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Difficulties faced by librarians in Africa – a comparative analysis.

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Abstract:

Governments play an important role in the provision of access to information in countries across the world. The most important indicator of how governments value information is reflected by the relevant national policies and laws of a country. This paper compares the national information (or information-related) policies of various countries in the West, East, Latin America and Africa. A comparative analysis is conducted and the main issues that are addressed in these policies, are identified and listed. Trends are observed by comparing the issues addressed in the national information policies of the different regions and continents.

This paper uses the results of the comparison to show that the policies in the African countries are generally centered on the development of information technology. The national information policies in other regions reveal other trends, such as in some South American countries which pay more attention to the role of the library, the promotion of books, reading and information content.

The paper concludes that librarians in many African countries are likely to be faced with numerous difficulties in the delivering of information to the community as the governments' policies seem to favour the technology and neglect the information content and its delivery. This approach is making the task of the librarians more difficult as government budgets decrease and opportunities in this sector continue to dwindle. Governments should pay more attention to the value of information content.

1.   Introduction

The subject of this paper deals with the difficulties faced by librarians in Africa. I approach the subject by taking a global and comparative perspective of the main problems in the fifty-two countries and do not attempt to identify the problems of any specific African country.

1.1   Focus
Librarians and all information specialists who are involved in library and information services share one common aim: they focus their efforts on collecting and making accessible information for use to the communities they serve. The focus of this paper is on the difficulties faced by librarians in Africa in delivering information to the communities they serve.

2.   Libraries, access to information and government policies
In the countries where governments support and value information as a resource the library and information sector is more likely to be better structured, regulated and co-ordinated than those that do not. A structured information sector is more functional and this makes it easier for librarians and information specialists to do their work, work together and provide the communities with the required information.

A government can address a country's information sector and information-related issues with a national information policy. Stone explains a national information policy as a requirement for the provision of information services within a society:

> "…For the information professionals and specialists who have been involved in the processes of accessing, managing, disseminating, and examining the use of information by the various target groups within society, the requirement for an effective National Information Policy is an accepted given. It is seen as an imperative to ensure better co-ordination and co-operation between the information systems and services… " (Stone, 1996: 1).

A government passes legislation or formulates a public policy on issues and problems it values. In the instances where a government uses a national information policy one can accept that the government values the information addressed in its national information policy. In this paper national information policy is defined as:

> "…a set of interrelated principles, laws, guidelines, rules, regulations, and procedures, guiding the oversight and management of the information life-cycle: the production, collection, distribution / dissemination, retrieval, and retirement of information" (Duran, 1991: 153).

All areas included in the above definition are relevant to the role of the librarian in Africa and other parts of the world.
Within the above definition six areas can be listed as part of an information policy and include the following relevant areas which are also of concern to the library sector:
- how information can best be described, analyzed, integrated, and organized for use;
- how certain policies, set at all levels of government, affect access to information;
- the effect of technology-based information systems on scholarship, learning, government, and the public well-being;
- the economics of information;
- the effect of organizational structure on information diffusion; and,

- the constraints effecting change" (Duran, 1991: 153).

The subject of this paper, "Difficulties faced by librarians in Africa", is approached by first looking at the national information policies in the different regions of the world and the issues addressed in these policies. The policies of the different regions are compared with specific reference to Africa as relevant issues faced by librarians involved in the library and information sector in this region of the world.

The more specific current difficulties faced by librarians in Africa are then listed and how these could be addressed in a national information policy explained.

3.   National information policies and issues

Many countries have national information policies or national information technology strategies. This is indicated in a survey conducted by Niegaard (Niegaard, 1999). The survey was conducted in 1999 and included 135 countries. Of the 55 countries that responded to the questionnaire sent to these countries, 61.8% indicated that they had national information policies, 18.1% had national information technology strategies and 29.2% had some form of information policy. A number of countries indicated that they were in the process of preparing national information policies.
Further research has been conducted on the national information policies in the different regions of the world in a more recent study by the author. In this study the national information policies in a number of countries in Europe, North America, Latin America, the East and Africa were analyzed in order to establish what issues are typically addressed in their national information policies. The national information policies of the following countries were compared in this research:

Table 1. Countries with some form of national information policy in the West and the East

Western countries	Eastern countries
Austria	Australia
Canada	China
Denmark	Fiji
European Union	India
Federal Republic of Germany	Indonesia
France	Japan
Netherlands	Hong Kong
Portugal	Malaysia
Spain	New Zealand
Sweden	Papua New Guinea
United Kingdom	Thailand
United States of America	U.S.S.R.

Table 2. Countries in Latin America covered with regard to national information policies

Mexico	Peru
Argentina	Chile
Columbia	

Table 3. Regions and countries covered in Africa with regard to national information policies.

North Africa	East Africa
Algeria	Ethiopia
Egypt	Kenya
	Uganda
West Africa	Southern Africa
Nigeria	Botswana
Ghana	South Africa
	Zimbabwe

The findings of this research are used in this paper as background to the difficulties faced by librarians in Africa in delivering information to the community in the new millennium.
The main issues addressed in national information policies are not discussed in this paper but compared briefly in order to give perspective on the information-related issues relevant to Africa and other world regions. This perspective is used later on in this paper to support the analysis of the current difficulties face by librarians in Africa.

The main issues addressed in the national information policies include the following:
(i)   *The North-South divide / information dependence / its impact on the economy*
The North-South divide, information dependence and the impact of information on the economies of countries are issues which influence the economies of many countries.

The bulk of the world's information is generated in the developed or northern countries. This imbalance in information production results in a dependence on information sourced from the developed countries of the Northern hemisphere by the less developed countries, mainly in the southern part of the world. This phenomenon is often referred to as the North-South divide.
The issue of information dependence is also an issue in the developed countries. This is reflected in the national information policies in some of the First World countries.

The countries in South America are particularly aware of the flow of information from the North and tend to bring in legislation to protect their own informatic industries and national cultures. Several South American countries encourage reading, book production and the role of libraries in their national information policies.

There appears to be some awareness of this problem in countries in Africa but no legislation or measures seem to be in place in the countries in Sub-Saharan Africa. Many of the countries in this region suffer from a shortage of books and available information sources and a general poverty of information. This can be seen in the number of book and research articles published annually in Sub-Saharan Africa. The number is fractional in comparison to the rest of the world. In 1991 this region produced only 1.2 per cent of the world's book titles, and in 1992 funding for scientists and engineers in this region amounted to a mere 0.7 per cent of the world total. The imbalance in the production and flow of information is perpetuating a dependence on the countries in the developing world (Lor, 1996: 1-3).

The Arabic countries in Africa, such as Algeria and Egypt, are trying to protect their cultures from the Northern influences. This is achieved by emphasizing the importance of national education and their high literacy rate which in turn allows for the communication of information on national issues in these countries in the daily government and independent press.

(ii)   *The issues of information content, industrial competitiveness and innovation*
The development of the Internet and the flow of information in the information age are influencing factors in the flow of information. This is heightening the need for countries to address the issue of information content. Economies in the information age are more knowledge-driven than before and with the mass of information that is in circulation, information needs to be managed optimally. Nowadays information needs to be managed so that, for instance, duplication can be avoided. Information is not necessarily easy to obtain and often more difficult to verify. The distribution of information sources is more fragmented as it may be found in more possible places, in electronic form or hard copy. Industrial competitiveness and innovation are strongly dependent on the availability of information for research and development. These factors are considered important in countries where their national information policies address aspects concerning information content for research and development. An analysis of the national information policies indicated that highly industrialized countries such as Japan, the United States of America, the United Kingdom, France and the European Union address the need for information for research and development and innovation. Amongst the developing world Algeria was found to stress the need to co-operate on issues concerning national information while the countries in South America stress the role of libraries in the provision of information in general.

(iii)   *Literacy*
Literacy lies at the heart of the ability to utilize available information. This issue was found to be addressed in the national information policies of five developing countries and one developed country.

(iv)   *Computer literacy*
Computer literacy is not addressed in many national information policies. France and Egypt were found to have national policies on this type of literacy.

(v)   *Education and skills training*
Columbia and New Zealand include education and skills training as important aspects within their national information policies. The United Kingdom is another country which intends to include education within its national information policy and to "improve educational effectiveness" (Library Information Commission Policy Report, 1999: 2).

(vi)   *Information society development*
A number of countries were found to address the issue of the development of an information society in their national information policies. The European Union, the United Kingdom, Thailand and Senegal are some of the countries which include this issue within their national information policies.

(vii)   *Telecommunication issues*
Telecommunication issues are included in the national information policies of five of the developing and six of the developed countries in the findings of the author's recent research. The telecommunications industry is probably the largest component of the information economy

(Malley, 1990: 92). Three aspects are important within the telecommunications industry, namely the connectivity, content and competencies. The telecommunications industry has been systematically deregulated and privatized. Data protection regulation was passed in Europe in 1984 to protect individuals from the dangers posed by the automatic processing of personal data. The matter is addressed in the European Union Data Protection Act (1984). Regulatory standards need to be in place to ensure inter-connectivity between different networks (Library Information Commission. Policy Report, 1999:2). Malley (1990: 92) suggests that a national information policy could benefit the formulation of legislation for the telecommunications industry as the policy could then act as a working model for the regulation of the telecommunication industry.

The telecommunication infrastructure is considered to be of such primary importance in the United States of America, that the national information policy is placed under the generic title "National Information Infrastructure" (NII) (IM Europe Legal Issues, 1999: 4). The NII is guided by the Information Infrastructure Task Force, an Information Infrastructure Standards Panel and an Advisory Council.

(viii)   *Copyright*
 Copyright is addressed in the national information policies in countries such as the United States of America, Mexico and Chile. Most countries are signatories to the International Convention on Copyright, but the issue of copyright is of such importance that it is stressed in the national information policies of the countries listed here.

(ix)   *Industrial property rights*
Canada pays particular attention to the protection of industrial property rights in its national information policies.

(x)   *Government communication*
Government communication is considered of particular importance in the policies of countries such as the United States of America, Canada, the United Kingdom, Algeria and Egypt. Government communication in the United States of America and Canada is facilitated to a large extent by television, while the daily government-owned newspaper is used to communicate with the public in Algeria and Egypt.

(xi)   *Access to information*
Access to information is an issue which is generally addressed in national information policies. Access to information may be facilitated or restricted by a government. In many countries the right to information is a constitutional right. Abuses of information by infringing on the privacy of individuals, and issues such as decency are other issues that call for restrictive legislation. These issues are also relevant to the information industry, such as the newspaper press (Malley, 1990: 93).

(xii)   *Censorship*
The United States of America, Canada and Nigeria address the issue of censorship in their national information policies. Censorship is particularly important with regard to the information which is made available on the Internet. The right to have access to information and the issue of censorship are topical issues in the United States of America. In Nigeria the issue of censorship appears to be of a political nature.

(xiii)   *Information ownership*
The ownership of information is addressed in the national information policies of countries such as the United States of America, Canada and Chile. This issue is strongly linked to the issue of copyright protection.

(xiv)   *Freedom of speech*
The issue of freedom of speech is considered to be a human right and is a constitutional right in many countries. Canada, the United States of America, Namibia and Ghana are countries where this issue is addressed in their national (information) policies.

(xv)   *Privacy*
The issue of privacy is addressed as a national policy in Canada.

(xvi)   *Intellectual freedom*
Intellectual freedom is also addressed in a national policy in Canada.

(xv)   *Other issues*
Other issues such as lifelong learning, are also addressed in the national information policies in a number of countries. These issues are not addressed as frequently as the ones above and are not considered in detail here.

(xvi)   *Libraries*
Libraries play a significant role in the information sector in many countries. The national information policies in most countries include legislation on their national and / or public library services. This legislation generally concerns the role of the national library in the management of the record of the country's national book collection and other information resources.
The above issues are the main issues addressed in the national information policies that were compared. In some countries only one or two of the issues are addressed, while more issues are addressed in others.

Table 4 presents a summary of the main issues addressed in the national information policies with examples of countries where these issues are addressed nationally.

Table 4: List of issues typically addressed in national information policies in various countries and examples of applicable countries.

Symbol	Issue addressed in National Information Policy (NIP)	Example of county where the issue is addressed in NIP
A	North-South divide / information dependence / impact on economy	Algeria; Canada; China; Egypt; France; France; Germany; Netherlands; Papua New Guinea; Portugal; Sweden; Thailand; Zambia;
B	Information content, industrial competitiveness & innovation	USA; Australia; Austria; China; Indonesia; Japan; Netherlands; Portugal; Spain; Sweden; Thailand; United Kingdom;
C	Literacy	Algeria; China; Columbia; New Zealand; Papua New Guinea;

		Thailand; United Kingdom;
D	Computer literacy	Egypt; France
E	Education / skills training	
F	Information society development	China; Denmark; France; Namibia; Netherlands; Senegal; Sweden; Thailand; United Kingdom;
G	Telecommunication issues	Denmark; Egypt; Ethiopia; France; Mozambique; Netherlands; Portugal; Senegal; Sweden; Uganda; United Kingdom;
H	Copyright	Chile; Mexico; Portugal; USA
I	Industrial property rights	Canada;
J	Government communication	Algeria; Canada; Egypt; USA;
K	Access to information	Australia; Canada; China; Germany; Columbia; India; Indonesia; Japan; Malaysia; Mexico; Namibia; Netherlands; Nigeria; Portugal; Sweden; Thailand; United Kingdom; Zambia; USA
L	Censorship	Nigeria; USA
M	Information ownership	Canada; Chile; USA
N	Freedom of speech	Canada; Ghana; Namibia; USA
O	Privacy	
P	Intellectual freedom	United Kingdom
Q	Other (such as libraries, reading, books, culture,	Argentina; Australia; Columbia; Denmark; Germany; Indonesia; Mexico; Peru; Portugal; Senegal; United Kingdom; Zambia

The survey of the national information policies and global trends indicates the type of issues addressed by governments in countries in the different regions of the world, In view of this global perspective the next section of this paper considers the current situation in Africa and the difficulties faced by librarians in delivering information to the community.

4.   A brief review of the development of libraries in Africa

The library in Alexandria in Egypt, North Africa, believed to have been founded by Ptolemy Soter about 283 BC (Donaldson, 1981: 13) was probably the largest collection of written material brought together before the invention of the printing press, with a collection of about 700,000 volumes. Other early examples of libraries in Africa are the so-called temple libraries in Egypt and other private collections.

In more recent times, during the period of colonial rule, libraries were established in Africa. Prior to this period the countries south of the Sahara were mainly pre-literate and did not have any libraries. Rosenberg explains that library development started in earnest in the period after the Second World War (1999: 15). During the period under colonial rule there was a desperate need for scientific information to assist in research and development, and governments started to set up national libraries and libraries attached to universities and institutions of learning. Public libraries were founded and were funded by the governments.

4.1　Current trends and problems faced by librarians in Africa

However, the libraries that were founded during the colonial period differ from the post-colonial libraries and Rosenberg describes the circumstances surrounding libraries in 1975 and in post-colonial times in1995. The development is illustrated in Table 5 with the current period summed up on the right-hand side of the table.

Table 5. Conditions of libraries in many African countries during the colonial and the post-colonial periods (based on Rosenberg, 1999: 13, 14)

1975 – Flourishing network of libraries in many African countries	1995/96 Libraries in decline or non-existent in many African countries
• libraries established and controlled by governments	• libraries no longer financed by parent bodies or organizations, but financed by donor agencies
• libraries dependent on government funding	• library budgets are mainly spent on staff costs, such as salaries
• libraries are developed according to Western models of libraries and librarianship	• limited new stock is acquired per student
• library development is done according to the pressures of international trends and foreign aid	• preference is given to the purchase of textbooks rather than research material
	• research activities receive little or no support
	• in many countries school libraries are no longer active
	• the ratio of books donated versus the number of books purchased continues to drop

Rosenberg (1999: 15) explains that from the mid-1970s to the end of the 1980s there have been many initiatives towards the development of national information policies in Africa. She states that "Fifteen years later, after expert missions, regional and country seminars, workshops, reports and draft plans and policies, not one national information policy is in existence in Africa." Rosenberg found that by 1999 no national information policies had been implemented in any of the African countries.

According to Mchombu Africa has "not yet accepted information as an essential resource for social and economic development". When looking at Africa we are aware that the continent is the most underdeveloped in the world and the majority of its people do not have access to development-oriented information (Mchombu, 1999: 234).

Oladele (2001: 4) describes the infrastructure for development information in most African countries as "weak". He states that "… if the countries had given adequate attention to the development of their infrastructure and institutions within the NIP framework, the information scene of the continent could have been a lot better". Research reveals many diverse approaches to policy formulation and implementation in the African countries with regard to the addressing

of national information issues, information communication, national information communication, and national information communication infrastructures. Despite the many efforts by foreign countries and organizations, the policy-making decisions of the African countries reveal their own approaches to national communication policy.

It appears as if many African governments consider the services provided by librarians in their countries to be of less value than the services provided by the other professions.
Limited information resources are available due to limitations in funding. Many African countries also lack the capacity to handle their indigenous information (Lor, 1996: 1-3). This makes it difficult for librarians to obtain relevant information material for library users.

The decline in libraries and library services in Africa in recent times is ascribed to some of the following:

(i)   Many governments in post-colonial Africa do not support the development of libraries in post-colonial Africa as they see information as a source of power, rather than a tool for development (Mchombo, 1999: 19).

(ii)   National library services and other library-related matters are not considered to be of primary importance for development by many of the governments in Africa (Rosenberg, 1999: 19).

(iii)   Libraries may not be essential to the communication of information in Africa or should be developed differently from the Western model of libraries (Rosenberg, 1999: 20).

(iv)
The above reasons indicate that information is not valued as a national resource in many of the African countries. However, this appears to be only partially true, as the development of information connectivity and technology are favoured in many African countries.

4.2   Information technology in Africa

A number of influences can be observed with regard to information technology development in Africa. These influences form a strong contrast in comparison to the decline which can be observed in the library sector in many African countries.

Various international organizations are involved in the development of information and communication technology in Africa.

Since 1978 libraries in developing countries have been encouraged to use information and communication technology as a means to access information (Rosenberg, 1999: 16). However, the cost of maintaining the software and hardware of the information and communication technology is too high for many libraries, and the libraries cannot be sustained.

Currently several international organizations are involved and are influencing the development of information and communication technology in many African countries.
The literature indicates that Africa's information technology is being influenced in a substantial way by international organisations, corporations with international interests and NGOs (National Governmental Organisations) (Nassimbeni, 1999: 5). Examples of international organisations and their initiatives in Africa are listed below (Table 6). The list is not complete, but serves to

demonstrate the extent of the involvement of these organisations in the process which is influencing information communication and the communication infrastructure in Africa. Table 6 below lists the communication centres in Africa and the organisations which are involved in telecommunication development. The different agencies and initiatives are described briefly below.

(i)   *The International Telecommunications Union (ITU)*
The ITU is one of the main leaders in the area of telecentre development. It is setting up Multi-purpose Community Telecentres (MCTs) in Africa, Asia and Latin America. It is involved in projects in Benin, Bhutan, Honduras, India, Mali, Mozambique, Suriname, Tanzania, Uganda, and Vietnam (Colle & Roman. 1999: 5).

(ii)   *Acacia Initiative Programme under the International Development Research Centre*
         (IDRC)
The Acacia Initiative Programme is an international effort led by the IDRC to empower sub-Saharan African communities with the ability to apply information and communication technologies for their own social and economic development. The IDRC intends to invest 60 million Canadian dollars over a period of five years in this project. The development of information and communication technologies (ICTs) needs to be sustainable at the community level and for this reason attention is also given to larger policy development (Colle & Roman, 1999: 9). The initial countries included Mozambique, Senegal, South Africa and Uganda. The main areas of focus for the initial investigation included: policy, human resources, technology and infrastructure, and content development (Uganda: NICI Policy, 1999: 2).
Initially some community telecentres were to be established to provide basic communication services such as "... voice, fax, e-mail, Internet access, etc.; public and quasi-public sector services such as telemedicine, distance education, municipal governance services, and private sector services like news distribution, telecommuting services, training, information on markets, crops and weather conditions, and more" (Colle & Roman, 1999: 7).

(iii)   *The Leland Initiative (or The Global Information Infrastructure Gateway Project) of the*
         United States Agency for International Development (USAID)
The Leland Initiative, under the auspices of the Centre for International Development and Conflict Management, has been involved in research on national information case studies, institutional development cases, and in expanding and refining the Conflict Information Technology Model with emphasis on the Internet (Leland Initiative 1998-1999 Year Two).
The Leland Initiative is a five-year plan. It aims to "bring the benefits of the global information revolution to people in Africa". Its main focus is on extending Internet connectivity to 20 or more African nations. The project works on the supply side by creating the Internet capacity and on the demand side by promoting an awareness of uses for the Internet. The initiative assists with the building of the infrastructure and encourages the development of Internet pilot projects and other activities that help increase the awareness and use of the Internet (Colle & Roman, 1999: 11, 12).

(iv)   *The LearnLink Project of the United States Agency for International Development*
         (USAID)
LearnLink is managed by the Academy for Educational Development, a not-for-profit NGO based in Washington, D.C. LearnLink uses technologies to link individuals, groups and organisations to build the capacity of people to access the resources they need to meed their learning needs. LearnLink is establishing Community Learning Centres (CLCs) in three countries: Ghana, Paraguay, and Benin (Colle & Roman. 1999: 13).

(v)   *Economic Commission for Africa*
In June 1999 a report by the Sub-Committee on Information and Communication Technologies was presented at a meeting of the Economic Commission for Africa (ECA) in Addis Ababa, Ethiopia, entitled "*Developing national information and communications infrastructure (NICI) policies, plans and strategies*". The document recognised the challenges that the African information infrastructure faces to be the following:

- expansion of public access, especially to rural areas;
- improving applications of new technologies; and
- content development (Economic Commission for Africa. 1999: 1).

(vi)   *Association for Progressive Communications (APC)*
The APC is an association of 22 non-profit computer networks around the world. It is working on community networking projects in Latin America, and is also involved in the linking of thousands of NGOs world wide to exchange development-related information. SangoNet, in South Africa, is an example of an APC initiative. This network provides low cost Internet access, training and other resources to hundreds of development organisations and NGOs in the Southern African region (Colle & Roman, 1999: 14,15).

(vii)   *Bellanet*
Bellanet is a consortium which includes the IDRC, UNDP, SIDA, CIDA, DGIS, Rockefeller Foundation, and the MacArthur Foundation. It aims to encourage collaboration and the use of information and communication technologies to create an enabling environment for such collaboration (Colle & Roman. 1999: 15).

(viii)   *PICTA (Partnership for ICTs in Africa)*
PICTA is a forum for the collaboration of donor and existing agencies acting within the framework of Africa's Information Society Initiative (AISI). The African Internet Forum (UNDP. USAID, Carnegie Corporation, the World Bank, and others) and the African Networking Initiative (IDRC, ITU, ECA, UNESCO, and others) were two of the major groups which were merged to form PICTA. Their focus is on ICT development in Africa (Colle & Roman. 1999: 15).

(ix)   *UNESCO*
UNESCO is involved in the development of communication centres in Mozambique. It is working together with the IDRC and ITU and supplies funding and / or workshops at these centres (Colle & Roman, 1999: 16).

(x)   *The World Bank*
According to Colle & Roman the World Bank is involved with rural communications activities in more than 15 countries. Their main focus is on policy, revenue and tariff arrangements and infrastructure development for rural telecommunications. Within the policy work, the Bank wishes to ensure access to communications by the poorest, most of whom live in the rural areas. The Bank's donor fund, InfoDev, has supported major distance education facilities in Ethiopia, Kenya, Uganda, Tanzania, Zimbabwe and Ghana. InfoDev is designed to "… provide developing nations' governments with policy advice and 'best practices' information on economic development potential of communications and information systems. In this context the World Bank operates as a knowledge broker for governments" (Colle & Roman, 1999: 16).

(xi)   *CIDA (Canadian International Development Agency)*
The Agency is involved in providing support for Internet connectivity and content creation
capacity building in five African countries (Colle & Roman, 1999:16).

4.3   Telecentres or communication centres in Africa and connectivity

Telecentres are technology-based community centres which provide telecommuncations and
Internet connectivity and access for under-served urban, rural and remote populations (Colle &
Roman, 1999: 4). Table 6 lists the countries in Africa where communication centres are being
developed by various agencies. Table 7 lists the Internet connectivity in Africa. From all these
initiatives there seems to be a desire within the developed nations to install telecommunication
facilities in the developing countries to ensure connectivity.

Table 6. Communication centres in Africa listing the country, agency involved and nature of the
development (Colle & Roman, 1999: 18-30).

Country	Agency	Activity	Notes
Benin	ITU USAID/LearnLink	MCT CLC	Begins 1999
Botswana	USAID/Leland	Connectivity	
Côte d'Ivoire	USAID/Leland	Connectivity	
Eritrea	USAID/Leland	Connectivity	
Ethiopia	USAID/Leland	Connectivity	
Mozambique	ITU IDRC/ACACIA USAID/Leland	MCT Telecentres Connectivity	Under way
Ghana	USAID/Leland VITA USAID/LearnLink	Connectivity Telecentres CLC	Operating in 3/99
Guinea-Bissau	USAID/Leland	Connectivity	
Guinea-Conakry	USAID/Leland	Connectivity	
Kenya	USAID/Leland	Connectivity	
Mali	ITU	MCT	Begins 1999
Madagascar	USAID/Leland	Connectivity	
Malawi	USAID/Leland	Connectivity	
Namibia	USAID/Leland	Connectivity	
Rwanda	USAID/Leland	Connectivity	
Senegal	ITU IDRC/ACACIA	MTC Connectivity Telecentres	Under discussion
South Africa		Telecentres (2000-)	Franchise model established by telecoms

	Universal Service Agency USAID/Leland IDRC/ACACIA	Connectivity Telecenters	
Tanzania	ITU USAID/Leland	MCT Connectivity	Begins 1999
Uganda	ITU USAID/Leland IDRC/ACACIA	MCT Connectivity ACACIA	Under way
Zimbabwe	USAID/Leland	Connectivity	

Communication in Africa has also been influenced by the development of telecentres or information and telecommunication centres. These telecommunication centres , or tele-centres, are of particular importance in areas in the Third World where not every home has a telephone. The Multipurpose Community Telecentres (MCTs) are created in collaboration with agencies such as the World Health Organisation (WHO); FAU; IDRC; CIDA; UNESCO; UNDP; SIDA; the International Red Cross/Crescent; and DANIDA (Colle & Roman, 1999: 5).

The United States Agency for International Development (USAID) is involved with two major efforts towards the development of telecentres. These efforts are The Global Information Infrastructure Gateway Project (the Leland Initiative) and the LearnLink project. LearnLink is specifically involved in Ghana, Paraguay and Benin (Colle & Roman. 1999: 11).

The Universal Service Agency (USA) in South Africa aims to foster universal access to telecommunications throughout South Africa (Colle & Roman, 1999: 14).

4.4   International organisations and Internet access

A survey of 54 African countries indicated that 51 countries have Internet access in the capital cities (Paul, 2000: 42) (Table 7). The countries with no local Internet access are Congo (Brazzaville), Eritrea and Somalia.

According to the survey there was an average of one Internet user per 5,000 people on the continent of Africa. Globally there is one Internet user per 40 people, and in Europe and North America, one per six people.

Africa has a relatively poor telecommunications infrastructure, and in Africa there are marked differences between major urban areas. Between 70 to 80 % of the population in Africa lives in the rural areas. Paul (2000: 42) states that countries in Africa need to take advantage of the information revolution. If they fail to do this they would "… become even more marginalised and economically stagnant".

The survey report reveals the following about Africa's Internet connectivity (Paul, 2000: 42):

Table 7. Africa's Internet connectivity (Paul, 2000: 42)

Countries with no local Internet access

Congo-Brazzaville (Access expected shortly)	Eritrea (Access expected shortly)	Somalia

Countries with only one public access Internet Service Provider (ISP)

Algeria	Burkina Faso	Gambia
Central African Republic	Ethiopia	Liberia
Malawi	Mauritius	Niger
Seychelles		

Countries with local ISPs or Post Office Protocols (POP) in some secondary towns

Angola	Benin	Botswana
Egypt	Ghana	Kenya
Morocco	Namibia	Nigeria
Tanzania	Tunisia	South Africa
Zimbabwe	Zambia	

Countries with local dial-up Internet access nationwide

Burkina Faso	Ethiopia	Gabon
Malawi	Mali	Mauritius
Mauritania	Morocco	Senegal
Chad	Togo	Tunisia
Zimbabwe		

Countries with ISDN Services (Integrated Services Digital Network)

Egypt	Mauritius	Morocco
Seychelles	South Africa	Tunisia

5.   Conclusion

The many difficulties faced by librarians in Africa in delivering information to the community is shown from a global perspective in this paper. In summary the following observations can be made with regard to the situation in Africa:

- Libraries are in decline in Africa..
- This is in strong contrast to the international involvement in the development of Africa's information technology.
- There is a general decline in the information services in many of the African countries and a deterioration in their indigenous information handling capacity.
- The information infrastructure of Africa appears to be in decline.

- The dependence on information from the developed nations is likely to continue without the building of competencies relevant to an information society on the African continent. In view of the difficulties faced by librarians in Africa the uneasy conclusion is reached that the information dependence of developing countries may be perpetuated.
- Governments tend to address information-related issues in their national information policies.

- This trend can be observed among the developed and developing countries.
- The governments in Africa should reconsider the importance of information to development and address the issues of concern to their country in a national information policy.
- Governments should be made aware of the information skills of librarians and the need for their skills in the handling of information. The role of the librarian in Africa has never been more relevant or important than in the present times.

I conclude with the sincere wish for a better future for the countries in Africa in the new millennium. I am convinced that information can be used to bring about change and hope that the governments in Africa will come to an understanding of the relevance of information for growth and development and that the skills of the librarians in Africa can be instrumental in this regard.

References
Colle, R.D. & Roman, R. 1999. *Communication Centers and developing nations: a state-of-the-art report.* (Internet) < http://www.fox.rollins.edu/"liason/asia/SING2HTML > [Accessed: 5 July 2001].

Donaldson, G. 1981. *Books: their history, art, power, glory, infamy and suffering according to their creators, friends and enemies*. Oxford: Phaidon.

Duran, C. 1991. The role of LIS education. In: McClure, C.R. & Hernon, P. ed. *Library and Information Science Research: perspectives and strategies for improvement.* Norwood: Ablex: 152,153.

Economic Commission for Africa: First meeting of the Sub-Committee on Information and Communication Techonologies: Committee on Development Information Report. Addis Ababa, 28 June – 1 July 1999 (Internet) <http://www.unecs.org_resources/Conference_Reports_and_other_ Documents/disd/codi/Cod1_ICT_report.pdf > [Accessed on 5 July 2001].

I*M Europe Legal Issues. 1999. *Access to public information.* (Internet) < http://europa.eu.int/ISOP/legal/eu/access/saxby/cn4/params.html > [Accessed on 6 November 2001].

Library Information Commission Policy Report: Keystone for the Information Age. 1999. *Keystone for the Information Age: a national information policy for the U.K.* (Internet) < http://wwwlic.gov.uk/publications/policy/reports/keystone.html > [Accessed on 6 November 2001].

Lor, P.J. 1996. Information dependence in Southern Africa: global and subregional perspectives. *African Journal of Libraries, Archives and Information Science*, 6(1): 1-9.

Malley, I. 1990. National and international imperatives of a UK national information policy. *Aslib Proceedings*, 42(3): 89-95.

Mchombu, K. Measuring the impact of information on rural development. <u>In:</u> Stilwell, C., Leach, A. & Burton, S. 1999. *Knowledge, information and development: an African perspective.* Pietermaritzburg: School of Human and Social Studies, University of Natal: 234-248.

Nasimbeni, M. 1999. Library and information policy in South Africa in the nineties: process, product and practice. <u>In:</u> Stilwell, C., Leach, A. & Burton, S. 1999. *Knowledge, information and development: an African perspective.* Pietermaritzburg: School of Human and Social Studies, University of Natal: 1999: 28-40.

Niegaard, H. 1999. *Libraries and national information policies and /or national IT strategies – a survey.* IFLA General Conference. 64th. August 16 – 21, 1998. (Internet) < http://www.ifla.org.III > [Accessed September 2001].

Oladele, B.A. 2001. *The imperatives of challenges for African in the Knowledge Age: Status and role of national information policy.* 67th IFLA Council and Conference. August, 2001. (Internet) < http://www.ifla.org/IV/ifla65/papers/144-143e.pdf > [Accessed on 15 August 2001].

Paul, M. 2000. *Global Internet connectivity: status, indicators and use of the developed and developing world.* London: UNED-UK. (Internet) < http://www.unedforum.org/publi/connectivity/UNED%20Connectivity%20Report.pdf > [Accessed on 5 July 2001].

Rosenberg, D. 1999. The sustainability of libraries and resource centres in Africa. <u>In:</u> Stilwell, C., Leach, A. & Burton, S. 1999. *Knowledge, information and development: an African perspective.* Pietermaritzburg: School of Human and Social Studies, University of Natal: 1999: 12-27.

Stone, M.B. 1996. *National information policies: are they possible to formulate?* IDRC, Canada. (Internet) < http://web.sn.apc.org/ecis/martha.htm > [Accessed 2001].

Uganda: NICI policy. 1999. (Internet) < http://www.bellanet.org/partners/aisi/rici/uganda/uganpol.htm > [Accessed on 5 July 2001].