

# **Basic Information Document**

## **Nicaragua Living Standards Measurement Study Survey 1998**

Poverty and Human Resources  
Development Research Group  
The World Bank

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## ACRONYMS

|        |   |
|--------|---|
| EMNV   | Living Standards Measurement Survey ( <i>Encuesta de Hogares Sobre Medición de Nivel de Vida</i> )  |
| ENDESA | Demographic and Health Survey ( <i>Encuesta de Demografía y Salud</i> )                             |
| FISE   | Emergency Social Investment Fund ( <i>Fondo de Inversión Social de Emergencia</i> )                 |
| GON    | Government of Nicaragua   |
| INEC   | National Institute for Statistics and Census ( <i>Instituto Nacional de Estadísticas y Censos</i> ) |
| LSMS   | Living Standards Measurement Study  |
| MAG    | Ministry of Agriculture and Livestock ( <i>Ministerio de Agricultura y Ganadería</i> )              |

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This document is part of an expanded program of documentation and further development of the Living Standards Measurement Study (LSMS), managed by Kinnon Scott, in the Poverty and Human Resources Division of the Development Research Group (DECRG). It was prepared by Diane Steele (DECRG) with the assistance of the team from the National Institute for Statistics and Census and Carlos Sobrado (LCSP).

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## I. Introduction

In 1993, Nicaragua administered its first Living Standards Measurement Survey (*Encuesta de Hogares sobre Medición de Nivel de Vida* - EMNV). The survey was designed by the National Institute for Statistics and Census (*Instituto Nacional de Estadísticas y Censos* - INEC) with technical assistance from the World Bank and carried out from February through June 1993 in both urban and rural areas in all regions of the country. The purpose of the study was to provide policy relevant data on living conditions in Nicaragua for use by the government (GON) in designing a poverty alleviation strategy.<sup>1</sup>

In 1997, the GON decided to replicate the EMNV in order to compare the current situation with the situation in 1993 and to collect more detailed information in those areas which were found to be important in 1993. Among other findings, it was found that: (a) rural poverty is much higher and deeper than urban poverty; and (b) poverty is concentrated in agriculture (World Bank, 1995b).

At the same time, it was decided to use the EMNV98 to perform an evaluation of Emergency Social Investment Fund (*Fondo de Inversión Social de Emergencia* - FISE) projects. This evaluation looked at FISE projects for primary schools, health posts, latrines, and water and sanitation projects throughout the country. Data were collected from a separate sample of households using the same questionnaire as was used for the EMNV. Additional questionnaires were designed to collect information from the facilities built or rehabilitated using FISE funds and equivalent facilities that had not used FISE funds. The data for the households from the FISE sample and the facilities are not included in the data being distributed for analyses of the EMNV.

The purpose of this document is to provide detailed documentation of the EMNV98. The report is organized in seven sections. Section II contains a detailed outline of the questionnaires used in the administration of the survey. Section III provides information on the sample design used. Sections IV and V provide descriptions of the pilot testing of the questionnaires and the field work for the actual survey. Mechanisms for data entry are described in Section VI. Section VII discusses Hurricane Mitch which hit Central America shortly after the survey was administered.

## II. Survey Instruments

Three questionnaires were used to collect the information: a household questionnaire; an anthropometric questionnaire; and a price questionnaire. In contrast to the 1993 survey, there was no separate community questionnaire. Some community level information is available in the household questionnaire, however.

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<sup>1</sup> Information on the EMNV93 can be obtained by mail (see Appendix A) or can be downloaded from the LSMS Web Site: <http://www.worldbank.org/lsm/lsmshome.html>.

The EMNV98 collected information using a household questionnaire which was based in part on the EMNV93 questionnaires. For those modules used in 1993 that were repeated in 1998, revisions were made to the format and questions. Questions that had been found to provide non-useful information in 1993 were deleted, questions that had been found to be poorly written were revised, and questions that provided information that was missing from the 1993 survey were added. Box 1 contains a summary of the contents of the 1998 questionnaire. See Appendix A for details on how to obtain copies of the questionnaires.<sup>2</sup>

There were three new modules used in the 1998 questionnaire that did not appear in the 1993 questionnaire - time use<sup>3</sup>, agricultural activities, and credit and savings. The migration module that was administered in 1993 was not included in the 1998 questionnaire.

Anthropometric information was collected from every household member in 1998, in contrast to 1993 when information was collected only from the children. The information collected included date measured, weight in kilograms, and height (or length) in centimeters.

A price questionnaire was administered at the community level<sup>4</sup> in rural areas and at the municipio level in urban areas. The goods included on the questionnaire were based on the basic consumer basket for the urban sector developed by the Ministry of Agriculture and the consumption basket used by INEC to calculate price indices. It includes 32 food products and 18 non-food items. It was designed to collect three price quotations at the level of each community/municipio.

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<sup>2</sup> Copies of the questionnaires can be obtained by mail (see Appendix A) or can be downloaded from the LSMS Web Site at: <http://www.worldbank.org/lsmsslms/home.html>.

<sup>3</sup> The time use module was administered in only one half of the dwellings. The selection of dwellings included was made as every other dwelling. In addition, the first dwelling selected changed in every other segment between the first and second dwelling.

<sup>4</sup> Community is defined as the area in which the survey was done. In rural areas, three stores closest to the interviewed households were surveyed to see what prices were charged. Efforts were made to visit pulperias that sold 90 percent of the products on the list. In urban areas, only one store was surveyed.

Box 1. Contents of the EMNV98 Household Questionnaire

| Section   | Description   |
|---|---|
| <b>ROUND I</b>                                      |   |
| 1 Characteristics of the Dwelling and the Household | The module on housing contains questions relative to the quality of the dwelling and services (water, electricity, sanitation) available in the household.  |
| 2 Characteristics and Composition of the Household  | This module contains the roster of individuals living in the household, their gender, age, and marital status, and information that identifies the parents of the children in the household.  |
| 3 Health  | The health module is divided in 3 sections:<br>A. Breastfeeding for children less than 3 years old.<br>B. Vaccinations and presence of “EDA” for children less than 6 years.<br>C. Presence/control of illness in all individuals.  |
| 4 Education   | The education module is divided in 2 sections:<br>A. Preschool and CDI attendance for children less than 6 years old.<br>B. Education for all individuals 6 years or older.   |
| 5 Economic Activity                                 | The economic activity module is administered to all individuals 6 years or older and is divided in 4 sections:<br>A. Determination of current work status<br>B. Primary occupation during the last week<br>C. Second occupation during the last week<br>D. Primary occupation during the last year  |
| 6 Fertility and Maternal Health                     | This module is administered to women between 15 and 49 and collects information on births, prenatal care, pregnancy, and costs.   |
| 7 Time Use  | This module is administered to all individuals in the household 6 and older and collects information on the time spent the day previous to the interview.   |
| <b>ROUND II</b>                                     |   |
| 8 Household Enterprises and Self-Employment         | This module collects information on households which have household enterprises or where the individual is self-employed. It is divided into 3 sections:<br>A. Data about the business/activities<br>B. Expenditures<br>C. Capital and inventory  |
| 9 Household Expenditures and Other Income           | The module is divided in 6 sections:<br>A. Food expenditures in the last 15 days<br>B.I. Non-food expenditures in the last week<br>B.II. Non-food expenditures in the last month<br>B.III. Non-food expenditures in the last 6 months<br>B.IV. Non-food expenditures in the last 12 months<br>C. Investments in the last 12 months<br>D.I Household income in the last month<br>D.II Household income in the last 12 months<br>E. Durable goods |
| 10 Agricultural Activities                          | This module collects information on the type of finca or land the household possesses, production; use of seeds, fertilizers, and pesticides; presence of animals; equipment inventory; use of technical assistance; and credit.  |
| 11 Credit and Savings                               | This module collects information on: (a) loans given to others; (b) deposits in financial institutions; (c) loans received; and (d) purchases on credit.  |

III. Sample Design

The sample used in the EMNV98 is completely different from the sample design used in the EMNV93.<sup>5</sup> In 1993, the country had been divided into nine administrative regions which no longer existed in 1998. In addition, the 7th Population and 3rd Housing Census was administered in 1995 which provided much better information on which to build the sample for the survey. The following is a brief summary of the sample and sample frame designed for the survey. The complete description of the sample is included as Appendix F.

### *Framework*

According to the last census of population in 1995, the Republic of Nicaragua is divided in 15 departments and two autonomous regions. Each department is divided in municipios.<sup>6</sup> The municipios are divided into census sectors which are further divided into census segments. On average, each segment has between 50 and 60 dwellings and a census sector has on average five segments. A computerized file of the census segments from each department was constructed from this census. The census area of supervision is a territorial unit established for the purposes of workflow. It consists of a group of census sectors and was considered as the normal work area for a census enumerator. The computerized file of areas and census segments within each department has been organized in such a manner to reflect the grouping in urban centers and rural areas according to the characterization established by INEC.

The same sample framework was used for both the EMNV98 and the Demographic and Health Survey (ENDESA-98 *Encuesta de Demografía y Salud*).<sup>7</sup> In this way the information from the two samples can be used together to obtain indicators of demography and health by living conditions.

The sample was preset at approximately 4,300 households in order to allow analyses of the data in three breakdowns: (a) the country as a whole; (b) by urban/rural location; and (c) by domains consisting of contiguous departments. Seven domains were defined for the survey and included:

Table 1. Domains for the Sample

| Domain         | Departments  |
|----------------|--|
| Managua        | Managua  |
| Pacific Urban  | Chinandega, Leon, Masaya, Carazo, Granada, Rivas   |
| Pacific Rural  |  |
| Central Urban  | Nueva Segovia, Madriz, Esteli, Jinotega, Matagalpa, Boaco, Chontales                           |
| Central Rural  |  |
| Atlantic Urban | North Atlantic Autonomous Region (RAAN), South Atlantic Autonomous Region (RAAS), Rio San Juan |
| Atlantic Rural |  |

<sup>5</sup> For information on the EMNV93 sample, see the Basic Information Document (World Bank, 1995a) for that survey. It is available on the LSMS Web Site and through the LSMS Office. See Appendix A for the addresses.

<sup>6</sup> There are 147 municipios in Nicaragua.

<sup>7</sup> The Demographic and Health Survey was administered by Macro International. Information on this survey is available at <http://www.macrint.com/dhs/>.

## Stratification

For the EMNV98, in addition to the explicit stratification of the census sectors and the urban and rural census segments within each department, an implicit stratification of geographic ordering in a serpentine method in the areas and segments was done. The efficiency of the implicit stratification can be calculated with the effect of the sample design. This is defined as the coefficient of the standard error with the sample design considering this geographic ordering and the sample error with the simple random design within the urban or rural part of each domain of study.

In order to have a sample of sufficient size, it was recommended that a minimum of between 30 and 40 census segments be selected from each domain. The total number of expected households was distributed by department proportionately to the square root of the population of each department in order to take into account the population distributions in the largest and smallest departments. Based on the response rate from the 1993 survey (approximately 94 percent of the households selected for inclusion agreed to participate), it was estimated that in order to obtain a total of approximately 4,370 completed interviews, it would be necessary to select approximately 4,650 dwellings.

Table 2. Distribution of the expected sample and of the number of conglomerates by domain of study

| Domain of Study   | Census Population 1995 | Expected Number of Households <sup>a</sup> | Number of Census Segments |
|---|------------------------|--|---------------------------|
| Managua   | 1,093,760              | 550  | 50                        |
| Pacific Urban   | 757,105                | 820  | 73                        |
| Pacific Rural   | 616,877                | 640  | 68                        |
| Central Urban   | 469,965                | 610  | 54                        |
| Central Rural   | 884,281                | 970  | 103                       |
| Atlantic Urban  | 169,551                | 340  | 30                        |
| Atlantic Rural  | 365,560                | 440  | 47                        |
| TOTAL   | 4,357,099              | 4,370                                      | 425                       |
| <sup>a</sup> This number was estimated using average numbers of households per segment. The actual number households is based on 10 households per rural segment and 12 households per urban segment. |                        |  |                           |

## Final Sample Size

Details on the final sample size and total number of respondents can be found in Appendix D. The total number of households included is 4,209 with 23,208 household members. The number of households with information from both rounds of the survey is 4,087.

The refusal rate for EMNV98 was higher than found in the 1993 survey (see Table 3). There were several reasons for this. In Nueva Segovia and RAAN, there were security problems caused by the presence of armed groups which resulted in four segments where it was impossible to enter to collect data and 2 segments in which only the first round of data could be collected. Religious and political reasons accounted for some of the refusals. Some of the questions on the ENDESA98 survey were considered too personal by local religious leaders who advised their followers not to respond to surveyors. The EMNV98 which was in the field after ENDESA98 was

often confused with the other survey and families refused to cooperate. There was a high percentage of uninhabited dwellings (close to 6 percent). Because the sample had no replacement, these dwellings are counted as refusals.

Table 3. Interviews by Department

| Department   | Planned Census Segments | Planned Number of Dwellings <sup>a</sup> | Extra Interviews <sup>b</sup> | Refusals <sup>c</sup> | Total Interviews | Non-Response Rate (%) <sup>d</sup> |
|--|-------------------------|--|-------------------------------|-----------------------|------------------|------------------------------------|
| Managua  | 50                      | 586                                      | 31                            | 78                    | 544              | 13.3                               |
| PACIFIC DOMAIN   |                         |  |                               |                       |                  |                                    |
| Chinandega   | 29                      | 322                                      | 5                             | 28                    | 301              | 8.7                                |
| Leon   | 29                      | 322                                      | 19                            | 39                    | 308              | 12.1                               |
| Masaya   | 25                      | 276                                      | 47                            | 21                    | 305              | 7.6                                |
| Carazo   | 20                      | 222                                      | 10                            | 33                    | 207              | 14.9                               |
| Granada  | 19                      | 212                                      | 2                             | 24                    | 192              | 11.3                               |
| Rivas  | 19                      | 204                                      | 3                             | 25                    | 183              | 12.3                               |
| CENTRAL DOMAIN   |                         |  |                               |                       |                  |                                    |
| Nueva Segovia  | 20                      | 220                                      | 6                             | 50                    | 199              | 22.7                               |
| Madriz   | 17                      | 180                                      | 7                             | 22                    | 166              | 12.2                               |
| Esteli   | 21                      | 232                                      | 11                            | 36                    | 213              | 15.5                               |
| Jinotega   | 28                      | 290                                      | 5                             | 96                    | 229              | 33.1                               |
| Matagalpa  | 32                      | 340                                      | 5                             | 51                    | 299              | 15.0                               |
| Boaco  | 19                      | 200                                      | 4                             | 24                    | 184              | 12.0                               |
| Chontales  | 19                      | 208                                      | 11                            | 40                    | 186              | 19.2                               |
| ATLANTIC DOMAIN  |                         |  |                               |                       |                  |                                    |
| RAAN   | 27                      | 290                                      | 1                             | 53                    | 245              | 18.3                               |
| RAAS   | 34                      | 372                                      | 1                             | 72                    | 304              | 19.4                               |
| Rio San Juan   | 17                      | 180                                      | 3                             | 41                    | 144              | 22.8                               |
| TOTAL  | 425                     | 4656                                     | 171                           | 733                   | 4209             | 15.7                               |
| <sup>a</sup> A dwelling (vivienda) can consist of more than one household (hogar).<br><sup>b</sup> Extra interviews occur when more than one household is found in one dwelling.<br><sup>c</sup> Refusal includes all types of non-response: refusal of interview by household, households in areas inaccessible due to violence, uninhabited housing units, household absent, and/or mapping errors.<br><sup>d</sup> Total number of refusals divided by planned number of dwellings. |                         |  |                               |                       |                  |                                    |

#### IV. Pilot Test

The pilot was performed in Managua (urban area) and Carazo (rural area) in December 1997. Table 4 shows the results of interviews.

Table 4. Location and Number of Interviews in the Pilot Test

| Area   | Total Number of Dwellings | Total Number of Households | Number of Incomplete Interviews <sup>a</sup> | Number of Refusals <sup>b</sup> |
|--|---------------------------|----------------------------|--|---------------------------------|
| Managua (urban)  | 67                        | 71                         | 1  | 2                               |
| Carazo (rural)   | 67                        | 70                         | 1  | 2                               |
| <sup>a</sup> Respondents answered some questions in the sections in the second round, but stopped without completing the section: Expenditures, Agricultural Activities, and Credit/Savings. |                           |                            |  |                                 |

<sup>b</sup> Respondents refused completely to respond to the second round, sections: Household Enterprise, Expenditures, Agricultural Activities, and Credit/Savings.

The pilot was administered by members of the INEC EMNV-team and individuals who had been involved in the EMNV93. The experience of the pilot test led to changes in some of the questions in the questionnaire and was crucial in deciding to administer the time-use module in only half of the households.<sup>8</sup>

The anthropometric data pilot was held January 19-23, 1998. This pilot was held later than the rest of the household survey because the team did not have the equipment they needed to collect the data. The same scales and measuring devices as used in the DHS were used in the EMNV98.

## V. Organization and Fieldwork Procedures

The household questionnaire was administered by teams consisting of one supervisor, three interviewers, and a driver. In total there were 14 teams. The supervisors were responsible for making sure the interviewers had the materials they needed and for making sure that any problems that came up in the field were resolved. Each team was assigned, on average, 30 segments to interview.

A separate brigade of anthropometrists were used to collect the anthropometric information. There were seven anthropometric teams consisting of one supervisor, two anthropometrists, two assistants, and a driver. In contrast to 1993, anthropometric information was collected from all members of the household rather than just the children. The individuals who collected the anthropometric data included several physicians who were available because a doctor's strike was going on in the country at the time.

The household questionnaire for the EMNV98 was administered in two visits to the household. On average it took 2 hours to administer the first round of the questionnaire and 1 hour for the second round. During the first visit, the modules for housing, household characteristics, health, education, economic activity, fertility and time use were administered. During the second visit the modules for household enterprises, household expenditures, agricultural activities and credit/savings were administered.

The training for the administration of the household questionnaire for the EMNV98 was held during March 16 - April 3, 1998. The survey itself was administered from April 15 through August 31, 1998.<sup>9</sup> The first questionnaires were administered in Managua in order to ensure that the interviewers fully understood the training and for really good supervision. After the first administration, the survey was administered simultaneously throughout the country, with the exception of those areas which represented difficult access and those most adversely affected by

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<sup>8</sup> The time use module took up to 20 minutes per person to administer. This added significantly to the total time needed to administer the questionnaire. It was thought that the time used to administer the time use module might lead to the refusal of the households to participate in the survey.

<sup>9</sup> There was one additional period of data collection done from September 18-October 2 to collect information for the household data for the FISE evaluation.

the rainy season (May through July). In areas of difficult access, the questionnaire was administered in a single visit to the household rather than multiple visits. The anthropometric survey was administered during May 9-August 31, 1998. Training for the anthropometric was completed from April 23-30, 1998. Training for the key entry people was also done from April 23-30, 1998.

## VI. Data Entry and Data Management

The data entry program was designed using IMPS, a data entry package developed by the US Census Bureau. This software allows programs to be developed to perform three types of data checks: (a) range checks; (b) intra-record checks to verify inconsistencies pertinent to a particular module of the questionnaire; and (c) inter-record checks to determine inconsistencies between the different modules of the questionnaire.

The data were key entered at the INEC headquarters in two groups. The data collected in Managua were keyed from April 27-May 19, 1998. The rest of the data were keyed from August 4-October 15, 1998. Difficulties in the purchasing of the computers lead to the delays in key entering the data.

## VII. Notes to Users of the Data

The month of the interview was recorded as the variable ETAPA. The value of this variable is the number of the month, for example, 4 is April, 5 is May, etc. In addition, there are two variables indicating the dates on which the interviews were conducted. DATER1 is the date on which the first round interviews were administered and DATER2 is the date on which the second round of the interview was administered.

Individual households can be identified by the variable I00. This variable contains up to 6 digits. The first 4 digits contain the unique dwelling number. If there were multiple households within the same dwelling, there will be a fifth digit which indicates the individual household within the dwelling. For example, in dwelling 6860, two households were interviewed. Therefore the household numbers (variable I00) for the two households are 68601 and 68602.

The household identifier I00 is used to merge data from different files at the household level. In order to merge data from different files at the individual level, the variables I00 and CODPER (individual person code) should be used.

The Unit of Measure codes are found in the questionnaire and in Appendix E of this document. In some software versions of the data, the labels on the individual values of the variables are incorrect.

In the agricultural module, if there is only one finca in the dwelling it will have number "00". The second finca in the dwelling will be number "10", the third finca in the dwelling will be "20", etc.

There was a doctor's strike in February through June during the administration of the survey. Because of the strike some individuals may report having gone to private clinics, but do not report paying to use the clinic.

The birthdate as found on the household survey should be used to calculate exact age in the anthropometric data.

There are several weighting (expansion factor) variables that have been included in the data set. In data set CONSUMO1, there are two weight variables for those households where it was possible to calculate a consumption aggregate:

| Weight Variable | Description   |
|-----------------|---|
| PESO2           | This is the weight for all analyses using household level data. |
| PESO3           | PESO2 times the number of household members.                    |

Because the sample is not self-weighted, these weighting variables must be used in analyses of the data in order to have estimates that are valid at the national, urban/rural and departmental levels. For more information, see Appendix I.

## VIII. Comparison to 1993 Data

The EMNV93 and EMNV98 data cannot be used as panel data. The same households were not visited in both surveys. In addition, the sample designs used in the two years were different. The EMNV93 is representative at the national, urban/rural and regional levels.<sup>10</sup> The EMNV98 is representative at the national, urban/rural and departmental levels. The data from the two surveys can be compared at the national and urban/rural levels.

The household questionnaire used in the EMNV98 was based on the household questionnaire used in the EMNV93 with modifications, improvements, and additions. A community questionnaire was administered in the EMNV93, but none was used in the EMNV98. Some community-level information is available in the EMNV98 household questionnaire section on housing.

The consumption modules of the two household questionnaires are significantly different. A more complete list of food products is included in the EMNV98. In addition, in the EMNV98 it is possible to separate out those food products that were purchased, produced by the household and received as donations or gifts. The list of non-food products included in the EMNV98 is also more extensive. This means that a straight comparison of the consumption aggregates in the two years cannot be done since each contains different components.

There are four modules included in the EMNV98 that are not found in the EMNV93 - Time Use, Household Enterprises and Self-Employment, Agricultural Activities, and Credit and

<sup>10</sup> The administrative regions that existed in 1993 no longer existed in 1998. See the EMNV93 Basic Information Document (World Bank, 1995a) for more information. It is available on the LSMS Web Site and through the LSMS Office. See Appendix A for the addresses.

Savings. In addition, there is one module that is included in the EMNV93 that is not found in the EMNV98, Migration.

Anthropometric information was collected on children only in the EMNV93 (children less than 5 years old). In the EMNV98, anthropometric information was collected on all members of the household.

## IX. Hurricane Mitch<sup>11</sup>

In November 1998, Hurricane Mitch hit Central America with one of the most devastating storms to ever hit the region. Over 50 inches of rain fell in five days. The death toll in the region as a whole was estimated as high as 10,000 with 2,000 or more dead in Nicaragua alone. The Nicaraguan government estimated that about 1,000,000 people would need housing (approximately 20 percent of the population). A preliminary survey of damage by USAID said “the extensive destruction spread over half the country overshadows the scenes recorded in Managua 26 years ago.”<sup>12</sup> Approximately 45,000 households in 72 municipios were affected in some way by Mitch. Half of the country was cut off because of washed out highways and bridges. Approximately 1,500 miles of roads and highways and 80 bridges were destroyed making it impossible to deliver food and relief to the countryside or to carry crops to ports. The western and northwestern sections of the country were especially hard hit. Roads and bridges were swept away and large chunks of the Pan American Highway were destroyed, cutting the crucial commercial link for Central America. Nearly 300 schools were destroyed or damaged so badly that they cannot be used. Dozens of health clinics, civic buildings and public markets were damaged or destroyed. More than one-third of the country’s agricultural crops were destroyed. The worst single incident from the storm was the collapse of the Casitas volcano which triggered massive mudslides that buried two large towns and surrounding settlements about 55 miles northwest of Managua. This area was home to about 4,000 people, most of whom are believed to be dead.<sup>13</sup> In northeastern Nicaragua on the Cocos River, government officials said about 50 communities where an estimated 50,000 Mixquita Indians lived along riverbanks were washed away by flood waters.

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<sup>11</sup> Information for this section was taken from articles in the Washington Post in November 1998.

<sup>12</sup> In 1972 an earthquake hit Managua that flattened most of the capital city and killed thousands of people.

<sup>13</sup> Final estimates were that 505 households were destroyed and 2,887 people were killed.

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## **APPENDIX A**

### **HOW TO OBTAIN COPIES OF THE DOCUMENTATION AND DATA**

Copies of the documentation (Basic Information Document and questionnaires) for the EMNV98 can be downloaded from the LSMS Web Site:

<http://www.worldbank.org/lsms/lsmshome.html>

or obtained by mail through the LSMS Office (see address below). It is recommended that individuals who are interested in using the data for analyses read the documentation prior to requesting copies of the data to ensure that the data will be useful to their analyses.

There is an open access policy for the data collected in the EMNV98. This means that potential users do not need to obtain the permission of the GON to receive a copy of the data. Users who are interested in receiving copies of the data should contact:

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The following information should be included in the request: (a) a brief description of the research that will be done with the data; (b) an indication of the format in which the user prefers to receive the data (ASCII, SAS Portable, or STATA); and (c) if requested from the World Bank, a check made out to the World Bank for the processing fee. Data will be provided on diskette in the user's requested format.

The World Bank charges a processing fee charged for providing the data. For the most current information on the processing fee, contact the LSMS office at the above address, send an e-mail to [lsms@worldbank.org](mailto:lsms@worldbank.org) or check the web site.

Individuals who receive copies of the data agree to: (a) cite the National Institute for Statistics and Census as the collector of the data in all reports, publications and presentations; (b) provide copies of all reports, publications and presentations to the National Institute for Statistics and Census (see address above) and the Poverty and Human Resources Division of the Development Research Group of the World Bank (see address above); and (c) not pass the data to any third parties for any reasons. Researchers found to be in violation of these agreements will not be able to receive copies of other data sets from the LSMS Office in the future.

**APPENDIX B**  
**DATA AVAILABLE FOR THE EMNV98**

| Name of File <sup>1</sup> | Contents   | Unit of Analysis        | Number of Variables <sup>2</sup> |
|---------------------------|--|-------------------------|----------------------------------|
| VIVIENDA                  | Characteristics of the Dwelling and the Household, Section 1 | Household               | 161                              |
| DEMO                      | Characteristics and Composition of the Household, Section 2  | Individual              | 30                               |
| SALUD                     | Health, Section 3, Parts A, B, C                             | Individual              | 78                               |
| EDUC                      | Education, Section 4, Parts A, B                             | Individual              | 60                               |
| ACTEC                     | Economic Activity, Section 5, Parts A,B,C,D                  | Individual              | 113                              |
| FECUND                    | Fertility and Maternal Health, Section 6                     | Individual              | 33                               |
| TIEMPO                    | Time Use, Section 7  | Individual <sup>3</sup> | 98                               |
| NEGONV                    | Household Enterprises, Section 8                             | Household               | 177                              |
| GASTOSA                   | Food Expenditures, Section 9, Part A                         | Household               | 31                               |
| GASTOSB                   | Expenditures, Section 9, Parts A,B,C,D                       | Household               | 254                              |
| EQUIPO                    | Durable Goods, Section 9, Part e                             | Household               | 26                               |
| AGROPEC                   | Agricultural Activities, Section 10                          | Household               | 2,102                            |
| AHORRONV                  | Savings, Loans and Credit, Section 11                        | Household               | 315                              |
| ANTRONV                   | Anthropometrics  | Individual              | 30                               |
| ANTHFCL                   | Anthropometric Z Scores                                      | Individual              | 16                               |
| CONSUMO1                  | Consumption aggregate  | Household               | 17                               |
| FECHAR1                   | Date 1 <sup>st</sup> round interview was administered        | Household               | 2                                |
| FECHAR2                   | Date 2 <sup>nd</sup> round interview was administered        | Household               | 2                                |
| PRECIOS                   | Prices of goods  | Community               | 176                              |

Notes:

All household and individual data files contain household (and member, where applicable) identification codes to enable merging of files.

<sup>1</sup> All data file names will have extensions which indicate their format, for example .DTA for STATA files.

<sup>2</sup> The number of variables is based on the ASCII files. In software formats, additional system variables used by the software are included

<sup>3</sup> This module was administered to only half of the households in the survey.

## **APPENDIX C**

### **DOCUMENTS AVAILABLE FOR THE EMNV98**

The following documentation is available for the EMNV98. Potential users are strongly recommended to read through the documentation in order to determine if the information available will fill the needs of their analyses. The documents can be downloaded from the LSMS Web site:

<http://www.worldbank.org/lsmshome.html>

or obtained by mail through the LSMS Office (see address in Appendix A).

1. Household questionnaire (Spanish only)
2. Basic Information Document (English only)
3. Interviewers Manual (Spanish only)
4. Supervisors Manual (Spanish only)
5. Data entry Manual (Spanish only)
6. Review and Coding Manual (Spanish only)

## APPENDIX D

### COUNTS OF DWELLINGS/HOUSEHOLDS IN THE SURVEY

(Counts without applying the expansion factor)

| DESCRIPTION                                | URBAN      | RURAL      | TOTAL      |           |
|--|------------|------------|------------|-----------|
| Total Dwellings                            | 2,160      | 1,878      | 4,038      |           |
| Additional Households in the Dwelling      | 110        | 61         | 171        |           |
| Total Households                           | 2,270      | 1,939      | 4,209      |           |
| <br>Total Population                       | <br>12,028 | <br>11,615 | <br>23,643 |           |
| Household Members                          | 11,833     | 11,375     | 23,208     |           |
| Non Household Members                      | 195        | 240        | 435        |           |
| <br>POPULATION BY AGE                      |            |            |            |           |
| Less than 3 years old                      | 837        | 1,043      | 1,880      |           |
| Less than 6 years old                      | 1,816      | 2,262      | 4,078      |           |
| 6 years old and older                      | 10,011     | 9,110      | 19,121     |           |
| 10 years old and older                     | 8,649      | 7,646      | 16,295     |           |
| Females 15 to 49 years old                 | 3,102      | 2,396      | 5,498      |           |
| Household Heads                            | 2,270      | 1,939      | 4,209      |           |
| <br>RESULTS BY MODULE                      |            |            |            | Omissions |
| Less than 3 years old (Section 3, Part A)  | 835        | 1,036      | 1,871      | 9         |
| Less than 6 years old (Section 3, Part B)  | 1,816      | 2,261      | 4,077      | 1         |
| Total (Section 3, Part C)                  | 10,601     | 9,946      | * 20,547   | 41        |
| Less than 6 years old (Section 4, Part A)  | 1,804      | 2,253      | 4,057      | 21        |
| 6 years old and older (Section 4, Part B)  | 9,947      | 9,058      | 19,005     | 116       |
| 6 years old and older (Section 5)          | 9,930      | 9,040      | 18,970     | 151       |
| Females 15 to 49 years old (Section 6)     | 3,100      | 2,391      | 5,491      | 7         |
| 6 years old and older (Section 7)          | 4,924      | 4,457      | ** 9,381   |           |
| <br>HOUSEHOLDS COMPLETED IN THE FIELD WORK |            |            |            |           |
| Round I                                    |            |            |            |           |
| Sections 1 to 6                            | 2,270      | 1,939      | 4,209      |           |
| Section 7                                  | 1,158      | 974        | *** 2,132  |           |
| Round II                                   |            |            |            |           |
| Section 8 (interviewed)                    | 2,313      | 1,874      | 4,087      |           |
| Section 8 (with enterprises)               | 1,007      | 384        | 1,391      |           |
| Section 9                                  | 2,208      | 1,871      | 4,079      |           |
| Sections 10 & 11 (interviewed)             | 2,210      | 1,866      | 4,076      |           |
| Total UPAs                                 | 255        | 1,242      | 1,497      |           |
| Total Fincas                               | 282        | 1,380      | 1,662      |           |
| Household with:                            |            |            |            |           |
| Loans granted                              | 131        | 62         | 193        |           |
| Deposits (savings)                         | 222        | 50         | 272        |           |
| Loans received                             | 451        | 251        | 702        |           |
| Purchases on credit                        | 235        | 115        | 350        |           |

Source: National Institute for Statistics and Census, 1998

\* Not applied to 2,620 children who had no other illnesses.

\*\* Represents 49.1% of the total population.

\*\*\* Represents 50.6% of the total household interviewed.

**APPENDIX E**  
**CODES NOT FOUND IN THE QUESTIONNAIRE**

**CODES FOR AGRICULTURAL PRODUCTS**

**1. Cultivos temporales:**

1.1 Cereales cosechados para grano.

1.1.1. Trigo

1.1.1.1 Trigo de invierno

1.1.1.1.1 Trigo duro (incluido el duro y el semiduro)

1.1.1.1.2. Trigo blando

1.1.1.2 Trigo de primavera

1.1.1.2.1. Trigo duro (incluido el duro y el semiduro)

1.1.1.2.2. Trigo blando

1.1.2. Arroz

1.1.2.1. De tierras inundadas (tierras bajas)

1.1.2.2. De tierras secas (tierras altas)

1.1.3. Maíz

1.1.3.1. Maíz híbrido con semilla certificada

1.1.3.2. Maíz común

1.1.4. Cebada

1.1.4.1. Cebada de invierno

1.1.4.2. Cebada de primavera

1.1.5. Mijo y sorgo.

1.1.5.1. Mijo

1.1.5.1.1. Otras clases de mijo (por ejemplo, mijo perla)

1.1.5.1.2. Otras clases de mijo (por ejemplo, bajra, mijo japonés)

1.1.5.2. Sorgo (por ej. jowar, grano de Guinea, durra)

1.1.5.3. Escoba nacional

1.1.6. Avena

1.1.7 Centeno

1.1.7.1. Centeno de invierno

1.1.7.2. Centeno de primavera

1.1.8. Granos mezclados (por ej. mortajo)

1.2. Tubérculos, raíces y bulbos

- 1.2.1. Papas (patatas)
- 1.2.2. Batatas (camotes)
- 1.2.3. Yuca (casave, mandioca)
- 1.2.4. Name
- 1.2.5. Arruruz
- 1.2.6. Cebollas secas
- 1.2.7. Ajos secos
- 1.2.8. Taros (cocolacias, malangas, etc)
- 1.2.9. Otros n.e.p. (por ej. quiquisque)

1.3. Plantas leguminosas principalmente para grano (excepto la soya y el maní)

- 1.3.1. Frijoles
- 1.3.1. Habas secas
- 1.3.2. Guisantes (arvejas) secos comestibles
- 1.3.3. Garbanzos
- 1.3.4. Lentejas
- 1.3.5. Chícharos de vaca
- 1.3.6. Gandúes
- 1.3.7. Vezas
- 1.3.8. Otros n.e.p. (por ej., altramuces, fenogreco, bambara)

1.4. Cultivos principalmente industriales.

1.4.1. Cultivos sacarinos

- 1.4.1.1. Caña de azúcar
- 1.4.1.2. Remolacha azucarera
- 1.4.1.3. Otros n.e.p. (por ej. Sorgo dulce)

1.4.2. Cultivos oleaginosos

- 1.4.2.0.1. Maní (cacahuete)
- 1.4.2.0.2. Soja
- 1.4.2.0.3. Linaza
- 1.4.2.0.4. Girasol
- 1.4.2.0.5. Nabina o colza
- 1.4.2.0.6. Mostaza
- 1.4.2.0.7. Sésamo
- 1.4.2.0.8. Semillas de algodón
- 1.4.2.0.9. Cártamo (alazor)
- 1.4.2.1.0. Risino
- 1.4.2.1.1. Otros n.e.p. (por ej., anís, semilla de alcarevea, ajonjolí)

- 1.4.3. Especies, condimentos y plantas aromáticas y medicinales.
  - 1.4.3.1. Pimiento, ají o chile seco, guindillas
  - 1.4.3.2. Cultivos para aceites esenciales (por ej. Geranio, espliego, menta)
  - 1.4.3.3. Plantas medicinales (por ej. Opio, regaliz)
  - 1.4.3.4. Otros n.e.p. (por ej. Anís, semilla de alcarevea)
- 1.4.4. Cultivos de fibras
  - 1.4.4.1. Algodón
  - 1.4.4.2. Lino cosechado para fibra
  - 1.4.4.3. Cañamo cosechado para fibra
  - 1.4.4.4. Yute
  - 1.4.4.5. Otros n.e.p. (por ej. Sunn (cañamo de Bengala), Kenaf (cañamo de la India) Urena (yute del Congo)
- 1.4.5. Otros Cultivos Industriales.
  - 1.4.5.1. Tabaco
    - 1.4.5.1.1. Curado en atmósfera artificial
    - 1.4.5.1.2. Otros tipos
  - 1.4.5.2. Achicoria
  - 1.4.5.3. Pelitre
  - 1.4.5.4. Otros n.e.p. (por ej. Índigo, alheña, mijo y Sorgo comunes o de scoba, esparto, caño de azúcar para techar).
- 1.5. Hortalizas principalmente para el consumo humano.
  - 1.5.1. Hortalizas de hojas o de tallo
    - 1.5.1.0.1. Alcachofas
    - 1.5.1.0.2. Espárragos
    - 1.5.1.0.3. Coles de Bruselas
    - 1.5.1.0.4. Coles (rojas, blancas, berzas de Savoya)
    - 1.5.1.0.5. Apio
    - 1.5.1.0.6. Achicoria verde, culantro
    - 1.5.1.0.7. Repollo de la China
    - 1.5.1.0.8. Berro
    - 1.5.1.0.9. Endivia
    - 1.5.1.1.0. Berza común
      - 1.5.1.1.1. Puerros
      - 1.5.1.1.2. Cultivos para ensalada
      - 1.5.1.1.3. Ruibarbo
      - 1.5.1.1.4. Espinacas
      - 1.5.1.1.5. Otros n.e.p. (por ej. Cardos, hinojo, maíz de Ensalada)
  - 1.5.2. Hortalizas de fruto
    - 1.5.2.0.1. Cantalupos y otros melones
    - 1.5.2.0.2. Chiles (ajíes) frescos, chiltomas
    - 1.5.2.0.3. Pepinos

- 1.5.2.0.4. Berenjenas
- 1.5.2.0.5. Calabaza vinatera
- 1.5.2.0.6. Oca
- 1.5.2.0.7. Calabaza común, ayote
- 1.5.2.0.8. Calabaza amarilla
- 1.5.2.0.9. Pimientos dulces
- 1.5.2.1.0. Tomates
- 1.5.2.1.1. Sandía
- 1.5.2.1.2. Otros n.e.p. (por ej. Chayotes, pipián)
- 1.5.3. Raíces, bulbos y hortalizas tuberosas
  - 1.5.3.1. Zanahorias
  - 1.5.3.2. Ajos Verdes
  - 1.5.3.3. Cebollas frescas
  - 1.5.3.4. Rabanos
  - 1.5.3.5. Remolacha roja
  - 1.5.3.6. Rutabagas (nabos secos) corrábano
  - 1.5.3.7. Nabos
  - 1.5.3.8. Otros n.e.p. (por ej. Apio o nabo, chiribía, Escorzonera, rusticano, salsiff blanco)
- 1.5.4. Hortalizas leguminosas verdes
  - 1.5.4.1. Habas
  - 1.5.4.2. Guisantes (arvejas)
  - 1.5.4.3. Otros n.e.p.
- 1.5.5. Otras hortalizas
  - 1.5.5.1. Coliflor
  - 1.5.5.2. Maíz (dulce)
  - 1.5.5.3. Otros n.e.p.
- 1.6. Cultivos hortícolas especiales.
  - 1.6.1. Cultivos al aire libre
    - 1.6.1.1. Flores, bulbos y cormos
    - 1.6.1.2. Plantas ornamentales
    - 1.6.1.3. Otros n.e.p.
  - 1.6.2. Cultivos bajo cubierta protectora (por ej. Vidrio, plástico)
    - 1.6.2.1. Hortalizas
    - 1.6.2.2. Hongos
    - 1.6.2.3. Flores y plantas ornamentales
    - 1.6.2.4. Otros n.e.p.
- 1.7. Cultivos forrajeros (para el pastoreo o la henificación, forraje verde o Ensilaje).
  - 1.7.1. Cultivos forrajeros leguminosos

- 1.7.1.1. Alfalfa
- 1.7.1.2. Trébol
- 1.7.1.3. Otros n.e.p. (por ej. Lespedaza, mielga, heno de Soja).
- 1.7.2. Gramíneas
  - 1.7.2.1. Solas (por ej., fleo, agrotis, dactilorrhoso, Pastos Sudán)
  - 1.7.2.2. Gramíneas mezcladas
- 1.7.3. Cereales
  - 1.7.3.1. Maíz para ensilaje
  - 1.7.3.2. Avena
  - 1.7.3.3. Otros n.e.p.
- 1.7.4. Gramíneas leguminosas y cereales mezclados
- 1.7.5. Otros cultivos forrajeros n.e.p.
  - 1.7.5.0.1. Col forrajera
  - 1.7.5.0.2. Patata
  - 1.7.5.0.3. Calabazas
  - 1.7.5.0.4. Girasol
  - 1.7.5.0.5. Remolacha forrajera
  - 1.7.5.0.6. Remolacha azucarera
  - 1.7.5.0.7. Caña de azúcar
  - 1.7.5.0.8. Nabo de suecia
  - 1.7.5.0.9. Colinabo
  - 1.7.5.1.0. Otros n.e.p. (por ej., zanahorias)
- 1.8. Plantas cultivadas principalmente para semilla.
  - 1.8.1. Semilla de remolacha azucarera
  - 1.8.2. Semilla de alfalfa
  - 1.8.3. Semilla de trébol
  - 1.8.4. Semilla de raigrás
  - 1.8.5. Semilla de cebolla
  - 1.8.6. Otros n.e.p. (por ej., trébol)
- 1.9. Otros cultivos temporales n.e.p.
- 2. **Cultivos permanentes:**
  - 2.1. Arboles frutales y árboles de fruto seco
    - 2.1.1. Frutas cítricas
      - 2.1.1.1. Naranjas
      - 2.1.1.2. Mandarinas y tangerinas (incluso clementinas y satsuma)
      - 2.1.1.3. Limones
      - 2.1.1.4. Toronjas y pomelos

- 2.1.1.5. Lima agria
- 2.1.1.6. Otros n.e.p. (por ej. Naranja, amarga, lima dulce Cidras, bergamotas, limón dulce, grayfuit, maracuyá)
- 2.1.2. Frutas de pepita
  - 2.1.2.1. Manzanas
  - 2.1.2.2. Peras
  - 2.1.2.3. Membrillos
  - 2.1.2.4. Nísperos
  - 2.1.2.5. Otros n.e.p. (por ej. Nísperos del japon)
- 2.1.3. Frutas de hueso
  - 2.1.3.1. Albaricoques
  - 2.1.3.2. Cerezas (incluidas las ácidas)
  - 2.1.3.3. Melocotones (duraznos)
  - 2.1.3.4. Ciruelas y ciruelas pasas
  - 2.1.3.5. Otros n.e.p. (por ej. Nectarina, aceituna)
- 2.1.4. Uvas
  - 2.1.4.1. Uvas para vino y jugo
  - 2.1.4.2. Uvas de mesa
  - 2.1.4.3. Uvas para pasas
- 2.1.5. Frutas pequeñas cultivadas
  - 2.1.5.1. Mirtilo
  - 2.1.5.2. Arándonos
  - 2.1.5.3. Grosella
  - 2.1.5.4. Uva espina
  - 2.1.5.5. Frambuesas
  - 2.1.5.6. Fresas
  - 2.1.5.7. Otros n.e.p. (por ej. Zarzamora)
- 2.1.6. Otras frutas cultivadas
  - 2.1.6.0.1. Granadas Aguacates (palta)
  - 2.1.6.0.2. Bananos
  - 2.1.6.0.3. Arbol del pan
  - 2.1.6.0.4. Anones
  - 2.1.6.0.5. Dátiles
  - 2.1.6.0.6. Higos
  - 2.1.6.0.7. Guayabas
  - 2.1.6.0.8. Mangos }
  - 2.1.6.0.9. Papayas (lechosas)
  - 2.1.6.1.0. Caqui
  - 2.1.6.1.1. Piñas
  - 2.1.6.1.2. Plátanos
  - 2.1.6.1.3. Granadas
  - 2.1.6.1.4. Zapotes

2.1.6.1.5. Otros n.e.p. (por ej. Litchi, algarrobo, pitahaya, locote)

2.1.7. Nueces comestibles

2.1.7.1. Almendras

2.1.7.2. Acajú (marañón)

2.1.7.3. Nueces de nogal

2.1.7.4. Castañas

2.1.7.5. Avellanas

2.1.7.6. Otras n.e.p. (por ej. Pacana, pistachos 8alfónsigos), nuez del Brasil, macadamía, mamón y pijivay, con exclusión de los cocos)

2.2. Cultivos permanentes destinados principalmente a fines industriales

2.2.1. Cultivos para la producción de bebidas

2.2.1.1. Café

2.2.1.2. Cacao

2.2.1.3. Té

2.2.1.4. Lúpulo

2.2.1.5. Yerba mate

2.2.1.6. Otros n.e.p. (por ej. Cola)

2.2.2. Cultivos oleaginosos

2.2.2.1. Cocos

2.2.2.2. Palma africana (palma aceitera)

2.2.2.3. Olivos

2.2.2.4. Otros n.e.p. (por ej. Tunga, árbol del aceite, butirospermos)

2.2.3. Especies y productos aromáticos

2.2.3.1. Pimienta negra

2.2.3.2. Canela

2.2.3.3. Clavo

2.2.3.4. Jengibre

2.2.3.5. Nuez moscada y macis

2.2.3.6. Vainilla

2.2.3.7. Cardamomo

2.2.3.8. Otros n.e.p. (por ej. Caña fístula)

2.2.4. Cultivos para la producción de fibra

2.2.4.1. Abacá (cáñamo de Manila)

2.2.4.2. Agaves

2.2.4.3. Capoc (ceiba)

2.2.4.4. Formio (lino de Nueva Zelandia)

2.2.4.5. Ramio y rea

2.2.4.6. Otros n.e.p. (por ej. Fique, maguey)

2.2.5. Cultivos para la producción de caucho y taninos

- 2.2.5.1. Caucho (hevea)
- 2.2.5.2. Acacia negra
- 2.2.5.3. Quebracho
- 2.2.5.4. Otros n.e.p.
- 2.2.6. Cultivos florales
  - 2.2.6.1. Rosas
  - 2.2.6.2. Jazmín
  - 2.2.6.3. Otros n.e.p.
- 2.2.7. Otros cultivos industriales
  - 2.2.7.1. Cidronela
  - 2.2.7.2. Morera para gusanos de seda
  - 2.2.7.3. Palma sagú
  - 2.2.7.4. Pala de Palmira
  - 2.2.7.5. Quinana
  - 2.2.7.6. Nueces de Areca (betel)
  - 2.2.7.7. Otros n.e.p. (por ej. Hierba limón)
- 2.3. Otros cultivos permanentes n.e.p.

## 5. Arboles

- 5.1.1. Arboles de uso industrial
  - 5.1.1.1. Neem
  - 5.1.1.2. Nacascolo
  - 5.1.1.3. Mangle
- 5.1.2. Arboles de uso maderables
  - 5.1.2.1. Cedro real
  - 5.1.2.2. Guanacaste blanco y guanacaste negro
  - 5.1.2.3. Vainillo
  - 5.1.2.4. Laurel negro
  - 5.1.2.5. Ñambar
  - 5.1.2.6. Madero negro
  - 5.1.2.7. Guapinol
  - 5.1.2.8. Tempisque
  - 5.1.2.9. Palo verde
  - 5.1.2.10. Genizaro
  - 5.1.2.11. Roble de sabana
  - 5.1.2.12. Coyote
  - 5.1.2.13. Cortez
  - 5.1.2.14. Pochote
  - 5.1.2.15. Caoba pacífico y caoba atlántico
  - 5.1.2.16. Guiliguiste
  - 5.1.2.17. Guayabón
  - 5.1.2.18. Nísperos

- 5.1.2.19. Ojoche
- 5.1.2.20. Jinocuabo
- 5.1.2.21. Kerosí
- 5.1.2.22. Pino
- 5.1.3. Árboles de sombra.
  - 5.1.3.1. Aripin
  - 5.1.3.2. Guyacán
  - 5.1.3.3. Talalate
  - 5.1.3.4. Quebracho
  - 5.1.3.5. Liquidambar
  - 5.1.3.6. Guayabillo
- 5.1.4. Árboles para uso Silvopastoril
  - 5.1.4.1. Espino
  - 5.1.4.2. Caliandra
  - 5.1.4.3. Jicaro
  - 5.1.4.4. Guasimo de terreno
  - 5.1.4.5. Leucaena
- 5.1.5. Árboles para uso de leña
  - 5.1.5.1. Madroño
  - 5.1.5.2. Sardinillo
  - 5.1.5.3. Paraiso
  - 5.1.5.4. Tigüilote
  - 5.1.5.5. Guaba
  - 5.1.5.6. Cornizuelo
  - 5.1.5.7. Aceituno

Fuente: Programa del Censo Agropecuario Mundial 2000. Colección FAO Desarrollo Estadístico.

### **HARVESTED AGRICULTURAL PRODUCTS**

| PRODUCT                     | STATE                  | CODE |
|-----------------------------|------------------------|------|
| Maíz                        | Grano                  | 010  |
|                             | Mazorca                | 011  |
| Frijol                      | Grano                  | 010  |
|                             | Con basura             | 022  |
| Trigo/Millón                | Grano                  | 010  |
|                             | Espiga                 | 031  |
| Sorgo                       | Grano                  | 010  |
|                             | Espiga                 | 031  |
| Café                        | Oro                    | 050  |
|                             | Uva                    | 051  |
|                             | Pergamino              | 052  |
| Arroz                       | Grano                  | 010  |
|                             | Granza                 | 061  |
|                             | Espiga                 | 031  |
| Frutas, legumbres, verduras | Verduras, maduro, etc. | 077  |

Fuente INEC - NICARAGUA - EMNV '98

## UNIT OF MEASURE CODES

**USE IN :**     **SECTION 9 (EXPENDITURES AND OTHER HOUSEHOLD INCOME)**  
                   **SECTION 10 (AGRICULTURAL ACTIVITY)**

These are the correct codes. If the codes in your copy of the codebook do not match these codes, use these codes instead.

| UNIDAD Y/O FORMA DE PRESENTACIÓN       | CODIGO | UNIDAD Y/O FORMA DE PRESENTACION  | CODIGO |
|--|--------|-----------------------------------|--------|
| Libra                                  | 01     | Caja de 10 onzas                  | 33     |
| Gramos                                 | 02     | Caja de 5 onzas                   | 34     |
| Unidad                                 | 03     | Pote de 400 gramos                | 35     |
| Rodaja(pedazo de fruta)                | 04     | Sobrecito (condimentos)           | 36     |
| Tortilla en bolsa                      | 05     | Botella 750 milímetros            | 37     |
| Cajilla (30 huevos)                    | 06     | ½ botella 370 milímetros          | 38     |
| Docena                                 | 07     | Botella 280 milímetros            | 39     |
| Barra de pan                           | 08     | Botella 100-150 milímetros        | 40     |
| Molde grande                           | 09     | Botella 12 onz. (gaseosa/cerveza) | 41     |
| Molde pequeño                          | 10     | Lata de jugo 160-200 mililitros   | 42     |
| Paquete (pan p/hamburguesa)            | 11     | Caja de jugo 200-250 mililitros   | 43     |
| Paquete (pan p/hot dog)                | 12     | Galón                             | 44     |
| Paquete grande (galletas)              | 13     | Litro                             | 45     |
| Paquete pequeño                        | 14     | Ramita (apio)                     | 46     |
| Caja de galletas                       | 15     | Paquete 20 unidades               | 47     |
| Bolsa de 1 onza                        | 16     |                                   | 48     |
| Bolsa de 2 onzas                       | 17     |                                   | 49     |
| Bolsa de 4 onzas                       | 18     |                                   | 50     |
| Bolsa de 8 onzas                       | 19     |                                   | 51     |
| Frasco grande de 250 gramos            | 20     | Cuartillo                         | 52     |
| Frasco mediano de 150 gramos           | 21     | Medio                             | 53     |
| Frasco pequeño de 50 gramos            | 22     | Arroba                            | 54     |
| Lata grande de atún 170 gramos         | 23     | Quintal                           | 55     |
| Lata pequeña de atún 110 gramos        | 24     | Canasto                           | 56     |
| Barrita de 4 onzas                     | 25     | Lata                              | 57     |
| Hamaca (yuca)                          | 26     | Quince                            | 58     |
| Valor                                  | 27     | Saco                              | 59     |
| Cabeza de ajo                          | 28     | Carga                             | 60     |
| Ristra                                 | 29     | Fanega                            | 61     |
| Moño (remolacha/cebolla zanahoria)     | 30     | Gajo                              | 62     |
| Moñito/manojito(yerba buena /culantro) | 31     | Caja                              | 63     |
| Bolsa (dulces)                         | 32     | NR                                | 99     |

Fuente INEC - NICARAGUA – DIRECCION DE INDICE DE PRECIOS - EMNV '98

## CONVERSION CODES

| TABLA DE CONVERSIONES PARA EL CUESTIONARIO EMNV NIC. 98 SECC. 9 y 10 |                         |          |         |           |         |        |
|--|-------------------------|----------|---------|-----------|---------|--------|
| CODIGO   | UNIDAD DE               | UNIDADES | PESO    |           | VOLUMEN |        |
|  | MEDIDA                  |          | LIBRAS  | GRAMOS    | GALON   | LITROS |
| 1  | LIBRA                   |          | 1       | 454       |         |        |
| 2  | GRAMOS                  |          | 1/454   | 1         |         |        |
| 3  | UNIDAD                  | 1        |         |           |         |        |
| 4  | RODAJA * (TROZO)        |          |         |           |         |        |
| 5  | TORTILLA                | 1        | 80/454  | 80        |         |        |
| 6  | CAJILLA DE HUEVOS       | 30       |         | 30 X 62.5 |         |        |
| 7  | DOCENA                  | 12       |         |           |         |        |
| 8  | BARRA DE PAN **         | 1        | 0.25    | 113.5     |         |        |
| 9  | MOLDE GDE.              | 1        | 1.24    | 561       |         |        |
| 10   | MOLDE PEQ.              | 1        | 0.64    | 292       |         |        |
| 11   | PAQUETE PAN HAMB.       | 8        |         | 425       |         |        |
| 12   | PAQ. PAN HOT DOG.       | 8        |         | 275       |         |        |
| 13   | PAQ.GDE. GALLETAS       | 10       |         | 272       |         |        |
| 14   | PAQ. PEQ. GALLETAS      | 1        |         | 25        |         |        |
| 15   | CAJA DE GALLETAS        | 1        | 8/16    | 227       |         |        |
| 16   | BOLSA 1 ONZ.            |          | 1/16    |           |         |        |
| 17   | BOLSA 2 ONZ.            |          | 2/16    |           |         |        |
| 18   | BOLSA 4 ONZ.            |          | 4/16    |           |         |        |
| 19   | BOLSA 8 ONZ.            |          | 8/16    |           |         |        |
| 20   | FCO. 250 GRS.           |          | 250/454 |           |         |        |
| 21   | FCO. 150 GRS.           |          | 150/454 |           |         |        |
| 22   | FCO. 50 GRS.            |          | 50/454  |           |         |        |
| 23   | LATA ATUN 170 GRS.      |          | 170/454 |           |         |        |
| 24   | LATA ATUN 110 GRS.      |          | 110/454 |           |         |        |
| 25   | BARRITA 4 ONZ.          |          | 4/16    |           |         |        |
| 26   | HAMACA (yuca)           |          | 50      |           |         |        |
| 27   | VALOR                   |          |         |           |         |        |
| 28   | CABEZA DE AJO **        | 1        | 1/16    | 28.37     |         |        |
| 29   | RISTRA DE AJO **        | 10       | 10/16   | 283.7     |         |        |
| 30   | MOÑO REMOLACHA          | 6        | 42/16   |           |         |        |
| 30   | MOÑO CEBOLLA            | 6        | 24/16   |           |         |        |
| 30   | MOÑO ZANAHORIA          | 6        | 30/16   |           |         |        |
| 31   | MOÑITO YERB., CULANT    |          | 1/16    | 28.37     |         |        |
| 32   | BOLSA (DULCES)          |          | 133/454 | 133       |         |        |
| 33   | CAJA DE 10 ONZ.         |          | 10/16   |           |         |        |
| 34   | CAJA DE 5 ONZ.          |          | 5/16    |           |         |        |
| 35   | POTE 400 GRS.           |          | 400/454 | 400       |         |        |
| 36   | SOBRE DE CONDIM.        |          |         | 1.5       |         |        |
| 37   | BOTELLA 750 ML          |          |         |           |         | 0.75   |
| 38   | 1/2 BOTELLA 370 ML      |          |         |           |         | 0.37   |
| 39   | BOTELLA 280 ML          |          |         |           |         | 0.28   |
| 40   | BOTELLA 100-150 ML      |          |         |           |         | 0.125  |
| 41   | BOTELLA 12 ONZ.         |          |         |           |         | 0.355  |
| 42   | LATA JUGO 160-200 ML    |          |         |           |         | 0.18   |
| 43   | CAJA JUGO 200-250 ML    |          |         |           |         | 0.225  |
| 44   | GALON                   |          |         |           | 1       | 3.8    |
| 45   | LITRO                   |          |         |           | 0.264   | 1      |
| 46   | RAMITA (APIO)           |          | 1/16    | 28.37     |         |        |
| 47   | PAQUETE 20 UNI (CIGARR) | 20       |         |           |         |        |
| 52   | CUARTILLO               |          |         |           |         |        |
| 53   | MEDIO FRIJOL            |          | 14      |           |         |        |
| 54   | ARROBA                  |          |         |           |         |        |
| 55   | QUINTAL                 |          |         |           |         |        |
| 56   | CANASTO (GDE.)          |          | 200     |           |         |        |
| 57   | LATA (JOCOTE)           |          | 180/16  |           |         |        |
| 58   | QUINCE *                |          |         |           |         |        |

|    |                      |    |        |  |  |  |
|----|----------------------|----|--------|--|--|--|
| 59 | SACO                 |    |        |  |  |  |
| 60 | CARGA                |    |        |  |  |  |
| 61 | FANEGA *             |    |        |  |  |  |
| 62 | GAJO=RACIMO (BANANO) | 30 | 180/16 |  |  |  |
| 99 | NO RESPUESTA         |    |        |  |  |  |

Nota: Se han corregido algunos errores de digitación en las unidades de conversión.

**TABLA DE CONVERSIONES PARA EL CUESTIONARIO EMNV NIC. 98 SECC. 9**  
**CONVERSION DE PRODUCTOS ESPECIFICOS**

| CODIGO | PRODUCTO<br>NOMBRE | UNIDADES          |                        | CONVERSION<br>Multiplique por: |
|--------|--------------------|-------------------|------------------------|--------------------------------|
|        |                    | DE                | A                      |                                |
|        |                    |                   |                        |                                |
| 2      | TORTILLA           | Unidades          | Gramos/libras          | 80 gr./0.1762 lb.              |
| 3      | NACATAMALES        | Unidades          | Libras/gramos/onoz     | 1 lb./454 gr./16 onz           |
| 4      | ELOTE              | Unidades          | Gramos/libras          | 170 gr/0.375 lb                |
| 6      | PAN SIMPLE         | Unidades          | Libras/gramos/onoz     | 0.25 lb/113.5 gr/4 onz         |
| 7      | PAN DULCE          | Unidades          | Libras/gramos/onoz     | 0.375 lb/170 gr/6 onz          |
| 8      | GALLETAS           | Unidades          | Gramos/libras          | 25 gr/0.055 lb                 |
| 20     | LECHE DE VACA      | Litro             | Gramos/libras          | 1031 gr./2.27 lb.              |
| 24     | HUEVOS DE GALLINA  | Unidad            | Gramos/libras          | 62.5 gr./0.1057 lb.            |
| 25     | ACEITE VEGETAL     | Litro             | Gramos/libras          | 908 gr./2 lb.                  |
| 26     | MANTECA DE CERDO   | Litro             | Libras/gramos/onoz     | 1.87 lb/849 gr/30 onz          |
| 31     | PLATANO            | Unidad            | Gramos/libras          | 227 gr/0.5 lb                  |
| 32     | CEBOLLA BLANCA     | Unidad            | Libras/gramos/onoz     | 0.25 lb/112 gr./4 onz          |
| 33     | CEBOLLA AMARILLA   | Unidad            | Libras/gramos/onoz     | 0.25 lb/112 gr./4 onz          |
| 35     | CHILTOMA           | Unidad med.       | Gramos/libras          | 28.37 gr./0.0625 lb            |
| 36     | TOMATE             | Unidad peq.       | Gramos/libras          | 85.12 gr./0.1875 lb            |
| 38     | PIPIAN O PEPINO    | Unidad med.       | Gramos/libras          | 0.435 lbs                      |
| 39     | PAPA               | Unidad peq.       | Gramos/libras          | 85 gr/0.1875 lb                |
| 43     | YUCA               | Unidad            | Gramos/libras          | 227 gr/0.5 lb                  |
| 45     | CARAMELOS          | Bolsa 30 unidades | Libras/gramos/onoz     | 0.29 lb/132 gr./4.73 onz.      |
| 49     | VINAGRE            | Litro             | Gramos/libras          | 960 gr/2.11 LB                 |
| 52     | JUGOS ENLATADOS    | Litro             | Gramos/libras          | 960 gr/2.11 LB                 |
| 52     | JUGOS ENLATADOS    | Unidad            | Litros/onoz. fluidas   | 11.5 onz fl/0.340 lt           |
|        | LICORES            | Litro (ron)       | Gramos/libras          |                                |
| 55     | CERVEZA            | Litro             | Gramos/libras          | 1000 gr/2.2 lb                 |
| 55     | CERVEZA            | Unidad            | Litros/onoz. fluidas   | 0.340 lt/12 onz                |
| 56     | HELADOS, SORBETES  | Litro             | Gramos/libras          |                                |
| 56     | HELADOS, SORBETES  | Unidad            | Gramo/libra/litro/onoz | 112 gr/4 onz                   |

| DENOMINACION | FANEGA | MEDIO | CUARTILLO | QUINCE |
|--------------|--------|-------|-----------|--------|
|--------------|--------|-------|-----------|--------|

**REGION MANAGUA  
Y PACIFICO**

|        |          |         |        |          |
|--------|----------|---------|--------|----------|
| MAIZ   | 288 lbs. | 12 lbs. | 6 lbs. | 3 lbs.   |
| FRIJOL | 336 lbs. | 14 lbs. | 7 lbs. | 3.5 lbs. |
| SORGO  | 384 lbs. | 16 lbs. | 8 lbs. | 4 lbs.   |

**REGION CENTRAL  
Y ATLANTICO**

|        |          |           |           |            |
|--------|----------|-----------|-----------|------------|
| MAIZ   | 420 lbs. | 17.5 lbs. | 8.75 lbs. | 4.375 lbs. |
| FRIJOL | 480 lbs. | 20 lbs.   | 10 lbs.   | 5 lbs.     |
| SORGO  | 480 lbs. | 20 lbs.   | 10 lbs.   | 5 lbs.     |

**MEDIDA REGIONAL NICARAGUENSE**

1 Fanega = 12 medios  
 1 Medio = 2 cuartillos  
 1 Cuartillo = 2 quince

## **ADDITIONAL OCCUPATION CODES**

### **(ANNEX TO THE ISCO-1988, PREPARED BY THE ILO)**

- 1411 Jefe de Departamento Agropecuario, caza, silvicultura o pesca.
- 1412 Jefe de Departamento de industrias manufactureras
- 1413 Jefe de Departamentos, coordinador, supervisor de la generación de energía eléctrica, captación y distribución de agua.
- 1414 Jefe de Departamento, coordinador y supervisor de construcción y obras públicas.
- 1415 Jefe de Departamento, coordinador y supervisor de comercios mayoristas y minoristas, exportación e importación.
- 1416 Jefe de Departamento, coordinador y supervisor de hoteles y restaurantes.
- 1417 Jefe de Departamento, coordinador y supervisor de transporte y comunicaciones.
- 1418 Jefe de Departamento, coordinador y supervisor del Banco Central, Bancos Comerciales, Bolsa de Valores, Casas de Cambio y Compañías de Seguros.
- 1419 Jefe de Departamentos, Coordinador y Supervisor de actividades inmobiliarias, alquiler de maquinaria y equipo, consultoría en equipo informático, mantenimiento y reparación de máquinas de oficina, actividades de investigación y desarrollo.
- 1421 Jefe de Departamento, Coordinador y Supervisor de Hospitales, Clínicas de Salud, Banco de Sangre y Laboratorio Clínico.
- 1422 Jefe de Departamento, Coordinador y Supervisor de Centros de enseñanza primaria, secundaria, técnica y universitaria.
- 1423 Jefe de Departamento, Coordinador y Supervisor de saneamiento y actividades sanitarias, organizaciones empresariales, de esparcimientos culturales y servicios personales.
- 1424 Jefe de Departamento, Coordinador y Supervisor de Finanzas, Administrativo, contabilidad y presupuesto
- 1425 Jefe de Departamento, Coordinador y Supervisor de personal y Relaciones laborales.
- 1426 Jefe de Departamento, Coordinador y Supervisor de Publicidad y Relaciones Públicas.
- 1427 Jefe de Departamento, Coordinador y Supervisor de abastecimiento, almacenamiento, compras y distribución.

- 1428 Jefe de Departamento, Coordinador y Supervisor de Informática.
- 9411 Ayudantes en general, no especificado en otro grupo.

# CLASSIFICATION OF ECONOMIC ACTIVITIES

## **01 AGRICULTURA, GANADERIA, CAZA Y ACTIVIDAD DE SERVICIOS CONEXOS**

- 0111** Cultivo granos básicos, cereales, otros cultivos.
- 0112** Cultivo de hortalizas y legumbres, especialidades hortícolas y productos de viveros.
- 0113** Cultivo de frutas, nueces y plantas cuyas hojas o frutos se utilizan para preparar bebidas y especias.
- 0121** Cría de ganado vacuno y ovejas, cabras, caballos, asnos, mulas y burdéganos, cría de ganado lechero.
- 0122** Cría de otros animales, Elaboración de productos animales.
- 0130** Explotación mixta. Cultivo de productos agrícolas en combinación con la cría de animales.
- 0140** Actividades de servicios agrícolas y ganaderos, excepto actividades veterinarias.
- 0150** Caza ordinaria y mediante trampas, repoblación de animales de caza, incluyendo servicios conexos.

## **02 SILVICULTURA, EXTRACCION DE MADERA Y ACTIVIDADES DE SERVICIOS CONEXOS**

- 0200** Silvicultura, extracción de madera y actividades de servicios conexos

## **05 PESCA, EXPLOTACION DE CRIADEROS DE PECES Y GRANJAS PISCICOLAS, ACTIVIDADES DE SERVICIOS RELACIONADOS CON LA PESCA**

- 0500** Pesca, explotación de criaderos de peces y granjas piscícolas y actividades conexas.

## **10 EXTRACCION DE CARBON Y LIGNITO, EXTRACCION DE TURBA**

- 1010** Extracción y aglomeración de carbón de piedra.

**11 EXTRACCION DE PETROLEO CRUDO Y GAS NATURAL, ACTIVIDADES DE SERVICIOS RELACIONADAS CON LA EXTRACCION DE PETROLEO Y GAS EXCEPTO LAS ACTIVIDADES DE PROPECCION**

**1110** Extracción de petróleo crudo y gas natural

**1120** Actividades de servicios relacionados con la extracción de petróleo crudo y gas, excepto la prospección.

**EXTRACCION DE MINERALES METALIFEROS**

**1320** Extracción de minerales no ferrosos.

**EXPLOTACION DE OTRAS MINAS Y CANTERAS**

**1410** Extracción de piedra, arcilla y arena.

**1421** Extracción de minerales para la fabricación de abonos y productos químicos.

**1422** Extracción de sal.

**1429** Explotación de otras minas y canteras.

**ELABORACION DE PRODUCTOS ALIMENTICIOS Y BEBIDAS**

**1511** Procesamiento y conservación de carne y productos cárnicos.

**1512** Elaboración y conservación de pescado y productos de pescado.

**1513** Elaboración y conservación de frutas, legumbres y hortalizas.

**1514** Elaboración de aceites y grasas de origen animal y vegetal.

**1520** Elaboración de productos lácteos.

**1531** Elaboración de productos de molinería.

**1532** Elaboración de almidones y productos derivados del algodón.

**1533** Elaboración de alimentos preparados para animales.

**1541** Elaboración de productos de panadería.

- 1542**      Elaboración de azúcar.
- 1543**      Elaboración de cacao, chocolate y productos de confitería.
- 1544**      Elaboración de macarrones, fideos de harina y productos farináceos similar.
- 1549**      Elaboración de otros productos alimenticios no incluidos en otra parte.
- 1551**      Destilación rectificación y mezclas de bebidas alcohólicas, producción de alcohol etílico a partir de sustancias fermentadas.
- 1552**      Elaboración de Vinos.
- 1553**      Elaboración de bebidas malteadas y de malta.
- 1554**      Elaboración de bebidas no alcohólicas, producción de aguas minerales.

#### **ELABORACION DE PRODUCTOS DE TABACO**

- 1600**      Elaboración de productos de tabaco.

#### **FABRICACION DE PRODUCTOS TEXTILES**

- 1711**      Preparación e hilatura de fibras textiles, tejedura de productos textiles.
- 1712**      Acabado de productos textiles.
- 1721**      Fabricación de artículos confeccionados de materiales textiles, excepto prendas de vestir.
- 1722**      Fabricación de tapices y alfombras.
- 1723**      Fabricación de cuerdas, cordeles, bramantes y redes.
- 1729**      Fabricación de otros productos textiles N. C. E. O. P.
- 1730**      Fabricación de tejido y artículos de punto.

#### **FABRICACION DE PRENDAS DE VESTIR, EXCEPTO PRENDAS DE PIELES**

- 1810**      Fabricación de prendas de vestir, excepto prendas de pieles.

**1820** Adobo y teñido de pieles, fabricación de artículos de piel.

**CURTIDO Y ADOBO DE CUERO, FABRICACION DE MALETAS, BOLSOS DE MANO, ARTICULOS DE TALABARTERIA Y CALZADO**

**1911** Curtido y adobo de cueros.

**1912** Fabricación de maletas y artículos similares y artículos de talabartería.

**1920** Fabricación de calzado.

**PRODUCTOS DE MADERA Y FABRICACION DE PRODUCTOS DE MADERA Y CORCHO, EXCEPTO MUEBLES**

**2010** Aserradura y acepilladura de madera.

**2021** Fabricación de productos de madera para enchapado, tableros y paneles.

**2022** Fabricación de partes y piezas de carpintería para edificios y construcciones.

**2023** Fabricación de recipientes de madera.

**2029** Fabricación de otros productos de madera, artículos de corcho, paja y materiales trenzables.

**FABRICACION DE PAPEL Y PRODUCTOS DE PAPEL**

**2101** Fabricación de pasta de madera, papel y cartón.

**2102** Fabricación de papel y cartón ondulado y de envases de papel y cartón.

**2109** Fabricación de otros artículos de papel y cartón.

**ACTIVIDADES DE EDICION E IMPRESIÓN Y REPRODUCCION DE GRABACIONES**

**2211** Edición de libros, folletos, partituras y otras publicaciones.

**2212** Edición de periódicos, revistas y publicaciones periodísticas.

**2213** Edición de grabaciones.

- 2219** Otras actividades de edición.
- 2221** Actividades de impresión por contrato.
- 2222** Actividades de servicios relacionados con la impresión.
- 2230** Reproducción de grabaciones originales.

## **FABRICACION DE COQUE Y PRODUCTOS DE LA REFINACION DE PETROLEO**

- 2320** Fabricación de productos de la refinación del petróleo.

## **FABRICACION DE SUSTANCIAS Y PRODUCTOS QUIMICOS**

- 2411** Fabricación de sustancias químicas básicas excepto abonos y compuestos de nitrógeno.
- 2412** Fabricación de abonos y compuestos de nitrógeno.
- 2413** Fabricación de plástico en forma primaria y caucho sintético.
- 2421** Fabricación de plaguicidas y otros productos químicos de uso agropecuario.
- 2422** Fabricación de pinturas, barnices y productos de revestimientos similares.
- 2423** Fabricación de productos farmacéuticos, sustancias químicas, medicinales y productos botánicos.
- 2424** Fabricación de jabones y detergentes, preparados para limpiar y pulir, perfumes y preparados de tocador.
- 2429** Fabricación de otros productos químicos.

## **FABRICACION DE PRODUCTOS DE CAUCHO Y PLASTICO**

- 2511** Fabricación de cubiertos y cámaras de caucho, recauchado y renovación de cubiertas de caucho.
- 2519** Fabricación de otros productos de caucho.
- 2520** Fabricación de productos de plástico.

## **FABRICACION DE OTROS PRODUCTOS MINERALES NO METALICOS**

- 2610** Fabricación de vidrio y productos de vidrio.
- 2691** Fabricación de productos de cerámica no refractaria para uso no estructural.
- 2692** Fabricación de productos de cerámica refractaria.
- 2693** Fabricación de productos de arcilla y cerámica no refractarias para uso estructural.
- 2694** Fabricación de cemento, cal y yeso.
- 2695** Fabricación de artículos de hormigón, cemento y yeso.
- 2699** Fabricación de otros productos minerales no metálicos N.C.E.O.P.

## **FABRICACION DE METALES COMUNES**

- 2710** Industria básica de hierro y acero.
- 2720** Fabricación de productos primarios de metales preciosos y metales no ferrosos.
- 2731** Fundición de hierro y acero.
- 2732** Fundición de metales no ferrosos.

## **FABRICACION DE PRODUCTOS ELABORADOS DE METAL, EXCEPTO MAQUINARIA Y EQUIPO**

- 2811** Fabricación de productos metálicos para uso estructural.
- 2812** Fabricación de tanques, depósitos y recipientes de metal.
- 2892** Tratamiento y revestimiento de metales, obras de ingeniería mecánica en general realizados por contrata.
- 2893** Fabricación de artículos de cuchillería, herramientas de mano y artículos de ferretería.
- 2899** Fabricación de otros productos de metal N.C.E.O.P.

## **FABRICACION DE MAQUINARIA Y EQUIPO**

- 2911** Fabricación de motores y turbinas, excepto motores para aeronaves, vehículos automotores y motocicletas.
- 2912** Fabricación de bombas, compresores, grifos y válvulas.
- 2913** Fabricación de engranajes, trenes de engranajes y piezas de transmisión.
- 2914** Fabricación de hornos y quemadores.
- 2915** Fabricación de equipo de elevación y manipulación.
- 2919** Fabricación de otros tipos de maquinaria de uso general.
- 2921** Fabricación de maquinaria agropecuaria y forestal.
- 2922** Fabricación de maquinaria y herramientas.
- 2923** Fabricación de maquinarias metalúrgicas.
- 2924** Fabricación de maquinaria para la explotación de minas, canteras y obras de construcción.
- 2925** Fabricación de maquinaria para mezclar alimentos.
- 2926** Fabricación de maquinaria para la elaboración de productos textiles, prendas y cueros.
- 2927** Fabricación de armas y municiones.
- 2929** Fabricación de otros tipos de maquinaria de uso especial.
- 2930** Fabricación de aparatos de uso doméstico N.I.E.O.P.

## **FABRICACION DE MAQUINARIA DE OFICINA, CONTABILIDAD E INFORMATICA**

- 3000** Fabricación de Maquinaria de oficina, contabilidad e informática

## **FABRICACION DE MAQUINARIA Y APARATOS ELECTRICOS N.C.E.O.P.**

- 3110** Fabricación de motores, generadores de transformadores eléctricos.
- 3120** Fabricación de aparatos de distribución y control de energía eléctrica.

- 3130**      Elaboración de hilos y cables aislados.
- 3140**      Fabricación de acumuladores pilas y baterías.
- 3150**      Fabricación de lámparas eléctricas y equipo de iluminación.
- 3190**      Fabricación de otros tipos de equipos eléctricos, N.I.E.O.P.

#### **FABRICACION DE EQUIPOS Y APARATOS DE RADIO, T.V. Y COMUNICACIONES**

- 3210**      Fabricación de tubos y válvulas electrónicas y otros componentes.
- 3220**      Fabricación de transmisores de radio y T.V. y de aparatos para telefonía y telegrafía con hilo.
- 3230**      Fabricación de receptores de radio y T.V., aparatos de grabación y reproducción de sonido.

#### **FABRICACION DE INSTRUMENTOS MEDICOS, OPTICOS PRESION Y FABRICACION DE RELOJES**

- 3311**      Fabricación de equipo médico y quirúrgico y aparatos ortopédicos.
- 3312**      Fabricación de instrumentos, aparatos y máquinas de medición, verificación y ensayo.
- 3313**      Fabricación de equipos de control de procesos industriales.
- 3320**      Fabricación de instrumentos de óptica y equipo fotográfico.
- 3330**      Fabricación de relojes.

#### **FABRICACION DE VEHICULOS AUTOMOTORES, REMOLQUES Y SEMIREMOLQUES**

- 3410**      Fabricación de vehículos automotores.
- 3420**      Fabricación de carrocería para vehículos automotores, fabricación de remolques y semiremolques.
- 3430**      Fabricación de partes, piezas y accesorios para vehículos automotores.

## **FABRICACION DE OTRO TIPO DE EQUIPO DE TRANSPORTE**

- 3511** Construcción y reparaciones de buques.
- 3512** Construcción y reparaciones de embarcaciones de recreo.
- 3591** Fabricación de motocicletas.
- 3592** Fabricación de bicicletas y de sillones de ruedas para inválidos.
- 3599** Fabricación de otros tipos de equipo de transporte N.I.E.O.P.

## **FABRICACION DE MUEBLES E INDUSTRIA MANUFACTURERA N.I.E.O.P.**

- 3610** Fabricación de muebles.
- 3691** Fabricación de joyas y artículos conexos.
- 3692** Fabricación de instrumentos de música.
- 3693** Fabricación de artículos de deporte.
- 3694** Fabricación de juegos y juguetes.
- 3699** Otras industrias manufactureras, no incluida.

## **RECICLAMIENTO DE DESPERDICIOS**

- 3710** Reciclamiento de desperdicios y desechos metálicos.
- 3720** Reciclamiento de desperdicios y desechos no metálicos.

## **40 SUMINISTRO DE ELECTRICIDAD, GAS, VAPOR Y AGUA CALIENTE**

- 4010** Generación, captación y distribución de energía eléctrica.
- 4020** Fabricación de gas, distribución de combustible gaseoso por tubería.
- 4030** Suministro de vapor y agua caliente.

## **CAPTACION, DEPURACION Y DISTRIBUCION DE AGUA**

- 4100** Captación, depuración y distribución de agua.
- 45** **CONSTRUCCION**
- 4510** Preparación de terreno.
- 4520** Construcción de edificios completos y de partes de edificios y obras de ingeniería civil.
- 4530** Acondicionamiento de edificios.
- 4540** Terminación de edificios y viviendas.
- 4550** Alquiler de equipo de construcción y demolición dotados de operarios.
- 50** **VENTA, MANTENIMIENTO Y REPARACION DE VEHICULOS AUTOMOTORES Y MOTOCICLETAS VENTA AL POR MENOR DE COMBUSTIBLE**
- 5010** Venta de vehículos automotores.
- 5020** Mantenimiento y reparación de vehículos automotor.
- 5030** Venta de partes, piezas y accesorios de vehículos automotores.
- 5040** Venta, mantenimiento y reparación de motocicletas y sus partes, piezas y accesorios.
- 5050** Venta al por menor de combustible para automotores.
- COMERCIO AL POR MAYOR Y EN COMISION EXCEPTO EL COMERCIO DE VEHICULOS AUTOMOTORES Y MOTOCICLETAS**
- 5110** Venta al por mayor a cambio de una retribución por contrata.
- 5121** Venta al por mayor de materias primas agropecuarias y de animales vivos.
- 5122** Venta al por mayor de alimentos, bebidas y tabaco.
- 5131** Venta al por mayor de productos textiles, prendas de vestir y calzado.
- 5139** Venta al por mayor de productos de uso doméstico.

- 5141**      Venta al por mayor de combustible, sólido, líquido y gaseoso.
- 5142**      Venta al por mayor de metales y minerales metalíferos.
- 5143**      Venta al por mayor de materiales de construcción, artículos de ferretería y equipo y materiales de fontanería.
- 5149**      Venta al por mayor de otros productos intermedios, desperdicios y desechos.
- 5150**      Venta al por mayor maquinaria, equipo y materiales.
- 5190**      Venta al por mayor de otros productos.

**COMERCIO AL POR MENOR, EXCEPTO EL COMERCIO DE VEHICULOS AUTOMOTORES Y MOTOCICLETAS, REPARACION DE ENSERES DOMESTICOS**

- 5211**      Venta al por menor en establecimientos no especializados con surtidos compuestos principalmente de alimentos, bebidas y cigarrillos.
- 5219**      Venta al por menor de otros productos de establecimientos no especializados.
- 5220**      Venta al por menor de alimentos, bebidas y tabaco en establecimientos especializados.
- 5231**      Venta al por menor productos farmacéuticos, medicinales, cosméticos y artículos de tocador.
- 5232**      Venta al por menor de productos textiles, prendas de vestir, calzado y artículos de cuero.
- 5233**      Venta al por menor de aparatos, artículos y equipos de uso doméstico.
- 5234**      Venta al por menor de artículos de ferretería, pintura y productos de vidrio.
- 5239**      Venta al por menor de otros productos en establecimientos especializados.
- 5240**      Venta al por menor en establecimientos de artículos usados.
- 5251**      Venta al por menor por correo.
- 5252**      Venta al por menor en puestos móviles.
- 5259**      Otros tipos de venta al por menor no realizado en lugares fijos.

**5260** Reparación de efectos personales y enseres domésticos.

**5270** Venta al por menor de maquinaria y equipo.

**55 HOTELES Y RESTAURANTES**

**5510** Hoteles campamentos y otros tipos de hospedaje.

**5520** Restaurantes, bares y cantinas.

**60 TRANSPORTE POR VIA TERRESTRE**

**6010** Transporte por vía férrea.

**6021** Otros tipos de transporte regular de pasajeros por vía terrestre.

**6022** Otros tipos de transporte no regular de pasajeros por vía terrestre.

**6023** Transporte de carga por vía terrestre.

**6030** Transporte por tubería.

**TRANSPORTE POR VIA ACUATICA**

**6110** Transporte marítimo de cabotaje.

**6120** Transporte por vía de navegación en ríos y represas.

**TRANSPORTE POR VIA AEREA**

**6210** Transporte regular por vía aérea.

**6220** Transporte no regular por vía aérea.

**ACTIVIDADES DE TRANSPORTE COMPLEMENTARIAS Y AUXILIAR,  
ACTIVIDADES DE AGENCIAS DE VIAJE**

**6301** Manipulación de la carga.

**6302** Almacenamiento y depósitos.

**6303** Otras actividades de transporte complementarios.

- 6304**      Actividades de agencias de viajes y organizaciones de viajes, actividades de asistencia a turistas.
- 6309**      Actividades de otras agencias de transporte.

## **CORREOS Y TELECOMUNICACIONES**

- 6411**      Actividades postales nacionales.
- 6412**      Actividades de correos distintas de las actividades postales nacionales.
- 6420**      Telecomunicaciones.

## **INTERMEDIACION FINANCIERA**

- 6511**      Banco Central
- 6519**      Otros tipos de intermediación monetaria.
- 6591**      Arrendamiento financiero.
- 6592**      Otros tipos de crédito.
- 6599**      Otros tipos de intermediación financiera N.I.E.O.P.

## **FINANCIACION DE PLANES DE SEGURO Y PENSIONES, EXCEPTO LA SEGURIDAD SOCIAL OBLIGATORIA**

- 6601**      Planes de seguridad.
- 6602**      Planes de pensiones.
- 6603**      Planes de seguros generales.

## **ACTIVIDADES AUXILIARES DE LA INTERMEDIACION FINANCIERA**

- 6711**      Administración de mercado financiero.
- 6712**      Actividades bursátiles.
- 6719**      Actividades auxiliares de la intermediación financiera N.I.E.O.P.

**6720** Actividades auxiliares de la financiación de planes de seguros de pensiones.

**70 ACTIVIDADES INMOBILIARIAS**

**7010** Actividades inmobiliarias realizadas con bienes propios o arrendados.

**7020** Actividades Inmobiliarias realizadas por contrata.

**ALQUILER DE MAQUINARIA Y EQUIPO SIN OPERARIOS Y EFECTOS PERSONALES Y ENSERES DOMESTICOS**

**7111** Alquiler de equipo de transporte por vía terrestre.

**7112** Alquiler de equipo de transporte por vía acuática.

**7113** Alquiler de equipo de transporte por vía aérea.

**7121** Alquiler de maquinaria y equipo de oficina.

**7122** Alquiler de maquinaria y equipo de construcción e ingeniería civil.

**7123** Alquiler de maquinaria y equipo de oficina.

**7129** Alquiler de otros tipos de maquinaria y equipo N.I.E.O.P.

**7130** Alquiler de efectos personales y enseres domésticos N.I.E.O.P.

**INFORMATICA Y ACTIVIDADES CONEXAS**

**7210** Consultoras en equipos de informática.

**7220** Consultores en programas de informática y suministro de programa de informática.

**7230** Procesamiento de datos.

**7240** Actividades relacionadas con base de datos.

**7250** Mantenimiento y reparación de maquinaria de oficina, contabilidad e informática.

**7290** Otras actividades de informática.

## **INVESTIGACION Y DESARROLLO**

- 7310** Investigación y desarrollo experimental en el campo de las Ciencias Naturales y la Ingeniería.
- 7320** Investigación y desarrollo experimental en el campo de las Ciencias Sociales y las Humanidades.

## **OTRAS ACTIVIDADES EMPRESARIALES**

- 7411** Actividades jurídicas.
- 7412** Actividades de contabilidad, auditoría y asesoramiento en materia de impuestos.
- 7413** Investigación de mercados y realización de encuestas de opinión.
- 7414** Actividades de asesoramiento empresarial en materia de gestión.
- 7421** Actividades de arquitectura e ingeniería y actividades conexas de asesoramiento técnico.
- 7422** Ensayos y análisis técnicos.
- 7430** Publicidad.
- 7491** Obtención y dotación de personal.
- 7492** Actividades de investigación y seguridad.
- 7493** Actividades de limpieza de edificios.
- 7494** Actividades de fotografía.
- 7495** Actividades de envases y empaque.
- 7499** Otras actividades de servicios N.I.E.O.P.

## **ADMINISTRACION PUBLICA Y DEFENSA, PLANES DE SEGURIDAD SOCIAL DE AFILIACION OBLIGATORIA**

- 7511** Actividades de la administración pública en general.

- 7512** Regulación de las actividades de organismos que prestan servicios sanitarios, educativos y culturales.
- 7513** Regulación y facilitación de la actividad económica.
- 7514** Actividades de servicios auxiliares para la administración pública en general.
- 7521** Relaciones exteriores.
- 7522** Actividades de defensa.
- 7523** Actividades de mantenimiento del orden público y de seguridad.
- 7530** Actividades y planes de seguridad social de afiliación obligatoria.
  
- 80** ENSEÑANZA
  - 8010** Enseñanza primaria y vocacional.
  - 8021** Enseñanza secundaria de formación general.
  - 8022** Enseñanza secundaria de formación técnica.
  - 8030** Enseñanza superior.
  - 8090** Enseñanza de adultos y otro tipo de enseñanza.
  
- 85** SERVICIOS SOCIALES Y DE SALUD
  - 8511** Actividades de hospitales.
  - 8512** Actividades de médicos y odontólogos.
  - 8519** Otras actividades relacionadas con la salud humana.
  - 8520** Actividades veterinarias.
  - 8531** Servicios sociales con alojamiento.
  - 8532** Servicios sociales sin alojamiento.

**90 ELIMINACION DE DESPERDICIOS Y AGUAS RESIDUALES, SANEAMIENTO Y ACTIVIDADES SIMILARES**

**9000** Eliminación de desperdicios y aguas residuales, saneamiento y actividades similares.

**ACTIVIDADES DE ASOCIACIONES N. I. E. O. P.**

**9111** Actividades de organizaciones empresariales y de empleadores.

**9112** Actividades de organizaciones profesionales.

**9120** Actividades de sindicatos.

**9191** Actividades de organizaciones religiosas.

**9192** Actividades de organizaciones políticas.

**9199** Actividades de otras asociaciones N.I.E.O.P.

**ACTIVIDADES DE ESPARCIMIENTO Y ACTIVIDADES CULTURALES Y DEPORTIVAS**

**9211** Producción y distribución de filmes y vídeo cintas.

**9212** Exhibición de filmes y vídeo cintas.

**9213** Actividades de radio y T.V.

**9214** Actividades teatrales, musicales y otras actividades artísticas.

**9219** Otras actividades de entretenimiento.

**9220** Actividades de agencias de noticias.

**9231** Actividades de biblioteca y archivo.

**9232** Actividades de museos y preservación de lugares y edificios históricos.

**9233** Actividades de jardines botánicos, zoológicos y de parques nacionales.

**9241** Actividades deportivas.

**9249** Otras actividades de esparcimiento.

## **OTRAS ACTIVIDADES DE SERVICIOS**

**9301** Lavado y limpieza de prendas de vestir de tela y piel.

**9302** Peluquería y otros tratamientos de belleza.

**9303** Pompas fúnebres y actividades conexas.

**9309** Otras actividades de servicios N. I. E. O. P.

## **95 HOGARES PRIVADOS CON SERVICIOS DOMESTICOS**

**9500** Hogares privados con servicios domésticos.

## Department and Municipio Codes

| DEPARTMENT |                 |      | MUNICIPIO             |  | DEPARTMENT |            |      | MUNICIPIO          |  |
|------------|-----------------|------|-----------------------|--|------------|------------|------|--------------------|--|
| CODE       | NAME            | CODE | NAME                  |  | CODE       | NAME       | CODE | NAME               |  |
| 05         | Nueva Segovia   | 05   | Jalapa                |  | 25         | Estelí     | 15   | Estelí             |  |
|            |                 | 10   | Murra                 |  |            |            | 20   | S.J. de Limay      |  |
|            |                 | 15   | El Jícaro             |  |            |            | 25   | La Trinidad        |  |
|            |                 | 20   | S. Fernando           |  |            |            | 30   | San Nicolás        |  |
|            |                 | 25   | Mozonte               |  |            |            | 05   | S. Pedro del Norte |  |
|            |                 | 30   | Dipilto               |  |            |            | 10   | S. Francisco Norte |  |
|            |                 | 35   | Macuelizo             |  |            |            | 15   | Cinco Pinos        |  |
|            |                 | 40   | Sta. María            |  |            |            | 20   | S. Tomás del Norte |  |
|            |                 | 45   | Ocotol                |  |            |            | 25   | El Viejo           |  |
|            |                 | 50   | Ciudad Antigua        |  |            |            | 30   | Puerto Morazán     |  |
| 07         | Atlántico Norte | 55   | Quilalí               |  | 30         | Chinandega | 35   | Somotillo          |  |
|            |                 | 05   | Waspan                |  |            |            | 40   | Villa Nueva        |  |
|            |                 | 10   | Puerto Cabezas        |  |            |            | 45   | Chinandega         |  |
|            |                 | 15   | Rosita                |  |            |            | 50   | El Realejo         |  |
|            |                 | 20   | Bonanza               |  |            |            | 55   | Corinto            |  |
|            |                 | 25   | Waslala               |  |            |            | 60   | Chihigalpa         |  |
|            |                 | 30   | Siuna                 |  |            |            | 65   | Posoltega          |  |
|            |                 | 35   | Prinzapolka           |  |            |            | 05   | Achuapa            |  |
|            |                 | 05   | Paiwas                |  | 35         | León       | 10   | El Sauce           |  |
|            |                 | 10   | La Cruz de Río Grande |  |            |            | 15   | S. Rosa del Peñon  |  |
| 08         | Atlántico Sur   | 15   | Laguna de Perlas      |  |            |            | 20   | El Jicaral         |  |
|            |                 | 20   | El Rama               |  |            |            | 25   | Larreynaga         |  |
|            |                 | 25   | Muelle de los B.      |  |            |            | 30   | Telica             |  |
|            |                 | 30   | Kukra Hill            |  |            |            | 35   | Quezalquaque       |  |
|            |                 | 35   | Corn Island           |  |            |            | 40   | León               |  |
|            |                 | 40   | Bluefields            |  |            |            | 45   | La Paz Centro      |  |
|            |                 | 45   | Nueva Guinea          |  |            |            | 50   | Nagarote           |  |
|            |                 | 50   | Otro RAAS             |  | 40         | Matagalpa  | 05   | Rancho Grande      |  |
|            |                 | 55   | Otro MASRAAS          |  |            |            | 10   | Rio Blanco         |  |
| 10         | Jinotega        | 05   | Wiwili                |  |            |            | 15   | Tuma-La Dalia      |  |
|            |                 | 10   | Cua-Boacay            |  |            |            | 20   | San Isidro         |  |
|            |                 | 15   | S. Ma. Pantasma       |  |            |            | 25   | Sebaco             |  |
|            |                 | 20   | San Rafael del Norte  |  |            |            | 30   | Matagalpa          |  |
|            |                 | 25   | S.S. de Yali          |  |            |            | 35   | San Ramon          |  |
|            |                 | 30   | La Concordia          |  |            |            | 40   | Matiguas           |  |
|            |                 | 35   | Jinotega              |  |            |            | 45   | Muy Muy            |  |
|            |                 | 05   | Somoto                |  |            |            | 50   | Esquipulas         |  |
|            |                 | 10   | Tototalpa             |  |            |            | 55   | San Donisio        |  |
|            |                 | 15   | Telpaneca             |  |            |            | 60   | Terrabona          |  |
| 20         | Madriz          | 20   | S.J. de Rio Coco      |  | 50         | Boaco      | 65   | Ciudad Dario       |  |
|            |                 | 25   | Palacaguina           |  |            |            | 05   | S. José de los R.  |  |
|            |                 | 30   | Yalaguina             |  |            |            | 10   | Boaco              |  |
|            |                 | 35   | San Lucas             |  |            |            | 15   | Camoapa            |  |
|            |                 | 40   | Las Sabanas           |  |            |            | 20   | Santa Lucía        |  |
|            |                 | 45   | S.J. de Cusmapa       |  |            |            | 25   | Teustepe           |  |
|            |                 | 05   | Pueblo Nuevo          |  |            |            | 30   | San Lorenzo        |  |
|            |                 | 10   | Condega               |  |            |            |      |                    |  |

| DEPARTMENT |           | MUNICIPIO |                   |
|------------|-----------|-----------|-------------------|
| CODE       | NAME      | CODE      | NAME              |
| 55         | Managua   | 05        | S. Franciso Libre |
|            |           | 10        | Tipitapa          |
|            |           | 15        | Mateare           |
|            |           | 20        | Villa Carlos F.   |
|            |           | 25        | Managua           |
|            |           | 30        | Ticuantepe        |
|            |           | 35        | S. Rafael del Sur |
| 60         | Masaya    | 05        | Nindirí           |
|            |           | 10        | Masaya            |
|            |           | 15        | Tisma             |
|            |           | 20        | La Concepción     |
|            |           | 25        | Mastepe           |
|            |           | 30        | Nandasmo          |
|            |           | 35        | Catarina          |
|            |           | 40        | S. Juan de Orient |
|            |           | 45        | Niquinohomo       |
| 65         | Chontales | 05        | Comalapa          |
|            |           | 10        | Juigalpa          |
|            |           | 15        | La Libertad       |
|            |           | 20        | Santo Domingo     |
|            |           | 25        | Santo Tomás       |
|            |           | 30        | S. Pedro Lóvago   |
|            |           | 35        | Acoyapa           |
|            |           | 40        | Villa Sandino     |
| 70         | Granada   | 05        | Diría             |
|            |           | 10        | Diriomo           |
|            |           | 15        | Granada           |
|            |           | 20        | Nandaime          |
| 75         | Carazo    | 05        | San Marcos        |
|            |           | 10        | Jinotepe          |
|            |           | 15        | Dolores           |
|            |           | 20        | Diriamba          |
|            |           | 25        | El Rosario        |
|            |           | 30        | La Paz Carazo     |
|            |           | 35        | Santa Teresa      |
|            |           | 40        | La Conquista      |
| 80         | Rivas     | 05        | Tola              |
|            |           | 10        | Belén             |
|            |           | 15        | Potosí            |
|            |           | 20        | Buenos Aires      |
|            |           | 25        | Moyogalpa         |
|            |           | 30        | Altagracia        |
|            |           | 35        | San Jorge         |
|            |           | 40        | Rivas             |
|            |           | 45        | San Juan del Sur  |
|            |           | 50        | Cárdenas          |

| DEPARTMENT |              | MUNICIPIO |                    |
|------------|--------------|-----------|--------------------|
| CODE       | NAME         | CODE      | NAME               |
| 85         | Río San Juan | 05        | Morrito            |
|            |              | 10        | El Almendro        |
|            |              | 15        | San Miguelito      |
|            |              | 20        | San Carlos         |
|            |              | 25        | El Castillo        |
|            |              | 30        | San Juan del Norte |

| REGION CODES |                |
|--------------|----------------|
| 1            | Atlantic Urban |
| 2            | Atlantic Rural |
| 3            | Central Urban  |
| 4            | Central Rural  |
| 5            | Managua        |
| 6            | Pacific Urban  |
| 7            | Pacific Rural  |

## COUNTRY CODES

| Country        | Code | Country      | Code | Country            | Code | Country         | Code |
|----------------|------|--------------|------|--------------------|------|-----------------|------|
| Algeria        | 01   | Israel       | 26   | Costa Rica         | 51   | Sweden          | 76   |
| Egypt          | 02   | Jordan       | 27   | El Salvador        | 52   | United Kingdom  | 77   |
| Libya          | 03   | Saudi Arabia | 28   | Guatemala          | 53   | Austria         | 78   |
| Sudan          | 04   | Syria        | 29   | Honduras           | 54   | Belgium         | 79   |
| Tunisia        | 05   | Turkey       | 30   | Panama             | 55   | France          | 80   |
| Guinea         | 06   | Yemen        | 31   | Cuba               | 56   | Germany         | 81   |
| Liberia        | 07   | Afghanistan  | 32   | Dominican Republic | 57   | The Netherlands | 82   |
| Mali           | 08   | India        | 33   | Haiti              | 58   | Switzerland     | 83   |
| Mauritania     | 09   | Iran         | 34   | Jamaica            | 59   | Bulgaria        | 84   |
| Nigeria        | 10   | Pakistan     | 35   | Puerto Rico        | 60   | Czechoslovakia  | 85   |
| Senegal        | 11   | Indonesia    | 36   | Trinidad & Tobago  | 61   | Hungary         | 86   |
| Ethiopia       | 12   | Malaysia     | 37   | Argentina          | 62   | Poland          | 87   |
| Kenya          | 13   | Philippines  | 38   | Bolivia            | 63   | Russia          | 88   |
| Mozambique     | 14   | Thailand     | 39   | Brazil             | 64   | Ukraine         | 89   |
| Somalia        | 15   | Viet Nam     | 40   | Colombia           | 65   | Uzbekistan      | 90   |
| Tanzania       | 16   | China        | 41   | Chile              | 66   | Albania         | 91   |
| Uganda         | 17   | Japan        | 42   | Ecuador            | 67   | Greece          | 92   |
| Angola         | 18   | North Korea  | 43   | Peru               | 68   | Italy           | 93   |
| Cameroon       | 19   | South Korea  | 44   | Paraguay           | 69   | Portugal        | 94   |
| Congo          | 20   | Taiwan       | 45   | Venezuela          | 70   | Spain           | 95   |
| Zaire          | 21   | Asia – Other | 46   | America – Other    | 71   | Yugoslavia      | 96   |
| Namibia        | 22   | Canada       | 47   | Denmark            | 72   | Europe – Other  | 97   |
| South Africa   | 23   | USA          | 48   | Finland            | 73   | Australia       | 98   |
| Africa – Other | 24   | Mexico       | 49   | Ireland            | 74   | Oceania – Other | 99   |
| Iraq           | 25   | Belize       | 50   | Norway             | 75   | Other           | 00   |

## REGIONS AND SUBREGIONS

| REGION   | SUB-REGION        | COUNTRIES | REGION    | SUB-REGION         | COUNTRIES |
|----------|-------------------|-----------|-----------|--------------------|-----------|
| 0 OTHER  | 00 Other          | 00        | 3 AMERICA | 31 North America   | 47 – 49   |
| 1 AFRICA | 11 North Africa   | 01 – 05   |           | 32 Central America | 50 – 55   |
|          | 12 West Africa    | 06 – 11   |           | 33 West Indies     | 56 – 61   |
|          | 13 East Africa    | 12 – 17   |           | 34 South America   | 62 – 70   |
|          | 14 Central Africa | 18 – 21   |           | 35 Other           | 71        |
|          | 15 South Africa   | 22 – 23   | 4 EUROPE  | 41 North Europe    | 72 – 77   |
|          | 16 Other          | 24        |           | 42 West Europe     | 78 – 83   |
| 2 ASIA   | 21 North Asia     | 25 – 31   |           | 43 East Europe     | 84 – 90   |
|          | 22 South Asia     | 32 – 35   |           | 44 South Europe    | 91 – 96   |
|          | 23 SE Asia        | 36 – 40   |           | 45 Other           | 97        |
|          | 24 East Asia      | 41 – 45   | 5 OCEANIA | 51 Oceania         | 98        |
|          | 15 Other          | 46        |           | 52 Other           | 99        |

ACTINEGO 1 = Production  
2 = Commercial  
3 = Service

P00 1 = Household member  
2 = Not a household member

## APPENDIX F

### CONSUMER PRICE INDEX FOR MANAGUA, 1998 (BASE 1994=100)

| Month  | General Index | Food and Drink | Clothing and Shoes | Housing  | Furnishings | Medicine & Health | Transport & Communication | Leisure & Culture | Education | Personal Expenses |
|--|---------------|----------------|--------------------|----------|-------------|-------------------|---------------------------|-------------------|-----------|-------------------|
| BASE   | 1.0000        | 0468476        | 0.060693           | 0.126070 | 0.071955    | 0.046773          | 0.104704                  | 0.006681          | 0.077131  | 0.037517          |
| Dec. 97                                      | 141.0288      | 141.4845       | 106.9882           | 180.2292 | 133.2844    | 127.2405          | 148.9487                  | 127.7860          | 119.3047  | 115.6406          |
| 1998   |               |                |                    |          |             |                   |                           |                   |           |                   |
| January                                      | 142.2607      | 143.5939       | 105.8314           | 180.2720 | 135.2384    | 129.0053          | 148.8066                  | 128.1473          | 119.9280  | 116.9697          |
| February                                     | 144.3055      | 145.5731       | 106.3086           | 183.5727 | 140.3609    | 129.5935          | 148.5473                  | 130.0691          | 122.7603  | 118.8932          |
| March  | 145.7666      | 147.9069       | 106.6862           | 183.5561 | 141.9923    | 129.5935          | 148.5911                  | 137.0146          | 124.0335  | 121.0352          |
| April  | 148.8607      | 152.1297       | 109.1221           | 185.5151 | 146.8880    | 133.1044          | 149.5162                  | 143.9520          | 124.4720  | 121.7699          |
| May  | 151.8859      | 156.2113       | 107.9417           | 190.7896 | 151.2237    | 134.2747          | 150.0013                  | 144.4717          | 125.5947  | 122.0927          |
| June   | 154.7048      | 160.6967       | 108.6992           | 195.3922 | 151.6100    | 134.2747          | 149.9117                  | 146.1314          | 126.2928  | 122.3064          |
| July   | 153.0061      | 154.9473       | 109.2734           | 199.0688 | 157.9320    | 133.0197          | 149.8517                  | 146.7545          | 127.3449  | 122.8729          |
| August                                       | 152.2455      | 151.4987       | 110.1143           | 203.4884 | 162.8315    | 132.6014          | 149.0012                  | 147.1221          | 128.1842  | 121.1576          |
| Sept   | 152.8053      | 151.2977       | 113.0229           | 206.7801 | 159.9125    | 136.8708          | 149.4069                  | 148.9436          | 129.1561  | 119.6411          |
| October                                      | 156.4460      | 156.1024       | 116.1213           | 213.2194 | 160.0954    | 138.6208          | 150.3369                  | 151.3049          | 130.3656  | 121.9993          |
| Nov  | 165.2874      | 171.2755       | 118.5418           | 222.0307 | 165.5823    | 138.2704          | 150.2316                  | 148.7700          | 130.8963  | 124.2411          |
| Dec  | 167.0674      | 174.1640       | 119.1607           | 223.5744 | 168.2008    | 137.2405          | 149.5149                  | 148.9227          | 132.2512  | 124.6723          |
| Monthly Variations, General Index and Groups |               |                |                    |          |             |                   |                           |                   |           |                   |
| January                                      | 0.87          | 1.49           | (1.08)             | 0.02     | 1.47        | 1.39              | (0.10)                    | 0.28              | 0.52      | 1.15              |
| February                                     | 1.44          | 1.38           | 0.45               | 1.83     | 3.79        | 0.46              | (0.17)                    | 1.50              | 2.36      | 1.64              |
| March  | 1.01          | 1.60           | 0.36               | (0.01)   | 1.16        | 0.00              | 0.03                      | 5.34              | 1.04      | 1.80              |
| April  | 2.12          | 2.86           | 2.28               | 1.07     | 3.45        | 2.71              | 0.62                      | 5.06              | 0.35      | 0.61              |
| May  | 2.03          | 2.68           | (1.08)             | 2.84     | 2.95        | 0.88              | 0.32                      | 0.36              | 0.90      | 0.27              |
| June   | 1.86          | 2.87           | 0.70               | 2.41     | 0.26        | 0.00              | (0.06)                    | 1.15              | 0.56      | 0.18              |
| July   | (1.10)        | (3.58)         | 0.53               | 1.88     | 4.17        | (0.93)            | (0.04)                    | 0.43              | 0.83      | 0.46              |
| August                                       | (0.50)        | (2.23)         | 0.77               | 2.22     | 3.10        | (0.31)            | (0.57)                    | 0.25              | 0.66      | (1.40)            |
| Sept   | 0.37          | (0.13)         | 2.64               | 1.62     | (1.79)      | 3.22              | 0.27                      | 1.24              | 0.76      | (1.25)            |
| October                                      | 2.38          | 3.18           | 2.74               | 3.11     | 0.11        | 1.28              | 0.62                      | 1.59              | 0.94      | 1.97              |
| Nov  | 5.65          | 9.72           | 2.08               | 4.13     | 3.43        | (0.25)            | (0.07)                    | (1.68)            | 0.41      | 1.84              |
| Dec  | 1.08          | 1.69           | 0.52               | 0.70     | 1.58        | (0.74)            | (0.48)                    | 0.10              | 1.11      | 0.35              |
| Monthly Variations v. December 1997          |               |                |                    |          |             |                   |                           |                   |           |                   |
| January                                      | 0.87          | 1.49           | (1.08)             | 0.02     | 1.47        | 1.39              | (0.10)                    | 0.28              | 0.52      | 1.15              |
| February                                     | 2.32          | 2.89           | (0.64)             | 1.86     | 5.31        | 1.85              | (0.27)                    | 1.79              | 2.90      | 2.81              |
| March  | 3.36          | 4.54           | (0.28)             | 1.85     | 6.53        | 1.85              | (0.24)                    | 7.22              | 3.96      | 4.66              |
| April  | 5.55          | 7.52           | 1.99               | 2.93     | 10.21       | 4.61              | 0.38                      | 12.65             | 4.33      | 5.30              |
| May  | 7.70          | 10.41          | 0.89               | 5.86     | 13.46       | 5.53              | 0.71                      | 13.06             | 5.27      | 5.58              |
| June   | 9.70          | 13.58          | 1.60               | 8.41     | 13.75       | 5.53              | 0.65                      | 14.36             | 5.86      | 5.76              |
| July   | 8.49          | 9.52           | 2.14               | 10.45    | 18.49       | 4.54              | 0.61                      | 14.84             | 6.74      | 6.25              |
| August                                       | 7.95          | 7.08           | 2.92               | 12.91    | 22.17       | 4.21              | 0.04                      | 15.13             | 7.44      | 4.77              |
| Sept   | 8.35          | 6.94           | 5.64               | 14.73    | 19.98       | 7.57              | 0.31                      | 16.56             | 8.26      | 3.46              |
| October                                      | 10.93         | 10.33          | 8.54               | 18.30    | 20.12       | 8.94              | 0.93                      | 18.40             | 9.27      | 5.50              |
| Nov  | 17.20         | 21.06          | 10.80              | 23.19    | 24.23       | 8.67              | 0.86                      | 16.42             | 9.72      | 7.44              |
| Dec  | 18.46         | 23.10          | 11.38              | 24.05    | 26.20       | 7.86              | 0.38                      | 16.54             | 10.94     | 7.81              |
| Monthly Variations v. the Same Month in 1997 |               |                |                    |          |             |                   |                           |                   |           |                   |
| January                                      | 8.16          | 8.21           | 4.52               | 4.67     | 5.00        | 7.05              | 15.85                     | 7.75              | 11.85     | 7.52              |
| February                                     | 9.70          | 10.68          | 4.07               | 9.87     | 8.25        | 7.92              | 7.28                      | 8.38              | 13.86     | 8.71              |
| March  | 10.94         | 12.54          | 6.41               | 11.23    | 9.62        | 8.07              | 6.03                      | 14.56             | 14.12     | 9.45              |
| April  | 12.84         | 15.50          | 8.01               | 11.36    | 12.79       | 10.82             | 6.48                      | 20.51             | 14.72     | 8.26              |
| May  | 14.24         | 17.19          | 6.80               | 13.42    | 16.76       | 11.73             | 6.80                      | 20.31             | 13.87     | 8.69              |
| June   | 14.11         | 16.90          | 8.02               | 13.75    | 17.03       | 11.73             | 6.36                      | 19.17             | 13.11     | 7.14              |
| July   | 11.18         | 9.93           | 7.20               | 15.69    | 20.82       | 8.74              | 6.17                      | 18.08             | 12.43     | 8.82              |
| August                                       | 11.26         | 9.35           | 8.94               | 17.78    | 23.99       | 8.02              | 4.79                      | 17.81             | 11.55     | 7.30              |
| Sept   | 12.49         | 11.20          | 11.01              | 18.30    | 22.15       | 10.19             | 7.25                      | 18.53             | 10.78     | 6.04              |
| October                                      | 14.60         | 14.05          | 14.46              | 19.98    | 21.81       | 9.28              | 9.86                      | 20.99             | 11.27     | 7.80              |
| Nov  | 17.93         | 22.02          | 14.43              | 23.04    | 24.56       | 8.67              | 0.93                      | 18.69             | 10.56     | 8.62              |
| Dec  | 18.46         | 23.10          | 11.38              | 24.05    | 26.20       | 7.86              | 0.38                      | 16.54             | 10.94     | 7.81              |

Source: INEC

## APPENDIX G

### EXCHANGE RATES 1998

| DATE     | C\$ per US\$ | DATE     | C\$ per US\$ | DATE    | C\$ per US\$ |
|----------|--------------|----------|--------------|---------|--------------|
| March 10 | 10.2109      | April 16 | 10.3289      | May 23  | 10.4482      |
| March 11 | 10.2141      | April 17 | 10.3321      | May 24  | 10.4515      |
| March 12 | 10.2172      | April 18 | 10.3353      | May 25  | 10.4547      |
| March 13 | 10.2204      | April 19 | 10.3385      | May 26  | 10.4580      |
| March 14 | 10.2236      | April 20 | 10.3417      | May 27  | 10.4612      |
| March 15 | 10.2268      | April 21 | 10.3449      | May 28  | 10.4645      |
| March 16 | 10.2299      | April 22 | 10.3481      | May 29  | 10.4677      |
| March 17 | 10.2331      | April 23 | 10.3514      | May 30  | 10.4710      |
| March 18 | 10.2363      | April 24 | 10.3546      | May 31  | 10.4742      |
| March 19 | 10.2395      | April 25 | 10.3578      | June 1  | 10.4775      |
| March 20 | 10.2427      | April 26 | 10.3610      | June 2  | 10.4807      |
| March 21 | 10.2458      | April 27 | 10.3642      | June 3  | 10.4840      |
| March 22 | 10.2490      | April 28 | 10.3674      | June 4  | 10.4872      |
| March 23 | 10.2522      | April 29 | 10.3707      | June 5  | 10.4905      |
| March 24 | 10.2554      | April 30 | 10.3739      | June 6  | 10.4937      |
| March 25 | 10.2586      | May 1    | 10.3771      | June 7  | 10.4970      |
| March 26 | 10.2618      | May 2    | 10.3803      | June 8  | 10.5003      |
| March 27 | 10.2649      | May 3    | 10.3835      | June 9  | 10.5035      |
| March 28 | 10.2681      | May 4    | 10.3868      | June 10 | 10.5068      |
| March 29 | 10.2713      | May 5    | 10.3900      | June 11 | 10.5100      |
| March 30 | 10.2745      | May 6    | 10.3932      | June 12 | 10.5133      |
| March 31 | 10.2777      | May 7    | 10.3964      | June 13 | 10.5166      |
| April 1  | 10.2809      | May 8    | 10.3997      | June 14 | 10.5198      |
| April 2  | 10.2841      | May 9    | 10.4029      | June 15 | 10.5231      |
| April 3  | 10.2873      | May 10   | 10.4061      | June 16 | 10.5264      |
| April 4  | 10.2905      | May 11   | 10.4094      | June 17 | 10.5296      |
| April 5  | 10.2937      | May 12   | 10.4126      | June 18 | 10.5329      |
| April 6  | 10.2969      | May 13   | 10.4158      | June 19 | 10.5362      |
| April 7  | 10.3001      | May 14   | 10.4191      | June 20 | 10.5395      |
| April 8  | 10.3033      | May 15   | 10.4223      | June 21 | 10.5427      |
| April 9  | 10.3065      | May 16   | 10.4255      | June 22 | 10.5460      |
| April 10 | 10.3097      | May 17   | 10.4288      | June 23 | 10.5493      |
| April 11 | 10.3129      | May 18   | 10.4320      | June 24 | 10.5526      |
| April 12 | 10.3161      | May 19   | 10.4353      | June 25 | 10.5558      |
| April 13 | 10.3193      | May 20   | 10.4385      | June 26 | 10.5591      |
| April 14 | 10.3225      | May 21   | 10.4417      | June 27 | 10.5624      |
| April 15 | 10.3257      | May 22   | 10.4450      | June 28 | 10.5657      |

| DATE     | C\$ per US\$ | DATE         | C\$ per US\$ | DATE         | C\$ per US\$ |
|----------|--------------|--------------|--------------|--------------|--------------|
| June 29  | 10.5689      | August 5     | 10.6911      | September 11 | 10.8146      |
| June 30  | 10.5722      | August 6     | 10.6944      | September 12 | 10.8180      |
| July 1   | 10.5755      | August 7     | 10.6977      | September 13 | 10.8213      |
| July 2   | 10.5788      | August 8     | 10.7010      | September 14 | 10.8247      |
| July 3   | 10.5821      | August 9     | 10.7044      | September 15 | 10.8280      |
| July 4   | 10.5854      | August 10    | 10.7077      | September 16 | 10.8314      |
| July 5   | 10.5887      | August 11    | 10.7110      | September 17 | 10.8348      |
| July 6   | 10.5919      | August 12    | 10.7143      | September 18 | 10.8381      |
| July 7   | 10.5952      | August 13    | 10.7177      | September 19 | 10.8415      |
| July 8   | 10.5985      | August 14    | 10.7210      | September 20 | 10.8449      |
| July 9   | 10.6018      | August 15    | 10.7243      | September 21 | 10.8482      |
| July 10  | 10.6051      | August 16    | 10.7276      | September 22 | 10.8516      |
| July 11  | 10.6084      | August 17    | 10.7310      | September 23 | 10.8550      |
| July 12  | 10.3117      | August 18    | 10.7343      | September 24 | 10.8583      |
| July 13  | 10.6150      | August 19    | 10.7376      | September 25 | 10.8617      |
| July 14  | 10.6183      | August 20    | 10.7410      | September 26 | 10.8651      |
| July 15  | 10.6216      | August 21    | 10.7443      | September 27 | 10.8685      |
| July 16  | 10.6249      | August 22    | 10.7476      | September 28 | 10.8718      |
| July 17  | 10.6282      | August 23    | 10.7510      | September 29 | 10.8752      |
| July 18  | 10.6315      | August 24    | 10.7543      | September 30 | 10.8786      |
| July 19  | 10.6348      | August 25    | 10.7577      | October 1    | 10.8820      |
| July 20  | 10.6381      | August 26    | 10.7610      | October 2    | 10.8853      |
| July 21  | 10.6414      | August 27    | 10.7643      | October 3    | 10.8887      |
| July 22  | 10.6447      | August 28    | 10.7677      | October 4    | 10.8921      |
| July 23  | 10.6480      | August 29    | 10.7710      | October 5    | 10.8955      |
| July 24  | 10.6513      | August 30    | 10.7744      | October 6    | 10.8989      |
| July 25  | 10.6546      | August 31    | 10.7777      | October 7    | 10.9022      |
| July 26  | 10.6579      | September 1  | 10.7811      | October 8    | 10.9056      |
| July 27  | 10.6612      | September 2  | 10.7844      | October 9    | 10.9090      |
| July 28  | 10.6645      | September 3  | 10.7878      |              |              |
| July 29  | 10.6679      | September 4  | 10.7911      |              |              |
| July 30  | 10.6712      | September 5  | 10.7945      |              |              |
| July 31  | 10.6745      | September 6  | 10.7978      |              |              |
| August 1 | 10.6778      | September 7  | 10.8012      |              |              |
| August 2 | 10.6811      | September 8  | 10.8045      |              |              |
| August 3 | 10.6844      | September 9  | 10.8079      |              |              |
| August 4 | 10.6877      | September 10 | 10.8112      |              |              |

Source: Banco Central de Nicaragua

## APPENDIX H

### RECOMMENDATIONS FOR THE SAMPLE DESIGN FOR THE LIVING STANDARDS MEASUREMENT STUDY IN NICARAGUA, 1998<sup>14</sup>

#### I. INTRODUCTION

The principal objective of the present document is to describe the recommendations that were followed in the development of the design of the sample for the second Living Standards Measurement Study (EMNV98 - *Encuesta de Medición de Niveles de Vida*) in Nicaragua. The first survey had been done in 1993 (EMNV93).

Collaborating with the technical directorate of the National Institute for Statistics and Census (INEC - *Instituto Nacional de Estadísticas y Censos*) and the technical group from the World Bank, it was possible for the author to maintain discussions of the objectives and of his goals for the EMNV98 permitting him to establish the recommendations necessary for the corresponding design of the sample with its respective procedures for selection.

Approximately 4,650 households will be selected for the application of the household questionnaires among all the households located in the dwellings selected for the EMNV98, in order to visit them twice in a period of three months of observation.<sup>15</sup> Given the national coverage of the EMNV98 it was necessary to evaluate the social projects of the Emergency Social Investment Fund (FISE - *Fondo de Inversión Social de Emergencia*). This evaluation considered a sample of FISE projects and an additional sample of 1,350 dwellings.

#### II. OBJETIVES OF THE SAMPLE DESIGN

(1) The universe (or group) of study for the sample of the EMNV98 and for the additional sample for the evaluation is the group of households in all the individual dwellings located in the territory of Nicaragua.

(2) This population of households will be interviewed with the household questionnaire and they will be contacted in the selected households for this study.

(3) The sample design for the EMNV98 is oriented to support a diversity of analysis for different areas of study and diverse groups or domains of interest.

(4) The principal domains to be distinguished in the tabulations of most important characteristics are the following:

- The Republic of Nicaragua as a whole.

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<sup>14</sup> Written by Alfredo Aliaga, Macro International, January 30, 1998. Translation of the original Spanish version.

<sup>15</sup> At the time this document was written, the time period for the collection of data was planned for three months. This was subsequently extended to four months.

- The entire urban area and the entire rural area, each one as a separate domain.
- Each of the following 7 domains defined in the country as:

Managua,  
Pacific Urban,  
Pacific Rural,  
Central Urban,  
Central Rural,  
Atlantic Urban, and  
Atlantic Rural.

The Pacific domain includes the following departamento: Chinandega, Leon, Masaya, Carazo, Granada, and Rivas. The Central domain includes: Nueva Segovia, Madriz, Esteli, Jinotega, Matagalpa, Boaco and Chontales. The Atlantic domain includes: RAAN, RAAS and Rio San Juan.

(5) The principal objective of the EMNV98 is to produce for these domains estimations of the diverse indicadores, with acceptable levels of confidence, in different areas such as a comprehensive measure of consumptions as well as indicators in the sectors of health, education and nutrition.

(6) The survey also includes a community questionnaire for the evaluation of FISE projects and the application of a household questionnaire to contrast potential beneficiaries within the area of influencia of the FISE projects against those that are not found within the given area of influence.<sup>16</sup>

### III. SAMPLE FRAMEWORK

According to the last census of population in 1995, the Republic of Nicaragua is divided in 15 departments and two autonomous regions. Each department is divided in municipios. The municipios are divided into census areas which are further divided into census segments. On average, each segment has between 50 and 60 dwellings and a census sector has on average five segments. A computerized file of the census segments from each department was constructed from this census. The census area of supervision is a territorial unit established for the ends of census control and is considered as the unit of a group of census segments, those which were considered as the normal work area for a census enumerator. The computerized file of areas and census segments within each department has been organized in such a manner to reflect the grouping of those in urban centers and the rural area according to the characterization established by INEC.

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<sup>16</sup> During the actual survey, there was no community questionnaire included. There were three facilities questionnaires (primary schools, health posts, and water and health projects) administered for the FISE evaluation in addition to the regular household survey.

The same sample framework was used for both the EMNV98 and the Demographic and Health Survey (ENDESA98 - *Encuesta de Demografía y Salud*). In this way the information from the two samples can be used together to obtain indicators of demography and health by living conditions.

It was decided to use the previously mentioned computerized file of census segments as the initial sample framework for both the ENDESA98 and the EMNV98. The principal reason is that it is possible to select an adequate number of primary sampling units (supervision units as UPMs) for the objectives of the ENDESA98, the EMNV98 and other possible surveys.

#### IV. STRATIFICATION

For the EMNV98, in addition to the explicit stratification of the census areas and the urban and rural census segments within each department, an implicit stratification of geographic ordering in a serpentine method in the areas and segments was done. The efficiency of the implicit stratification can be calculated with the effect of the sample design, that which is defined as the coefficient of standard error with the sample design considering this geographic ordering and the sample error with the simple random design within the urban or rural part of each domain of study.

#### V. MINIMUM SIZE OF THE SAMPLE FOR EACH DOMAIN

In general, the design of the sample for a survey such as the EMNV98 is stratified, by conglomerate, and can be (resumed) in two stages. The sampling error for this design has two components: the first corresponds to the variation between conglomerates (census segments) and the second to the variation of the households within the conglomerates. In general the variation between conglomerates is greater for the urban areas than in the rural areas, but the variation of the households within the selected conglomerate is less in urban areas than in rural areas. (Por lo tanto), an important factor in controlling the sampling error is to reduce the large component of variation that is the variation between conglomerates and that which is inversely proportional to the number of conglomerates (especially in urban areas).

For a type of survey like the EMNV98 it is recommended that a minimum of between 30 and 40 conglomerates be selected by domain of study for an adequate analysis of the information. Also it is well known that an increase in the number of conglomerates in the sample reduces the sampling error, but not in proportion to the increase of this number. Specifically, if the number of conglomerates is doubled, the sampling error will be reduced by only 30% of the original value.

Based on the previous considerations, in order to avoid the high costs of implementation and of compromising the quality of information, a (detenida) evaluation of these factores should be done, and it is for this that it is recommended to maintain this minimum required for the estimations per domain.

## VI. ASSIGNMENT OF THE SAMPLE

With the objective to assign the sample for the EMNV98, it is necessary to use information from the EMNV93, as an instrument of support to estimate certain parameters of the design. In this survey 4,200 individual dwellings were selected with an additional 544 dwellings (for a total of 4,744) in order to have a total of 4,455 completed household interviews. With this information and an average number of completed households per selected dwelling of 0.94, it was estimated that in order to obtain a total of approximately 4,370 completed household interviews, it would be necessary to select approximately 4,650 dwellings, i.e.  $4,650 \times 4455 / 4744$  is approximately equal to 4,370.

In ENDESA98, the total of completed interviews was distributed by departments; not proportionately by the population size but proportionately to the (ratio) squared of the population of each department in order to be able to (comply) with the required objectives of the survey in terms of following a large distribution between the largest and smallest departments, in reality this criterion was taken from a concept much more general than is to combine the importance of the department (population size) and the sampling error of the department indicator.<sup>17</sup> Given that the sample for the EMNV98 is a subsample of the ENDESA98 selected systematically with the same reason for selection, then also the subsample of the EMNV maintains the same assignment of the (ratio) squared. In the following table can be observed the following assignment of the sample of conglomerates by domain of study for the EMNV98.<sup>18</sup>

Table 1. Distribution of the expected sample and of the number of conglomerates by domain of study

| Domain of Study | Census Population 1995 | Expected Number of Households | Number of Census Segments |
|-----------------|------------------------|-------------------------------|---------------------------|
| Managua         | 1,093,760              | 550                           | 50                        |
| Pacific Urban   | 757,105                | 820                           | 73                        |
| Pacific Rural   | 616,877                | 640                           | 68                        |
| Central Urban   | 469,965                | 610                           | 54                        |
| Central Rural   | 884,281                | 970                           | 103                       |
| Atlantic Urban  | 169,551                | 340                           | 30                        |
| Atlantic Rural  | 365,560                | 440                           | 47                        |
| TOTAL           | 4,357,099              | 4,370                         | 425                       |

## VII. SELECTION OF THE SAMPLE

The sample chosen for the EMNV98 can be summarized in two stages: the first stage consists of a systematic selection of census segments with probability proportions to its size. In those selected census segments was implemented a (levantamiento) of cartographic revision and

<sup>17</sup> See Bankier, Michael D. "Power Allocations: Determining Sample Sizes for Subnational Areas." *The American Statistician*, Vol 42, No. 3, August 1988.

<sup>18</sup> The numbers of expected households were derived using different numbers of households per segment than were actually used in the final selection of the sample.

(actualization) of its dwellings that have been generated since the last population census. In the second stage of the selection, a fixed number of households within each conglomerate (12 in urban segments, 10 in rural segments) will be selected in such a manner that the same probability for each dwelling (and automatically for all households within the dwelling) within each conglomerate. Given that we have a fixed size for each conglomerate and that the assignment of the size of the sample was not proportional through its departments in the ENDESA98, the final sample for the EMNV98 is not a self-weighting through its domains of study. This this reason it is necessary to establish the corresponding weights.

For the process of selecting the census segments the following steps were followed:

- Given that the distribution of the population in Nicaragua is approximatately half urban and half rural according to the last population, the assignment of potential for the ENDESA98 and the EMNV98 maintains this same proportion for the urban and rural domains. However with this size of urban sample, the Atlantic urban domain only permitted to select 18 conglomerates, so it was decided to increase this to 30 conglomerates.
- In the EMNV98 it was calculated the number of census arease to be selected in each urban/rural domain, as the division between the number of dwellings in the sample assigned to the domain and the average of the sample of dwellings per census segment (12 in urban areas and 10 in rural areas). The total of segments to be selected in the urban domion was established to be 200 (2,400/12) segments and similarly, it was established as 225 (2,250/10) rural segments.
- In each urban/rural domain, (se mantuvo) the order of selection of the census segments in the ENDESA98.
- For the EMNV98 within each urban/rural domiion was realized a systematic selection and with equal probability of the number of census segments required for the survey, that is to say that of the a segments in the ENDESA, b census segments were selected for the EMNV98.

In each department, the corresponding probability of selection of each segment of the sample design for the EMNV98 will be expressed in the following mathematical relationship:

$$P_{li} = \left( \frac{a * m_i}{\sum_i m_i} \right) \left( \frac{b}{a} \right)$$

where:

- a : is the number of census segments selected in the ENDESA98,
- b : is the number of census segments selected in the EMNV98,
- m<sub>i</sub> : is the number of dwellings in the ith census segment according to the 1995 census,
- Sm<sub>i</sub>: is the total of households in the corresponding department according to the 1995 census,
- P<sub>1i</sub> : is the probability of selection of the ith census segment in the department.

Prior to the following stage of the selection, each census segment was (actualized) (en cuanto) to the quantity and distribution of the dwellings. Finally within the segment, will be implemented a final selection of dwellings with the corresponding list of (actualized) dwellings. With the (actualized) number of dwellings for each segment is determined the number of dwellings to be selected according to the following formulas:

$$P_{2i} = \frac{I}{I_i} = \frac{n_i}{L_i}$$

where:

- n<sub>i</sub> : is the number of dwellings (12 urban, 10 rural) selected in the ith conglomerate,
- L<sub>i</sub> : is the number of total dwellings listed in the ith conglomerate (actualized) in 1997,
- I<sub>i</sub> : is the interval of selection for the dwelling within the ith conglomerate, and
- P<sub>2ij</sub> : is the probability of the jth dwelling within the ith census segment for the EMNV98.

The final probability of the dwelling in each department being selected can be expressed as:

$$P_{ij} = P_{1i} * P_{2ij}$$

Once the total number of dwellings to be selected has been established, the actual procedures of selection of them depend is the conglomerate es located in urban or rural areas.

For each urban conglomerate, the selection will be 12 dwellings in a systematic form with an interval of selection of  $I_i = L_i / n_i$ . The first selection is made at random within the range of the interval of selection and the following selections are determined to accumulate consecutively the interval of selection.

For each rural conglomerate , the selection of the households will be done in compact groups of 10 contiguous dwellings from the list of all dwellings within the census segment according to the following procedures:

- enumerate the dwellings consecutively in the list of dwellings in the rural conglomerate.
- select a random number between 1 and L<sub>i</sub> . Let's call this number A<sub>i</sub>.
- select 10 contiguous dwellings starting with the dwelling with number A<sub>i</sub>.
- if the end of the list is reached prior to selecting 10 dwellings, restart the selection from the beginning of the list to select 10 dwellings.

Finally, all estimation will be calculated with an estimator of reason:

$$r = (\sum w_j y_j) / (\sum w_j x_j)$$

where the sum is (llevada) on all the units of analysis and  $w_j$  is the weight assigned to each unit of analysis. In general  $y_i$  is the value of the variable under consideration and  $x_j$  is the variable of content.

## VIII. PRECISION OF THE RESULTS

With a simple (muestro) in one stage (assuming a sample of segments of equal size) with an indicator estimated ( $p$ ), with a known size of total units in the universe or subuniverse ( $N$ ) and with a minimum sample size ( $n$ ), it is possible to calculate the relative error (e.r.) using the following equation:

$$e.r. = \sqrt{(1 - \frac{n}{N}) (\frac{1-p}{np})}$$

Almost with certainty can be observed in the following table that the indicators for each one of the domains of the EMNV has a level of precision sufficiently acceptable (less than 20 percent).

Also for reasons of illustration and as can be seen in the following table, the respective relative errors for each department hve been calculated. As a result of this analysis, whatever indicator estimated at the department level must present is corresponding sample error in such manner to have an idea of its relative error (sampling error/estimateor) that which permits us to observe its level of precision.

Table 2. Table of Estimated Relative Error

| Area of Study  | Number of Segments |        | Level of (prevalencia) of the indicator |        |        |        |        |
|----------------|--------------------|--------|---|--------|--------|--------|--------|
|                | Universe           | Sample |   |        |        |        |        |
|                | N                  | n      | p=0.30                                  | p=0.35 | p=0.40 | p=0.45 | p=0.50 |
| Managua        | 3,265              | 50     | 0.21                                    | 0.19   | 0.17   | 0.16   | 0.14   |
| Pacific Urban  | 2,213              | 73     | 0.18                                    | 0.16   | 0.14   | 0.13   | 0.12   |
| Pacific Rural  | 1,663              | 68     | 0.18                                    | 0.16   | 0.15   | 0.13   | 0.12   |
| Central Urban  | 1,396              | 54     | 0.20                                    | 0.18   | 0.16   | 0.15   | 0.13   |
| Central Rural  | 2,155              | 103    | 0.15                                    | 0.13   | 0.12   | 0.11   | 0.10   |
| Atlantic Urban | 511                | 30     | 0.27                                    | 0.24   | 0.22   | 0.20   | 0.18   |
| Atlantic Rural | 970                | 47     | 0.22                                    | 0.19   | 0.17   | 0.16   | 0.14   |
| Pacific Total  | 3,876              | 141    | 0.13                                    | 0.11   | 0.10   | 0.09   | 0.08   |
| Central Total  | 3,551              | 157    | 0.12                                    | 0.11   | 0.10   | 0.09   | 0.08   |
| Atlantic Total | 1,481              | 77     | 0.17                                    | 0.15   | 0.14   | 0.12   | 0.11   |
| Urban Total    | 7,042              | 200    | 0.11                                    | 0.09   | 0.09   | 0.08   | 0.07   |
| Rural Total    | 5,131              | 225    | 0.10                                    | 0.09   | 0.08   | 0.07   | 0.07   |
| Country Total  | 12,173             | 425    | 0.07                                    | 0.06   | 0.06   | 0.05   | 0.05   |
| DEPARTMENT     |                    |        |   |        |        |        |        |
| Nueva Segovia  | 397                | 20     | 0.33                                    | 0.30   | 0.27   | 0.24   | 0.22   |
| Madriz         | 282                | 17     | 0.36                                    | 0.32   | 0.29   | 0.26   | 0.24   |
| Esteli         | 536                | 21     | 0.33                                    | 0.29   | 0.26   | 0.24   | 0.21   |
| Chinandega     | 952                | 29     | 0.28                                    | 0.25   | 0.22   | 0.20   | 0.18   |
| Leon           | 968                | 29     | 0.28                                    | 0.25   | 0.22   | 0.20   | 0.18   |
| Managua        | 3,265              | 50     | 0.21                                    | 0.19   | 0.17   | 0.16   | 0.14   |
| Masaya         | 657                | 25     | 0.30                                    | 0.27   | 0.24   | 0.22   | 0.20   |
| Granada        | 444                | 19     | 0.34                                    | 0.31   | 0.27   | 0.25   | 0.22   |
| Carazo         | 453                | 20     | 0.33                                    | 0.30   | 0.27   | 0.24   | 0.22   |
| Rivas          | 402                | 19     | 0.34                                    | 0.31   | 0.27   | 0.25   | 0.22   |
| Boaco          | 366                | 19     | 0.34                                    | 0.30   | 0.27   | 0.25   | 0.22   |
| Chontales      | 429                | 19     | 0.34                                    | 0.31   | 0.27   | 0.25   | 0.22   |
| Jinotega       | 575                | 28     | 0.28                                    | 0.25   | 0.23   | 0.20   | 0.18   |
| Matagalpa      | 966                | 33     | 0.26                                    | 0.23   | 0.21   | 0.19   | 0.17   |
| RAAN           | 567                | 27     | 0.29                                    | 0.26   | 0.23   | 0.21   | 0.19   |
| RAAS           | 728                | 33     | 0.26                                    | 0.23   | 0.21   | 0.19   | 0.17   |
| Rio San Juan   | 186                | 17     | 0.35                                    | 0.32   | 0.28   | 0.26   | 0.23   |

## IX. SAMPLE FOR THE FISE EVALUATION

The principal objective of this study is an evaluation of FISE based on:

- the quality of the social infrastructure and the services provided by FISE,
- the (metas logradas) in the poor areas and the use of them by poor communities,
- the sustainability of the FISE investments, and
- the capacity of the community administration.

This evaluation considers a methodology that compares a group of FISE projects and their potential beneficiaries against a group that has not benefited from the intervention of FISE. With this objective in mind, can be found two associated components:

- a sample of FISE and non-FISE projects, and
- an additional sample of households.

### Sample of FISE Projects

The universe of FISE projects consists of four groups (subuniverses):

- Primary schools and preschools - 724 units
- Health posts - 211 units
- Water and sanitation projects - 33 units
- Latrine projects - 266 units

Each group consists of a different type of project, (de allí que) the size of the sample in each group was calculated for each group and with a determined level of relative error with indicator “p”. This indicator “p” is calculated in terms of the total number of units of analysis (number of primary schools, number of health posts, number of water and sanitation services, or number of latrine services). Some typical examples of the indicator p can be seen in the following:

- the percentage of primary schools with sanitary services for the students
- the percentage of health posts with an attached pharmacy
- the percentage of health posts with regular presence of a doctor
- the percentage of water and sanitation projects with more than 60% of households connected
- the percentage of water and sanitation projects with maintenance in the last year.

For a simple (muestreo) in one stage with an estimated indicator (p), with a known size of the total number of units in the universe or subuniverse (N) and with a required value of the relative error (r.e.), then the size of the minimum sample (n) required is calculated using the following relation:

$$r.e. = \sqrt{\left(1 - \frac{n}{N}\right) \left(\frac{1-p}{np}\right)}$$

For each of the four types of projects. Observing the following tables it was decided that a total of 89 projects would be selected: 24 primary schools, 22 health posts, 20 water projects, and 23 latrine projects. Given that it was necessary to include in the evaluation comparison groups that had not received a FISE intervention, the total number of projects would be 135: 48 primary schools (24 FISE and 24 non-FISE); 44 health posts (22 FISE and 22 non-FISE); 20 water and sanitation projects (all FISE); and 23 latrine projects (all FISE). The comparison groups for the water and

sanitation projects and latrine projects would be developed from information at the household level and would be selected from the sample of the EMNV98.

Table 3. Sample sizes for a relative error of 15%

| Relative Error<br>r.e.=0.15 or 15% | Primary Schools<br>N=724 | Health Posts<br>N=211 | Water and<br>Sanitation<br>N=33 | Latrines<br>N=266 |
|------------------------------------|--------------------------|-----------------------|---------------------------------|-------------------|
| p=0.30                             | n=91                     | n=70                  | n=27                            | n=75              |
| p=0.40                             | n=61                     | n=51                  | n=25                            | n=53              |
| p=0.50                             | n=42                     | n=37                  | n=24                            | n=38              |

Table 4. Sample sizes for a relative error of 20%

| Relative Error<br>r.e.=0.20 or 20% | Primary Schools<br>N=724 | Health Posts<br>N=211 | Water and<br>Sanitation<br>N=33 | Latrines<br>N=266 |
|------------------------------------|--------------------------|-----------------------|---------------------------------|-------------------|
| p=0.30                             | n=54                     | n=46                  | n=24                            | n=48              |
| p=0.40                             | n=36                     | n=32                  | n=22                            | n=33              |
| p=0.50                             | n=24                     | n=22                  | n=20                            | n=23              |

The decision for a minimum total of 135 projects (89 FISE and 46 non-FISE) guarantees us almost with security that which estimated indicator estimated at 0.30 or 0.40 has a relative error of 20% or (0.20); and in addition (with almost security) an indicator estimated at 0.40 or more has a relative error of 15% (or 0.15).

Considering that a single conglomerate of 10 households is sufficient for the evaluation of a determined project then the associated sample of households around the FISE and non-FISE projects must have 1,350 households selected (i.e. 135\*10). Additionally households selected for the sample of the EMNV98 are considered for the ends of comparison with the selected households as beneficiaries of FISE projects for water and sanitation and latrines.

## **APPENDIX I**

### **THE CONSUMPTION AGGREGATE FOR THE EMNV98<sup>19</sup>**

The following notes are written exclusively for the file called CONSUMO1<sup>20</sup> which was originally prepared using the SPSS software.

#### **Introduction**

This appendix includes a brief description of the variables in the file. A copy of this description is included at the end of this Appendix. The variables "I00" to "I08" correspond to the identification variables that are found in the front page of the household questionnaire. The variable to identify each household is the variable "I00". The sample drawn for the EMNV98 is significant for the following levels: the national level (all households), at the level of urban and rural households (identified by the variable "I05"), and at the level of the seven regions (identified by the variable "REGION"). Other groupings such as the department level are not significant and results based in these other groups will not be significant or reliable.

#### **Consumption Aggregate**

The variable that permits us to order households and to be able to compare their living conditions, or welfare, is "consumption" which has been adjusted for the number of members in the household and for the difference in geographic prices. This is the variable that is called "the consumption aggregate."

#### **Classifications Based in the Consumption Aggregate**

Two typical classifications based in the consumption aggregate are presented. First, the classification of poverty (the variable "POBREZA") which identifies each household as extreme poor, not extreme poor, or as not poor. One should exercise caution in the use of this variable because to obtain results about all the poor, it is necessary to include both the extreme poor and the not extreme poor. The variable that divides the total population into two groups: not poor v. all of the poor is "POBRE" where all the not poor households have a value of 0 and all the poor households (including the extreme poor) have a value of 1.

The second classification is the variable "QUINTIL" which divides all the population in five groups with an equal number of people (20% in each group). The groups are ordered from the household with the least value in the consumption aggregate (1<sup>st</sup> quintile) to the households with the highest value in the consumption aggregate (5<sup>th</sup> quintile).

#### **Adjustment Factors**

Three types of adjustment factors are included.

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<sup>19</sup> Written by Carlos Sobrado (LCSP). Translation of the original Spanish version.

<sup>20</sup> Created 17 November 1999.

## Members

The number of household members (variable MIEMBROS) permits us to transform the quantities of consumption into per capita. The variable CONSUMO is already divided by the number of members in each household.

## Differences in Geographic Prices

The variable F.GEOGRA captures the differences in prices between different areas of the country. It has been constructed to be used as a divider such that to transform any monetary variable (cordobas), divide all the values by F.GEOGRA. What happens in this process is that the monetary quantities that are reported are comparable between the different areas of the country, that is we take into account the variation of prices observed in the sample. The variable CONSUMO is already divided by the adjustment factor F.GEOGRA.

## Expansion Factors

The expansion factors<sup>21</sup> permit us to expand the sample to the entire population of Nicaragua.

The variable PESO2 is the expansion factor for households which have the consumption aggregate. The variable PESO3 is the number of household members multiplied by the expansion factor (MIEMBROS \* PESO2).

It is necessary to exercise caution with the use of these two expansion factors since they may be confusing. The key point in deciding which to use is to ask first how are the data organized: based on households or based on individuals? The data file CONSUMO1 is organized based on households and presents information by household, but other files in the EMNV98 are based on individuals, for example the files with the information on health, education, economic activity, time-use and others. The second question that we must ask is if we want to project or expand the results. The results can be expanded to the total number of people in Nicaragua or to the total number of household in Nicaragua.

Table I.1 presents a guide for when to use each one of the expansion factors. It is important to emphasize that the variable PESO3 is only used when the original file is organized based in household and we want to report results as the number of individuals.

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<sup>21</sup> The expansion factor is the inverse of the probability of selection for the sample. For example if 10 households were selected from a population of 1,000 households, the probability of selection is 1 in a hundred (0.01) and the expansion factor is  $1/0.01=100$ .

Table I.1. Guide for the Use of Expansion Factors in the EMNV98

| Organization of the Original File | Base for Reporting Results | Expansion Factor to Use |
|-----------------------------------|----------------------------|-------------------------|
| Households                        | Households                 | PESO2                   |
| Individuals                       | Individuals                | PESO2                   |
| Households                        | Individuals                | PESO3                   |

The variable CONSUMO has not been adjusted by the expansion factor. In order to obtain data at the national level, it is necessary to use the expansion factor. In SPSS, this is done by selecting the commands “Data” then “Weight Cases...” and then selecting the variable desired and include it in the box “Frequency variable”.

#### Others

Finally, it is necessary to take into account that the design of the sample permits us to report results in number of people (or households) at the level of national population and for significant groups. To report results in number of individual (or households) for sub-populations, it is necessary to refer to the population tables.

For example, if the data from the EMNV98 tell us that 70% of the children younger than 1 year old have received vaccinations, and we want to report not only the percentage, but the number of children, first we must verify the size of this group and apply the percentage. For this example, we should use the estimated population of children less than one year old in June 1998<sup>22</sup>: 171,203 and calculate 70% of that number or  $171,203 * 0.7 = 119,842$  although it is recommended to report the total in thousands. The final result would be to say that 70% of the children less than one year old had received vaccinations or that 120,000 children less than one year old had receive vaccinations.

<sup>22</sup> Source: INEC, VII Censo de Población y III de Vivienda, 1995. Estimations and projections of population from the Dirección de Estadísticas Sociodemográficas.

## ANNEX 1

Information from the file CONSUMO1. This same list can be obtained by opening the data set in SPSS and using the commands “Utilities” and then “File Info”.

### List of variables on the working file

| Name |   | Position |
|------|---|----------|
| I00  | # de formulario (identificación única)<br>Print Format: F6<br>Write Format: F6    | 1        |
| I01  | Departamento<br>Print Format: F2<br>Write Format: F2                              | 2        |
|      | Value      Label  |          |
|      | 5      Nueva Segovia  |          |
|      | 10      Jinotega  |          |
|      | 20      Madriz  |          |
|      | 25      Estelí  |          |
|      | 30      Chinandega  |          |
|      | 35      León  |          |
|      | 40      Matagalpa   |          |
|      | 50      Boaco   |          |
|      | 55      Managua   |          |
|      | 60      Masaya  |          |
|      | 65      Chontales   |          |
|      | 70      Granada   |          |
|      | 75      Carazo  |          |
|      | 80      Rivas   |          |
|      | 85      Río San Juan  |          |
|      | 91      RAAN  |          |
|      | 93      RAAS  |          |
| I04  | Segmento censal<br>Print Format: F5<br>Write Format: F5                           | 3        |
| I05  | Area<br>Print Format: F1<br>Write Format: F1                                      | 4        |
|      | Value      Label  |          |
|      | 1      Urbano   |          |
|      | 2      Rural  |          |
| I06  | Número de Vivienda<br>Print Format: F3<br>Write Format: F3<br>Missing Values: 999 | 5        |
|      | Value      Label  |          |

999 M NO RESPUESTA

I08      Hogar Número      6  
           Print Format: F1  
           Write Format: F1  
           Missing Values: 9

Value      Label

9 M NO RESPUESTA

REGION      Región significativa en la muestra      7  
           Print Format: F8.2  
           Write Format: F8.2

Value      Label

1.00      Managua  
 2.00      Pacífico Urbano  
 3.00      Pacífico Rural  
 4.00      Central Urbano  
 5.00      Central Rural  
 6.00      Atlántico Urbano  
 7.00      Atlántico Rural

MIEMBROS      # de miembros en el hogar      8  
           Print Format: F8  
           Write Format: F8

PESO2      Factor de Expansión para hogares con agreg. consumo (4,040)  
 9  
           Print Format: F8.2  
           Write Format: F8.2

PESO3      PESO2 \* MIEMBROS      10  
           Print Format: F8.2  
           Write Format: F8.2

F.GEOGRA      Factor de ajuste geográfico (a dividir)      11  
           Print Format: F8.2  
           Write Format: F8.2

CONSUMO      Consumo anual Per Cápita ajustado (/f.geogra)      12  
           Print Format: F8.2  
           Write Format: F8.2

LI.IND      Valor en C\$ de Mayo 98 de línea de pobreza EXTREMA      13  
           Print Format: F8.2  
           Write Format: F8.2

LI.POB      Valor en C\$ de Mayo 98 de línea de pobreza GENERAL      14  
           Print Format: F8.2  
           Write Format: F8.2

POBREZA      Clasificación de grupos de pobreza      15  
           Print Format: F8.2  
           Write Format: F8.2

Value      Label

|         |  |                  |    |
|---------|--|------------------|----|
|         | 1.00   | Pobre Extremo    |    |
|         | 2.00   | Pobre no extremo |    |
|         | 3.00   | No Pobre         |    |
| QUINTIL | Quintiles poblacionales basados en 'consumo' |                  | 16 |
|         | Print Format: F8.2                           |                  |    |
|         | Write Format: F8.2                           |                  |    |
| POBRE   | Pobre o no                                   |                  | 17 |
|         | Print Format: F8.2                           |                  |    |
|         | Write Format: F8.2                           |                  |    |
|         | Value  | Label            |    |
|         | .00  | No pobre         |    |
|         | 1.00   | Todos los pobres |    |