CHAPTER EIGHT

Library Resource Sharing with special reference to developing countries

Cephas Odini

8.1 INTRODUCTION

Rydings (1977) defines library resource sharing as the process by which the resources of a group or network of libraries are made available to the sum total of the persons entitled to use any one of those libraries.

Resource sharing is a wide phrase embracing library co-operation, library systems and networking. It is an omnibus expression covering co-operation, co-ordination, interlibrary loans, co-operative acquisition, co-operative storage and processing.

Resource sharing may appear to be nothing more than a new term for the familiar concept of library co-operation. True, many of the same activities are included, but there is a significant difference in the approach. The earlier term takes the existence of libraries for granted and describes how they can achieve their objectives better by working together. The new term appears rather to assume a range of physical, intellectual and conceptual resources on the one hand and a body of people with library and information needs on the other, and covers the activities involved in organising the one into a set of optimum relationships to meet the needs of the other.

Resource sharing may be seen as a term for working out inter-institutional relationships for the benefit of users in a profession which is frequently described as changing from materials-oriented to a client-oriented.

The basic function of the library is to match the information needs of users with information contents of documents. The proper performance of this function requires the services of library staff and the provision of library facilities in the form of accommodation and equipment. These in turn need the support of an infrastructure comprising administrative authority – sometimes in the form of legislation – an organisational structure and adequate finance. All these elements – finance, organisation authority, accommodation and equipment, manpower and collections of documents – may be regarded as library resources and thus has the legitimate subjects of resource sharing programmes.

Information is essential for national development but the exponential growth of information in recent years has surpassed the ability of individuals and institutions to cope with it. How to tap this wealth of information in a systematic way so that it can be applied to increase knowledge, guide research and formulate policy has become one of the most pressing problems of the 1980’s.

For centuries, librarians have pursued the unattainable goal of gathering, in a single library, all the resources necessary for information and research in their country or institution. Once a fond hope, this has become an impossible dream. If libraries are to continue to meet the demands of their users, increased co-operation and resource-sharing are vital.
The need to share resources in order to cope with the increased flow of information is true in all countries, but is most acute in developing countries where resources are limited. Among the many priorities, information services seldom rate very highly. This means that library budgets are correspondingly low.

The rapid escalation in the price of materials, particularly periodicals, also means that already meagre library budgets lose purchasing power from year to year. In addition, foreign exchange regulations in many countries make the purchase of foreign materials very difficult. The physical collection of documents is hindered by lack of an efficient book trade, and by gaps and delays in reporting new publications in national bibliographies, where these exist.

Lack of facilities for rapid communication among national libraries and documentation centres, inefficient equipment for producing photocopies and microforms, poor telephone and postal services, and restrictive customs regulations also hamper access and exchange of information.

Given these problems, resource-sharing, although not a panacea, offers attractive benefits. In fact resource-sharing has been described as “the life-style of the future for libraries”. In the developing countries where resources—human, material and financial— are most scarce, its perfection is a necessity.

8.2 NATIONAL PLANNING FOR RESOURCE-SHARING IN DEVELOPING COUNTRIES

In many developing countries, it is necessary to co-operate in improving existing library resources either in quality or quantity, or both, before attempting to co-operate in using them. It is important to establish that the development of programmes for the shared use of library resources is not seen as an end in itself, but as a means to an end—that end being some kind of improvement in the ability of participating libraries to meet the needs of users. Resource-sharing thus provides a strategy for attaining a particular functional objective and should not be regarded as a primary objective itself.

Resource-sharing cannot be possible when resources are so limited as to be only adequate for immediate use of local clients. In the library, archive and information fields, this is particularly so, since documentary information is not a matter of priority in most developing countries. What is needed is:

1. Forward planning to develop favourable conditions for resource-sharing.

2. The development of professional ethics which will provide an influential pressure group which will establish an effective information network including library, information and archive services and the appropriate educational and training agencies.

According to Parker (1977) in most developing countries as well as in many developed countries, the lack of data on the present library situation is one of the main obstacles to effective planning; whether of library development in general, or of resource-sharing programmes in particular. Many countries do not know how many libraries they have, or where they are, how many library workers are employed in them, at what levels; what their collections contain, or what use is made of them; how many library users or potential users exist and what their needs are and so forth. Such data can only be collected with the willing co-operation of librarians in all kinds of libraries and in all parts of the country. Resource-sharing, at least of manpower, is thus not merely a desirable, but an essential element in the data collection process on which successful planning depends.
UNESCO lays great emphasis on the establishment of representative national bodies of appropriate status with the following functions:

1. To survey information needs and provision.
2. To identify the information input required to support the various sectors of national development plans.
3. To advise on the administrative arrangements, organisational structures, skilled manpower and technology required for providing the necessary services.
4. To link the main user communities and the information providers (including librarians and archivists) with the government agencies having overall responsibility for national development.

Developing countries which set up national bodies of the type described will be in a good position to identify the needs for basic local and institutional services, for supplementary centralised services and for other resource-sharing arrangements.

These bodies will, of course, require their own input of data on which to base their decisions and their own channels for receiving specialist advice. As they will normally report to a central organ of government, they will have the official status which will give them access to government development plans and to the broad range of data on which these plans were based.

When the national planning and co-ordinating body takes up its responsibilities in a developing country, it is likely that some limited progress in resource-sharing will have been made in response to initiatives by members of the information professions or by their professional associations. Such developments, although perhaps of an informal nature, can often be valuable in testing possible strategies and in helping to establish a climate conducive to institutional cooperation.

One of the biggest gaps in a country's publishing programme is often in publications needed to support community development programmes, since different agencies and departments usually issue pamphlets and other publications in an uncoordinated fashion, resulting in gaps and overlaps. The national library and information service planning body will be in a good position to identify the need for such publications and to co-ordinate programmes for their production and dissemination.

Such a rationalized publication programme should help to relieve undue pressure on libraries participating in resource-sharing schemes by making widely available publications which contain essential information.

In addition, a national planning body will have an important role in the area of user education for all user groups from school children and community groups to decision-makers and researchers and can draw on UNESCO's expertise on this. Furthermore, as scientific and technical information services develop, there will be a particular need to see that standards and norms adopted in services which involve the use of computers and telecommunications are such as will enable the country to benefit from and contribute to the main regional and international services.

The national planning body should also be charged with the responsibility of ensuring that arrangements are made for supplying and maintaining an adequate cadre of skilled manpower.
8.3 ADMINISTRATIVE IMPLICATIONS

The success of any resource-sharing venture depends not only on having appropriate goals and objectives, but also on creating and operating a service within the right legal, administrative and fiscal framework. Indeed, regard must also be paid to the political background in the case of any resource-sharing scheme which includes a number of countries in a region.

Even within a single country resource-sharing has political implications, since information is a national asset and a library or information network is a public utility.

In countries with a federal type of government, additional political and legal considerations arise, since because of its very nature library resource sharing cannot be confined to any one state or province. The means of establishing appropriate levels of government control or involvement in a country with a federal government may include the use of state agencies for distributing federal funds and a federal interstate compact for schemes involving more than one state. Whatever the constitution of a country, statutory bodies such as a national council or commission, or parastatal institutions such as a national libraries board or a national library may have a key role to play as instruments for implementing government policy, particularly in developing countries.

Specific legal considerations may include: the law relating to the free flow of information, legal deposit, access to government documents, patent information, the checking and safeguarding of data in machine readable form, the translation and reproduction of books published abroad, and the control and use of telecommunication networks, if they exist.

One legal matter which is of special significance for resource sharing relates to copyright. The concept of “fair dealing” in making copies of articles in periodicals or extracts from monographs has proved adequate for several decades, holding in balance the interests of authors and publishers on the one hand and on the other, users of information and libraries acting on their behalf. In recent years, with the advent of rapid copying machines and the great increase in the supply or making of photocopies especially in the developed countries, the situation has been studied afresh in several countries.

In some countries legislation may be needed to take personal responsibility from the librarian if books lent either to individuals or to institutions are lost. Such enactment need replacing by administrative measures designed to ensure a proper control of library materials, control which is consistent with the provision of reasonable access to them.

8.4 BENEFITS FROM RESOURCE-SHARING

The benefits to be obtained from resource-sharing devised on the most appropriate basis may be grouped into four categories:

1. Avoiding of Unnecessary Duplication

Unnecessary duplication of expensive resources can be avoided and thus prevent calls for additional finance for this purpose. So, given the current pressures on funds in most countries, well-structured resource-sharing arrangements can demonstrate to governments and other funding bodies, the responsible and effective operation of library and information services. From this position it should be possible to obtain a more ready response to claims for additional resources to meet those needs which cannot be met by maximising the use of available resources.
2. **Possibility of Access to a Wider Range of Materials, Collections and Services**

Users of existing services will have access to a wider range of materials, collections and services. This not only helps individuals to achieve their objectives, but it also produces socially desirable conditions by reducing areas of information deprivation and contributing towards a more equitable social environment.

3. **Relating Staff Education to the Efficiency and Effectiveness of Services in Participating Libraries**

Joint staff education programmes are necessary, first to create the right environment for the effective operation of resource-sharing schemes by giving information on the objectives and the strengths and difficulties of other participating institutions. For this purpose visits and the mixing together of staff of all levels at informal functions have an important role to play.

4. **The Satisfying of National and Community Objectives**

Few countries, if any, can avoid the pressure of the contemporary situation in which access to relevant information is essential to achieve national objectives, while at the same time the output of relevant specialist information is increasing rapidly. A national strategy for providing the necessary library and information services becomes inevitable to meet national objectives. In these circumstances a planned and organised commitment to resource sharing becomes essential for the healthy development of library and information services if they are to meet national needs effectively and economically.

8.5 **CONSTRAINTS ENCOUNTERED IN RESOURCE-SHARING**

1. Without adequate preparatory study and analysis, resource-sharing may not be initiated on the most appropriate basis or with clear objectives. Fundamental weaknesses in the structure of local and institutional services may therefore be temporarily concealed.

2. Without good planning, a continuing education programme for staff and a well conceived organisational structure, institutional and personal barriers may prevent effective resource-sharing from being carried out.

3. The operations of resource-sharing may not include adequate arrangements for monitoring services and for responding to the information feedback. This may lead to undue pressures on certain participating institutions and also to a lack of perceived benefits for members generally. Technical incompatibilities among participants may also emerge and it may be difficult to overcome them once an ill-planned scheme has been inaugurated.

4. There may have been lack of recognition that the inauguration and operation of resource-sharing arrangements usually costs money and that benefits may not be seen immediately, but only become apparent in the medium and long term.

5. There will frequently be some geographical locations, particularly in developing countries and in rural areas generally, where poor transport and communication facilities greatly inhibit the development of satisfactory resource-sharing schemes.

6. A lack of momentum and commitment may arise through changes in personnel and other external factors, leading to a lack of flexible response to change and the creation of new initiatives.
8.6 CO-OPERATIVE ACQUISITION

There are four standard methods of acquiring library materials: by purchase, gift, exchange or legal deposit. The last may be considered as a particular form of gift, so there are basically three methods.

There are, however, three further categories which have less to do with the methods of acquisition but with the way in which co-operation takes place. These categories may be briefly described as:

1. The Farmington Plan
2. Centralised Purchase
3. Joint Purchase

1. The Farmington Plan

Though not the first, the Farmington Plan is probably the best known of modern programmes for co-operative acquisition, and has been succeeded by others such as P.L. 480, and the Scandia Plan, which are equally important. The original planning committee of the Farmington Plan was set up at a meeting in Farmington, U.S.A. in 1943, but the scheme did not become operative until 1948. For the first three years of its existence the Plan allocated collection of materials to participating libraries on a subject basis. At a later stage the allocation was according to geographical areas.

2. Centralised Purchase

According to the Centralised Purchase method of co-operative acquisition, either one library in a co-operative group, or an outside purchasing agency, places the book orders for all libraries in the group. Among the advantages that may arise from the procedure are:

- The need for only one set of the less frequently used bibliographical tools and booktrade publications.
- The possibility of larger discounts when several copies of the same book are bought together.
- The buying agency can notify intending purchasers of duplication of orders, preventing unnecessary duplication.

Even where no formal consortium exists, but where one library in a city or area has a more extensive collection of bibliographies and book selection aids than others, library staff from the smaller libraries can be given ready access to these materials, to assist in their ordering and cataloguing processes.

3. Joint Purchase

Joint Purchase method of co-operative acquisition varies from centralised purchases in that two or more libraries combine to share the cost of a very expensive item, and the users of each library have access to it but it must of course be located in one place only, usually selected to be close to related materials.
Problems of Co-operative Acquisition

There is bound to be conflict between the responsibilities of a library to its own users and those which it undertakes as a member of a consortium. Financial commitments do not end with the payment for acquisitions obtained as part of a co-operative effort. The materials thus purchased are intended for use in other libraries, so the initial cost must be added to costs arising from interlibrary loans and/or photocopying.

Apart from economic difficulties, a library which belongs to a consortium may face another conflict between the needs of its own users and the other members of the consortium. Also, since subject specialised acquisition schemes are usually built upon the special strengths of existing collections, which in turn are based on the particular research or teaching interests of the parent institution, the library which is most likely to possess specialist material is also the one least likely to be able to lend it. To some extent this difficulty can be overcome by photocopying, the limiting factor here being copyright.

One other problem has to do with the varied sizes of libraries. Co-operative programmes succeed only as long as each participant perceives them as beneficial to the institution. Large libraries may be reluctant to participate in co-operative programmes for fear that they will be called upon to contribute more from their larger resources than they can possibly hope to receive from others. However, experience does not support this view, since requests are not normally disproportionate to the relative size of collections.

Special Considerations in Developing Countries

In the development of any co-ordinated national scheme for acquisitions it will be important to give due weight to the considerable communications difficulty which exists in most developing countries. First, postal services tend to be organised in relation to box numbers associated with institutions rather than physical locations of individual addresses and this can present problems for the individual researcher or reader in remote rural places depending upon a distant central back-up service.

There will therefore be need to take into account the placing of collections and the extent to which the content is duplicated. The postal system in the majority of cases is slow and does not support the rapid availability of photocopies between acquisition centres.

Telecommunications too may be sporadic and unreliable bases for co-operative procedures. It may frequently be easier and more rapid to obtain inter-loan on an inter-continental rather than on an inter-regional or national basis.

Agency collection of local materials however, is an aspect of collaborative acquisition policies that may be fruitful. Successful examples of these have been achieved among Universities and this may reinforce the view that these are most likely to be effective if they are arranged between types of institutions with similar objectives and basis for funding.

Despite the criticisms of the effectiveness of the Standing Conference of African University Libraries (SCAUL) there has been successful collaboration in this area by the Eastern Area (SCAULEA) covering the systematic and regular exchange of national newspapers and the 8 national official publications. This was first agreed on between members at the meeting in Addis Ababa, Ethiopia, in 1971 and has continued effectively except where political developments have made this impracticable.
8.7 PROCESSING CENTRES

The Concise Oxford English Dictionary defines processing as:
“Course of action, proceeding, especially method of operation in manufacture, printing,
photography, natural or involuntary operation, series of changes.”

Processing is therefore concerned with, first, a course of action, second, a method of operation,
third, a series of changes.

Functions

The bibliographical functions traditionally associated with processing centres for monographs
are cataloguing and classification and these form the foundation for any bibliographical
activities, the operations of which are often dictated upon at the national level by the laws of legal
deposit.

Cataloguing will include decision-making processes connected with the selection of information
for main entries, forms of names to be used, subject headings, etc.

Emanating from the above two operations is the preparation of bibliographies, holding lists,
catalogues and card catalogue service or the dissemination to users of the entries in some other
format.

For periodicals processing, centres are concerned with certain elements of the cataloguing and
classification processes, the compilation of union lists in various forms to meet subject, title or
regional requirements.

They are also concerned with the registration of locations to facilitate inter-lending or co-
operative acquisition programmes, with translations and with the production of indexes or
abstracts to nationally or internationally acceptable standards.

Processing centres will also undertake certain “housekeeping” functions such as the addition of
ownership identification, the addition of classmarks, labelling and improving bindings and
plastic jacketing. The services described might be preceded by ordering, receiving, checking
and invoicing of the materials. They are likely to be followed by packaging and despatch.

In many developing countries, the annual book production figures and the current demands of
scientists and researchers do not justify the establishment of sophisticated and expensive
processing centres. Many librarians are still concerned with the establishment of basic stocks
within the newly founded universities and public library systems. Energy is devoted to
encouraging and inculcating the reading habit, and all are involved in the training of staff to
undertake the basic services. This situation, however, will change as educational programmes
and development plans gather momentum.

If the resources to be shared within a nation’s boundaries, whether bibliographical information
or direct scientific or technological information do not yet exist in adequate quantities, the
problems of bibliographical processing and information provision might most economically be
solved by looking into the co-operative resources of a larger entity particularly an entity which
that nation is a part of, for example, a region.

For instance, it could be argued that a country that produces less than say, 500 titles a year could
hardly be expected to sustain a national bibliography. Also, a country with a small number of
laboratories and research projects can hardly justify the expense of establishing the sort of
processing centres required for information transfer. They might well benefit from regional
resource sharing schemes where they exist.
However, if co-operation is to operate on a regional basis, then some central agency or informal organisation within which to co-operate is necessary. This could be a government ministry or a library association or a national library. If this form of foundation does not exist to act as a co-ordinator then co-operation is hampered.

The Advantages of Processing Centres

1. To free qualified librarians from cataloguing and classification and give them more time for public services.

2. To prevent duplication of effort and the waste of much needed manpower.

3. To increase the quality of work in technical services and facilitate standardisation.

4. To carry on original indigenous research necessary for the formation of a national technical service which can then interact internationally.

8.8 CO-OPERATIVE STORAGE

Where storage capacity is small as is the case in academic libraries of many developed countries, one remedy may be a shared store on a cheap site. These stores may be regarded as warehouses in which shelving space may be rented. As well as relieving pressure on library shelves, such first-line relegation allows the use of the material to be monitored over, say, a period of five years before it is sold or offered to a national store. Alternatively, the less-used material relegated to the store may pass to joint ownership so that unwanted duplicates can be shelved more readily by size. This process, although saving storage space, and adding to overall resources, involves staffing costs. Such costs are increased considerably if the jointly owned material is listed for the best of members, unless participating libraries all have machine-readable records of holdings. However, without such listings, the material is likely to be seldom used, and rare and potentially useful items are effectively lost.

When deposited material passes into joint ownership it is sometimes found desirable to establish a fund to fill in back runs and take out continuing subscriptions for little-used serial publications on behalf of member libraries. In countries lacking any comprehensive national lending library, such a programme can prove attractive.

One could say that the main impetus for co-operative storage is when library materials available exceed space in individual libraries. However, in East Africa this is not the case. Many of the larger libraries are housed in buildings constructed only a few years ago and therefore have enough space for some years to come.

Moreover, as in all developing countries, funds for acquiring books are scarce and the development, at least in quantity, of the book-stock is slow. Lack of enough resources within each library makes it crucial to be able to depend on other libraries if users needs are to be satisfied. Due to this necessity, a number of co-operative schemes are in operation in East Africa to enable libraries to receive material and information from each other. While this is not co-operative storage in the real sense of the phrase, it enables libraries to tap on resources stored and owned by other libraries in the region.
8.9 INTERLIBRARY LENDING

Interlibrary lending is the most ancient and to this day the most common form of resource sharing in libraries. The following three principal problems have been universally identified with regard to interlibrary lending though not all of them have been solved in all countries:

1. Recognition of the respective responsibility of borrower and lender.
2. Identification and location of material requested.
3. Economics of interlibrary lending

There are of course many other problems, some are related to personnel issues, others to questions of administration and others to the availability of adequate communication links.

It is unfortunate that in spite of the obvious advantages which collection sharing brings to all concerned, the principle of interlibrary loans has not yet been accepted in many developing countries. There seems to persist an overriding fear that lending in general and lending to other libraries in particular is not to be encouraged.

The principle of interlibrary lending is far from being fully accepted as a means of resource sharing in libraries. In order to have it recognised as an economic and sensible means of making a nation’s bibliographic resources available to all citizens, it may be necessary for some countries to introduce enabling legislation so that librarians need not fear prosecution if books lent either to persons or to institutions are lost.

The second major problem concerns the bibliographic description of items requested for interlibrary loan and the identification of the most suitable institution from which to request them. The first part of this aspect of interlibrary loans is grounded in the notion of standard bibliographic description.

Librarians involved in interlibrary loan services anywhere in the world are probably united in their opinion of the low standard of bibliographic competence of their users’ requests for material not found in their home library. Yet, only conformity with international standards of descriptive cataloguing will ensure that the item asked for will be the item received; equally important, the lending library should not be expected to identify the request, but should be able to rely on the information supplied.

There persists even in fairly advance library systems a lack of appreciation of the amount of work that falls on the more richly endowed libraries through their willingness to lend books and serials to their libraries.

The cost of international interlibrary loans has been the subject of a few recent studies and considerations are being given to the possibility of providing financial compensation to lending libraries. However, this may have only marginal bearing on the day-to-day operations of academic and research libraries in developing countries.

8.9.1 Interlibrary lending and Universal Availability of Publications (UAP)

Efforts to improve bibliographic access must be accompanied by an improved document supply, with the ultimate aim of Universal Availability of Publications.

Universal Availability of Publications (UAP) is, together with Universal Bibliographic Control (UBC), the most important element in International Federation of Library Associations.
(IFLA)'s programmes. Just as UBC aims to work towards total bibliographical control of the world's published output, UAP aims at ensuring that everyone, everywhere, can obtain access to all documents whenever and wherever they have been published. UAP is a necessary companion to UBC since extended access to bibliographical references will be merely frustrating unless the documents to which they refer can be obtained.

Just as no library can be self-sufficient, so no country, however large, can be self-sufficient; national interlending systems must be supported by international interlending systems. IFLA has been concerned with international lending for many years. International lending is of special importance to developing countries because they are not self-sufficient.

For international lending, as for national lending, several elements are required to constitute an effective system:

1. The documents must be available.
2. Requests must be transmitted quickly.
3. Documents must be transmitted quickly
4. Accounting must be simple.
5. Procedures and forms must be simple and standardised
6. Local (or national) channels should be used first.
7. Each country must have a national centre or centres to plan, co-ordinate and monitor the lending system.

How each developing country designs its national interlending system will depend, to some extent, on geographical size, nature and extent of existing resources and proximity to developed countries. However, it would be useful to identify the patterns that seem to be particularly promising, always taking into account special local conditions. Developing countries have the advantage that in designing their national library and information systems they can build interlending availability into them as an integral element; in some developed countries it is proving hard to superimpose satisfactory lending provision on traditional systems that have evolved over the years. Moreover, interlending systems in developing countries can be quite simple in design, in contrast to the very complex networks that have been constructed in some developed countries on the basis of extensive and scattered existing collections.

Considering possible ways of achieving universal availability, with developing countries particularly in mind, a basic and cardinal principle of UAP is that every country must be able to supply its own publications to any other country, by loan or photocopy. This does not mean that a country should automatically and immediately apply to the country of origin for every document it requires, but as a last resort each country must accept this responsibility.

At present, few countries can provide such a service even for current publications, let alone retrospective ones. Some countries have interlending systems designed to provide access, by means of union catalogues, to foreign publications contained in their various libraries, but not to their own publications. It should at any rate not be difficult for developing countries, most of which do not yet publish many books, to make such provision; in doing so they will make a very real contribution to UAP, since these publications are often very difficult to access to.

8.10 THE IMPACT OF COMPUTERISED SYSTEMS AND NETWORKS

The development of computer-assisted information systems and networks is of great importance for world-wide co-operation in resource sharing involving both developed and developing countries.
The development of computer-assisted information system and networks has three interrelated components:

1. The creation and growth of many machine-readable data bases capable of on-line interactive searching from remote terminals.

2. The development of computerised library networks interconnecting libraries and computer facilities and data bases.

3. The establishment of mission-oriented national and international information systems such as the well conceived model developed for the International Nuclear Information System (INIS).

Machine-readable abstracting and indexing services data bases have become a major bibliographical and reference tool in many countries world-wide. Although a majority of the data bases are for bibliographical type of information there are others which cover news articles, full texts of legal cases and statutes, numeric data and graphic representations.

The impact of the phenomenal growth of machine-readable data bases has resulted in the following:

1. More on-line terminals established at an increasing number of locations to facilitate remote access.

2. More effective communication techniques.

3. Improved standardisation and co-operation among data base producers.

4. Expanded bibliographical services.

5. Increased demand for document delivery service, interlibrary loan and photocopying service.

6. Greater need for resources sharing and networking among information systems.

The Machine-Readable Cataloguing (MARC) format which was designed by the Library of Congress for representation of bibliographic data in machine-readable form has since been adopted as both national and international standards. The MARC data base has been used widely in the US both as a cataloguing and bibliographical tool and as a source for interlibrary loan, acquisitions, circulation and many other applications. Increasingly many countries including a few developing countries are now producing their national bibliographies in MARC format. Exchange of MARC tapes by many countries is also in effect.

Because of the high costs required in creating and maintaining machine-readable data bases, it is considered impractical for most developing countries to undertake such projects other than to produce their national bibliographies and periodical indexes in machine-readable forms.

In recent years there have been a number of experiments or pilot projects conducted by UNESCO and some developed countries to test the usefulness of providing Selective Dissemination of Information (SDI) service to researchers in selected developing countries. The results have been generally favourable.

However, because of the high telecommunication costs and use charges, the volume of searches to be made by developing countries may remain low unless there is a special reduced rate for users from developing countries.
8.11 THE DEVELOPMENT OF COMPUTERISED LIBRARY NETWORKS

Another important phenomenon of recent times which facilitates the sharing of resources is the development of computerised library networks through which machine-readable data bases become viable information resources accessible to a large number of users, both near and far. However, most of these computerised library networks exist in the developed countries.

For developing countries and some small but developed countries, there is an increasing possibility that they may be connected to international networks through a designated national node in each of their countries, although local and national library and information networks have been developed largely without computers and sophisticated telecommunication systems.

The so-called “network parasitology” concept successfully employed by Finland is another good example applicable to developing countries. Since 1971, the Helsinki University of Technology Library has been able to provide SDI and retrospective searchers by using computers and data bases located at the Royal Institute of Technology Library, the Biomedical Documentation Centre in Stockholm, and the Technological University of Denmark in Copenhagen.

Other cases of networking in developing countries that are worth mentioning are the telex networks established in several Latin American countries. The best known one is the Argentina Telex Network for Scientific and Technical Information which was initiated in 1971 under the US–Argentina Science Co-operation Programme. The telex network interconnects the principal libraries and documentation centres in Argentina.

8.12 THE ESTABLISHMENT OF INTERNATIONAL INFORMATION SYSTEMS

There is an important development being undertaken by several international and intergovernmental organisations to establish mission-oriented information systems on a global basis. The first of these is the International Nuclear Information Systems (INIS) established in 1970 by the International Atomic Energy Agency as a co-operative system to handle information related to the peaceful applications of atomic energy.

During the process of planning and the designing of INIS, several important principles were conceived and agreed upon by its planning team. These principles which have since been adopted as a model for several other international information systems such as the International Information System for the Agricultural Science and Technology (AGRIS) and the International Information Systems for the Development of Science (DEVSIS) are:

1. Decentralisation of the task of identifying and recording information as it is produced, each participating nation (or region) being responsible for reporting what is produced in its own territory.

2. Centralised merging of material reported by the different input centres (national focal points), the task being performed in an international agency through international financing.

3. Output products tailored to the needs of advanced institutions with computer facilities as well as to printed (or micro–filmed) indexes and abstracts that can be used by institutions without such facilities, and individual scientists.

4. Back–up service of photocopies or microfiches to ensure availability of texts.

5. Products available at low cost and all charges payable in local currencies.

6. International management, based on consultation with all participants.
7. The engagement of government to ensure official support and the availability and infusion of relevant government publications and reports.

8. Utilisation of an internationally accepted standard bibliographical format to permit future interconnection among various international information systems.

The model stipulated above has many important features, some of which are of special benefit to developing countries. First, it makes each participating country responsible for reporting the relevant publications in its territory thereby alleviating duplication of efforts and ensuring the fullest coverage. Secondly, since each participating country is to bear the cost of initial reporting, countries with a larger volume of publications will bear larger expenses while countries with smaller volume of publications will bear smaller expenses. This apportionment of cost is more favourable to developing countries and therefore encourages them to participate.

Thirdly, the central processing of bibliographical records in an international centre supported by international funding is far more economical than for each country to attempt processing them locally. Furthermore, by means of central processing, bibliographical information from all participating countries can be quickly merged and made available world wide.

Finally, it helps to endorse accepted international standards in bibliographical format and reporting provides training opportunities for information workers in developing countries.

In promoting the establishment of International Mission–Oriented Information Systems and the application of methods, norms and standards which will maximise the intercompatibility of all systems and facilitate their interconnections, UNESCO has made a very significant contribution through its UNISIST programmes whose aims are to co–ordinate existing trends towards co–operation and to act as a catalyst for the necessary development of a world wide information network.

8.13 EVALUATION OF RESOURCE SHARING SCHEMES

A systematic evaluation of resource-sharing schemes uses various criteria; cost effectiveness, reliability, flexibility, building on strengths, quality control and effectiveness in relation to changing user needs.

It is recognised that a number of subjective elements are included in these criteria for evaluating resource sharing. However, the development of further statistical techniques, mathematical models and simulation will in due course provide additional guidance in the measurement of utility and effectiveness. In the meantime those involved in the assessment of resource-sharing should be conscious of the non-technical factors affecting success or failure, such as political, geographical or economic constraints, deficiencies in the infrastructure, human values and the personalities involved.

8.14 CONCLUSION

From this discussion, it is clear that if libraries are to continue to meet the demands of their users, increased co-operation and resource-sharing are vital. However, developing countries should not rush into entering resource-sharing schemes without good planning. First and foremost, they need to:

1. Clarify objectives in advance. They should try to assess potential demands for library service by studying the nature and extent of users’ needs.

2. Recognise that resource-sharing requires money, staff and commitment to the common purpose.
3. Devise programmes from which all participants, including large libraries will benefit.

4. Assume that there is no one best approach. Consider various forms of co-operation and devise programmes that can be carried out with the resources available.

5. Be familiar with approaches tried elsewhere, but not to assume that they can be transplanted. While some can be accepted with modification, others should be rejected in favour of better ones, more suited to local conditions.

6. Recognise and make allowances for problems that will arise from limitations of infrastructure, e.g. postal and telephone services, photocopying, equipment maintenance etc.

7. Consider the possibilities of multi-country programmes where there are solidly based national systems on which to build.

8. Be sceptical about elaborate computerised systems as the only sound approach, but be willing to experiment with computerised networks where conditions seem favourable.

The development and exploitation of technology offers the hope that networks for knowledge will one day bring the resources of the greatest libraries within reach of users of the smallest collections in developing countries. Machinery alone however, will not bring the millennium. The skill, determination and patience of librarians will be required in the future, as they are today, if the maximum potential of library resource-sharing is to be realised.

8.15 REVIEW QUESTIONS

1. Examine the functions of resource-sharing.

2. Discuss the factors that constitute “Resource-Sharing”. How are identical factors organised in your country?

3. Explain the following concepts:
   a) Library co-operation
   b) Library systems
   c) Library Network
   d) Interlibrary Lending
   e) Library co-ordination
   f) Co-operative acquisition
   g) Co-operative storage and processing

4. Why is resource-sharing considered relevant to few libraries of developing countries? How can the obstacles encountered by libraries and information centres in resource sharing be overcome?

5. Discuss the benefits to be derived from resource-sharing. What constraints are likely to be encountered in resource-sharing in Kenya?

6. What steps and considerations are being taken in your country to promote resource-sharing? What contributions have been made to these efforts by the foreign individuals and organisations?

7. What are the considerations to establish, develop and monitor resource-sharing among libraries in your country?

8. Evaluate the following in terms of relevance, and appropriateness in a given situation.
a) The Farmington Plan
b) Centralized Purchase
c) Joint Purchase

9. The Universal Availability of Publications (UAP) and the Universal Bibliographic Control (UBC) are no longer considered relevant in document exchange and delivery among libraries. Discuss.

10. How far has computerised systems and networks assisted resource-sharing activities among the libraries in your country?

8.16 BIBLIOGRAPHY


