

THE NICARAGUAN LABOR FORCE SURVEYS IN FIDEG

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These labor surveys were carried out in Nicaragua from August 8, 1992, to August 8, 1998. The FIDEG Labor Force Surveys (FLFS) were carried out at the urban sector of major cities that represent over 53 percent of the total urban population. The surveys consist of household surveys that were administered in Managua, León, and Granada. The FLFS surveys were implemented by FIDEG and have been supported by the Swedish International Development Authority since 1992 (FIDEG, 1998).

Sample Design

In 1992 there was no recent census on which to depend. Thus, researchers at FIDEG had to rely on a second best solution, which was to design the sample from the voter registration lists of all persons aged 16 and older. These lists had been prepared for the elections of 1990. The compilation of voter registration lists entailed complete coverage of the voting population, particularly in the three cities that were chosen for these surveys. The data

on voters were desegregated at the level of Electoral Committees (Junta Receptoras de Votos, JRV). Here, segments of the population are grouped in blocks or houses that are shown in maps that have been elaborated for districts and neighborhoods.

Selection of Households

Using the population projections of the official government agency (INEC) for 1991 (based on the previous census and updated in 1982), statistics were used to determine the optimal sample size. The sample size was preset at 870 households. The criterion used for determining the overall sample size was to obtain a sufficient number of households for the sample to be representative at the urban level of the three cities chosen. It was also preset that out of the 870 households to be surveyed, 400 would be from Managua, 240 from León, and 230 from Granada. These numbers were chosen based on the distribution of the JRVs in those three cities. The sample size so determined permitted to obtain a ninety five percent level of confidence in the data.

FIDEG determined that in the 1992 survey there could be substitution of houses within a same block. This decision was made in case the house chosen at random

refused to cooperate or the persons to be interviewed were not present when the interview was to be conducted. There would not be substitution for the following years to guarantee that the same household would be captured in the following years.

In each of the three cities, contiguous JRVs were grouped until the desired population was reached. In this fashion, a total of six strata were formed. Once the JRV within each strata were organized, a rule of association was chosen which ensured that all JRVs had at least 220 registered voters and approximately 60 or more housing units. This assumption was based on an estimate of 3.7 people 16 years or older per housing unit.

Any JRV, which did not fulfill this requirement, was joined to the previous JRV in the list, which was contiguous and pertained to the same strata. FIDEG's sample of households came out after a total of 89 JRVs had been randomly chosen.

The selected JRV were updated in the field, both in terms of mapping as well as the enumeration of the housing units and other buildings that they contained. Within each enumeration area (JRV or group of them) in the sample, 10 housing units were selected randomly for the survey in two compact clusters of five housing units each.

The Persons Interviewed

Three alternatives were allowed concerning answering the interview: the head of the family; the spouse or the companion to the head of the family; or, if those individuals were not available, the adult in the house that claimed to know as much as possible of the family. The experience of collecting the surveys through the seven consecutive years provided some evidence that at least 50 percent of the respondents through the whole period were the heads of the family, 25 percent were spouses; the difference were adults that responded because they knew as much as possible about the particular family.

Important Caveats to Keep in Mind

The FLFS surveys have been done in seven consecutive years. The more years included the higher the risk of having attrition of families that drop out of the survey for various reasons.

In these surveys, 385 out of the original 870 families have always been the same for the seven years of FIDEG's panel. Of the original 870 families, 316 additional cases have been the same for at least four years. Only 169 cases of the original families surveyed had to be completely dropped and could not be followed.

While the above is an important consideration to keep in mind, it is also true that since the house units included in the 870 cases are the same for the most part, they are linked to the strata where they are located. Thus, it is reasonable to assume that given the relatively similar demographic, educational, and income characteristics of the family substituted, it is still valid to continue using the total sample size of 870 families as if they were all the same in the seven years of the analysis.

An additional caveat in these surveys is that while the family may be the same, the number of people within the family varies from one year to another, as the family size changes. Family size changes either because new members are born or come to live with the family, or because other members may leave or pass away. This complicates the handling of more than 34,255 observations collected in the period from 1992 to 1998. For this reason in most of the analysis of the data for this study, the head of the family was used as the major subject of analysis.

Additional caveats to bear in mind here are that part of the migration module in the survey, housing condition module and consumption module were only administered in the 1992 and 1998 surveys.

Sampling Weights

The weights were only determined at the beginning of the panel; for all subsequent years the weights were held constant. The determination of such weights was set with the help of the municipal governments of each city. They have a very precise way to stratify the population of their cities and it was following their advice that the stratification levels were determined. The weights applied in each case are presented in Table 1 below.

Table 1

Sampling Weights as Percentage of Total Population Surveyed
(measured in percents)

Strata	Managua	Leon	Granada
Very-Very Low	23.5	13.8	5.4
Low	36.5	6.1	32.6
Medium-Low	31.9	30.9	42.4
Medium	3.9	45.0	10.6
Medium-High	2.5	4.2	8.9
High	1.7	0.0	0.0

Variables Collected

The household questionnaire covered a broad range of topics, for which 89 questions were asked to the individual interviewed. The outline of the topics covered is provided

in Figure 2 below. Each item in Figure 2 is explained following the figure.

- 1.) Household Roster
- 2.) Education
- 3.) Employment
- 4.) Migration
- 5.) Health
- 6.) Living Conditions
- 7.) Housing Conditions
- 8.) Consumption
- 9.) Personal Opinion of the Person Interviewed

Figure 2. Household Questionnaire

Household Roster

In this module, basic demographic information is collected on people in the household and a determination is made of whether or not an individual is a member of the household. Data for this section are collected for all people in the housing unit. Based on this data, individuals can be classified whether they are household members and their relation to the head of the family.

Education

There are four main areas of this section: basic literacy attainment; present registration in school and reasons for not registering; attendance and reasons for not attending; and educational level. This section is always administered to all household members age six and above, even if this information is repeated year after year for the same individuals.

Employment

This section consists of four subsections. These subsections are listed below.

- 1.) Activities of Household Members. This section identifies the activities of household members in the seven days before the interview. This is to determine if people were employed, unemployed (seeking work), or inactive. This section is administered to all household members age six and above.
- 2.) Principal Job in Previous 7 Days. In this section, information is collected on economic activity; sector and occupation; months, days, and hours worked; income (including all additional benefits in cash or in-kind); savings

that the worker had after paying all of his (her) home expenditures; number of workers in the enterprise where he (she) works; duration of employment; type of enterprise; and the presence of insurance, retirement support or other complements to the worker's income. This section was administered to all household members age six and above who were classified as employed in the previous section.

3.) Secondary Job in Previous Seven Days. In this section, information is collected economic activity, sector and occupation, income (including all additional benefits in cash or in-kind). This section was administered to all household members age six and above who indicated that they held a secondary job in the previous section.

4.) Unemployment and Underemployment. The data here concern any search for supplementary or substitute jobs, length of search for work, length of time without work, description of the previous job, size and type of enterprise where the household member used to work, income perceived by the person even if he (she) was not

working, and a description of that income. This section was administered to all household members age six and above who were classified as unemployed or underemployed.

Migration

This part has data on the place of birth of each household member, place where the household member was living two years earlier, and reasons for each individual member moving. A second part is administered to the family as a unit. In this part, the data refer to whether the family has lost any members due to migration, as well as the destination, and the reasons for moving.

Health

In this section, data are recorded on illness in the last 12 months prior to the interview, use of medical facilities and personnel, and their appraisal of the quality of the service, hospitalization, medication, community services, their use by the family, and reasons for using them or not using them. The section is administered to the household as a unit.

Living Conditions

In this module, data were collected on the family's self appraisal of its living conditions in the last twelve months. The intent of this section is to identify and tackle such conditions. The section is administered to the household as a unit.

Housing

In this module, data were collected on the type of construction, size, and legal situation of the housing unit, access to water, energy, sanitary conditions, type of fueling used to cook, and type of layout of the household unit. This module was administered to the head of household or his or her spouse.

Consumption

This module is aimed at gathering data primarily on food consumption for the seven days before the interview. Data collected include whether certain basic staples in the Nicaraguan meal have been consumed and in what quantity for the family, and whether the quantities consumed are the same, less, or more than what used to be consumed four months before the interview.

Personal Opinion of the Person Interviewed

This module was designed to collect data on the opinion of the head of household about whether the institutional and structural adjustment reform during the last 12 months prior to the interview have affected the family in any way.