# An Analysis of Indigenous Knowledge Legislation and Policies in Kenya

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#### **Abstract**

Since the dawn of history, humanity has always sought more knowledge to feed families, stay healthy, argue with neighbours, and understand the immediate environment, among other issues. Before scientific approaches of knowledge discovery emerged, local ways of solving problems were already strongly established. These ways have persisted to date and comprise what is known as indigenous knowledge (IK). As society scientifically developed, IK became a neglected area whose potential as a resource in development was forgotten. This neglect has led to myriad socioeconomic challenges affecting food security, environmental conservation, health and social cohesion, among others. Therefore, the need to rediscover and mainstream IK in development is great. This need is anchored on the understanding that IK is the basis for local-level decision making in agriculture, healthcare, food preparation, education, natural-resource management, and a host of other activities. One of the perspectives of enhancing the creation, use and perpetuation of IK is enactment of facilitative policies and legislation. This chapter analyses the IK legislation and policies in Kenya and the extent to which they have been implemented and thereafter recommends strategies which can be used to enhance the impact of IK in socioeconomic development in Kenya. Data that informed the study leading to this chapter were collected through content analysis of the existing IK policies and legislation. Additional data were collected through key informant interviews with information science professionals and policy makers. The study revealed that several legislative and policy provisions on the regulation, preservation, management, use and development of indigenous knowledge exist in Kenya. However, there are many gaps in the content and implementation of these provisions which should be addressed to enhance their impact on the promotion, growth and perpetuation of indigenous knowledge in Kenya. The findings here may be used by information practitioners, policy makers and communities to enhance the creation, use and impact of IK.

**Keywords:** Indigenous knowledge, knowledge management, legislation, policies, Kenya

#### Introduction

Scholars have provided varied definitions of what constitutes indigenous knowledge. Semali and Kincheloe (1999), for example, hold the view that indigenous knowledge reflects the dynamic way in which the residents of an area have come to understand themselves in relation to their environment and how they organise that folk knowledge of flora and fauna, cultural beliefs, and history to enhance their lives. Smith (1999) suggests that indigenous knowledge is a term that internationalises the experiences, concerns and struggles of some of the world's colonised peoples. Ocholla (2007) perceives IK as a complex set of knowledge and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area. Earlier, Onyancha and Ocholla (2004) provided a similar explanation, defining IK as a dynamic archive of the sum total of knowledge, skills and attitudes belonging to a community over generations and expressed in the form of action, object and sign languages for sharing. Characteristically, IK is local because it is engrained in a specific community; established within the boundaries of broader cultural traditions and developed by a specific community; intangible and consequently not easily codified; conveyed orally; experimental rather than theoretical; learned through repetition; changes continuously; and is constantly created and recreated, discovered and lost, even though outsiders may perceive it to be static (World Bank, 1998). On their part, Warren (1991) and Flavier (1995) perceive IK as the local knowledge or knowledge that is unique to a given culture or society. IK contrasts with the international knowledge system generated by universities, research institutions and private firms. It is the basis for local-level decision making in agriculture, health care, food preparation, education, natural resource management, and a host of other activities in rural communities (Warren, 1991). Thus, indigenous knowledge is the information base for a society, which facilitates communication and decision-making. As pointed out earlier, indigenous information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems (Flavier et al., 1995).

Unfortunately, for reasons largely associated with ignorance and arrogance, IK has been neglected, vindicated, stigmatised, illegalised and suppressed among the majority of the world's communities (Onyancha & Ocholla, 2004). Nonetheless, Agrawal (1995) argues that IK has become a new area of attraction in development as demonstrated by the interest that the field has attracted among researchers, donors, writers and scholars. He further explains that although IK was earlier seen as inferior, inefficient and an

obstacle to development, today's thinking has recognised the value it holds for sustainable development. The increased focus on IK represents a shift from the preoccupation with the scientific knowledge which has failed to alter the lives of the majority of the poor over the last decades. It is important to note, however, that the increasing attention indigenous knowledge is receiving from academic and development institutions has not yet led to a unanimous perception or appreciation of the concept of indigenous knowledge. This is in spite of the emergence of the school of thought which posits that a country's ability to build and mobilise knowledge capital is equally essential for sustainable development as the availability of physical and financial capital (World Bank, 1997). The basic component of any country's knowledge system is its indigenous knowledge. It encompasses the skills, experiences and insights of people applied to maintain or improve their unique livelihoods.

## Rationale of Indigenous Knowledge Legislation

Humanity has always sought more knowledge to feed families, stay healthy, argue with neighbours, and understand their immediate environment, among other issues, since the dawn of history. Before the scientific approaches of knowledge discovery emerged, local ways of solving problems were already strongly established. These ways have persisted to date and comprise what is known as indigenous knowledge. As society scientifically developed, IK became a neglected area whose potential as a resource in development was forgotten. This neglect has led to myriad socioeconomic challenges affecting food security, environmental conservation, health and social cohesion, among others.

The need to rediscover and mainstream IK in development is great. This need is anchored on the understanding that IK is the basis for local-level decision making in agriculture, healthcare, food preparation, education, management of natural resources, and a host of other activities. One of the perspectives of enhancing the creation, use and perpetuation of IK is the development of facilitative legislation and policies. Regardless of the growing number of studies on and interests in IK in Kenya, the issue of its protection is poorly addressed. For instance, literature on the legislative and policy provisions on IK in Kenya is scanty.

This chapter analyses the existing IK legislation and policies in Kenya; the extent to which they have been implemented; as well as their impact on the status of indigenous knowledge in Kenya. The authors also recommend strategies which can be used to enhance the impact of IK on socioeconomic development activities in Kenya.

#### **Theoretical Framework**

The study, informing this chapter, used the knowledge worldview model outlined by Fleer (1999) as the theoretical framework. Hart (2010) defines knowledge worldviews as cognitive, perceptual, and affective maps that people continuously use to make sense of their social landscape and to find their ways to whatever goals they seek. He further explains that knowledge worldviews are developed throughout a person's lifetime through socialisation and social interaction. He points out that they are encompassing and pervasive in adherence as well as influential. However, they are usually unconsciously and uncritically taken for granted.

The model proposed by Fleer (1999) classifies perceptions of knowledge into two broad categories, that is, indigenous and scientific knowledge and explains that these sets of knowledge define one's worldviews and points out that while indigenous knowledge is founded on the traditional worldview and produced for specific purposes, such as to maintain particular societies, scientific knowledge is founded on the "civilised" worldview and most of the times is produced for the sake of it. She argues that while scientific knowledge seeks power over nature and people, indigenous knowledge seeks to coexist with the same. She describes scientific knowledge as being materialistic, reductionist, rational, de-contextualised, individual and competitive. On the other hand, she extols indigenous knowledge as being spiritual, holistic, intuitive, contextualised, communal and cooperative.

While applying this model, the authors are, however, aware that although there appears to be a clear dichotomy between indigenous and scientific knowledge, this division is not realistic since these sets of knowledge interact with and influence each other. For instance, indigenous knowledge can be investigated, validated and documented using scientific means. Thus, indigenous knowledge can produce scientific knowledge and vice versa.

The knowledge worldviews model was applied to help the authors understand what really constitutes indigenous knowledge as well as its influence on its adherents' perception of the world around them. This perception and influence of indigenous knowledge largely determines how the communities use or control it. Legislation and policies on indigenous knowledge are generally aimed at regulating and promoting this asset. The suitability, application and impact of these legislation and policies on indigenous knowledge are assessed based on the worldviews of its bearers.

## Methodology

The study was conducted through content analysis. This is a research technique used to make replicable and valid inferences by interpreting and coding textual material such as documents, oral communication, audio, text, hypertext, and graphics (Weber, 1990). The authors analysed the content of the Forests Act; National Museums and Heritage Act; Wildlife Conservation and Management Act; Plant Protection Act; Fisheries Protection Act; Witchcraft Act; as well as Protection of Traditional Knowledge, Genetic Resources and Folklore (draft). The authors also assessed the degree to which these legislation and policies have been implemented as well as their impact on the status of IK in Kenya. Additional information was collected through interviews with key informants consisting of ten (10) information scientists and five (5) policy makers.

## **Findings and Discussions**

The findings of the study are presented and discussed hereunder.

## The major provisions of the policies and legislation

Table 1 presents the key provisions of the respective legislation and policies which were identified and reviewed by the authors.

#### Adequacy of the policies and legislation

An assessment of the legislation and policies identified above revealed that they address the following issues relating to indigenous knowledge in Kenya:

- 1. Identification of what constitutes indigenous knowledge;
- 2. Recognition of both indigenous knowledge and their holders (both local and foreign);
- 3. Collection and/or acquisition of indigenous knowledge from individual, corporate or community holders;
- 4. Preservation and perpetuation of existing tangible and intangible indigenous knowledge;
- 5. Conservation of various expressions or manifestations of indigenous knowledge to enhance their longevity;

- 6. Promotion of the commercial, sentimental and other forms of use of indigenous knowledge for the benefit of their individual holders, indigenous communities and the society at large;
- 7. Promotion and popularisation of indigenous knowledge as an acceptable and usable knowledge which is beneficial to society;
- 8. Promotion of the participation of the affected indigenous communities in the management and exploitation of their indigenous knowledge;
- 9. Definition of crimes relating to indigenous knowledge in Kenya and stipulation of the punishment for these; and
- 10. Provision of frameworks for collaboration between holders and stakeholders of indigenous knowledge in Kenya and beyond.

Table 1: Key provisions of legislation and policies on IK in Kenya

Legislation or Policy	Year Enacted	Key Provisions	Strengths	Weaknesses	Implementing Organisation
Forests Act	2005	The protection of forests and the biodiversity therein in collaboration with the local communities; collaboration with the local communities to preserve and benefit from flora and fauna traditionally used or newly discovered by them; establishment of a fund to conserve indigenous forests; promotion of community-based forests; maintenance and protection of sacred trees and groves and other areas of cultural, ethno-botanical or scientific significance; provision of customary rights to forests and forest produce to support the custom of local communities; and provision of a framework for the management of indigenous forests.	Recognition of local communities Preservation and conservation of flora and fauna and fauna funding mechanism for communities conservation	No clear provisions on the documentation, transfer or sharing of indigenous knowledge within and outside the communities	Kenya Forest Service
National Museums and Heritage Act, 2006 Zero Draft of the Kenya Heritage	2006; revised in 2012 Proposed Law (2015)	The establishment, control, management and development of national museums; identification, collection, protection, conservation, and the transmission of the cultural and natural heritage of Kenya; and to repeal the Antiquities and Monuments Act and the National Museums Act.	Identification, conservation, preservation and transmission of indigenous knowledge through heritage	Less focus on the promotion of access of the indigenous knowledge owned or held by museums and communities	National Museums of Kenya

Kenya Wildlife Service sies	Ministry enous of Agricu- tt lture	Kenya Ige in Plant Health Inspecto- rate Service	Director of Fisheries
No provisions for identifying and demystifying superstitions about specific wildlife species which influence community relations with them	Less room for the application of indigenous knowledge to protect plants; more focus on conventional rules	Does not recognise indigenous knowledge in plant protection	Does not make provisions for indigenous knowledge on fishing
Provides a framework for the protection of wildlife and their ecosystems Recognises the challenges of climate change and poor funding on wildlife conservation	Protection of indigenous plants from diseases, pests, export or illegal trade Compensation for plant loss	Provides a framework for the protection of plant variety in Kenya	Recognises traditional fishing and preservation of fish
The protection of wildlife species as well as their habitats and ecosystems; integration of community based natural resource management practices in wildlife conservation and management; collection, management and transmission of information on wildlife in Kenya; definition of the measures necessary for equitable sharing of wildlife benefitis; promotion of adaption and mitigation measures to avert the consequences of climate change which are detrimental to wildlife; devolution of wildlife conservation and management to communities through county governments; as well as the establishment of a endowment fund.	Prevention of the introduction of diseases destructive to plants in Kenya; prevention of the spread of pests; definition of the roles of land owners in the protection of plants; and regulation of importation of plants.	Assures of the quality of agricultural inputs and produce to promote food security and sustainable development in Kenya; coordination of all the matters relating to crop pests and disease control; provision of advice to the Director of Agriculture on appropriate seeds and planting materials for export and import.	The development, management, exploitation, utilisation and conservation of fisheries; licensing of fishing vessels; development of traditional and industrial fishing; promotion of cooperation amongst fishermen; and limitation of fishing in certain circumstances.
2013	1937; revised in 2012	2012	1991; revised in 2012
Wildlife Conservation and Management Act	Plant Protection Act	Kenya Plant Health Inspectorate Service Act	Fisheries Protection Act

Provincial Administration (Provincial Commissioners, District Commissioners and Chiefs)	Undefined - "National Competent Authority"	Kenya Industrial Property Institute
Definition of witchcraft is confusing; may include with harmless indigenous practices	Over-protection of traditional knowledge and its expression misses the point that indigenous knowledge is communal and spiritual in nature; capitalistic in approach	Capitalistic; indigenous knowledge is sentimental
Criminalises the negative use of witchcraft to cause injury or fear	Recognition and protection of indigenous knowledge Recognises and protects owners of indigenous knowledge Promotes sharing of indigenous knowledge indigenous knowledge	Protection of inventions and innovations
Criminalisation of the acts of witchcraft; defines witchcraft as activities aimed to cause fear, annoyance and injury as well as claims of supernatural power; criminalisation of the use of charms and medicines with the intent to injure or attempts to discover offence by witchcraft; definition of witchcraft offences and their punishments.	Recognition of the holders of traditional knowledge; protection of traditional knowledge; conferment of rights to holders of traditional knowledge; protection of traditional cultural expressions such as music, dance, plays, rituals, sculpture, pottery, and carvings, among others; provision of access to traditional knowledge; definition of offences and penalties related to traditional knowledge and cultural expressions; promotion of the utilisation of traditional knowledge and cultural expressions in ways which benefit the knowledge holders and communities; promotion of the equitable sharing of the benefits of traditional knowledge and cultural expressions; and the establishment of Traditional Knowledge and cultural expressions; and the establishment of Traditional Knowledge	Protection of inventive and innovative initiatives; facilitation of the acquisition of technology through grants and regulation of patents, utility models, rationalisation models and industrial designs.
1925; revised 1948, 1963 and 1964	Draft Bill, 2015	2001
Witchcraft Act	Protection of Traditional Knowledge, Genetic Resources and Folklore	Industrial Property Act

Source: Research data

The authors also noted that most of the legislation and policies are fairly recent. Many of them have been revised in the recent past to make them more relevant and applicable in the emerging circumstances. It was noted that most of the revisions were made in 2012. This is most likely because several lawmaking agencies focused on updating legislation and policies to conform to the requirements of the new constitution promulgated in 2010. Nonetheless, it was noted that some legislation have not been updated lately. One such case is the Witchcraft Act which was enacted in 1925 and last revised in 1964. These legislation and policies need to be updated to conform to the current constitution as well as the structure of government. There is also need to deal with the concept of witchcraft carefully because it is a complex practice bringing forth highly emotive aspects of religion and culture whose criminalisation may lead to unintended biases and discrimination.

The authors also noted that most of the legislation and policies focused on preservation and conservation. This is perhaps because these were the most urgent indigenous knowledge management needs. Important as these may be, indigenous knowledge must also grow and advance to meet the dynamic needs of the society. Therefore, there is need for legislation and policies which do not only perpetuate the existing indigenous knowledge but also of those that stimulate growth and/or emergence of new knowledge. There is also a need for legislation and policies which facilitate the validation of indigenous knowledge through scientific research and application within and outside the holding communities.

The scope of coverage of the fully enacted legislation and approved policies was also observed to be limited. For example, there were no direct provisions on traditional medicine, herbs and medicinal plants as well as traditional knowledge and cultural expressions. It was noteworthy, however, that drafts of these exist. The fact that they have not been enacted in comparison to the others demonstrates a lack of recognition of their value in national socioeconomic development. The stakeholders are encouraged to prioritise these legislation and policies to avert risks related to direct or indirect loss of indigenous knowledge.

## Implementation of the policies and legislation

The findings from the key informant interviewees revealed that all of them were of the view that the legislation and policies related to indigenous knowledge in Kenya have generally been implemented well. Nonetheless, they pointed out that the challenges that hamper the effective implementation

of these legal and policy provisions include inadequate resources; poor coordination between the implementing bodies; frequent reorganisation of government agencies mandated to implement the provisions; culture of selfishness, corruption and other unethical behaviour in society; lack of adequate incentives to motivate the holders of indigenous knowledge to share it; civilisation which results in the neglect of sources or holders of indigenous knowledge; consequences of climate change which have affected sources or practices of indigenous knowledge; lack of documentation which leads to the loss of indigenous knowledge when its holders pass on; and stigmatisation which makes indigenous knowledge less appealing or, in some cases, criminal. These challenges require the concernted effort of government, professional and communal stakeholders to mitigate so as to enhance the effective implementation of the existing legislation and policies on indigenous knowledge in Kenya.

#### The impact of the policies and legislation on IK

The key informants identified both positive and negative impacts of the existing legislation and policies on indigenous knowledge in Kenya. The positive impacts included commercial revenues accrued through product sales or tourist visits; contribution to the development of national values and ethos which ensure peace and coexistence; promotion of the identity of Kenya as a distinct society and sovereign nation; conservation of natural habitats and ecosystems; contribution towards effective adaptation to and mitigation of the consequences of climate change; recognition of the value of indigenous knowledge; popularisation and application of indigenous knowledge; as well as documentation, preservation, conservation and perpetuation of indigenous knowledge. The negative impacts include stigmatisation of aspects of indigenous knowledge; division of Kenyans along the lines of traditional practices and ethno-based indigenous knowledge; as well as slow socioeconomic growth in cases where societies have remained conservative and closed to civilisation and modern development.

#### Conclusion

Several legislative and policy provisions on the regulation, preservation, management, use and development of indigenous knowledge in Kenya exist. However, there are many gaps in the content and implementation of these provisions which should be addressed to enhance their impact on the promotion, growth and perpetuation of indigenous knowledge in Kenya. All government and community stakeholders are encouraged to make concerted effort to address the gaps in the content and implementation framework of indigenous knowledge in Kenya.

## **Practical Application**

The findings of this study may be used by information practitioners, policy makers and communities to enhance the creation, use and impact of IK. Moreover they may be used by stakeholders to address the challenges hampering the effective preservation and use of indigenous in Kenya through relevant legal and policy provisions. The findings may also be used by scholars to identify knowledge gaps which may ultimately stimulate research.

## Recommendations from the Study

The authors propose the following strategies to mitigate the bottlenecks identified in the content and implementation of the legislation and policies on indigenous knowledge in Kenya:

#### Domesticate international indigenous knowledge policy framework

There are several indigenous knowledge legislation and policies on the global platform. Kenya should embrace and domesticate these to its benefit. This can be done by the relevant government agencies, such as government ministries, departments and agencies.

## Establish indigenous knowledge resource centres within the public library system

In Kenya, as pointed out earlier, the National Museums of Kenya has an indigenous knowledge resource centre which is meant to serve the whole country through its branch networks. This is not adequate, especially given that IK is context specific. The authors recommend that all public libraries in Kenya should set up indigenous knowledge units.

#### Training on indigenous knowledge

In some countries, universities have gone a notch higher by initiating IK departments which provide training on IK issues such as history, languages and culture, among others. In some cases, aspects of IK are taught as courses in academic institutions. There should be deliberate efforts by training institutions to develop and deploy curricula on indigenous knowledge in Kenya.

#### Partnerships to leverage indigenous knowledge

Partnership lies at the foundation of the strategies for harnessing IK. This partnership should have a local, regional and global face. Whereas IK is localised in nature, its applicability can be global. Thus, there is the need to bring IK to the global platform. The relevant government, community and private sector institutions should explore and harness opportunities for collaboration on matters IK.

#### Indigenous knowledge research and validation

The relevance and value of indigenous knowledge grows with its applicability. This can be demonstrated, validated and enhanced through relevant research. Research and academic institutions in Kenya should mainstream indigenous knowledge in their research agenda.

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