



UNITED NATIONS  
ECONOMIC  
AND  
SOCIAL COUNCIL



Distr.  
GENERAL

E/CN.3/530  
13 June 1978

ORIGINAL: ENGLISH

STATISTICAL COMMISSION

Twentieth session

20 February-2 March 1979

Item 12 of the provisional agenda. Programme objectives: implementation and prospects (b) Statistical work of the specialized agencies

STATISTICAL WORK OF THE SPECIALIZED AGENCIES

Report of the Secretary-General

SUMMARY

The present document is a progress report, presented for the information of the Commission, on the statistical activities of the specialized agencies since the nineteenth session of the Commission, in November 1976. It covers the work of the International Labour Office (paras. 2-9), the Food and Agriculture Organization of the United Nations (paras. 10-38), the United Nations Educational, Scientific and Cultural Organization (paras. 39-50), the International Civil Aviation Organization (paras. 51-57), the World Health Organization (paras. 58-77), the International Monetary Fund (paras. 78-87), the Universal Postal Union (paras. 88-90), the World Intellectual Property Organization (paras. 91-96) and the General Agreement on Tariffs and Trade (paras. 97-99).

1. At the nineteenth session, the Commission considered a progress report by the Secretary-General entitled "Statistical work of the specialized agencies" (E/CN.3/497). 1/ The present document is the corresponding report on the work done by the agencies since the nineteenth session. A progress report on the statistical work of the regional commissions and the Inter-American Statistical Institute (E/CN.3/529) and a report on the work of the Statistical Office of the United Nations (E/CN.3/531) are also before the Commission.

---

1/ For a summary of the discussion in the Commission, see Official Records of the Economic and Social Council, Sixty-second Session, Supplement No. 2 (E/5910), paras. 195-197.

## I. INTERNATIONAL LABOUR OFFICE

2. As in previous years, the statistical programme of the International Labour Office (ILO) was characterized by a large volume of published material. The 1976 and 1977 issues of the Yearbook of Labour Statistics were published in December 1976 and December 1977 respectively. The quarterly Bulletin of Labour Statistics (and its eight supplements in the intervening months) appeared regularly. The second quarterly issue of the Bulletin contained, as in previous years, the results of the ILO October inquiry on wages, salaries and normal hours of work for selected occupations and on retail prices. The 1978 edition of the Technical Guide, Volume I (Consumer Prices) was issued in March 1978 and Volume II (Employment, Unemployment, Hours of work, Wages) in April-May 1978.

3. Labour Force Estimates and Projections, 1950-2000 (second edition) appeared in six volumes in 1977. These volumes were prepared by the ILO Bureau of Statistics as part of a joint international effort of the United Nations and the specialized agencies, designed to produce a co-ordinated series of comprehensive demographic estimates and projections. Quinquennial estimates and projections of total population and labour force by sex and age group (with corresponding labour force participation rates), 1950 to 2000, together with the sectoral distribution of the labour force by sex for 1950, 1960 and 1970, for the world, geographical areas, regions and individual countries and territories are set out in volumes I to V. Volume VI contains a detailed description of the methodology employed.

4. As part of its efforts to translate international standards into operational programmes, the ILO will publish in 1978 "An integrated system of wage statistics: a manual on methods". This manual, inter alia, discusses in detail the types of surveys to be undertaken for collecting and compiling statistics of (a) earnings and hours actually worked, (b) wage rates and normal hours of work, (c) labour cost, (d) wage structure and distribution. It also indicates methods of constructing wage indices and for comparing real wages.

5. Work also proceeded towards the publication of the third edition of Household Income and Expenditure Statistics, scheduled to be issued at the end of 1978. This will present in standardized form (and in one volume) the results of household income and expenditure surveys conducted from 1968 to 1976 in more than 80 countries throughout the world.

6. The ILO continued to work on the development and standardization of labour statistics. It is reviewing the existing international recommendations on labour force statistics (employment, unemployment, underemployment) and preparing questionnaires that could be used in manpower and income surveys. The results of this work (which should also prove useful in the implementation of the National Household Survey Capability Programme recommended in Economic and Social Council resolution 2055 (LXII)) will eventually appear in a manual on surveys of manpower and income.

7. Methodological research is continuing on statistics of industrial accidents and occupational diseases. The results of this work may be reviewed in a meeting of experts.

8. The work of the ILO on intercity price comparisons for the determination of post adjustments of international officials in European duty stations is to be transferred to the International Civil Service Commission.

9. In accordance with the current international emphasis on household surveys as a major instrument for collecting basic socio-economic data (including the ILO's specific interest expressed by the 1976 World Employment Conference), the ILO established in Asia a post of regional expert in household surveys. Similar posts will be established in 1978 in Africa and Latin America. These projects will complement the work of the present regional adviser in labour statistics in Africa and the ILO's programme of direct technical co-operation in individual countries - the latter being generally financed by the United Nations Development Programme (UNDP) and bilateral programmes of development assistance.

## II. FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

10. Over 100 countries participated in the programme for the 1970 World Census of Agriculture. The final results from 48 of these countries were published in 19 issues of the Census Bulletin. In addition, the results from 15 other countries were prepared for publication in 1978. The results will continue to be published as received from the countries.

11. The Food and Agriculture Organization of the United Nations (FAO) Programme for the 1980 World Census of Agriculture (WCA) was distributed to all FAO member countries in 1977. It placed particular emphasis on the agricultural census as an integral part of the over-all system of agricultural statistics in the countries all over the world. For promoting the 1980 World Census of Agriculture three publications were issued in 1978: (a) the "Report on the 1970 World Census of Agriculture" containing the experiences of the countries that took the census of agriculture under the framework of the 1970 programme; (b) "Guidance for taking agricultural census" containing detailed instructions and samples on all phases of the agricultural census and (c) with the assistance of the United Nations Fund for Population Activities (UNFPA) a "Guide for the collection of statistics on agricultural population and employment". Besides issuing these publications other promotional measures during 1977 and 1978 to assist developing countries in taking censuses of agriculture around 1980 included the organization of national census demonstration centres (NDCs), training centres, seminars and special courses with reference to the programme for the 1980 WCA. These were held in different parts of the world and FAO assisted in preparing the programmes/courses, providing background documents, giving lectures and also providing financial support to national institutions for the holding of NDCs and for financing fellows from neighbouring countries.

12. Following the recommendations of the World Food Conference and in close co-operation with the Food Security Assistance Scheme, the Global Information and Early Warning System (GIEWS) and Plant Production Division, a programme has been started to assist countries in setting up a crop forecasting system including the application of crop-yield/weather relationships. The objective of this system is to have early estimates of expected production of food crops before actual harvest time. This will enable the authorities concerned to take timely action with regard to imports/exports, storage and internal transportation, market stabilization etc. Preparatory missions have been sent to 11 countries, selected on the recommendations of recent FAO food security missions and taking into consideration their vulnerability to acute food shortages or crop failures. Three more missions are planned before the end of 1978. The missions advised countries on improvement in their agricultural statistics, necessary for implementing or strengthening a crop forecasting system. A document was prepared and circulated to statistical field staff on "A statistical aspect of an information and early warning system" and one on "Statistical methods of forecasting crop production" is in preparation.

13. An international training course in remote sensing applications for agriculture, jointly organized by the United Nations and FAO in co-operation with

the Government of Italy, was held in Rome during April-May 1977 with the main objective to provide education and practical training to participants from developing countries in the application of remote sensing methodology for crop statistics and for agricultural censuses; 17 participants attended this course.

14. FAO's Interlinked Computerized Storage and Processing System (ICS) of assembling, compiling, processing and disseminating food and agricultural statistics, which now covers about 240 primary food and agricultural commodities and 290 processed products derived therefrom, has built up the data series from 1961 to 1978 for 215 countries and territories in the form of supply/utilization accounts which make for consistency and comparability. This now represents the world's largest and most up-to-date data bank of food and agricultural statistics on which national and international agencies and institutions can draw, as they do now, to meet their requirements of current and long-term series of food and agricultural statistics.

15. Provisional detailed food balance-sheets for 1972-74 averages have been prepared for 162 countries, covering almost the entire world population. Each food balance-sheet is supplemented by a table showing per capita food supply by major crop groups in terms of calories, protein and fat for the average period 1961-63 and individual years 1964-1974. This material, a major outcome of the data processed and stored in ICS, has been sent to the countries for review and comments which will be taken into account in the revision and updating of the food balance-sheet series through ICS.

16. The base period for index numbers for food and agricultural production, as well as for agricultural trade, has been shifted from the 1961-65 average to the 1969-71 average and a substantial improvement has been made in the methodology for the construction of index numbers series of production at the country, regional and world levels. The common regional weightings based on wheat price relatives previously used have been replaced by average annual producer prices in order to arrive at country indices and exchange rates for aggregating them at regional and country levels.

17. The computerization of the data series and the streamlining of the publication programme in 1977 have enabled the Statistics Division to advance the issuance dates of periodic statistical publications (Production Yearbook, Trade Yearbook and Annual Fertilizer Review). The Monthly Bulletin of Statistics became trilingual in January 1978, reducing the time-lag between data availability and their publication.

18. Work has started on the preparation, by computer, of questionnaires on production and quarterly trade, tailored to each country.

19. A glossary of terms used in food and agricultural statistics is in preparation.

20. The Fertilizer Data Centre has been in operation since 1975. All fertilizer statistics and related data are integrated at the Centre. In addition to production, trade and consumption statistics, the Centre collects, compiles and

/...

disseminates information on prices paid by farmers, quarterly import and export prices and fertilizer production capacities. It has also extended its activities to fields related to fertilizers, such as high-yielding varieties of cereals and fertilizer application by crops.

21. Land-use statistics are being expanded to provide information of significance to environmental studies.

22. The improvement of pesticide statistics is underway, in consultation with industry.

23. Work on economic accounts for agriculture is continuing. Following the publication of a report containing production accounts at current prices for 62 countries for the period 1961-1971, a second edition is now under way with coverage expanded to around 100 countries with such accounts, together with production accounts at constant prices and capital formation accounts for a number of countries for the period 1965-1976.

24. As a result of the continuous work on the assessment of the world food and nutrition situation, the Fourth World Food Survey was published in 1977. The scope of this Survey is broadly similar to that of its predecessors. It attempts to update the review of recent trends in food production and supply against the background of increasing population and the most recent evidence regarding the incidence of under- and malnutrition.

25. Work has continued on the compilation of data and the review of country practices and methods of food consumption surveys. While the analysis of those results has been used in the Fourth World Food Survey, the methodological material and the basic statistical series have been presented in the Review of Food Consumption Surveys - vol. I: covering Europe, North America and Oceania, and vol. II: covering Africa, Latin America, the Near East and the Far East. The above will provide suitable background information for the revision of the 1964 Programme of Food Consumption Surveys within the over-all context of the National Household Survey Capability Programme recommended in ECOSOC resolution 2055 (LXII) and the preparation of manuals for promotion of the surveys in the countries.

26. The increasing policy and planning orientation of FAO statistical work, especially the recent requirements for the poverty-oriented and the basic-needs approach to agricultural and rural development have continued to require the development and maintenance of regular series of social statistics and indicators. Work is in progress for the development of the FAO programme of social indicators, comprising the preparation of a conceptual framework of social indicators pertaining to the food and agricultural sector and the construction from data readily available or that can easily be collected, of a series of indicators to be published in an internal document towards the end of 1978.

27. As a part of its contribution to the Joint World Health Organization/United Nations Children's Fund/FAO Global Nutritional Surveillance System, FAO initiated work in developing indicators of expected changes in per capita availabilities of

food and nutrients, derived from advance food balance-sheets based on early estimates of crops received mainly through the Early Warning and Food Information System, and of likely increases/decreases in incidence of under-nutrition. The ongoing activities on the promotion of the revised programme of Food Consumption Surveys and of the National Household Survey Capability Programme recommended in Economic and Social Council resolution 2055 (LXII) will, it is expected, facilitate the development of nutritional surveillance systems in developing countries.

28. Work on the revision of the world-wide estimates and projections of agricultural population and labour force covering the period 1950-2000, as part of the interagency work programme in the field of demographic estimates and projections, was completed in 1977 (see para. 3 above).

29. Increased emphasis is being placed on the data of support prices for major agricultural products in the context of the monitoring of progress of international agricultural adjustment and, in consequence, the data base and information content of the publication Agricultural Support Price Statistics will be expanded.

30. In connexion with a project on "land resources for populations of the future" in developing countries, work is under way for deriving population and land-use (cropping patterns) estimates by agro-ecological zones on the basis of available subnational administrative-area data.

31. FAO has started a technical co-operation programme (TCP) to assist countries in their immediate requirements for short-term technical assistance. Assistance was provided under TCP during 1977 to Bolivia, Cape Verde, Ecuador, Guinea, Sao Tome and Principe, Senegal and the United Republic of Cameroon in data processing, in preparing projects relating to agricultural census and in training in agricultural statistics.

32. During the reporting period, about 40 field experts per year were engaged in promoting the development of agricultural statistics in various countries.

33. The Yearbook of Forest Products now includes annual data for 12 years on the production and trade in forest products and the average unit value in trade, together with tables on the direction of trade for two years. The use of the computer and some streamlining in procedures allow completion of data preparation within 12 months of the end of the last year reported. Data on the capacity of the pulp and paper industry and five-year forward estimates of the change in capacity are published annually. These estimates are now backed up with a publication listing the specific mill investments that make up the estimated additions to capacity. Assessments of the capacity of the wood-based panels industry are published periodically, the latest being in 1977. A collection of forest products price series has been assembled in conjunction with the Economic Commission for Europe (ECE) and the first issue was published by ECE in 1978. These series will be updated, augmented and published annually by FAO. A monthly bulletin - tropical forest products in world timber trade - was initiated on a regular basis in September 1977.



34. During the reporting period, the following volumes of the Yearbook of Fishery Statistics have been published: volume 40 (Catches and landings, 1975); volume 41 (Fishery Commodities, 1975); volume 42 (Catches and landings, 1976) and volume 43 (Fishery Commodities, 1976). Volume 44 (Catches and landings, 1977) is expected to be published in December 1978 and vol. 45 (Fishery Commodities, 1977) in January 1979. The "catches and landings" volumes continue to be published by automated data-processing techniques. The data base permits supplementary regional tabulations to be issued and the input documents, i.e. questionnaires submitted to countries for completion, have been computerized and are submitted to national offices as pre-coded, pre-filled computer-printed documents. Experience has shown that this expedites and facilitates significantly the return by many national offices of up-to-date statistics.

35. The Fisheries Department is investigating the possibility of computerizing the fishery commodity data base and of publishing the "fishery commodities" volumes of the Yearbook of Fishery Statistics by computer printouts. The development of new tables on fishery commodities (production and international trade) is now well under way, taking into account the revision of the existing international commodity classifications, such as the Standard International Trade Classification, the Brussels Tariff Nomenclature and their harmonization.

36. The demand for current and detailed catch and effort data, which are essential in the assessment of the state of fish stocks and in the formulation of management and research programmes at the national and regional levels, requires computer facilities to expedite the extraction and publication of data on catches by major fishing areas. The extension of the territorial waters and economic zones up to 200 miles from the coasts is resulting in increased demand at the national and regional level for detailed data on catches and effort. There is also a growing need for more information on discard and on recreational fish catches, which could affect selected commercial fish stocks.

37. The ninth session of the interagency Co-ordinating Working Party on Atlantic Fishery Statistics was held at the headquarters of the International Commission for the Northwest Atlantic Fisheries (ICNAF) at Dartmouth, Nova Scotia, 17-23 August 1977 and the fifth session of the Indo-Pacific Fisheries Council (IPFC)/Indian Ocean Fisheries Commission (IOFC) Joint Working Party of Experts on Indian Ocean and Western Pacific Fishery Statistics was held at Manila, 1-3 March 1978.

38. In certain regional fishery projects supported by the United Nations Development Programme (UNDP), the need for fishery statistics was recognized and several field experts were engaged to promote their development in the groups of countries concerned, particularly those bordering on the Eastern Central Atlantic, the Western Central Atlantic, the Gulf and the South China Sea.

[Revision]  
per Harber,  
UNDP  
27 VII '78

III. UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

A. Statistics on education

39. The programme on education projections was completed, and trends and projections of enrolment by level of education and by age and sex were published for major regions, for the period 1960-2000, and for individual developing countries, for the period 1960-1985. Three major studies on education trends and projections were prepared and presented at three international conferences (the International Conference on Education, the Conference of Ministers of Education of African Member States and the Fourth Regional Conference of Ministers of Education and of Ministers responsible for Economic Planning in Asia and Oceania). A programme consisting of holding four national training seminars on education projection methods each year of the three-year period 1977-1979 was initiated. A manual on methods for projecting school enrolment in developing countries was completed, and a methodology for projecting educational attainment of the adult population was developed. Work was started on the preparation of a detailed study of wastage in primary and secondary education.

40. The following reports were published using census data on literacy and educational attainment: (a) a compendium of the basic data; (b) disparities in countries of the Asian region; (c) methodological studies for estimating and projecting; (d) estimates and projections of literacy rates. A draft manual on statistics for literacy programmes and a practical guide on out-of-school and adult-education statistics were issued. In addition, pilot projects were launched to test the manual and the practical guide in selected countries, and both documents will eventually be revised in the light of the experience gained in these pilot projects.

41. The proposed revision of the 1958 Recommendation on the International Standardization of Education Statistics will be examined by the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) at its twentieth session, in 1978. In addition to the national handbook on the International Standard Classification of Education (ISCED) for the United Kingdom (England and Wales), UNESCO issued similar handbooks for France, Egypt, Peru and the Sudan. During 1977, a special issue of the Bulletin of the International Bureau of Education was prepared concerning the UNESCO data collection system, data suppliers and national publications on education statistics, publications of UNESCO's Office of Statistics and a progress report on ISCED.

B. Statistics on science and technology

42. Activities aiming at methodological improvement and expansion of data collection relating to scientific research and experimental development in Member States were pursued. An experimental survey of scientific activities in research and development (R and D) in the social sciences and humanities was conducted with a view to establishing a continuous collection of data in this field; a study was

prepared on statistics concerning selected activities related to R and D in several European countries; a study on methods of statistical measurement of scientific and technological information and documentation has been initiated. A guide to the collection of science statistics was prepared in English, French and Spanish for national bodies engaged in statistical activities. Pursuant to Economic and Social Council resolution 1901 (LVII), the classification of R and D by objectives has been completed in English, French, Russian and Spanish. A statistical report on R and D in Latin American Member States was prepared as a reference document for the Standing Conference of Directors of the National Councils in March 1978. A statistical analytical report on manpower and expenditure for R and D was prepared for presentation at the second Conference of Ministers responsible for science and technology policy in the European and North American Region (MINESPOL II), to be held in September 1979.

43. In accordance with a resolution adopted by the General Conference in 1976, a preliminary report and a draft recommendation were prepared on the international standardization of statistics on science and technology. A special committee of technical and legal experts appointed by Member States is due to meet in Paris from 5 to 14 June 1978 to finalize the draft recommendation for submission to the General Conference at its twentieth session, in 1978.

#### C. Statistics on culture and communication

44. Steps have been taken towards extending the scope of cultural statistics to cover new fields, such as the theatre and public expenditure for cultural activities. An expert meeting was held in October 1977 to discuss technical aspects related to the international standardization of statistics on public expenditure for cultural activities. In 1978, the administrative organs of UNESCO, the Executive Board and the General Conference, will examine the advisability of having a recommendation on the subject. It is expected that such a recommendation will be approved by the General Conference at its twenty-first session, in 1980.

45. A questionnaire has been prepared on statistics relating to the theatre, for an international inquiry to be conducted in 1978, the first to be carried out by UNESCO in this field. Following the adoption by the General Conference, in 1976 of a recommendation on the international standardization of radio and television statistics, a questionnaire was sent to Member States early in 1978, for the first survey on radio and television.

46. The second joint UNESCO/ECE meeting on cultural statistics will take place at the end of 1978 and will inter alia discuss, within the context of statistical work related to the United Nations framework for the integration of social and demographic statistics (FSDS), the scope and coverage of a framework for cultural statistics, which has been the subject of a study by UNESCO.

#### D. Statistical data bank

47. The statistical data bank has been expanded to cover virtually all major statistical areas of concern to UNESCO. This expansion has made possible the preparation of an increasingly greater proportion of tables for the UNESCO Statistical Yearbook directly from the bank and has facilitated the production of other statistical data reports.

48. Work has started on the development of teleprocessing methods for information storage and retrieval using the data bank. A number of interrogation programmes have been written and put into application, thus permitting access to selected data series by users equipped with a visual display or typewriter terminal connected to the central computer of UNESCO. As concerns conventional batch-processing applications, a number of additional programme modules have been written to provide greater flexibility in table-handling operations, particularly the editing and updating of tables and their preparation for final printing.

49. Starting with the 1975 edition, the entire contents of the Statistical Yearbook have been reproduced by photo-offset from computer output, which has permitted a considerable reduction both in the time required and in the costs for printing. The Yearbook has become, starting with the 1976 edition, a trilingual publication, with all explanatory texts, table headings, and foot-notes printed in English, French and Spanish.

#### E. Technical co-operation

50. Technical co-operation in statistics continued to be provided with the financial support of the United Nations Development Programme and other extrabudgetary sources. The extrabudgetary assistance chiefly provided expert services to Member States upon request in the areas of education statistics and of statistics teaching at the university level. About 12 experts were assigned to individual countries, three of whom taught statistics at the university level. Under the Regular Programme, technical co-operation in statistics consisted of three statisticians based in the Regional Offices of Education and of a number of consultant missions, staff missions and fellowships in education statistics and statistics on science and technology.

#### IV. INTERNATIONAL CIVIL AVIATION ORGANIZATION

51. The statistical programme of the International Civil Aviation Organization (ICAO) continued to be developed and improved during the period under review. Implementation of the recommendations of the Statistics Division at its sixth session (20 October to 7 November 1975) remained a major task, as did the conversion of data processing to computerized operations. New editions of all the Air Transport Reporting Forms were prepared and distributed for use by States when reporting statistics for 1977.

52. The experimental on-flight origin and destination statistics programme, started in June 1976, was maintained along with the ongoing programme of flight-stage statistics. A decision on which of these two programmes will remain in the regular statistical programme is expected to be taken by the ICAO Council before the end of 1978.

53. The collection of financial and traffic statistics for en-route air navigation facilities and services was introduced on a biennial basis beginning with data for 1976 and the collection of airport financial data was introduced on an experimental basis for the years 1976 and 1977.

54. An annual statistical survey of general aviation activities, civilian pilot licences and certain air transport operations was introduced starting with the 1977 data. The information thus collected will fill an important gap in the available statistics and it should be particularly useful in work on the promotion of safety in civil aviation.

55. The first edition of a yearbook entitled Civil Aviation Statistics of the World, 1975 was published early in 1977 and the second edition, for 1976, was published in August 1977. The yearbook presents in one volume the most widely used statistical information on air transport, supplementing the comprehensive and detailed data published in the Digests of Statistics.

56. The library of civil aviation statistics and related publications was continually expanded. With the long-term aim of establishing a bibliographic service for use by ICAO, the Contracting States and others, arrangements were initiated for listings of the material to be made available periodically.

57. The growing need for improving the statistical capabilities of civil aviation departments, airports and airlines continued to be recognized. The regular programme of statistical workshop meetings in different regions of the world was intensified. Workshops were held at Dubrovnik in February 1977, Dakar in October 1977 and Bangkok in January 1978. Three more workshops are to be held in 1978, in Lima, Arusha and Cairo. The ICAO Regional Offices provided guidance to States in meeting their statistical obligations to ICAO and, when required, conducted short courses on air transport statistics for officials of civil aviation administrations.

## V. WORLD HEALTH ORGANIZATION

58. A large number of countries suffer from the lack of adequate health statistics to support health planning, management and research activities. In addition, in many developing countries, health statistics are incomplete and inaccurate. Efforts have been made, therefore, to co-operate with countries in making their health statistical services more user-oriented and responsive to health needs, objectives, targets and activities than in the past. More than 70 projects at country and intercountry levels are in operation with the aim of strengthening national health information systems and services. More than 100 fellowships are awarded every year to professional statisticians for training abroad.

59. Systems analyses of vital and health statistical services were conducted in Honduras, Jamaica, Mexico, the Philippines and Thailand during the first half of 1977. The analytical reports will be published at the end of 1978.

60. Studies on infant and childhood mortality and their relation to fertility, which were undertaken in Afghanistan, Algeria, Sierra Leone and the Sudan, have been completed and data are being processed for analysis. The results of a comparative study of the influence of biological and social factors on perinatal mortality, obtained from Austria, Cuba, England and Wales, Hungary, Japan, New Zealand and Sweden, were consolidated for publication.

61. Within the programmes of development of health indicators and measurement of levels of health, the World Health Organization (WHO) co-operated with the International Epidemiological Association (IEA). A joint IEA/WHO working group on the measurement of levels of health was organized at Nieborow, Poland in March 1977. WHO also co-operated in this area with the Organisation for Economic Co-operation and Development (OECD). Special attention was paid to the development of statistical indicators for primary health care. A working group met at Rijeka, Yugoslavia in October 1977 on the development and use of primary health records in developing countries.

62. A meeting on cancer statistics information subsystems was held in Minsk, Union of Soviet Socialist Republics, in September 1976 to discuss the different types of national cancer statistics systems, their objectives, contents and operating procedures. An expert committee meeting on cancer statistics, sponsored jointly by WHO and the International Agency for Research on Cancer, is to be held at Madrid in June 1978.

63. A consultation on birth defects surveillance was held at Geneva in December 1976 with a view to the preparation of a report on the subject to the World Health Assembly.

64. A meeting on the statistical principles of monitoring and surveillance in public health was held at Geneva in November 1977.

65. A meeting on practical and systems considerations in maternal and child health care will be held at Geneva in December 1978.

66. A Workshop for Teachers of Health Statistics was held at Cardiff, United Kingdom in early 1977 and an Interregional Conference on the Teaching of Health Statistics to Medical Undergraduates was organized at Karachi, Pakistan in

March 1978. The Conference reviewed teaching and learning processes in various countries and provided a forum for an exchange of views and experiences of university teachers and other specialists in health statistics and epidemiology. It made recommendations on the improvement of statistical teaching methods for medical undergraduates.

67. WHO collaborating centres were established at Rennes, France, Alexandria, Egypt and Rijeka, Yugoslavia, in order to encourage the development of health records and their use for management of primary health care services as well as for national planning.

68. Two additional centres for the classification of diseases have been created, bringing the total to six. There are two for the English language (London and Washington) and one each for French (Paris), Portuguese (Sao Paulo), Russian (Moscow) and Spanish (Caracas). Their function is to advise countries on problems arising out of the use of the International Classification of Diseases (ICD) and its related classifications.

69. The twenty-ninth World Health Assembly, in 1976, approved the recommendations of the International Conference for the Ninth Revision of ICD and as a consequence the following documents were published in 1978: ICD-9 (2 volumes - Tabular List and Alphabetical Index) in English and French; International Classification of Procedures in Medicine (2 volumes) in English; ICD for Oncology (ICD-O) in English and Spanish. Versions of these documents in the other official languages are in preparation.

70. A Working Group on Lay Reporting of Morbidity and Mortality was held at New Delhi in November 1976. The Working Group drew up a list of symptom associations and conditions recognizable by lay or paramedical personnel for the reporting of causes of death and of reasons for contact with health services. The list was extensively field-tested in a number of countries of South East Asia in 1978.

71. Part of WHO's participation in the implementation of the World Population Plan of Action is through continuous monitoring of mortality data for mortality trends and patterns. This is done by updating WHO's data bank with the most recent information from countries. As more countries are now sending mortality and morbidity data on computer tape, the timeliness of the publications, World Health Statistics Annual and World Health Statistics Report, has improved.

72. The World Health Statistics Annual, 1977, was published comprising the following volumes: vol. I, Vital Statistics and Causes of Death; vol. II, Infectious Diseases, Cases and Deaths and vol. III, Health Personnel and Hospital Establishments.

73. The monthly World Health Statistics Report became a quarterly publication as from 1977. It features special subjects of public health interest focusing mainly on the analysis of international health data, principally those stored in the WHO

data bank. One issue of the Report was devoted to "Community Water Supply and Excreta Disposal in Developing Countries: Review of Progress".

74. A "Manual of mortality analysis" and "Life table and mortality analysis" were published with the help of UNFPA funds.

75. A comprehensive report entitled "A review of developed and developing computer applications in medicine" was completed by a consultant.

76. One of the important activities in the statistical programme is the provision of methodological support to disease control programmes and health research undertaken jointly by countries and WHO. These support activities cover a wide range of topics including sample surveys of disease prevalence, follow-up studies of community population and patients, field trials of prophylactic and therapeutic measures, health services research, computerized simulation models of disease dynamics and laboratory studies on vaccines and other biologicals; they also include the application of operational research and systems analysis approaches to disease control and health services research.

77. Methodological support was given in particular to the following projects:

- (a) Field research to develop strategies for the control of malaria in African zones of different ecology;
- (b) Field investigation to evaluate the endemicity level of treponematoses in Senegal, through clinical and serological surveys;
- (c) Study of the epidemiology of schistosomiasis and the methodology of its control in man-made lakes;
- (d) The onchocerciasis control programme in the Volta River Basin;
- (e) An international study of the effects of multiple-drug treatment of leprosy in circumventing the problem of drug resistance in South-East Asia;
- (f) Studies in community control of hypertension, rehabilitation and secondary prevention of myocardial infarction, and prevalence and diagnostic criteria studies in rheumatic heart disease;
- (g) Several studies in the human reproduction and family health programmes; and
- (h) A collaborative study on epidemiological models of acute bacterial diseases and their application in public health.



## VI. INTERNATIONAL MONETARY FUND

78. During 1976-1977 the Bureau of Statistics continued to collect and process a growing body of statistics relevant to world monetary and payments problems; to release these in the monthly issues of International Financial Statistics (IFS) and Direction of Trade (DOT) and in the Direction of Trade Annual, Balance of Payments Yearbook and Government Finance Statistics Yearbook; and to make them available in various other forms. The Bureau continued its efforts in rationalizing the means of assembling data, in improving the conceptual basis of compiling internationally comparable statistics and in broadening the means of their dissemination. Since May 1977 the work of the International Monetary Fund (IMF) on the assembly and review of balance of payments statistics has been centred in the Bureau.

79. As regards data collection, the number of time series assembled directly from national sources increased sizably in topical and country coverage. The collection and normalization of data has continued to give appropriate emphasis to the establishment of new country pages in IFS, to improvements in the coverage of the data base and to revision of existing data to enhance their conformity to international standards. Countries' use of the Bureau's computer-generated report forms for general and financial statistics has improved the accuracy and currentness of such data in Bureau publications. The Bureau has also established the feasibility of receiving data from countries via tape as a practical means of data collection and direct entry into the Data Fund, the IMF's computer system. During the past two years the Bureau has continued to enlarge and refine its tape exchange system with member countries. At present, national data are being regularly reported to the Data Fund in machine-readable form by seven countries and plans are under way to extend the system to five more countries. Tape exchange has become an efficient and timely means of data collection and it is especially effective as a means to collect and control revised time series data over a long history.

80. At the data-processing level, development has begun on interactive communications among users, programmes and data through video display terminals (CRT) to enable both compilers and users of the Data Fund to express their requirements to the system in terms of the data to be retrieved and the operations to be applied. A retrieval and display routine is now operational. It is expected that further development in this area will enhance ease of use of the system and result in a savings of user resources.

81. At the data-processing level, a comprehensive redesign of the data base structure and programme routines is in process. The first phase is expected to be operational by the end of 1978. The major areas of change in the new system relate to a variable frequency and variable length tree structure data base storage format. By reducing the amount of physical space needed to store long-strings of data, it will be possible for more than 300,000 time series to be stored on line.

New programme routines are being written in a modular fashion with each module having a unique function. In addition to functional modules for retrieval, reformat, update, calculate and print, there are separate data-base-management modules to control the processing and management of the data on random access devices. Users will communicate their processing requirements to the system, utilizing a new English statement command language. Eventually a master control module will accept this new language of words and phrases and translate the statements into machine functions and processes.

82. In the area of publications, the Bureau has further refined and extended its photocomposition and tape subscription systems. The International Financial Statistics, Direction of Trade, Balance of Payments Yearbook and Government Finance Statistics Yearbook are all photocomposed publications that are produced via the photocomposition process, which has improved their currentness, flexibility and standardization. Subscriptions to all four statistical publications are also available in machine-readable tape form, and over 215 tapes are mailed each month to subscribers throughout the world.

83. About one quarter of the time of the Bureau's economist staff is occupied by its statistical work in the field. In this field work the Bureau has continued to provide technical co-operation in statistics to member countries under the general programme for establishment or improvement of central bank bulletins and in separate staff missions for improvement of statistical assembly in central banks. In both forms of assistance, emphasis has been given to the development and improvement of financial and general statistics prepared in accordance with classification and definitional standards that help to make such data useful for monetary authorities and others concerned with the monetary and payments problem.

84. During 1977, the programme of technical co-operation covered 27 countries. In the eight years of the programme's operation, the Bureau helped to establish new central bank statistical bulletins in 26 countries. There have also been substantial improvements in the content of existing bulletins.

85. In separate short-term staff missions, the Bureau staff during this period assisted two countries in the compilation of balance-of-payments statistics and seven countries in the assembly of detailed government finance statistics according to the framework given in the IMF draft "Manual on government finance statistics".

86. Under the IMF programme for the assembly and publication of comparable government finance statistics, the first Government Finance Statistics Yearbook was published in September 1977. The Yearbook contained disaggregated statistics on central government operations, tables showing derivation of these statistics from national sources, summary statistical tables on operations of state and local governments and institutional information on government units, accounts and data source and lists of nonfinancial public enterprises and public financial institutions. The Yearbook contained information for 100 countries, which was derived from questionnaire replies completed by the countries. During 1977 a

pilot course on government finance statistics design to train officials in procedures of the draft "Manual on government finance statistics" was conducted at the IMF Institute for participants from 26 countries. Similar courses in Spanish and French are planned for 1978 and 1979, respectively. Work is proceeding on revision of the draft "Manual on government finance statistics" in close co-ordination with the "Manual on public sector statistics" in preparation by the United Nations Statistical Office; see "Progress report on the Manual on public sector statistics" (E/CN.3/509), also before the Commission.

87. In the process of completing work on the revision of the Balance of Payments Manual, comments received on the June 1975 draft were used in preparing the final version of the fourth edition of the Manual that was issued, in English, at the end of 1977. French and Spanish versions of the Manual are being readied for publication in 1978. The Bureau has continued to conduct English, French and Spanish courses on the methodology for compilation of balance-of-payments statistics at the IMF Institute.

## VII. UNIVERSAL POSTAL UNION

### A. General

88. The importance of statistics in the activities of the Universal Postal Union (UPU) was recognized at its establishment more than 100 years ago, and the publication of data on the postal services of the member States has been assured since 1875. The nature of the data has in the course of the years undergone various changes, which led, pursuant to resolution C 35 of the 1964 UPU Congress at Vienna, to the publication of Statistique des services postaux containing 98 items.

### B. New policy

89. The 1974 Congress at Lausanne, accepted the principle of broadening the postal statistics as well as adapting the statistical items to the needs of the member States of UPU. This marked the beginning of intense activity with a view to revising and improving the system of international postal statistics. Prior to 1973, the UPU statistical activities aimed only at information; since then, they have had two complementary goals: (a) internationally, to deduce systematically the general trends of postal traffic and the means used to deal with this traffic, as well as the interdependence of postal development and growth in the economic, social and cultural spheres; and (b) nationally, to promote the use of statistics by postal administrations as an effective instrument for the management and planning of their services.

### C. Results

90. The results attained by the end of March 1978 can be summarized as follows:

(a) A revised list of some 200 items of Statistique des services postaux was drawn up in October 1974, the definitions and methods of collection specified for each.

(b) In order to get the postal employees responsible for providing statistical data acquainted with the new questionnaire, an instruction manual was published in 1975.

(c) Since then, postal statistics in the new form of loose-leaf binders have been published for the years 1974, 1975, and 1976. Beginning 1976, data furnished by the postal administrations have been submitted to an automatic logical and chronological control.

(d) Statistical data, collected and published in the annual UPU publication since 1964, have been stored in machine-readable form.

(e) Utilizing this data base, the International Bureau of UPU prepares an Annual Report on the Situation of Postal Services, the first of which was published

in 1977 analysing data up to 1975. The 1976 report is in preparation.

(f) A consultative group of statisticians has been created to give technical advice to the International Bureau.

(g) Most national postal administrations have indicated their liaison service on statistical matters.

## VIII. WORLD INTELLECTUAL PROPERTY ORGANIZATION

### A. General

91. The importance of industrial property statistics in the World Intellectual Property Organization (WIPO), and in its predecessor, Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle (BIRPI), has been recognized since the creation of BIRPI in 1884. The publication of the industrial property statistics of member States in the journal Industrial Property/La Propriété Industrielle has been assured since 1885.

92. The extent of the statistical data has, during the course of the years, increased and led, in 1964, to a separate publication entitled Industrial Property Statistics.

93. In 1974 the principle of broadening the statistics to include breakdowns according to 32 technical fields for patent and like documents and to 42 classes of goods and services for marks was accepted.

### B. Publications

94. Industrial Property Statistics (Publication A) presents international statistical series on industrial property rights for nearly 100 countries. It includes data on the applications and the grants of patents, inventors' certificates, utility models, plant varieties and industrial designs as well as on applications for and registrations of trademarks and service marks and on registrations of international marks. For each of the industrial property rights applied for or granted in the reporting country, a breakdown is given according to the country of origin of the resident. Data are given for the latest available year for all the series except "patents in force", for which historical annual data for the past decade and updated total number of patents in force are published. The utility models, plant varieties, trademarks and service marks and industrial designs "in force" are listed together with the corresponding data of the previous year. Publication A is published by the International Bureau of WIPO on the basis of information supplied by Industrial Property Offices.

95. Industrial Property Statistics (Publication B) contains basically the same statistical data as Publication A, plus:

(a) a breakdown of patent and inventors' certificate applications and grants according to 32 technical subject-matter fields defined in terms of the International Patent Classification (IPC);

(b) a breakdown of trademark and service mark applications and registrations according to the 42 classes of goods and services defined in terms of the International Classification of Goods and Services, (Nice Classification);

(c) a breakdown of patents, utility models, trademarks and service marks and

/...

industrial designs according to priority claims under the Paris Convention for the Protection of Industrial Property;

(d) a survey of pending patent and inventors' certificate applications; and

(e) a breakdown of the patents and inventors' certificates granted according to the year of filing of the application.

### C. Computerization

96. Steps have been taken towards the computerization of procedures for reviewing and disseminating the industrial property data reported by countries. To this end, all data, all routine calculations, including arithmetical verification, and all type-setting requirements are now being computerized. As a result, the next issues of Industrial Property Statistics (for 1976 and 1977) will be printed by photocomposition from the machine-readable data base. It is also intended to feed data of Industrial Property Statistics for years at least as far back as 1973, to permit the publication, in early 1980, of comparative statistical tables for many countries.

## IX. GENERAL AGREEMENT ON TARIFFS AND TRADE

A. Tariff and trade data base

97. During the period under review, particular attention was paid to updating and further extending the tariff and trade data base required in the trade negotiations. The customs tariff data and the import statistics now also cover 1975 and 1976. The data are collected from national authorities. From this documentation, a series of analytical tables was produced to enable both developed and developing Contracting Parties to carry out an assessment of the various techniques and modalities envisaged in the multilateral trade negotiations. Copies of the basic files are currently made available to participating Governments.

B. Statistics on textiles

98. A regular reporting scheme of textile and apparel statistics designed to meet the requirements of the Textiles Committee under the Arrangement Regarding International Trade in Textiles was established towards the end of 1974. Under this scheme, quarterly statistics on production and trade in textile and apparel products of cotton, wool and man-made fibres, as well as quarterly employment statistics and annual value added and investment statistics for the textile industry and the apparel industry, are supplied by countries participating in this Arrangement. The submissions are available to participating Governments. The statistics are furthermore used in the preparation of reports to the Committee.

C. Other statistical work

99. The compilation of statistics or background documentation for studies on current problems in the field of commercial policy, which the Contracting Parties or their subsidiary bodies require, as well as the background statistics required for the regular analysis of world trade, have accounted for a significant part of the statistical work of the secretariat. In general, such documentation covers various fields of world production, trade and prices and is, as far as possible, based on published statistics. Extensive use is being made, in particular, of the United Nations Statistical Office trade data tapes, which have been reorganized in order to achieve easier retrieval and compilation of time series.