

10 Mexico

Census Microdata: 1960, 1970, 1990 and 1995

Cecilia Rabell

Introduction

The first national census was conducted in Mexico in 1895. Decennial censuses of the population have been carried out in years ending in zero for every decade since 1900 except the 1920s, when a census was conducted in 1921. Standardization of the census schedule, enumeration procedures and the publication of tables began with the 1930 census.

Computerization of the census began in the 1960s, when the first microdata sample was drawn. With the 1970 census, computerization was completed. For that census the entire data processing operation from key-punching to the production of tables was accomplished by computer. The devastating 1985 earthquake destroyed much of the infrastructure of the National Statistical Office (INEGI) in Mexico City, including all extant copies of 1980 census microdata for some major administrative districts. The Agency and several thousand employees were relocated to Aguascalientes, hundreds of kilometers from the national capital. Despite these problems, the 1990 enumeration occurred without serious obstacles. This census was the first to commercialize microdata. A one percent anonymized sample of

Dr. Cecilia Rabell is a researcher in the Population Department at the Institute of Social Research, Mexican National Autonomous University. She is also Chair of the Population M.A. Program at the Latin American Faculty of Social Sciences. She has published on the historical demography of New Spain as well as on current demographic issues, especially Mexican children's schooling and labor during the second half of the twentieth century.

households from the 1990 census is available for purchase (approximately \$1,000). To increase use of its products by researchers, and as an experiment, INEGI granted to members of the Mexican Society of Demographers (SOMEDE) copies of all of its machine-readable statistical data, including census microdata, free upon request through the Society.

In 1995, the first micro-census was conducted, and a microdata sample became available on CD-ROM within one year of enumeration day. The 1995 micro-census was a simple population count, but a detailed questionnaire was administered to approximately four percent of all households. The 2000 census was conducted as planned in March of that year. There are elaborate plans to commercialize products from this enumeration, including making census microdata samples available for purchase.

Source Material

The 1960 Census

In 1965, a 1.5% sample containing 502,702 person records was drawn by the official statistical office, coded and keyed on computer punch cards. It was a systematic sample of individuals, not families or households. Copies were provided to the Colegio de México and the United Nations Demographic Center for Latin America (CELADE).

The 1970 Census

A 1% sample with 480,265 person records was made. It is a systematic sample based on households. It is possible to analyze individuals in their family and household contexts, thanks to a household identification code. The original microdata tapes for the entire census were lost during the 1985 earthquake.

The 1980 Census

Computerized data for this census is incomplete due to the 1985 earthquake. Of 32 federal entities, three are lost, three

are damaged, and a part of the Federal District data is also missing. There is no known sample. This census is rarely used; even government agencies frequently give information based on 1970 or 1990 figures. The main problems with this census appear to be:

1. Previous cartographic work was non-existent or incomplete (for example, in Mexico City);
2. There was a very high proportion of non-response (as high as 30 percent in some questions, such as those related to fertility);
3. Figures were replaced by “corrected” figures (projections based on the 1970 data).

The 1990 Census

The dataset is complete in digitized form and the National Statistical Institute (INEGI) is willing to provide special samples upon request. A one-percent sample is available for purchase, containing 802,774 person records, organized in households. GIS software can be used, because localities have geographical coordinates but a high proportion of localities cannot be traced for because of mistakes in coordinates or because localities have incomplete or repeated names.

1995 Micro-Census

The complete dataset is available in digitized form. A very short form was administered to the entire population (91 million inhabitants and 19.4 million households), and a long form (or survey) was administered to a sample of approximately 80,000 households. The anonymized microdata from the long form are also available for purchase.

Procedural History

Mexican microdata census samples date from the 1960s. Due to the destruction and disorganization of INEGI’s archives caused by the 1985 earthquake, the most complete, readily accessible documentation on the 1960 and 1970 samples is available from CELADE in Santiago, Chile. An example of the scope and depth of CELADE’s documentation holdings for

Mexico is cited elsewhere in this volume. The National Population Commission (CONAPO) and several university research centers in Mexico have also compiled considerable documentation on these early samples, but their holdings are not readily accessible to others. For the 1990 and 1995 microdata, thorough documentation is provided on CD-ROMs distributed by INEGI.

Variable Availability

Mexican census enumeration forms contain a battery of questions designed to elicit social, demographic, and economic information in considerable profusion. The census microdata faithfully reflect the original enumeration forms. Housing information requested varies from census-to-census, but usually consists of some twenty questions (Table 10-1). Standard questions on type of dwelling, ownership and the number of occupants is supplemented in the early censuses by questions on the consumption of meat, bread, eggs and milk. For later years, these questions, which were designed to reveal insights on the social development of the population, were replaced by more standard questions on dwelling construction materials, access to services and the like.

Personal characteristics in Mexican census microdata are reported in Table 10-2. Here, again, there is much variation among censuses, but a set of core variables remain remarkably constant over time. The marital status question is particularly intriguing because it takes into account three types of marital union—informal, civil, religious, or civil and religious combined.

Confidentiality Provisions

All Mexican census microdata are thoroughly anonymized. While individuals in 1960 and 1970 census microdata are identified by municipality, documentation for the municipal codes is difficult to obtain. The 1990 data are identified only by federal entity. With 32 entities and a population of 90 million persons, identifying individuals in these microdata would pose a substantial challenge.

Table 10–1. Mexican Census Variable Availability, 1960-1990: Place and Housing Characteristics

Variable	1960	1970	1980	1990
Federal Entity of residence	X	X		X
Municipality	X	X		.
Locality (coded by size)	X	X		X
Greater metro area		X		X
Housing characteristics				
Type of dwelling		X		X
Walls	X	X		X
Roofs		X		X
Floors		X		X
Number of rooms	X	X		X
Kitchen		X		X
Cook-stove				X
Indoor bathroom		X		X
Waste disposal				X
Water	X	X		X
Sewage	X	X		X
Electricity		X		X
Fuel	X	X		X
Ownership	X	X		X
Number of Persons	X	X		X
Number of Families		X		X
Type of Household		X		X
TV/Radio	X	X		
Meat (consumed last week)	X	X		
Eggs (same)	X	X		
Milk (same)	X	X		
Bread (same)	X	X		

Table 10–2. Mexican Census Variable Availability, 1960-1990: Personal Characteristics

Variable	1960	1970	1980	1990
Relationship to head (<i>jefe</i>)	X	X		X
Sex	X	X		X
Age	X	X		X
Marital status	X	X		X
Migration:				
Place of birth	X	X		X
Length of residence	X	X		
Previous residence (federal entity)	X	X		X
Language/Ethnicity/Social condition:				
Native language	X	X		X
Spanish language	X	X		X
Dress (wears shoes)	X			
Religion	X	X		X
Education:				
Literate	X	X		X
Level of education attained	X	X		X
Number of years studied	X	X		X
Currently enrolled	X	X		X
Pre-school				X
Technical school primary				X
Technical school secondary				X
Professional field				X
Fertility:				
Number of children everborn		X		X
Number of live born children	X			X
Number of surviving children				X

Table 10–2. Mexican Census Variable Availability, 1960-1990:
Personal Characteristics (continued)

Variable	1960	1970	1980	1990
Economic status, employment:				
Economically active	X	X		X
Main occupation	X	X		X
Position in occupation	X	X		X
Sector	X	X		X
Monthly salary	X	X		X
Number of weeks unemployed	X			
Looking for work	X	X		
Number of months worked last year		X		
Hours worked last week				X
Ever worked	X			

Data Access

Access to the 1960 and 1970 census microdata requires permission from the National Statistical Agency, INEGI. Now that the 1990 and 1995 data are commercialized, it is expected that the earlier microdata would become more freely available, since they are as thoroughly anonymized as the commercialized data. Mexican census microdata are available as ASCII text files.

Data Expansion

The IPUMS-International project has signed an agreement with the Mexican Statistical Institute, INEGI, to integrate all the available census microdata of Mexico, including 1960, 1970, 1990, 1995, and 2000. There is a possibility of drawing higher density samples for those censuses where the original data tapes still exist.

Further Information

For further information on the Mexican census and data available from it, see: Centro Latinoamericano de Demografía. *Banco de Datos, Boletín Informativo*. Santiago, Chile: 1969-1985.