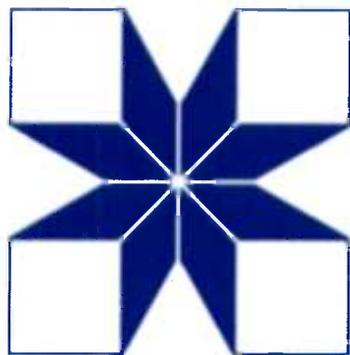


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# NATIONAL INFORMATION AND INFORMATICS POLICIES IN AFRICA

REPORT AND PROCEEDINGS  
OF A REGIONAL SEMINAR  
HELD IN ADDIS ABABA, ETHIOPIA  
28 NOVEMBER – 1 DECEMBER 1988

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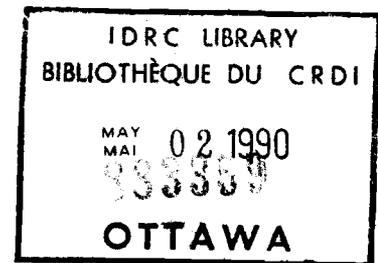
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**NATIONAL INFORMATION AND INFORMATICS POLICIES IN AFRICA  
Report and Proceedings of a Regional Seminar**

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 AND INFORMATICS  
POLICIES IN AFRICA:  
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**Addis Ababa, Ethiopia  
28 November - 1 December 1988**

**SECTION II**

**THE PROCEEDINGS**

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## A. INTRODUCTION

### a) Background

Following the attainment of political independence, most African countries turned to building their national economies. It was immediately obvious that resources were scarce so that they had to be allocated optimally after the careful definition of priorities, and the role of government in economic life was to be relatively strong because of the lack of development of the private sector. It was also realized that economic growth did not necessarily bring about overall development and that equity was as important, if not more so. This led to the pursuit of development policies and planning as instruments of African economic and social development over the last three decades.

Results have been mixed both between countries and over time. Both internal and external economic and political factors have influenced the performance of African economies, the attainment of development goals and the implementation of stated policies and plans. After thirty years of such developmental planning, many countries have yet to make much progress. Whether this dismal failure is caused by inappropriate policies and plans, ineffective implementation or a combination of both remains beyond the scope of this paper. In all the present discussions, however, the socio-economic and political reality in Africa should be considered, because the formulation, implementation and review of information and informatics policies is likely to face similar obstacles and possibly the same fate as other sectoral and multi-sectoral policy efforts.

### b) Definition of Public Policy

According to SPENGLER [1955] "the term policy commonly refers either to policy objectives or to both an objective and the institutional instruments designed for its realization...Should the actual outcome of a policy differ from its intended outcome, then the content of the actual outcome must be distinguished both from the content of the intended outcome and from the content of the policy itself". Thus, he distinguishes between policy objectives, statements and outcomes although in common usage they all fall within the purview of public policy.

The African Association of Public Administration and Management (AAPAM), at the Seychelles Roundtable of 1980, on "Public Policy in Africa" endorsed the following definition:

Public policy was accepted as a deliberate and binding action by responsible and authoritative organs of state (not always the Government) designed to influence the behaviour of society or substantial sections thereof. It is formulated to bring about a systematic way of solving fundamental national

problems. Systematization in severity of problems may be set against the resources available to deal with them and at the same time to harmonize the different aspects of sectoral policies with total policy [AAPAM, 1980].

The literature on public policy processes identifies a number of typologies for policy analysis. JONG-YOUL YOO summarizes four models:

- i. Intelligence, promotion, prescription, innovation, application, termination, appraisal;
- ii. Problem identification and development programme implementation, evaluation and termination;
- iii. Formulation, search, comparison, interpretation and verification;
- iv. Goal setting, problem identification, formulation of policy alternatives, choice of the optimum alternatives, realization strategy, and evaluation.

## B. NATIONAL INFORMATION POLICIES IN AND FOR AFRICA

### a) Problems hindering improvements in information infrastructure and services

National information policies in Africa should lead to a systematic resolution of the problems hindering development of information infrastructure and services. This is the raison d'être of information policies in Africa. The major problems to be resolved, and the developmental challenges that should serve as the basis for information priorities, will be briefly outlined before delving into the scope, process and instruments of national information policy.

It is a widely held belief that African decision-makers are not sufficiently aware of the relevance of information in national development. However, AIYEPEKU has suggested that decision- and policy-makers are in fact generally cognizant of the importance of information in their individual capacities [AIYEPEKU, 1988, pp. 18-19]. Their shortcoming is that this recognition has not helped to overcome the ambivalence governments pose towards information pursuits. Although individual attitudes are changing for the better, organizational response has not been tangible nor of significant proportions.

By far the major obstacle to information infrastructure building is the inadequacy of financial and material resources available for information activities. Given the predominant role African governments play in social and economic life, the low priority they attach to information activities is the major cause of prevailing shortcomings. The situation has been exacerbated by austerity measures enacted as a result of the prevailing crisis in the continent and by the increasing difficulty in disbursing funds for activities not budgeted for in development plans.

A further problem is the shortage of qualified information personnel. According to a study published in 1970 [DEVSI Study Team] factors contributing to this include: (a) the lack of Africa-based training opportunities; (b) the orthodox approach to librarianship maintained by the few schools of library science; and (c) the inadequacy of re-training facilities for both middle-level and managerial information workers. Twenty years later, this analysis is still accurate. Furthermore, the most recent concern is that information managers should be well-versed not only in the principles of information and library science but also in management techniques. The reasoning behind this is that the future of African information services lays in the leadership capacity of information practitioners. It has been noted that:

"it is essential that information practitioners do not remain librarians, documentalists or information scientists alone, but that there should emerge a class of information managers who act as politicians and defend the information cause at political forms; as salesmen who sell competitive information products in a difficult market place; as public relations officers who form and change information consumption habits; and, as managers who raise the financial, technological and human resources for information pursuits" [D. ABATE, 1987].

There are, however, two pre-requisites for the creation of such information managers:

- i. information staff must be academically equal to the administrative and technical officers to whom they provide services; and
- ii. their status in terms of financial remuneration and social recognition should be approximately on par with others of equivalent responsibilities [GEHRKE, 1985: 183].

The inadequacy of the existing information infrastructure is a serious problem. Many development institutions still operate with virtually no in-house information support, and very inadequate physical resources. Few countries have information services utilizing state-of-the-art technologies and associated practices that could serve as demonstration centres.

The inadequacy of investment in information infrastructure does not imply absolute government indifference. Substantial investments have been made in building up and maintaining information collection and delivery capacities in the form of national and sectoral libraries, documentation centres, archives, statistical offices, etc. The utilization of these has, however, been far below desirable levels [IDRC, 1988], mainly because of the imbalance in the supply and demand for information. The generalizations by E. BAARK, resulting from his study of national information systems in India and China, could equally well depict the African situation:

"Most libraries and documentation centres still operate on the notion that when information is available it will be utilized, without sufficient consideration to the intrinsic (sources, delivery modes and channels, time factor, language factor, retrieval efficiency, coverage) and extrinsic limitations (socio-political framework, economic infrastructure, motivations to seek information)... Too much emphasis has been placed on the supply of services and too little on mobilizing demand. New information services have tended to be based on traditional library services. User studies are conducted only occasionally... little effort has been put into positive marketing of services.." [BAARK, 1986: 55-64].

In addition to the shortcoming of supply, there are also demand constraints. Numerous authors have attributed the root causes of underutilized information capacities in developing countries to the fact that reading habits and the impulse to use information are underdeveloped. Rote-learning and an emphasis on factual knowledge is emphasized in most high schools and universities, rather than training in problem solving and using a variety of information sources [GEHRKE, 1985: 183]. Developing the utilization of African information services has proved far more difficult than capacity building.

#### **b) Emerging information needs**

Having discussed some fundamental problems hindering information infrastructure and services, attention should now be given to emerging information needs, the provision of which should draw a similar degree of attention from national information policies.

It is widely agreed that over the last years, social and economic conditions in the continent have deteriorated mainly because of adverse climatic conditions, deteriorating international economic relations and inept economic management by governments. Attempts to face this situation have led to shifts in governmental priorities in response to different challenges [UNECA, 1987].

Both the understanding of African development problems, and implementing solutions, require substantial amounts of information input. But alterations in priorities cause corresponding changes in emphasis in information needs.

In sub-Saharan Africa, agriculture is regarded as a cornerstone of the economy. The present emphasis in development strategies in favour of agriculture and agro-industry, therefore, becomes one of the foundations for the priorities in information activities. Many African countries already possess agricultural statistics units, libraries and documentation centres, etc. There has been much recent talk of early warning food security information and environmental monitoring systems, etc. An effective way to meet the needs arising from multidimensional agricultural or rural development concerns includes farm management, adult education, farm credit, water management, appropriate technology, etc. It also includes the needs of multiple users involved in such processes like planners, extension agents, peasant leaders, district administrative officers, etc. This type of development requires innovative information collection, processing and delivery together with continuous experimentation and updating of methods. Recent technological advances in remote sensing, communication and data processing show unsurpassed potential [ABATE, 1987].

Sectoral development strategies, in areas such as trade, industrialization, transport, and communications, and natural resources exploitation require greater emphasis. Trade and industrial information services are still at an embryonic stage. Most African Governments have not been able to secure an in-depth knowledge of their natural resource base as yet. The information needs and ways of seeking such information on the African private sector are still little understood.

Public administration and economic planning, implementation and monitoring are the weakest links in the chain of government functions. Some of the shortcomings result from the inadequate availability and use of information. In addition, there is the need to follow-up and monitor the structural adjustment and readjustment processes which virtually all sub-Saharan African countries have initiated, particularly in their impact on social and economic life. There are three particular problems in this area: inadequate indicators to explain and monitor the phenomena, the lack of a mechanism for generating information and data, and thirdly, the absence of the information systems to regularly collect, process and deliver those indicators which have been defined and generated.

Information support for development pursuits takes numerous forms. Conventional thinking gave exclusive emphasis to printed, textual sources so that visual outputs with major information components such as cartography or geological surveys, were not considered as information outputs for dissemination and enhanced utilization.

**c) Scope of national information policies  
in and for Africa**

A definition of information as new knowledge disseminated in accordance with the information requirements of the receiver for the fulfilment of tasks is too narrow for the purposes of the present discussion. In this context, the term "development information" is more apt and may be defined as:

"...intelligence or knowledge that contributes to the social, economic, cultural and political well-being of society, irrespective of the form it is encrypted in (text, figures, diagrams, etc.), the medium it is stored in (paper, magnetic, etc.), the mode of dissemination (oral, written or audio-visual, etc.), the social activity that generated it (research, administration, censuses, remote sensing, etc.) or the organizing and disseminating institutions (libraries, documentation centres, archives, statistical offices, mapping agencies, geological surveys, computer centres, media and broadcasting services, telecommunication services)."

The following functions qualify for inclusion in national information activity: research, statistics, media and broadcasting, entertainment, telecommunications, publishing etc. By extension the national information policy regulates activities within and across all these functions.

Customary references to national information policy, however, revolve around:

- i. discreet processes in information activity i.e. generation, collection, distribution, etc.
- ii. the aims of these processes with strong emphasis on published, textual information carried on paper media; and,
- iii. the means of improving labour skills, financing, institutions, coordination, etc.

The literature on national information policy and experience in countries where it has been applied suggests that:

- i. There appears to be consensus that national information policies should address the generation, collection and distribution of information, but the utilization of information as a subject of policy concern is frequently underemphasized and has only received attention relatively recently.
- ii. There is less agreement on whether certain types of information (statistical, public administration, management, etc.) should fall within national information policies or not. The Guidelines on National Information Policy drawn up by UNESCO indicate that:

"the task here is to state what types of information are needed to meet the requirements of various users (scientists, technologists, engineers, managers, administrators, educators, students, consumers, farmers, etc.). This involves assessing the relative users of archives, library transactions, documentation services, information and repackaging facilities, extension services, popularization programmes, referral services, expert services, consultation bureaux, seminars, conferences, etc. The task also includes ascertaining whether information is needed on current research, technical specifications, standards, patents, statistical data, maps, etc." [UNESCO, 1985: 8].

To this broad selection the following could also be added: meteorological data, geological inventories; land use/land resources information; management information and data, together with the activities related to them and the services they generate.

In spite of the above, however, experience indicates that national information policy efforts (draft policies and general thinking as reflected in published and unpublished literature) emphasize documentary information. In Malawi, a national seminar articulated specific goals and issues for a national policy on library and information services. In Botswana the authors of a report on coordinating information services, as the prelude to a prospective policy, argue that:

"a heavy stress on libraries thus implies attaching a preponderant importance to the media of printed information... it means, conversely neglecting or at least de-emphasizing non-print information and operation such as the generation and use of knowledge...the July seminar opted in the short-term, for the narrower definition of information and wanted the proposed council to concentrate on the improvement of library and information services and...at later stage, the council could expand its

operation to include other fields of public knowledge and numerical data...given this approach the proposed council can have only a limited role" [DATTA, 1988].

A confidential draft policy statement of another African country virtually excludes even the mention of information sources and services other than library and documentation centres.

It is not the intention of this paper to examine the propriety of these few policy drafting efforts in concentrating on printed, documentary information. It is possible that practitioners in the documentary information field are much more active in the pursuit of national information policies. Others may not identify their functions to be within the information field, so that they take a very limited role in information policy and related exercises. Possibly the major reason is the preponderance of print-based media in the exchange of information within the modern sector in Africa today.

The issue to be resolved is the breadth and scope of national information policies (NIPs) in Africa: the narrow emphasis on library and documentation, or the broader basis to include statistical information services, rural extension information, news and media information, management information systems etc.). Each country will make its own choice depending on local circumstances. Botswana opted for the narrower definition because of the strategic considerations of concentrating "...in the first place, on the improvement of library services.." (Author's emphasis) [DATTA, 1988].

Theoretically there are apparent advantages and disadvantages in adopting the broader definition of national information policies.

- i. A broad policy applies to a larger body of information leading to a fuller satisfaction of national information needs.
- ii. A large number of often highly competitive and at times conflicting interests will be represented in a broad policy. Thus, particularly the early stages of policy formulation, may become a forum for bureaucratic infighting instead of a mechanism for harmonization and cooperation.
- iii. On the other hand, a broader scope will provide a wider base of support which NIPs may need to overcome bureaucratic inertia.

Another aspect of the scope of NIPs involves the inputs required to bring about an improvement in information services. The guidelines prepared by UNESCO set out four basic inputs as bases for NIP objectives: institutional machinery (organizational framework); labour; physical facilities, and funding. Factors and issues relevant to each of these inputs are thoroughly discussed elsewhere and will not be

considered here. Suffice it to say that the rate of effectiveness of NIPs at providing adequate levels of these inputs is partially determined by the prevailing situation and degree of harmonization with sectors that have some bearing on the NIPs. For instance, the labour elements in information policy are affected by the country's overall higher education policy.

Many public policy areas have an interface with information policy:

- (i) **Education policy:** the provision of post-literacy material; training students to seek out information; school and university library programmes; mid- and higher-level education and information work training; etc.
- (ii) **Science and technology policy:** the application of informatics technology; library, information and documentation services for research purposes; scientific publishing;
- (iii) **Public and state security policy:** confidentiality; personal privacy;
- (iv) **Legal codes:** copyright; legal deposit; printing law;
- (v) **Civil service and employment:** adequate remuneration for information workers; establishment/creation of new information units;
- (vi) **National research policy:** research capability building through the provision of information for research and dissemination of research results;
- (vii) **Fiscal and overall economic policy:** priorities for national development; use of accurate information and data for economic planning; flow of information in public administration; improvements in economic management with better information;
- (viii) **Taxation policy:** import levies for information products (computers; books; etc.);
- (ix) **Communications policy:** information transfer using modern telecommunications; pricing of communication services (telecommunication, postal, etc.);

- (x) **Informatics/computer policy:** the application of informatics to information work; choice of technologies; etc.

To be successful, any NIP must take full account of the implications of other policies which may influence it.

In addition, there are procedures, rules, regulations and legal codes both public and organizational, pertaining to the initiation, formulation and review of public policy within governments, which are of critical importance.

### C. INSTRUMENTS OF NATIONAL INFORMATION POLICY

#### a) Range of Instruments

Instruments of national information policy are those mechanisms that enable the analysis, formulation, implementation, enforcement and/or review of policy. Some instruments are applicable only to certain stages of the policy process whilst a number of others are essential features at all stages.

Instruments commonly available to policy processes are:

- i. legislation with legal and/or budgetary provisions;
- ii. administrative rules, regulations and procedures;
- iii. institutions, including departments, autonomous agencies, committees, professional associations;
- iv. studies, plans, programmes and projects;
- v. comprehensive, documented government white papers describing policy;
- vi. incentive/penalty schemes that encourage or discourage government, private sector or individual actions;
- vii. propaganda and positive media action;
- viii. technical standards, specifications, guidelines, etc.
- ix. formal and informal consultations, including meetings, symposia, consultative groups, etc.

The use of these instruments are, therefore, what constitutes policy. The number that are in effect, the efficiency with which they are applied and their coherence is in essence the measure of policy. The ideal is where all are optimally utilized in a coherent manner.

It appears that most African countries use at least some of these policy instruments for their information activities. Indeed every African country has some legislation, rules, regulations or institutions concerned with information work. There is not, therefore, per se, an absolute lack of information policy, but on the other hand, it is often true to say that African countries do not have effective information policies, because the instruments are not applied consistently, or coherently.

In addition, the instruments used often fall far short of the scope, degree and nature of the changes and actions required to overcome the fundamental problems and developmental challenges that should be addressed. The following brief discussion on some of the issued policy instruments demonstrates this point.

#### **b) Legislation and national budgets**

Prominent amongst legislation applicable to information work are national deposit laws, printing acts and related public laws. The major problem, however, is lack of enforcement, the exclusion of some vital activities (e.g. unpublished material and the absence of clear confidentiality rules). Recent legislative efforts in Zimbabwe, Swaziland, Malawi and Zambia, however, may result in positive amendments and significant progress.

Most countries possess legislation regulating broadcasting and communications, including the use of telephone, telegraph, radio, television, etc. and such legislation is usually relatively much more effective. The agencies responsible for the services usually retain the licensing of private sector use. The legislation, however, does not always permit optimum dissemination of information.

Virtually every African country has enacted legislation on the establishment of numerous types of information institutions, including: statistical offices, libraries, documentation centres, the media, mapping agencies, etc.

In most African countries national legislatures vote on all public expenditures in the annual budget exercise. Budgetary legislation thus has a direct bearing on information work since requests for funding are debated and decided by parliament.

Future information policies must address the issue of appropriate legal instruments and sufficient levels of budgetary provision.

**c) Administrative rules, regulations and procedures**

Administrative rules, regulations and practices are perhaps the most crucial instruments of policy execution. For information purposes, such instruments include: import rules; customs duties; personnel recruitment and placement; disbursement of funds; etc. Under circumstances where formally recognized, coherent policies do not exist, administrative rules become de facto policies.

In Africa the prevailing rules were not developed in consideration of information work and they are often counter-productive. Even when the administrative guidelines were issued specifically to address decision-making and operation in information work, the basis and standards used were not arbitrarily.

Future information policies should, therefore, result in (a) the review and elimination of existing prohibitive regulations and practices; (b) the development of administrative instruments appropriate to overall information policy objectives; (c) and most importantly, the continuous monitoring of the interpretation and application of such rules and regulations.

**d) Institutions**

Generally in Africa, institutions have been the chosen instruments of policy formulation, implementation and evaluation. The existence or creation of autonomous or semi-autonomous institutions in the development field is an indication of the degree of government priority as for example, those institutions responsible for forestry, tourism, shelter, desertification and population. Often the institutions as described in the act of parliament give a good picture of the size and scope of the job. At times governments have envisaged the creation of an institution provided with a sufficient policy framework, so that as a result, institutional provisions appear to be interchangeable with policies. Occasionally, newly created institutions are charged with policy development.

Whether or not the large number of newly created African institutions have been worth the resources allocated to them is debatable. There is, however, general agreement that they have been indispensable elements of the development process. The weaknesses relate to overlap in mandates and lack of coordination as well as to shortages in qualified personnel, equipment, etc.

In Africa, as elsewhere, the creation of institutions responsible for coordinating the wide array of national information activities has not taken place. Rather, more common has been: (a) the setting up of national institutions responsible for collecting, processing and disseminating particular types of information (e.g. geological surveys, population and agricultural censuses, etc.); (b) the opening of sectoral and subsectoral library, documentation and other information

units within government departments, and (c) re-definition of the mandates of existing institutions such as national libraries, archives, statistical offices etc.

Many African countries are still considering the question of creating a new national information institution. Such an institution has often been confused with a national information and documentation system or network. The argument rages around various pros and cons. The creation of a new institutions could give fresh impetus to the whole information effort; they could also establish badly needed linkages; clarify ambiguities as regards responsibility and accountability and provide promotional support, a revitalized image and a break with restrictive practices. On the other hand, a new structure could lead to duplication of effort, increased bureaucratic infighting and additional expenses involving the possible waste of resources.

In this debate, African information professionals have consistently opposed the creation of new institutions in favour of strengthening existing information infrastructure and a more even distribution of available resources to existing centres. Recommendations for national information and documentation centres in Malawi and Zambia are awaiting decisions by the respective governments.

African professionals attach great value to cooperation and coordination in information work. What is less clear, however, is whether this is to be achieved through purely voluntary means or enforced through government directives, with the result that information units are suspicious of the intentions of national coordinating bodies. Clearly information institutions do not want to lose their autonomy either to new structures or to rival institutions that may be strengthened at their expense. A better solution would seem to be the creation of committees and councils charged with coordination and harmonization functions. So far, however, their focus is library and documentation services.

Over the past few years, library associations have become vital instruments of policy and the flag-bearers of national information policies in the narrower sense of the phrase. They have enlisted the unreserved support of their membership. Whether they will command a similar level of government attention, however, will be demonstrated by the reaction to pending draft recommendations and policies.

#### **e) Plans, programs and projects**

The ultimate test of a policy process is the extent to which it has been translated into plans, programmes and projects.

National information plans as pre-requisites for improving information infrastructures and services was an idea accepted by the information community several decades ago. The inclusion of information plans in national development plans has been recommended repeatedly. A distinction should be made, however, between the annual plan dealing squarely with the yearly budget and the indicative perspective medium- and long-term plans covering three, five or ten years. Within the annual plan an information component may be a distinct chapter or may be contained within in the sectoral plans.

The incorporation of information elements into sectoral plans is already happening. Annual national plan and budget documents cite objectives, expenditures, activities, etc. of national information institutions (statistical offices, national libraries, archives, etc.). The problem in this regard is the poor basis on which the objectives and targets are set and the stagnant level of resources made available to information pursuits. At government, departmental and ministerial levels, however, information services often do not have stated objectives or separate budgetary allocations.

It is clear that it is not feasible for governments to totally distinguish information plans in national plan documents, since information is and should be, part and parcel of each sectoral plan. On the other hand, there is a need to devise mechanisms that will allow the comprehensive planning and monitoring of information activities throughout the sectors, in order to achieve an aggregate picture. An overall information plan is also a minimum requirement to plan and monitor development in basic information infrastructure such as labour, technologies, etc. The feasibility of integrating information plans in indicative national development plans is demonstrated in Algeria [Government of Algeria, 1985]. The relevant chapter in the Algerian development plan addresses information in a broader sense and includes management, statistical and documentary information.

The implementation of a national information plan, therefore, involves both sectoral and national-level information activities. Execution will take the form of regular activities, broad medium- and long-term programmes and short- to medium-term projects. Projects are the most basic level of planning and relate in detail to objectives, outputs, inputs and budgetary implications within a time-frame.

National information policies, therefore, should guarantee that :

- (a) the studies necessary to develop the plans are commissioned;
- (b) national information plans are devised; and that they appear as separate chapters in indicative plans;
- (c) plans in turn are developed into projects and programmes;
- (d) responsibility for these is assigned;
- (e) guidelines on monitoring and evaluation are laid down; and
- (f) a clear indication of the probable degree and nature of government support is provided.

**f) Government White Paper**

The forms taken by information policies are themselves instruments of policy since governments can package them in a number of ways, depending on comprehensiveness, length, the normal policy issuing methods of the government in question; etc. Policy could be declared by presidential decree, cabinet memorandum, party position paper, parliamentary statement or white paper.

A white paper is not only a statement but also an instrument of policy which serves as a reference during implementation later for policy review.

**D. INFORMATION POLICY ANALYSIS**

The introduction to this paper cited the steps involved in the policy process: goal setting, problem identification, development, implementation and review. Given the small number of information policy efforts in African countries, none of which so far have been ratified by governments, present discussions can only focus on the first three of these issues.

**a) Information policy goals**

From the examples of Malawi and the other still confidential national draft document, the following policy goals emerge:

- i. to encourage the generation, collection and utilization of published and unpublished materials;
- ii. to ensure support for infrastructure, facilities, technologies and manpower;
- iii. to encourage access to and utilization of information;
- iv. the implementation of a national information and documentation system.

**b) Information problem identification**

Problem identification in the two cases already cited was similar. The needs and availabilities of sectoral library and documentation services were possessed, and these served as the points of departure for policy development. Since the coverage and quality of the data collected uneven, however, it is doubtful whether problem identification was based on accurate factual information.

The ideal situation would have been the preparation of detailed surveys on national information needs, infrastructure and services, but the professionals concerned were ignorant of the basic factual requirements. There have been numerous recommendations for detailed quantitative surveys and analysis to be carried out. The lack of the considerable time and resources required for such efforts has doubtless proved a major constraint.

The next stage of the policy exercise - translating goals and objectives into feasible plans, programmes and projects - should induce all those concerned to assemble the data and carry out the required analysis. Too often, however, planning in Africa is undertaken without the necessary basic facts and this may also apply to information planning.

The policy development exercise involves translating the broad objectives into more specific, problem-oriented statements with an indication of the nature of actions to be taken and the instruments to be utilized. An examination of the few available information policy drafting exercises reveals a major weakness *vis à vis* the scope of the policies and the problems to which they are addressed. Although the objectives are sufficiently broad to encompass all major information functions (information in the broader sense of the word) the stipulated elements, instruments and strategies of policy implementation deal with library and documentation services only. Thus, the draft policies in essence are partly national library and documentation policies.

This does not mean that the draft policy documents are irrelevant. At the moment they constitute the most important milestones in putting library and documentation infrastructure services on a par with information needs and development challenges.

Setting a national policy process in motion is easier if responsibility falls purely within one particular sector (e.g. health). If the issues concern several government agencies, the interdepartmental responsibilities have to be clearly delineated. There are cases, however, where the issues are so nebulous that such definition is very difficult. Leading governments to creating committees, councils and sometimes, new agencies. The policy process, thus, takes its form and direction from the particular nature of the problem and the manner in which government decides to react to it.

Perhaps it is the lack of clear organizational responsibility that leads to difficulties in information policy formulation. If so, then the countries that have first created an institutional mechanism may have the right approach.

Once the impetus for a national information policy formulation exercise exists, then there are several essential steps: (a) maintaining the motivation; (b) establishing a consensus between the concerned parties; and, (c) the designation of the key personnel to produce the policy document. In those few African countries which have undertaken information policy efforts, the library community, through the library association, has not only been instrumental, but also largely responsible for all three stages. As far as possible, efforts have been made to involve other professional groups. The results have, however, been mixed. In Botswana, the group producing the report on coordinating information services was composed of librarians, academicians, researchers, data processing experts and policy-makers. Although its final recommendations were restricted to library and documentation services, it considered information policy from a fairly broad perspective. In Zambia, this was not the case, for drafting the policy document was entrusted to senior members of the library community. The creation of the government library and documentation service by act of parliament in Zimbabwe, although not strictly a policy effort, had major policy characteristics. It was developed under the leadership of the library association, but with the participation of other professional groups. In Malawi, a national multi-disciplinary seminar recommended policy goals, specific policy elements and the institutional and operational mechanisms for possible implementation [MWIYERIWA, 1987]. Although the recommendations refer to library and documentation services, it is by far the most exhaustive policy recommendation made to government.

## E. CONCLUSION

In conclusion, it is clear that all the policy formulation efforts discussed above have been influenced significantly by the UNESCO guidelines by advisory services to member-States and by the five meetings co-sponsored with the respective governments and library associations. Since the information related problems and potentials in the countries concerned have much in common, the general approaches to and results of information policy efforts so far have been very similar.

F.

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