

United Nations Statistical Office

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0. Preface

This contribution to *Statistisk tidskrift* reviews the development which preceded the establishment of the United Nations Statistical Office, the current work of the UNSO and some views on its future tasks. The article does not review the international statistical system as a whole. For information on other international statistical activities the reader is referred to the references at the end of the article [2, 3, 6, 8].

1. Introduction

International co-operation in statistics started with the first international congress in Brussels in 1853. The congress was initiated by the Belgian statistician Adolphe Quetelet and the British mathematician, statistician and computer scientist Charles Babbage, both highly regarded statisticians (Campion 1949). In the present context it may be particularly interesting to remind the reader that Mr. Babbage also was the inventor of the Difference and the Analytical Machines which are considered to be among the predecessors of the modern computers which play such an important role in modern statistical work. The first workable model of the Difference machine was by the way built by a Swedish printer and exhibited in London in 1854 [4].

It is also well worth noting that the statis-

ticians were among the first professions recognizing the need for and benefits of international co-operation by exchanging methodological knowledge and sharing empirical experience. They also saw the importance of systematic statistical work and recommended that a statistical commission be established in each country and that these commissions should report to an international statistical commission which in turn should be responsible for international statistical comparability.

Nine international congresses were held in the interval of 1853 to 1876 with an average attendance of nearly 500 statisticians. According to the recommendation of the first congress a Permanent Commission was established to implement the recommendations of the statistical congresses. The Permanent Commission tried to carry out its duties by forcing the national statistical organizations to comply to the recommendations of the congresses. This proved to be a very unwise strategy which not only destroyed the Permanent Commission itself but also ended the international statistical congresses.

In 1885 the International Statistical Institute was established as a scientific organization [7]. Many governments considered the organization with great respect and officially appointed their delegates to the Institutes sessions. The ISI has held 43 sessions since it was established and has played an important role in development of statistics and promotion of international statistics. It

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has formed special committees and working groups to review particular problems and to recommend solutions. The reports of these committees have also in many instances given results which later were recommended for adoption by the national statistical services.

A Permanent Office of ISI was established in 1913 and started its work in The Hague during the difficult first world war period by publishing international statistics for the European countries. After the war the International Labour Organization and the International Institute of Agriculture became responsible for the publication of international labour and agriculture statistics, respectively, while the Permanent Office of the ISI continued to publish international demographic statistics.

After the creation of the League of Nations, a Mixed Committee with representatives from the League of Nations, the International Labour Organization and the International Statistical Institute was formed. The Mixed Committee prepared a series of reports and proposals as to statistics for the consideration of their parent organizations.

The next step of importance for international statistical co-ordination was the Conference of Official Statisticians who met in Geneva in 1928. The objective of this conference was to consider the possible adoption by their governments of some of the proposals which had been put forward in order to obtain internationally more comparable statistics. The conference drafted a convention relating to economic statistics which became the basis for further work in this field in the '30s.

Based on recommendations from the same convention, the League of Nations established its Committee of Statistical Experts which met annually up to World War

II. The Committee prepared a number of methodological studies, reports and recommendations on economic and social statistics which had an important impact on the development of national statistics in a number of member countries as well as on the international comparability of statistics. A similar group was established by the International Labour Organization to look after the labour statistics and prepare recommendations for the Conferences of Labour Statisticians.

2. The UN Statistical Office

The United Nations Statistical Office (UNSO) is a part of the UN Secretariat in New York. This Secretariat's main responsibility is to serve the General Assembly (GA) and its different political bodies. The Economic and Social Council (ECOSOC) is one of the four main councils reporting to the GA and is the political body concerned about economic and social questions. There are several functional commissions reporting to ECOSOC. The Statistical Commission (STC) is one of them responsible for considering and giving guidance on statistical questions [14].

The STC was established in 1946 and meets every second year [5]. It consists of representatives from 24 member countries according to geographical distributions. The member countries represented in the STC are determined by ECOSOC which also appoints the persons to serve after nominations from the member countries. The personal members of the STC are usually chief statisticians in their home countries. The STC has a Working Group which carries out preparatory work for the STC sessions.

The UN Secretariat headed by a Secretary General is divided into departments

and offices. The Department of International Economic and Social Affairs (DIESA) and the Department of Technical Co-operation for Development (DTCD) are responsible for research and for delivery of technical assistance to developing countries, respectively. They are each headed by an Under-Secretary General. UNSO is an office within DIESA, but it is also carrying out technical co-operation tasks for DTCD.

In addition to the Secretariat the UN system comprises five regional UN Economic Commissions responsible for UN work in the different regions of the world, a number of specialized agencies responsible for different substantive areas, the UN funds and other organizations connected to the GA.

The responsibilities of UNSO are:

- a. Methodological development
- b. Technical co-operation
- c. Compilation, processing and dissemination of statistics
- d. Statistical service to the GA and its organs
- e. Co-ordination of international statistical activities.

Methodological development consists of the development of conceptual systems including statistical standards, statistical methods and techniques, statistical organization and training. The work is determined by the work programme of UNSO which has been considered by the STC [11]. The different tasks are either carried out within the office or by help of recruited consultants and will usually result in a draft publication. To secure that views and interests from all parts of the world are taken into account a draft publication will often first be reviewed by an expert group which will be called to a meeting in the office for discussion of the draft. The draft will also usually be distributed for comments to national

statistical offices in member countries and to the statistical services of the regional commissions and the specialized agencies. After all comments are taken into account the publication will be redrafted accordingly and presented for the STC. The STC may approve the draft and recommend it for adoption by ECOSOC as an international recommendation. However, not all the methodological publications of the UNSO are intended to become recommendations. Many are handbooks, guidelines and special studies. The number of methodological publications prepared by UNSO during the last ten years counts 37 recommendations, guidelines, handbooks and technical reports.

The DTCD is the executing agency of the UN technical co-operation with developing countries. In statistics the responsibility for the substantive technical assistance is charged to the UNSO. This responsibility comprises evaluation of needs in the countries for assistance in the field of statistics, assistance in formulation project proposals to the funding agencies and advice and assistance in implementing approved projects. As of January 1, 1981 UNSO assisted 88 countries in their statistical development. In several countries there were more than one statistical project and the total number of development projects in statistics supervised by UNSO was approximately 300. Part of the assistance is to provide statistical experts to countries requesting such assistance. In the beginning of 1981 there were 175 statistical experts working in developing countries in statistical projects for which UNSO was substantively responsible. These projects represent nearly 35 million US dollars in 1981. This amount represents approximately one fifth of the total technical assistance executed by the

UN and it is an interesting indication about the importance of statistical information in connection of country development.

The National Household Survey Capability Programme (NHSCP) is a new technical co-operation effort of the entire UN family including funding agencies and interested specialized agencies with a Central Co-ordinating Unit in UNSO [12]. It is designed to help interested developing countries to obtain a continuous flow of integrated statistics for their development plans, policies and programmes. The NHSCP is a data-collecting as well as a capability-building programme.

Will there be any return to the UNSO from statistical development and technical co-operation? It is a long feed back process, but in the long run UN will also profit from the investment in better international statistics. The third responsibility of the UNSO is to collect, process and disseminate international statistics in the fields not covered by the statistical services of the specialized agencies. UNSO collects, processes and disseminates international statistics in the fields of demographic and social statistics, industrial and construction statistics, foreign trade, transport and energy statistics, price and national accounts statistics. The UNSO is also responsible for development of environment statistics even though at the moment no systematic collection can be carried out in this new field.

The results of these activities are a number of statistical publications which may be classified in two groups, the general statistical publications aimed at users wanting general statistical references to the conditions and development in the member states of UN and the specialized publications aimed to satisfy the needs of those users who require detailed information about certain

special aspects. Within the first group UNSO publishes the Statistical Pocketbook which is a small popular publication mainly meant to be an introduction to international statistics, and the UN Statistical Yearbook which is a publication with nearly one thousand pages filled with interesting facts of the contemporary world. Partly also belonging to this group is the Monthly Bulletin of Statistics which reflects the main trends of international development from month to month.

The second group comprises special publications like the Demographic Yearbook, Compendium of Social Statistics, Yearbook of Industrial Statistics, Yearbook of World Energy Statistics, Yearbook of International Trade Statistics and the Yearbook of National Accounts to mention some. Most of these specialized statistical publications contain, up to a thousand pages or may even be published in two volumes.

The publications are prepared by modern automated photocomposition techniques and the recurrent annual publications count for nearly 18 thousand table pages in output per year. In addition come more ad hoc publications as different compendia and reports.

The UNSO statistics are not only disseminated in the traditional form of publications. Statistics are now sold on machine-readable tapes and on microfiches to those users who prefer to have the statistical information available in these forms.

Providing service to the GA, its political bodies and different conferences sponsored by UN has also been emphasized as one of the objectives of UNSO. This responsibility is of more ad hoc nature and takes different forms. The UNSO is frequently asked to prepare the statistical basis for documents to be presented for the mentioned bodies.

More regular statistical service is rendered to such bodies as the Committee on Contributions, the Statistical Commission and its Working Group. Even though these requests are ad hoc they require input of a significant volume of resources.

The last but not the least important responsibility of UNSO is co-ordination of the different statistical activities of the international statistical agencies. The UNSO has been charged with this responsibility without being given any instructional authority. International co-ordination in statistics has therefore to be approached in the spirit of voluntary co-operation among the different agencies. The main vehicle is the ACC Subcommittee on Statistical Activities which can be considered as an annual conference of the international chief statisticians. The annual meeting is by tradition chaired by the Director of the UNSO and attended by representatives of the statistical services of the regional commissions, the specialized agencies and other international organizations with statistical activities. UNSO is also acting as a secretariat for the subcommittee. It is not without professional pride that it can be stated that the co-operation in this group is excellent and that very good co-ordination results have been achieved.

The UNSO is organized into an Office of the Director, a Demographic and Social Statistics Branch, an Industrial, Environment Statistics and Classification Branch, a National Accounts and Special Projects Branch, a Trade, Transport and Energy Statistics Branch, and a Statistical Services Branch. Each branch is headed by an Assistant Director. The Office of the Director includes a Management and Planning Section, a Software Development Section, a Technical Co-operation Co-ordination Sec-

tion and a Central Co-ordination Unit for NHSCP. The Technical Advisers in statistical data processing also report directly to the Director.

At the beginning of 1981 the size of the staff of UNSO was 110 professionals and 106 general service staff members. Because of the general world wide economic situation an increase in the staff is not expected in the next few years and new tasks will therefore have to be carried out by redeploying resources.

The UNSO budget for biennium 1980-1981 for direct costs was 13.6 million US dollars of which about 3.4 million dollars were contributed directly from extrabudgetary resources. The budget for the next biennium is not expected to be increased in real terms [15].

3. Future Tasks for the UN Statistical Office

UN has developed a planning and budgeting system to which the UN Statistical Office has to comply. Its main components are a Work Programme Budget (WPB) system and a Medium Term Plan (MTP) system. The current WPB period expires at the end of 1981 [11]. The next period will cover the biennium 1982-1983 which will be the last within the current MTP[10]. The WPB is subdivided into Programmes. The planned activities of UNSO is one such Programme. A Programme is usually subdivided into Sub-programmes which consist of Programme elements. A Programme element is characterized by one or several identifiable substantive outputs like a publication, report, etc. The MTP is also subdivided into Programmes and Subprogrammes, but does not give specifications on the level of Programme elements. The next UN/MTP will cover the six year period 1984-1989. Work on the WPB 1982-1983

and the MTP 1984–1989 started within the Secretariat in 1980 [15].

After the preparatory work in drafting these planning documents is finalized, they are presented for several UN commissions and committees before they are finally adopted by the General Assembly. Both the proposed WPB and the draft MTP for UNSO were submitted for review and consideration by the Statistical Commission in January 1981 [13]. The WPB proposal which contained 8 Subprogrammes and 31 Programme elements in the Statistics Programme were considered by the Statistical Commission as to their content and priority. The STC stated that there were no activities in the proposed WPB which were obsolete, of marginal usefulness or ineffective, and the STC pointed out that important functions with highest priority include development and harmonization of classifications and other international standards, co-ordination of the international statistical programmes and improvement and maintenance of statistical capabilities in developing countries.

The STC also endorsed the draft provisional MTP and gave particular high priority to development of concepts and methods, provision of technical co-operation to establish and maintain statistical and data processing capabilities in developing countries, and to co-ordination of international statistical programmes. The STC expressed that statistical development must be kept up to date with identified advances in technology. The UNSO should take a lead in this field and it should continue to develop its own data bases to allow more efficient processing. This would also enhance the possibilities for UNSO to provide assistance to countries. Steps need to be developed in the next WPB to prepare participa-

tion in international statistical systems carried over a communication network for data exchange. The Statistical Commission also further encouraged co-operation with other international agencies.

There are four important future tasks which I will deal with in some more detail. They are 1) the development of a more active contact with the potential users of international statistics, 2) further international standardization of statistical concepts and methods, 3) continued technical co-operations aimed at statistical capability building in developing countries, and 4) implementation of a world statistical system taking advantage of the rapidly developing telecomputer technology.

International statistics are currently prepared without close contact with the users. Very little is known about the users and how they use our statistics except for the fact that their number is surprisingly low taking into account that they represent the world market. The present structure and content of the international statistics are to a large extent determined by the producers based on what is available from countries and on what they think could be of value to the unknown users. This is an extremely difficult situation for UNSO which has the responsibility to draft international recommendations to the statistical producers on what and how to prepare statistics which meet the needs of the users.

It is important to build up a two way communication with the users to secure the international statistical information which is really needed. Who are the users of international statistics? We will probably find them all over the world as government planners and policy makers, international negotiators, the national and transnational businessmen, scientists and educators as well

as the general public. In a world which is becoming more and more complex and integrated, more and more decisions require knowledge about domestic and foreign development expressed in comparable terms. We also know that the more advanced the world becomes the more correct decisions will depend on good statistical information to plan, monitor and evaluate development on the local, regional and global levels.

Therefore creating a mechanism by which the producers of international statistics will learn more about the changing needs of the users of their products must be a major task for UNSO in the future.

As has already been pointed out, the value of international statistics to the users also depends on the comparability of the different parts of the international statistics. The comparability has two dimensions, national comparability among the different national statistical subject-matter areas such as the population statistics, the social statistics, the industrial statistics, etc., and the international comparability among statistics from different countries. The question of comparability has been a great concern inherited by UNSO from its predecessors. During its 35 years UNSO has developed a number of recommendations, systems and classifications now widely used in the UN member countries. However, there are still a number of problems to be solved. Developing a more systematic approach to integrating the conceptual bases for economic, demographic, social and environmental statistics must be one of the main tasks for the future including harmonization of classifications in the different fields of statistics.

Traditionally much of the technical co-operation in statistics with developing countries has been directed toward assis-

tance in planning and carrying out specific surveys and censuses. This resulted in specific results but the next time another survey or census was needed, and a new assistance project had frequently to be launched because no capabilities were left from the previous projects. A new orientation has been built into the provision of technical co-operation in statistics through the National Household Capability Survey Programme [12]. This programme aims to set up country projects through which a permanent capability to carry out household surveys is built by training through a series of supported surveys which are adjusted to the particular needs of the individual participating countries. The basic ideas behind this programme must be emphasized and carried over to other parts of a national statistical system.

The fourth and a very challenging task is to implement a world statistical system by means of modern telecomputer techniques. The aim must be that the international statistical knowledge should be widely shared and easily accessible for the users wherever they might be. The development of data communication networks including communication satellites has been extremely rapid during the last decade. Parallel with this, the technology of on-line and interactive use of computer data bases has developed equally fast and is emphasized with dramatic decreases in cost of use. The so-called telematic marriage between telecommunication and computer technologies permits world wide data sharing. A number of information systems and utilities are already working on the international scene. Even though no international information utility has so far been interested in a wide provision of statistical service, there is little which can prevent the establishment of

such a service based on international statistics which can be purchased from UNSO and other international statistical organizations. In my opinion, the users needs should be served by the responsible producers of statistics who have the necessary knowledge to guide the users to that information which matches their needs best and to give warnings about the defects.

UNSO has preparatory work on this task on its next WPB and MTP. The implementation of a world statistical system cannot be the sole responsibility of UNSO or any other single organization, but has to be a joint responsibility based on co-operation among all national and international statistical offices utilizing available telecommunication facilities. The future division of labour might be that the national statistical offices also would consider it their responsibility to develop the system within their respective countries and to market the international statistics together with their own national statistics. They might also be responsible for identifying and specifying the needs for international statistics as well as their own national statistics in their countries. The international statistical offices should then be responsible for the relevance and comparability of the international statistics and for the statistical information service to the international organizations.

The particular role of UNSO in the development of such a world statistical system cannot be more than that of an initiator and co-ordinator. The main responsibility for analysing, designing and implementing a world wide statistical system must be a joint responsibility and activity which is to be carried out in the co-operative spirit of the first statistical congress in 1853.

4. Conclusions

During its 35 years history the main achievements of the UNSO are the contributions to technical co-operation in statistics, standardization and computerization of the national statistical systems, and the voluminous international statistical publications.

These developments have required both large and well qualified resources. The stream of new and important international issues deserving statistical attention seems only to increase. In the prevailing economic situation it will, however, not be realistic to assume that UNSO will be allocated a significant amount of additional resources [15]. The dilemma which the UNSO seems to be facing is either to respond to requests for new statistics by eliminating some of the present tasks, or to concentrate on the present tasks ignoring new requests.

At present the collection, processing and preparation of statistical publications requires about two fifths of the UNSO budget. To be able to respond to requests for new international statistics, further methodological and technical development, technical co-operation and co-ordination, it will be necessary to make the present publication oriented activities more efficient or, if no other possibility will exist, eliminate some of them.

In the anticipated future development towards a conceptually and technically integrated world statistical system, the role of the UNSO will probably gradually change from the present role as a statistical office with publishing international statistics as a main function to a role in which the initiating, advisory and co-ordinating functions will be more predominant.

5. References

- [1] Campion, H.: International Statistics, Journal of the Royal Statistical Society, Series A, Vol. CXII, Part II, London 1949.
- [2] Dannemann, W.: Activities of the Bureau of Statistics of the International Monetary Fund, Proceedings of the 42nd Session of the International Statistical Institute, Manila 1979.
- [3] Goldberg, S. A.: The International Statistical Services – With Special Reference to the United Nations Statistical Office – An Overview, Proceedings of the 42nd Session of the International Statistical Institute, Manila 1979.
- [4] Goldstine, H.N.: The Computer from Pascal to von Neumann, Princeton University Press, Princeton 1972.
- [5] Leonard, W.R.: The Work of the Statistical Office of the United Nations, Proceedings of the 26th Session of the International Statistical Institute, Bulletin de l'Institut international de statistique, Bern 1949.
- [6] Narain, R.D.: International Agricultural Statistics – Some Aspects of its Growth Problems and Prospects, Proceedings of the 42nd Session of the International Statistical Institute, Manila 1979.
- [7] Nixon, J.W.: History of the International Statistical Institute: 1885–1960, International Statistical Institute, The Hague 1960.
- [8] Uemera, K.: The Health Statistics Programme of the World Health Organization, Proceedings of the 42nd Session of the International Statistical Institute, Manila 1979.
- [9] United Nations: Directory of International Statistics, Department of Economic and Social Affairs, Statistical Office, Statistical Papers, Series M, No. 56, New York 1974.
- [10] United Nations: Proposed Medium-Term Plan for the Period 1980–1983, Vol. IV, General Assembly, Official records: Thirty-Third Session, Supplement No. 6, New York 1979.
- [11] United Nations: Proposed Programme Budget for the Biennium 1980–1981, Vol. I, General Assembly, Official records: Thirty-Fourth Session, Supplement No. 6, New York 1979.
- [12] United Nations: The National Household Survey Capability Programme—Prospectus, Statistical Office, United Nations, New York 1980.
- [13] United Nations: Statistical Commission—Report on the Twenty-First Session, Economic and Social Council, Official Records 1981, Supplement No. 3, New York 1981.
- [14] United Nations: Yearbook 1978, Vol. 32, United Nations, New York 1981.
- [15] United Nations: Proposed Programme Budget for the Biennium 1982–1983, Vol. 1, General Assembly, Official records: Thirty-Sixth Session, Supplement No. 6, New York 1981.