Israeli Central Bureau of Statistcis

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Introduction

The statistical service in Israel functions on a centralized basis and the Central Bureau of Statistics is the government agency responsible for collecting, processing and disseminating a variety of statistical data from surveys and administrative sources, and for carrying out national censuses. In the framework of the centralization of the statistical service, data

collection for government needs is entrusted wholly to the Central Bureau of Statistics.

Methods of data collection, measurement techniques and procedures are the sole responsibility of this organization. The Statistical Law states that the Bureau shall be directed by scientific considerations only, and thus it is independent of any pressures on the methods it uses and procedures it employs in data collection, in the content of the information collected and the data released, or in the forms of data dissemination, etc.

The Bureau obtains information, the provision of which is mandatory, from suppliers of data such as households, firms, government and other public and private organizations. But the individual information obtained by the Bureau is kept confidential and no individual-level data can be given to any outside body whatever.

Population & Housing Census - CBS

Thank you for this opportunity to present, before this forum, the approach of the Central Bureau of Statistics in Israel to the theme of this Conference: "Public data: use it or loose it". I am sure that our approach is similar to that of other statistical offices, especially in countries with a centralized system of statistical services, but the specific experience may be different.

We at the Central Bureau of Statistics devote much thought and effort to the production of the large volume of data we collect, which is used extensively by government, public bodies, researchers, and other users. We are guided in this respect by the following principles:

¹Presented at the International Association for Social Science Information Service and Technology (IASSIST) Conference held in Washington, D.C., May 26–29, 1988

1) The data collected by the Bureau should be the data which are needed by the users.

2) The data produced should be readily accessible to the users.

These two principles are the topics which I would like to discuss.

As to the first principle: in theory, public users can be asked to spell out explicitly their requirements for statistical information in advance of the time when they intend to use it. But in most cases, decision makers do not define in a proper manner the information they require, and in many cases they do not even know what data they will require at a future date. Our experience tells us that when a need for data arises, the data are required immediately, and as a statistical agency we also know that preparation of new statistics requires an extended period of time, sometimes a number of years.

Therefore the task of the Bureau is to use special means intended to determine if the Bureau is supplying the data which really are required, and if the figures published in over ten thousand pages annually are really needed. These means should also help to define the priorities to be put on the collection of various types of data. Hence, in order to ensure that the data collected are the data which are required, various tools have been developed and several bodies have been established for the purpose of being involved in the process of defining the data required and priorities.

One of the most important bodies, the functions of which are defined by law, is the Public Advisory Council for Statistics which brings together representatives of the main users of the information with the Central Bureau of Statistics, as the main producer of data. Among the representatives of the users are various government agencies, local authorities, trade unions, manufacturing associations, universities and research institutes, voluntary organisations and some independent experts. The Advisory Council has dealt with such subjects as development plans for various branches of statistics, censuses, classification – especially when a new subject becomes a policy issue, such as energy statistics and statistics on the environment.

A number of interdepartmental special advisory committees co-operate with the Bureau in addition to ad hoc sub-committees which the Advisory Council establishes. These interdepartmental special committees are set up to solicit comments and advice from users and researchers on specific statistical programs and projects. Among these committees are the Public Committee on the Consumer Price Index, on Input-Output Tables, on Labour Statistics, and special committees which advise on the planning and conduct of large surveys, such as Survey on Aging, Survey of University Graduates, Family Expenditure Survey, Survey of Travelling Habits and many others.

I would like to mention another aspect of the mutual contacts between the Bureau and the users. This is the function of "liaison officer" with the Central Bureau of Statistics, which has been established in various government offices and in other public organizations. These officials, as one of their functions, define the specific statistical needs of their organizations and submit them to the Bureau. They also know how to find out and use existing data. Individuals, or even special units, with such a function, exist in many departments and in some local authorities, and the Bureau encourages the development of these useful ties between public users and data producers.

After determining the types of data required, the relative priorities must be determined. In general, priorities are based on the importance of the data for planning and decision making as well as availability of funding possibilities. The influence of users on the order of priorities is expressed mainly through the budget. An important part of the Bureau's budget, (close to 50%) is financed by government users, and this gives them a "say" on the subject of what statistical information will be collected, and some influence in determining priorities. In addition, the annual program of statistics is reviewed by a "Steering Team" composed of high government officials, who present their views on priorities and budget allocation to various projects.

I have reviewed here briefly the main ways in which users' requests and needs determine to a large extent the type of data collected by the Bureau. Nevertheless, it should be emphasized that the Central Bureau of Statistics does not wait for decision makers and planners to present their requests for specific statistical data, nor does it wait till financing has been assured. The Bureau tries to anticipate data needs and makes an effort to encourage users to define their requirements and to prepare tools that will be needed to obtain the data. This contributes to the existence of an orderly and comprehensive information system of statistical series. Thus, the Bureau tries to ensure that most data are available when they are required.

The second topic which I would like to discuss is the question how the Israeli Central Bureau of Statistics tries to make data readily accessible to users.

I do not intend to describe here the variety of conventional channels by which data are disseminated, of which printed publications still represent the most important medium. The Bureau's policy is to maximize availability and accessibility of data by developing new techniques, but this does not mean that one should disregard the importance of printed books, quick press releases, short bulletins, personal contacts with users by telephone and mail, etc. On the contrary, we have found that adopting modern technology in every stage of the collection and creation process improves many of the traditional forms of data dissemination. There are many examples of a substantial reduction in the time needed to bring data from the producer to the user by employing advanced computer techniques. One such example is the storage as microdata of a growing number of statistical series in data bases. While in the past, production of data in a format suitable for dissemination, such as camera-ready copies for printing, required weeks of planning and programming, today many statistical series are obtained instantly from data bases in the form of tables ready for distribution or publication. This is the case with statistics on national accounts, balance of payments, consumer price index, unit value indices of foreign trade, many series on labour, transport, industry, agriculture and others.

Electronic media of dissemination have a clear advantage over printed media, mainly in the speed and convenience with which users may access data. The Bureau has used this method in the past and uses it even more today by providing statistical information in machine readable form. One of the most important practices in this framework is the dissemination of anonymized microdata tapes to selected users, for research purposes. Great progress in this matter was made with the 1983 Population and Housing Census data. Within a very short time after the census was carried out, a series of public use tapes containing detailed census data were prepared and made available to users for processing. Two kinds of tapes were prepared for public use:

1. Summary data tapes based on the 100% enumeration, which include a limited number of variables and very wide geographic detail;

2. Two versions of *microdata tapes* which include practically the entire 20% enumeration sample.

The second category of tapes contain individual records of persons and households, with all

personal identification erased and other possibilites of identifying individuals eliminated. In spite of the relatively high cost of these tapes, users took advantage of the possibility to process census data themselves. The users of these data are mainly government agencies, municipalities, universities, research institutes and other large organizations. Due to the standard census tapes which the Bureau released for public use, availability of information from the last census is very widespread among the public users and the census serves as a source of very detailed information easily accessible to users for social planning and decision making and for research and teaching.

In this context I would like to mention the role of the Social Science Data Archive of the Hebrew University, which was the first organization to acquire the census tapes released for public use, in addition to many other tapes produced by the Bureau which contain data from most of the large surveys it conducts. The Social Science Archive plays an active role in further disseminating data produced by the Central Bureau of Statistiscs and in making these data more accessible than the format of the tapes released by the Bureau would otherwise allow. Special computer programs were developed by the Archive, including a data base which makes possible easy and immediate access to census data for each region, and enables users to obtain statistics on very detailed geographic bases, including the production of statistical maps. In this way the Archive serves researchers of the Hebrew University and of other universities and research institutes in Israel, as well as some other public users, by providing data for their use.

I would like to make two important comments on the dissemination of statistical data in the form of anonymized microdata: the first is, that we were very hesitant, some years ago, about distributing "microdata" and were apprehensive of the dangers and difficulties of processing data from these tapes outside the Bureau. These

dangers included: deriving different figures from those published, using data for very small cells regardless of the problems of accuracy and statistical reliability that this may cause, potential breach of confidentiality, etc. But our experience has shown that by paying special attention to these problems in the planning and preparation of the microdata for public use, by providing proper and detailed documentation regarding the variables and categories included in the tapes, and by close contact with the users, mainly in the first stages of processing data, most of these dangers were avoided. Moreover, the usefulness of the data from various surveys and from the census was increased tremendously by the availability of the tapes.

The second comment which I would like to make is that the dissemination of microdata tapes by the Bureau for local processing requires highly skilled and well informed users, equipped with appropriate computer facilities. Therefore, the number of users of this kind of data is rather limited to large organizations which are interested and able to load their own computers with a great amount of data for long run and multi-purpose use. Hence this form of dissemination of machine readable data does not solve the need for a computerized system which would make it possible to expand the circle of users to the large number of new potential users of demographic, social and economic statistics, for business and administrative purposes whose demand for machine readable statistical information can not be satisfied by microdata tapes. This demand may be satisfied if the statistics were to be cheap, supplied in a simple format, and tailored for a wide range of uses. Unfortunately, in this respect, I am not in a position to present information from our experience, and I will be happy to listen to the achievements reported in the discussions during this Conference.

Thank you for your attention.