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DEMOGRAPHIC INFORMATION FROM VITAL REGISTRATION OFFICES IN MEXICO, 1982

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FOREWORD

Until the establishment of the General Direction of National Register of Population and Personal Identification, civil registration was carried out in México by the different States which operated autonomously as in any Federated State. The lack of a central agency with powers to direct or coordinate the activities of the various States made it difficult to secure improvements in the system.

The expressed national need for a population register and personal identification system created an almost instant demand for complete and accurate vital records as a basis for updating the system. The new agency faced the immediate task of understanding the present registration organization and mechanism, and evaluating the major features of the system and procedures. Uniform procedures and formats were introduced. Mechanisms were introduced to coordinate the system. Intensive and comprehensive training courses were conducted. The rapidity with which all these reforms were introduced is unique in the annals of civil registration and vital statistics.

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DEMOGRAPHIC INFORMATION FROM
VITAL REGISTRATION OFFICES IN MEXICO, 1982

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A. PRESENT INFORMATION NEEDS

The development program requires accurate and timely information for use in the economic and social planning of this country. The knowledge of the various aspects of population becomes specially important in order to attain an adequate level of life in a society of justice and, at the same time, an equitable land distribution.

Demographic policies require information mainly related to population growth and the various characteristics of the population and its geographical distribution. Once the policies and the desired goals are established, a continuous monitoring of results is required by programs so that modification of various components may be made in case of any deviation.

At the present time, all progressive governments give special attention to demographic planning, as they are aware that development is made by and for men. Facing this perspective, it is not possible to avoid the need of having effective information sources to support organizations in charge of planning programs.

In México, the Government has formulated a demographic policy, inserting in its legal frame a General Population Law. Its main objective being the regulation of phenomena affecting population in their numbers, structure, dynamism, and distribution throughout the country, in order to obtain a fair and equal participation of all the benefits to be obtained from the economical and social development. Therefore, all decision makers have to know how demographic variables that determine population growth, birth rates, mortality, and migration have evolved; and, consequently, how other variables such as education, employment, and housing, interact with them.

It is important to mention that in México, from 1900 to 1950, in 50 years, the population has increased from 13.6 to 25.8 million inhabitants. This doubling of the population was repeated only 20 years later, from 1950 to 1970; with a population growth that went from 25.8 to 50.7 million; and it is estimated that population will be doubled in 30 years, from 1970 to the year 2000, if demographic policy goals are achieved.

B. ALTERNATIVE SOURCES FOR OBTAINING INFORMATION

The production of demographic information has three different information sources: a) Population Census, b) Sample Surveys, and c) Administrative Registers. Each source in the National Information System has a specific and complementary purpose.

Demographic information with its origin in Vital Registration Offices is of major importance, because it completes the census information and allows its

actualization each year. Therefore, theoretically, if we add to the population of a determined year the births and subtract the deaths occurred during that same year, we will obtain next year's population, allowing that no migration movements will occur.

Within the information system, major importance is given to the information from Vital Registration Offices because:

It is obtained as a by-product of an essential register in civil life. That means that its capture cost is limited.

It is a continuous source, which means that with a fast processing system, information can be obtained at any time of the year.

Vital statistics are not prevalent, but incidence data. They are statistics that supply a measure of certain facts of an event occurring in a determined period of time in a continuous way. Experience has demonstrated that civil registration is the only sure method to obtain a continuous and actual data on phenomena that occur at a point in time; this fact points out the importance of immediately registering events after they take place.

C. INFORMATION SITUATION UNTIL 1980

The demographic information that the user has traditionally received presents a series of deficiencies which limits its use in different ways. Referring to conceptual coverage, México deplores the lack of analytical variables for fertility or mortality research, such as, information related to education and occupation. Data on the size of the place of residence are important in order to differentiate behavior among urban-rural environments. At the present time, certain variables concerning births needed by health officials such as birth weight, genetic background of the mother, place and person assisting during the childbirth, are still not available. In some way, these data are scattered in health units, and in special research surveys, but they have not been systematized, nor integrated in the national information system.

One problem is the timeliness of the statistics. At the present time, we have information up to 1978. This delay is the result of the slow process which starts with manual transcription to statistics that are sent to the Dirección General de Estadísticas (Central Statistical Office) in México City. There, they are codified and electronically processed. This procedure is not as efficient as desired in terms of time and quality.

There are also problems with respect to the lack of quality of the information. In the basic items, several kinds of omissions have been detected, such as: death certificates without the sex variable, estimates of up to 5 percent; 23 percent lacked information on civil state and 40 percent did not have information on the place of usual residence.

From a quantitative point of view, omission in death registers have been detected, especially on infant mortality. It is thought that deaths of children less than a year old are also omitted in the birth registers. The latter is also affected due to delayed birth registration.

The estimation of these phenomena has been done in the following way: since 1973, birth registers have been processed taking into account the year of

occurrence of the birth. It was found that in 1973, 38.6 percent of the births registered in that year actually occurred in some previous year. These proportions were 37.3 percent in 1974, 33.3 percent, 34.2 percent and 30.0 percent in the years subsequent to 1974. With such a high proportion of births comprised of events occurring in previous years, it is not possible to infer in a trustworthy way the fertility behavior of the population in any data year.

It is very possible that infants that die soon after birth are not registered as live births or infant deaths. Usually, this omission is found among the scattered population that cannot go to a Vital Registration Office because they live too far away from it, or because they cannot afford the cost of registration.

With regard to death statistics, there may be serious problems of under-registrations. The very low recorded mortality rates among persons at different ages leads us to think that systematic omissions of deaths must exist.

Vital statistics have also been affected by the lack of control and use of multiple criteria in the registration process; for example, when there is a death, the certificates, primary source of the register, is often filled out without full knowledge of the required information, sometimes because the doctor or the person who issues the document does not have the basic information or the person making the declaration is not the proper one.

Until 1980, definitions and technical specifications on babies that died after birth, and born dead, in the State Civil Code were not uniform; some States recognize in their legislation as being born alive any person who lives 24 hours or who is presented alive in the Registration Offices, which does not satisfy demographic and health criteria that have been internationally agreed upon.

The appraisal of the above-mentioned circumstances in the Registration Offices has lead us to consider its effect on the basic indicators. Under-estimation of the child mortality rate is calculated at 33.4 percent from 1942 to 1946, tending to reduce through time, because in 1976, the under-estimation average is 14.7 percent. In regard to adult mortality, it is also expected to be under-estimated, although the exact amount is not known.

Referring to births, there is an estimated omission of 4 percent which is not significant in terms of birth rate estimation. However, it is highly important in relation to mortality rates which are very sensitive to changes.

Analysis is seriously affected by additional deficiencies presented on information of birth registers; birth registers are presented by the year in which the registration takes place, instead of presenting them by the birth year; also, the mother's age is given as the age at the time of registration instead of the age at the time of birth. Both circumstances change the fertility structure and general birth levels. Therefore, it is not possible to follow fertility behavior in an accurate way. Distribution of fertility rates are seriously biased due to the fact that delayed registration is increasing. Five percent of the births that occurred in 1951 were registered in subsequent years; in 1976, the out-of-time registration rate was 34 percent. This may indicate an increasing awareness of the need for registration, but this fact seriously limits the usefulness of continuous registers for planning purposes.

D. NATIONAL SYSTEM OF POPULATION REGISTERS

The Dirección General del Registro Nacional de Población e Identificación Personal (General Direction of National Register of Population and Personal Identification), which is part of the Secretaria de Gobernación (Ministry of the Interior), is the institution responsible for organizing the National System of Population Register, its main objective being the knowledge of human resources in the country in order to support the formulation and evaluation of the Public Administration programs on demographic matters.

For the integration of the system, two strategies were defined: the first one, incorporates the existing population when the operation begins; and the other, incorporates future population.

First, it was decided to use the existing population records for the present population, in order to start the integration of the Information System, and gradually include different population sectors that are registered.

The register was initiated with the group of employees working in central federal public offices (approximately 1,500,000 workers). The Information System of Federal Government Personnel was integrated with this information.

For future population, defined as any person whose birth has been registered in the State records after January of 1982, it was decided to incorporate them through Vital Registration Offices throughout the country. With this purpose in mind, the following studies on Vital Registration Offices were made in order to become familiar with their organization and performance.

1. Research on historical, judicial, and doctrinaire background of Vital Registration Offices in México City.
2. Research on Comparative Rights of legal dispositions existing in each Federal Entity on Vital Registers matters.
3. Basic survey of Vital Registration Offices which, by means of a questionnaire carried out in all Vital Registration Offices, a diagnosis on their organization and administrative performance could be made.
4. Analysis on operative methods and formats used during 1981 for registers in the different entities, as well as analysis of communication channels established between Vital Registration Offices and Federal Offices entitled to them.

Results obtained from these activities made it possible to gain knowledge of the problems existing in the Institution, and made it possible to design a program to up-date the registration procedures.

The Vital Registration Offices Modernization Program in México is integrated by three main proposals:

- Legislative Pattern on Vital Registration Offices matters.
- Administrative patterns for Vital Registration Offices.
- Standard formats for Vital State events registers.

This program's main objective is to establish, at the national level, legal basis, organization and homogeneous formats which will allow all population in the country to receive the same kind of treatment according to national development.

In México, the registers' performance is of local competence; therefore, in order to carry out the modifications proposed and to initiate the application of the new registration procedures starting on 1982, it was necessary to reach a coordination agreement between the Federal Government and the Local Governments.

For the introduction of the operative stage, an extensive training program for Vital Registration Offices' personnel was designed and carried out. This program covered the most important historical background of the National Institution and general information about its performance, objectives, and organization, up to the level of specific knowledge of the new and exclusive formats to register the events at the Vital Registration Offices.

Several local courses were conducted throughout the country with the support of audiovisual and written material; all employees at the National Institution were adequately prepared to carry out the change in the way they performed their work. This training stage took place during the last months of 1981.

When the program's operation was properly started, a mechanism which made possible the permanent evaluation of the works of the Vital Registration Offices was established; with this purpose, approximately 800 visits were made to different offices in all the country, facing personally the operational difficulties that arose with the new procedures.

It is important to mention that the training as well as the follow-up and evaluation programs are performed permanently, due to the great importance in a whole modernization process, as it is in the Mexican case.

E. ACTIVITIES THAT IMPROVE DEMOGRAPHIC INFORMATION IN VITAL REGISTRATION OFFICES.

In order to perform adequately these activities in coordination with local governments, a National Council of Officers of Vital Registration Offices was created (one member per State, and representatives from the Presidencia de la República (President's Office) and Secretaría de Gobernación (Ministry of the Interior)). This Council meets every year to exchange experiences and to find solutions to common problems related to the Institution. This Council, after dividing the country in five regions, elects one representative for each region. Together, these five representatives form the Permanent Committee. This is a work-group devoted to develop the necessary activities in order to fulfill the recommendations received in each National Meeting; this committee issues a bi-monthly publication which is distributed to all Vital Registration Offices in the country and it contains general information about the Institution.

The specific activities that have been undertaken for the optimization of activities of Vital Registration Offices could be placed in the following frame:

1. To improve quality. This action is efficiently carried out with several measures, such as:
 - a) Homogeneity in the formats of certificates, not only by allowing

the compilation of the same information in all the country, but also by decreasing information omissions.

b) Coordination with the Secretaría de Salubridad y Asistencia (Ministry of Public Health) and the Dirección General de Estadística (Statistics Office) for the adoption of uniform certificates of death, fetal death, and live birth to promote their utilization in order to obtain several advantages (at present, they are approved but not in use), such as:

- 1) Useful and necessary information can be obtained to design activities in charge of public health systems.
- 2) The person who is responsible for the information compilation has more possibilities to obtain it correctly, than the Officer of Vital Registration Offices due to his educational level and mainly because he obtains the necessary information about pathologic states that cause death, or about "any life signal that could have existed after the body is separated from the mother."
- 3) The utilization of these certificates will help to improve the registers' opportunity, at least in those live births and fetal deaths that occur at health institutions.
- 4) The use of these certificates as source documents in the elaboration of vital statistics will avoid transcription mistakes.
- 5) In elaborating the statistical information, the term "born alive" will be easier to use in terms of recommendations from the World Health Organization.
- 6) It will allow availability of information on fundamental variables for sanitary evaluation and program, such as: birth weight, prenatal attention to the mother, and death causes.

c) The adoption of a Legislative pattern in all the country, which is now contemplating concepts that were previously avoided, and which gives uniformity to all entities, and provides obligatory features to procedures toward the Vital Registration Offices' modernization.

d) The new state administrative organization encourages communication among States, municipalities and the Federation, and, in this way, administrative problems and conceptual doubts are better and more frequently discussed.

e) The continuous training program given to employees and officers of Vital Registration Offices, which encourages the personnel in charge of the registers to widely understand their task, making them aware of the serious implications that an incorrectly filled-out certificate has. This program is planned to be a continuous one, with orientation directed to specific training areas.

- f) The evaluation project, which by means of monthly indicators obtained on quality in the filling-out of certificates, amount, out-of-time birth registers, omissions on information, among others, will supply important elements required by the State Units of Vital Registration Offices, for the development of structures that will improve the registers' quality and organization.
2. After identifying demographic indicators which the Population National Registration will be able to supply, particularly those coming from Vital Registration Offices, statistical appendix for improving conceptual coverage, which include the following information, were designed:
- a) For births: Birth order, type of birth, type of parents' union, scholarship and position at work. From 1982, children born alive, surviving children, and children living in the parents' house.
 - b) For deaths: Medical assistance, scholarship, and position at work.
 - c) For marriages and divorces: Scholarship and position at work of the couple.

Besides quantifying vital facts, this information will encourage research on "typification" of demographic behavior of population, according to these variables.

3. Two strategies are developed for the increase of geographical coverage:
- a) The installation of mobile units in 13 States out of 32, which represents one of the most efficient activities regarding the registration of vital events without the need to create offices in all the country's corners, which frequently cannot fulfill their task due to communication problems.

As an advantage, mobile units can coordinate activities with other institutions related to education, public health, and statistics. Also, we should consider as an advantage the fact that mobile units can follow population in their demographic behavior.

- b) The program also contemplates activities toward the possibility of obtaining copies of birth and death records as a free service. In this way, a great coverage would be encouraged and the registration proceedings would be improved. This proposal presented by the Permanent Committee is normally established in 14 States.
4. In order to obtain timely information of vital events, the Dirección General del Registro Nacional de Población (General Direction of National Register of Population) has formed a technical and human infrastructure capable of processing information with the required celerity. At this moment, we have some reports available with registers of 1982.

Up to now, we have obtained from the first stage:

- a) Special facilities for documents processing, which include reception and deliver areas, document selection office, documents files

and information codification, with capacity for the management of 15 thousand documents per work duty.

b) A center for information retrieval which includes 126 working stations, with capacity for the transcription of 12 thousand birth registers or certificate documents per work duty.

c) A center for information processing with a modern computational system for the processing of all daily transactions and to have a data bank in devices that will be available for 15 million registers.

d) A development center with special equipment for the personnel training and the development of information systems.

e) A center for the manufacturing of personal identification cards with 20 video terminals and printers directly connected to the data bank, and two lines for the cards' manufacture, in order to produce four thousand units per work duty.

The already undertaken and above-mentioned activities will surely represent a great improvement on information from Vital Registration Offices. At the present time, we are performing a critical evaluation process on this information, which will help us define their present state.

In summary, the Mexican Vital Registration System strengthens to do a better job in its function of giving legal basis to the population, and being a fundamental source for statistical information on vital events.

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