

## Colombia 2004: Survey Information

### Summary table

| <b>Generic information</b>       |   |
|----------------------------------|---|
| Name of survey                   | Continuous Household Survey (Encuesta Continua de Hogares – ECH)  |
| Institution responsible          | National Administrative Department of Statistics (DANE)   |
| Main objective                   | Provide basic information about the size and structure of the population's labor force (employment, unemployment and inactivity), and other variables such as sex, age, marital status and education.   |
| Survey structure                 | Cross-sectional. Continuous collection of data.   |
| Frequency                        | Yearly since January 2000   |
| Survey year / Wave               | ECH 2004  |
| Coverage                         | Non-institutional civilian population residing in the thirteen major cities and metropolitan areas. The national coverage survey provides results for urban and rural areas, large regions and totals by department. The population of the so-called national territory before the 1991 constitution, which comprises approximately 4% of the population, is excluded.    |
| <b>Sampling</b>                  |   |
| Sampling design                  | Probabilistic, stratified, with unequal clustering, multi-staged and self-weighted (for the 13 cities and their metropolitan areas)   |
| Sampling frame                   | The sampling frame consists of the cartographic inventory and listings of dwellings by city from the Population and Housing National Census of 1993, with continuous updates and new counts of buildings and dwellings through the same sample, with the corresponding maintenance.   |
| Final sample size                | The sample size in each quarter corresponds to 50,850 households in the thirteen cities and 12,510 households in other domains of study.  |
| <b>Collection</b>                |   |
| Collection period                | Continuous  |
| Instruments and main contents    | The ECH covers the following topics in basic modules or records conducted on an ongoing basis: general characteristics, labor force, employment, unemployment, inactivity. There are also modules whose questions are applied with less frequency: dwelling and household characteristics, migration, and child labor, among others.                                      |
| <b>Definitions</b>               |   |
| Household                        | Person or group of persons who occupy a dwelling in part or in whole, and have come together to sleep under the same roof and eat the food they share, or simply the former. These persons may or may not be related by kinship. Domestic servants and their families are considered members of the household as long as they sleep in the same dwelling where they work. |
| Household head                   | Habitual resident of the dwelling, recognized as head by the other members of the household.  |
| <b>Data quality aspects</b>      |   |
| Unit response rate               | ??  |
| Item non-response / imputation   | No imputing.  |
| Weighting                        | The final expansion factor is the product of the basic expansion factor, the sub-sample weight, and the non-response adjustment factor.   |
| <b>Labour market information</b> |   |
| Source                           | Interview   |
| Reference period                 | Varies with survey module: at time of interview; week, month, or year prior to it.  |
| Definition of employment         | Persons that worked for pay (in money or in kind) for at least 1 hour during the week of reference, or did not work during the week of reference but held a paid job. This definition also includes unremunerated family workers who worked for at least 1 hour during the week of reference.   |
| Treatment of military personnel  | Identifiable under "professionals and technicians" in the code of occupations.  |
| <b>Income</b>                    |   |
| Source                           | Interview   |
| Reference period                 | Varies with survey module: at time of interview; week, month, or year prior to it.  |
| Unit of collection               | Individual  |
| Unit of time                     | Salaries, in kind payments, and commissions are reported on a monthly basis. Other payments are reported for the last 12 months.  |
| Restrictions                     | No explicit restrictions.   |
| Gross/net                        | Employees declare gross incomes.  |

This document is based on the Interviewer's Manual of Technical Procedures and the Methodological Book of the *Continuous Household Survey – ECH 2004*, National Administrative Department of Statistics (DANE).

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**A. Generic characteristics**

Official name of the survey/data source:

*Continuous Household Survey* (Encuesta Continua de Hogares – ECH 2004).

Administrative unit responsible for the survey:

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| National Administrative Department of Statistics (DANE)<br>Methodology and Statistics Production Office<br><a href="http://www.dane.gov.co/">http://www.dane.gov.co/</a> |
|--|

The DANE implemented the National Household Survey (ENH) quarterly and continuously from 1976 to 1999. The ENH's aim was to measure changes in levels of employment, unemployment and other variables related to the population's labour force. The ENH was replaced in 2000 by the Continuous Household Survey (ECH), whose main feature is a fieldwork carried out continuously throughout the year. One of the most salient characteristics of this survey is that the indicators obtained from it are averages for the labour force in a given period while the weekly collection allows to capture seasonal variations and to eliminate the effects of reference period.

To ensure continuity between the ENH and the ECH, the two surveys were conducted in parallel in 2000, in order to provide information for the analysis of the differences in the results from the two methods; identify basic criteria for the splicing of the series; refine

operating processes and procedures; harmonize urban and rural surveys; and define the system of processing and production of results.

The objectives of the ECH are:

- To estimate magnitude indicators [indicadores de magnitud] for an expected unemployment rate of 10%, and other labour market indicators.
- To measure the general characteristics of the population: kinship, gender, age, marital status, education, etc.
- To measure the characteristics of employment: seasonality, underemployment, industry, profession or trade, occupational position, income, and affiliation to social security.
- To measure the characteristics of unemployment: job search time; industry, occupational position, and profession or trade in the previous job; and industry, occupational position and profession or trade in which the person is looking for work.
- To measure the characteristics of inactivity, and the reasons why the population has withdrawn or does not participate in the labour market.

## **B. Population, sample size and sampling methods**

### Population coverage

The universe is made up of non-institutional civilian population residing in the thirteen major cities and metropolitan areas (Bogotá, Medellín, Cali, Barranquilla, Bucaramanga, Manizales, Pasto, Pereira, Cúcuta, Ibagué, Montería, Cartagena y Villavicencio). It includes also the survey of national coverage that delivers results for urban and rural areas, large regions and totals by department. The universe excludes the population of the so-called national territory before the 1991 constitution, which comprises approximately 4% of the population.

### Sample size

The sample size in each quarter corresponds to 50,850 households in the thirteen cities and 12,510 households in other domains of study.

### Sampling design

The original sampling frame consists of the cartographic inventory and listings of dwellings by city from the Population and Housing National Census of 1993, with constant updates and new counts of buildings and dwellings through the same sample, with the continuous maintenance.

The sampling method has the following characteristics:

#### **a. Probabilistic**

- b. **Stratified:** Use of geographic and socio-economic criteria.
- c. **Multi-staged:** Three stages: selection of sections, selection of blocks, and selection of segments.
- d. **By clusters:** Compact segments are selected with an average of 12 dwellings, where all dwellings, households and individuals are investigated.

### **C. Data collection and acquisition**

#### Collection period

Continuous (January-December 2004)

#### Reference period

Varies with survey module: at time of interview; week, month, or year prior to it.

#### Data collection

Data collection is carried out on a continuous basis. Interviews are conducted with direct or indirect informant, defined as a person over age 18 who is a household member other than a domestic servant. The collection is weekly for the thirteen areas and monthly for the main [cabecera] and the remaining areas.

### **D. Definition of the survey units**

Depending on the specific goals of the study, the survey units are the dwelling, the household, and the individual.

#### Dwelling

Set of structures separated or connected, occupied or intended for occupancy as separate living quarters by a family or some other group of persons living together, or by a person living alone. The housing unit can be a house, an apartment, a room or group of rooms, a shack, or any shelter occupied or available for use as a place to stay with the following characteristics:

**Separation:** It must be separated from other dwellings by floor to ceiling walls and covered by a roof.

**Independence:** It must have access to the street by a passage or staircase without passing through areas of exclusive use of other dwellings.

It must have exclusive use on dining and living room, laundry, clothes yard, kitchen and bathroom.

### Household

Person or group of persons who occupy a dwelling in part or in whole, and have come together to sleep under the same roof and eat the food they share, or simply the former. These persons may or may not be related by kinship. Domestic servants and their families are considered members of the household as long as they sleep in the same dwelling where they work.

### Household head

Habitual resident of the dwelling, recognized as head by the other members of the household.

## **E. Contents**

The ECH covers the following topics in basic modules or records conducted on an ongoing basis:

- General characteristics
- Labor force
- The employed
- The unemployed
- Inactivity

There are also modules whose questions are applied with less frequency:

- Dwelling and household characteristics
- Migration
- Child Labor

## **F. Quality of data**

### Response rate

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The estimated error is around 5% with a confidence level of 95% for the main indicators.

### Editing and coding

To ensure the quality of the survey, the DANE requires that after each survey, both the collector/interviewer and the supervisor review the contents of the completed questionnaire

to verify its full processing, correct flows and consistency of information in order to make the clarifications deemed relevant in a timely manner and directly at the source.

The supervisor conducts at least two daily re-interviews to verify the quality of the work of the data collector/interviewer. Also, the supervisor must receive the material daily and make a pre-evaluation of the forms before handing them to the critic-encoder in the office. As a follow-up measure, the critic verifies immediately that the material is complete. The critic also verifies daily that any material that does not comply with the established standards is returned to the field.

The program FOX-PRO is used for the detection of inconsistencies in the processing of the form, as well as in the critic-coding and entry of the data, allowing the clean-up of the collected information. This process begins almost simultaneously with the criticism and encoding of the information, in order to have sufficient time to return material to the field if necessary. The survey coordinator for each of the cities subject of study certifies with his/her signature the quality of the information before sending the backup to the DANE headquarters. Additionally, the coordinator must do a random review of 5% of the processed material in order to verify it matches the information recorded on the form.

The regional offices send the backup of the information collected and verified to the DANE headquarters on a weekly basis. The coordinator of field logistics performs the consolidation of all the regional backups by weeks, and makes a final correction of inconsistencies, as well as coverage control. The survey coordinator in each regional office conducts meetings with the field team at least every two days to feedback to the different processes (collection, critique-encoding and entry); to uphold the concepts and resolve the doubts that have arisen in the execution of the process; to follow up on incomplete or pending surveys and to perform coverage control. In addition, the survey coordinator conducts the redistribution of work and evaluates the performance of the group.

### Imputation

No imputing.

### Weighting procedure

The final expansion factor is the product of the basic expansion factor, the sub-sample weight, and the non-response adjustment factor.

The basic expansion factor for each household in the sample is the reciprocal of the final probability of selection of each dwelling and individual under study.

The sub-sample weight is calculated by segment and is theoretically equal to 1 for all segments. However, the dynamic development of the sampling frame can make this framework greater or smaller than 1 in accordance with the dwelling density of the segment at the time of the survey; for this reason, it modifies the basic expansion factor for the segment.

The coverage adjustment for non-response is obtained by dividing the number of households selected in a segment by the number of households surveyed in the same segment.

Expansion factors in the monthly and quarterly databases indicate how many individuals (or households) represent each of the individuals (or households) selected in the sample, so that the sample results become representative of the total population. Since the third trimester of 2003, databases of metropolitan areas began to use expansion factors for individuals and households separately.

According to the DANE methodology, the expansion factor for a trimester is obtained by adding up the expansion factors for each of the three months and dividing by three. The analysis of households expanded to the population for periods without household expansion factors can be performed by using the expansion factors corresponding to the head of each household.

## **G. Uses of the survey**

### Publications

Monthly, bimonthly and quarterly press releases since 2001.

### Poverty and Income Distribution

Poverty and extreme poverty estimations for 2002-2005 (III quarter)

|            |      | Nacional | Urbano | Rural |
|------------|------|----------|--------|-------|
| Pobreza    | 2002 | 57,0     | 50,2   | 75,1  |
|            | 2003 | 50,7     | 46,3   | 62,9  |
|            | 2004 | 52,7     | 47,3   | 67,5  |
|            | 2005 | 49,2     | 42,3   | 68,2  |
| Indigencia | 2002 | 20,7     | 15,5   | 34,9  |
|            | 2003 | 15,8     | 12,6   | 24,6  |
|            | 2004 | 17,4     | 13,7   | 27,6  |
|            | 2005 | 14,7     | 10,2   | 27,5  |

Source: National Planning Department, Estimations ECH and MERPD- ENH