NATIONAL INFORMATION AND INFORMATICS POLICIES IN AFRICA

REPORT AND PROCEEDINGS
OF A REGIONAL SEMINAR
HELD IN ADDIS ABABA, ETHIOPIA

28 NOVEMBER – 1 DECEMBER 1988
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NATIONAL INFORMATION AND INFORMATICS POLICIES IN AFRICA
Report and Proceedings of a Regional Seminar

Addis Ababa, Ethiopia
28 November - 1 December 1988

International Development Research Centre (IDRC)
&
Pan African Documentation and Information System (PADIS)

Shahid Akhtar
Editor

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NATIONAL INFORMATION POLICIES, PLANS AND SYSTEMS IN SUB-SAHARAN AFRICA

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A. INTRODUCTION

African countries are becoming increasingly aware of the fact that information, especially specialized information, is an indispensable factor in the development and rational use of their total natural and human resources. Information is one of the costliest and fastest growing industries in modern times. Its introduction, therefore, requires careful national planning to ensure that every sector of the economy benefits. The development of information systems and services needs to be planned as an integral part of a country's development plan and not as an adjunct to it.

This growing awareness of information is the result of years of cooperation with, and assistance and encouragement from the United Nations Educational Scientific and Cultural Organization (UNESCO); international information systems such as the International Information System for the Agricultural Sciences and Technology (AGRIS) of the Food and Agricultural organization (FAO), International Nuclear Information System (INIS) of the International Atomic Energy Agency (IAEA); the Commonwealth and national organizations and institutions, particularly the International Development Research Centre (IDRC) of Canada and the German Foundation for International Development (DSE).

UNESCO's assistance in the development of library and information infrastructures, especially in developing countries, since the 1960's, is well documented and needs no detailed elaboration here. Within the context of development from which the new, emergent countries were viewed in the early 1960's, UNESCO and other assistance organizations recognized that libraries were no longer mainly cultural, but were seen "in conjunction with other information sources, as a vehicle for development" [U. GEHRKE, 1985, p. 168].

The change in emphasis since the 1970s from assistance in the development of individual institutions to the development of institutional infrastructures for the establishment of national information systems led in 1974, to the concept of National Information Systems (NATIS), the UNESCO framework for establishing integrated national library, documentation and archive services. The Intergovernmental Programme for Co-operation in the field of Science and Technological Information (UNISIST) launched in 1972, was concerned solely with the development of scientific and technological information. A framework was required, therefore, especially for developing countries, to take account of non-scientific information.

Thus, one of the prime objectives of NATIS was that a national information policy reflecting the needs of all sectors of the community and of the nation as a whole, should be formulated, to guide the
development of an overall plan for incorporation into the national development plan. The rationale for this was that governments would be committed to execute national information programmes and ensure their viability, if they had invested time, effort and, above all, funds in their establishment.

Despite all the various efforts, however, by the early 1980's, few African countries had given serious consideration to formulating a national information policy, let alone establishing a viable national information system.

In the past few years, there has been growing interest and activity throughout Africa in the development of national information infrastructures, regional and international co-operation, and ultimately in national policy. The emphasis is on creating endogenous systems, on the basis of local initiatives, with international assistance.

This development can be attributed partly to the growing impact of the new technology on the information industry and the resultant information culture dominated by computers and the other new technologies, which have resulted in new demands, emphasis and orientations. In addition, the increasing inaccessibility of information for viable decision-making in most African countries, because of ineffective and inefficient information handling techniques and archaic systems, is widening the gap between the "information rich" North and the "information poor" South. W.O. AIYEPEKU [1983] assesses the critical information situation as follows:

"African states have recognized for some time ... that the situation with regard to documentation and information about socio-economic development in Africa is far from satisfactory. Many countries do not have mechanisms for keeping track of the published and unpublished information generated in the context of the activities of their planners, economists, scientists, and other individuals who have responsibility for implementing national development plans. They often lack organized access to the relevant information produced by bilateral and multilateral aid agencies. Consequently, these countries often continue their planning and programming in ignorance of vital facts that have been documents" [p. 35].

Many African information professionals and a growing number of decision-makers and researchers have realized that the solution, indeed the salvation of their countries, depends on mutual collaboration, more serious consideration of the need for development information, and policies and systems which can make that information more easily available.
B. OBJECTIVES AND SCOPE OF THE REVIEW

a) Nature and scope of the literature

This survey attempts to comprehensively examine individual national and regional priorities, trends and directions taken by existing development information policies and systems in the context of shared experiences. The geographical scope of the review is the Eastern and Southern African sub-region.

The bulk of the literature of direct relevance to national information policy for Africa consists almost entirely of unpublished draft proposals on policies, plans, recommendations and declarations emanating from conferences that concern individual countries or the region in general.

Of considerable importance are the articles in periodicals and conference papers which describe and evaluate existing information systems and infrastructures, or address important topical issues.

Acts and legislative instruments establishing information services and institutions provide direction by defining the areas of and limits to responsibility.

There is other documentary material in the form of consultancy mission reports resulting from surveys of information systems and services generally, the information status of specific sectors of the particular economy, or specific institutions such as archives. Such studies usually contain recommendations and conclusions with policy implications, while some even put forward detailed plans and guidelines for future policy formulation.

Lastly, some documents address issues of information policy at the national and international levels in general terms. Although they do not relate specifically to Africa, they are important as background to the whole concept of national information systems management and the policies that are essential for the systems' viability. UNESCO is the main source of such documents.

b) Structure and presentation of the review

As the above summary suggests, there are very few monographs on the subject of information policy for the African region. Even in the "information-rich" North, information policy is a new concept that is only now attracting professional and intellectual attention. In Africa and other developing countries, the field is even less tested and thus its intellectual organization is rather problematic. Although issues and elements of policy are well known, the literature presents no unified approach to their discussion. Reports and articles by information professionals touch on every aspect of information including policy matters.
To impose some structure on the literature, therefore, a combination of problem-oriented and source of document presentation is adopted, rather than a country-by-country approach. This should avoid the repetition of issues. Obvious national trends, especially current attempts at policy formulation, will be discussed under relevant country headings. Thus, the review first considers the background literature, examining general discussions of and guidelines on information policy issues, mainly those generated by UNESCO.

Section two on policy development will focus on information infrastructure development. Institutional surveys and policy documents will also be dealt with in this section.

This will be followed by observations and comments on important issues related to the review material, with recommendations as appropriate.

The study concludes with consolidated recommendations.

Terms such as information, information policy, information technology, and documentation have been the subject of many definitions. Throughout, their use will conform with definitions provided by UNESCO/PGI at the UNISIST II Intergovernmental Conference of 1979.

C. BACKGROUND DOCUMENTS

One very effective means by which the topicality of the concept of national information policy has been maintained is its internationalization. Since the issue first appeared on the international agenda, general discussions at national and intergovernmental levels and guidelines for establishing information systems and policies, have proved useful to member States in their efforts to give the matter national attention.

a) UNESCO

The most prolific source of background documents is UNESCO:

i. Intergovernmental Conferences (UNISIST/NATIS/PGI)

Since the UNISIST programme was launched in 1972 a body of literature has accumulated from intergovernmental meetings and conferences in the form of position papers, recommendations, guidelines, and procedures for processing information, setting up
information systems, and developing national information policy. In spite of its science-oriented, sectoral approach to information issues, the UNISIST I Conference considered that the establishment of a national information policy was one of the most important pre-requisites for taking advantage of the proposed World Science Information System. For developing countries, the National Focal Points and UNISIST Committees respectively became centres for dealing with policy matters, infrastructure development, and scientific and technological information.

ii. The Intergovernmental Conference on the Planning of NATIS (UNESCO, 1974)

The Intergovernmental Conference on the planning of NATIS (UNESCO, 1974) aimed to encourage the integrated planning of national documentation, library and archive infrastructure and its report is the most comprehensive statement of the need for an integrated policy approach to such development. Robert V. WILLIAMS (1988) declares that the NATIS programme "was - and, to some extent still is - UNESCO's most systematic plan for the development of a worldwide information system". Whilst acknowledging the preoccupation of UNISIST with scientific information he gives UNISIST II the credit for establishing the necessity of developing national and international information policy to assist in the building of systems leading to the flow of appropriate information and technology to the developing nations.

The Intergovernmental Council of the General Information Programme (PGI) at its sixth session (November 1986), reviewed the activities for the two previous years, following the alienation of some western member States from UNESCO and the resultant drastic cuts in the organization's budget. Particular mention was made, of information personnel and user training, policy and infrastructure development and regional networking, where proper development was threatened unless extrabudgetary funds could be mobilized.

It was recommended that programmes be initiated to facilitate technology transfer to developing countries and that data bases and model information systems should be established to demonstrate to decision-makers and information professionals the impact of modern technology in information handling and on the decision-making process.

iii. Reports of the Director-General of UNESCO

UNESCO's mass media policy is the most visible part of its information agenda and the cause of the alienation mentioned above.

The organization has, however, achieved commendable success in its communication programme for developing countries, as shown in the reports of the Director General of UNESCO (1979/80; 1981/1983), especially in the development of communication policies and
infrastructures, of the three regional communications policy conferences, mentioned in the 1979/80 report one was held in Yaounde, Cameroun, in July 1980. The conference laid down the principles for formulating and implementing communication policies in member States and stressed self-reliance at the national and regional levels and technical co-operation to strengthen national and regional integration to increase the flow of information.

The report mentions several training programmes both at the national and regional levels in Africa and projects benefiting several African countries.

The 1981/1983 report provides information on follow up action to the recommendations made by the 1979/80 Intergovernmental conference and continued assistance in infrastructure and policy development. Of particular importance to Africa was the establishment of the Pan African News Agency (PANA) which began operations in 1983; technical and financial sponsorship to organize a regional African workshop on communication policies and planning, in 1983; the creation of fifteen rural newspapers in five Sub-Saharan African states, and assistance to scientists in African and other Third World countries to develop appropriate low-cost equipment, all in the context of establishing a new world information and communications order.

iv. Policy Guidelines

Victor ROSENBERG [1985] observes that "perhaps the most relevant materials produced by UNESCO in the area of information policy are the guidelines for the development of information and the documents from the UNISIST II Intergovernmental Conference on Scientific and Technological Information for Development (UNESCO/PGI 1979a; 1979b; and 1979c), which contain a summary of the meetings". This assessment excludes the latest and most comprehensive of the UNISIST guidelines - that by Ines WESLEY-TANASKOVIC [1985] - which contain a step-by-step approach to national information policy formulation and implementation. R. AUBRAC [1988] points out that it neglects certain major problems such as the training of staff and the choice of equipment, but nevertheless, it suggests alternatives for countries to choose from according to their circumstances.

The breadth of view reflects the vast experience from which it was drawn and it has formed the basis of ongoing attempts to formulate information policy in the African region.

UNESCO's guidelines on national and international scientific and technological information (STI) policies were reviewed by Raymond AUBRAC (1988), for the benefit of all agencies (bilateral and multilateral) involved in this field.

He examines the evolution of the problem of national information policies, with special emphasis on those of developing countries and focuses on those recommendations that relate directly to this issue.
The review is a lucid presentation of the activities of UNISIST and its changed perspective with regard to the development of information systems for developing countries.

A number of the UNISIST documents reviewed by ROSENBERG address information policy issues over the period 1974-1980. He notes that they reflect a progression of policy approaches from more or less traditional library concepts (UNESCO 1974b), through concern with the structure and operation of national information centres, policies for managing information resources and increasing document availability, the impact of changing technologies and the policies needed to deal with the rapid change, to the emergence of networks and microcomputer technology and the development of standards to make that technology more accessible.

ADAMS [1976; 1977; 1980] and SLAMECKA [1979] report on four successive meetings on the planning and implementing of national information activities on science and technology in which these changing policy issues were addressed. The fourth conference in 1980 focused on the role of information in national development. At this meeting UNISIST began to consider social issues such as the ownership of intellectual property, the hardship to developing countries caused by the increasing use of advanced technology and national capabilities for using information. Thus, ROSENBERG comments "the international community seems to have moved from the optimistic view that any nation can set up a national information exchange to the more pessimistic view that technology is putting the weaker countries at a greater and greater disadvantage" [p. 15].

There has been considerable disappointment, certainly from UNESCO, that the high hopes of NATIS implementation and of the advantageous effects on the information systems of member States have not been fulfilled, nor its practical value sufficiently publicized. An answer exists in a survey report compiled for UNESCO by J.P. POLINIERE [1974]. In a user-oriented survey of information systems and the literature on them, POLINIERE postulates that any information institution depends for its success on the existence of crucial links between information sources and users. He describes national information systems as "a set of inter-related information institutions which jointly switch information to the user" [p. 3]. He regards a central co-ordination mechanism for linking weak institutions into a network as the main remedy for the inefficient performance of information systems, rather than the establishment of new systems. African countries would be well advised to take a serious note of this observation.

UNESCO's concern prompted the organization to sponsor the meeting of a Group of Experts to draw up a plan of action for the implementation of NATIS 1974. The meeting recommended a comprehensive programme to promote NATIS, including a series of studies to form guidelines aimed at a clearer explanation of the NATIS concept.
A more conventional planning document was compiled jointly for UNESCO by Jacques H. d’OLIER and B. DELMAS [1975]. Their monograph on documentation, libraries and archives planning does not merely establish the necessity for formulating a general information policy and principles for building a national documentation system, it also considers the methodology for providing information services to meet user needs and discusses crucial policy issues such as information personnel training, networking and the provision of guidelines adapted to the level of development and size of the country concerned.

Pauline ATHERTON [1977] in a handbook on concepts and prevailing practices concerning the planning and functioning of information systems and services, considers issues such as the need to promote collaboration and inter-connection of library and information services at national, regional and international levels in order to ensure the unimpeded flow of information from generator to user. The handbook is addressed to "students and science information personnel of the developing countries who may be in a position to plan or develop new information services; for emerging managers of information systems and services ... in obtaining an overview of the field, including questions of information policy and planning, management and organization of information systems and services, procedures and methods, standardization, facilities and equipment and training aspects" (Preface).

This volume gives a helpful definition of information infrastructure focusing on the seven component elements, the last of which is national policies and examines and proposes schemes for their exploitation for development. The focus on developing countries, with examples of operational systems drawn from Africa, makes the handbook directly relevant.

b) Non-UNESCO Sources: Individual Professional Input

The points of view on information policy issues of individual professionals, taking both national and international perspectives, provide a direct approach to interpretation of issues which can make them easier to comprehend and assimilate.

Andrew A. AINES and Melvin S. DAY [1975] identify factors inhibiting the formulation of a national information policy, emphasizing the complexity and interdisciplinary nature of the process. These include negative attitudes, lack of leadership, insufficient public understanding and standards, technological competition and influences of international organizations. (For example, many African countries suffered as a result of the confusion resulting from the rivalries between UNESCO’s UNISIST and NATIS programmes).
International information policy and information transfer involve complex processes affecting information generators and recipients alike. WILLIAMS examines the role of Intergovernmental Organizations (IGOs) in this area and focuses on the delicate nature of the processes and issues involved, for example national sovereignty, security, copyright, patent protection, standards, dependence "the free flow of information for scientific progress and the growth of democracy" [p. 2].

He observes that there has been greater progress in international information transfer because developing countries, usually the transfer receiver, have confidence in existing international information systems (e.g. AGRIS, INIS and INFOTERRA of the United Nations Environment Programme). In his view, this augurs well for future understanding of and progress on policy matters which require that nations relax entrenched positions in defence of political, economic, ideological and sovereignty interests.

D. INFORMATION POLICY DEVELOPMENT

a) Information policy planning

National Information systems management has clear implications, a policy plan whose objective, according to J.A. BOON [1984], is to protect, develop, control, retrieve and make information available as a national resource and to promote its use throughout society. The objective also includes a definition of priorities and a problem-oriented co-ordination of resources. The policy plan is usually made up of statements on a number of policy positions and developmental guidelines given the status of law by means of legislative action. Ideally, this should comprehensively cover all sectors of the information industry, for example, libraries, documentation/information centres, computer science, mass communications media and telecommunications.

In Sub-Saharan Africa, such officially stated and legitimized plans are rare although individual institutions or sectors of the information industry, especially in mass communications, may have their own rules and guidelines. There are now beginning to emerge draft guidelines or statements of intent for consideration by governments.

b) Legislation for library and information services

The absence of unified information policies in Sub-Saharan African countries means that certain documents that may not strictly be policy documents have had to be classified as such, because, in so far as they offer legitimacy and guidance to information institutions, they constitute policy guidelines, however limited and inadequate.
Legal instruments such as the various laws establishing libraries and library boards, national library services, archives and documentation centres; deposit laws for the control and dissemination of national output of literature; and copyright laws for protecting the ownership of intellectual property represent the most basic policy documents in the sector. Their aim is to ensure the unimpeded flow of information.

M.M. NHLAPO [1985] confirms that such basic, legislative instruments existed in many African countries long before independence, since the Library Board, Library Services, and Archives Acts were designed to regulate public library and archives facilities in the colonies. Such legal provisions have been expanded, amended or repealed according to the demands of changing national perspectives and aspirations or new ones have been enacted for newly created institutions [p. 14]. Their main functions is to define the scope and objectives of information institutions and direct the focus of their responsibilities.

B.Y. BOADI and Peter HAVARD-WILLIAMS [1983] refer to the UNESCO-sponsored Ibadan Seminar on the Development of Public Libraries in Africa (1953) as a pace setter in its advocating "the adoption of appropriate legislation to ensure a service that had a well-defined administrative set-up and adequate financial support" [p. 9].

For the countries of the former East African Community, i.e., Kenya, Tanzania and Uganda, J.S. MUSISI [1981], K.J. MCHOMBU [1984] and S.A.H. ABIDI and J. KIYIMBA [1983] all refer to the HOCKEY Report of 1960 as the basis for such legislative action and mention the influence of the Ibadan seminar. The Tanzania and Uganda Library Services were established by Acts of Parliament in 1963 and those in Kenya in 1967, with the brief to "promote, establish, manage, maintain, and develop libraries" (MCHOMBU).

Library development has been uneven in Southern Africa. Zambia and Lesotho established library systems and services without legal mandates. Francis INGANJI [1983] points to a number of problems in Lesotho resulting from this vacuum, such as a lack of financial support and haphazard growth and allocation of responsibilities [p. 39]. M.M. MOSHESHOE [1986] examining the situation from the international perspective, deplores Lesotho's inability to contribute to and benefit from the Universal Availability of Publications (UAP) and Universal Bibliographic Control (UBC) provisions.

B.M. LUNGU [1985]) in his extensive comments on the Zambian situation criticizes the failure of attempts in 1976 and 1978 to persuade the Government to provide legislative support and direction for the country's library services and comments on the resultant lack of identity and the uncontrolled pattern of development of those services [p. 5].
Botswana, Swaziland, Malawi and Zimbabwe have legally established library services. The Drafting Committee (1987) on A Co-ordinating Body for Botswana’s Information Systems refers to an impressive development of library services in Botswana since independence and the establishment of the Botswana National Library Service (BNLS) in 1968.

R.S. MABOMBA’s sectoral account [1987] of information services in Malawi describes a viable national library service having a clear vision of its responsibilities and regular funding as a result of the National Library Service Act of 1967.

Although the library history of Zimbabwe can be traced to the late nineteenth century, Peter C.MAZIKANA [1987] states that a National Library and Documentation Service (NLDS) was legislatively established only in 1985 and became operational in 1987 [p. 171].

The Indian Ocean Islands of Seychelles and Mauritius have smaller less well developed library services. Marie Consuelo BENOIT [1984] refers to the "birth" in 1978 of the National Library of Seychelles but with no indication whether this happened through legislative action or not [p. 8]. Gaetan BENOIT [1984] recommended for Mauritius, a new law to replace the existing library law and refers to the ineffective legislative action already taken in support of the country’s library services.

c) Deposit Laws and Bibliographic Control

Legal deposit provisions establish institutions and responsibilities that ensure bibliographic control of national publications and their dissemination at the national and international levels. BOADI and HAVARD WILLIAMS examine legal deposit in the context of international co-operation, with particular reference to the concepts of Universal Bibliographic Control (UBC) and Universal Availability of Publications (UAP).

They explain the requirements of UBC which make it the responsibility of each country to provide a regular record of publications issued within its borders, on the basis of internationally accepted standards, in order that reading material may be available to all. This mechanism for bibliographic control which should be ensured by legal deposit provisions, consists of a national bibliographical agency, normally a National Library where a copy of each publication must be deposited by its author, printer or publisher, and perhaps also in other designated deposit centres, in order to enable the compilation of a national bibliography at specified intervals.

The literature suggests that these conditions are only partially met even by libraries with legal deposit laws.
ABIDI and KIYIMBA; MUSISI; J.M. NG’ANG’A [1983] and E.E. KAUNGAMNO [1983] writing respectively on Uganda, Kenya and Tanzania, point out that such services have been established at various times and that national bibliographies are issued. NG’ANG’A’s report and wide coverage for Kenya’s bibliographic affairs in International Cataloguing, July/September 1984, show that a national bibliography was first issued in 1983. ABIDI and KIYIMBA refer to difficulties in the application of Uganda’s deposit laws and in ensuring strict and comprehensive control because of legislative and political problems.

The Report on Co-ordination for Botswana mentioned earlier refers to "the confusion resulting from the existence of different laws on legal deposit" [p. 10] which makes it difficult to obtain accurate figures of books published in the country. A major work by LEBOKA [1983] advocates rationalization of the existing laws.

MABOMBA, Angeline KAMBA [1984], P.C. MAZIKANA [1987] and M. WALUBITA [1988] state that in Malawi, Zimbabwe, and Zambia the national archives are the deposit libraries and bibliographic agencies. They are a colonial legacy from when there was a centralized archive for all three territories in Salisbury (now Harare), with legal deposit status. KAMBA and MAZIKANA give substantial information on deposit provisions in Zimbabwe, which seem to have been functioning quite satisfactorily. The national archives have issued the Zimbabwe National Bibliography since 1961 and KAMBA observes that "the successive versions of deposit legislation (1916, 1938 and 1975) have ensured some measure of success" in bibliographic control of the country's publications.

The deposit laws of Ethiopia, Malawi and Swaziland have been examined. Ethiopia’s Deposit of Printed Materials proclamation No. 50/125 requires that three copies of each book be deposited with the Ministry of Culture and Youth. Malawi’s Printed Publication Act (1st March 1984) invests deposit status in the national archives and requires one copy of each book published in the country to be lodged there. The Deposit and Preservation of Books (1978) is an amendment to Swaziland’s Copyright Act No. 36 of 1912. It confers legal deposit status on three libraries and requires that each should receive a copy of any publication issued in the country from the publisher.

None of these laws mandate a responsibility for issuing the national bibliography.

A proposed amendment of Swaziland’s Copyright Act - Draft National Service Bill (1984), "to establish the National Library Service and to provide for matters incidental thereto" (title page) would repeal the 1978 Act. The Copyright and deposit provisions as well as the main library legislation for establishing the Swaziland National Library Service would then be incorporated into one legislative instrument. B.J. KINGSLEY (1988) suggests that the Bill has not yet become law.
d) Copyright Legislation

There is little mention of this in the literature. Copyright is mentioned only in the title of the Swaziland legislation which deals with deposit arrangements which that law incorporates. Botswana's Report on Co-ordination merely refers to "confusion" caused by the existence, in the Botswana Statute Books, of two different copyright conventions - the Berne Convention (1948) and the Universal Copyright Convention (1952) and that clarification as to which of them should be applied is not clear in the existing law.

e) The Ineffectiveness of Existing Legislative Instruments

It may be seen, therefore, that not all libraries and documentation services in the sub-region enjoy legislative support. and where it is given, it has not been successful in making the services efficient in discharging their responsibilities. The available literature suggests a number of reasons:

i. Present legislation is limited, covering only institutions and services in the public library system. Other information systems and services, including libraries in government departments and ministries, the private sector, parastatals, commercial and banking institutions are not covered. They derive indirect legitimacy from the acts which established their parent institutions, even though there may not have been any mention of such services in the Acts. LUNGU [p. 5] certainly corroborates this scenario for the special library and documentation centres in Zambia. MAZIKANA [1983] has pointed out, however, "a national information service consists of much more than just the libraries" so that legislative provision is required for all types of information systems and institutions that may exist in a country;

ii. The absence of a co-ordinating agency works against effectiveness. Library Boards or Services may perform this function for the Public Library System. This shortcoming is mentioned by MUSISI, KAUNGAMNO, MCHOMBU and by practically all authors who discuss information problems in general terms and not only in relation to library legislation;

iii. Deficiencies in the legislative instruments are another factor. NHЛАРО [1970] states this to be the case with particular reference to deposit laws, in Swaziland. Angeline KAMBA recommends a revision of the deposit law in Zimbabwe to bring it in line with UNESCO guidelines. Uganda's deposit laws are reviewed by ABIDI and KIYIMBA
and Kenya's by MUSISI. The deficiencies cited include publishers' ignorance (and plain disregard) of the existence and requirements of the legislation; cumbersome methods of deposit, and unrealistically low fines for non-compliance which do not act as a deterrent. Other sources of weakness are government exemption from deposit obligations (e.g. in Kenya), though they are the largest publishers in African countries; and, the general lack of coverage for the new publication and audio-visual media, such as video cassettes, magnetic tapes and discs.

These factors have impeded the bibliographic control of national publications and reduced the capacities of African countries to control (UBC) and provide access (UAP) even to local users. D. ABATE [1986] summarizes as follows:-

"Very few countries have national policies and legislation that govern and regulate the organization and utilization of information. Where they exist they are either poorly formulated or remain unenforced. The cause lies in the fact that there are no central agencies responsible for information that have the powers and mandate the particular situation requires. Even when such structures exist their tasks are not adequately defined or they lack the authority or the capacity to establish a realistic policy and plan and defend it at the national legislative and executive levels. While it should not be assumed that legislative framework would resolve all the bottlenecks, it is nonetheless true that good legislation facilitates the creation and development of infrastructures" [p. 79].

To address this situation E.E. KAUNGAMNO [1978] recommends an integrated approach to the provision of library services in African countries. He outlines the rationale for and functions of national library policies within Africa and suggests a central co-ordinating body or agency controlling a centralized system or, a loose network of independent systems. This is a valid basis, but the current approach to integration embraces all information centres and systems, not just libraries.

f) The Mass Media and Telecommunication

ROSENBERG observes that information policy can cover everything from telecommunication to journalism. Blaise CRONIN [1987] goes further into the complexity of the issues involved, including media control and ownership, privacy and security, broadcasting policy, licensing, telecommunications, intellectual property rights, and
transborder data flows. These aspects, however, receive little attention in the literature on legislation in particular and policy in general.

Individual institutions such as newspapers, broadcasting and telecommunication institutions tend to have their own institutional policy guidelines enshrined in the Acts that established them (BOON).

E. Infrastructure Surveys and Policy Development

Attempts by African governments to develop information infrastructures and to strengthen their information capabilities have often taken the form of requests for consultants or experts from UNESCO or some other international body, as well as from government and non-governmental organizations, to undertake surveys either of the status of scientific and technological information (STI) generally, or of specific sectors (usually science and technology oriented) of the economy. There are also several general reviews of existing library and information facilities and of specific institutions in the field of information.

As Ulrich GEHRKE [1985, p. 169] observes "a large number of consultancy reports, mostly established in close co-operation with local experts and including recommendations for further action, have resulted from these missions". Many have helped in establishing viable infrastructures. Several have not been implemented, but their recommendations should form relevant bases for future policy action. The following examples demonstrates the point.

a) Sector-oriented surveys

i. Tanzania

E.E. KAUNGAMNO [1985, p. 17] refers to a "proliferation of reports by foreign experts in connection with the establishment of National Networks and Documentation Centres in Tanzania. Charles BOURNE [1974], a UNESCO Consultant, was invited to advise the Tanzania government on the Establishment of a national centre for scientific and technological documentation. E. SAMAH A [1978], another UNESCO expert, produced a study on the application of science and technology in development. The SAMAH A report provides a clear assessment of information needs and methods of information transfer and dissemination in the agricultural, industrial, health and medical sectors of Tanzania's Kilimanjaro region and attributes the problems to the absence of a national information policy to provide direction and ensure material and other relevant support. Recommendations suggested co-ordination, resource sharing and the need for a national information policy.
A mission was recently undertaken by SAREC (1984), the Swedish organization that co-ordinates research co-operation in developing countries, to re-investigate the feasibility for establishing a national research information service.

A number of consultancies have been undertaken in some research and information centres in the crucial agricultural sector. B. HOLMBURG [1982] makes reference to "previous consultancy missions" in 1975 and 1976.

The 1975 mission undertaken by M.J. MENOU resulted in a report titled "Project for the establishment of a national agricultural system (Tanzania): Report of a consultancy mission" (FAO.URT/71/527). R.F. MUNN's mission produced the following report: Improving agricultural library services in Tanzania. HOLMBURG further refers to several other consultancies and consultations with the authorities by staff from FAO in Rome and IDRC and to an in-depth UNDP study on the overall structure of agricultural research in Tanzania.

Such reports usually embody conclusions and recommendations with guidelines or actual plans for subsequent official policy decisions. HOLMBURG's brief was to stress the network approach for agricultural information resources and to define those of relevance to that sector. He recommends the creation of a network of co-operating information units from existing centres and systems so that they can make optimal use of existing and international resources. Recognizing the growing importance of new technology in information handling, the report recommends the optimal use of desk-top computers which are widely available in Dar-es-Salaam.

The industrial sector has received similar, though less extensive attention. A. YUDIN and M. EL-TOUKHY [1986] from UNIDO wrote against the background of the Industrial Development Decade for Africa the (IDDA) and took particular account of the special concern of the Lagos Plan of Action (1980) in identifying particular sectors in which the supply of national information was crucial for the success of the IDDA. The report indicates that many African countries have no industrial information system and where they exist, they are inadequate in scope and orientation. They also lack the resources to obtain information from external sources on a systematic basis, in particular from the Industrial and Technological Information Bank (INTIB) which was established in 1980 "to facilitate and accelerate industrial and technological information flow to developing countries for the selection of alternative technologies and equipment and to reduce the preparation time of feasibility studies".

A similar report was written on Zambia's industrial sector by the two consultants. Both reports examine existing information infrastructures for the sector and assess the national focal points of INTIB. They recommend training personnel for data input into the INTIB system and related areas.
ii. Ethiopia

According to Kebreab W. GIORGIS [1976], a UNESCO mission undertaken by W. PATON reported on a long-term plan for a nation-wide development of public and school library services in Ethiopia. It also made recommendations on the focus of the National Library’s functions, including that serving as the headquarters of the central public library in a country-wide public library system. E. TIKU [1985] views the inefficient services offered by information systems as justification for the decision by the Ethiopian Science and Technology Commission (ESTC) to request UNESCO’s assistance in studying the basic requirements for setting up and implementing a scientific and technological information system. Several reports were issued between 1975 and 1987.

Establishment of a national scientific and technological documentation centre (1975) - responded to the terms of reference which included:

(a) Evaluation of the existing resources;
(b) Identification of national needs of STI;
(c) Drawing up a plan for a national STI Centre; and
(d) Costing the plan.

The report recommended short term training programmes to develop specialized personnel in information science and the establishment of a focal point to link the national system with external ones.

S. PARTHASARTHY [1978], another UNESCO Consultant, surveyed existing STI facilities in Ethiopia and recommended the establishment of a national STI system - the Ethiopian Scientific and Technical Information System (ESTIS) - as "a matrix for bringing together the scientific and technical information activities in a functional network" [p. 45]; ESTIS should then formulate a national STI policy. TIKU refers to a subsequent survey [1983] to update PARTHASARTHY’s report which had not been implemented and which recommended a seminar to highlight major issues involving the planning of an Ethiopian Scientific and Technological Information System; to review and assess existing information and documentation services; to formulate proposals for the promotion of a national information policy and plan for Ethiopia; to define project areas and consider the establishment of a permanent co-ordinating mechanism. These recommendations embody important policy considerations.

M. N. SEETHARAMAN [1987] writing in the context of current discussions on the relationship between STI, national information policy and national development planning, recommended the need for government commitment to and support for a national STI policy. This is in line with the recommendation of the Vienna Plan of Action (1979)
of the United Nations Centre for Science and Technology for Development (UNCSTD), that information policy be "an integral part of the overall national development plans..."

In 1984 SAREC produced a report carried out jointly for Ethiopia and Tanzania on a model STI centre for small research and development systems designed for developing countries, but with special relevance to the countries concerned.

iii. Kenya

The proposed rationalization of the agricultural research sector of the Kenyan economy had led to a recent survey of the sector by N.W. POSNETT. His Report (1987) recommends the reduction of the number of national agricultural centres from 46 to 31 and the establishment of a new, hierarchical, basic structure. He makes no detailed policy recommendations on information in that sector. The recommended mergers of old agricultural research and development structures into a smaller number of parastatals, however, should result in equally rationalized information resources, thus providing a model for other sectors in the future.

The survey also involved a critical examination and evaluation of the various libraries and documentation centres attached to the agricultural research institutions. Nine of the twenty-one recommendations were devoted to improving the information and documentation support systems in terms of staffing, finance, stock development and management, accommodation, etc.

b) Survey of Specific Institutions

i. Ethiopia and Kenya

John WALFORD, a UNESCO consultant produced a report in 1984 reviewing the Kenya National Archives. A.W. MABES [1982] undertook a similar mission on the Ethiopia National Archives and the report recommends a three-phased plan of short-, medium-, and long-term, whilst also drawing attention to the need for legislation, for an Advisory Council for staff training. WALFORD's recommendations for Kenya include, the definition national archives functions, management structure and staff training and status. Both of these reports should form valid bases in the formulation of national information policies on archives.

ii. Seychelles and Mauritius

Marie Consuelo BENOIT refers to two earlier reports commissioned by UNESCO in 1976 and 1977, on the development of libraries, museums and archive services. These were written by Francis Otiano PALA and
K.C. HARRISON respectively. PALA's terms of reference included the development of "a plan for a national information policy in Seychelles" and the development of a Seychelles National Library.

HARRISON's mission was to assess "the present situation of library, documentation and archives services, to discuss with the authorities the future prospects for library development and to lay the foundation for a workshop for library assistants designed to be held during August, 1978". BENOIT reports that Harrison undertook a similar mission in Mauritius.

F. REGIONAL INITIATIVES

a) Conferences

African countries now accept the importance of establishing viable information and documentation systems. Thus conferences and seminars have been convened which have brought together information professionals, researchers, academics and policy-makers to consider the problems of access to information and the need for policy to provide direction in this effort. Attempts have also been made to establish regional information systems on a co-operative basis similar, for example, to EURONET, the European On-Line Information Network, which aims to make accessible to each country in the region the information resources of all.

Scott ADAMS and Judith A. WERDEL [1975 p. 315] note the significance for the African region as a whole of the CASTAFRICA Conference, organized by UNESCO (Dakar, Senegal, 1974), to review national policies on science and technology for development. Many references were made at that conference to the need for compatible information services and systems.

GEHRKE also explains that the aim of CASTAFRICA was to assist UNESCO member States to set up the necessary programming machinery and institutions to effect a national policy for science and technology [p. 171], in which context alone a national information policy was considered possible.

The Lagos Plan of Action [1980], the policy document of the Organization of African Unity (OAU) for Africa's economic development and self reliance, recognizes the essential role that information should play in project execution in every sector of the national economy. It, therefore, enjoins African countries, as a matter of policy, to provide an information component for every sector of the economy in their development plans, based on the needs of that sector
and those immediately related to it. It urges African countries to plan for and set up national information systems to ensure ready access to decision-making information. The importance of information in national development runs through the entire document.

The Joint Conference of African Planners, Statisticians and Demographers (Addis Ababa, 1988) resulted in the publication of two documents which are interesting examples of rare statements by African administrators and policy-makers of their information requirements, type of information required and the mechanisms for its generation and dissemination. The documents, entitled: "Improving information flows on the follow-up process to African economic recovery and development"; and "Issues on information and monitoring", are a response to the information requirements of the United Nations Programme of Action for Africa’s Economic Recovery and Development (UN-PAAERD). They represent a new and positive approach to information policy which augurs well for future relations between policy makers and members of the information profession.

The Report of the Information Experts Meeting held in Harare, in 1985, is important for its emphasis on information personnel training. It focused not only on Africa's chronic shortage of information professionals, but also on existing training institutions and their responses to the labour problem. Garth GRAHAM addresses the need for institutions to meet the urgent demand for specialist, information managers for the documentation and information centres being established within the Southern African Development Co-ordination Conference (SADCC). The proposed information science school to be based at Addis Ababa University is seen as a response to similar need.

An important outcome of this meeting is the series of handbooks (now in three volumes) on teaching and learning materials which are designed "to bring all professionals closer to the user". They comprise articles covering the entire spectrum of the information discipline in the sub-region.

The report of an earlier conference, the Meeting on the Introduction of Information Science into Library Training in East Africa, held in Dar-es-Salaam in February 1980 and edited jointly by S.A.N.ABIDI and Ties MOELLER also addressed the need for the curricula in library schools in Eastern Africa favour information science, in order to meet the growing demand for professionals. The report was accepted as a guideline for the development of East African information training.

Harmonizing information studies training programmes was the subject of a meeting of African educationists in information, convened in Bonn in December 1987, under DSE sponsorship. The meeting followed the London Colloquium and IFLA Brighton Conference which discussed the subject at a general level. The proceedings review comprehensively the curricula and course content of library and information training institutions on the continent. They recommend that training programmes
in librarianship, archives and documentation should be harmonized to avoid duplication of work, wastage of resources and isolationism in these closely related professional areas, bearing in mind that integrated library and information systems form the basis of current African policy initiatives.

b) Regional Networks

R.S. MABOMBA [1983] discusses some of the initiatives in the Eastern and Southern African sub-region towards a regional information network, with its implied principles of the sharing and co-ordination of resources. He mentions the International Conference on the Development of a Documentation and Information Network in Eastern Africa, Nairobi, Kenya 24th July - 1st August, 1973 (the NAIROBI CONFERENCE), the establishment of the Pan African Documentation and Information System (PADIS) at the headquarters of the Economic Commission for Africa (ECA) in Addis Ababa, Ethiopia (January, 1981) and the PADIS First Consultative Meeting of Information and Documentation Scientists, Policy-Makers, Researchers and Experts on Technical Co-operation from Southern African Governments (Harare, Zimbabwe, 22-26 February, 1982), at which the discussions on the formation of a Southern African Documentation and Information system (SADIS) were finalized.

i) The Nairobi Conference (1973)

This conference represents the first step in Africa towards the co-operation and co-ordination of information resources to maximize their use. MABOMBA and GEHRKE mention the establishment of a regional co-ordinating agency, the Regional Committee/Council for the Development of Information Services in Eastern Africa, which was later (1975) "expanded to include almost all countries in Eastern and Southern Africa.

Of the Council's eight objectives listed by MABOMBA, which reflect its co-ordinating role in the proposed regional information network, two were of special significance. The first was to respect participating country's socio-political and ideological orientation, which will inevitably form the basis of the national information system. The other was to accept that national funds would have to be committed to the maintenance of the regional system, although international funding would be solicited and an international perspective maintained.

GEHRKE also refers to the Nairobi Conference (and the KAMPALA Meeting of 1970), but emphasizes its national focus by making particular mention of the resolutions calling for the creation of National Documentation Centres and National Co-ordinating Bodies.
ii) The Pan African Documentation and Information System (PADIS)

PADIS is the first African-wide system established on an intergovernmental basis. Several authors discuss its operation and significance. GEHRKE explains its operational objectives of providing access to information for policy-makers, technicians and planners engaged in the social and economic development of African states. MABOMBA's treatment of PADIS is brief, but it does, however, provide a list of objectives, two of which address the readiness of African member States to participate in PADIS, and the latter's standardizing and co-ordinating role. Dejen ABATE [1986] discusses the major obstacles to the improvement of Africa's information services and their removal in the context of PADIS which was established to strengthen the information infrastructures of African states and encourage the formulation of national information policies to enable meaningful participation in the PADIS programme.

By far the most comprehensive and objective appraisal of PADIS is that by W.O. AIYEPEKU [1983] who focuses on the critical shortages of information infrastructures and materials that led to the decision to establish the PADIS project. He explains the objectives, structures and functions designed to address these issues and the expectations under which PADIS operates. He strongly recommends that IDRC and ECA identify a few "carefully selected" countries and sub-regions in Africa and give them technical and financial support as "cornerstones" of the PADIS network, and that a training policy should be evolved by PADIS to utilize human resources in information science in Africa to teach DEVSIS methodologies and applications at both sub-regional and national levels.

iii) The Southern African Documentation and Information System (SADIS)

A major development on the Southern African information scene and one designed in response to some of the above-mentioned recommendations was the unsuccessful attempt to establish SADIS as a sub-regional component of PADIS. It aimed for national information systems co-ordination at the sub-regional level, as a back-up or sector of SADCC. MABOMBA records the "Birth of SADIS" at the "First Consultative Meeting of Information and Documentation Scientists, Policy-Makers, Researchers and Experts on Technical Co-operation from Southern African Governments" convened in Harare, Zimbabwe, from 22nd to 26th February, 1982. He states the intended purpose of SADIS to serve the countries of the sub-region by identifying and collecting information generated within the region and by stimulating information sharing and co-ordination among member states [p. 6].
The intensive and far advanced preparation for SADIS ceased suddenly in 1984, although the abandonment of the project was never publicly announced. Private discussions and speculations have not been lacking. MAZIKANA suggests that SADIS "floundered amongst nullified and over-turned decisions and amidst a lack of supporting national structures capable of maintaining the momentum" [p. 177]. He puts it forward as an object lesson to those who attempt to establish sophisticated regional information networks without first ensuring the existence of viable national information services. Of greater significance perhaps is the political dimension which brought about the reversal of decisions.

MAZIKANA refers to arrangements to revamp SADIS into ESADIS - the Eastern and Southern African Documentation and Information System - to be based in Lusaka, Zambia. The various documents that were prepared in relation to ESADIS should prove useful to this project.

In his presentation of IDRC-IS programme directions, Garth GRAHAM (1985) explains that the promotion of co-operative regional information systems is a priority with IDRC and that it is only after these have been established, the standards developed and technological solutions to compatibility problems have begun to emerge that IDRC'S Information Sciences Division turns its attention to the national level [p. 143]. In the regional context, he mentions IDRC sponsored systems such as the International Livestock Centre for Africa (ILCA) and the International Centre for Research in Agro-Forestry (ICARF), which are the result of this deliberate "top down" approach.

G. NATIONAL INITIATIVES

National information policy formulation can only be undertaken by the countries concerned. MONTVILOFF [1987] rightly observes that policy depends on a country's information requirements, which are themselves subject to the major national development goals. He also maintains that outside assistance can only take the form of the creation of an awareness of the importance of action in this direction by policy-makers, through supportive rationale IDRC, DSE, UNESCO and other aid donors have been assisting in this way since the early 1970s.

a) Conferences, seminars and surveys

In many of Eastern and Southern African countries action to improve the policy environment is increasing. The immediate catalyst was the UNESCO/IDRC-sponsored Seminar on Resource Sharing in Southern and Central Africa, held in Dar-es-Salaam, Tanzania, on 16 to 19 December 1985. The seminar report emphasized again the importance of resource-sharing among SADCC countries but points out that for this to be effective, the national capabilities in each member country should
be strengthened. To this end, in October 1986, UNESCO surveyed four countries of the sub-region; Botswana, Malawi, Zambia and Zimbabwe.

The formulation of a national information policy was identified as a priority "as it provides the legal framework for co-ordinated development and management of national information resources".

The account given above provides the background to on-going activities on information policy in the sub-region. UNISIST NEWSLETTER [Vol. 14, No. 2, 1987] reports quite extensively on three seminars on national policy for library and information services held "within the framework of the development of information resource sharing activities within and among countries, members of the Southern African Development Co-ordination Conference (SADCC)" which met in Zambia, Zimbabwe and Malawi from 23 to 27 February, from 25 to 27 February and from 4 to 6 March 1987 respectively. The main objectives of the seminars included the formulation of a basic policy statement and its endorsement at the highest possible level and the setting up of a policy procedure.

Three reasons are given for holding the seminars, the 1985 Dar-es-Salaam seminar, the consultancy carried out by Made and the SADIS feasibility study of 1982-1983. Zambia and Malawi put forward draft proposals and/or modalities for a national information policy as a direct result of these meetings. Zimbabwe established a National Documentation System. Under DSE sponsorship and as essential initial steps towards the formulation of a national policy Botswana held two workshops; the first on the Establishment and management of a national information service held in Gaborone on 23 to 27 February 1987 and the other in July 1987, on the need to establish a national co-ordinating agency.

Even those countries that have not yet prepared formal draft policy statements have held conferences and symposia, some directly on policy, others to discuss general information problems which can only be solved by a national information policy. Evidence of such policy-oriented activities exists in the following: the Mbabane and Maseru Workshops (February and March 1986) on the co-ordination of information services in Swaziland and Lesotho respectively and the "Proceedings of the Ethiopian evaluation and analysis seminar on national scientific information policy and plan" (April 1984). A "Seminar on Namibian Bibliography and Documentation" was convened in November 1985 to lay the groundwork for a future information policy and system.

b) Professional Opinion

At the individual level, information personnel have made strenuous efforts, but with limited success, to point out to governments the various problems that make library and information systems ineffective and unable to deliver information correctly. F. INGANJI [1983] undertook a survey of the status of libraries and information centres in the countries of the Eastern and Southern Africa. His general
observations on service performance are that basic information systems, such as academic and public libraries, archives etc., exist in the majority of the countries surveyed. These are modern information centres, but they do not perform well due to the well-known infrastructural weaknesses of insufficient manpower, inadequate training programmes, indifferent funding, lack of co-ordination, narrow inward looking attitudes and inadequate government support, all of which he attributes to the absence of information policies in the countries. Similar sentiments have been expressed. Maurice LUNDU [1983, 1984, 1985] and C.B.M. LUNGU [1985] of Zambia; MCHOMBU [1984] of Tanzania; MUSISI [1981] and OTIKU [1985] of Kenya; and R.S. MABOMBA [1983, 1984, 1987] of Malawi, have all tried to point out that information is an essential resource that needs exploiting for national development. The responses from policy-makers have varied from country to country, but the general picture of indifference at the policy level is pervasive.

The absence of impact has been attributed to a lack of professional clout among information professionals. GEHRKE sees the low priority accorded to the information profession and its practitioners in Africa in this context, as indeed does ABATE. GEHRKE's explanation is of an inferiority complex resulting from the unequal educational levels between librarians and those in the higher echelons they serve. This may not be true in all cases, but there is a tendency to employ untrained staff in libraries and information centres. Critical comment in the professional literature certainly bears this out. So too does the trend of training institutions to overproduce non-graduate diploma holders, as commented on by J.R. NEILL [1985, p. 23].

GEHRKE feels that, this discrepancy precludes competent discussion between supplier and user of information which in developed countries often prepares the ground for continued partnerships [p. 183]. Lack of appreciation of library and information work may be a contributory factor [p. 189], but Garth GRAHAM [1985] blames the inability of information experts in the region to meet the acknowledged challenges through problem-solving discussions.

There is no shortage of references to discussions of major defects in the performance of information systems and services that require a definite statement of information policy to redress them. INGANJJI predicted the inevitability of the development of national information policies and the establishment of national documentation centres in the sub-region. He based this observation on the fact that growing recognition of the importance of information as a national resource highlighted the obligation to make it more readily available.
Co-ordination, Co-operation and Resource Sharing: Central Issues in Information Policy and Systems Effectiveness

Effective co-operation through co-ordination of effort is a basic precept of the UNESCO information programme since national self-sufficiency in information in the modern world is neither possible nor desirable because of the volume and cost of information. Resource sharing would ensure the availability of national and world-wide information at a fraction of the cost of each country endeavouring to acquire them individually.

This viewpoint has been accepted since the Nairobi Conference of 1973. More recently the Dar-es-Salaam Seminar (1985), the joint Mbabane and Maseru seminars (1985) and the Gabone Workshop (July 1987) have all reiterated the same theme.

The discussions, however, have taken place in situations where sharing and co-operation have had little impact because they have neither been formalized nor co-ordinated. The literature is full of references to such situations.

E. SAMAHA [1976] draws attention to the wasteful duplication of effort that can result from a lack of co-ordination, in the report on a mission to Tanzania in 1976, to study the application of scientific and technological information in development.

Marian CHIKAWE said it all in relation to Tanzania in her presentation for the Certificate in Librarianship.

Both this and Francine Matseliso THABISI's [1983] review of co-operation in Lesotho suggest a growing tendency to use the co-operation and co-ordination of information resources as a topic for academic essays in library schools. Thabiso examines the seriousness of the lack of co-operation and information sharing in Lesotho; points out the benefits to be derived from it and concludes predictably by recommending that only a national information policy with legislative backing can ensure its effectiveness.

QOBOSE [1985] writing on co-operation in Botswana concludes that there is none. Thus, the July 1987 seminar can be seen as a response to the need for institutionalized co-ordination in the context of information policy formulation. The principle of networking as expressed in the reports on the seminars in Botswana and Zambia (1988), have co-ordination as an important foundation stone and resource sharing a major objective.
d) Recent National Action or Statements in the Direction of Policy

Efforts have been made by some countries of the sub-region to formulate information policies in accordance with NATIS, while others reflect a combined NATIS/UNISIST approach, in their sectoral orientation to integrated systems. This is borne out in conference papers and articles.

i. Zambia

The reports of two fairly recent conferences on national information policy show the heightened consciousness of the need for guidance for the country's information programme. The seminar held in 1985 was specifically on the need for a regional policy and the 1987 conference was convened to formulate such a policy which is contained in the "National Information Policy for Zambia: Draft Proposals" (1987).

Under the influence of M.C. LUNDU [1984, 1986] Zambia’s approach has been NATIS-oriented, since the declared role of NATIS was to assist in the establishment of information systems in member States which will ensure that information is available to those engaged in developmental activities in all sectors of the national economy.

Thus the Draft policy proposals enshrine the following principles:

(a) Information is one of the national issues crucial to development.

(b) A national information policy should identify and define major areas of information need (in the context of the major objectives of the national development plan).

(c) The policy statement should commit the state to provide the proper environment and the means for meeting identified needs.

(d) A national information policy will ensure planned, co-ordinated and strong infrastructural capabilities as the basis for co-operation and resource sharing at all levels.

The Draft is in two major parts. Part one deals with the importance of information as a national resource and justifies exploitation in line with other resources; gives a brief survey of the state of the information infrastructure and considers the major socio-economic sectors and their information requirements.
Part Two consists of the proposed policy statement; the aims or objectives of information policy for Zambia; then the actual policy proposals and suggested strategies for their implementation; followed by a brief conclusion.

The document makes provision for the all-important central co-ordinating agency - the Zambia Advisory Council on Library and Information Resources (Zaclir) - which is expected to formulate the final policy, present it to government for consideration, and if adopted, ensure that legislative support is included and, oversee its implementation.

This is a library-oriented set of proposals in which an integrated system is implied rather than stated. In spite of references to "the network", there is no indication of the structure of the proposed system. The relevance of the new technology is recognized, but not its full impact and dimensions, as only the applications are dealt with and those not in detail.

On the whole, the document is a brave attempt, particularly bearing in mind the Zambian history of failed presentations to Government.

ii. Botswana

The Botswana draft is not on national information policy specifically, but on the establishment of a National Co-ordination Agency which would formulate the policy proposals for Government consideration and approval. The proposals are contained in a report on co-ordinating information services in Botswana. The circumstances that led to the decision to create this body have been explained already in the regional context. The report of the 1987 conference explains that the SADIS proposals necessitated the creation of a national committee to liaise with SADIS. An ad-hoc Information Co-ordinating Council (ICC) created at the time was formalized into the Information and Documentation Co-ordinating Council (IDCC), to formulate a national information policy. Its activities, including two conferences on policy, both in 1987, resulted in the decision to form a committee to discuss the setting up of a co-ordinating agency.

The document presents the background and reviews the present information scene before giving a justification for establishing a council, and setting out its objectives, functions, structure, focus and financial requirements. It concludes with recommendations.

This is a different approach from other national initiatives in the sub-region. Efforts are concentrated, first and foremost, on the creation of the co-ordinating agency, although the functions set out inevitably embody policy proposals. The actual policy guidelines for the attention of government will constitute a second stage in the total effort.
The system suggested is biased towards libraries and institutions dealing with written information, so that disproportionate emphasis is given to publishing and the publishing industry. The present narrow definition of information (a deliberate decision by the Drafting Committee) excludes the full integration of the new technology, although its increasing application and impact on the society is recognized.

iii. Kenya

Kenya has also taken serious steps towards evolving an information policy, and the need for a developed system of documentation and information has been clearly stated. GEHRKE records that he witnessed personally this awareness in 1973 and he refers to a number of ground breaking works by librarians and development researchers in Africa generally and Kenya in particular. He mentions three conferences, including the Nairobi Conference of 1973 which all brought together professional information producers and users in an attempt to bridge the gap between them and initiate co-ordination of information resources in Eastern Africa.

MUSISI [1983/84] provides a comprehensive view of the development of libraries and information services in Kenya, highlighting not only the weaknesses and problems, but also providing a picture of attempts to establish viable infrastructures on which an information policy could be based.

J.M. OTIKE [1986] suggests that the ultimate solution to the problem facing special libraries lies in the formulation of an information policy with the necessary machinery to co-ordinate all information activities and resources in order to avoid duplication and under utilization.

The surveys by J. WALFORD [1982] on the Kenya National Archives and N.W. POSNETT [1987] on the agricultural sector, pointed out the need for co-ordination within the framework of a national policy, as the only means of combatting the constraints on the effective provision of information for development.

A response to this call is to be found in the proceedings of a committee formed by the Kenya Library Association which was mandated to design a national information policy for the country. The Committee which was composed solely of librarians, finally declared itself unequal to the complex task, but it assembled considerable information from operational national information policies in other countries, such as Jamaica.
The latest attempt to formulate information policy in Kenya has resulted in a most interesting draft statement, National Scientific Information Policy, which was prepared in February 1987, by the Committee on Documentation and Information of the National Council for Science and Technology (NCST).

The policy objectives are stated in relation to the fact that Kenya has no comprehensive integrated information and communication policy, but that there are sectoral policies, which relate mainly to the mass media and telecommunications.

Whilst an integrated policy for the whole country is necessary, it is felt that one comprehensive national information policy is not practicable because it would be too unwieldy. Thus, a multi-sectoral, modular approach to policy formulation is presented in a draft policy statement different in its comprehensiveness and complexity of structure from all others examined in this study. It combines all institutional and other information services on the basis of autonomous sectors interlinked in a computer-based network, with District Information and Documentation Services and a national system to provide access to the entire national store of information, through comprehensive bibliographical services and document delivery systems.

Two different national systems are advocated: the overall scientific and technological information (STI) system in all the sectors of the national economy, including natural and physical sciences, social sciences and humanities, and a parallel system of District Information and Documentation Centres (DIDC) linked administratively to the STI. The DIDCs were evolved by the Ministry of Planning, in response to the government's strategy for a district focus for rural development.

The proposed system has major implications on human and financial resources. POLINIERE observes that the centralization of functions is necessary to maximize the use. The need to bring resources closer to users is recognized, but expert opinion suggests that this trend should become prominent only as the country and its information systems develop. Centralization is necessary, or at least, decentralization should be limited to the capabilities of scarce resources.

iv. Tanzania

Tanzania is the only country in the sub-region that has developed a national policy on libraries. It is a straightforward and authoritative statement of government policy with a comprehensive view of library provision and development, from village to university level, in which traditional library functions are intermixed with those of documentation services. The demands of modern research and development activities for the rapid flow of information are taken into account and thus brief mention is made of the new technology and its effect on the information handling.
The policy covers national libraries only to the exclusion of the private sector and archives. It is based on a survey of the current situation in libraries, backed by impressive statistics.

The document defines the obligation of libraries to satisfy identified basic needs in education, research, entertainment, culture and patriotism. Definite directives are given for fulfilling these needs and libraries in Tanzania are called upon to contribute to this effort through co-operation, resource sharing and dedication to duty.

Provision is made for co-ordination at two levels. First, the Tanzania Library Services Board (TLSB) is responsible for supervising and co-ordinating public library services, establishing a national library and developing the National Central Library in accordance with Act No. 6 of 1975 which set up the Board.

Secondly, there is the National Advisory Council on Libraries which "shall be the main advisory and co-ordinating body between the Tanzania Library Services Board and other libraries" in seeking ways and means of developing libraries in Tanzania.

The policy is to be implemented by the Ministry of National Education (which is also its author), through the Tanzania Library Services Board, but since other organizations have full powers of building and developing their own libraries, the Government expects these organizations to take some initial steps in implementing the policy [p. 33].

This document was completed before the Dar-es-Salaam Workshop on Resource Sharing (1985), but whether this had any effect on its final promulgation is not known.

v. Uganda

Uganda's efforts to establish national information policy are praiseworthy in view of the country's political and economic turmoil. Development in every sector of the economy was brought almost to a stand-still until recently.

ABIDI and KIYIMBA, already cited, testify to this and Kate WOOD [1986] refers to a scene of desolation in her report of a survey sponsored by the British Council on education and manpower training in Uganda. The determination to resuscitate the country's reconstruction effort should be viewed in this light.

A seminar on the role of information in the reconstruction of Uganda held in 1987, recommended the formulation of a policy for a national, integrated information system. Other recommendations included the need for information to be part and parcel of the country's national development plans and legislative support for information institutions.
As a result, the existing National Information Agency Advisory Committee (NIAAC) was charged with working out proposals for national information systems and structures and with their submission for Government discussion and approval.

The proposed system is based on the NATIS concept. A three-level structure of libraries, documentation centres and archives is suggested without any sectoral preference and with clearly defined functions. Legislative support is proposed: under a NATIS Governing Body (the Co-ordinating Agency), responsible to the Minister of Public Service and Cabinet Affairs. The Secretariat would be located in the office of the President.

This is a library oriented system and there is no provision for computer-based information systems, although specialized information centres are envisaged. This approach is suggested in the 1987 seminar proposals, because of the lack of exposure of Ugandan librarians and of equipment, qualified manpower, funds etc.

The information policy guidelines, according to the draft, are based on the priority needs of Uganda in the areas of scientific, technological and management resources. They assist Government to decide on how Uganda’s priority needs in information can be satisfied within the available resources.

The Committee has, therefore, suggested a policy on the basis of and in conformity with UNESCO guidelines:

(a) Elaboration of a national policy;
(b) Application of norms and standards;
(c) Development of information handling capability;
(d) Training of information manpower and users.

These form the focus of the national information policy and also constitute the main thrust of National Information System activities, which have been worked out in considerable detail.

vi. Malawi

According to R.S. MABOMBA [1983], the Intergovernmental Conference on the Development of Information Services in East Africa, held in Arusha, Tanzania, provided the impetus for the development of documentation activities in Malawi within the NATIS Concept. It also led to several decisions and activities on strengthening the creation of a NATIS Committee to set up a co-ordinated system of library and information services.

Malawi was also an active member of the Council for the Development of Information Systems and Services in Eastern and Southern Africa set up by the Nairobi Conference (1973), whose objectives included fostering resource sharing and promoting the recognition of the importance of information in the region.
The country participated actively in the preparations to establish SADIS and liaised with the SADIS secretariat through the NATIS Committee. At the Zambia Network Seminar, held in Lusaka in February 1988, J.J. UTA [1988] put forward the present picture in a paper in which he identifies the institutions in Malawi which will participate in a future network.

The background of sustained professional activity provided a national framework for the accelerated regional information activities of the 1980s. In consequence, a Seminar on national policy on library and information, was held in Lilongwe in 1987, which set out the draft proposals, laid the foundations and initiated the procedures for formulating a national information policy.

The seminar identifies specific goals and policy issues, chief among which was the optimal utilization of information and professional knowledge in planning, decision-making and problem-solving. The policy format adopted is similar to that of Zambia and reflects the direct input of UNESCO. An element of policy is identified, followed by the means for its implementation.

In other respects, however, the Malawian approach is different for:

(a) No formal committee was appointed to undertake the exercise since the seminar papers provide the background, and the participants represented, in effect, a "drafting committee".

(b) The seminar recommendations constitute the draft proposals.

(c) There is no structured background information, since the various seminar papers comment on aspects of the library, archives and information. This absence may be inconvenient and irksome to the policy-makers to whom the proposals are addressed.

(d) A co-ordinating agency is suggested, but its place in the administrative structure, membership, structure and functions are left for future discussion.

This is a library-oriented set of proposals which states its objectives clearly. It does little more than lay the foundation and initiate the procedures for the formulation of a national policy, for no specific details exist at this juncture.
vii. Ethiopia

The concept of a national integrated information system on the basis of clearly defined policy guidelines is a new phenomenon to all sub-Saharan African countries including Ethiopia. Even though there is currently considerable activity to improve the situation, Mengsteab ADHANA [1985] points out that various libraries, archives and documentation centres "have not been embraced by a national system along the lines of NATIS" [p. 29]. He explains that it is not information work that is lacking, but rather clear policy and concerted action. He refers to several UNESCO consultancies and seminars, including "A National Information Policy Plan" (1984) as means of achieving that goal.

K. TIKU [1985], although more concerned with scientific and technological information, also describes a rather depressing picture of research and development activities serviced by ineffective traditional libraries, in a context of inadequate trained personnel and limited financial and other resources.

Nevertheless, there is evidence of steady progress towards the establishment of a national information policy which will provide a framework for the STI system planned by the Ethiopian National Science Commission. This has been the focus of the many UNESCO consultancies referred to above.

Many of the recommendations of these consultancies and seminars have not been implemented, or have only been partially implemented, but they provide valuable background material on information policy and systems. SEETHARAMAN used these materials during his recent survey of 1987. The 1978 survey by PARTHASARTHY on the establishment of a national STI centre and system for Ethiopia made particularly important policy recommendations which were reflected in those of the 1984 national policy seminar. These included the establishment of a national information policy on the basis of the UNISIST GUIDELINES by WESLEY-TANASKOVIC [1985] and the setting up of a national co-ordinating agency (she presented a summarized version of the Guidelines as her input at the 1984 seminar). The Ethiopian Science and Technology Commission (ESTC) was nominated to be that agency in 1986. Since then ESTC has been much involved in current initiatives in policy development and the establishment of a national information system. The report of the recent "Survey on Library and Documentation Activities in Ethiopia" [1987], initiated by the Commission, has as some of its objectives:

(a) to design a national science and technology information and documentation service; and,

(b) to help provide the required information for science and technology information policy formulation.
A national STI policy depends on a science and technology policy. A Conference organized in June 1988, in Addis Ababa, discussed the possibility of formulating a policy for science and technology. The conference working papers including one by TEFERI, "A Survey of Scientific and Technological Information Services in Ethiopia" [1988], with results from the ESTC survey of the previous year.

The recommendations of SEETHARAMAN’s Report [1987] have resulted in the establishment of the National Scientific and Technological Information and Documentation Centre (NSTIDC) in Addis Ababa, with computer and photocopying facilities, jointly funded by UNESCO and UNDP.

The recognition and appreciation of the relevance of the new technology to their systems is an important position taken by Ethiopia. TIKU identifies the "choice and applications of foreign technology on the best possible terms, to contribute to national gains in technological development" and the "capacity to adapt and improve technology" as among the important elements in scientific and technological capacity building. SEETHARAMAN also says in his report that his terms of reference included conducting:

"a training course on information handling techniques and computer-based information systems for the benefit of personnel working in these areas in the Commission and in other Government Departments and Agencies".

Thus, although Ethiopia has not yet produced a definite information policy document, serious preparations are underway in that direction.

viii. Zimbabwe

Zimbabwe has no national information policy, the report on information and documentation capabilities survey conducted by the now defunct Southern Africa Development Information / Documentation Exchange (SADEX) notes that Zimbabwe was among the first countries to seek assistance from PADIS in developing a national scientific and technical information centre [SADEX, March/April, 1981, p. 17]. MAZIKANA (1987) notes that Zimbabwe established a National Library and Documentation Service (NLDS) in 1985 following the workshop of March 1985, which is regarded as "a significant step forward" towards the eventual formulation and execution of a national information policy [pp. 171-172].

ix. Swaziland and Lesotho

Swaziland and Lesotho have no definite policies and by implication, no co-ordinated and integrated national systems. They have, however, been active participants in recent professional activities in the sub-region. The reports of the various DSE
sponsored seminars mentioned elsewhere testify to a systematic attempt to diagnose and solve the major problems affecting library and information fields.

In a paper presented at the Botswana Workshop [1985], M.M. NHLAPO (Swaziland) observes that the recommendations from two previous workshops show Swaziland's needs in setting up a national information service, foremost of which is a national information policy.

Lesotho, is now reported to have a National Information Liaison Committee, which could perhaps presage a co-ordinating agency, which has conducted a survey on library and museum services in the country (1983). This indicates some action in the direction of integrated services and policy considerations.

H) CONCLUSION

a) General Conclusion

African governments are now reasonably aware of the importance of information and the need for policies to ensure its full exploitation for national development. Concrete policies are emerging. The extent to which the relevance of the new technologies is recognized, however, varies from country to country and in most cases it is not given a high profile.

However much concerned policy-makers are with establishing guidelines for basic systems, there is nevertheless considerable awareness of the need not merely to design ways of coping with information but also to strengthen societies against the technological onslaught, through endogenous systems with the same technological base, acquired by means of external assistance. It is an example of the development dilemma that African countries have yet to solve.

b) Specific Comments and Recommendations

Various policy issues that are discussed in the professional literature have been mentioned in the preceding study, some in detail, others only in passing or indirectly. The following comments and recommendations are made to suggest areas of special consideration and action in the immediate future.

i. Research into Professional Policy Issues and National Information Requirements

To be effective, an information policy should be based on the identified information needs of the various sectors of the national economy, as well as on the articulated problems of the information community. There is a dearth of empirical investigation into any of
the above parameters. Much of the available literature consists largely of descriptive surveys which do not propose realistic solutions.

Thus it is recommended that:

(a) Problem and action-oriented investigations into the information requirements of specific economic sectors and into the deficiencies of existing information services preventing effective performance should be undertaken, so that purposeful planning can be effected.

(b) It is particularly recommended that joint teams of information practitioners and academics should research such specific problem areas as:

Training
- The relevance of existing training programmes the calibre and performance of the end products;
- Information manpower needs of sectors of society in relation to levels of qualification and areas of specialization;
- The prospects of promotion to professional levels through study for para-professionals;
- Harmonization of training curricula to further the objective of integrated information systems and services;

Improving the image of the information profession and rapport between practitioners and policy makers/administrators;

Research on the need to improve the status, terms of employment and remuneration of information workers;

The information needs of specific groups of people or sectors of the economy (for example rural information systems).

ii. Over-Dependence on Foreign Consultants

Studies are important aspects of information policy determination. The majority of these are undertaken by foreigners working closely with local professionals. The production of these reports is within the competence of local personnel. The preference for foreign experts is symptomatic of the lack of confidence of African administrators and
policy-makers in their own national professionals. This aspect of the dependency syndrome needs to be addressed and African administrators must learn to respect the professionalism and expertise of local personnel by using them. This would ensure more relevant and timely reports and would provide opportunities for strengthening local expertise and generate more confidence. PADIS should assist by making available its African experts data base.

iii. Non-Implementation of Report Recommendations

There is much evidence to show that the majority of reports resulting from the feasibility studies requested by African governments are not implemented, for one reason or another. The same applies to conference recommendations. The result is a proliferation of consultancies and meetings which reconsider the same issues. This situation creates the unfortunate impression that the organizations concerned care more for the professional advancement of their staff, than assisting the recipient countries.

African governments should, therefore, endeavour to establish firm priorities and follow up recommendations with action. UNESCO and other donor agencies should establish mechanisms to ensure follow up action on projects initiated or sponsored by them, avoiding wasteful duplication.

African institutions should collaborate to ascertain what reports already exist in related fields before requesting consultancies. This recommendation presupposes the existence of reference material, such as reviews and directories, that would make such co-ordination possible. The responsibilities of the information professionals are obvious.

iv. Legislation

The formulation of integrated national information policy assumes the amalgamation into one single unitary law of existing separate legislation on individual information institutions, systems and centres. This should take cognizance of related national and international copyright law, bibliographic controls, free flow of information and related legislation.

There is firm evidence that existing legislative instruments are inadequate in their coverage of institutions. They are often restrictive and narrow in their provisions and in some countries, are altogether non-existent. The existing book-hunger in Africa and the increasing use of information result in reproduction on a considerable scale that may infringe copyright regulations on author’s personal and financial rights.
Thus governments in the region are urged to up-date existing information legislation in consultation with the professional community, so that such laws ensure proper validity and direction for the information institutions concerned. In those countries where information institutions operate without legislative mandate and support, governments are urged to make such provisions as soon as possible.

The acts establishing parastatal institutions should make specific provision for the libraries or information/documentation centres attached to them.

Governments in the sub-region should endeavour to formulate policies that strike a proper balance between the particular demands of their people for information and the requirements of international copyright agreements.

v. Over-Dependence on Foreign Information Sources

The East and Southern African sub-region is heavily dependent on foreign countries for the bulk of its information. This includes a dependence on South Africa by means of various co-operative measures.

Governments and all institutions interested in information should strive for policies to reduce this dependence in the interest of national self-reliance, security and self-respect. This includes measures conforming to the SADCC objective of reducing dependence on South Africa.

vii. The New Technology

The current preoccupation of the profession is to establish effective national information systems to ensure accessibility at all levels. This is being done in the context of rapid technological changes in the spheres of telecommunications, computers and publishing that are bound to have a great short- and long-term impact on the design and operation of the systems created, and on society. It is also important to take optimal advantage of the enormous processing and storage capacities and new methods of communication associated with computer and telecommunications hardware and software, and to find appropriate applications for them in library and information work.

These matters are not discussed in the literature on information policy except in the Kenya Draft Policy Guidelines. The others mention computers and information technology only in passing and in the limited context of application for library housekeeping purposes. This attitude misses the whole point. The advances and developments in the new technology and their possible uses in and impact on African
societies need serious investigation even if they cannot be fully adopted at present. It is only a matter of time before African countries will have to establish computer-based systems, especially in the context of regional and international co-operation, or face the prospect of becoming professionally moribund.

African information institutions should, therefore, ensure that at least the senior personnel are exposed to or have some training in the use of computers in information handling. PADIS should redouble its training efforts in this area. Local institutions could co-operate with the computer companies for short staff training sessions.

Donor organizations should assist in mounting some of these programmes either individually or jointly with regional African institutions such as PADIS or the East and Southern African Management Institute (ESAMI).

vii. Integrated Information and Communications System

Communications, including the media and telecommunications, have not received enough attention in the literature and draft policy documents. Whilst the profession deals with "hard" information, a largely illiterate continent ignores the relevance of the mass media and other means of popular communication at its peril. Radio, newspapers, television programmes and the mobile cinema of Information Services Departments, etc., are relevant in extension and rural education programmes. Telecommunications belong in this age of communication satellites. They should all be part of integrated information systems and the information community should seriously consider their use in enhancing the dissemination of information to the urban and rural masses.

Governments are urged, therefore, to develop or improve existing communications infrastructures including roads, postal and telecommunication facilities and to expand them countrywide.

viii. Overstatement of Information Problems

Since 1980, a great many conferences and workshops have been convened in Africa to discuss the various information problems such as personnel development, resource sharing and co-ordination. Although these are necessary to develop information facilities and ensure the effective use of scarce resources, there is too much overlap and reiteration of old issues.

Conference proceedings should be concerned with and represent the topic under discussion. Country reports should treat only those aspects of the subject which are relevant and not review the entire information situation.
ix. The Private Sector

The current trend towards formal policy guidelines is an encouraging development which should receive support from all sectors of the economy. The private sector has, however, been omitted from official discussions of policy and guidelines. Although indigenous private sector information institutions are rare, multinational organizations dominate all African economies. Thus provision should be made for their representation and input into policy discussions in order to prevent possible future conflicts of interest.

c) Summary of Recommendations

i. Problem-and action-oriented investigations should be conducted into the information requirements of specific sectors of the economy and into professional problems that militate against performance in information production and dissemination.

ii. African administrators and policy-makers are urged to employ local experts in feasibility studies to establish confidence in both directions and ensure relevance of reports.

iii. To ensure follow-up in the implementation of study reports and conference recommendations, African governments should establish priority areas of need; donor countries should ensure that sponsored projects are executed; directories and reviews of ongoing or completed projects and relevant results should be compiled, to avoid duplication.

iv. Legislative backing should be provided for every individual information institution to give it direction and identity. Copyright legislation should strike a balance between the special information needs of African communities and the requirements of international conventions.

v. Existing information legislation should be amended to ensure that new developments, processes and the products of a fast developing information industry are included.

vii. The dependence on external information resources should be reduced, especially on South African sources, in the context of SADCC objectives.
PADIS, donor organizations and computer companies in African countries should assist in providing exposure for African librarians and other information personnel to the use of computers in information work.

Increased use of the mass media and telecommunication facilities should be made to ensure effective dissemination of information to the masses of the people.

The private sector, especially multinational organizations, should be involved in information policy discussions to prevent future conflicts of policy.

Government of those countries that have presented draft policy guidelines are urged to examine these seriously and without undue delay, with a view to approving and giving them legislative backing.

Those countries that have not yet evolved a national information policy should be encouraged to do so as soon as possible.
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### J. ACRONYMS USED IN THE REVIEW

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
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<tbody>
<tr>
<td>AGRIS</td>
<td>International Information System for the Agricultural Sciences and Technology (Food and Agriculture Organization)</td>
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<td>BNLS</td>
<td>Botswana National Library Service</td>
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<td>CSIR</td>
<td>Council for Scientific and Industrial Research (Ghana)</td>
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<td>DEVSIS</td>
<td>Development Sciences Information System</td>
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<tr>
<td>DSE</td>
<td>Deutsche Stiftung fur Internationale Entwicklung (German Foundation for International Development)</td>
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<tr>
<td>ECA</td>
<td>Economic Community for Africa (United Nations)</td>
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<td>ECOWAS</td>
<td>Economic Commission for West African States</td>
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<tr>
<td>ESADIS</td>
<td>Eastern and Southern African Documentation and Information System (proposed)</td>
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<td>ESAMI</td>
<td>Eastern and Southern African Management Institute (Based in Tanzania)</td>
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<td>ESTC</td>
<td>Ethiopia Science and Technology Commission</td>
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<tr>
<td>EURONET</td>
<td>European On-line Information Network (European Economic Community)</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>IDDA</td>
<td>Industrial Development Decade for Africa</td>
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<td>International Development Research Centre, Information Sciences Division</td>
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<td>IGOs</td>
<td>Intergovernmental Organizations</td>
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<td>INFOTERRA</td>
<td>International Referral System for Sources of Environmental Information (United Nations Environmental Programme) Formerly UNEP/IRS</td>
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<td>Acronym</td>
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<tr>
<td>INIS</td>
<td>International Nuclear Information System (International Atomic Energy Agency)</td>
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<td>INTIB</td>
<td>Industrial and Technological Information Bank (United Nations Industrial Development Programme)</td>
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<td>Kenya Library Service</td>
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<td>NATIS</td>
<td>National Information System</td>
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<td>National Scientific and Technological Information and Documentation Centre (Ethiopia)</td>
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<td>OAU</td>
<td>Organization of African Unity</td>
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<td>Pan African Documentation and Information System</td>
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<td>General Information Programme (UNESCO)</td>
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<td>Abbreviation</td>
<td>Full Name</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<tr>
<td>UNISIST</td>
<td>Intergovernmental Programme for Co-operation in the field of Science and Technological Information</td>
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<tr>
<td>UNPAAERD</td>
<td>United Nations Programme of Action for Africa's Economic Recovery and Development</td>
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<tr>
<td>USNAS</td>
<td>United States National Academy of Sciences</td>
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<tr>
<td>ZACLIR</td>
<td>Zambia Advisory Council on Library and Information Resources (the proposed coordinating Agency in the Draft Information Policy Proposals for Zambia)</td>
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<tr>
<td>ZLA</td>
<td>Zambia Library Association</td>
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<tr>
<td>ZLS</td>
<td>Zambia Library Services</td>
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