

ACTIONS FOR THE IMPROVEMENT OF CIVIL REGISTRATION AND VITAL STATISTICS¹

International Institute for Vital Registration and Statistics

General Statement of Problem

The purpose of this document is to present the needs for an adequate national system of civil registration and vital statistics; the various problems and impediments to the development of such a system; and how these difficulties might be overcome by actions that might be taken nationally and internationally. Special reference will be made to steps that can be taken to accelerate the process of providing vital statistics for national planning of economic and social development.

The United Nations has adopted numerous resolutions concerning civil registration and vital statistics. These formal resolutions are in addition to the technical recommendations made by various international commissions and committees. 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.

The United Nations program for the World Population Year 1974 recognized the importance of civil registration in the following words: "It is essential that the lack of demographic statistics in a large part of the world be overcome—and vital registration systems be introduced in all countries of the world." This recognition reflects the previous action of the Economic and Social Council of the United Nations which, in 1968, requested the Secretary-General to undertake a *World Programme for the Improvement of Vital Statistics*, convinced that such a program would assist developing countries to provide the statistical base for planning the development and use of human resources as well as for charting economic and social development, and providing a constant measurement of progress towards the objectives of the Second United Nations Development Decade. The United Nations *World Population Plan of Action* stated further that "in line with the objectives of the *World Programme for the Improvement of Vital Statistics*, countries are encouraged to establish and improve their vital registration system, as a long-term objective, and to enact laws relevant to the improvement of vital registration...."

Virtually all countries have adopted permanent legislation providing for compulsory and continuous registration of vital events. However, the quality of the systems varies from excellent to very poor. All of the developed countries have efficient systems. Some countries considered to be in the "developing" category have systems that are adequate. The systems of a number of other countries are on the verge of becoming adequate for certain purposes. Other newer countries are at the beginning stages. Despite all the resolutions and specific recommendations for the improvement of civil registration and vital statistics, progress has been slow in the implementation of recommendations in the developing countries.

One reason for the seeming lack of progress is that not all the major barriers to improvement can be easily or quickly removed. For example, because of difficult terrain and the lack of roads and transportation, the local registration office may be virtually inaccessible to a large part of the population in these areas. There is little that the civil registration authorities can do to establish a communications network, and it may take years of economic development before a

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transportation system becomes a reality. On the other hand, it may be possible to organize now a mobile system to bring the registration authority closer to the public to be served.

The case for action to improve civil registration and vital statistics rests not only on the great need for the specific type of data produced by this system, but also on the fact that it can be demonstrated that effective progress can be made and the cost-effectiveness considerations are favorable. The cost-effectiveness considerations take account of the fact that in almost every country registration laws exist, and the basic infrastructure and the costs for a national network for registration are already largely in place through the local government structure. Reliable estimates of present expenditures of developing country governments for vital registration are elusive, but the current aggregate certainly runs into the tens or hundreds of millions of dollar equivalents per year.

Although national registration systems have existed in some countries for decades, even centuries, the matter is by no means static, especially in developing countries. Many of those countries are in the process of formulating new legislation, new organizational arrangements, and new administrative procedures to obtain improvements in the existing systems. However, it is essential that the activities be directed at basic problems amenable to solution now or in a foreseeable future. Also, the program emphasis should be on ways and means of producing vital statistics for the country as soon as possible.

Parallel to these national activities is a wide range of international activities which, in view of the planning need for accurate vital statistics, are designed to encourage and assist countries in their efforts to improve their systems. In its over 30 years of work in this field, the United Nations 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 quite active.

The United Nations Fund for Population Activities (UNFPA),² in view of the need for birth and death rates—national, regional and global—as an index to population change, has supported many efforts by countries to improve their civil registration and vital statistics systems.

In the past several years, there have been at least six major international or regional conferences organized by the United Nations or bilateral agencies related exclusively to civil registration and vital statistics. In all, delegations from more than 60 countries attended these conferences. All of these conferences were called to consider the status of civil registration in the respective areas and the means of achieving improvement. These conferences suggest that there is greater awareness of the need for good civil registration than ever before. It is essential that these interests be channeled into the most effective pathways for producing national vital statistics.

With such a long history of civil registration, and with so much national and international attention given to civil registration and vital statistics systems, it is appropriate to ask why such systems are still considered incomplete and inadequate in many countries. An analysis will be made of the problems, and the respective roles of the national, regional and international agencies in solving these problems will be examined. This will be followed by recommendations for a coordinated program for the improvement of civil registration and vital statistics.

²Editor's note: Now the United Nations Population Fund (UNFPA).

Analysis of the Problem

A comprehensive survey of problems in civil registration and vital statistics would involve a detailed review of civil registration laws and regulations, the administrative organization of the civil registration and vital statistics systems, the relationship between civil registration and vital statistics agencies, the civil registration and vital statistics processes and practices, as well as the different socioeconomic and cultural factors that constitute impediments to the registration of vital events. However, the efficiency of a national system may be summarized by one measure, the completeness of registration of the various vital events. This criterion for adequacy of national systems will be discussed. The major obstacles to the improvement of civil registration and vital statistics will then be presented.

Criteria for adequacy of national systems

One measure of the adequacy of national systems is the completeness with which vital events are currently registered. Unfortunately, there is now no way of measuring precisely the completeness of registration of vital events in developing countries. What are available, for the most part, are the evaluations of the registration authorities in the different countries with respect to registration completeness of births and deaths that occur in the country. The United Nations *Demographic Yearbook* contains such estimates of registration completeness.

From the 1975, the 1969, and the 1959 *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. The 50 countries with complete registration are distributed by continent as follows: Africa, 8; Latin America, 28; Asia, 8; and Oceania, 6. These data show that the quality of birth statistics remains less than satisfactory, especially in Africa, Asia and Oceania.

The measure of the percentage of births that may be registered is an oversimplification of a full evaluation of the adequacy or efficiency of a national system. This situation arises because civil registration systems serve two completely disparate sets of purposes. Therefore, a single simple criterion of adequacy may give 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 internationally to other statistical systems. For example, such evaluation is not applied to published 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 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. Sophisticated analytical methods for incomplete data, sample registration schemes, selective tabulation area procedures, and so forth, 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 criterion of adequacy of

the system is not meaningful. If a segment of the national population lives outside the usual national social and economic culture, an immediate need for registration may not exist; and 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 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 of the purposes for which it exists at the present level of demand for individual documentation.

Major obstacles to registration improvement

To ascertain the nature of obstacles to the development of a good registration system, the International Institute for Vital Registration and Statistics sought the opinions of its national members responsible for civil registration or vital statistics in the less developed countries represented in the Institute. Members from 32 countries responded with exposition of over 100 problems that they perceived.

The more than 100 barriers to achievement of complete registration of births and deaths and reliable vital statistics were concerned with well-defined elements of the civil registration and vital statistics systems.

Analysis of the stated obstacles revealed that, in addition to the lack of funds, which appears to be an almost universal problem, seven other problems were considered by the respondents to be of outstanding importance. These were (1) failure to provide by law for an autonomous, central registration authority, (2) failure to make registration compulsory, (3) lack of appreciation among high-level governmental officials of the need for vital records and vital statistics, (4) lack of registration services in remote areas of the country, (5) delayed (late) registration, (6) lack of qualified staff and (7) lack of motivation among the public to register. Of these, the lack of an autonomous central registration authority, the lack of appreciation among officials of the need for vital records and statistics, and failure to motivate the public to register have the greatest impact in developing countries.

The various obstacles to registration improvement may be classified in other ways. One useful way of considering the problems and difficulties is in accordance with 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 increased funds and (3) solvable problems.

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. Also, there will be problems in communication in any additional effort to improve registration.

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.

Problems solvable but requiring 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.

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 coordinating 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.

There is another class of impediments to national efforts for improvement. It relates to the fact that there is high priority to the current programs of family planning and health improvement at both the international level and the national level. The demand is for immediate results and for immediate statistical data that identify the health and demographic problems and measure the short-range impact of action programs.

Since the improvement of civil registration and vital statistics programs requires, because of the nature of the obstacles mentioned above, a long-range and sustained plan of action, there is a reluctance to invest in a long-range plan for the future. A frantic search is undertaken for short-range and immediate substitutes for conventional vital statistics. These short-range and immediate substitutes are in no sense adequate for the needs, so there is a retreat to the use of what might be called "intuitive thinking" and planning. This is an unfortunate result because the basic demographic and health problems are not likely to disappear in the near future, and soundly based planning is required.

Difficulties arising from the heterogeneity of patterns of national organizations

A special problem arises in dealing with issues of civil registration at the international level because of the varying patterns of national organizations for civil registration and vital statistics in the different 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 a registrar general's office. In other countries, the registration function may rest with the ministry of interior (as a local government function) or the ministry of justice (as a judicial function) or with some other governmental entity, and the statistical aspect may be the responsibility of a central statistical office.

As a heterogeneous group, the responsible national officials have been largely outside the mainstream of international activity in this field and may only accidentally learn of new developments in other countries in law, organizational ideas, new operating technology or even of the relevant international recommendations and technical assistance programs.

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

	Countries
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

	Countries
National office of registration	12
National health office	17
National statistical office	<u>106</u>
	135

The heterogeneous character of the national organizational patterns has tended to inhibit the evolution of widely accepted international principles for the organization of vital registration systems. General purpose national statistical offices are also not organized on a standard basis, but such organizations do have a much more uniform pattern of organization that 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 that serves as a forum where the varied group of national official statisticians, health officials, judicial officials and national officials responsible for local government can intercommunicate about registration systems. The heterogeneity of organizational responsibility is reflected also in dispersed responsibility among the various units of the United Nations structure, and this has retarded acceptance of the recommended United Nations programs for the establishment of uniform vital registration systems.

More important 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.

Civil registration and vital statistics: Responsibilities of national agencies

National responsibility for compiling vital statistics	Total	National responsibility for civil registration			
		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

Source: Nora P. Powell, Organizational Arrangements for a Vital Registration System, Working Papers, No. 1, International Institute for Vital Registration and Statistics, Chapel Hill, N.C., 1977.

The table above shows this mixed pattern. In the 135 countries studied, the responsibility for 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 registration office in 60 instances, but of these the central registration office is responsible for statistical compilations in only 12 countries. All in all, in only 33 of the 135 countries is the responsibility for both registration and compilation of vital statistics 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, in an almost unidentifiable way, into numerous other aspects of local administrative work.

An additional complicating organizational factor is that although many countries are constitutionally organized as 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. Therefore, the problems of the civil registration and vital statistics systems will differ depending on the form of the national political organization.

The civil registration and vital statistics pattern in the unitary and federated countries may be summarized as follows:

Unitary countries

- One national agency responsible for both civil registration and vital statistics
- Multiagency responsibility at the national level

Federated countries

- No national agency responsible for civil registration, but a national agency responsible for vital statistics
- One national agency responsible for both civil registration and vital statistics
- Multiagency responsibility at the national level

The unitary countries with a single national agency responsible for both civil registration and vital statistics should have the minimum organizational problem of coordination between civil registration and vital statistics. Where the civil registration and vital statistics functions are being carried out in two different national agencies, there is need for coordination of the activities of these two agencies. The day-to-day operations require prompt delivery of statistical information of acceptable completeness and quality from the civil registration to the vital statistics agency. On a longer-range basis, there needs to be a working relationship to establish national definitions of the items on the vital records and periodic revisions of the vital record forms. Because changes in registration practices will have an impact on vital statistics, there needs to be full agreement on the changes before modifications in registration procedures are introduced.

The establishment and maintenance of a working relationship for the coordination of civil registration and vital statistics are difficult enough in countries with a centralized government. The difficulties are multiplied in the federated countries where the responsibilities are decentralized to the different states or provinces. In these countries, the role of the federal government is to coordinate and unify the activities of the autonomous states or provinces. In countries like the United States and India, the national government recommends for adoption by the states model legislation and regulations on civil registration and standard forms for the registration of vital events. The implementation of federal recommendations and the organization and administration of the civil registration system are in the hands of the independent state or provincial governments. The case of a federated country can present a complex of jurisdictional gaps that can hardly be solved, but it is possible to improve the operation of the civil registration system through various means of coordination and collaboration.

International Activities

In spite of the many international activities to assist in the improvement of national civil registration and vital statistics systems, the major difficulty at the international level is, as stated above, the heterogeneity of the national agencies responsible for civil registration and vital statistics. As has been detailed, in a few countries, the responsibility rests with the health ministry; 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 be the responsibility of the ministry of interior or the ministry of justice, and the statistical aspect may be the responsibility of a central statistical office. There are also other more unique patterns. This factor of national variation is reflected in the dispersed responsibility among the various intergovernmental agencies, since each agency naturally relates primarily to its own national clientele.

Intergovernmental agencies

International agencies may be classified into two major groups—intergovernmental agencies in which the members are national governments themselves, and nongovernmental international agencies in which the members are not governments but individuals in their own private capacities.

There are numerous intergovernmental agencies, certainly more than several hundred. Some are global in scope, some are regional. Some have general terms of reference, others are specific and limited. Only a few have responsibilities that relate in any way to civil registration and vital statistics. Most important from this viewpoint is, of course, the United Nations and its principal permanent secretariat, and its vast system of councils, regional offices, permanent commissions, special fund organizations, and so on, and some 18 specialized and related agencies each of which has its own organizational pattern of secretariats, regional offices, commissions and committees.

Most important of all these organizations with concern for civil registration and vital statistics are the Statistical Commission, the Statistical Office, the Population Commission and the Population Division, of the United Nations Secretariat; the UNFPA; and, among the United Nations specialized agencies, the World Health Organization (WHO).

The U.N. Statistical Office, since 1948, has published an annual *Demographic Yearbook* that gives vital statistics data for all parts of the world. In addition, it has prepared important documentation including the *Principles of a Vital Statistics System*, two editions of the *Handbook of Vital Statistics* and many other relevant documents. The third revision of the *Handbook* is in preparation.

The U.N. Statistical Commission and the U.N. Economic and Social Council to which it reports, have adopted numerous policy and technical resolutions and recommendations relating to registration and vital statistics. Unfortunately, adequate funds to implement these recommendations have not always been available, although the UNFPA has given substantial support to data collection matters, including the improvement of civil registration and vital statistics.

The WHO publishes the *World Health Statistics Annual*. Volume I of this series is devoted to vital statistics and causes of death. The WHO also issues the *World Health Statistics Quarterly*, which presents analytical studies contributed by distinguished scientists to highlight mortality trends and differentials. To promote international uniformity of statistics, the WHO has been conducting the preparatory work for the decennial revisions of the *International Classification of Diseases* and calling decennial conferences for the adoption of the revised disease classifications. The WHO also recommends for international adoption the medical certificate form and rules for selection of diseases for primary mortality tabulations, as well as definitions of live birth, fetal death and low birth weight.

Aside from the United Nations and agencies related to it, a few other international agencies have carried on work to promote the improvement of civil registration and vital statistics. Most notable of these is the Inter-American Children's Institute headquartered in Uruguay. The Inter-

American Children's Institute is not a unit of the United Nations system but a specialized agency of the Organization of American States, having as its members, with a few exceptions, all of the North and South American countries.

Because of its interest in the welfare of children, the Inter-American Children's Institute for more than three decades has actively supported the improvement of civil registration as a necessary process to establish the legal status and family connection of children. Similarly, because of its interest in child and maternal health, the Institute has supported efforts to improve vital statistics.

As stated, these interests go back at least three decades during which period the Institute made and published a number of studies of the status of civil registration in the American states. More recently, under a grant from the UNFPA, the Institute has conducted a vigorous program of national systems evaluation, technical advisory activities and training projects. The scope and continuing character of the work of the Inter-American Children's Institute have made it the most effective regional agency working in this field.

Bilateral agencies

As emphasized before, the primary responsibility for the improvement of civil registration and vital statistics in a country must be assumed by that country itself. However, if a country seeks assistance in this task, there are various external sources of technical assistance and, in some cases, even temporary operating funds. International multilateral agencies such as the United Nations and the WHO have substantial technical assistance programs in this field.

Individual countries also make important contributions to international efforts for the improvement of civil registration and vital statistics because they recognize that good vital statistics are essential to national and worldwide economic and social development.

All of the work of the multilateral agencies is made possible by the financial contributions to these agencies by individual countries. In particular, the resources that the UNFPA can use for vital statistics projects in developing countries are based on voluntary contributions by countries to that Fund. The same is true of the work in this field by the U.N. Statistical Office, the WHO and other governmental international agencies.

Another way that individual countries help in the overall effort is by making available specialists from their own agencies to serve for limited periods of time as technical experts on assignment to the United Nations and other multilateral international agencies.

In these ways, the indirect contributions of national governments sustain the programs of agencies such as the United Nations. In addition, some countries have technical assistance programs in which the contribution is made directly from the donor country to the receiving country without an international agency acting as intermediary. These are referred to as bilateral programs.

Perhaps the major element in these bilateral technical aid programs that relates to civil registration and vital statistics is the portion that is directed to training of registrars and statisticians. A number of developed countries with efficient registration systems have offered fellowships and travel grants to governmental officials in developing countries to assist them in participating in a wide variety of academic courses, seminars, nonacademic special courses and observation and study tours.

Many European countries have offered such training opportunities to officials in selected countries. The United States has had training courses for national and local officials of developing countries extending back 40 years or more. The U.S. National Center for Health Statistics (and its predecessor agencies) started the international training courses as early as 1940 and

continued them on an intermittent basis until recent years. The U.S. Bureau of the Census includes a training module on civil registration and vital statistics in its current annual comprehensive international statistical training program.

At a Joint Nordic Meeting in February 1982, the Nordic countries of Finland, Norway and Sweden agreed to a joint program for technical assistance in civil registration and population statistics that will include a Nordic training program for staff of developing countries. Plans for this project are in the initial stages, and the Nordic countries are soliciting advice and comments from a number of agencies and experts with training experience in this field.

Another major aspect of bilateral assistance programs has been research on effective ways to improve registration. France has carried on a number of experiments in Africa as to the feasibility of continuous studies of population sample panels for obtaining estimates of vital rates. Extensive research was conducted by the Registrar General's Office in India with some bilateral assistance, as preliminary steps in establishing India's highly successful continuous sample registration scheme. With bilateral assistance, experiments on sample registration have also been conducted by Peru, Indonesia, Pakistan, and other countries.

The Program of the Laboratories for Population Statistics (POPLAB) at the University of North Carolina, in the United States, conducted extensive research activities on civil registration methods by projects in cooperation with the governments of Colombia, Turkey, Morocco, Kenya, Philippines, Ecuador and Egypt. The results of these research studies have been published in a number of Scientific Reports and discussed at six international POPLAB conferences, the last of which (1976) was attended by 50 participants from 17 countries and five international agencies.

Another major aspect of national bilateral programs has been to provide technical assistance experts directly to countries requesting such aid. Some of these assignments are for short periods, but many are for periods of one year or more. The assignment of a national expert to work with another country may involve direct financial assistance to initiate some proposed improvement or to conduct some type of demonstration project to illustrate or to test a new method of operation of some aspect of the civil registration or vital statistics system. The VISTIM program of the U.S. National Center for Health Statistics has been particularly active in assisting demonstration projects as joint efforts of the United States and participating countries.

National officials of developed countries are sent to international conferences where they participate with officials from other countries in reviewing the experiences of the various countries, presenting scientific papers on questions related to registration and vital statistics and making recommendations for future national and international action.

While these bilateral programs have made major contributions to the worldwide improvement of registration and vital statistics, such programs are not without problems. Perhaps the major difficulty with most of these programs is that they lack continuity. The improvement of such a fundamental and administratively complicated governmental function as civil registration requires a long-term and patient perspective. But bilateral programs, in this field at least, are ad hoc, temporary and subject to apparently irrational starts and stops. The United States program of assistance in this field has been particularly erratic as the responsible officials and consequently the program objectives and priorities constantly change. For example, the United States program of special training for vital statisticians has been started and stopped at least half a dozen times since it was first offered in 1943. This lack of continuity has resulted in substantial waste and inefficiency for the United States technical agency that presented the courses, since courses were designed, the necessary staff assembled and the classes started. This effort was largely lost when the financial backing was withdrawn, and then had to be done all over again when several years later it was decided to reinstate the training activity. The impacts of other aspects of the

United States bilateral program and those offered by other developed countries are also lessened because of their ephemeral character.

Another major problem with bilateral assistance programs is that the national experts are to a very large extent expert only in the laws and procedures of their own country. There are few experts in this subject that have a broad international orientation of the possible modes of organization and functioning of a civil registration system. An expert sent abroad on a bilateral assistance project to advise another country may understand completely the laws, definitions, procedural methods and national needs of his own country, but he may not have adequate experience to perceive what is needed and possible in another country with distinctly different traditions, different cultural patterns and a different level of social and economic development. Despite these problems, a country seeking to establish an improved civil registration system or improved methods of compiling vital statistics should not ignore the possibilities of obtaining bilateral assistance if technical help is desired.

Nongovernmental agencies

There are countless nongovernmental international agencies. In such organizations, the members are individuals or national organizations, but not governments as such. Although some members of nongovernmental agencies may be government officials, as members of nongovernmental organizations they act in their own private capacities and not as formal representatives of their countries.

Most nongovernmental organizations have a specialized area of interest and almost none relate to civil registration and vital statistics or even have a marginal interest in those topics. There are three major exceptions. These are the International Statistical Institute, the International Union for the Scientific Study of Population and the International Institute for Vital Registration and Statistics. While these agencies carry on activities that have a bearing on civil registration and vital statistics, none of them are a source for direct technical assistance to countries seeking to improve their systems.

International Statistical Institute. The International Statistical Institute (ISI) is a professional nongovernmental organization whose members are professional statisticians in governments, universities and commercial businesses. The ISI was organized in 1885 and is, therefore, perhaps the oldest organization of its type in the world. The ISI has consultative status with the U.N. Economic and Social Council and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In January 1983, the ISI had 1,220 honorary and ordinary members in 99 countries and approximately 120 national statistical offices whose directors are entitled to ex officio membership by virtue of their positions.

The formal organization of the ISI in 1885 was preceded by a series of 10 international Statistical Congresses, the first of which was in 1853 and the last in 1885 at which time the continuing ISI was established. The International Statistical Congresses were concerned to a large extent with demographic statistics, and consideration of questions relating to this field of statistics carried over into the early work of the ISI. Some of the basic concepts that now define a modern population census and the vital statistics systems were developed by the ISI in this period.

In recent years, the ISI has not been concerned directly with civil registration or vital statistics. But, because of its history of leadership in these topics, and because of the prestige of its membership of regular and ex officio statisticians, its influence remains important in demographic statistics.

An outstanding activity in the past decade has been the Institute's sponsorship and management of the World Fertility Survey (WFS). This has been an extensive series of surveys conducted with the cooperation of the ISI and national governments in more than 40 developing countries.

Without doubt, the WFS has been the most extensive and successful social survey program ever undertaken. It will continue to have an influence on fertility statistics and, consequently, on the more traditional type of vital statistics for years after the completion in 1984 of the active field aspects of the work. The analysis of the rich archives of the WFS will continue indefinitely by scholars and institutions around the world.

International Union for the Scientific Study of Population. The International Union for the Scientific Study of Population (IUSSP) is a nonprofit scientific organization composed of individual members, established in 1928. The membership of the IUSSP represents the users as well as the producers of demographic data. The objectives of this organization are to stimulate research on population, develop interest in demographic matters, foster relations among people involved in population studies and disseminate scientific knowledge on population. The IUSSP has consultative status with the Economic and Social Council of the United Nations and with UNESCO.

The IUSSP holds biennial conferences at which scientific papers are presented at the various technical sessions dealing with demographic analyses and with methodological problems. Some of these sessions have been concerned specifically with civil registration, and many of them have had implications regarding vital statistics. Between conferences, research activities are conducted through technical committees appointed for the purpose. These technical committees also have sponsored scientific meetings on substantive issues.

International Institute for Vital Registration and Statistics. The International Institute for Vital Registration and Statistics (IIVRS) is a nongovernmental, international, scientific organization established in 1974. It is free from any political, commercial or national affiliation. The principal objective of the IIVRS is to encourage the improvement of civil registration of births, deaths and other vital events and the compilation of vital statistics from such registration records. The IIVRS is composed primarily of officials with national or international responsibilities related to civil registration and vital statistics. The IIVRS policies and programs are established by an international Board of Directors.

The program of the IIVRS is designed to be complementary to the activities of other multilateral and bilateral programs in the field. The IIVRS is officially designated as a nongovernmental organization with consultative status with the U.N. Economic and Social Council.

National officials responsible for civil registration or vital statistics in countries that are members of the United Nations or its specialized agencies are eligible for membership in the IIVRS. International agency personnel with related responsibilities are also members. The IIVRS hopes to promote greater national efforts by stressing the utility of the vital records and the data derived from them, and by heightening awareness of needed improvements. The IIVRS concentrates its efforts on the developing world, but it also hopes to encourage cooperative relationships among officials in developing countries and their counterparts in countries considered to have efficient systems.

The IIVRS publishes an annual *Directory of Members* based on information received from countries and agencies; a newsletter, the *IIVRS Chronicle*, which gives brief items on national and international activities relating to civil registration and vital statistics; and a series of *Technical Papers* including descriptions of national systems and expositions on selected technical, organizational and procedural topics. These publications are distributed without charge to members.

In 1983, the IIVRS had 242 national members in 125 countries, as well as 32 international agency officials and technical assistance advisors. The national members are distributed throughout major regions of the world as indicated (number of countries in parentheses): Africa 65 (39); North America 40 (16); South America 34 (12); Asia 47 (27); Europe 41 (23), and Oceania 15 (8).

International programs

There are a number of governmental and nongovernmental organizations engaged in studies and other activities relating to civil registration in various countries. With the possible exception of the U.N. Statistical Office and the WHO, these activities are generally uncoordinated, and the specifics of the various programs are generally not widely known. The mobilization of the existing resources and the coordination of efforts would add greatly to progress in this essentially undeveloped field. Most of all, there needs to be a planned program to accelerate the development and improvement of civil registration and vital statistics in the developing countries. The countries will necessarily carry most of the load, but leadership and assistance of various kinds from international sources will be most useful.

The two principal agencies concerned with demographic and health statistics, the U.N. Statistical Office and the WHO, themselves have an important stake in the development and improvement of the civil registration system. Because of its broad demographic responsibilities, the United Nations has the overall purview of civil registration and vital statistics. The WHO has, because of its health and medical interests, the primary responsibility for mortality statistics on causes of death. This division of labor, though arbitrary, has worked reasonably well. However, because of the difference in national patterns or organization of the civil registration system, some modification of the working relationship between the U.N. Statistical Office and the WHO may be desirable. For those countries where the responsibility for civil registration is in the health ministry, arrangements might be made for the WHO to work directly with the country on an agreed-upon program. Because the working relationship between the WHO and the national health administration has already been well established, this should make for a much more effective means of program development.

To date, most of the joint actions taken by the U.N. Statistical Office and the WHO appear to be on an ad hoc basis. This is satisfactory when planning for conferences and seminars, but when the problem is as massive and intractable as development of registration systems seems to be, a planned program covering a period of years is essential. It is recommended that the U.N. Statistical Office and the WHO plan a 10-year program with the objective of producing usable vital statistics for a national tabulation area for every developing country at the end of the 10-year period. The resulting data need not be for the country as a whole, but for areas where registration completeness is adequate and could serve as a basis for national data.

There has never been a strong continuous program of international activity in civil registration and vital statistics. Nor has there been any sustained interest in the problems of the developing countries in improving their registration system. Several of the regional offices of the United Nations have had advisors in civil registration, but only intermittently has there been a full-time or a part-time high-level post in either the U.N. Statistical Office or the WHO for developing national registration systems and for promoting uniform registration and statistical practices. Without full-time attention and without strong international leadership, it is unlikely that much progress will be made in the development and improvement of civil registration in the developing countries.

It is recommended that an international civil registration and vital statistics program promote the national development and improvement of civil registration and vital statistics through the following means:

- Technical assistance, including the establishment of a cadre of experts on various aspects of civil registration and office procedures
- Training and education of personnel
- Systematic updating of international vital statistics standards
- Convening of conferences
- Promoting methodological research
- Clearinghouse of information
- Regional programs
- Field activities

Technical assistance. The kind of technical assistance to be offered may range from a comprehensive survey of the present status of civil registration and vital statistics and the identification of problems to be solved to short-term assignments on special problems of a specific nature. The former will require a generalist type of expert while the latter will need specialists in specific areas of activities such as legislation, record preservation, certification methods, filing methods, electronic computer installation, and so on. A roster of experts who can provide technical assistance of various kinds to countries, and offer short- and long-term consultation to countries is essential. Priority for technical assistance should be given to countries with greatest promise of success, countries that establish national commissions on civil registration and vital statistics, and those that show indication of providing increased budgetary support for the improvement of civil registration.

Training and education of personnel. The kind of training and education to be offered will differ depending upon the level of activity, that is, local, state or provincial, or national. Those at the national level may involve one or possibly two years of education at some university or demographic training center, whereas the clerks in the local registration offices may require in-service training on the details of registration requirements and procedures, responsibilities of the informants, and how the various forms are to be filled out. The training material for local registration office personnel needs to be developed by the state or provincial registrars in collaboration with the local registrars. These training manuals, in turn, will have to be patterned after the material developed by the national registration office so that there will be uniformity in procedures and practices in every registration unit in the system. The responsibility for training of personnel at the subnational level lies with the country, but outside assistance will be of great benefit to the developing countries. Education of professionals at a demographic center will, in all likelihood, require outside funding in the form of fellowships. Without technically trained national professionals, the imprint of even the best of outside technical assistance will fade away after the completion of the consultative assignment.

Updating of international standards. To achieve international comparability of vital statistics, it is essential that all countries adopt the same definitions, registration practices, classifications, coding procedures and tabulation lists. Most of the present standards in vital statistics have been embodied in the United Nations *Principles and Recommendations for a Vital Statistics System*. The WHO has proposed for international adoption definitions of live birth, fetal death and perinatal death. The WHO is also responsible for the decennial revisions of the International *Classifications of Diseases* used for the classification of causes of death, causes of morbidity and causes of medical care. In accordance with the *Regulations* of the WHO, each member nation of the WHO

is obligated to adopt the International *Classification of Diseases* and the various definitions and disease tabulation lists, unless the country makes a specific reservation concerning the use of the various recommended provisions.

The *Principles and Recommendations* of the United Nations are not binding on countries as are the *Regulations* of the WHO. They are chiefly concerned with the contents of the vital records and vital statistics compilation, including suggested tabulations, but they also touch on civil registration laws and practices. The first issue of the *Principles and Recommendations* was adopted in 1953, and the second edition was adopted in 1970. A third edition is in preparation.

All standards should be reviewed periodically to ascertain if they are still serving current needs. New items of information should be developed to meet emerging social and economic needs. To achieve this, it is suggested that a decennial revision cycle like that of the *International Classification of Diseases* be adopted for updating the United Nations *Principles and Recommendations for a Vital Statistics System*.

Convening of conferences. It is suggested that an international conference be held to consider various revision proposals concerning civil registration and vital statistics practices. Such a conference could also provide a forum for the discussion of major issues of mutual interest in civil registration and vital statistics. The recommendations of such a conference could then be presented to the U.N. Statistical Commission for appropriate action.

The advantage of such an international conference is that it provides for the direct participation of both the civil registration and the vital statistics authorities of the various countries in the development and adoption of standards and criteria for international use. Such participation should have an important effect on the national implementation of the standards. The inclusion of civil registration authorities in an international conference once every 10 years would not only expose these officials to the broader international needs, but would give recognition to the importance of their functions. Many registration officials are not now recognized even nationally, much less internationally.

Promoting methodological research. There are many ways of performing a function but it is not always clear which is the most effective or efficient way. Also, there are measurement problems, such as the ascertainment of the completeness of registration, for which there are no good solutions. Research in methodology will provide answers that will reduce operating costs or make possible the adoption of new techniques. Studies are particularly important where repetitive actions involving large volumes of records take place.

The promotion and support of research into methods applicable to a large number of countries will be of great benefit to the countries. Of particular interest will be demonstration projects using alternative approaches to the solution of problems. The publication and distribution of methodological studies will be an important resource to other countries faced with the same problems.

Clearinghouse of information. Among the present problems of developing countries are isolation, lack of technical information and the absence of trained personnel. An international program responsive to the needs of these countries would have an information center to open up communication within countries and among countries to facilitate exchange of technical information.

In addition to the country activities, there are a number of governmental and nongovernmental organizations carrying on studies and activities related to civil registration. Little is known about these programs. It would be most informative and useful to establish an information clearing center to make a periodic roundup of activity dealing with civil registration and vital statistics. A report on the ongoing activities by organizations should be useful to all concerned.

Regional programs. Even if international agencies were to establish a continuous program of activity to promote civil registration and vital statistics in the developing countries, it will not be possible for them to cope with the wide range of registration problems and issues that exist in various countries in different stages of economic and social development, and with different cultural backgrounds and traditions. One possible way of accelerating the development of civil registration and vital statistics in developing countries is to organize activities on a regional basis so that countries in the same general stage of development with similar cultural backgrounds can work together on common problems. Such action will also serve to open up communication among technicians in the different countries and provide opportunities for them to exchange views on various issues. A regional program will not only focus attention on the common problems of countries in the same area but will make possible the pooling of resources in seeking solutions to these problems.

An effective regional program will require a small but competent staff attached to some kind of regional organization. Such an organization could be the regional commission of the United Nations, a demographic center, or a nonprofit organization established for that purpose. However it is organized, it is essential that the program orientation be mainly on civil registration problems. Should the statistical interests become dominant, alternative methods to civil registration procedures will be sought in an attempt to produce vital statistics quickly. Unfortunately, these expedients cannot ever serve as substitutes for registration data. The diversion of resources to household surveys and other activities will result in the loss of momentum on the ongoing developmental work on the civil registration system and will only delay the day when national vital statistics will become available.

The staff of the regional centers for development of civil registration and vital statistics should be available to all the countries in the area in an advisory capacity. The regional advisor, through his knowledge of activities in various countries, may be able to make referrals to technicians in other countries with experience on the problem in question. He may also be of help to countries in arranging for technical assistance, and in obtaining grants for special projects. The regional office can serve a useful function as the focal point in the area where technical questions may be directed about various activities going on in the countries in civil registration and vital statistics. The regional office can then keep the countries informed through newsletters and field visits. In his capacity as regional advisor and liaison officer for the international agency, he should visit each country several times a year. At least some of these field visits should be in company with the headquarters staff of the international agency.

One of the important needs of developing countries is technically trained personnel. The regional office can be of service by encouraging promising technicians to apply for training fellowships. Also, it can organize regional seminars and training courses for national officials on various aspects of civil registration and vital statistics. It would be particularly useful if the training modules could be arranged so that the national officials could use much of the material to conduct training courses for state personnel in their countries.

The regional centers for the development of civil registration and vital statistics can organize and hold meetings of national officials of civil registration and vital statistics, or of small technical committees, whichever is appropriate, to delineate major problem areas in civil registration and vital statistics, and draw up a program of study to find solutions to these problems. In the conduct of these studies, the countries will be given assignments to study different aspects of the problem. In some cases, various alternative approaches to the problem may be tried. Draft reports will be circulated among the participants for comments. If necessary and where appropriate, committee meetings or regional conferences can be held to iron out differences in viewpoints or to seek a consensus.

Another possible activity is the development of regional views on proposed international standards and recommendations. Usually, such proposals go directly from international agencies to individual countries for comments. The force of these comments will be reinforced considerably if they represent the views of the region instead of a single country. This is especially true of the developing countries. Therefore, it would serve the interests of the countries of the region to convene technical committee meetings comprised of representatives of the countries to discuss the proposals and put forth regional views on the important issues and problems common to the area.

The participation of national officials in regional meetings and conferences will contribute greatly to the professional growth of technicians in the area. Small technical committee meetings focusing on specific issues will have an important impact on the development of civil registration and vital statistics.

Aside from the technical committee meetings, it is suggested that regional conferences on civil registration and vital statistics be convened under the auspices of the regional office at least two times in 10 years. One of these conferences may consider, among other things, the regional proposals on international standards and definitions prepared by the regional technical committee. Possible agenda items for the regional conferences are discussions on various aspects such as legislation relating to civil registration, registration procedures, organization of civil registration and vital statistics systems, coordination of activities within and between the two systems, methods of indexing, storage and retrieval of vital records and certification of vital events, evaluation of vital statistics, promotion of registration completeness, and so on. Many conferences on civil registration and vital statistics have been sponsored in the past by the United Nations, the U.N. Regional Commissions and the WHO. They have been invaluable in seeking solutions to regional problems in civil registration and vital statistics.

It is essential that the regional programs involve the participation of organizations in the region that have evidenced a strong interest in the improvement of civil registration in the countries of the region. For example, in the Africa region, the Union Dounière et Economique de l'Afrique Central (UDEAC) and the Organisation Commune Africaine et Mauricienne (OCAM) have conducted ad hoc seminars for the improvement of civil registration in the Francophone countries in their union. In Latin America, the Inter-American Children's Institute has an active program on civil registration in the countries of the region. The Inter-American Children's Institute seems eminently suited as the central focus of responsibility for the promotion of civil registration in the Latin American countries. If this is not possible to arrange, the civil registration program of that organization should be an integral part of the total regional program.

Field activities. A field program constitutes an important part of an advisory and information service. It will provide an opportunity to offer consultative advice as well as to pick up technical information useful to other countries. Also, it is only through such field visits that the international representative will become familiar with and gain some understanding of the national problems of civil registration and vital statistics and of the needs of the various countries for technical and other kinds of assistance.

A field visit by headquarters staff should be made to each regional office serving the developing countries several times a year. Each such visit should include trips to several countries in the region in the company of the regional advisor so that each developing country will be visited at least once a year by the international program director.

The field contacts will also be invaluable to countries. They will provide an opportunity to obtain ideas and advice on current problems as well as a chance to receive help in writing up requests for technical assistance.

National Programs

It is obvious that there are strong international interests in fostering national civil registration systems that provide comparable data required for international efforts to promote social and economic development. Nevertheless, these international interests must be subordinate to the national needs for demographic data and for the use of registration records for legal purposes within the country.

In improving their systems, countries can reasonably expect some assistance from international agencies in the form of recommended standards and definitions, possibly some financial assistance in establishing demonstration projects and pilot projects, and some short- or long-term assistance from foreign technical experts. However, such assistance will necessarily be of limited character.

Much progress has been made in establishing international definitions and principles for the collection, coding and tabulation of vital statistics. International and regional seminars have been held for the training of vital statisticians, and for the identification of areas needing improvement. On the other hand, very little has been done in establishing appropriate models for the desirable national organization structures and for patterns of cooperation and coordination among the various national ministries concerned or between the central and local authorities. The problem of coordination within the civil registration system and between the civil registration and vital statistics systems is one of the major barriers to the improvement of civil registration and vital statistics in most developing countries.

One step in the direction of coordination is to have periodic conferences of civil registration and vital statistics personnel. Depending on the situation, annual or possibly biennial meetings might be held. The program may be varied, some of the meetings may be held exclusively for civil registration personnel or for vital statistics personnel where problems of special interest are discussed. Others may be joint meetings of the two disciplines. Parts of one or more national conferences may be devoted to preparing national proposals on international standards to be submitted to the regional group for further consideration. Some of the national conferences may be in the form of workshops or training seminars. Others may be for the exchange of views, or for solving specific registration problems that have important implications for vital statistics.

With regard to financial and operating assistance from international agencies, not much can be hoped for. In recent years, international agencies, particularly the UNFPA, have given substantial sums of money to countries for periodic census operations and for ad hoc sample surveys. However, civil registration is a different matter since this process is not a one-time effort but a continuing governmental function deeply imbedded in regular governmental activities. International funds are usually not available to support ongoing national activities of this type.

International assistance in the form of long- or short-term technical assistance experts is often available from intergovernmental or bilateral agencies. However, such experts are of limited value to a country seeking to improve its own system. The organization and operation of a civil registration system does not follow any uniform pattern, and the needs and possibilities of one country are quite distinct from those of another. International experts with a broad and flexible view of what might be useful in various countries are rare indeed. An internationally recruited expert may be an expert with regard to the system in his own country but quite ineffective in developing ideas and strategies for improving civil registration in another country with a different level of resources, a different pattern of national organization and different cultural or geographic features.

This comes down to the point that if a country is proceeding to improve its civil registration and vital statistics system, the responsibility and the leadership for this activity must lie with the

country itself. *Outside consultants may be helpful but the country itself must develop its own plan of action that fits in with its own requirements and potential.* To assist in the development of such a strategy, a list of possible actions that might be considered is given below. By no means are all of these items appropriate or necessary for any one country, but the list provides a number of possible activities, a selection of which could form the basis for a long-range national plan of action.

Assessment of the problem and use of available resources

The process of civil registration and the use of its records for both legal and statistical purposes is based on an extended sequence of operations by governmental units throughout the national territory, which often involve more than one national ministerial jurisdiction. In different countries, different parts of this sequence of operations may be strong or weak. The assessment of the problem in any country is clearly an early step in developing a national strategy for improvement. In some instances, this assessment may involve consultations with other countries and external experts to get a comparative view of the national situation.

Investigation of the national resources that can be directed to an improvement program and of the financial and technical assistance that might be obtained from multilateral agencies (United Nations, WHO, and so on), from bilateral agencies (U.S. Agency for International Development, Canadian International Development Agency, Swedish International Development Authority, and so on) from professional associations (such as ISI, IUSSP, IIVRS) and from private foundations (Ford Foundation, Rockefeller Foundation, and so on) should be undertaken.

Concurrent with the above steps, a selection of feasible activities from the points listed below and other efforts appropriate to the national situation to comprise an integrated strategy for progress should be made.

General and interministerial activity

Formulation of a unified plan for the national reform of the civil registration and vital statistics system based on assessment of the existing systems is essential. The plan should separate what is possible now and what should be left to the future, and should concentrate on problems and solutions that promise the greatest possibility of success. It should be part of the strategy to improve civil registration by geographic areas so that usable birth and death statistics will become available within the period covered by the plan.

Because of the national importance of the problem, it has been proposed that an ad hoc national commission at the highest ministerial level be appointed to consider the problems and prepare a plan of reform of the civil registration and vital statistics systems. The national commission should include representatives of the administrative departments or ministries with substantial interest in civil registration and vital statistics. In countries where civil registration is the responsibility of autonomous state or provincial governments, there should be a representative of the state or provincial registrar on the national commission. The national commission should receive the highest political and administrative support so that it can discharge its responsibilities.

The unified plan for the national reform of civil registration and vital statistics systems should include, inter alia, the following steps:

- Define the objectives of the systems, including goals for development and improvement.

- Designate national agencies responsible for civil registration and vital statistics. Where no responsible agency for civil registration exists in the national government, establish such a national ministerial responsibility for the nationwide coordination of civil registration.
- Establish means of coordinating civil registration and vital statistics, possibly through a permanent advisory committee following the pattern for national committees on vital and health statistics recommended by the First World Health Assembly.
- Review the authority and responsibility of national, state or provincial, and local registration offices in the administrative chain involved in the flow of registration records, and make necessary changes.
- Review and update national registration laws for conformity with international recommendations on registration and statistical procedures, and give legislative authority and responsibility to the various agencies involved. The laws should be as simple and general as possible and yet enable the agencies to function efficiently. One way to accomplish this is to incorporate in the law the immutable provisions of registration and statistical procedures and write into regulations the administrative requirements that may be revised at a later date because of change in conditions. This use of regulations that have the same force as laws is advantageous in that revisions of the law are difficult to make, whereas modifications of regulations may be made simply as an administrative procedure.
- Formulate a 10-year plan for achieving the goal of producing usable national vital statistics. Develop a strategy for improving civil registration area by area, concentrating available resources, and a strategy for establishing a national statistical tabulation area.
- Outline the organization, staffing and budget needed for the program.

Activities primarily the responsibility of civil registration authorities

- Implement a unified plan for national reform of the civil registration system.
- Conduct a systematic study of each facet of civil registration such as registration procedure; fee system; penalty for late filing; transcription of records; filing and preservation of records; certification procedures and the whole administrative organization of the system, including location of the primary registration office, and the identification and correction of deficiencies in the system.
- Experiment with innovative registration procedures and methods and with office procedures to increase the efficiency of various operations.
- Make improvements in the flow pattern of registration documents from the local registration offices to the central office.
- Make improvements in the organization, maintenance and retrieval of records—centrally and in the field.

- Make improvements in employment standards, incentives and distribution of work load. Develop and conduct training courses for registration personnel.
- Arrange for use of local auxiliary resources for registration such as hospitals and health centers.
- Establish a public information program on responsibility for registration, incentives/penalties, uses and value of individual records and issuance of certifications of vital records. Create public awareness of the need for registration of vital events.
- Promote the use of birth registration records as proof of age, relationship, citizenship, and so forth by other government programs, for example requiring a birth certificate as proof of age for enrollment in grade school, for social security pensions and for food rationing.
- Establish national and state field services to maintain uniformity of registration practices in and among the various states or provinces.
- In collaboration with the vital statistics authority, study the quality of information reported on vital records and the ways and means of improving the accuracy of reported information, including more complete and accurate statements on causes of death.
- Study the relationship between the civil registration system and the population register if one exists or is under consideration. Because vital records are essential for the updating of population registers, an efficient and timely notification method is needed.
- Develop a system of unique birth registration serial number. This may also serve as a national identity number.

Activities primarily the responsibility of vital statistics authorities

- Implement the unified plan for national reform of the vital statistics system. Institute a tabulation area for compilation of national vital statistics, starting with the geographic areas that meet the criteria of completeness and quality of data. As more areas qualify, include them in the national tabulation area.
- Establish and exercise tight control of records flowing from the local registration offices to the central statistical office.
- Collaborate with registration authorities in securing the improvement of the quality of statistical items on the registration records.
- Review tabulation plans and make needed revisions to bring them into conformity to the greatest extent possible with national needs and international recommendations.
- Plan and conduct data processing operations to ensure timely production and distribution of monthly and annual vital statistics reports.

- Develop analytical capabilities to increase the usefulness of the statistical output by providing meaningful interpretation of data for national planning for social and economic development. Apply statistical techniques for the management of incomplete data.
- Contribute to the improvement of intercensal and postcensal population estimates to provide the best denominators for calculating vital rates.

Participation in regional and international activities

Aside from methodological and analytical studies conducted for national purposes, there is need for participation in studies organized along regional and international lines. Because of their knowledge of data collection and processing procedures and their limitations, officials of national agencies should collaborate in such studies.

As the quality of vital statistics improves, there will be more and more opportunities for national agencies to participate in analytical studies involving various countries in the region or on a worldwide basis. These studies of trends and differentials will contribute to the knowledge of determinants of fertility and mortality.

There is need for national participation in the development of international definitions of vital events and characteristics of those events, model laws governing civil registration, registration requirements and practices, uniform statistical practices and classifications, and of minimum international statistical tabulation requirements. The testing of methods, procedures and forms can be conducted only at the national and local levels so that national participation is essential in the development of the various facets of civil registration.

The data and experience required to understand the need for the various revision proposals are in the national and local civil registration and vital statistics agencies. Also, because the national agencies will eventually have to implement the international recommendations on definitions, practices, and so on, their participation at the various stages of development of the international proposals will result in better national acceptance.

Regional seminars and international meetings and conferences will broaden the horizons of the national participants and will have an integrating effect on the participants of the various countries in attendance. These discussions will also be an important learning process for the regional and international personnel who may not have first-hand experience with problems of national civil registration and of vital statistics data processing.

Plan of Action

It has been emphasized throughout the above discussions that reliable vital statistics based on an efficient civil registration system are essential data for economic and social development. The creation and maintenance of such a system of civil registration and vital statistics is a national responsibility, and each country must assume the primary burden of meeting the costs involved. This does not preclude the use of technical assistance and of training and other assistance from bilateral or multilateral agencies.

At the present time, virtually every country in the world has legislation on compulsory registration of births and deaths, and the infrastructure for the registration of these vital events. The statistics derived from the registration system have been invaluable for national planning for social and economic development in the developed countries. In the developing countries, there is a special need for vital statistics, but registration data are often incomplete and of limited usefulness. The prospects of securing complete nationwide registration in each developing

country in the foreseeable future are not good. However, it would seem feasible to produce useful vital statistics for every country in the world in the next 10 to 15 years with the present state of technical knowledge if available resources can be mobilized to follow a coordinated plan of action. Any number of specific plans of action can be drafted and, while these would differ in detail, it would seem that several main points are essential.

In the first place, a plan of action should be built around activities that have a good possibility of success. The plan of action should also envisage a constant and sustained effort. Within this general framework, the following points are suggested:

- Allocation of more international resources.
- Better coordination of international assistance activities. Establishment of a cadre of recognized international experts in this field.
- A unified national plan for reform.

Allocation of more international resources

Although it constantly has been stressed that national improvement of civil registration and vital statistics is a national responsibility, the substantial interest of the international agencies should not be overlooked. Data from these systems are essential for national purposes, but they are also needed for the planning and evaluation of international development and population programs.

Over the years, international programs—bilateral and multilateral—have expended hundreds of millions of dollars to support census and survey projects to provide data for national and international use. The amount of money allocated to the improvement of the more continuous civil registration systems has been trivial by comparison.

In recent years, there has been a substantial cutback in international technical assistance for data collection activities. However, major international data collection support activities such as that for the WFS and the 1980 round of population censuses are now coming to an end. Therefore, it may now be opportune to reallocate some of these resources to civil registration and vital statistics improvement projects.

A full-time international program for the promotion of, and assistance in, the development and improvement of national civil registration and vital statistics is proposed. This program includes the following:

- Technical assistance
- Training and education of personnel
- Systematic updating of international vital statistics standards
- Convening of conferences
- Promoting methodological research
- Clearinghouse of information
- Regional activities
- Field activities

An essential aspect of any adequate plan of action is the provision of more international resources for civil registration improvement. More resources will be needed not only for the United Nations agencies but also for the various regional offices. These regional offices are closer to the

cultural, economic and geographic factors that impinge on any national improvement program, and they are likely to understand the nature of the assistance that would be most useful to a country.

Better coordination of international assistance activities

The spectrum of agencies that have international activities includes a host of multinational agencies, regional agencies, bilateral agencies, nongovernmental organizations and other types of public and private organizations. Of these, only a few have programs directly related to population. Of this group, perhaps no more than a dozen have direct interest or programs in projects concerned with improving national civil registration and vital statistics—essential data for the measurement of population change. These few programs are scattered widely among various agencies. Most activities originate with the work of the United Nations in the UNFPA, which supports work done in this field by the U.N. Statistical Office, the WHO and other organizations.

At the international level, the U.N. Statistical Office and the WHO have responsibilities for the development of civil registration and vital statistics. Although the U.N. Statistical Office has overall international responsibility for vital statistics, responsibility for this area is in the national health administration in a number of countries. Therefore, the WHO should be given responsibility for promoting improvements in registration and vital statistics in these countries.

Because of such overlapping areas of responsibility, there is need for focus of international leadership in the U.N. Statistical Office and the WHO, and for a planned coordinated program over the next 10 to 15 years that would embrace the interests of all agencies concerned. One phase of this program should deal with technical assistance to countries and training to be provided by international agencies. The other phase should be concerned with the development of international standards with respect to definitions, classifications and procedures, and the periodic updating of these standards. It is suggested that there be a systematic scheduled plan of international, regional and national conferences to provide a mechanism for the review and revision of these programs and standards, and which will also provide an opportunity for discussion of mutual problems and interchange of technical information.

A recognized cadre of international experts

A civil registration and vital statistics system differs fundamentally from other demographic data collection systems. The population census and the demographic survey each have a basic design and method of operation that are essentially the same from one country to another, although there are major differences in content, sampling considerations, enumerator training programs, tabulation plans, and so on. However, a census or survey expert in one country can usually qualify as an expert in another country. This is not the case for civil registration and the derivation of vital statistics from registration records. A person might be a top registration expert in his own country but be quite ineffective or even counterproductive as an advisor to another country.

This is so because the civil registration system serves two entirely different national purposes—statistical and personal identity. This situation results in a maze of differing laws, organizational patterns and national priorities. In addition, civil registration is deeply imbedded in local governmental administration processes and, being dependent on cooperation from local populations and institutions, it is more affected by cultural, geographic, ethnic and other variations in the national structure.

For this reason, it is important that persons used as consultants in this field have a broad exposure to variations in how things are, or might be, organized and a mature judgment as to the appropriate action to recommend in any situation.

The number of people with this sort of background is very limited, and any plan of action should include the continuing maintenance of an open roster of a qualified cadre of experts.

A unified plan for national reform

While the work of international agencies is essential for the worldwide improvement of civil registration and vital statistics, the basic responsibility rests with the nations themselves. As outlined above, there are a great variety of possible national activities, but the choice of those that are most pragmatic and within the national cultural and economic possibilities of any country must rest with each country itself.

Many of the past national and international activities for the improvement of civil registration have failed or have been only partially successful because such activities were directed at only one small segment of the national problem. Also, there has been a lack of continuity of efforts, that is, no sustained program has put into general practice the lessons learned.

Attempts for change made so far in the area of civil registration show that there is much bewilderment about how to proceed. Some efforts have been directed at the problems of registration at the local level, others at the derivation of national vital statistics from registration records, others at the coordination of the various national agencies responsible for different parts of the whole civil registration and vital statistics process. These partial solutions seldom result in an improvement in the effectiveness of the total system—improving the procedures for establishing personal identification and family relationships or in improving vital statistics so that they are useful as one of the bases for national economic and social planning.

In place of these partial reforms, single national structural reform is suggested. The careful planning of that one reform in all its aspects is considered essential.

The Latin American Committee that was appointed to study these problems points out in its report the need for a unified plan (*The National Importance of Civil Registration and the Urgency of Its Adaptation to a Modern Society*) as follows:

Modernization of a complex organization such as a civil registration system must be carefully planned. Strategy should be planned to ensure success. The disciplines and sectors involved and concerned are many. It seems indispensable that the reforms include modifications to civil law or to those laws which include the substantive provisions governing the organization and operation of civil registration; the vital statistics system has points of view to express and interests to protect. Therefore, they should also participate in the process; the agencies and officials in charge of economic and social planning policy who constantly require demographic information, should also be included. Insofar as there exists a system of personal identification or one is planned, officials responsible for that sector should also participate.

The report goes on to propose the appointment of an ad hoc national commission at the highest political level to take the responsibility for planning the strategy of modernizing the organization and operation of the civil registration and vital statistics systems. This commission should include representatives of all the interested sectors of public administration. A commission

at the highest ministerial level is justified by the political and administrative support that the commission needs for compliance with its functions, so that the study and proposal for change would have the soundest and broadest possible support.