayment/entertainment?
T 19	Roughly what percentage of household income does family save?
T 20	How does the family regard its current standard of living, when compared to that of a year ago: vastly improved/improved/stayed the same/fell/fell significantly

U	Data on sources of annoyance within dwelling environs
U 1	Noise (specify source of noise)
U 2	Works and excavation
U 3	Potholes and neglected roads
U 4	Lack of street lighting
U 5	Difficulty of finding free parking
U 6	Other sources of annoyance within dwelling environs

V	Data on availability of public services within dwelling environs (how far from dwelling are the following services provided, in hundreds of metres?)
V 1	Public transport services (specify which: car, bus, underground/subway, train)
V 2	Government primary school
V 3	Private primary school
V 4	Day care centre or kindergarten
V 5	Grocery stores
V 6	Bakery
V 7	Pharmacy
V 8	Physician clinic
V 9	Dispensary
V 10	Hospital

W	Data on completion, verification and encoding of survey questionnaire, and questionnaire data entry
W 1	Was questionnaire filled out (in its entirety or in part), and if not, why not?
W 2	Date on which questionnaire was completed (day/month/year)
W 3	Number of visits needed by investigator to complete questionnaire
W 4	Time needed to fill out questionnaire (in minutes)
W 5	Name and number of field investigator (as well as dates on which questionnaire was received and submitted)
W 6	Name and number of fieldwork team leader (as well as dates on which questionnaire was received and submitted)

W 7	Name and number of first office survey-data verifier (as well as dates on which questionnaire was received and submitted)
W 8	Name and number of second office survey-data verifier (as well as dates on which questionnaire was received and submitted)
W 9	Name and number of first questionnaire-response encoder (as well as dates on which questionnaire was received and submitted)
W 10	Name and number of second questionnaire-response encoder (as well as dates on which questionnaire was received and submitted)
W 11	Name of data entry operator (as well as dates on which questionnaire was received and submitted)