International Cooperative Information Systems

Proceedings of a seminar held in Vienna, Austria, 9-13 July 1979
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Sharing Development Information

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Since the advent of the space age and advanced use of mass communication media, individuals involved in the field of public administration are finding themselves constantly in need of improved support systems for efficient utilization of information of all types, regardless of the size of the government or organization they must administer. On one hand they must cope with the problem of an information explosion that requires an enormous amount of time and energy to absorb and digest the portion needed to know or do their job well. On the other hand, they must solve many complex problems that are the product of complex bureaucracies and the transnational and multidisciplinary nature of contemporary political and economic reality. These are no exceptions for those of us engaged in international economic and social development.

We constantly find it necessary to have the capacity to predict our information needs well in advance so that, when the need arises, information will be at our fingertips in a suitable form. It is often too late to collect data after one's information needs are identified, especially when the data collection depends upon the cooperation of those who do not share the same information needs at that moment. My own experience has been no exception.

Program planning and coordination efforts within the United Nations family require an enormous amount of cross-organizational information that cannot be collected without interorganizational cooperation. Our ability to obtain such information depends heavily upon the ability of each individual agency or organization to supply information in a form that can be aggregated, compared, or collated. Adoption of standards and guidelines for various components of information systems and services is one of the first steps to accommodate economic sharing of information from various sources.

The economic advantage to be gained by sharing technical knowledge and experience on the use of information is self-evident. Provision must be made to encourage exchange of information about the existence of inexpensive hardware or availability of efficient software, as well as knowledge about the systems and services that meet individual needs.

During the past 2 years the Information Systems Unit of the United Nations Department for International Economic and Social Affairs has conducted a pilot project to establish an automated information system, Development Information System, and to provide intradepartmental coordination of information systems activities within our department. The results of this project will be reported to the UN General Assembly at the forthcoming session for review and decision on its future course.
Development Information System

Although a few more months still remain before the end of the 2-year pilot phase, I am pleased to report that we now have a fully operational system with a sample data base of close to 2000 records. This means that the departmental files are now being inventoried on a regular basis; unpublished reports containing information suitable for repeated use are selected, abstracted, and indexed; and various storage and retrieval data elements are being computerized. The United Nations was one of the six sponsors of the DEVSIS feasibility study, along with UNESCO, ILO, OECD, UNDP, and IDRC. Because we did not wish to duplicate the efforts of others unnecessarily, it was logical for us, in establishing our own system, to make full use of the preliminary design of DEVSIS. For instance, we have adopted the data input sheet designed for DEVSIS for our data entry. Our decision to adopt the DEVSIS input sheet was also influenced by the fact that it adhered to the UNISIST guidelines — an important factor for a new information system being established within the UN family. As for the list of indexing terms necessary to describe the information contained in documents, rather than creating another new thesaurus of indexing terms, we chose to participate, along with ILO, CEPAL, OECD, and others, in a cooperative effort supported by IDRC to revise the Macrothesaurus so that the terms it contained would fully reflect our needs.

After much research, we were convinced that useful experience can be gained from the application of the minicomputer to development. Therefore, for the pilot phase of the Development Information System, we are testing the cost-effectiveness of a minicomputer-based information storage-retrieval system using MINISIS developed by IDRC. So far, we are pleased with the capabilities of the pilot system and have begun the market test of the system's output. In addition to producing a variety of printed outputs, the system is capable of providing a printout of on-line data pinpointed by interrogation using key words that describe the information the user is seeking.

An identical system is being proposed for establishment at the Economic Commission for Africa (ECA) under its DEVSIS-Africa program. I was very pleased that ECA chose to utilize the experience we have gained in this area by including the officer in charge of the Development Information System as a member of the DEVSIS-Africa study team. The preliminary report of the study indicates that one of the most thorough preparations has been undertaken by the team. ECA and IDRC deserve our recognition for their achievement as well as for their commitment to improving access to information useful for international development. When DEVSIS-Africa is implemented, it will be compatible with our Development Information System as well as LABORDOC of ILO, as ILO has recently made the decision to purchase a minicomputer and to implement MINISIS at its headquarters located in Geneva.

Modest progress is being made toward international cooperation in information systems within the United Nations family. The next step is to increase the flow of information among international organizations and their member governments.