STATISTICAL COMMISSION
Fourth session
Geneva

STATISTICAL DEVELOPMENT IN CERTAIN COUNTRIES AND
POSSIBLE REMEDIAL MEASURES
(Expert Assistance in Statistics)

Memorandum prepared by the Secretariat for consideration under
Item 6(b) of the provisional agenda

Introduction
1. The seventh session of the Economic and Social Council, in considering
the report of the third session of the Statistical Commission, gave
attention to the problem of the development of the statistical services of
member countries. The Economic and Social Council invited the Statistical
Commission to consider "as a matter of urgency, how statistically under-
developed countries requiring assistance in remedying deficiencies of
statistical data can be helped to improve their basic statistical
services" (resolution 149 C VII). The Commission may wish to review the
record of the previous actions of the Economic and Social Council and of
the Commission itself in this respect. These may be summarized as follows:

(a) Based on joint recommendations early in 1947 of the
Statistical Commission and of the Population Commission
relating to the need for developing more adequate basic
census data, ECO/SCC requested:

"The Secretary-General to offer advice and assistance
to all such Member States as are prepared to take
comparable population censuses, whether by complete
enumeration or on the basis of a scientific sample..."
(resolution 41 (IV)).

(b) At its third session the Commission strongly endorsed
the request made by the Sub-Commission of Statistical Sampling
that

"necessary staff be provided in the Statistical Office of
the United Nations to deal with work in statistical sampling.

Since the
Since the sessions of the Sub-Commission are held only once a year, it is important that staff recruited in the Secretariat to render technical assistance to the specialized agencies and Governments, and to prepare working papers for the sessions of the Sub-Commission.

(c) Also at its third session, in considering the question of statistical education and training, the Commission stated: "It is unfortunately true, however, that many of these same countries do not now possess the present or potential resources of trained personnel upon whom would fall the responsibility of organizing and the burden of operating an adequate statistical system. The needs of many Governments for expert assistance have been recognized by the Economic and Social Council. Assistance by the United Nations to its Member Governments seems especially appropriate when the needs for such assistance arise in part from obligations they have assumed to the United Nations. Among such obligations is that of reporting statistical information to the United Nations, to the specialized agencies and to other inter-governmental organizations.

The collection of statistical information by Governments for domestic and international use is a highly technical function, requiring the services of experts in various administrative and technically specialized positions. When such experts are not available, are of very limited training and experience, or are very few in number, the United Nations and other inter-governmental organizations will be seriously handicapped in receiving needed information.

Provision by the Secretary-General of a statistical field service would provide one means of enabling Governments having such deficiencies to meet their statistical obligations. The services rendered should be technical and advisory only. In no conceivable case, except for purposes of demonstration, should United Nations staff undertake the actual collection of national statistics. The Statistical Commission reiterates its hope, first expressed by the Nuclear Statistical Commission and

/vigorously
vigorously urged again by members of the Commission at its third session, that the Statistical Office of the United Nations may soon be able to organize a field service. If it were appropriately organized and assigned it could provide a means through which the United Nations would be able to respond promptly to requests of Member Governments for expert assistance in statistical matters. The duties of such a service would not be limited to its responses to governmental appeals for technical aid. Even if statistical personnel of high competence were uniformly distributed throughout the world, a field service attached to the Statistical Office of the United Nations would have many other important functions related to the general advancement and co-ordination of international statistics. Such responsibilities as it might have for assisting Member Governments should gradually diminish in relative importance as the statistical resources of Member Governments were themselves built up.

In so far as the needs of Governments for statistical assistance are concerned, the Commission would view the organization of a field service by the Statistical Office as a stop-gap measure. Of more fundamental importance, so far as these needs are concerned, would be an attack at its source upon the problems presented: namely, the insufficiency in numbers, education and training of statistical personnel. In the long run, governmental needs with respect to statistical organization and technical activities will best be served by an international programme of statistical education and training. This the Commission proposes."

(d) At its third session in considering the population censuses to be taken in many countries in 1950, the Commission requested the Secretary-General

"to make adequate provisions for rendering expert advice and assistance in this regard to those countries which may request it".

(e) In addition to the action summarized above, and arising as a result of these and similar recommendations by the Economic and Employment Commission, the General Assembly at its third session adopted a resolution (200 III) for the provision of technical assistance on the basis of requests received from Governments and
in accordance with policies outlined. The Assembly also approved financial means for enabling such expert assistance to be given by the United Nations. The Assembly's resolution authorized the Secretary-General to arrange for
(a) the organization of international teams of experts;
(b) the training abroad of experts from underdeveloped countries, and
(c) for the training of local technicians in their own countries.
It also authorized the Secretary-General to provide facilities designed to assist Governments in obtaining technical personnel and supplies.

Statistical Development

2. It is only in recent times that general recognition has been given to the fundamental importance of sound statistical information. With this recognition has come realization of the need for permanent arrangements within national administrations for the regular collection, compilation, and dissemination of statistical information. Progress in the social sciences too has increased the awareness of the kind of information that is necessary for public and private institutions and for the conduct of business. Even in advanced countries with long experience in the field of statistics, however, it is only in recent years that adequate arrangements have been made for the recruitment and training of specialists in statistics. The problem to which the Economic and Social Council drew attention is essentially one of differences in the stage of development of countries from the point of view of statistics. Few countries can be considered to be in possession of all the statistical material they would desire. It is necessary, therefore, to consider the stage of development below which a country should, for the purposes of this problem, be considered statistically deficient.

3. The statistics of a country are often scattered over a variety of sources and exist in many different forms. The published data are frequently not the total that is available, especially in present circumstances of shortage of printing facilities in many countries. The Statistical Office of the United Nations is not in the best position to evaluate the statistics of each country in this respect. It can infer much from the quantity and quality of published and unpublished material received from countries by the United Nations and the specialized agencies; full knowledge of each country's stage of statistical development would, however, necessitate detailed information concerning the material available
and being compiled in the private and public institutions of each country. The international organization can judge a country's statistical progress from its ability to meet its international responsibilities for supplying and publishing data, but it can not say finally whether the country's statistics are adequate to meet national needs.

4. The final test of adequacy must be whether the national statistics (a) provide a continuing basis for efficient government; (b) provide a basis for private and public institutional arrangements; (c) take account of the country's international responsibilities as determined by participation in international institutions.

In other words, adequate national statistics should provide the basis for informed decisions on economic and social matters both by individuals and by private and public institutions. This involves the further requirement that the statistical authorities should be bound by no rules tending to bias or to conceal their results and that their compilations should be published openly and be subject only to the condition that they preserve personal and business anonymity. Exceptions to the requirement of publication should of course be made where national security is involved.

5. The main cause for inadequacy in the field of statistics is the lack of administrative machinery for providing statistical data. It is considered that technical assistance in remediying this kind of inadequacy was the main problem to which the Economic and Social Council drew attention.

6. In most countries which are deficient in statistical services, the basic problem is at least as much a problem of administration as it is of education and training. If it is accepted that adequacy of statistics is to be determined by what is required for informed decisions of economic and social matters by individuals and by private and public institutions and for the discharge of international responsibilities, then a prior condition of statistical adequacy is the willingness of Governments to create any necessary administrative machinery for this end.

**Education and Training**

7. The problem of education and training in statistics has been studied by the Secretariat and suggestions are presented in another paper to be considered by the Statistical Commission (document E/CN.3/56).

8. The means by which the United Nations and the specialized agencies are at present furnishing assistance in the field of statistics to countries may be summarized as follows:

(a) the establishment
(a) the establishment of statistical standards which can be used by countries which have not previously set up standards. Such standards can also be adopted by countries whose nationally established standards are less adequate;
(b) the publication of assemblies of statistical data and of studies in statistical method;
(c) correspondence designed to elicit statistical information in the course of which advice on statistical problems in frequently given;
(d) organization of statistical training institutes;
(e) training of officers from member countries.

Statistical Organization

9. To give effect to the Economic and Social Council's resolution it is necessary to provide for more direct and effective assistance than is at present available. The most direct and effective assistance that can be given to a country is assistance in making administrative arrangements for the regular collection, compilation, and dissemination of data, or assistance in improving existing arrangements. The current programme of the United Nations and the indirect assistance which it can give is of greatest significance and usefulness to countries where the nucleus of a statistical organization already exists. Such a nucleus may be either a single office in which statistical work is centralized, or it may be a collection of functions which are incidental to the work of other branches of the national administration. The better the statistical organization of a country is, the better it can profit from the work of international agencies. Where some sort of statistical authority exists, means are available by which responsible individuals can obtain knowledge of statistical methods and the practices by which other countries measure social and economic phenomena. It would appear, therefore, that direct international assistance to countries whose statistics are inadequate should, at least initially, concentrate on the setting up and improvement of the statistical organizations of those countries and on problems of collection of data.

10. In most countries the government agencies responsible for statistical data have developed as a result of forces only remotely connected with statistics. The statistical functions were largely by-products of other governmental functions. Where statistical organizations have developed in this way there is usually no single statistical authority responsible for the whole field of official statistics. Technical assistance, to be effective in this respect, should provide for adequate statistical information to be
information to be collected, organized and channeled into the government administrative machinery in such a way that statistics will be utilized in both the planning and the implementation of governmental policy.

11. Three different systems can be discerned over the whole field of official statistics:

(a) a central statistical organization responsible for all official statistics, even though the collection of certain data remains the responsibility of other administrative agencies;

(b) a fragmented statistical organization in which each individual branch of the administration is responsible for its own statistical work;

(c) a fragmented statistical organization with provision for standardization by means of a single agency charged with the duties of co-ordination and standardization.

12. The type of organization that is most suitable for a country depends mainly on conditions in the country. It may be said, however, that for small countries whose political system is not of a federal nature, a central statistical authority of some kind is likely to be most effective in the early stages of statistical development. This is so partly because shortage of trained personnel is a characteristic of such countries and economy of direction is therefore necessary; partly also because in the early stages of development it is essential that the statistical organization should be strong enough to establish uniformity of method and standards. It may be, therefore, that international aid to member countries should at the first stage be concentrated on enabling these countries to set up central statistical offices or on making arrangements for central direction and co-ordination of fragmented statistical activities.

Collection of data

13. The second stage of technical assistance is likely to be concerned with the collection of data. When a statistical organization has been set up it will usually be confronted with a schedule of tasks to which the Government attaches an order of priority determined by its programmes. It will therefore be the task of the technician to advise the statistical organization on the initiation of means by which a regular supply of data becomes available, taking account of the subjects for which the need is most urgent. This is a field in which direct advice by a visiting technician is of greatest importance. For while there are many text-books of statistics from which the statistical staff of a new office may learn the techniques involved in handling data, there are few indeed in which

the operations
the operations involved in collecting data are exhaustively or adequately described. Even in schools and colleges where education in statistical method is adequate, the emphasis is usually on methods of analysis to the neglect of methods of collection. It is probable, therefore, that for some time to come, countries which are deficient in statistics will require reliance on the services of visiting technicians for assistance in this field. The Commission may wish to consider whether they should request the Secretary-General to arrange for the compilation and publication of a manual for persons engaged in the collection of data. Such a manual could be based on the methods of collection used in countries which have already established efficient systems of collection in particular fields.

14. It may be noted that collection of data does not always involve direct operations by the statistical organization. Where government agencies exist, statistical data of some kind usually result from their administrative actions. A first task of a statistical organization would therefore be to make arrangements with existing agencies directed towards ensuring that every contact between the branches of the administration and the citizen should yield the maximum possible amount of statistical data. Concentration of effort initially on such indirectly collected data has the additional advantage that it provides a useful form of training for the staff of a statistical organization. In this way, too, the statistical office can be enabled to show early results in the form of assembles of data, and possibly useful time series, yielded by the past and current activities of the administration.

15. In the case of data for which it is necessary to arrange schemes of direct collection either by the statistical organization or by other branches of the national administration, the visiting technician will be required to advise on the drawing up of forms for field operations, instruct the local staff in the technique of eliciting the required information, estimate the personnel and budgetary implications of the operations, and advise on how the collection scheme may most economically be accommodated to the existing administrative arrangements of the country. In the course of his work he will require to keep in close touch with his colleagues in the United Nations and specialized agencies in order that he may have the benefit of their experience and knowledge in special subject fields.

Statistical Office Field Service

16. For the Statistical Office to give the kind of technical assistance which is discussed above, it is essential that it should have a staff of officers available for field service or, alternatively, that it should
possess sufficient elasticity in its senior staff arrangements that officers may be made available for field work when the necessity arises. Much can be done by the United Nations in arranging inter-governmental loans of personnel with particular skills, but because of the political problems which this type of operation may involve, it is clearly preferable that personnel of international civil service status should be used wherever possible. It is also desirable that personnel engaged in assisting countries should have served for a period at Lake Success so that in their field operations they can take account of the standards and work done by the Statistical Commission, the Statistical Office of the United Nations and the specialized agencies. They should also be able to draw upon the knowledge and experience of their colleagues in the Statistical Office and the specialized agencies in the different subject fields, for co-operative projects.

SUMMARY

17. For the purpose of improving the statistical services of countries whose statistics are inadequate, the Commission's attention is directed to the adequacy of the following programme in the carrying out of which the United Nations and the specialized agencies could collaborate. Part of the programme consists of new activities which the Commission may wish to recommend to be undertaken. The remainder consists of activities at present in operation but which may require expansion if a programme adequate to meet existing needs is to be put into operation.

Programme

(a) Creation of a field service within the Statistical Office of the United Nations to provide technicians to visit and advise countries or groups of neighbouring countries which require assistance.
(b) Creation of fellowships to enable individuals from countries which require assistance to undergo a period of training in the institutions of other countries, in the Statistical Office of the United Nations, or in the statistical offices of specialized agencies.
(c) Conduct of statistical institutes designed to provide training in statistical methods and in particular subject fields in the areas where other facilities are inadequate.
(d) Conduct of demonstration projects designed to afford field experience to statistical officers of countries which can not otherwise provide such training.

/(e) Regional
(e) Regional consultations (under the aegis of the Statistical Commission and in co-operation with regional economic commissions where they exist) of individuals concerned with statistical problems which are common to a given region.

(f) Compilation and publication of manuals, statistical papers, and other documents explaining current practices or recommended methods in particular subject fields.

(g) Publication of statistical data and issuing of questionnaires indicative of standard methods of collection, compilation, and presentation of statistical information.

(h) Correspondence with individuals concerned with statistical operations for purpose of eliciting information and furnishing advice on statistical problems.