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## IMPROVING CIVIL REGISTRATION SYSTEMS IN DEVELOPING COUNTRIES

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### FOREWORD

All of the developed countries have long-established and effective civil registration systems. The design and organization of these systems vary greatly among the countries, but they all serve the general legal purpose of establishing the individual documentation regarding births, deaths and other vital events, and also serve the general statistical purposes of forming the documentary basis for the computation of the essential demographic variables of the birth rate, the death rate and variations of these rates according to various geographic, social and economic, and demographic factors.

Many developing countries have also created vital registration and statistics systems that serve these purposes, but in other developing countries, although almost universally established by law, the systems have serious deficiencies.

This article is an attempt to describe briefly the present status of these systems in developing countries, to identify the main obstacles to improvement, and to group these obstacles into those that are difficult to overcome and those that can be eliminated more easily.

An earlier version of this paper was prepared for presentation at the International Population Conference organized by the International Union for the Scientific Study of Population held in Manila in December 1981.

## IMPROVING VITAL REGISTRATION SYSTEMS IN DEVELOPING COUNTRIES

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### A. PRESENT STATUS OF REGISTRATION SYSTEMS IN DEVELOPING COUNTRIES

Reliable vital statistics are a major element of any national demographic data collection and analysis program and are universally recognized as such. Adequate vital statistics, in the traditional sense, are derived from a civil registration system and the individual documents that it produces. In view of the importance of vital statistics and an understanding of the general problems of the improving of the underlying civil registration systems, progress has been steady and pervasive, but nevertheless quite slow.

National registration systems have existed in some countries for decades, even centuries, and it can be noted that in contrast to *ad hoc* censuses or surveys, most countries have adopted legislation establishing continuous, permanent and compulsory civil registration systems. The strong legal basis for civil registration systems exists because registration is primarily regarded as a legal rather than as a statistical function, and its history on this basis goes back to the early 17th century, and in more fragmentary and special purposes forms to perhaps a thousand or more years before that.

Internationally, the questions involved have historically also received much attention. As early as 1853, the International Statistical Congresses began considering questions related to vital statistics, which were also matters of early interest to the International Statistical Institute when it was created in 1885, the Health Division of the League of Nations, and, immediately upon its creation, of the United Nations. In its over 30 years of work in this field, the UN has carried on many significant activities--development of principles for vital statistics systems, publication of operating manuals, numerous recommendations by Commissions and Councils, and a continuing sequence of seminars, conferences, and training sessions. Some bilateral and regional agencies have also been very active.

In just the past three years, there have been at least six large international or regional conferences organized by the UN or bilateral agencies related exclusively to civil registration and vital statistics. In all, these conferences were attended by delegations from more than 60 countries. All of these conferences were called to consider the status of civil registration in the respective regional areas and the means of achieving improvement. The effect of these conferences and other social developments means that there is greater awareness of the need for good civil registration than ever before. The United Nations has adopted over 90 formal resolutions relating explicitly or implicitly to civil registration and vital statistics. These resolutions are in addition to numerous recommendations by UN and World Health Organization Commissions and Committees. Recently, at its 21st Session in January 1981, the UN Statistical Commission endorsed an extensive and continuing UN program for the improvement of civil registration. The resolutions relate registration and vital statistics to

economic development, social development, and public administration. In addition, the two Human Rights Covenants, ratified in 1976, explicitly and implicitly recognize civil registration as an essential process in establishing some of these rights.

As is expressed in the numerous UN resolutions and recommendations, the documents derived from civil registration are essential as a basis for the measurement of population change and evaluating the success of population programs; as a basis for health statistics; as a basis for social studies, and as a basis for establishing the individual civil rights of children, women and men.

Even with this recognition of the importance of civil registration and vital statistics, there are numerous problems in the achievement of improvements. Some of these problems relate to geography, transportation, literacy of the population, and organization and management matters related to literally thousands of local government employees scattered throughout a country that have responsibility for some aspects of the process. The problems are difficult, but the experience of some countries in each part of the world shows that adequate results can be obtained at least in some aspects.

Some problems arise from the fact that the responsible officials at the national level may be located in any one or more of several ministries--Interior, Justice, Health, Economics, the Supreme Court, etc. As a heterogeneous group, they have been largely outside the mainstream of international activity and may only accidentally learn of new developments in other countries in law, organizational ideas, new operating technology or even of the relevant UN resolutions.

An analysis of the completeness with which vital events are registered can be based on the percentage of births and deaths that get registered currently. Such information may be fragmentary as well as subject to deficiencies in method of derivation. The United Nations *Demographic Yearbook* contains by far the most comprehensive and reliable available information on this question.

The 1975, the 1969, and the 1959 United Nations *Demographic Yearbooks* in which natality statistics were the featured subject, completeness codes for births in the less developed countries were assembled for the latest available year in the natality trend tables.

Among the 91 countries with indices of completeness, 50 are said to have 90 percent or better completeness at the present time, while 41 show the "incomplete" code. For the rest of the countries (71), the quality was reported as "unknown". These data show that the quality of birth statistics remains less than satisfactory, especially in Africa, Asia and Oceania.

With such a long history and with so much national and international attention given to civil registration systems, it is appropriate to ask why such systems in many developing countries are still considered inadequate.

Part of the problem arises because civil registration systems serve two completely disparate sets of purposes, and, therefore, two sets of criteria of adequacy are applied with perhaps an overly harsh judgment of whether the system is serving either purpose usefully. The expectation that the system should produce 100 percent error-proof records is a criterion not usually applied to other statistical systems. The UN *Demographic Yearbook* systematically applies to national civil registration data a designation of "complete" or "incomplete"--

dividing the data on this basis at an estimated 90 percent completeness level. Such an evaluation is not applied to census results, although it is certain that some finished census operations have an incompleteness of more than 10 percent, and a considerable number of censuses have an incompleteness of 100 percent because they are never finished at all. For sample surveys, the situation is even worse. Some of the best surveys give estimates of sampling error, but few if any can give real estimates of bias in or completeness of the different variables, although such errors can run to very high percentages indeed.

One of the purposes of a civil registration system is to provide a documentary source for vital statistics. For this purpose, it would, of course, be ideal to have a nationwide 100 percent count of events and complete coverage for all important variables. Lacking this, however, the data are not necessarily valueless. Analytical methods for using incomplete data, sample registration schemes, selective tabulation area procedures, etc. can and have produced usable information for demographic purposes and for social and economic planning.

The other primary purpose of a civil registration system is to produce documentary proof essential for individual juridical uses. However, here again a too harsh criteria of adequacy of the system should not be applied. If a segment of the national population lives outside the usual national social and economic culture, a need for immediate registration may not exist. If, for example, the first use of a child's birth certificate is to establish age for school entrance, little harm is done if registration is delayed beyond the first year. The legal record has value for proving identity, age, citizenship, filiation, marital status and so forth, primarily in the settled, largely urban populations, while rural, nomadic and tribal populations may have little need for such proof. To bring them into the mainstream would be contingent on social change that may not be imminent in many countries. Still, in such countries, the registration system may be more or less adequately serving one or both of the purposes for which it exists.

## B. OBSTACLES TO IMPROVEMENT

Irrespective of the caveats above, it must be recognized that the obstacles to improving a civil registration system in a developing country are difficult problems most of which require a long-term effort to solve. In developed countries, the civil registration systems have been improved by decades of effort and may even now still have serious defects.

To list and classify these obstacles to improvements, the International Institute for Vital Registration and Statistics (IIVRS) sought the opinion of its national members who are responsible for civil registration or vital statistics in the developing countries that are represented in the Institute, associates from 32 countries responded with expositions of the problems that they faced. These respondents are officials in countries representing every continent of the world. Responses ranged from "no problems exist" to detailed statements on the barriers that were currently being encountered in trying to develop reliable civil registration records and vital statistics.

As would be the case with any widespread governmental operation, numerous obstacles were reported which must be overcome to increase the efficiency of the system. These obstacles can be arranged and classified in many different ways and, of course, they overlap and interrelate so that most could be considered in more than one category. However, another way to consider the difficulties is

according to what is necessary or how resistant or susceptible the problems are to solution. From this point of view, the problems might be considered in three broad groups: 1) relatively intractable problems relating to geography and culture, 2) problems solvable but requiring additional national or outside technical assistance funds, and 3) solvable problems.

1. Relatively intractable problems. This group of problems presents a number of obstacles, many of which can be solved within the framework of long-range social and economic development, but can hardly be solved by short-range actions taken within the civil registration system itself. In other words, the solutions lie outside the scope of changes that the registration system itself can bring about. Some of this group of problems relate to the geography of the country and an uneven distribution of the population. Here, problems of transportation and communication vastly complicate the operation of an efficient civil registration system.

Closely related to this, is the nature of the population. A predominately rural, largely illiterate population is not conducive to a high degree of registration completeness or accuracy. A population of this type may lack any motivation for registration, may fail to comply with the laws or even be aware of them, or may delay reporting the occurrence of a vital event. In extreme cases, there may exist a resistance to registration, and falsification of reported information.

As stated, the impact of these conditions may be ameliorated as social and economic conditions improve, but their solution is hardly within the domain of the civil registration system alone.

2. Problems solvable but requiring additional national or outside technical assistance funds. There is a long list of problems whose solution is primarily a matter of adequate funds. This list includes adequate staff, proper training, availability and distribution of essential forms and supplies, transport for supervisory or training staff, office space, modern record storage, document reproduction equipment, data processing facilities, printing facilities, and so forth.

In contrast to the "relatively intractable problems," most obstacles in this category could rather quickly be eliminated if adequate funds were available. It is difficult to estimate national expenditures for civil registration because the process is so intertwined with other regular governmental operations, but the lack of funds in national budgets for specific registration needs is certainly an almost universal impediment to the improvement of the national civil registration systems.

Internationally, civil registration and vital statistics are recognized as major components of a required national demographic data system. However, the amount of international technical aid resources that have been directed at registration improvement has been trivial compared to the very large international investment for improving population censuses and demographic surveys.

3. Solvable problems. This group of problems presents obstacles that can be solved within the national domain and with relatively small financial requirements. They include the adequacy of legislation, the nature of the civil registration organization, the methods of coordination of the different elements of the system and the priority given to the whole enterprise by the government. This is not to say that these problems are necessarily easy to solve. There are conflicting legal interests, there are questions of competing jurisdictional

control, and there are other governmental programs claiming higher priority status. However, there is nothing inherent in the problems themselves that makes them insoluble.

In reference to legislation, there are very few countries lacking national or provincial laws requiring the registration of vital events. Many of these, however, may be deficient in specific detail, such as, failure to make registration compulsory, impractical time requirements for registration and other operational points.

Perhaps the most important legal deficiency is the failure to provide a central registration authority that can direct or coordinate the registration function throughout the entire country and monitor or supervise its operation. This and related questions of organizational arrangements are certainly the most crucial problems of registration that are susceptible to solution.

In considering the organizational status of civil registration and vital statistics systems throughout the world, the question should be examined from two points of view: 1) what is the effect of the organizational differences between countries, and 2) what is the nature and effect of the allocation of responsibilities within a country.

With reference to the differences between countries, of course, the efficiency of a system in one country does not depend on how the system may be organized in another country. Nevertheless, at the international level, a major difficulty is the heterogeneity of the patterns of national agencies responsible for vital registration and vital statistics among the countries of the world. In a few countries, the responsibility rests with Health Ministries; in other countries, the responsibility for both registration and statistics rests with a special central national agency such as the Registrar General's Office. In other countries, the registration function may rest with the Ministry of Interior (as a local government function) or with some other governmental entity, and the statistical aspect may be the responsibility of a Central Statistical Office.

A study of 135 countries shows the following distribution of national responsibilities for administering or monitoring civil registration and for compilation of vital statistics:

Responsibility for Administering or Monitoring Civil Registration

	<u>Countries</u>
National Office of Registration	60
National Health Office	14
National Statistical Office	11
No responsible national office	<u>50</u>
	135

Responsibility for Compilation of Vital Statistics

National Office of Registration	12
National Statistical Office	106
National Health Office	<u>17</u>
	135

The heterogeneous character of the national organizational patterns has tended to inhibit the evolution of widely accepted international organizational models for vital registration systems. General-purpose national statistical

offices are also not organized on a uniform basis, but such organizations do have a much more uniform pattern of organization and function, which has facilitated the development of internationally standardized concepts and principles. The heterogeneity of national vital registration agencies is also an obstacle to the international dissemination and interchange of technical information on new methods and the application of improved techniques. There is no international intergovernmental agency which serves as a forum where the varied group of national official statisticians, health officials, judicial officials, and other national officials responsible for local government can intercommunicate about registration systems. The national heterogeneity of organizational responsibility is reflected also in dispersed responsibility among the various units of the United Nations structure and this has retarded development of the recommended UN programs for the establishment of uniform vital registration systems.

Important also from the standpoint of improving vital statistics in a country is the frequent dispersal of responsibility for different components of the chain of functions involved with the registration systems to different agencies within the same national government.

TABLE 1

Civil registration and vital statistics: Responsibilities of national agencies

National responsibility for compiling vital statistics	National responsibility for civil registration				
	Total	Central registration office	Central health office	Central statistical office	No central responsibility
Central registration office	12	12	-	-	-
Central health office	17	5	10	-	2
Central statistical office	106	43	4	11	48
Total	135	60	14	11	50

Table 1 shows this mixed pattern for 135 countries. For example, in the 135 countries studied, the responsibility for the vital statistics compilation is with the Central Statistical Office in 106 cases; yet, of these, the Central Statistical Office has responsibility for civil registration in only 11 countries. Looking at the table from another axis, national responsibility for civil registration rests with a national Central Registration Office in 60 instances, but of these the Central Registration Office is responsible for statistical compilation in only 12 instances. All in all, in only 33 of the 135 countries reported in Table 1 is the responsibility for both registration and compilation in the same national agency. An even more serious problem is that apparently in 50 of the 135 countries there exists no national agency with a clear responsibility for monitoring or improving civil registration. In many of these cases, local registration may be a function of local civil administrative or judicial offices. In such cases, there may be a national ministry that has nominal jurisdiction over



registration, but this administrative jurisdiction may be molded into, in an almost unidentifiable way, with numerous other aspects of local administrative work.

An additional complicating organizational factor is that although many countries are constitutionally organized as geographic unitary national entities, other countries are federations of states or provinces. The distribution of powers between the national government and the provincial governments with regard to registration may vary widely. In some cases, registration may be the exclusive domain of the provinces, whereas, in others there may be some defined or undefined federal government responsibility.

In terms of possible ease of improving the systems for registration and vital statistics, the national political organizational patterns may be roughly grouped into several classes:

- 1) Geographically unitary countries
  - a) One agency responsible at national level
  - b) Multi-agency responsibility at national level
- 2) Geographically federated countries
  - a) One agency responsible at national level
  - b) Multi-agency responsibility at national level.

The case of a geographically federated country with multi-agency responsibility at the national level can present a complex of jurisdictional gaps and overlappings which can hardly be solved easily, but at least can be improved by various forms of coordination.

#### C. HIGHER PRIORITY FOR IMPROVING SYSTEMS

In view of the number and variety of problems to be solved in creating an efficient registration system, it should be obvious that no simple answers will be found. Taking an *ad hoc* survey or even taking a national census are finite, bounded projects. Improving a registration system, in contrast, is more analogous to creating a whole nationwide continuous local governmental operation. It is boundless not only in time but in the manner that it is intertwined with numerous other governmental functions.

Undoubtedly, numerous steps can and are being taken to improve registration and many make-shift interim improvements can be made. However, real progress can be made only when governments are prepared to make the basic policy decision that adequate registration and vital statistics are essential for national well being and economic and social progress.

The lack of a high priority status among top governmental officials for vital records and statistics is one of the most important obstacles blocking improvement. To help impress officials with the real need for vital records and statistics, the IIVRS has prepared two technical reports. The first of these, published in March 1980, explored the relationship of human rights and registration of vital events. The study showed that registration of births and registration of marriages are themselves human rights for which the signatory States are obligated to provide. It also singles out 23 human rights whose realization depends partly on the civil registration of birth, death, marriage or divorce

having taken place. In fact, the contribution of the birth record to the implementation of human rights is almost unique in its widespread application, making it by far the most important document issued by the registrar.

The second IIVRS study in this area deals with the use of vital statistics as social indicators. This study demonstrates the essential role of vital statistics in measuring accurately changes that are taking place in population composition, levels and trends.

Indicators, in part, based on vital statistics have had a significant international history. They found an important place in the first (1954) international catalogue of components of levels of living. They are also included in the recent reference work on social indicators: *Social Indicators: Preliminary Guidelines and Illustrative Series*, approved by the UN Statistical Commission at its 19th Session in 1976. Not less than 36 indicators were described by the commission as useful for detecting incipient social problems as well as monitoring recognized ones, establishing scales in terms of which targets for better levels of living can be set, and highlighting certain interrelationships among the various dimensions of well being. Without exception, the 36 indicators derived from vital statistics are described as being concerned with measuring changes in population, family formation and stability, and the state of health of the population. These uses put vital statistics very high on the list of essential statistics and should serve to stimulate their development and improvement in all countries of the world.

Demographers recognize the need for accurate vital statistics for demographic analysis purposes, but the material also has a broader indirect application in that demographic trends have a profound impact on all phases of economic and social development.

The lack of a vital statistics system capable of producing even crude birth and death rates in a large number of developing countries, and the efforts of these countries to plan for and provide maximum support for development programs in the absence of such crucial data, emphasizes the need for these countries to continue to be assisted in developing and improving their conventional civil registration and vital statistics system to the level where the resulting data can be used to formulate basic social and economic policy and programs and also to evaluate results.

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