



LIMITED

CDCC/MIDIS/81/4

19 October 1981

ORIGINAL: ENGLISH

ECONOMIC COMMISSION FOR LATIN AMERICA
Sub-regional Headquarters for the Caribbean
CARIBBEAN DEVELOPMENT AND CO-OPERATION COMMITTEE

Regional Workshop on Methodology for Inventory of Development Information Units Bridgetown, Barbados 19 to 24 October, 1981



ELEMENTS OF A CARIBBEAN DATA BASE OF DEVELOPMENT INFORMATION UNITS

DRAYTON



UNITED NATIONS

ELEMENTS OF A CARIBBEAN DATA BASE OF DEVELOPMENT INFORMATION UNITS

A FRAMEWORK

The data base being discussed belongs within the Phase II programme of the Caribbean Information System - Planning (CARISPLAN) which fundamentally attempts building information infrastructure as contributory to the economic and social planning processes in the region.

First and foremost, the data base should therefore, be seen as a potentially viable contributor to this scheme. In this respect, and for working purposes, one can then appreciate the choice of the definition by Ian Palmer - "The fundamental storage of relevant data for the operational and strategic planning and control of an enterprise" $\frac{1}{2}$. (One can substitute the expression "development information infrastructure" for the term "enterprise").

With regards to CARISPLAN, two pertinent concepts emerge from this definition, these are the concepts "relevant data" and 'planning and control". In the first instance, the concept of "relevant data" is significant for the data base because there is an inventory exercise involved where it will be imperative to access data that clearly reveals to users the information situation that exists.

For the methodology used, the concept also makes it imperative that one use a very <u>integrative approach</u> to the information function. In a system of planning and control, the ideal situation demands that one gives consideration to all facets of the subject, hence, planning information infrastructure, as related to development information units will require that one look at all facets of the information needs, for example, the

^{1/} Palmer, Ian. <u>Data base systems: A practical reference</u>. New York, Q.E.D. Information Sciences, Inc., 1975. p. 1-2.

availability of resources, management expertise, administrative techniques, services rendered and status of the organization.

This approach becomes imperative especially when one considers that the inventory exercise must not only be a measurement activity. Within CARISPLAN, one would want to achieve a harmonious set of activities in operation at each information unit so that the system as a whole develops. In this regard, the data base must then offer a basis for <u>evaluation</u>, for example, the data must be able to tell to what extent resources are being optimized in each unit.

The concept "planning and control" completes the point of the contributory rôle the data base can play. An information system in the region suggests the need for <u>co-ordination</u> of regional activities. It would demand various co-operative efforts at the national level and regionally, for example, in the standardization of cataloguing practices; or the strengthening of subject specialist areas within each territory.

In this respect, a Caribbean data base of development information units could provide a data base of integrated regional data that can be processed further to give information on the national and regional situations. The data base would then assume a <u>diagnostic rôle</u> and the information gleaned here could offer a basis for policy and plans at the national or regional levels.

Given the framework outlined above, a Caribbean data base of development information units must be looked at for discussion, in terms of its capabilities for providing a meaningful store of information to users. The products of such a system here, will so constitute a Meta-Data System. The data base is viewed as that set of relevant data on the human and material resources existing, the managerial expertise and administrative techniques available for organizing them and the services provided through the combination of these features. The data base must also be able to identify these features as belonging to a unique unit.

A META-DATA SYSTEM

The Meta-Data System can form a basis for monitoring, review and evaluation of activities. A Meta-Data System has been defined as information about information, and within this definition the system can take any direction.

For purposes of CARISPLAN, however, one should give consideration to the set of design principles governing the system and as outlined in the document CDCC/PO/WP/80/12. The following principles were considered, namely:

- 1. The value of information as a <u>national resource</u> which must be exploited;
- 2. The value of horizontal technical co-operation and the need to build on the expertise and experiences of member countries; and
- 3. The need to access relevant information produced in other third world and industrialized countries and its related concept of resource-sharing.

Apart from these major principles, other considerations embraced users' needs; the environment; accessibility; timeliness and currency.

These areas of concern can well become a set of guiding principles that govern the direction of the Meta-Data System. For example, information on the units' main subject interests included in the collection could later form the basis of a horizontal technical co-operation programme - information on each unit's publications' programme e.g. in the production of recurrent subject bibliographies can be used for building on technical expertise in the region, and for later resource-sharing endeavours on the international level - activities involved in the processing of the unit's collection, could reveal much standardization in practices e.g., in the use of the Anglo-American Cataloguing Rules (AACR₂), which could then offer a basis for some form of co-operative cataloguing.

The point about all this is the fact that the capabilities of a data base allows the organization of information in any form. For CARISPLAN purposes, here this would best be to convey information that reveals the

existing information situation of the development information units, and to establish and show relationships between certain information variables.

This approach to providing information emphasizes two sets of capabilities of the data base which should necessarily interest the planners and other users of the system. These are:

- 1. Monitoring activities.
- 2. Evaluation.

Monitoring Activities

This type of information could explain the information situation as it is throughout the region. It would constitute first level data collected at the survey stage, and would be representative of the situation at a point in time. The approach favours the publishing of "directory" type or "register" information that would be useful to the researcher who accesses information himself or the intermediary Librarian/Information Specialist who intervenes on behalf of the researcher.

A directory of development information units in the Caribbean would identify name and exact location of an information unit. This information bridges the first gap in seeking out information and overcomes the initial drawback in not knowing what units exist or if a name is known, not knowing exactly where to locate a unit. This is a problem that can become sizeable given the geographic spread of information units at the national level, and more and more so, regionally. All other forms of identification, for example, telephone number, postal or cable address, nature of the unit, e.g., documentation centre, library, reference centre also provide initial directional clarification that a user needs to have.

Information regarding subjects included in the collection (public administration, environment, nutrition, labour, transport, tourism), would identify for the user what subject information is included in any of the information units. At present, there appears a definite move in favour of subject specialization. In fact, development agencies will tend to have specialist fields of interest, as in the case of an Industrial Development Corporation; or a Government Ministry or a Central Bank. The information

units that belong within these entities will, therefore, reflect their interests. Subject information, particularly regarding "predominant subject" most importantly offers greater possibility that the user accesses valid, up-to-date information.

The "directory" approach to conveying information in a Meta-Data System, could further address itself to any of the critical variables in the user interface function, namely:

- days and hours of service.
- publications of the unit.
- library equipment available.

The task here is to best convey the relevant information that directs the user to the unique unit desired.

The store of existing data must, however, be always able to provide a referral service to users. Beacuse situations are rapidly changing over time, the data base must also be updated regularly, so as to provide accurate information.

Evaluation

The evaluation exercise should be useful to the planners and policy makers for the system at both the national and regional levels. This could entail periodic review type information from the data base and could embrace time series data that would give a comparative picture for each territory and for the region as a whole. How the data is analysed over time will be the responsibility of the planners of the system. For CARISPLAN purposes, two approaches immediately come to mind as examples, namely:

- a) Analysis by territory; and
- b) Analysis by subject.

Analysis by territory: this approach can be used for assessing the information resource capability of each territory. As part of a regional venture, the strengths, weaknesses, and limitations of each territory will have to be assessed for the system; for example, "In which territory is the strongest manpower collection and in which the weakest?" or, "In which

territory is there high availability of special equipment, and automated facilities for processing and disseminating documents?"

For the analysis here, one would want to obtain a picture of the 'spread' of these variables in the region as a whole and the information thus gleaned could be reported on. This would provide the impetus for strengthening the weak areas of the infrastructure or provide the basis for co-operative activities where economy in regional information activity is desired. One example of this type of activity is in the publication of a subject bibliography of material on "mechanization of small-scale agriculture".

Analysis by subject: Analysis of the data by subject seems most relevant in establishing the levels of contribution of the information units to the economic and social planning processes in the region.

Within the region, development plans and project proposals hold a significant place in annual Budget Speeches. Development Institutes to which development information units are attached have a definitive rôle to play in these plans. CARISPLAN addresses itself to establishing information infrastructure for the smoother running of planning processes and recognizes information as a national resource to be exploited.

Given these factors, the information resource capability in the region should be assessed for its present and potential contribution to their relevant sectors, so that the movements in the areas for planning will be paralleled by thrusts in the related information areas. Some examples of such activity would be seen in the building up of a collection on food processing in the case of St. Vincent; the securities market in Trinidad and Tobago; rice technology in Guyana and wind energy in Barbados.

At the regional level, the advantages accrued in building up specialist collections can be spread over other territories through the horizontal transfer of such information. Each territory could therefore hold within their wider collections the specialist areas that parallel the country's interests. The transfer of information that follows should constitute a truly co-operative activity that benefits both country and region.