A National Library and Information Service System in Barbados

Carl Keren

October 1982
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A NATIONAL LIBRARY AND INFORMATION SERVICE SYSTEM IN BARBADOS

Report of a Consultancy Mission (September 1981)

Carl Keren
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In the spring of 1981, the International Development Research Centre (IDRC) participated in discussions with the Government of Barbados concerning mechanisms for implementing a national information program. The National Council on Libraries, Archives and Documentation Services (NACOLADS), Barbados, had been actively involved in preparing background working documents that led to the formulation of a set of recommendations for the creation of this national information program.

These discussions resulted in the identification of a consultant, Mr. Carl Keren, Director of the National Center of Scientific and Technological Information (COSTI) in Israel, who was assigned the task of designing an implementation plan for a national library and information program in Barbados. His report was accepted in principle by NACOLADS and formed a large part of NACOLADS final report to the Barbados Government. In turn, the Government of Barbados has accepted fully the recommendations of NACOLADS.

Throughout Mr. Keren's report, the proposed Barbados program is referred to as the Barbados Library and Information Services System (BLISS). The Government of Barbados modified this somewhat and chose the name: the Barbados Library, Archive and Information Centre Network (BLAIN).

We believe that Mr. Keren's report makes a positive contribution to the literature on the design of national information programs, as it offers a model for a strongly centralized solution based upon such factors as size of population, geographical land mass, and available human resources. Thus, it has been published in its entirety to ensure a wider distribution.

Martha B. Stone, Associate Director
Information Sciences Division
International Development Research Centre
LETTER OF TRANSMITTAL

To: Mr John E. Woolston, Director, Information Science Division, IDRC

In accordance with the consultancy contract of the IDRC in its letter of 30 July 1981, I traveled to Barbados on 4 September 1981 and stayed on the Island until 26 September 1981. From 28 to 30 September, I stayed in Ottawa for debriefing.

In the consultancy contract, I was required to: 1 - Cooperate with the Ministry of Information and other authorities in Barbados; 2 - Assess existing information activities and planning, and determine areas of strength and weaknesses; and 3 - Draw up a medium-term action plan for the development of information services in Barbados.

The Barbadian authorities and the library and information profession extended to me every possible support and assistance required to ease and facilitate my work. The Minister of Information, Senator N. Barrow; the Permanent Secretary, Mr Ch. Thompson; the campus librarian of the University of the West Indies, Mr M. Gill; the librarian of the Caribbean Development Bank, Mrs N. St. John; the librarian of Barbados Public Library, Mrs B. Carrillo; and many others took great interest in my work and devoted much of their time and effort to assist me whenever needed. To them all, I am indebted for making my stay on the Island so pleasant. I would also like to express my thanks and appreciation to Mr R. Archer of IDRC, for the very efficient administrative arrangements he made.

In the enclosure, please find my report of the mission. Any lacunae or wrong interpretations of the existing situation are my own and do not reflect the efforts of my hosts to assist me in every respect. The recommendations were discussed, as far as possible, with the authorities directly concerned, as to their feasibility of implementation and adjusted where necessary.

Thank you for having entrusted me with this mission. I believe that the efforts of Barbados to establish an improved information system are worthy of your continuing support. If I can be of any further assistance to you or to my hosts in Barbados in connection with this mission, I shall be glad to oblige.

Carl Keren
Tel-Aviv
October 1981
The library-information field in Barbados has aroused considerable interest because its role in national development is appreciated. This is clearly shown by the better-than-average national infrastructure that was created by the efforts of national professionals, the support that they receive from government, the advanced professional standard of senior personnel, and by the degree of use (demonstrating utility) that patrons make of existing facilities. The background and decision papers that the National Council for Libraries, Archives and Documentation Services (NACOLADS) - appointed by the Minister of Information in 1980 - had prepared for evaluation by government, and on which I was asked to comment, reflect the maturity and seriousness with which Barbados prepares itself to enter the new era of information work. Whether an outside consultant agrees or disagrees with all or some of the proposed action plans is certainly less important than the fact that there is a demonstrated national ability to face the issues, to select alternatives, to set priorities, and to translate planning into action.

In view of the foregoing, I considered that my main task was to assist in the concretization of ongoing planning, the reconciliation of some divergent viewpoints, and the sharpening of the need to select priorities, and to lend support in explaining action plans to decision-makers in government. Here and there, I was probably also able to share previous experience with my hosts and to clear up some ambiguous concepts and definitions that, if they had remained, might have introduced difficulties and misunderstandings later.

The library and information services activity in Barbados has many areas of strength:
- the high literacy rate of the population;
- a basic infrastructure of relatively well maintained and functioning libraries;
- a very good cadre of professional librarians, especially in the senior grades;
- considerable interest in this activity -- the Minister himself, his senior staff, managers in commerce and industry, academic and other decision-makers recognize the contribution that this field can make to national development; and
- a very strong tendency to improve existing activities by indigenous means and to seek foreign assistance, principally for advice and as a resource to hasten development.

The weaknesses that were identified concern mainly:
- information users who do not participate in the action, nor have sufficient awareness that libraries and information services justify their existence by use;
- professional services are strongly library-technique oriented;
- subprofessional personnel who have been insufficiently trained and not used as efficient as they could be;
- infrastructure for information services that is lacking in the modern sense and education of staff (or users) towards these modern services that has been nonexistent; and
- a relationship between salaries and acquisition of materials that is financially very unfavourable.

The papers and recommendations produced by a number of working groups appointed and led by members of NACOLADS were basic to my study. On the strength of these working papers, NACOLADS had prepared an interim report that was submitted to government. It seems that, due to pressure of time, this report was not sufficiently discussed by the assembly of NACOLADS members and is therefore not totally acceptable to all. The interim report deals mainly with general intentions and contains few indications on the means by which they are to be achieved. The interim report will be revised into a final report that will include the findings of this consultancy mission, as far as they are acceptable. This final report, or rather those parts that are accepted by government, will constitute the medium-term plan stipulated in the IDRC contract.

It should be added that the more essential recommendations of this report were discussed with the assembly of NACOLADS on 24 September 1981 and were acceptable to a significant majority of them. The feasibility of implementing these recommendations was also discussed with the administrative authorities concerned, such as the Ministry of Finance and the Civil Service Commissioner. The authority responsible for the plan's implementation, the Ministry of Information, was consulted throughout the study. Only recommendations that were acceptable to all concerned have been retained in this report. An additional basic constraint were considerations related to the economic realities of Barbados and its prospects of obtaining assistance (financial and professional) from abroad.

Finally, I attempted to link, wherever possible, developments in Barbados to regional (Caribbean) and international activities. I should, however, point out that successful participation in these activities requires a sound national infrastructure: the creation of which is the aim of most of my recommendations.

In the course of this consultancy, I was asked to comment on activities of which, as I immediately pointed out, I have little knowledge and even less expertise. This applies especially to the national archives, the school library system, and the public library and any comments and recommendations referring to these should be viewed with these reservations in mind.
In its search for an improved national information system, NACOLAOS proposed, in its interim report of December 1980, the creation of a national library that would group, under a single administrative umbrella, all government-dependent library services. Under the NACOLAOS plan, a directorate for such a national library would be established, and be administered by the Ministry of Information and draw all its budgets from that Ministry. The National Library would incorporate various centralized service divisions and direct through these, in a hierarchical fashion, the libraries operating in the various government departments, the public library, and various technical support functions. A division in the national library structure, designated as the research division, would be charged with the task of ensuring cooperation among the national library and the archives and public and privately administered libraries and information services.

The organizational option proposed in the interim report has several advantages. First, a relatively large structure is created that, through national predominance and the resources it commands, would influence the development of information services in Barbados. Second, the unified administrative structure, with only one ministry representing the system at the government and budgeting levels, simplifies procedures and makes for short lines of decision making. A sympathetic ministerial approach could ensure relatively massive infusion of resources (this could, however, also work in an opposite direction). Third, economies of scale and of centralization are easier to enforce in a large and administratively homogenous structure. Fourth, personnel in the proposed organization would have greater scope for advancement and job mobility. And, fifth, the efficient application of scarce professional personnel, sophisticated equipment, and buildings is easier to enforce in a centralized system.

The proposed organizational scheme also contains, however, some significant disadvantages. First, a relatively large and potentially unwieldy administrative superstructure would be established that could easily focus attention on bureaucratic procedures to the detriment of professional progress. Second, putting the structure together and optimizing its performance would take, even if fully supported, much effort and time, possibly more than 2 years. While this basically administrative work is being done, little professional progress can be expected. Third, within the government sector itself, mission-oriented ministries would be separated from the information activities that are designed to assist them. Representatives of the principal users, e.g., the ministries of Health and Agriculture, would no longer be responsible for the development of a basic service that permits the users to discharge their tasks. Thus, the present inactivity and disinterest of these ministries in the information field would be legalized and, worse, made permanent. Fourth, the operational and administrative workload of the proposed structure would be heavy. Its discharge would always have to take precedence over purely professional duties and the
flexibility of planning and experimentation that is necessary for future development would probably be impaired. Fifth, experience has shown that national information activities that are operationally subordinated to a single administrative authority may easily lose the freedom of professional decision-making and decisions that suit administrative purposes become dominant. A relatively large and powerful government agency that is the centre of activities may also reduce the cooperation of some smaller, independent, units. And, sixth, although the need of regional cooperation is rightly emphasized throughout the interim report and in future planning, decision-making and cooperation might become more cumbersome if Barbados is represented by a relatively large and powerful unit that is administratively, operationally, and organizationally totally identified with governmental interests.

Discussions with representatives of the ministries of Education, Health, and Agriculture, although not conclusive and lacking final authorization, conveyed the impression that these ministries would prefer to retain some control over the information activities within their jurisdiction. They clearly preferred that the operational budgets for their library and information activities should be part of their departmental estimates and that they should be authorized to participate decisively in the setting of their departmental information policy. However, all representatives found much merit in a more coherent national library and information system, including some centralized activities, such as acquisition and technical services, and a nationwide policy for personnel allocation, training, etc. They also favour a national approach to infrastructural problems involving the allocation of resources and authority to make interdisciplinary decisions.

BLISS: AN ALTERNATIVE OPTION

An analysis of the advantages and disadvantages inherent to the structure proposed in the NACOLADS interim plan leads me to propose an alternative organizational approach. The proposed option is based on the network concept in which nodes of the network have equal status and responsibilities, with the exception of such activities that serve the network as a whole.

Several networking models exist. The one proposed here would permit the presentation of groups as network nodes, to reduce the number of contact points that must be managed and also to allow for a variety of hierarchical organizations to participate. Otherwise, all network nodes should participate equally in the system. The proposed network (Fig. 1) is discussed in detail in the next section.

It is proposed that the designation National Library, which the NACOLADS interim plan used, be discarded. Neither the NACOLADS plan nor the proposed alternative aims at establishing a national library in the conventional sense. The reasons for such a change of designations have been discussed extensively with all concerned. Briefly, however, the use of appropriate terminology is of more than purely semantic importance and is bound to ease
the establishment of a new structure and its acceptance by all concerned.

It is suggested that the new system be named Barbados Library and Information Services System, or any appropriate equivalent. The acronym BLISS is used, for convenience and brevity, throughout the remainder of this report.

Principles of BLISS operation

BLISS is to operate on the network principles and its first priority is to develop network capabilities and modes of operation, coordination, and cooperation. There will be seven principal network nodes: the Public Library and its branches; libraries in government offices, institutions, hospitals, etc.; school libraries; the national archives; the University of the West Indies (UWI) library and other on-campus libraries; special libraries in banks and private and semiprivate institutes; and the BLISS directorate.

Networks nodes should be free agents in all operations that do not contravene or influence the operations of the national system. For instance,
each node decides on its acquisition policy but it may not, unilaterally, change the subscription status of a publication for which it has been assigned a network responsibility. If a change is required, for budgetary or other reasons, it must be coordinated with the network directorate.

Although each network node should be autonomous in its direction and the discharge of its designated duties, certain network rules should be developed and enforced. These rules concern seven main topics.

Cooperation and interlending: It is recommended that BLISS develops a coordinated acquisition program, especially for serials, abstract journals, and collections of a highly specific nature. Each network node will be responsible for the adequacy of the collections in its assigned field and for putting the documents in that collection at the disposal of other nodes. A precondition for the successful operation of such a scheme is the activation of reporting tools such as union catalogues. Mechanisms for interlibrary loans, including the supply of photocopies, must be developed concurrently.

Union cataloguing: Collections must be made "transparent" to all network nodes. This will, incidentally, allow increased specialization of facilities. For example, it seems uneconomical to maintain huge (and often irrelevant) collections of United Nations or World Bank materials every library whose parent organization has a working relationship with these international organizations. An efficient reference section in BLISS should be able to show what is available and where, and have the tools to get the information fast.

Users: A much closer relationship between users and the facilities must be established. Nodes should make all network resources available to their patrons, not solely their internal collections. Users' education should, therefore, be broadly based and staff training must be adequate to respond to wider responsibilities.

Weeding policy: An economic weeding policy, i.e., removal of superfluous or outdated material and of little-used material, must be designed. Nearly all libraries suffer from congestion and stack room is at a premium. If stacks are cluttered with documents that are never or only rarely used, the demand for new premises soon arises. It is, for instance, frequently wasteful to bind and to store in several libraries duplicate copies of old serials (say 5-7 years old). A network convention that apportions this task in an equitable fashion has many merits. Such a convention would assign the storage of little-used material to a single facility that would in turn make it available to any network node in which it is required.

Work documentation: Libraries and information services use many different forms, worksheets, etc. BLISS should attempt a far-reaching unification of these working tools to cut down on administrative efforts and to enhance cooperation and compatibility. A centralized supply of these forms merits consideration.
Computerization: The introduction of computerized activities into the BLISS environment will certainly occur in the near future. The relatively small size of BLISS and the scarcity of trained personnel should make it mandatory that all such activities should be applicable to the system as a whole and that no network node should be permitted to do "its own thing." The need to cooperate not only nationally but also regionally and internationally adds emphasis to this point.

Staff: Staff training, professional advancement (and opportunity), and mobility should apply equally to all network personnel. This is the only way through which a professionally adequate work force can be created.

Each network node would continue to depend on its parent organization for its current resources and development. BLISS may, through its directorate, support a network node with network resources, principally for two reasons:

- first, to create an activity that has not existed before or that is underdeveloped and that would be of importance to BLISS as a whole, e.g., building a collection in a specific field; and
- second, to maintain a permanent operational activity that serves the network and its aims as a whole, in an operational environment that can cope with it successfully, e.g., document accession from a certain source, input preparation for international databases, etc.

The policy implications arising out of this recommendation are twofold. First, each parent organization continues to be responsible to the direct funding of the library and information activities that are under its jurisdiction. Second, activities newly created for BLISS or maintained for it should, whenever possible, be put within existing operational units. Such a policy would probably be more cost-efficient than the creation of separate units and it would also enhance network coherence and cooperation.

The network manager or directorate

BLISS is to be led and coordinated by a network directorate. The directorate would act as a network manager and contain all the functions necessary to discharge this task. However, the directorate is seen principally as a headquarters unit with a very small staff (9-10 persons) and with no direct operational responsibilities, except the direction of two centralized units: document acquisition and cataloguing and technical support services.

The role of the network manager is seen as follows:

- it represents network interests externally. It would thus become the national focal point and representative wherever such a designation is appropriate, e.g., for UNISIST, FID, bilateral and regional agreements, etc.
- it represents broad noninstitutional interests at a governmental or other official or semiofficial level. This includes the formulation of the national information policy and its implementation, national budgetary and personnel policy, initiation and implementation of standards and common procedures, initiation and monitoring of training activities, examination
requirements, etc.

- the network manager would ensure that adequate technical support services exist and, if such services need to be operated centrally for reasons of expertise or economy, would direct their operation. This includes operations where a single unit, such as on-line services, can serve the whole network.

- the manager would be concerned with all aspects that contribute to the smooth operation of the network, such as interlibrary loans, weeding policy, communications, personnel mobility and grading (at a general nonindividual level), systems compatibility, acquisition and equipment purchase agreements, construction of union catalogues and databases, acquisition of general information sources, network consultants, etc.

computerization of network activities or of each of its nodes should in all cases be a concern of the network manager (the BLISS directorate), because of the far-reaching implications for network compatibility and operation that are involved. Government may have a good case to ensure, by regulation or otherwise, that this recommendation is unilaterally enforced.

- additional responsibilities may be transferred to the systems manager by government or by network consensus.

The composition of the BLISS directorate and its relation to other parts of the network are shown in Fig. 2 and described in the following section.

The staff of the directorate (including the position of the director) should include six or seven professionals and two or three support personnel (secretaries, etc.) at most. Positions need not be filled immediately or be staffed by full-time personnel and the director should have considerable leeway to fill vacancies as need arises and suitably qualified people become available. With few exceptions, staff positions can be filled by nonlibrarians. This is, in fact, desirable to avoid stripping existing libraries of trained personnel and also to introduce additional professional qualifications into the Barbadian library and information environment. The proposed organization should be reviewed, and if necessary adjusted, after about 2 years.

It is recommended that the directorate and its various functions be accommodated in proximity to or even within existing facilities. Such housing would not only obviate the need for new offices but would also serve to make the new organization part of the facilities it is designed to support and diminish the need for additional administrative support. The library of the Community College seems to have ample accommodation for the offices of the directorate.

Functional description of the BLISS directorate

The proposed directorate is subordinated to the Minister of Information through the permanent secretary. The working relationships and roles suggested for each of its elements are described below.

NACOLADS: This organization is to become a permanent body acting as an advisory council that meets three or four times annually to receive reports,
Fig. 2. Composition, interrelationships, and functions of the BLISS directorate.
discuss policies and work plans, and generally act as a "sounding board."

**Executive committee:** The committee is elected out of the NACOLADS membership but additional committee members are users' representatives, a representative of the Ministry of Finance, and the director of BLISS. The committee should be chaired by the permanent secretary of the Ministry of Information. Its total membership should not exceed seven to nine members. The committee should meet monthly and authorize all decisions that are not of a day-to-day operational character. It should also authorize disbursements out of the special fund.

**Library association:** The Association should provide professional advisory input to the directorate and receive from it support for association activities.

**Director:** BLISS is represented at the senior level by a director who administers the directorate and coordinates activities. The director also submits working plans, budgets, structural suggestions, etc. to the executive committee for decision and review.

**Coordinator of government libraries:** This staff member will initiate and coordinate the restructuring of government-owned facilities, including reallocation of personnel and material holdings, building of collections, changes of premises and equipment, etc. The coordinator will liaise closely with the directors of each individual facility regarding budgets, personnel training, internal operating procedures, etc. and represent the interests of this sector at the senior BLISS level.

**Regional and international cooperation:** A staff member will be required to coordinate all activities of the authority with non-Barbadian organizations. This person will assist in making arrangements for individual activities needing international contacts and will represent Barbados internationally. She or he will ensure that Barbadian input into regional and international activities is adequate. Management of such activities that exist already will be taken over and additional contacts will be developed.

**Staff development, training, and publications:** This position should deal with the large variety of problems that will arise as a result of expected staff changes, the design of training curricula, the organization of courses, examinations, selection boards for trainees, etc. BLISS will have few publications of its own to attend to, but it should develop a professional capability to advise government and others on how to lay out publications and how to produce them technically. This would be a useful function, especially if the future storage and retrieval aspects are duly considered. The need to develop a public-relations program for BLISS and the efforts at users' education that go along with it will be of more immediate concern.

**Data bank construction and maintenance:** This is a new field and should be developed on a priority basis. The staff member should organize data preparation, collection, dissemination, and exchange, and negotiate
computerization. The following data banks are recommended initially:

. A data bank of reports, surveys, government publications, etc. with an annual input of about 400-500 items. Worksheets to be prepared should list bibliographical data and a summary and be compatible with regional data banks (such as CARICOM, CARISPLAN, and AGRINTER) to which Barbados is party.
. The national bibliography should be handled by this staff member and should be compatible with the data bank mentioned above.
. A union catalogue of serials held by BLISS should be prepared with an expected input of about 2500 titles.
. Data banks relating to institutions such as libraries, manufacturing and service firms (of importance to exporters and investors), and similar topics should be encouraged and supported professionally and financially.

Network coordination, planning, and development: This function should ensure that operating procedures, rules and regulations, etc. are compatible throughout BLISS and that network activities proceed in a manner that fits the concepts and policies that have been adopted. Library interloan procedures, forms design, weeding and retention policies, allocation of acquisition responsibilities, etc. are a few examples of the activities to be handled by this function. The organization of activities that, for reasons of size or economic or technical complexity, should be developed for the whole network also fall in the sphere of this function: online services to external databases, SDI services, etc. are examples. As network restructuring proceeds, plans must be laid for future development and all achievements should be constantly monitored and evaluated. Statistical and other measuring tools must be introduced and maintained.

Technical support functions: Within the BLISS directorate and as a service to the system as a whole, a professional capability must be provided to advise on, to judge, and possibly also to introduce technological innovation into the network. Computers and telecommunications are obvious examples of the expertise in which BLISS requires some indigenous knowledge; however, problems related to microforms, printing and binding techniques, and photocopying and similar machine-bound systems also require technical knowledge to evaluate library and information services applications and to make informed decisions on acquisitions and use. Additionally, this function should represent the BLISS director as manager of the technical-support units that are within the director's jurisdiction. Some recommendations relating to these units are noted in separate sections.
To develop an adequate library and information services structure in Barbados, significant resources are required. I do not have sufficient details to estimate the national total investment that is needed and, in any case, this investment must be closely related to the development of the national economy, the socioeconomic goals of government, the research and development activity, regional and international relations, and several other factors. The annual allocation made to the system is, of course, also dependent on investments made in previous years in buildings, library stock, equipment, and training of staff. Throughout this report, financial values are given in Barbadian dollars (in September 1981, B$2 = U.S. $1).

Chandler's survey, some of the data I collected during my visits, and other (fragmentary) data lead me to estimate the total annual expenditure on library services in the country at roughly B$3.5 million of which government spends directly about 50%. These figures are approximations only and an error of 15-20% should be allowed for. A breakdown of available figures reveals that most of the money is spent on salaries and related postings, or on buildings and maintenance, and only some 20%, on average, is spent on acquisition of material. These figures should be considered in the context that international usage indicates that a ratio of 40:60 (acquisitions: other expenses) is sound practice in special libraries and about 50:50 or even 55:45 is considered acceptable in public and academic libraries.

Very little can be gained by analyzing the reasons for the present, rather disturbing, division of resource allocation. Most of such an analysis would be guesswork. Probably it is correct to assume that financial authorities have found it easier, over the years, to contain the growth of the acquisition budget and more difficult to adjust available staff positions to constantly shrinking purchases. It is probably also reasonable to assume that a relatively large number of staff never got a fair chance for training and professional advancement and that the "savings" that were effected in this way resulted in relatively inefficient working methods needing more personnel that would be required otherwise.

To indicate the probable resource requirements of an improved national library and information service would be extremely difficult and inexact at present. Most estimates are likely to mislead eventually. Too many variables, some of which are listed below, are involved that would make resource calculations largely theoretical:
- the specific recommendations of this report that will be accepted and the priority and sequence of implementation;
- the extent and the speed with which personnel can be upgraded and new types of staff can be recruited and inserted into the system;
- the extent of cooperation that can be established with information users, which alone justifies additional expenditure;
- the degree of cooperation that can be expected from the
administration and the library community in carrying out the reforms needed and the authority that the director and staff of BLISS will be able to exert; and

- the funding that government can free for this activity in each of the following years and the quality and quantity of foreign assistance that can be obtained.

Any variation in any of the above factors, and others, is likely to influence planning and priorities, and thereby resource requirements.

Recommendations

Future resource allocations should attempt a gradual correction of the balance between materials acquisition and the personnel needed for its handling. This could be done by a series of interlocking decisions that would:

- restore acquisition budgets to an adequate level;
- develop staff capabilities to a level where all staff can accept and cope with professional challenges and find job satisfaction in them;
- make better use of equipment, buildings, and technical support services to optimize benefits that result from them;
- streamline operating procedures to enable existing staff to cope with increasing workloads; and
- permit the selective introduction of computer-assisted systems that would become economically justifiable once manual processes are straightened out.

Additional recommendations include the following.

- The recruitment of the director and staff of BLISS requires the net addition of about seven professional staff members. It seems that technical and administrative personnel can be transferred, at least initially, from existing units or inserted into jobs that are now filled by unqualified personnel.

- A special fund, amounting initially to about B$1 million, must be established out of which the reorganization of BLISS can be financed. Funds should preferably not be earmarked initially for specific expenditures but should be expendable for system needs by a proper authority. The appointment of a committee that includes representatives of the ministries concerned (Information and Finance), the director of BLISS, and the executive committee of NACOLADS could be such an authority. Surplus funds should be transferable to subsequent financial years to optimize expenditures. Exact budget specification should be prepared by the director of BLISS for the period following the reorganization phase, but some form of a flexible fund should always be retained. It should be entirely clear that the special fund is totally additional to present expenditures and that it is not intended to cover current expenses, salaries, maintenance, etc. The fund is intended for capital and reorganization expenses only.

- Adequate housing for the National Archives must be funded as must the shelving and equipment necessary for the preservation of the holdings.

- Resources for the implementation of other recommendations made in this report or the recommendations made by the director of BLISS and the
The special fund is intended to cover the restructuring costs of the system over the period that seems to be required for its implementation, i.e., about 2 years. The amount was estimated on the basis that about 15% will be required for staff changes and training, another 15% for physical facilities, furniture, and equipment, about 40% for the rebuilding of collections (basic stock), and the remainder of about 30% for a variety of activities such as database creation and maintenance, contract work, users' education, etc. These are, however, very rough estimates, that can be corrected with exact figures once BLISS starts to function.

BLISS should devise a pricing policy for the services it provides. Any income that arises out of this policy should revert to BLISS or its network nodes, and not flow as income into the government treasury. Such income should be used, as it is elsewhere, for the development of services to users. A similar policy should apply for any (temporary) income derived from deposits for book loans.

Any savings made by BLISS due to increased efficiency should be made available for system use. If, for example, personnel can be reduced, the salary equivalent should become applicable to acquisitions or to other professional expenditures. The establishment of BLISS and the special funds put at its disposal should not diminish, in any way, the financial resources allocated to various participating network nodes and the obligations of their parent bodies to ensure adequate funding for the nodes.

Foreign assistance

There seems little doubt that some foreign assistance will be required to implement all the recommendations made in this report. Such assistance may be in funds or professional services, or both. It is, however, suggested that such assistance should be based on the principle that it is supplemental to a basically indigenous effort and that the establishment of BLISS and its current operation should not be dependent on foreign grants and funding.

On this basis, foreign assistance may be sought for:
- provision of an adequate storage place for the National Archives;
- financing of a microfilming contract for copying documents representing the historical national heritage;
- equipment and personnel training for the technical-support section of the national system (binding, catalogue-card production, and microfilming);
- in-service training for an agricultural information specialist, a medical librarian, and a school library consultant, and establishing local short courses on such topics as online services, computing in libraries and information services, library management, methods of document accession and sources, and elementaries of database construction and maintenance;
- acquisition of some basic library and information material in areas where new specialities are developed or existing facilities are upgraded.
such topics as engineering, agriculture, health, administration, and perhaps also trade information services are most likely to qualify - current and future maintenance of collections should in all cases be a national responsibility;
- initiation of computerized information services, if introduced; and
- special activities related to participation in regional and international networks.

DEVELOPMENT AND TRAINING

It is rightly stated that an information system is as good as the personnel who serve in it. Potential BLISS participants employ at present about 150 persons, of whom about 40 are graduate librarians or staff members with an academic training in some field.

Most of the graduates received their degree in the library school of UWI in Mona, Jamaica. Their principal areas of studies were traditional library techniques and some background studies (such as history, geography, etc.), very few have had a substantive subject-field education. Most nongraduates who are employed at present had no professional training at all, except some on-the-job instruction. Nongraduate professionals in government facilities are assigned to libraries by the civil service with a clerical or semiclerical classification. The librarian-in-charge has practically no vote in setting personnel qualifications or selection. Very few of the staff members who are employed at this level see in it a permanent vocation, worth a considerable educational effort or likely to provide the professional and material rewards they expect. Thus, personnel turnover and job dissatisfaction is very noticeable and one of the main, if not the principal, weakness of the Barbadian library system.

A 1-year course (1 day/week) in librarianship will shortly be offered for nongraduates. The course will be taught by a teacher from the library school in Mona.

Recommendations

At least in government, a professional structure must be established that would include all personnel, graduate and nongraduate alike, who are employed in the library and information field. Within this structure, adequate rules for advancement (by merit and education) should be provided and job mobility be ensured. The salary structure should adequately recompense staff for their professional responsibilities. The BLISS directorate should determine, with the civil service establishment, the basic educational requirements, continuous training efforts, examination requirements, grading levels, etc. that are required to create this professional structure and to make it effective. They should also design procedures needed for the interim period, i.e., the integration of present staff into the new structure, personnel selection and reallocation, etc.

An inventory should be prepared of personnel available now and those becoming available in future (now under training). Immediate training needs
should be identified for each person. A projection of personnel requirements for BLISS should also be prepared and their qualifications be noted. Job descriptions can then be written and salary grades assigned to each.

Government-supported education and training (especially abroad) should be authorized according to needs within the system and should not be left entirely to individual initiative. In this connection, it is suggested that subject specialists are urgently required in fields such as health, agriculture, computing and communications, economics, management, and engineering, and that library-technique qualifications should be added to basic degrees in these and similar sciences. Personnel ready to engage in such a broader educational effort should be preferred for public assistance.

A broadly based training effort should be instituted as soon as possible for BLISS personnel. This training effort should contain short courses (up to 1 week) as well as extensive courses (up to 1 year).

**Short courses:** Such subjects as management, accounting practices, forms control, introduction to computers, methods of users education, etc. are suitable for short courses. The organization of many of these courses could be contracted to outside institutions such as BIMAP.

**Extensive courses:** Longer courses should be of two types A and B. The A-type course should be addressed to nonprofessional staff members and focus on the practical day-to-day techniques with which they have to deal. Principles of librarianship, cataloguing and classification systems, lending procedures, etc. are examples of the topics that should be taught. The B-type course should be addressed to graduates or to nongraduates who have several years of professional experience. This course would focus on practical aspects of advanced information work such as information services management, information storage and retrieval methods, computer and communication techniques, online services, SDI, production of indexes, and methods of document accession. Both A and B courses should involve about 4-6 hours/week. Part of class time should be the student's time and part of it come from working time. Teaching should be done, as far as possible, by local personnel as they know the real problems better than anybody else. Also, class preparation requires study and keeping up with the profession, something that seems to be highly desirable. Curricula design should take note of the excellent guidelines that have been published by Unesco/PGI on this subject.

**Additional courses:** Other workshops, seminars, etc. have been suggested:
- a workshop on information management at the national and regional level with the participation of foreign experts;
- an online training seminar for about 6-10 professionals (The seminar should last about 2 weeks and should be conducted by a foreign expert in this field. Technically, provisions must be made for hands-on experience, i.e., at least two terminals (teletype in preference to CRT's) must be available throughout training);
- a course on computer use in information work lasting initially about
2-3 weeks (This course will also have to be conducted by a foreign expert. A prerequisite should also be some hands-on experience, i.e., access to a suitably programmed machine); and
- in-service training, probably in a developed country, for personnel facing special tasks such as medical librarianship, work in agriculture, document preservation in archives, technical-support functions, etc.

The suggestions made in the previous paragraphs should only be indications of what can and should be done. It must, however, be clear to all concerned that unless a serious effort is made in this area, much of the investment in resources and reorganization of facilities are likely to be value less.

**TECHNICAL-SUPPORT UNIT**

Several libraries in the country maintain small units for binding (or repair of binding) of books and serials. Other libraries have microfilming apparatus (such as the Archives), still others microfilm and fiche reader-printers. There is a plethora of photocopying machines, some of them operating with very unfavourable and expensive paper sizes. Quite a few pieces of equipment are not in use, those in the Community College have never been used since they were acquired in the late 1970s.

All facilities reported problems in maintaining equipment, frequently involving waiting several months for fault finding and maintenance or even decommissioning. Not only equipment maintenance poses problems, personnel engaged in technical jobs are often on the lowest range of the salary scale and have little motivation to be trained and to "put their hearts" into the work. Their superiors lack technical knowledge and are unable to direct this part of the work and instruct personnel.

**Recommendations**

In view of this analysis, four recommendations are made.

Technical support facilities of BLISS should be centralized and put under the management of a competent technician in the BLISS directorate.

Personnel and equipment now installed in BLISS facilities should be transferred to the new unit and, if necessary, be reallocated from there. As far as possible, however, activities should be carried out centrally, certainly for jobs such as binding, microfilming, and other tasks that are normally done in batch mode.

Possibly, an expert in these activities should organize the task of the unit properly, check out existing equipment, and advise on necessary purchases. The training of operating personnel should have high priority and, after successful training, adequate salary conditions should ensure reasonable production schedules and continuity. It is also suggested that the feasibility of contracting these tasks wholly or partly to specialized firms be investigated. Perhaps the larger scope offered by centralized BLISS
activities would increase the attractiveness of the work for private enterprises.

The BLISS directorate will have to ensure that, administratively and operationally, the unit operates efficiently and that network nodes that use the service have no reason to withdraw after some time. Preferably, some administrative authority should be assigned to this unit; for example, authorization of equipment purchases, drawing up of service contracts with suppliers, etc.
Acquisition of documentary material and cataloguing processes require, at present, an inordinate number of personnel and time in the various libraries. Professionals in libraries focus most of their attention on this aspect of the work and have, therefore, little time left to plan library development, to provide adequate user-services, and to advance professionally.

Most libraries have only relatively small budgets for new acquisitions and are, therefore, unable to take any advantage of economies of scale, to control the acquisition process adequately, or to select literature optimally. A wide variety of cataloguing and classification systems is in use, often precluding compatibility and future computerization.

Recommendations

A centralized acquisition and cataloguing unit should be established in the directorate of BLISS.

The centralized unit should be staffed by a reallocation of personnel from existing facilities. The utilization of the unit should be made mandatory immediately for government facilities; it is hoped that other facilities will join once the cost-effectiveness and quality of the operation become apparent. The unit should be housed in rooms vacated through the reorganization of existing libraries. It should operate in assembly-line fashion with considerable attention devoted to staff and cost saving, operating efficiency, work flow, and quality control. Factors such as bulk purchasing, supply by tender, time saving (e.g., air freight arrangements), etc. should rate considerable attention.

As long as card catalogues are the mainstay of the operation, suitable equipment for card production should be used. A participating facility should get all the cards it needs, together with the documentary material to which it refers. Material received by participating libraries should be ready for immediate shelving.

Acquisition and cataloguing will probably be one of the first activities to be computerized once the first phase of the plan, i.e., restructuring, has been completed. All processes to be employed in the unit should, therefore, be designed so that future conversion to machine-readable records is as painless as possible. Forms, worksheets, cataloguing data, purchase orders, etc. should follow international standards (see publications of IOB on information standards). If an OCLC relation (i.e., a shared computerized cataloguing system) is foreseen for the future, operations should be compatible with the procedures used by libraries that participate in that network.
A union catalogue of serials should be started immediately, to be followed, as soon as feasible, by a union catalogue of books. The publication of contents pages of broadly used serials may be highly cost-effective.

Libraries that use this facility should channel all their orders on specially designed forms. To minimize accounting procedures, it is suggested that participating libraries establish deposit accounts with the unit and that financial statements be issued on a monthly basis.

International document accession agreements, such as those with the British Lending Library or NTIS, should be transferred to the responsibility of this unit.

The operational efficiency of this unit and its viability will be a crucial test of the BLISS concept. It is suggested that, before full-scale operation is started, thought be given to all the procedural and operational activities that are involved, that operation manuals be written, forms designed and tested, and that the system be tested in trial runs. Haste should be made slowly and carefully.

Discussion

Ideally, collection cataloguing and maintenance procedures for books and other documents should be compatible throughout the network. Practically, however, there seems to be no great urgency in imposing universal classification methods, etc. The public library employs the Dewey System, the UWI uses Library of Congress, and other libraries use still different schemes. The small size of the network and the close personal contacts maintained by staff make the imposition of unified systems, at a time when so much else must be done, a low level priority. Should UWI, however, go through with its plan to become a partner in the OCLC network, this recommendation would change and UWI should act also as an agent for other libraries. It is, however, recommended that the economics of joining OCLC be analyzed further and that this plan be pursued only if the economic advantages can be clearly demonstrated.

HOLDINGS IN SCIENCE, TECHNOLOGY, AND SOCIOECONOMIC SUBJECTS

During discussions with users and librarians, the comprehensiveness and timeliness of collections needed for current awareness and for problem-solving were frequently raised. This problem is not as acute for academic needs, where the curriculum and related library requirements are generally known in advance; thus BLISS facilities can order what they need with time to spare. All other needs, however, cannot always been foreseen and a small country with a small basic library stock, limited resources, and long delays in supply faces considerable difficulties.

Online services, SDI, and similar services that have arisen because of modern information technology provide mainly bibliographic references that must be followed up by an efficient document-accession service. Even when
acquisition budgets are plentiful, countries that are far from centres of
document production find it very expensive to order all they need by
airmail. Anything that is shipped in other ways takes 3-6 months at least to
reach Barbados.

At present, very little data exist to permit reasonable decisions;
little is known about the potential users of BLISS facilities and what their
areas of interest are; nothing is known about which types of information are
needed urgently and which can wait. Modern information technology has not
yet been employed and users' reaction to it is unknown. Even the forerunners
of that technology, such as secondary-source publications, are practically
unavailable and none of the potential users who has been contacted has
complained about their absence.

In view of these observations, it would be too early to make any firm
recommendations on this topic. A few tentative ones may nevertheless be
useful.

Online and other services that provide bibliographic data should only be
introduced if adequate provision for reasonably timely document delivery has
been made. In the Barbadian context, this is likely to entail ordering by
telex and document supply by air. The follow-up service is, therefore,
rather expensive but without it the value of all the rest is questionable.

There should be far-reaching coordination within BLISS nodes to
eliminate duplication and to increase the utilization of budgets for the
broadest possible base of holdings that resources permit.

Sources that supply documents on microfiche, which can be airmailed
economically, should be developed, and an attitude that accepts the use of
microfiche and a technology that permits such use should be encouraged.

The institution and maintenance of good statistical and reporting
systems seems to be a necessary tool to gather data for decisions that are
vital for a future, efficient, information system.

COMPUTERS

As was to be expected, much interest was shown in the use of computers
for libraries and information work. There is, however, insufficient
knowledge of the infrastructure that is needed to introduce high-technology
equipment successfully.

Available equipment consists of an IBM 360/115 in government. This
machine is used principally for administrative and statistical data
processing, works in batch mode only, and is unable to provide any programing
support to users. The Caribbean Development Bank (CDB) is in the process of
installing an IBM 4331 with adequate peripheral equipment. I was unable to
determine the needs for which this system is being installed and which
application programs are to run on it. Negotiations are in progress to
obtain from Unesco the ISIS package and to use it for information handling,
including the CDB library. Nobody, including the programmer who will take over ISIS, has any knowledge about the capabilities of ISIS or of the steps needed to prepare for computerization of the facility. Other machines include a small ICL installation on the UWI Campus (not equipped for textual information work) and the purchase agreement of a PDP 11/34 at the Meteorological Institute (the machine has not yet been delivered).

Recommendations

Of all the computer installations mentioned above, it seems that only the CDB facility offers some prospects of use by BLISS. The potential programing support seems to be minimal and, without assurance of adequate and continuous support, it is strongly suggested that permanent operational activity not be installed, even if ISIS is successfully transferred.

CDB should, however, be approached for three services: first, facilities to familiarize BLISS personnel with computerized activities in general and ISIS-based operations in particular; second, preparation of databases and their printed outputs, production of indexes, etc.; and, third, demonstration and familiarization with various machine-based systems such as SDI, library records, etc.

In the long run, the use of mainframe machines for an information system of limited size seems ineffective. An early investigation into a microprocessor- or minicomputer-based system that is also compatible with regional cooperative activities is strongly recommended.

HIGH-TECHNOLOGY EQUIPMENT ACQUISITION AND MAINTENANCE

Wherever equipment of some complexity was installed, problems of maintenance were reported. For example, an IBM Selectric typewriter in the Public Library worked for a few months but has been out of commission for 5 years. Kodac microfilming equipment in the Archives was not working for months at a time until faults were traced and repairs made. No guarantee for future smooth operation exists. Microfiche/film reader-printers of various manufacturers and vintages were found in several organizations, none of which has any contract or guarantee for maintenance or repair.

Recommendations

Because modern handling requires sophisticated equipment, several recommendations are necessary.

Any equipment offers must be accompanied by firm undertakings for long-term maintenance. Such undertakings should be supported by proof of trained technicians and secure supplies of spare parts. If possible, it is advisable to require long-term guarantees to ensure adherence to contract. BLISS should not install any equipment whose maintenance has not been assured.

Government might consider centralized purchasing or leasing, or both,
principally to secure adequate maintenance contracts. I do not know the situation in other Caribbean countries, but a joint regional approach to this problem seems reasonable. Alternatively, it may be useful to consider equipment operation by mobile units that are based in countries where adequate maintenance facilities exist. This is especially worth consideration for operations that can be done in batch, such as microfilming of documents, etc.

The allocation or funding of equipment by international organizations should preferably contain conditions for a satisfactory solution of continuous maintenance.

The operation of high-technology equipment requires special expertise, training of personnel, knowledge of material acquisition and storage, and special electrical, building, and air-conditioning provisions. Although it is convenient to maintain small operational units as part of each operation, it seems that size, workloads, methods of supervision, and technical expertise make this a wasteful and impracticable method of operation. Centralization of effort should be investigated and, if feasible, properly organized, preferably with the help of a knowledgeable expert. This would apply to microfilming, binding, and printing, and to equipment and building maintenance, and, eventually, also to many data-processing tasks.
SPECIFIC FACILITIES

The previous sections of this report deal mainly with topics applicable to BLISS as a whole. During my visits to the various facilities of which the national system is composed, some comments and suggestions were made that would contribute to improved performance and efficiency. Based on these comments, I have noted some principles relating to very basic and specific activities.

THE NATIONAL ARCHIVES

The casual and nonexpert observer who visits the National Archives is impressed by the beauty of the location and the architecture of the buildings. A closer look, however, conveys the impression that the physical conditions for materials storage is totally inadequate. The buildings are old, with wooden floors and ceilings and badly fitting windows. There is almost total disregard for fire and insect hazards, and for the ravages of weather and humidity. It seems hardly conceivable that air conditioning can alleviate the situation substantially. If Barbados wishes to conserve its national heritage, immediate attention to the storage problem is necessary.

The collection of the Archives has been made in a very casual manner. The archivist described it as a "garbage collection," i.e., whoever had something to throw away and was not quite sure how to dispose of it, called in the Archives. Sometimes the archivist learned of material due for disposal and saved it just in time. At present, no new material can be absorbed by the Archives due to lack of personnel and of space. The latter is largely due to very uneconomical stacking methods: methods that are perhaps appropriate in an open-stack library but certainly not in archives.

The organization of the material seems rather haphazard. Very rare, one-of-a-kind, books are stored together with more common documents, handwritten manuscripts of the 17th century are stored with newspapers dated 400 years later. All stacks are of wood and, in spite of regular fumigation, heavy termite damage was observed. Material of historical value is stored not only in the Archives, but also in the Public Library (without adequate safeguards) and elsewhere (for example, in some churches). There are no rules and procedures in government or elsewhere for the organization of records or for eventual transfer to the Archives; nor is such transfer actually effected.

Recommendations

The Archives should be designated as the place where documents relating to the national heritage of the country are collected, safeguarded, and made available for research and consultation. To that effect, adequate legal steps should be taken and administrative rules of procedure be passed. The required legal and administrative background can probably be developed from the laws and rules that have been promulgated in other nations. A policy on this should be established as soon as possible and should be enforced by
relevant laws and regulations and policing powers. It is recommended that
the Archives should be responsible for the preservation of the national
historical records and long-term personal, property, and financial records.
The Archives should have a voice in the management systems for public records
to facilitate the eventual transfer of documents into their safekeeping.

Steps must be taken immediately to provide for adequate, safe storage of
documents. Whether the existing buildings can be properly adapted or new
premises have to be sought is not within my field of expertise, but that
something must be done as soon as possible is obvious to the most untrained
observer. Because an adequate building is likely to be expensive, the
introduction of "Compactus" stacking to save storage space and thorough
repairs to existing buildings are recommended.

Laws should also be enacted concerning the preservation of rare books
and maps, and similar material, and their transfer from existing collections
-especially in the public sector) to a central place of safekeeping. The
actual implementation of such laws presupposes, of course, that the Archives
are properly equipped to deal with additional material.

For the Archives to fulfill their historical and administrative role,
material kept by the former colonial power should be made available, at least
in microform.

To enable the staff of the Archives to deal successfully with its
principal tasks, the maintenance of a library, library staff, and library
budgets should be discontinued, at least temporarily. The Archives should
serve scholars and other users with the collections for which it was set up
and any other documents required by the public to facilitate historic and
other research should be available elsewhere. If the Archives' staff needs
additional venues of interest and promotion, this should, and could, be
brought about by different means. Library holdings should be transferred to
UWI or the Public Library, or both.

Although the Archives are heavy users of microfilming and need special
skills for document preservation, it seems doubtful whether they can, and
should, devote considerable attention and resources to basically technical
tasks and whether they can maintain these activities efficiently. A
centralized unit, which cares properly also to the Archives' requirements,
has many merits.

The Archives must invest a considerable effort into the microfilming of
documents that are in immediate danger of disintegration, or of documents
that are one-of-a-kind. To cope with the considerable backlog of work, the
possibility of contracting this to a commercial firm, perhaps even to a
foreign organization, should be investigated.

Personnel advancement, motivation, training, and mobility present
difficult problems in this small environment. If the foregoing
recommendations are accepted, even in part, their implementation should
present a considerable challenge to personnel over the next few years and
this should be properly recompensed. In the long run, an adequate Archives establishment should be attractive to scholars of history and other fields who will find in it a scientific satisfaction, and archivists and technical staff could find some upward advancement and mobility in the information structure that is to be established.

THE BARBADOS PUBLIC LIBRARY (BPL)

The Public Library holds place of pride on the Barbadian library scene regarding size, number of users served, number of personnel employed, range of services offered, and distribution of services throughout the Island. The Public Library is a "Free Library" (as the inscription over its portal proclaims) and, through its main facility, several branches, and bookmobiles, it permits access for all inhabitants of the country to books of many types (fiction and reference, adult's and children's) and to newspapers and serials. In some respects, the BPL fills functions that, in many other countries, would be assigned to a national library or to some specialized mission-oriented libraries.

BPL is, therefore, one of the principal cornerstones of BLISS and should be developed accordingly. Regretfully, a rather conservative management system, little support for innovation and rejuvenation, an inflexible personnel structure, and low acquisition budgets have held professional growth back. The recommendations are designed to enable BPL to develop and regain the status and fill the role for which it was designed.

Recommendations

A clear cut policy by which BPL activities are governed must be established. This policy should spell out the BPL's role in:
- the provision of access to books and serials for members of the general public whatever their economic circumstances and their educational level;
- the provision of reference services, either for information required directly or for information-on-information; and
- to step in and fill any gaps that other BLISS nodes may leave open.

The BPL's role as a supplier of books to educational facilities should be reexamined. The latter should be augmented by BPL services but no more.

The use of resources must be improved to gain budgets for additional acquisitions and other activities. For this purpose, the following suggestions may be of interest.

- Improvement of security will reduce pilferage by staff and public alike. According to some estimates, more than a third of the stock, especially new acquisitions, are lost. It is also questionable whether the present open-stack policy should be retained.
- A refundable cash deposit scheme in which a deposit is required for each loan, should be instituted. Losses in 1980 for loans that were not returned exceeded B$65,000, i.e., 30% of the annual acquisition budget.
- A move to softcover purchases, especially in the adult and reference
section, wherever possible would reduce costs.

The cost-benefits of various operations must be examined closely and appropriate changes instituted. Some suggestions are:

. All processing operations should be organized in an assembly-line fashion, thus saving space and personnel. Typing should be done by all employees for themselves; breaking the workflow repeatedly for typing should be discontinued.
. Universal jacketing of all books in plastic covers seems wasteful: books should be jacketed only when they are checked out.
. Acquisitions, cataloguing, and binding should be handled by a separate unit, preferably under the directorate of BLISS.

Collection policy must be changed to introduce a dynamic approach to activities. The following specific points are worth mentioning:

. The Archives or another appropriate institution should receive all historic or rare books and documents that are irreplaceable. The BPL has no provisions for the safekeeping of such materials.
. A weeding policy should be established so that material that is no longer required or that is irreplaceably damaged can be removed from the shelves and either transferred to other facilities or destroyed.
. A properly policed serials-reading room with an adequate selection should be established. Barbadian material, including government publications, surveys, reports, etc., must be fully represented and the room should also contain a good selection of the West Indian and other publications of general interest.
. Holdings of branch libraries (and headquarters) should be checked as to the relevance of the material to local needs. For example, if new industries are established in a neighbourhood, the advice and material help of industry managers should be sought in the acquisition of relevant literature.
. Acquisitions in general should be decided on by consultation with appropriate experts and users' representatives and not only by the administrative decision of the librarian.
. Material in branch libraries should be shifted at intervals to recompense for their limited holdings.
. Opening hours should be maintained up to the early evening.

The reference section must be developed to a level at which it can fill the central role envisaged for it in the BLISS organization. Suggestions are:

. Reference should be able to direct users within BLISS and also to sources abroad relevant to their needs.
. Reference should be properly equipped with encyclopedias, dictionaries, guidebooks, yearbooks, catalogues, etc. and have priority on the BPL budget for its needs.
. Reference should assist users in locating information but should not do extensive bibliographical research for them. If such research is required, it should be paid for by users.
. Reference should accept prepaid orders for nonconventional material from noninstitutional users and route them properly.
Reference should maintain a coin-operated photocopying machine for public use.

Reference should develop a capability to respond to a large variety of users' requests in various socioeconomic and technological fields, either directly or by referring the user to an adequate supplier. For that reason, reference must maintain flexibility in staffing and acquisitions.

The existing accommodation of the BPL can probably be better used and may be sufficient until money can be found for new construction. Suggested improvements are:

- The public sections of BPL should be rearranged so that the principal sections of lending, serials, and reference are placed in the three wings of the entrance hall.
- Galleries should be built in the high rooms; at present 2-2.5 m are wasted. The architects estimate that room capacity can be increased by 40-60%, at about 30% of the cost of new building.
- Much of the collection could be stored in closed stacks that would need much less room than the present form.
- The problems of fire hazard and insect damage must be faced; either of them could destroy the library or its branches.
- Staff training and staff motivation must be introduced (see relevant section on personal development and training).

SCHOOL LIBRARIES (MINISTRY OF EDUCATION)

Several exhaustive reports have been produced on the topic of school libraries within the last few years (see especially items 11 and 15 in appendix B). These reports were written by experts in the field of school libraries and it seems inappropriate for a nonexpert to comment on the specific recommendations made in these reports or even to reiterate their findings.

Generally, I found that the conclusions reached in the reports coincide closely with my personal observations. My recommendations have been formulated principally in relation to the proposed BLISS structure and also touch on topics that reflect government policy.

Recommendations

The responsibility for school libraries should be unambiguously assigned. The present situation, where the BPL has assumed some tasks and the Ministry of Education others, should be resolved immediately. School libraries in this context refers to nonacademic educational establishments at all levels. Responsibility implies policy, operation, and funding; preferably, the responsibility should be transferred to the Ministry of Education.

The suggestion by Jenerette (see item 11 in appendix B) that a senior school-library supervisor be appointed in the Ministry of Education is fully supported. The development and supervision of the activity should be the responsibility of the supervisor who would represent the activity in BLISS,
including NACOLADS.

The budgetary process must be examined. The situation in which each principal gets a book allowance, according to his or her powers of persuasion, is unhealthy. Preferably, allocations should be made on a per-student basis. The allocation of library space, furniture, and personnel should also be standardized according to some objective factors.

Book-selection processes must be improved. Acquisitions should reflect the curriculum and special goals. Educators should participate in the process. Some services should also operate during vacation periods, always considering that real literacy, and its importance for national development, requires a continuous effort.

The need for personnel development and training has been emphasized in the section on that topic: it applies fully in this particular field.

At present, the bookmobiles of the BPL serve principally the educational establishment. Once the tasks of the BPL and the Ministry of Education have been redefined, this practice should be examined. Ideally, some bookmobiles should serve the educational establishment for schools unable to maintain permanent libraries and others the BPL in its task of serving the reading needs of the population at large. Until the means can be found to bring about this separation, it seems that more efficient utilization of existing equipment could alleviate some shortcomings.

School libraries should not be involved in the textbook scheme. The present practice should be discontinued.

AGRICULTURE

An agricultural library and information system seems to be nonexistent. Its only trace is an accumulation of books and periodicals in the former location of the Ministry of Agriculture, which was vacated by all operational departments some time ago. The place is now in charge of an assistant librarian who does not know its contents, the way it is organized, the budget, etc. and whose principal clientele is schoolchildren who wander in during intermissions to leaf through some books.

The situation at the new location of the Ministry, where its principal laboratories are, is not much better. No library exists there at all and it seems that none will be established unless a new building is erected. Such a building has been applied for but has not yet been authorized. Even if the money for this building is granted, which is uncertain, it will take several years to get a new library operating. The 40-odd researchers at the location are meanwhile obtaining some books and periodicals, each in their own speciality and each in a very individual fashion. There is no bibliographical control whatsoever. Agricultural information services in the modern sense do not exist; if they would be offered, it seems doubtful whether they could be used, as researchers seem unaware of a need for them and the use to which they are put. The budgetary information received is
rather vague but it seems that the library budget of the Ministry of Agriculture amounts to less than 0.3% of its research and development (R&D) expenditures; compared with at least 3-5% in similar facilities elsewhere.

Recommendations

Without going into much detail, the following principal recommendations are made.

The library in Bridgetown must be closed immediately and its contents safeguarded, as best possible, until the collection can be revived and brought into use. All acquisitions there should be stopped until reviewed.

A senior professional staff member of the Ministry must be appointed to determine the information needs of R&D personnel, management, and extension workers, so that some guidance can be provided to an incoming information worker. This staff member should, at least temporarily, carry the ministerial responsibility for this activity.

A professional librarian must be transferred to the Ministry, at least on a temporary basis, to bring material in the new location under some bibliographic control. If orderly cataloguing, etc. cannot be established, at least some basic lists should be prepared that would allow for professional and financial decisions and control.

As soon as possible, the library must be rebuilt. The person in charge should preferably be someone who has a first degree in agronomy or a related science and, if lacking library training, she or he should receive this through special courses and by assistance from a professional librarian. The coordinator of government libraries in BLISS should decide on additional staff positions needed.

A suitable room and furniture must be found in the new location of the Ministry to house the present collection, or at least its operational part (serials, handbooks, reports, etc.). Because building of a new library is still doubtful and will in any case take some time, an existing room should be requisitioned for this purpose. A room of about 25 m² would serve to start activities.

According to various figures received, it seems that the Ministry spends at least B$6.5 million/year on R&D. To make this expenditure meaningful and effective, a library and information section must be adequately operated and funded. To build the library activity to an acceptable standard, at least B$100,000 (including salaries) should be budgeted initially by the Ministry.

To justify the expense, the person in charge of the activity must cultivate close relations with the potential users and appraise them constantly on the services offered. Much working time should be spend on these tasks and on the provision of services that are requested in consequence. Professional guidance on how best to perform in such a capacity can probably be obtained from one of the larger agricultural research
establishments in the USA or elsewhere and, if possible, some in-service training abroad should be sought.

BLISS should provide all the assistance needed to build this activity up to an acceptable professional standard. This should be done in close cooperation with the Ministry.

HEALTH SERVICES

Two libraries in this discipline were examined: one at the Ministry of Health and one at the Queen Elizabeth Hospital. Although these libraries are close together and serve, potentially, the same clientele, their activities are not coordinated and complimentary. The impression was reached that the library at the Ministry exists largely in a professional vacuum and its holdings are barely used. Although it is a rather small facility, it still disposes of some budgets and is cared for by a full-time professional librarian. The library at the Hospital has more staff and more extensive holdings and supplies an active, if small, user population of medical personnel and students.

Holdings in both libraries seem to be very limited in scope and basic stock. Considering the geographic isolation of Barbados and the extended time needed to receive documentary material, it appears that a much larger basic stock is required to give adequate service and to cope with emergencies. To a nonmedical observer such as myself, it also appears that future library development should give increased attention to the principal areas that the library will have to service, e.g., clinical medicine, preventive medicine and public health, nursing, preclinical studies, pharmacology and toxicology, etc.

Also, little material was found for such topics as hospital management, equipment, administration, etc. No information could be traced regarding modern methods of patient-records management and related fields. True, there have been no requests by users in all of these fields, but once users' interest can be generated, as it should be, the absence of related documents will become very noticeable.

Recommendations

My recommendations are of a general nature only and should be checked and adjusted by experts.

The library of the Ministry of Health library should be closed and amalgamated with that at the Queen Elizabeth Hospital.

The resulting library should be directed by, or at least engage in a senior position, a person who is knowledgeable in medicine or one of its allied fields such as biology or biochemistry. The director of the library and possibly all professional staff should acquire, as a priority task, that knowledge specific to medical libraries.
A much closer user-library relationship than exists now should be developed immediately. The library should evolve from a registry and depository of documents, which it is at present, into an essential tool for the medical and paramedical professions. As the Queen Elizabeth Hospital library is likely to be the only medical library on the Island, its services should be available to all qualified users including nonstaff members and it should be housed and administered in a form that enables it to cope with this task.

Building of stock, current acquisitions, range of services provided, etc. should be decided on through close cooperation with the profession served. It seems advisable to recommend that this cooperation should be institutionalized (for instance, through the appointment of appropriate committees) and not be left solely to personal initiatives. (This comment is equally applicable to all mission-oriented activities.)
CONCLUSIONS

This summary contains the principal points made in the report and the main recommendations resulting from them. Thus, it forms a discussion paper on which the government can base a decision concerning the organization of the national library and information services system in Barbados.

National goals

No official document has yet described the goals for a library and information services system. For the purpose of this report, they are defined as follows:

• to safeguard the documents that record the national heritage (archives);
• to provide adequate sources of knowledge about the West Indies in general and Barbados in particular;
• to provide access to reading material for the public at large; and
• to prepare a sound resource for problem solving and gaining of knowledge in science, technology, business, and other mission-oriented activities.

Present resources

About 40 libraries are active in Barbados. They employ about 150 persons of whom about 40 have professional qualifications (mostly at a graduate level). Other staff members are largely untrained. Total expenditure amounts to about B$3.5 million annually, half from government, the rest from public and private organizations. Of the total expenditure, about 80% is spent on salaries and incidentals, and less than 20% on acquisition of material. A move of this ratio towards 65:35 or even 55:45 should be an immediate goal. No information services in the modern sense have been identified: all existing facilities operate as traditional libraries.

Information policy

Based on an analysis of the national goals and of the existing situation, a policy was formulated that, as a first priority, would restructure ongoing activities within about 2 years. During this restructuring, the cost-effectiveness and benefits of existing facilities are to be optimized and the basis for a modern library and information services network created. The progress achieved during this reorganization phase and the improved users-facility relationship that should result should provide clear trends for future development. Areas in which critical decisions must be made immediately are organization, personnel, and resources.

Principal recommendations

Recommendations made in this report are mainly those of policy or involving significant structural changes. Detailed directives for activities
are generally not spelled out: they should be formulated by those who implement this, or any other, plan.

Organization: The principal recommendations concern the establishment of the Barbados Library and Information Services System (BLISS), a network that would draw together and coordinate activities. Within the network, and especially its government sector, significant changes in tasks and procedures are suggested, necessitating also some reallocation of staff and resources. The network would be directed by a small directorate that is to be established. Some activities, especially of a technical and economic nature, are to be centralized for the network as a whole.

Personnel: The recommendations concern a significant effort in training (and teaching) to upgrade staff and to open channels for professional advancement and some job mobility. The latter is needed to comply with reorganization plans and the shift to mission-oriented information services. A change in civil service conditions that govern employment in this field has been discussed and agreed to. The need to enlarge the job scope by employing subject-trained specialists and technicians has been emphasized.

Resources: The recommendations deal mainly with the restructuring of expenditure to establish a sound division between expenses for salaries, etc., and the acquisition of materials. The reorganization of existing activities requires considerable financial means and a special fund, amounting to B$1 million, should be established for this purpose. Such a fund will require government spending in this field to increase by about 30% over the next 2 years and will bring government expense for libraries and information services up to a level that is more acceptable than the present one, but still considerably lower than in other countries.

Other activities: Recommendations are made on such topics as archives, libraries in schools and various government offices, the need for database creation, regional cooperation, and to develop information services for the development needs of Barbados.

The future

Once the reorganization and restructuring of activities has been completed, or at least is well under way, Barbaros should be able to develop the socioeconomic and technological information services without which a modern nation cannot function effectively. Throughout the report, the faith is expressed that Barbados has the professional personnel, resources, and administrative capability to complete the task.
APPENDICES

A: PERSONS CONSULTED AND INTERVIEWED

N. Barrow, Minister of Information; M. Bailey, Librarian, Ministry of Agriculture; M. Best, Librarian, Ministry of Foreign Affairs; K. Blackett, Ministry of Health; D. Brathwaite, Ministry of Agriculture; B. Carrillo, Barbados Public Library (BPL); M. Chandler; L.A. Chase, BIMAP (Barbados Institute for Management and Productivity); G. Clément, Unesco Consultant to Technology Energy Unit, Caribbean Development Bank (TEU/CDB); J. Dellamore, TEU/CDB; W. Depeiza, Erdiston Teachers Training College; C. Depradin, Director, Caribbean Meteorological Institute; I. Douglas, TEU/CDB; W. Estrick, Chief Establishment Officer; H. Gibbs, Librarian, Barbados Development Bank; M. Gill, Campus Librarian, University of the West Indies (UWI); K. Griffith, Permanent Secretary, Ministry of Finance; P.E. Griffith, Barbados Export Promotion Corporation; J. Harvey-Ellis, Ministry of Education; K. Haynes, Ministry of Education; E. Ifill, BPL; C. Ince, Chief Information Officer; K. Ingram, Director, Libraries, UWI; K. Iniss, Ministry of Education; L. Jackson, Barbados Community College; D. Jefferts, Ministry of Agriculture; R. Leslie, Manager, Barbados Development Bank; K. Lewis, Cable and Wireless Ltd., Barbados; W. Marshall, Professor, Department of History, UWI; G. Medford, Ministry of Education; A. Musgrave, Barbados Publishers and Booksellers; W. Primus, Trinidad; R. Reckord, Librarian, Ministry of Health; C. Rocheford, Archivist, National Archives; M. Rynd, Director, Standards Institute; N. St. John, Librarian, CDB; M. Sealey, Librarian, Queen Elizabeth Hospital; M. Simmons, Librarian, Barbados Community College; G. Smith, National Science Council; W. Smith, Architect, BPL; C. Storey, Librarian, Harrison College; E. Straughn, Barbados Statistical Service; Ch. Thompson, Permanent Secretary, Ministry of Information; W. Trotman, Principal, Ellerslie Secondary School; S. Welch, Ministry of Foreign Affairs; C. Willabus, Programmer, TEU/CDB; M. Williams, Librarian, Central Bank of Barbados (President, Library Association); P.A. Williams, Director, Barbados Export Promotion Corporation; and D. Worrel, Central Bank of Barbados.

B: BACKGROUND MATERIAL CONSULTED


g. Williams, M.I. (Chairperson). 1980. Libraries of the University of the West Indies.


C: ABBREVIATIONS AND ACRONYMS

AGRINTER: Sistema Interamericano de Informacion para las Ciencias Agricolas, San José, Costa Rica.

BIMAP: Barbados Institute for Management and Productivity.

BLAIN: Barbados Library, Archive and Information Centre Network.

BLISS: Barbados Library and Information Services System.

BPL: Barbados Public Library.

CARICOM: Caribbean Community, Georgetown, Guyana.

CARISPLAN: Caribbean Socio-Economic Planning Information System, Port-of-Spain, Trinidad

CDB: Caribbean Development Bank, Bridgetown, Barbados.

COSTI: National Center of Scientific and Technological Information, Israel.

CRT: Cathode ray tube.


IDRC: International Development Research Centre, Ottawa, Canada.

IOB: Inter-Organization Board for Information Systems and Related Activities, Geneva, Switzerland.

ISIS: Integrated Set of Information Systems.


NTIS: National Technical Information Service, Springfield, VA, USA.

OCLC: Ohio Colleges Library Center, Columbus, OH, USA.
R&D: Research and Development.

SDI: Selective Dissemination of Information.

TEU/CDB: Technology Energy Unit of the Caribbean Development Bank, Bridgetown, Barbados.


UNISIST: Intergovernmental Programme for Co-operation in the Field of Scientific and Technological Information (Unesco).

UWI: University of the West Indies.