Social Indicators at the Israel Central Bureau of Statistics

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1. Overview

The social indicator program at the Israel Central Bureau of Statistics (ICBS) has two parts:

1. A series of social indicator reports
2. An annual social survey

The social indicator reports draw together information on various topics from publications of the ICBS and from other sources. The social survey has a core questionnaire and a variable module. Data from the social survey is included in the annual social indicator report, Israel 200X - A Social Report. Data needs identified by the social indicator program can be met by means of the social survey. Components of this integrated program are in various stages of implementation. Five social indicator reports have been published, and two more are ready for publication. Field work on the first wave of the social survey will be completed at the end of the year, and we plan to release results in July, 2003.

2. Development

Both the social indicator program and the social survey came into existence at the initiative of Prof. Yossi Yahav, who served as Government Statistician from 1993 to 2001. The two programs began at different times, were housed in different administrative units (though under common management) and were integrated into a single program only after their separate establishment and implementation. Development of the social indicator program commenced in 1995, as an internal project of the ICBS. The scope of the social survey made external funding necessary, and this was obtained in 1998 from the Budget Division of the Ministry of Finance.

The current social indicator program at the ICBS represents a re-birth and expansion of a project which began in the late 1970’s and resulted in the publication of two volumes of Society in Israel (for a fuller description of the earlier social indicator program at the ICBS, cf. my “Quality of life research at the Israel Central Bureau of Statistics,” 58 Social Indicators Research, 2002, pp. 141-161). This effort was a belated expression of the “social indicator movement” which had first flourished, especially in the United States, and then declined, as it also did in Israel. Its revival at the ICBS can be attributed to a growing awareness of the relationships between economic and social phenomenon, against the background of significant changes in the economic and social structure of the country, including a trend toward privatization in various areas of social and economic life. Among the effects of such changes was an increased willingness to admit that existing social problems were not transitory phenomena, and a growing recognition that it was important to obtain systematic information on social conditions, including the views of people about their situation. The social indicator program, by drawing together material from various sources and presenting it in an integrated manner, provides in an easily accessible format basic statistical information on the major areas of social life.

The social indicator reports are intended to serve a number of purposes. They will provide measures of quality of life and social welfare; show trends in these measures over time; identify population groups of interest who are better and worse off with regard to these measures; enable comparisons with other countries; and permit policy-makers to evaluate progress toward achieving policy goals.
The social survey both complements the basic social indicator program, and goes beyond it. Until the inception of the social survey, the ICBS had no vehicle by means of which information on social conditions could be collected in an ongoing manner. The three continuing surveys fielded by the ICBS – the Labor Force Survey, the Survey of Household Expenditures and the Survey of Household Income – this latter as an appendix to the final wave of the Labor Force Survey panel – focused on the economic condition of the household. All were household, not individual, surveys, and information on individuals, to the extent it was collected, was usually obtained by proxy, based on reporting by whichever adult was available to answer the enumerator’s questions when he or she called or visited the dwelling.

Some information on social conditions is, of course, collected in these three surveys, both as part of the basic questionnaire and, in the case of the Labor Force Survey, as an occasional appendix. All the surveys collected basic demographic information on members of the household – sex, age, marital status, country of birth/origin, year of immigration, and on household size; information on schooling and educational attainment of household members, religion of the household head and number of rooms in the dwelling. Appendices to the Labor Force Survey could deal with health status, victimization, leisure activities, etc. None, however, focused on social conditions, and the topic coverage in any of them was limited, mostly restricted to the main reason for fielding the survey – labor force participation in the case of the Labor Force Survey; household income; or household expenditures in the case of the Household Expenditure Survey, which provides the information necessary for the annual recalibration of the Consumer Price Index.

The lack of a stable vehicle for collecting information on social conditions has meant that surveys addressing specific topics must be separately initiated, designed and funded. Over the years, many surveys on a variety of social topics have been undertaken this way: radio listening and television viewing in the 1970’s; panel surveys of immigrant absorption in the 1970’s; persons with academic degrees in 1979 and 1984; persons aged 60 and over in 1985 and 1997; time use in 1991. From the point of view of the ICBS, this process is time-consuming, inefficient and uncertain in outcome insofar as success in obtaining funding is concerned. From the point of view of the client, the time required to prepare for a one-time survey often means too great a delay in obtaining the information needed (even though, of course, unwillingness to wait means formulating policy based on even less information). The social survey is intended to provide a vehicle by means of which a variety of data can be collected annually on basic social conditions, and in addition allow us to focus on a particular topic in greater detail.

In our view, an interaction exists between the provision of tools useful for policy makers, and their utilization. The existence of a vehicle like the social survey allows us to offer policy makers a dependable tool for collecting policy-relevant information. We hope that the availability of such an instrument will encourage them to anticipate utilizing the information it can provide, and incorporate this anticipation into the planning process. This will be more likely to occur if accompanied by a growing appreciation of the value of medium-range planning in the development of social policy. The existence of the social survey can, in turn, advance this process.

The core questionnaire of the social survey obtains information on the situation of respondents and their evaluation of their situation in nine major areas of social life. By repeating this set of questions annually, we create a longitudinal data series that allows us to track changes over time. The variable module is specifically designed to address policy-relevant issues chosen by the Budget Division, and provide
it with information that it can be used for monitoring, planning and evaluation. No similar vehicle currently exists in Israel that can carry out this function.

3. Content

The social indicator program publishes two kinds of reports: an annual overview, Israel 200X - A Social Report, which summarizes and reorganizes published data on various areas of social life; and a series of subject reports which provide more detailed information. Two annual reports have appeared, for 2000 and 2001, and a third is nearing completion; three subject reports have been published, for health, education, and housing and living conditions, and a fourth, on employment, is in preparation. As presently conceived, the subject reports will appear in a multi-year cycle, with a detailed report appearing in a rotation of approximately five years.

The social indicator reports are based on existing data sources, primarily those originating within the ICBS, and not on collection of new data. Moreover, most of the information presented in the social indicator reports has already been published; very few new tabulations are undertaken. This approach was chosen for a number of reasons: it was much less costly than undertaking new data-collection activities; use of already-published data reduced the time needed to publish the first set of reports; presentation in one place of existing data on social conditions and social welfare would demonstrate the richness of easily accessible data and encourage wider use of what is available. As new data becomes available from other ICBS activities, such as the social survey, it can be incorporated in the social indicator reports.

The conceptual framework guiding the social indicator project identifies domains, concerns, means and ends. The project is organized around major domains relevant to social welfare. These include population, family, education, employment, economic resources, housing, health, poverty, safety and security, social protection, civic involvement and leisure behavior. In each domain, the project identifies “policy goals,” which are defined as concerns. For example, a concern in the domain of health would be reducing morbidity from particular illnesses. Two kinds of indicators are defined for each concern, having to do with means (resources) and ends (outcomes). Indicators of means include, for example, government expenditures in a particular area as a percent of total government expenditures; indicators of ends include, for example, the percent of twelfth-grade students obtaining a matriculation certificate.

The annual summary report has two parts: an introductory chapter which presents the basic indicators from the perspective of a special topic, followed by the individual chapters presenting summary indicators for each of the areas of social life. This structure was decided on following the appearance of the first annual summary report, Israel 2000 - A Social Report, whose tables were accompanied by a comprehensive text. Since we did not expect major changes in most of the indicators from one year to the next, including a comprehensive text in each annual report would have resulted in considerable repetition of material appearing in previous volumes. This would be undesirable. Therefore, we decided to enrich the report by presenting the indicators in the framework of a special topic chapter, while the individual chapters on each area of social life would provide brief summaries of the data. The special chapter for the 2001 report dealt with regional differences, and the special chapter for the forthcoming 2002 report will deal with the Arab population of Israel. Organizing the indicators around a special topic, in addition to their standard presentation, serves to demonstrate additional uses for them, and encourages potential users to consider additional ways in which they can be presented.
The text of the annual report focuses on outcomes, and presents measures describing the current situation and trends in recent years in the various areas of social life, focussing on those clearly connected to social policy. Where possible, the report presents comparisons with other countries. Many of the indicators are presented separately for major population groups: men and women; Jews and Arabs; income quintiles; regions; etc. The social indicators project tracks social inequality with respect to attainment of policy goals, provision of services, access to services and utilization of services. This information allows planners to propose changes in the allocation of resources in order meet changing social needs identified by the social indicators data series. (Unfortunately, appropriate or adequate indicators are not always available for some of the elements in the conceptual scheme, or for specific populations of interest.)

Most of the indicators presented are based on single variables (e.g., proportion of teachers holding academic degrees); a few are synthetic measures. One examples of the latter is a poverty index based on the UN Human Development Report, adapted for use in Israel; a second example is the socio-economic ranking of localities in Israel, developed by the ICBS both for research purposes and for the use of the Ministry of Interior in determining budget allocations for municipalities.

The annual social survey is based on a sample of persons drawn from the Israeli population registry, which contains all persons with an Israeli identity number (but does not include, for example, foreign workers even if they have been in the country for more than a year). The survey target is 7000 completed interviews. The social survey comprises a core questionnaire and a variable module. The core questionnaire is designed to provide a time-series of basic measures in nine areas: housing, health, education, employment, economic circumstances, culture and leisure, family and friends, safety and security and social involvement. The list of topics is, not surprisingly, very similar to the domains of the social indicator project, even though the two activities were initially developed separately. Since information is collected from individuals about themselves, and not by proxy, we are able simultaneously to obtain data about the situation of the respondents, and their feelings about it. Since the sample is drawn from the population registry, which contains a identification number for each individual, we are able to link information from the social survey to that available in other data files in the possession of the ICBS.

In addition to being a vehicle for monitoring social conditions over time, the social survey has, as noted above, an additional function: providing to government policy-relevant information for planning, evaluation and research in the area of social policy. Half of the social survey interview, which lasts between 45 minutes and an hour, is devoted to the core questionnaire, and the other half to the variable module. The topic for the variable module is chosen by the Budget Division of the Ministry of Finance, based on its policy agenda and need for information. The topic for the first wave of the social survey currently in the field is pension coverage; for 2003, the topic is poverty and welfare; for 2004, welfare of children; and for 2005, factors affecting participation in the labor force. (An English translation of the core questionnaire and variable module for the first two waves of the social survey is available from the author). Planning for the variable module currently is based on a four-year cycle: the topic is selected in the middle of the first calendar year; the questionnaire is prepared and pre-tested in the second calendar year; fieldwork is carried out during the third calendar year; and results are to be available in the fourth calendar year. Because the survey is carried out annually, successive waves of the survey will be at different stages of development and implementation at any given
time. Concurrently, annual results will be published based on the core questionnaire, and are scheduled to appear six months following the completion of fieldwork on any given wave.

Two aspects of the social survey set it apart from other surveys on social topics that the ICBS has carried out. The first is its integrative character: the social survey is the only one that collects information on a wide variety of topics covering the major areas of social life. The only survey at the ICBS similar in its scope was that dealing with persons aged sixty or older, which also covered a broad range of topics. But that survey, of course, was limited in its coverage to the elderly, so most of the population was left out. The integrative character of the social survey means that, for the first time, it is possible to examine the relationships between characteristics of respondents and of households across areas of social life: health and work; education and work; health and leisure; and so on, for the Israeli population as a whole and for key subgroups – by sex, age, religiosity, nationality, region – limited only by the imagination of the investigator (and, of course, the sample size).

The second innovative aspect of the social survey is its integration of information on the situation of the respondents with information on their evaluation of their situation. Depending on the topic area, data is collected regarding satisfaction, expectations for the future, perceived difficulties and obstacles in attaining personal goals, and other aspects. This approach is followed both in the core questionnaire and in the variable module. By asking people how they view their situation, the social survey provides a richer set of data than would be available if we limited our investigation to the conditions of life themselves, thus deepening, for example, our understanding of the correlates of satisfaction.

The social survey will also be used as a platform for methodological inquiry into questionnaire design. The Blaise program which is used for the questionnaire has the capability of presenting alternative question wordings according to predetermined rules, and we plan to use this capability to examine issues such as the effect of question wording on response.

4. Implementation

As noted above, most of the work on the social indicator project involves the organization and presentation of existing tabular data. Currently, no new data collection or data creation activities have been undertaken in order to generate information for the social indicators. As noted earlier, the integration of the social indicator project with the annual social survey will enable incorporation of data from the survey in the annual summary reports as soon as this information becomes available. Staff of the social indicator project devote most of their effort to identifying relevant data sources, harmonizing the presentation of data from different sources, where possible, and reorganizing existing tables for presentation in the social indicators publication series. Today the social indicator project and the social survey have been united administratively. The subject-area department responsible for the social indicators project now comprises three full-time staff, one of whom is also the overall manager of both projects.

The social survey is a much larger undertaking, involving ongoing coordination among departments responsible for subject matter, field work, sampling methodology and weighting, and information technology. The annual budget of the social survey is NIS 6.5 million which, at the exchange rate at the time this sentence was written, was about $1.4 million. Our social survey is innovative technologically as well as substantively: it is the first survey which the ICBS is carrying out by
enumerators using laptop computers running the Blaise interviewing software, with data transmission between the enumerator and the central office over phone lines from the enumerator’s home via the internet. Implementing this procedure required adding hardware and software security components to the transmission route, in order to prevent unauthorized access to the ICBS internal network. In doing so, we discovered that not all proposed security components were compatible with the requirements of the transmission route, and we are still engaged in a process of trial-and-error to determine the optimum mix of security, on the one hand, and ease of transmission, on the other.

Three main problems arose as a result of the move to enumeration using laptops running Blaise and data transmission from home over the internet: data security; control of field work procedures; and language of enumeration. Data security has two aspects: preventing unauthorized access to information from respondents while it is stored in the enumerator’s laptop and during transmission; and protection of the ICBS against unauthorized entry using the data transmission route. The challenge is to develop technical solutions that are not so burdensome for the field work staff that they impede the progress of the survey.

In a traditional paper-and-pencil survey, or a survey carried out with computers but not managed centrally, enumerators and supervisors in field offices usually meet regularly to exchange materials and information. Direct transmission of information – data, work-loads, instructions, etc. – between the enumerator and the central office, potentially bypassing field offices, requires that consideration be given to the role of the field office, as well as to appropriate procedures for ongoing control over enumeration and maintaining field work schedules. While the computerized enumeration application can provide tracking information on many fieldwork parameters, it is necessary to decide which are most necessary and most useful for management needs.

The social survey questionnaire is administered in three languages: Hebrew, Arabic and Russian. The Blaise application supports languages written from left to right, like English. Thus, preparing a Russian version of the questionnaire presented no special difficulty. Hebrew, on the other hand, is written from right to left, and Blaise does not support Hebrew. In order to use Blaise for surveys in Hebrew, the ICBS undertook a major project to adapt Blaise for Hebrew. This work was undertaken prior to the social survey, as part of retooling two of the four waves of the Labor Force Survey from paper-and-pencil to CATI. Arabic, like Hebrew, is also written from right to left, but involves an additional complication: the form of the letters depends on their place in the word: initial, medial or final. Writing Arabic on a computer requires either that the writer select the letter form appropriate for the letter’s place in the word, or that the computer do so - similar to the way Word capitalizes the first letter in a sentence if we forget. Blaise allows Arabic letters to be written in their “isolated” form, not adapted to their place in the word. Moreover, the number of alternative letter-forms in Arabic exceeds the number of “slots” Blaise makes available in its font table. We have not yet solved this problem, and for the time being the Arabic questionnaire appears to the enumerator transliterated into Hebrew.

A fourth difficulty arose from using the Population Registry as a sampling frame for selecting respondents, rather than first sampling dwelling units and then applying an algorithm to select a particular respondent within the dwelling unit. We chose the Population Registry because it gave us access to the respondents’ identity numbers, which could be used to link information from their questionnaires to
administrative data files held at the ICBS, thereby enriching the data set. The alternative, asking respondents for their identity numbers, is currently implemented in other surveys, but only about 60%-70% of respondents cooperate. Population Registry address information, however, is not up to date (about 25 percent of the addresses are incorrect), and our field work department expends great effort, not always successfully, tracking down respondents who were not found at their Population Registry address. We attempt to obtain additional, hopefully more up-to-date addresses for persons in the sample by searching other data files in our possession, such as the 1995 Census of Population, or the file of driver’s licenses. We are also planning to evaluate the relative advantage of moving to sampling within a dwelling unit; it is clear that we will be less successful in obtaining identity numbers, but we should improve our chances of locating the selected respondents.

5. **Data dissemination**

Reports from the social indicators project are distributed as standard ICBS paper publications and on CD-ROM; as of now there are no plans to change this. Results from the social survey, on the other hand, will be disseminated in a number of ways. Our plan is for the first results to be made available to the public six months following the end of field work, in two separate releases: main indicators from the core questionnaire, and main findings from the variable module. Data from the core questionnaire will also be integrated into the annual *Israel 200X – A Social Report*. Results from the variable module will be made available to the Budget Division when they are ready, even if this occurs earlier than six months after the completion of field work. A full report presenting the findings from the variable module will be published later. Other than the initial release of findings from the core questionnaire of the social survey, and the integration of some of the data in the annual *Israel 200X – A Social Report*, no additional paper publication is planned. Instead, data from the core questionnaire will be made available to the public in three ways – as microdata files, on the internet by means of a table generator and under the auspices of the research room at the ICBS.

The ICBS makes microdata files available for public use, with appropriate protections to prevent identification of individual records. We release two kinds of microdata files, which differ in their level of detail. Public Use Files (PUF) are, in principle, available to anyone; geographic detail is minimal and code categories are grouped in such a way as to make identification of specific respondents extremely unlikely. Microdata Under Contract (MUC) files contain more detail, but are available only to researchers in predefined categories, and their use is restricted by various contractual terms. Detailed anonymized microdata files are available to approved researchers in a “research room” facility on ICBS premises.

Our plans for disseminating data from the core questionnaire by means of a table generator on the internet, instead of in a paper publication, represent an innovation at the ICBS (though a similar project is underway for the dissemination of information on traffic accidents resulting in injuries). Our decision was based on a number of considerations: a desire to make the results widely available as soon as possible and avoid the delay involved in the publication process; the realization that the data in the core questionnaire lent itself to analysis in many different ways, and that we could cover only a small number of them in any one publication, at the same time as limited resources prevented multiple publications; the wide accessibility of the internet; our belief that we could design an application and a user-friendly interface
which would encourage utilization. The application will work on a microdata file at the PUF level, the same kind of file that is made freely available.

6. **Being useful**

The components of the social indicators/social survey program have different, though overlapping, goals. The social indicators project provides systematic information, in one place, regarding the degree to which policy goals relating to the main areas of social life are being achieved, and facilitates the tracking of changes over time. The social survey core questionnaire expands the available social indicators by including questions not only on the situation of the respondents, but on their evaluation of their situation. Such information allows us to analyze the relationship between situation and satisfaction, track over time changes in satisfaction, and examine the structure of relationships among the situation of persons in various areas of social life, the structure of relationships among their evaluations, and the connections between these two content universes. Finally, the variable module of the social survey is specifically designed to provide information relevant to planning, implementing and evaluating social policy.

Three different audiences have an interest in the various components of the program: the public at large; social science researchers; and public officials involved in policy (There may be, of course, some overlap among the groups). Public support is necessary for the success of statistical programs, and both the social indicators project and the social survey core questionnaire have public advisory committees whose members are specialists in the various areas covered in each program. We have received very positive responses to the series of social indicator publications. They are being used as they were intended to be, as convenient sources of up-to-date, reliable information on social conditions which is not available elsewhere in an easily accessible format. We anticipate there will be great interest in the information that will be provided by the core questionnaire, especially on the part of researchers, but also by social welfare policy makers.

Our principal challenge is to make the information in the variable module relevant to its “clients,” the budget division of the Ministry of Finance. In our view, the success of the social survey, and our ability to continue fielding it, depends on our ability to provide useful, timely, policy-relevant information. It is to the credit of the Budget Division that they allowed themselves to be convinced that a social survey could serve as an important policy tool, especially since systematic medium-range planning is not widespread on major issues of public policy in Israel. The ICBS sees as one of its major tasks the intelligent use by government planners of reliable statistical information, and our contacts with the Budget Division are aimed at helping them do so with regard to the material we provide.

In our view, the Budget Division is the appropriate agency to define the topic for the variable module. Since our social survey cycle is four years long, our initial annual contact with the Budget Division occurs four years prior to the date results are anticipated. This lead time encourages the client to select topics which are not merely of temporary interest, but rather those which are current problems, will remain on the public agenda for the near future, and for which systematic, reliable information is lacking. Each of the first four topics for the variable module, selected by the Budget Division, meets these criteria. In fact, the topic of the first wave, pension coverage, has become again a live issue, and the results of the survey currently in the field will soon be useful for policy planning.