Auditing the Indigenous Knowledge Systems in Kenya (IKS): Challenges and Opportunities¹

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Abstract

Abstract

This paper discusses the auditing of IKS in Kenya, and explores IKS policies and legislations, structures, centres and systems, activities, and research trends. The study targeted the Ministries of Gender, Sports, Culture and Social Services; NGOs; and Research Centres/ Higher Educational Institutions (HEIs), including individuals and documented reports. We have applied largely qualitative (i.e. purposive and snowball) sampling techniques for data collection through document analysis and limited interviews. Snowball sampling was used in order to link with the key subjects of the study - through direct or indirect linkages for face-to-face interviews. Review of the literature, particularly government documents, was very useful. Preliminary results show that IKS policies that exist are fragmented in various government documents, such as laws, development plans, government gazettes etc. IKS are not coordinated as there is no properly constituted government structure formulated to do this, and in the absence of a database to represent all local research activities in Kenya, it is difficult to establish the magnitude of research emanating from this domain in the country. It was noted that reliance on external databases such as ISI, MEDLINE, AGORICOLA and ERIC to represent research in this domain, despite providing useful information for trend analysis, is inadequate and exclusive. The study concludes that the auditing of IKS in Kenya is feasible. However, in the absence of a well coordinated, planned and structured system for IKS development in Kenya, the auditing task remains problematic. Agenda for further work is provided with some interesting insights.

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1. Introduction

Indigenous knowledge can be defined in a number of ways. Semali and Kincheloe (1999: 3) claim that Indigenous Knowledge aims to "reflect the dynamic way in which the residents of an area have come to understand themselves in relation to their environment and how they organize that folk knowledge of flora and fauna, cultural beliefs, and history to enhance their lives". The National Research Foundation defines it as a "complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area" (NRF, nd: np). The World Bank (1998: i) states that "IK is unique to a particular culture and society. It is the basis for local decision-making in agriculture, health, natural resource management and other activities. IK is embedded in community practices, institutions, relationships and rituals. It is essentially tacit knowledge that is not easily codifiable". Kaniki and Mphahlele (2002: 3) define Indigenous knowledge as a cumulative body of knowledge generated and evolved over time, representing generations of creative thought and actions within individual societies in an ecosystem of continuous residence, in an effort to cope with an ever-changing agro-ecological and socio-economic environment.

In addition to the above definitions, Indigenous Knowledge is also referred to as local knowledge (Anand, 2006; Kargbo, 2005: 200), traditional knowledge (IDRC, nd; Ellen and Harris, 1996: 3), indigenous and traditional knowledge, (Kawooya, 2006), ethno-ecology, folk knowledge, folklore, ecology, and knowledge of the land (Kargbo, 2005: 200). This paper applies both IK and IKS to mean the same adopting Chisenga's (nd: 94) application of the two terms interchangeably.

IK cannot be defined on its own because it is embedded in the culture of the people. As Ngulube (2002:62) points out, IK pertains to experiential locality-

specific knowledge and practices of medicine, healing, hunting, fishing, gathering, agriculture, combat, education, and environmental conservation. Mutula (nd: 129) refers to IKS as "an intricate knowledge acquired over generations by communities as they interact with the environment. Indigenous knowledge (IK) consists of cultures and traditional practices of ethnic nationalities, and indigenous technological capacity in agriculture, fishing, forest resources exploitation, environment management and knowledge transmission". While Chisenga (nd: 94) uses both IK and IKS interchangeably to connote the same, by referring to the World Bank (WB) and Southern African Research and Documentation Centre (SARDC, nd: np), which define IKS as "a body of knowledge and beliefs built by a group of people, and handed down generations through oral tradition, about the relationship between living beings and their environment. It includes a system of organizations, a set of empirical observations about the local environment, and a system of self-management that governs resource use."

While the importance of IKS can not be underscored (World Bank report, 2004: 2), the mere danger of its extinction (Ikoja-Odongo, 2004: 175) means that there is a major need for its audit. Thornton (2001: 129) posits that information auditing and mapping allows for the identification of current implementations, responsibility for the maintenance of data, and the discovery of areas in which improvements can be made or duplications eliminated.

Information auditing is the process of discovering and evaluating the information resources of organizations with the aim of implementing, maintaining or improving information management systems (Buchanan & Gib in Thornton, 2001: 128). Ikoja-Odongo (2004:175) defines an information audit as a yardstick for ensuring conformity to standards. He further reiterates that auditing is meant to discover, check and verify the indigenous knowledge systems (IKS) within a given country, and the country's ability to deal with this

knowledge. Botha and Boon (2003: 23-24) contend that auditing is a recognized management technique providing managers with an overview of the present situation in keeping with specific resource(s) and services within an organization. They further state that auditing "entails the systematic examination of the information resources and the management of these in an organization." (Botha and Boon 2003:23)

The main purpose of an audit is to determine **what** the information requirements of an organization are, and **how** the information centre can best fulfil these needs. It also **evaluates** the effectiveness of an existing information system in order to determine effective ways of making their operation and services relevant (Ocholla, nd: 41).

Management in this study covers the way IKS are managed in terms of the existing laws, policies, and structures in place, and whether there are any funding allocations for the same.

Various audit related studies have been carried out, such as by: Kiplang'at, 2004; Majanja, 2004; Ikoja-Odongo 2004; and Ikoja-Odongo 2002.

The aim of this study was to map and audit Indigenous Knowledge Systems and management practices in Kenya. Its main objective was to unearth and map current IK environment management practices. This objective was reflected in the following research questions:-

- Which IK systems are currently available in Kenya?
- Which national policies and strategies on IK currently exist in Kenya?

To get an entire overview of the current status quo of IK management practices, the study focussed on Policies and legislation, Structures and Governance, Centre and Systems, Programmes and Activities, and Research and Documentation in Kenya.

It is with this in mind that the study undertook a survey in order to identify what IKS exist, how much Kenya has done with regard to IKS, and whether there are any policies and legislations for the same. The survey was also intended to address the status quo of IKS in Kenya, and how they are managed.

2. Methodology

The auditing of various documents on policies, strategic plans and legislation relating to Indigenous Knowledge was executed. The study targeted Policies and legislation, Structures and Governance, Centres and Systems, Programmes and Activities, and Research and Documentation in Kenya. MoGSCSS is the government body that is responsible for policies and legislations on IKS. The study was largely qualitative, and hence applied non-probability sampling techniques. The study targeted structures and governance, i.e. the Ministries of Gender, Sports, Culture and Social Services, Centres and Systems such as NGOs, Research Centres/ Higher Educational Institutions (HEIs), policies and legislation, programmes and activities, research, and documentation. Different sampling techniques were used. Firstly, cluster Sampling was applied. This technique is suitable when a researcher lacks a good sampling frame (Neuman, 2000: 209). There were five clusters, namely Ministries, NGOs, and Research Institutions, Higher Learning institutions, Activities and Research trends. It is from these clusters that we were able to apply the purposive sampling purposive sampling technique was technique. The applied centres/activities in the Ministry of Culture, Sports and Gender that deal with IK. The centres/activities were drawn from the sampling frame provided by the Ministry of Gender, Sports, Culture and Social Services. This largely formed a fair representation of cultural diversity and various levels of knowledge management development. Snowball sampling was used to enable us to connect with the key subjects through direct or indirect linkages for face-to-face interviews.

Methods of data acquisition consisted of the following:

- Informal enquiries at institutions that deal with IKS
- Formulation of a guided interview schedule that was largely derived from the research objectives and research questions
- Documentation of the physical location of the sampled institutions to be visited
- Actual field visits
- Phone Interviews, and
- Observation and documentary review

A literature review was carried out to inform the study. Among the reviewed sources were government legislation and reports, institutional policy documents, institutional curricula, dissertations and workshop reports.

3. Results

The following is an overview of IKS policies and legislations, structures, centres and systems, activities and research trends encountered in the auditing process.

3.1. Legislation and policies

Kenya is party to the following regional and international conventions that seek to provide a legal framework for the protection of indigenous knowledge/culture (Draft: The National Policy on Culture of The Republic of Kenya, nd: np). These include:

- The Universal Declaration of Human Rights (UDHR), Article 27
- The International Covenant on Civil and Political Rights (ICCPR)
- International Covenant on Economic Social and Cultural Rights (ICESCR)
- The African Charter on Human and People's Rights (ACHPR)

- Berne Convention for the Protection of Literary and Artistic works
- Convention on the Protection and Promotion of Cultural Diversity (CPPCD)
- International Convention for the Protection of Phonograms and Broadcasting Organizations (ICPPBD)
- Declaration of the Principles of International Cultural Co-operation (DPICC)
- Convention for the Safeguarding of the Intangible Cultural Heritage (CSICH)
- Agreement on Trade Related Aspects of International Property Rights (TRIPS)
- Convention for the Protection of World National Heritage

Despite Kenya being party to the above, the study found that there is no known unitary legal framework. There is a lot of fragmentation of bits and pieces in various acts. The following table 1 highlights examples of such acts:

Table 1. Policies

Acts/Policies	Goal	Body Responsible	
Chapter 210a - Moi University Act	Promote and develop national cultural	Moi University	
	heritage through academic programmes		
Chapter 7 Of 2005 - Forests Act	Managing and protecting forest land	Kenya Forest Research Institute	
Chapter 210 - University Of Nairobi Act	Promote and develop national cultural	University of Nairobi	
	heritage through academic programmes		
Antiquities & Monuments (Cap 215- 1984)		National Museums Board	
Kenya Cultural Centre (Cap 218 – 1979);	Management of the centre	Kenya Cultural Centre	
Wildlife (Conservation And Management) Act	Management and conservation of wildlife	Wildlife Conservation and	
(Cap 376 - 1985)		Management Service	
Environmental Management And Coordination	Management and protection of natural	Ministry of Environment and Natural	
Act	resources e.g. lakes, shores, wetlands,	Resources	
(Cap 8 of 1999)	coastal zones or river banks or forests		
Draft: The National Policy On Culture Of The	Recognition, promotion and protection of	Ministry of Gender, Sports, Culture	
Republic Of Kenya	culture	and Social Services	

Development Of Laws For The Protection Of	Recognition, integration, p	promotion and	Attorney General
Traditional Knowledge, Genetic Resources	protection of culture		
And Folklore (Legal Notice No. 1415, 2006).			

The study's findings concur with Otieno-Odek's (nd, 4-5) assertion that the protection of traditional knowledge is problematic. In principle, Kenya is fully committed to protecting traditional knowledge. For example, two legal provisions permit this:

- (a) Protection of folklore under copyright law; and
- (b) Using utility model provisions to protect indigenous "inventions". An "invention" is qualified for a utility model certificate if it is new and is industrially applicable. The patent requirements for novelty and inventive steps are not applicable to utility models.

He further posits that the major problem facing traditional knowledge protection in Kenya is categorization. For instance, he argues, there are various forms of traditional knowledge. They cannot all be fitted under one system. Present discussions at government-departmental level centers around how to divide and determine whether it is patent, trademark or copyright that is to protect the item of traditional knowledge, and what criteria for categorization should be used. For example, the informal interviews conducted in the course of the study also highlighted major flaws in the management of indigenous knowledge. For instance, the Managing Director of Kenya Industrial Property Institute (KIPI), posed major challenges relating to definition of IKS and suggests that a legal definition is thus paramount, regardless of what approach various researchers, organizations and countries take.

The Intellectual property issues were also cited by Kimani of the National Council of Science and Technology (NCST) in reference a coconut grater developed by a Mombasa secondary school during the annual school science congress, but patented by an individual from Tanzania. Examples of such rights are: industrial property rights — patents (KIPI), works of arts and artistic expression, paintings, sculptures, literary — copyright act (AG), Plant breeders and variety rights — convention of endangered species (KEPHIS).

✓ Currently there are two draft polices: the national policy on traditional medicine and medicinal plants, and the national policy on the culture of the Republic of Kenya by the Ministry of Planning and National development and the Ministry of Gender, Sports, Culture and Social Services, respectively. In addition, the Attorney General has also appointed a task force in the development of laws for the protection of traditional knowledge, genetic resources and folklore (legal notice no. 1415, 2006).

3.2. Structures and Governance:

3.2.1. Ministry of Gender, Sports, Culture and Social Services (MGSCSS)

The ministry houses the department of culture, which was established in 1980 following a presidential decree, and is mandated to operate under Presidential Circular No. 3/2003 on the "Organization of the Government of the Republic of Kenya". The department has been shifting from different ministries since its establishment, i.e.: the Ministries of Culture and Social Services; Women and Youth; and Home Affairs and National Heritage, among others. The department collaborates with other government departments in carrying out its vision (i.e. "to build a vibrant and cohesive Kenyan society thriving on the richness of its cultural diversity") and mission ("to promote, revitalize and develop Kenya's diverse cultures for sustainable development"). The department also collaborates with a number of non-governmental organizations both locally and internationally, whose agenda is to incorporate cultural issues in their project planning and implementation (MGSCSS Service Charter, nd: 4-5).

The department is structured with its activities running from the top level at the headquarters, to provincial, district, divisional and location/local levels. At the top is the Director of Culture, who has several assistants. The director, the deputy director and the assistant directors form what is known as the Directorate of Culture. This is the main organ running the administrative, financial and policy components of the department. Under the directorate of

culture, is the Heads of divisions. Currently there are five functional divisions dealing mainly with specific issues and programs. These are:

- 1. Cultural Education Information and Research (CEIR)
- 2. Performing Arts (PA)
- 3. Visual Arts (VA)
- 4. Indigenous Health, Nutrition and Environment (IHNE) and
- 5. Kenyan Languages and Oral Traditions (KLOT).

At the regional level, the department of culture is managed by the provincial directors of culture and district cultural officers in the province, and the district levels respectively ((MGSCSS Service Charter, nd: 5): MGSCSS website).

The Heads of cultural programs are the prime movers and implementers of functional cultural activities. They plan, organize, launch, and implement cultural projects within their areas of specialization. However, they work under the close supervision of the directorate and in consultation with the provincial and district heads according to the nature of the project. The programmes and projects on Languages and Oral Traditions are implemented under the division of Kenyan Languages and Oral Traditions, with the support and collaboration of the division of Cultural Education, Information and Research (MGSCSS Brochure, nd: np).

Kenya is endowed with a rich and diverse cultural heritage that is rooted in over 42 distinct indigenous communities. Therefore, the objective of establishing the division of Languages and Oral Traditions in the department of culture is to promote and revive various indigenous languages and oral traditions. Local communities hold enormous and vital indigenous knowledge that can be tapped into development, e.g. traditional medicine, indigenous technology, conflict resolution, traditional environmental conservation techniques, disaster management and early warning systems (MGSCSS Service charter, nd.).

The Ministry's major clients are: members of the general public, cultural communities of Kenya, cultural organizations/groups, artists & arts organizations & cultural centres, cultural practitioners/experts, community based organizations, corporate bodies concerned with cultural matters, foreign missions, educational institutions and government agencies (MGSCSS Service charter, nd.).

3.3. Centres and Systems:

Several IKS related centres and systems exist in Kenya. Notably, Kenya Resource Centre for Indigenous Knowledge (KENRIK), Kenyatta University, University of Nairobi including: Department of Linguistics and African Languages, Institute of African, Anthropology and Gender studies; Indigenous Information Network, The Centre for Minority Rights Development (CEMIRIDE), Bomas of Kenya, Survey of Economic Plants for Arid and Semi-arid Lands (SEPASAL) – Eastern Africa Node.

3.3.1. Kenya Resource Centre for Indigenous Knowledge (KENRIK)

KENRIK is one of the departments of the National Museums of Kenya that functions under the Ministry of State for National Heritage (Office of the Vice-President). KENRIK was started in the early 90s. It is a centre dealing with the research and documentation of indigenous knowledge, with activities covering many aspects of biological diversity from an IK perspective (Mwangi, 2003: 3). The purpose of the centre was to steer the IK agenda in the country. It managed to achieve this through various workshops and conferences, which are still held on a regular basis. It is noted (see KENRIK brochure, nd: np) that the centre derives most of its work from project proposals in various fields, e.g. anthropology, environment, nutrition, ecology, ethno-botany, ethno-ontology etc. Other forthcoming programs, as outlined in the Brochure, are: appropriate technology; traditional food; survey of economic plants of arid and semi arid

lands (SEPASAL); safeguarding endangered oral traditions in East Africa (at its pilot stage); conservation of sacred sites (on-going); traditional medicine as an aspect of capacity building (policy issues being addressed – countrywide debates ended in February 2007); and formulating a policy for genetic resources and folklore (policy to protect - at development stage

3.3.2. Kenyatta University

Kenyatta University (see Kenyatta University Website) which is located 16 kilometers from Nairobi became a constituent college of the University of Nairobi in 1970. In 1985, Kenyatta University College became a fully fledged university, and was renamed Kenyatta University. Today, Kenyatta University is the second largest university in Kenya, and has about 8,000 students. The university offers degrees in the Faculties of Education, Arts, Science, Home Economics, Environmental Studies and Commerce. All the faculties offer Bachelors, Masters and PhD programmes.

The university began offering courses in traditional medicine through the department of Health Sciences, thus being the first of its kind on the African continent. These courses are aimed at strengthening research in alternative medical practices and confronting health challenges in Africa (Mogere, 2006, 4). Additionally, the university has other departments that compliment each other in the promotion and preservation of the country's culture. These include History, Archaeology and Political Studies, Kiswahili and African Languages, and Fine Art. These courses are offered from undergraduate to doctorate levels (see Kenyatta University website).

3.3.3. University of Nairobi

As reported in the University of Nairobi Almanac 2006-2007(2007 18 -21) the origin of the University of Nairobi can be traced back to 1947, when the British

Colonial government mooted the idea of starting a technical and commercial institute of Nairobi. This idea came into realization in 1956, when the first batch of "A" level students was admitted for technical courses. The institute was by then known as the Royal Technical College, but changed its name to University College in 1963 as a fully fledged and autonomous university. Currently, the University of Nairobi has 84 academic departments, 8 institutes, and a school in its six colleges, namely:

- 1. College of Agriculture and Veterinary Sciences.
- 2. College of Architecture and Engineering.
- 3. College of Biological and Physical Sciences.
- 4. College of Education and Distance Learning.
- 5. College of Health Sciences.
- 6. College of Humanities and Social Sciences

It is through the Faculty of Arts that IK related courses are conducted. This is through the Institute of African, Anthropology and Gender studies, and the Department of Linguistics and African Languages.

3.3.3.1. Department of Linguistics and African Languages

Wasamba and Mwanzi (2006:21) reports that in 2002, the department embarked on an ambitious programme that aimed to strengthen the teaching and research of African oral literature. This, according to them, was in response to a particular requirement, namely the need to preserve indigenous knowledge systems and apply them to local development needs, and train young scholars in modern ways of collecting, documenting, preserving, analyzing and disseminating the oral art forms of Kenyan communities. It was also anticipated, they observe, that the programme would encourage university students taking oral literature to appreciate their cultural heritage whilst simultaneously achieving the UNESCO objective of safeguarding intangible heritage from

imminent extinction. Presently, an oral literature research programme exists in the Department of Literature. For the last four years, the department has managed to provide education to both undergraduate and postgraduate students in oral literature research methodology, which includes actual fieldwork, and has been able to document oral literature of the Digo and Duruma in Kwale District, oral literature of the Samburu in Samburu District and oral literature of the Luo, Luhya and Kalenjins in Vihiga District (Wasamba and Mwanzi 2006:21)

3.3.3.2. Institute of African, Anthropology and Gender studies

Information obtained from undated Institute of African, Anthropology and Gender studies brochure show that the institute was started in 1970 and charged with the responsibility of promoting and conducting original research in African prehistory, musicology and dance; traditional and modern arts and crafts; and religion and other belief systems. Apart from collaborating with the government and other institutions, it also publishes a journal of Anthropology, i.e. MILA. Courses on offer range from undergraduate to PhD programmes

3.3.4. Indigenous Information Network (IIN)

According to IIN Website, Indigenous Information Network (IIN) is a non-profit, Non-governmental Organization (NGO) registered in the Republic of Kenya under the Non-governmental Organization Act of 1990. It was founded in 1996 and was legally registered in 1998. The organization was founded by a group of professionals in response to addressing needs specifically regarding availing information through media and other channels about indigenous peoples, their livelihoods and challenges they face as they struggle to exist. The organization has been managed by volunteers since 1996, and has been involved in disseminating information, community development, and lobbying and hosting advocacy activities in support of indigenous and minority peoples in the region

3.3.5. The Centre for Minority Rights Development (CEMIRIDE)

As highlighted in the CEMIRIDE website, the Centre for Minority Rights Development is a Non-governmental Organization (NGO) that seeks to strengthen the capacity of minorities and indigenous peoples in Kenya and the rest of Africa, in order to secure their rights in all social, political and economic development processes. CEMIRIDE, thus, provides a voice for minorities and indigenous peoples, a voice through which they can articulate their needs and aspirations, and see these needs expressed in their rights and respected in the countries of their abode, thereby allowing them to enjoy their human rights as members of both their respective societies, and the global society at large. CEMIRIDE is an active player in national, regional and international efforts to improve the position of minorities and indigenous peoples

3.3.6. Bomas of Kenya

The Word "Bomas" is authentically African, and simply means "An African Homestead". Bomas of Kenya, according to Ministry of Tourism website, was established by the government in 1971 as a subsidiary company of the Kenya Tourist Development Corporation. It is a tourist attraction and a facility for the preservation, maintenance and promotion of the rich and diverse cultural values of various tribal groups of Kenya. Bomas targets tourists visiting Kenya and residents, who include school children. Cultural entertainment programmes and other traditional instruments are used as part of the performances. The facility has a trained group of dancers known as Harambee Dancers, who perform a cross-section of all the authentic traditional dance songs of Kenya. There is also an acrobatic team that performs in-house entertainment and offers entertainment for hire. Traditional African dishes are also served.

3.3.7. Survey of Economic Plants for Arid and Semi-arid Lands (SEPASAL) – Eastern Africa Node

The SEPASAL (see SEPASAL Brochure) project was begun in 1981 at the Royal Botanical Gardens, Kew, with support from OXFAM and the Cloth workers' Foundation. It is a major database of useful "wild" and semi-domesticated plants of the world's tropical and subtropical drylands, with a major focus on Africa SAPASAL collates information on the uses and user-related properties of plants, widely scattered information available to a wide (http://www.kew.org/ceb/sepasal). The project has established regional nodes in order to address specific regional needs. The Eastern Africa node is based at KENRICK, while the Southern Africa node is based at the National Botanical Research Institute of Namibia (ibid). Currently, SEPASAL contains information on more than 6300 useful dryland species, excluding major crops. The database is used by research institutions, government departments, NGOs, and aid and developmental organizations. It contains detailed information on nomenclature, descriptions. distribution, ecology, cultural and economic uses, conservation, chemical composition, development issues, seed sources and references. Prior online registration is required before searching and downloading information via the following web address: http://www.kew.org/ceb/sepasal/. The Eastern Africa node focuses on updating dryland species information from Kenya, Uganda, Tanzania, Somalia, Ethiopia, Eritrea, Sudan, and Djibouti. Its aim is to update and check information on 1500 species found in the region (ibid).

3.4. Programmes and Activities

A programme is a group of activities directed towards achieving defined objectives and targets (NZHS, 2000). An activity is a specific task or grouping of tasks that provides a specialized capability, service, or product based on a recurring government requirement (DoDEA, 2004). 'Programmes' in this study

are those events that are regular and have been allocated budgets, whereas 'activities' are events that are carried out of necessity, e.g. to create awareness or to arrest a situation, but are not consistent.

It was found that various institutions, including Ministries and research organizations, take part. Most of the events promote the awareness of IK and its preservation, and the reliving of the past. Most of these events involve local communities. Below (see Table 2) are examples of some programmes and activities.

Table 2. Programmes and Activities

PROGRAMMES/ACTIVITIES	FREQUENCY	BODY RESPONSIBLE	
Visual Artist	Annual	Division of Visual Arts in	
		collaboration with Italy	
African Traditional Medicine	Annual	Division of Indigenous Health,	
day		Nutrition and Environment (IHNE	
Kenya Pastoral week	Annual	CEMIRIDE	
Kenya Music Festivals	Annual	??	
Youth traditional cooking	N/A	Division of Indigenous Health,	
competition		Nutrition and Environment (IHNE)	
African traditional medicine	Annual	Division of Indigenous Health,	
day		Nutrition and Environment (IHNE	
2001 – 2010 decade for	Annual	Division of Indigenous Health,	
tradition (declared by the		Nutrition and Environment (IHNE	
African Union Kenya started		TVatilition and Environment (IIIIVE	
to mark the day in 2004 in			
Nairobi, 2005 in Nyeri, 2006			
in Nakuru, this year it will be			
marked in Mombasa.)			

3.5. Research Trends and Documentation

An analysis of multiple databases in EBSCOhost (i.e. Academic Search Premier, Business Source Premier, Eric, Masterfile, Medline, International Bibliography of Theatre & Dance), Thompson Web of Science formerly ISI, Access to Global Online Research in Agriculture (AGORA), Health InterNetwork, Access to Research Initiative (HINARI), African Journals Online (AJOL), AGRICOLA reveal that the volume of research conducted in Kenya cannot be ascertained as there is no single database that specifically deals with documenting IKS. For example, recent studies reported by Ocholla and Onyancha (2006) and Le Roux (2003) based on international databases only represent part of Kenya's research in this domain. Although Boolean searches by using several combinations(traditional Knowledge and Kenya) with Kenya produce several hits but not necessarily records, an extension of bibliometric analysis on IK records on Kenya from that originally done by Ocholla and Onyancha (2006) is essential to provide a clearer picture of the domain. This could be supplemented by existing but uncoordinated IK databases alluded to earlier. Evidently, there lacks a mechanism for pooling all the research conducted globally and in Kenya

4. Challenges

There are still several challenges to be tackled. These may include:

- Sensitization on the importance of preserving and managing IKS.A comprehensive IKS policy and effective implementation should enhance this process.
- Creation of a one stop centre or database for IKS that promotes codification, access and use of IK. Such a database can be created through public or private (e.g SABINET in South Africa) or through collaboration between public and private information institutions.

- Development of a unitary legal framework is essential. There is a lot of fragmentation of bits and pieces across various legislations.
- Creation of a taxonomy of IKS that enables proper definition and categorization for easy development and access is critical. For example, there are various forms of traditional knowledge.
- Management of the fragmented IKS. This leads to poor coordination and duplication of efforts that is financially expensive and time consuming. For instance, besides the Department of Culture, there are other government ministries that deal with IKS, such as the Ministry of Tourism and Wildlife and the Ministry of State for National Heritage. There are no clear linkages between the main organ of the government and other complimentary organizations. Most of them run their affairs independently without consultation, leading to the duplication of various outputs, e.g. the various courses on IK undertaken by the academic institutions, and the services offered by NGOs.

5. Opportunities

There is a growing interest in IKS in Kenya as demonstrated by some policies, governance structures, centres, research and documentation and activities in place. Thus, an IKS development environment exists in Kenya that can be tapped into and developed. For example, the government, particularly the Department of Culture, can play a crucial role. With the popularization of IK growing in many parts of Africa and the developing countries in particular, training of training of experts for IKS management is possible, collaboration at national, regional and international levels is achievable and the enhancement of indigenous capacity as a key to the empowerment of local communities and their effective participation in the development process is possible. People are better able to adopt new ideas when they can be seen within the context of existing practices and ways of

living. Opportunities also exist in the involvement and integration of the youth into the mainstream of IKS management as witnessed through ongoing IK education and training programmes in Higher Education Institutions in the country. Indeed, there is a foundation on which to construct IKS.

6. Conclusion

IKS development in Kenya needs to recognise and identify the challenges and opportunities available for regular attention. Mapping and auditing of IKS should provide a picture for clearer visualisation of IKS, there strengths, deficiencies and gaps that is essential for their development. In essence, the present generation (particularly the youth) needs to be involved in order to appreciate IKS. The integration of IKS in the education curricular should be strengthened if already exist or introduced if does not exist. Access and Benefit Sharing (ABS) should be entrenched in order to empower individuals and communities. This would also help alleviate poverty. The sound existence of research and academic institutions could play a vital role in promoting, recognizing, developing and protecting IKS within national, regional and international Diasporas. This would water down to grass roots level, and hence create economic benefits. A legal framework for the management of IKS should be put in place. There should be a recognized body in charge of the management of IKS. An IKS database should be availed as a one-point-of-access for the research carried out in Kenya. Further research should be carried out on the most effective ways and means to link various institutions in Kenya, the government and all stakeholders.

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