





↑ Teobaldo de Jesús Betancourt lives with his wife Maria Teresa Álvarez and their three kids: Augusto, Yeira and Jhefferson, in Montería (Córdoba).

CHAPTER 1

ELCA'S SAMPLE AND FIELD OPERATION

The estimated sample of ELCA is 10,800 households, 6,000 urban households and 4,800 rural households. This is a representative sample of urban areas and four rural micro regions in Colombia. The field operation took place during the first semester of 2010. The sample, instruments and field operation are described in this chapter.

1.1. ELCA'S SAMPLE

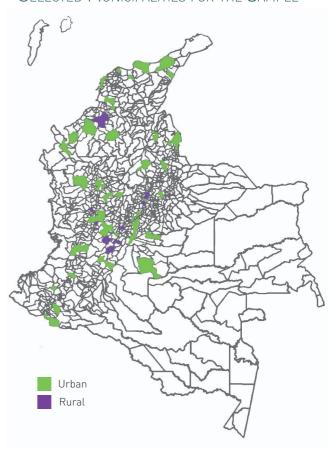
→ The urban area study is comprised of single unit households belonging to socioeconomic levels 1 through 4, living in five regions of the country: Bogotá, Central, Eastern, Atlantic and Pacific (excluding the Pacific corridor). The rural sample is comprised of small productive households (mostly socioeconomic level 1) located in four micro regions located in the Mid Atlantic, Cundinamarca and Boyacá, the Coffee Region and East Central regions. These regions were chosen according to the following characteristics: their economic growth, production, poverty and living conditions.

The estimated sample size was determined at 1,200 households in each urban region or rural sub-region, for a total of 6,000 urban households and 4,800 rural households. The cluster sample design is probabilistic, stratified, multi-staged and clustered. The

first step was the selection of the municipalities in each of the urban and rural samples. Within each of these samples, blocks or districts were respectively selected, and finally the set of households to be interviewed was chosen. Map 1 indicates the urban and rural sampling distribution for the country's municipalities (48 and 17 municipalities respectively).

Due to the longitudinal nature of this survey, tracking all household members over time is costly and complex, given the fact that they grow up and create new households. Therefore, the longitudinal survey will only monitor the household's head, his/her spouse, and the children and grandchildren of at least one of them. The survey allows us to build the complete composition of the household in which each monitored member lives, during each moment in time when they are observed.

Map 1.
Selected Municipalities for the Sample



1.2. Instruments

In order to gather the necessary information according to ELCA objectives, three types of instruments were defined:

- Household questionnaire¹.
- Community context questionnaire².
- Instrument for taking anthropometric measurements (weight and size) in children under 5, and verbal skill tests for children between the ages of 3 and 9.

The household questionnaire, which is made up of 272 questions for the urban area and 364 for the rural area, gathers information on the composition of the household, demographic characteristics of all members, detailed information on the head of household, spouse and children under 10, regarding education, health, employment, income, social and community participation, and household information on adverse events, assets, savings, debt, transfers, and living and housing conditions. This is the first time this type of information is gathered in Colombia at a household level. The rural questionnaire includes issues on land possession and usage, agricultural and livestock and non-agricultural and livestock produc-

tion, and a reconstruction of the use of time, with the purpose of obtaining a more appropriate measurement of rural employment than that currently used in traditional household surveys.

The community questionnaire is made up of 28 questions in the urban area and 57 in the rural area, and gathers information on institutional supply, infrastructure and public services, adverse events and conflict, and social capital. The rural community questionnaire also includes issues on markets, land conflict, and insertion into agricultural and livestock rural markets. Complementarity between the community and the household questionnaires is significantly important for understanding several dynamics of household economics.

The measurement test instrument for children between the ages of 0 and 9 includes the Peabody Picture Vocabulary Test (PPVT) for children between the ages of 3 and 9, and weight and size measurements for all children between the ages of 0 and 4. Qualified personnel, mainly psychologists, implemented this questionnaire. This is the first time that the practice of verbal testing has such wide geographical coverage.

1.3. FIELD OPERATIONS

The first round of data gathering, or baseline, for ELCA took place between the 25th of February and the 4th of July 2010. The operation was directly handled by CEDE and the Deparment of Economics of Universidad de los Andes. For this purpose, a Field Director was appointed and 12 work groups established, made up of a supervisor, four surveyors and one psychologist or professional with a similar background, for a total of 72 persons in the field. Data gathering was directly input into computers, making data collection more efficient and qualitatively better.

A total of 10,168 surveys was completed: 5,448 urban and 4,720 rural, resulting in 91% coverage in urban areas and 98% in rural areas. Table 1.1 depicts the operation's results by area and region. Bogotá was the region with least coverage (81%), mainly because many households belonging to the fourth socioeconomic level (the highest one included in ELCA) refused to participate in the survey. The remaining urban regions obtained a response level above 90%. The response level in rural areas was high (no less than 94%), where the East Central sub region showed the least coverage, although the response level obtained is within the expected range.

^{1.} This questionnaire may be consulted in the ELCA webpage: http://encuestalongitudinal.uniandes.edu.co

^{2.} This questionnaire may be consulted in the ELCA webpage: http://encuestalongitudinal.uniandes.edu.co



TABLE 1.1.

SAMPLE SIZE: HOUSEHOLD SURVEYS BY AREA AND REGION

Urban Sample Rural Sample Coverage 1,200 1,200 1,126 93.8% Mid Atlantic 1,180 98.3% Atlantic Eastern 1.200 1,081 90.1% Cundiboyacense 1,200 1.203 100.3% 1,200 1,200 1,164 97.0% 1,209 Central Coffee Region 100.8% Pacific 1,200 1,101 91.8% East Central 1,200 1,128 94.0% 1.200 976 81.3% Bogotá Total 6,000 5,448 90.8% Total 4,800 4.720 98.3%

Source: Own calculations based on ELCA.

Regarding community questionnaires, a total of 779 were applied of which 557 were in urban areas and 222 in rural areas, as indicated in Table 1.2.

TABLE 1.2.

COMMUNITY SURVEYS

BY AREA AND REGION

Urban Sample		Rural Sample		
Region	Completed surveys	Region	Completed Surveys	
Atlantic	112	Mid Atlantic	57	
Eastern	109	Cundiboya- cense	48	
Central	114	Coffee Region	58	
Pacific	110	East Central	59	
Bogotá	112			
Total	557	Total	222	

Source: Own calculations based on ELCA.

Of the 10,168 households, which completed the surveys, children under the age of 10 were found in around half of the households (5,254), for a total of 8,437 children under the age of 10. Anthropometric measurements were applied to 4,050 children under the age of 5 (99.1% of children) and PPVT tests applied to 5,965 children between the ages of 3 and 9 (98.4% of children) as shown in Table 1.3. This relatively high coverage is explained by the household's interest in obtaining information on the nutritional conditions and verbal development of their children. Standardized and personalized test results for each child are sent to each household and, when needed, as indicated by the results, they are accompanied by a recommendation that the household member visits the corresponding health or educational institution.

Table 1.3.

Anthropometric Measurements for Children and PPVT Tests by Area and Region

Urban Sample								
Region	Total households	Households with children	Total children aged 0 to 9	Children per household	Children aged 0 to 4	Children with anthropometric measurements	Children aged 3 to 9	Children with PPVT
Atlantic	1,126	651	1,140	1.01	552	550	815	803
Eastern	1,081	555	825	0.76	406	401	569	562
Central	1,164	497	703	0.60	375	374	492	487
Pacific	1,101	525	777	0.71	376	367	556	550
Bogotá	976	458	669	0.69	341	331	465	456
Total	5,448	2,686	4,114	0.76	2,050	2,023	2,897	2,858
Muestra rural								
Region	Total households	Households with children	Total children aged 0 to 9	Children per household	Children aged 0 to 4	Children with anthropometric measurements	Children aged 3 to 9	Children with PPVT
Mid Atlantic	1,180	664	1,220	1.03	596	595	875	860
Cundiboyacense	1,203	676	1,095	0.91	510	507	800	789
Coffee Region	1,209	630	934	0.77	423	422	692	689
East Central	1,128	598	1,074	0.95	506	503	793	769
Total	4,720	2,568	4,323	0.92	2,035	2,027	3,160	3,107
National Total	10,168	5,254	8,437	0.83	4,085	4,050	6,057	5,965

Source: Own calculations based on ELCA.

Finally, the field operation in rural areas registered 5,857 land plots properties of which 5,599 are owned by the household, 209 are rented or otherwise held, and 49 were sold by households during the 12 months prior to ELCA, as indicated by Table 1.4.



↑Brayan Daniel Gómez Morales (striped shirt) talks with a friend in the driveway. Armenia (Quindío).

TABLE 1.4.

LAND PLOTS BY RURAL REGIONS: OWNED, RENTED* OR SOLD

Region	Own property	Rented property*	Sold property	Total land plots
Mid Atlantic	1,332	71	14	1,417
Cundiboyacense	1,727	56	15	1,798
Coffee Region	943	32	10	985
East Central	1,597	50	10	1,657
Total	5,599	209	49	5,857

^{*}Land plots offered for rent, sharecropping, lease, pawn or antichresis

Source: Own calculations based on ELCA.