### 75 YEARS OF INTERNATIONAL LABOUR STATISTICS

This article celebrates three-quarters of a century of work by the ILO Bureau of Statistics in the field of labour statistics. During that time, the world's population has almost tripled and its labour force has to support an ever-increasing proportion of that population. The world of work has changed considerably: new industries and occupations have emerged while others have become less important or even disappeared. Technological developments unimaginable 75 years ago have not just created new types of activity, but have changed the face of production and trade, with a consequent impact on the worldwide distribution of employment. Conditions of work have evolved, with better social security coverage and increased leisure time, at least for some workers. Othershave had to turn away from the search for increasingly rare paid employment jobs to create their own income-generating activities. The challenge for the Bureau of Statistics has been to collect and publish relevant information about employment and conditions of work and life in the face of all these changes, and to assist ILO constituents in their efforts in this regard. This article outlines the ways in which the Bureau of Statistics has endeavoured to meet this challenge.

# **Background**

From the outset, statistical activities have formed an integral part of the International Labour Organization, as witnessed by the setting up in 1919 of a Statistical Section for "the collection and distribution of information on all subjects relating to the international adjustment of conditions of industrial life and labour". Over the past 75 years, this Statistical Section (now an independent technical department called the Bureau of Statistics) has endeavoured to carry out its mandate in the face of an ever changing world. Its continuing aim has been to increase the capacity of member States to collect and use essential labour statistics, and to compile, analyse and disseminate these statistics.

The Bureau of Statistics has to cover a very broad range of subjects, relating not just to employment and working conditions, but also living conditions. The link between social and economic policies and labour statistics is such that the Bureau's activities and interests at a particular point in time depend to a large extent on the requirements for those policies. As new needs emerge from new orientations in ILO and national programmes and policies, so the Bureau's activities evolve. For example, its first areas of study covered workers' levels of living, unemployment and industrial accidents, reflecting the attention given in the early 1920s to the need for appropriate policies. These particular problem areas have persisted for three quarters of a century, while others have emerged with time: including employment, the economically active population, household income and expenditure, industrial disputes, social security, labour cost, labour productivity and underemployment. The Bureau has to consider not just the conceptual and coverage aspects of each field, but also their measurement and classification. This has meant the development of methods for a variety of data sources, including surveys of establishments (employers) and households, and the use of administrative records and registers. Classifications have been established for a number of areas, including occupations and industries, status in employment, occupational injuries and labour cost. Recent concerns have led the Bureau to turn to the issues of employment in the informal sector, gender wage differentials and job segregation, poverty, child labour and international labour migration.

Within the UN system, the ILO Bureau of Statistics is the focal point for labour statistics. Since the early 1950s, the Bureau has worked in close collaboration with the statistical departments of other international organizations, including those of the World Bank, OECD and the European Community. The tripartite structure of the ILO is, however, unique among the international bodies: representatives of employers' and workers' organizations work alongside those of governments in all aspects of the ILO's activities.

# **Activities of the Bureau of Statistics**

Over three-quarters of a century, the Bureau's work has been propelled by the objectives noted above. Its first major activity, data collection, analysis and dissemination, led naturally to the other two, standard setting and technical assistance. In order to understand and use the statistics, the concepts, definitions, classifications and methods used by countries to collect and analyse the data were examined, and in turn this suggested ways of improving the statistics by adopting the best methodologies. The result of comparing labour statistics between countries therefore underlined the importance of international standards.

## # International standards

- International Conferences of Labour Statisticians "The attention of the Office has on several occasions been drawn to the interest which would attach to a meeting at Geneva of a certain number of public labour statisticians. It has been pointed out that certain new States, which are at present engaged in organising or developing their services of labour statistics, could thus obtain indications as to the statistical methods employed in those countries which have had considerable experience in this domain. Nor would this be the sole interest attaching to such a conference. It would also enable the statisticians of the various States to confer with a view to introducing a certain degree of uniformity into statistical methods. Though labour statistics deal with subjects that are often international in character, they are drawn up primarily from a purely national point of view. The scientific study of labour problems would be greatly facilitated if these statistics could be rendered to a certain extent internationally comparable."

This was how the International Conference of Labour Statisticians (ICLS) was conceived in the early 1920s. The ILO Governing Body debated the agenda of this first Conference at some length. Finally, three subjects were selected: (a) classification of industries and occupations, which had already been studied from the international point of view, particularly in connection with unemployment statistics; (b) statistics of wages and hours of labour, particularly in view of their lack of uniformity; and (c) statistics of industrial accidents, as factory inspectors would participate in the work of the next International Labour Conference, to consider the Labour Inspection Recommendation (No. 20). Two

other topics that were strongly favoured by certain Governing Body members - consumer price indices and statistics of strikes and lockouts - were deferred to a later ICLS.

All member States were invited to send delegates to the First ICLS, which was attended by 52 participants from 33 member States and the League of Nations. Fourteen more ICLS have taken place to date, and participation has gradually increased. The Fifteenth ICLS, held in 1993, was attended by 215 participants from 76 countries, workers' or employers' organizations and international institutions.

Each ICLS examines a number of issues on the basis of reports prepared by the Bureau of Statistics. The agenda is decided by the Governing Body taking into account the recommendations of earlier ICLS and topics identified by the Bureau as a result of its work in a particular field or through other ILO programmes. There are usually two or three subjects for standard-setting, and several for discussion with a view to developing standards in the future.

The task of standard-setting begins with a review by the Bureau of the concepts, definitions, classifications and methods currently used by countries, in order to identify problems and develop possible approaches for their solution. Many producers and users of the statistics are consulted throughout each development stage. A meeting of experts is usually convened, with experts appointed by the Governing Body in consultation with governments, employers' organizations and workers' organizations. This group examines the issues and makes recommendations, on the basis of which the Bureau prepares proposals for the ICLS to consider. Once guidelines have been adopted by the ICLS, they are submitted to the Governing Body for approval. They then become part of a whole body of international standards on labour statistics<sup>3</sup>. A recent innovation has been the preparation by the Bureau of manuals to supplement the recommendations, giving guidance for their practical application<sup>4</sup>. These are now important components for the Bureau's technical assistance to member States.

While the Bureau's aim is to provide guidance on all topics of labour statistics, so that new standards are developed as new needs emerge, it is sometimes necessary to review and update existing standards in the light of changes in the world of work, or technical advances concerning statistical tools.

As a result, certain topics have returned to the agenda of the ICLS two, three or more times, the most frequent being wages and hours of work (discussed at nearly all the ICLS), the classification of occupations, occupational injuries and unemployment. Table 1 shows the topics discussed at each ICLS, illustrating the wide variety of subjects dealt with by the Bureau and the need for continuous monitoring or updating of the guidelines for others. Recently, two significant elements of standard setting have been the definitions of strikes and lockouts on the one hand and of the informal sector on the other, which were adopted by the 15th ICLS (1993).

An important item not on the agenda of the ICLS but always present is the contact established between labour statisticians from all parts of the world. These conferences provide a rare opportunity for them to meet, exchange views and experience, organize collaboration between their countries, and generally get a wider perspective of the subject of labour statistics. Participants undertake their work in a spirit of cooperation and goodwill, aiming at the best result possible. Decisions are taken on the basis of a consensus; very rarely is there any formal voting to decide on the contents of a resolution. Each ICLS also enables the staff of the Bureau to meet or renew acquaintance with national statisticians, and to discuss directly matters that would otherwise have to be dealt with by correspondence. Answers or solutions to problems are often more forthcoming through such personal contact.

- International labour conventions Two major milestones in standard setting should also be mentioned here: the only international Conventions in the field of labour statistics, which form part of the International Labour Code. The first (No. 63) concerns statistics of wages and hours of work, and was adopted by the International Labour Conference (ILC) in 1938 following a resolution of the Fifth ICLS (1937). It aimed at improving the comparability of these statistics, as a direct result of the ILO's work on the October Inquiry (see below). Some 35 countries ratified this Convention. The Bureau of Statistics was instrumental in replacing Convention 63 in 1985 by the more up-to-date and wide-ranging Convention 160, which sets out minimum guidelines encompassing all areas of basic labour statistics. Each of the countries<sup>5</sup> which have ratified the Conventions is required to report to the ILO each year on their application. The Bureau of Statistics then makes a technical evaluation of the situation, on the basis

of which the Governing Body's Committee of Experts on the Application of Conventions and Recommendations follows up on problems or queries with the countries concerned.

# **# Collection and dissemination of information**

The Bureau began collecting labour statistics in the early 1920s with national figures of prices and unemployment, which were published in the *International Labour Review* as from its first issue in 1921. Data on employment were soon added, and over the years the subjects covered gradually expanded to include wages, hours of work, industrial disputes and collective agreements. It is now almost sixty years since the ILO *Year Book of Labour Statistics* was first issued in 1935, containing time series on each of these topics. Its coverage has changed with time to reflect current interests and developments. Topics such as food consumption, social security, occupational injuries, national income, migration, economically active population, household income and expenditure, labour productivity and labour cost have been added and some dropped, either because responsibility was transferred to other organizations (such as migration) or other ILO departments (such as social security), or because of the need to cover new areas using limited space and resources. Monthly or quarterly updates of the series published in the *Year Book* were first issued in the *International Labour Review* and its statistical supplement, and since 1965 in the quarterly *Bulletin of Labour Statistics* and its supplement.

The Bureau has followed essentially the same procedures since the 1920s to collect the data it publishes. Since 1924, questionnaires have been sent out to ministries of labour or national statistical services to collect information for the October Inquiry (see below) and, since 1935, for the *Year Book*. The data appearing in the *Bulletin* are drawn from the relevant official national publications, or are sent directly to the Bureau each month by national statistical services. Experiments are currently under way to devise appropriate methods for electronic data transfer. Almost all the information collected by the Bureau is stored in a series of computer data bases<sup>6</sup>, which are used for preparing publications, analysis and answering users' requests for data.

It was the First ICLS in 1923 which recommended that the ILO should take over a survey, initiated a few years earlier by the British Ministry of Labour, to collect data on wages and food prices in 16 capital cities. Its aim was to compare differences in the levels of real wages in the various countries. This survey (now known as the "ILO October Inquiry" because of its reference period) has been carried out by the Bureau of Statistics since 1924. Its results constitute a unique set of international wage and price data going back over seventy years<sup>7</sup>.

Other publications have been issued periodically, presenting statistics on household income and expenditure<sup>8</sup> and estimates and projections of the economically active population<sup>9</sup>, the latter being prepared by the Bureau using population estimates and projections produced by the United Nations Statistical Office. More recently, a biannual newsletter gives the latest news about the Bureau and its activities.

To provide users with information about the statistics it compiled and published, the Bureau launched a series of *Technical Guides*<sup>10</sup> in 1964. These were issued every two years from 1968 to 1980, when a new, more detailed series of *Sources and methods: Labour statistics*<sup>11</sup> was introduced. Preparing the methodological descriptions on the different subjects provides valuable insight into the methods used by countries, essential for the Bureau's developmental work for the international standards.

At the beginning, French and English were the languages of the Bureau's publications. Nowadays, all the Bureau's regular publications are issued in the three ILO working languages (English, French and Spanish). All documents for conferences and meetings are released in these languages, and often also in Arabic, Chinese, German and Russian. Manuals have also been translated into other languages, including Russian and Portuguese.

# **# Technical assistance**

Initially, the Bureau's technical assistance activities were limited to the dissemination of the international standards contained in the resolutions adopted by the ICLS. At that time, the ILO member States had fairly similar levels of development and social and economic organization, and the problems encountered were also comparable. Towards the end of the 1930s though, the Bureau's experts in particular subjects began to visit countries at their request, to advise them on specific topics. Even during the Second World War, Bureau staff visited various Latin American countries to provide assistance. These types of missions became more frequent in the 1950s and 1960s as more countries of different levels of development joined the ILO.

Later on, long-term assistance became the norm, in the form of projects lasting several months or years, for establishing or strengthening the existing infrastructure and training national staff. Up to 1975, about a hundred projects had been carried out in 60 countries. Since then, however, this has progressively given way to short-term assistance on specific technical problems, provided by regional advisers in labour statistics, Bureau staff or external consultants. Until recently, regional advisers were stationed in Africa, Latin America (until the mid 1980s) and Asia. As a result of the active partnership policy, much of the ILO's technical assistance is now directed from the regions. Labour statistics specialists have been appointed to three of the regional multi-disciplinary teams established recently two in Africa and one in Asia. Bureau staff continue to provide advisory services on request. For some years, these requests have increased, particularly for the regions not covered by labour statistics specialists. For example, in the past few years, there has been an explosion of requests for technical assistance from Eastern Europe and the countries of the former Soviet Union. In response, the Bureau has carried out missions to assist individual countries. In order to reach as wide an audience as possibly and to introduce statistics from these countries to new statistical methods and standards, it has also organized national and international seminars and training courses. The statistical services of a number of countries, including Australia, Austria, France, Germany, the Netherlands, Sweden, the United Kingdom and the United States, as well as other international organizations, such as the Statistical Office of the European Community, have cooperated with the Bureau in several of these seminars, providing materials and lecturers. The Bureau has also collaborated closely with other international or regional bodies in carrying out similar activities.

Training is an important element of the Bureau's technical assistance activities. Fellowships have been provided for national statisticians to attend courses, while regional seminars for producers and users of labour statistics were organized periodically from the 1950s to the 1970s. In the past few years training courses in labour statistics have become a regular feature of the Bureau's programme, held at the ILO's Training Centre in Turin (Italy). The most recent (September 1994) was held in Turkey, however, in cooperation with the Turkish State Institute of Statistics, for statisticians from Central Asian and Caucasian countries. Bureau staff design their own training material, give lectures and organize practical workshops using different computersoftware. The Bureau is currently preparing a compendium of its training material.

#### **Means of action**

The Bureau has always comprised a wide mixture of nationalities, reflecting the multinational character of the ILO. This has been significant for its work, as staff need to be able to understand and deal with a wide range of practices and cultures. In the period up to 1940, the Bureau numbered about eleven officials on average, representing eight or nine mainly European nationalities. It grew gradually after 1945, to 19 officials of 13 nationalities in 1955, reaching a peak of nearly 40 staff from 19 countries throughout the world in the late seventies. Financial difficulties subsequently led to considerable cuts: in 1980 the staff was down to 23. Since the mid-eighties the Bureau has consisted of about 26 officials, divided evenly between the general service category, which includes mainly administrative support and statistical assistants, and the professional category, comprising statisticians and, in the last decade or so, computer specialists. Students, trainees and external consultants swell these figures from time to time. The proportion of women in the Bureau has increased slowly; since the mid-eighties, they account for about half of the staff, but are concentrated mainly in the general service category. On average, Bureau directors seem to have considerable staying power, as there have only been ten since 1920.

All the data collected by the Bureau were processed manually up to 1980, when extensive data bases were established at the International Computing Centre (ICC) in Geneva. The microcomputer age dawned in the ILO in 1990, revolutionizing the Bureau's work methods and capacities. All Bureau staff are now equipped with PCs, linked via a local area network. E-mail facilities enable fast communication with other international organizations and with ILO offices and labour statistics experts in the regions.

#### The future

Over the next few years, several major themes will be the focus of the Bureau's development activities, aiming at standard-setting or discussion at the Sixteenth ICLS. Statistics of underemployment and of income from employment will be examined by meetings of experts scheduled respectively for 1995 and 1997, before these are taken up by the Sixteenth ICLS (provisionally planned for 1998). Proposals are also being prepared for statistics on occupational injuries and diseases. Other areas in which the Bureau is continuing its developmental efforts are statistics of working time, the use of administrative records as a source of labour statistics, the international classification of status in employment and a labour accounting system.

The Bureau is collaborating with other ILO departments on a number of projects relating to child labour, the informal sector and migrant workers. Special experimental surveys on the first two of these topics are being carried out in selected countries to develop and test appropriate statistical methodologies. Two manuals will be prepared on the basis of the experience gained. The Bureau is also studying other areas related to labour, including poverty and legal minimum wages. The programme for data collection and dissemination continues, as do the Bureau's efforts to make the data more accessible to users. It is hoped that the ILO's active partnership policy will lead to improved contacts with member States, and an increased flow of information in both directions between the Bureau in Geneva and the national statistical services throughout the world.

- 1 Article 396 of the Versailles Treaty of Peace and Article 10(1) of the Constitution of the ILO.
- Extract from the minutes of the 18th Session of the Governing Body of the ILO (1923).
- 3 Current international recommendations on labour statistics (ILO, Geneva, 1988).
- 4 An integrated system of wages statistics: a manual on methods, by K.M. Bashir (ILO, Geneva, 1979)

Consumer price indices, by R. Turvey et al. (ILO, Geneva, 1989)

Surveys of economically active population, employment, unemployment and underemployment, by R. Hussmanns, F. Mehran and V. Verma (ILO, Geneva, 1990)

5 At the time of writing (August 1994), the following 37 countries have ratified Convention 160: Australia, Austria, Azerbaijan, Belarus, Bolivia, Brazil, Colombia, Cyprus, Czech Republic, Denmark, El Salvador, Finland, Germany, Greece, Guatemala, India, İtaly, Kyrgyzstan, Latvia, Mauritius, Mexico, Netherlands, Norway, Poland, Portugal, Russian Federation, San Marino, Slovakia, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, Tajikistan, Ukraine, United Kingdom, United States.

Of the 35 countries that ratified Convention 63, the following are still bound its obligations: Algeria, Barbados, Canada, Chile, Cuba, Djibouti, Egypt, France, Ireland, Kenya, Myanmar, New Zealand, Nicaragua, Panama, South Africa, Syrian Arab Republic, United Republic of Tanzania and Uruguay.

#### 6 Databases:

LABORSTA: Labour statistics (since 1969): economically active population (from 1945), employment, unemployment, hours of work, wages, labour cost, consumer price indices, occupational injuries, strikes and lockouts. Used for preparing the Year Book and Bulletin of

LABSSM: Text data base containing methodological descriptions of sources of data collected by the ILO. Used for preparing Sources and methods: labour statistics series.

L'ABOCT: ILO October Inquiry results: wages and hours of work for 159 occupations in 49 industry groups (from 1983) and retail prices for 93 food items (from 1985). Used for preparing Statistics on occupational wages and hours of work and on food prices: October Inquiry results.

HIES: Household income and expenditure: sources of income, income or expenditure classes, consumption expenditure, types of expenditure, household size and characteristics of households; from national surveys between 1979 and 1991. Used for preparing Household income and expenditure statistics, No. 4, 1979-1991.

LABPROJ: Estimates and projections of the economically active population for all countries with a population of over 300,000 in 1980 (covers 1950-2025).

LABCOMP: ILO-comparable estimates: labour force, employment and unemployment (from 1981).

LABISCO: Text data base for ISCO-88: occupational descriptions and titles coded to ISCO-88 and ISCO-68; corresponds to index published in *International Standard Classification of* Occupations, 1988.

SEGREGAT: Employment or labour force by detailed occupational groups and sex (for years near to 1970, 1980 and 1990).

ABS: Absence from work: persons absent and time of absence by reason (from labour force surveys in the 1980s).

LABMINW: Legal minimum wages: by sex, industry and other characteristics (from national regulations, laws) (from 1980).

*LABEDUC*: Level of education reached by the economically active population.

The Bureau's LABORSTA on-line system can be accessed by users connected to the International Computing Centre (ICC) in Geneva. Data can be viewed on-screen, printed and/or saved as personal SAS (Statistical Analysis System) data sets for future use.

Extracts from LABORSTA and other data bases can also be supplied on tape or diskette. For further information, contact P. Cornu, Bureau of Statistics, ILO, 1211 Geneva 22, Switzerland (telephone + 41-22-799 6554, fax. + 41-22-799 6957).

Publications containing the ILO October Inquiry results:

International Labour Review, individual issues until 1933

Year Book of Labour Statistics until 1957;

International Labour Review, Statistical supplement 1958 to 1964

Bulletin of Labour Statistics, second quarter edition, 1965-1985, then as separate edition each year until 1992

Statistics on occupational wages and hours of work and on food prices - October Inquiry results, special supplement to the Bulletin of Labour Statistics, since 1993

<sup>8</sup> *Household income and expenditure statistics*, four editions:

No. 1: 1950-1964 (ILO, Geneva, 1967)

No. 2: 1960-1972 (ILO, Geneva, 1974)

No. 3: 1968-1976 (ILO, Geneva, 1979)

No. 4: 1979-1991 (ILO, Geneva, to be released in 1994)

Labour force projections, 1965-1985 (ILO, Geneva, 1971)
Labour force estimates and projections, 1950-2000 (ILO, Geneva, 1971)

Labour force estimates and projections, 1950-2000 (ILO, Geneva, 1977)

Economically active population estimates and projections, 1950-2025 (ILO, Geneva, 1986)

Technical Guide (ILO, Geneva, 1964-1980)

Section I: Consumer price indices

Section II: Unemployment

Section III: Employment

Section IV: Wages

Section V: Hours of work

From 1968 to 1980, Section I was issued as Volume I, and Sections II to V appeared as

Volume II.

Statistical sources and methods:

Volume 2: Employment, wages and hours of work (establishment surveys) (ILO, Geneva, 1987)

Volume 3: Economically active population, employment, unemployment and hours of work (household surveys) (ILO, Geneva, second edition, 1990)

Volume 4: Employment, unemployment, wages and hours of work (administrative records and related sources) (ILO, Geneva, 1989)

Volume 5: Total and economically active population, employment and unemployment (population censuses) (ILO, Geneva, 1990)

Sources and methods: labour statistics

Volume 1: Consumer price indices (ILO, Geneva, third edition, 1992)

Volume 6: Household income and expenditure surveys (ILO, Geneva, 1994)

Volume 7: Strikes and lockouts (ILO, Geneva, 1993)