

Harnessing Traditional Knowledge for Environmental Conflict Management in Kenya

Kariuki Muigua

Table of Contents

1. Introduction	3
2. Traditional or indigenous knowledge	4
3. Place of Traditional or indigenous knowledge in the Legal Framework	5
3.1 International Legal Framework on protection of TK/IK	5
3.2 National Legal Framework on protection of TK/IK	7
4. Nature of Environmental Conflicts	8
5. Role and relevance of traditional knowledge in conflict management in environmental matters.	9
5.1 Traditional Knowledge and Environmental Security	12
6. Traditional Knowledge in Kenya: A mirage?	14
7. Harnessing Traditional or Indigenous Knowledge: Walking the Talk	16
7.1 Constitution of Kenya 2010 and Indigenous Knowledge	17
7.2 Concerted Efforts	19
8. Conclusion	20
References	21

Harnessing Traditional Knowledge for Environmental Conflict Management in Kenya

By Kariuki Muigua*

Abstract

This paper critically examines the relationship between traditional or indigenous knowledge and environmental conflicts management in Kenya. The author argues that traditional or indigenous knowledge can be harnessed or used in management of environmental Conflicts. This paper is informed by the hypothesis that indigenous knowledge reflects communities' practices and beliefs, and it can effectively be used to address some of the localized conflicts that are environmental in nature.

The author examines the role and relevance of traditional knowledge in conflict management in environmental matters with the aim of achieving environmental security for the Kenyan communities and ultimately sustainable development.

1. Introduction

This paper critically examines the relationship between traditional or indigenous knowledge and environmental conflicts management in Kenya. The author traces the connection between traditional knowledge and environmental conflicts, with a view to making a case on how the knowledge can be harnessed or used in management of such conflicts. The main argument is that based on the fact that indigenous knowledge reflects communities' practices and beliefs, it can effectively be used to address some of the localized conflicts that are environmental in nature.

It has rightly been observed that in any society, conflict is one of the major factors negatively affecting development as it diverts resources that could have otherwise been used productively. Conflict is also regarded as undesirable in many societies since, in its violent form, it claims the lives of many people, destroy property, and diverts human as well as financial resources away from development.¹ Thus, conflicts ought to be managed effectively. There have been convincing

*PhD in Law (Nrb); FCI Arb (Chartered Arbitrator); LL.B (Hons) Nrb; LL.M (Environmental Law) Nrb; Dip. In Law (KSL); Dip. In Arbitration (UK); FCPS (K); MKIM; Accredited Mediator; Consultant: Lead expert EIA/EA NEMA;

arguments that Africa had, from time immemorial, evolved its own mechanisms and institutions for managing and resolving disputes and conflicts in ways that preserved the fabric of society and encouraged peaceful co-existence. Indeed, the argument is that the concept and practice of peace and conflict resolution is not new in Africa, but rather it is the institutionalization of peace and conflict studies at African Universities and schools and civil society organizations, that is the new phenomenon.² All African communities have had rules to ensure that individuals lived in harmony with one another and that justice was done when conflict broke out.³

The paper discusses the role and relevance of traditional knowledge in conflict management in environmental matters. The main goal, the author argues, is to use TK to achieve environmental security for the Kenyan indigenous communities and ultimately sustainable development.

2. Traditional or indigenous knowledge

Traditional knowledge (TK) may exist in various forms. While the discussion in this paper will highlight TK in other forms where relevant, the main focus shall be indigenous knowledge in the form of Traditional Ecological Knowledge (TEK). Traditional Ecological Knowledge has been defined as a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.⁴ Traditional knowledge (TK) has also been defined as knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity.⁵ The term "indigenous knowledge" may generally refer to how

BSI ISO/IEC 27001:2005 ISMS Lead Auditor/ Implementer; Advocate of the High Court of Kenya; Lecturer at the Centre for Advanced Studies in Environmental Law & Policy (CASELAP), University of Nairobi. [September, 2016].

¹ Mengesha, A.D., et al., "Indigenous Conflict Resolution Mechanisms among the Kembata Society." *American Journal of Educational Research*, 2015, Vol. 3, No. 2, pp. 225-242 at p.227.

² Ibid, p. 229.

³ Ibid, p. 229; See also Irobi, E.G., 'Ethnic Conflict Management in Africa: A Comparative Case Study of Nigeria and South Africa,' May, 2005, available at <http://www.beyondintractability.org/casestudy/irobi-ethnic> [Accessed at 23/04/2016]; Mengesha, A.D., 'The Role of Sidama Indigenous Institutions in Conflict Resolution: In the Case of Dalle Woreda, Southern Ethiopia,' *American Journal of Sociological Research*, Vol. 6 No. 1, 2016, pp. 10-26.

⁴ Berkes, F., et. al., 'Rediscovery of Traditional Ecological Knowledge as Adaptive Management,' *Ecological Applications*, Vol. 10, No. 5. (Oct., 2000), pp. 1251-1262 at p. 1252.

⁵ World Intellectual Property Organisation, 'Traditional Knowledge,' available at <http://www.wipo.int/tk/en/tk/>

members of a community perceive and understand their environment and resources, particularly the way they convert those resources through labour.⁶

From the foregoing definitions, TK or indigenous knowledge (IK) mainly originates from the communities and it can be said to be a reservoir for community expertise and experiences in relation to environmental matters. It has been argued that indigenous groups offer alternative knowledge and perspectives based on their own locally developed practices of resource use.⁷

Traditional knowledge may be holistic in outlook and adaptive by nature, gathered over generations by observers whose lives depended on this information and its use. It often accumulates incrementally, tested by trial-and-error and transmitted to future generations orally or by shared practical experiences.⁸ In general all traditional knowledge and resources are considered to be collective heritage of a community or ethnic group, even if the accumulation of knowledge is individual, because they are ancestral heritage, and are believed to come from God.⁹

3. Place of Traditional or indigenous knowledge in the Legal Framework

3.1 International Legal Framework on protection of TK/IK

The *Convention on Biological Diversity*¹⁰ under Article 8 (j), dealing with traditional knowledge, provides that each contracting party shall, as far as possible and appropriate: “Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.” Further, Article 10(c) of the UN Convention on Biological Diversity (CBD) provides that each Contracting Party shall, as far as possible and as appropriate protect and encourage customary use of biological

⁶ Castro, A.P. & Ettenger, K., ‘Indigenous Knowledge And Conflict Management: Exploring Local Perspectives And Mechanisms For Dealing With Community Forestry Disputes,’ *Paper Prepared for the United Nations Food and Agriculture Organization, Community Forestry Unit, for the Global Electronic Conference on "Addressing Natural Resource Conflicts Through Community Forestry,"* (FAO, January-April 1996).

Available at <http://www.fao.org/docrep/005/ac696e/ac696e09.htm> [Accessed on 10/04/2016].

⁷ Berkes, F., et. al., ‘Rediscovery of Traditional Ecological Knowledge as Adaptive Management,’ op cit., p. 1251.

⁸ Ibid, p. 1252.

⁹ Swiderska, K., et. al., ‘Protecting Community Rights over Traditional Knowledge: Implications of Customary Laws and Practices,’ Interim Report (2005-2006), November 2006, p. 13.

Available at <http://pubs.iied.org/pdfs/G01253.pdf> [Accessed on 10/04/2016].

¹⁰ 1992 Convention on Biological Diversity, [1993] ATS 32 / 1760 UNTS 79 / 31 ILM 818 (1992).

resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements. The CBD is the only international treaty that specifically acknowledges the role of traditional knowledge, innovations, and practices in biodiversity conservation and sustainable development, as well as the need to guarantee their protection, whether through intellectual property rights (IPRs) or other means.¹¹

The *United Nations Declaration on the Rights of Indigenous Peoples*,¹² provides that indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.¹³ In conjunction with indigenous peoples, States are obligated to take effective measures to recognize and protect the exercise of these rights.¹⁴

One of the factors that informed this Declaration is the recognition that that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment.¹⁵

The objectives of the *Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005*¹⁶ include, inter alia: to protect and promote the diversity of cultural expressions; to create the conditions for cultures to flourish and to freely interact in a mutually beneficial manner; to encourage dialogue among cultures with a view to ensuring wider and balanced cultural exchanges in the world in favour of intercultural respect and a culture of peace; to foster interculturality in order to develop cultural interaction in the spirit of building bridges among peoples; and to reaffirm the importance of the link between culture and development for all

¹¹ Dutfield, G., 'TRIPS-Related Aspects of Traditional Knowledge,' *Case Western Reserve Journal of International Law*, Vol. 33, Iss. 2, 2001, pp. 233-275 at pp. 261-261.

¹² 61/295. *United Nations Declaration on the Rights of Indigenous Peoples*.

¹³ *United Nations Declaration on the Rights of Indigenous Peoples*, Art. 31(1).

¹⁴ *Ibid*, Art. 31(2).

¹⁵ *United Nations Declaration on the Rights of Indigenous Peoples*, Preamble.

¹⁶ Passed by the General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 3 to 21 October 2005 at its 33rd session.

countries, particularly for developing countries, and to support actions undertaken nationally and internationally to secure recognition of the true value of this link.¹⁷

The international recognition of indigenous knowledge means that national governments ought to give this knowledge more recognition and facilitate active uptake and use of the knowledge by communities.

3.2 National Legal Framework on protection of TK/IK

The *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009*¹⁸ was developed in response to a growing need to address three main challenges facing the country today: accelerating technological development, integration of the world economic, ecological, cultural, trading and information systems and the growing relevance of intellectual property rights to these areas of activity.¹⁹ The Policy was formulated in order to provide a national framework for recognition, preservation, protection and promotion of sustainable use of traditional knowledge, genetic resources and traditional cultural expressions. Ultimately, this is meant to enhance mainstreaming of such knowledge systems into national development planning and decision making processes at all levels.²⁰

Notably, one of the Policy Statements is to the effect that the Government in collaboration with other stakeholders will endeavour to: create awareness on the importance and the value of TK and Traditional Cultural Expressions (TCE) for, education, conflict resolution, posterity and socio-economic development.²¹

The *Protection of Traditional Knowledge and Traditional Cultural Expressions Act, 2016*²² provides a unified and comprehensive framework for the protection and promotion of traditional knowledge and traditional cultural expressions; and gives effect to Article 11, 40(5) and 69 of the Constitution. Notably, one of the purposes of this Act is to recognize the intrinsic value of traditional cultures and traditional cultural expressions, including their social, cultural, economic,

¹⁷ Art. 1, Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005.

¹⁸ Government Printer, July 2009, Nairobi.

¹⁹ Ibid, preamble.

²⁰ Ibid, para. 1.1.10.

²¹ *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009*, para. 4.4.

²² Act No. 33 of 2016 (Government Printer, Nairobi, 2016).

intellectual, commercial and educational value.²³ It defines “traditional knowledge” as any knowledge originating from an individual, local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another and includes agricultural, *environmental* or medical knowledge, and knowledge associated with *genetic resources or other components of biological diversity* (emphasis added), and know-how of traditional architecture, construction technologies, designs, marks and indications.²⁴

It is noteworthy that this definition is broad enough and it is relevant to the discussion in this paper in that it contemplates environmental knowledge as part of TK. The foregoing Act is, however, silent on the use of TK in conflict management. This does not however mean that it prohibits the same since it is drafted in broad terms envisaging conflict management as part of use and enjoyment of TK by communities.

4. Nature of Environmental Conflicts

Conflict has been defined as a struggle over values or claims to status and resources, in which the aim of the conflicting parties is not only the desired values but also neutralize, injure or eliminate their rivals.²⁵ Conflict is seen as an inevitable phenomenon in human society’s sphere of life since the entire life of humankind is manipulated by the prevalence of conflict within the society when people set opinion against opinion, run interest against interests.²⁶ It has been observed that almost all societies, regardless of their location in time and space, have laws and mechanisms for handling disputes/conflicts and achieving resolution of differences.²⁷ The causes of environmental conflicts vary across the globe and their manifestations differ considerably. Causes can range from control over vital environmental resources to contestations over natural resources at the community and/or household level.²⁸ It, therefore, follows that such mechanisms are informed by knowledge

²³ Ibid, S. 2(d).

²⁴ Ibid, S. 4.

²⁵ Mengesha, A.D., et al., “Indigenous Conflict Resolution Mechanisms among the Kembata Society.” op cit, at pp. 225-226.

²⁶ Ibid, p.226.

²⁷ Ibid, p. 226.

²⁸ Bob, U & Bronkhorst, S., ‘Environmental conflicts: Key issues and management implications,’ *African Journal on Conflict Resolution*, Special Issue on Environment and Conflict, Vol. 10 No. 2, 2010, pp. 9-30 at p. 10.

originating from within such communities. TEK comes in handy when such communities are to deal with environmental conflicts.

There has also been documented evidence to the effect that that if conservation and environmental management policies are not formulated and implemented in a holistic way to balance the needs and interests of conservation and people, it can lead to conflict.²⁹ Environmental deficiencies supply conditions which render conflict all the more likely. They can serve to determine the source of conflict, they can act as multipliers that aggravate core causes of conflict, and they can help to shape the nature of conflict. Moreover they can not only contribute to conflict, they can stimulate the growing use of force to repress disaffection among those who suffer the consequences of environmental decline.³⁰

While environmental conflicts take on different forms and have multiple and varying impacts in different contexts, the key points of conflict are in relation to climate change, conservation, water quality and availability, air quality and management aspects.³¹ Communities have special relationship with the environment in their areas and any adverse effect on such environment directly interferes with the livelihoods of the community. Shocks to natural systems are anticipated and where rights and processes are uncertain, this may lead to conflict.³² Such conflict can be between similar resource users (e.g. between pastoralists), or between users with different needs (farmers versus pastoralists), or even within families where gender based violence appears to surge with climate stresses.³³

5. Role and relevance of traditional knowledge in conflict management in environmental matters.

Although customary laws vary widely between communities, underlying customary principles or values such as reciprocity, equilibrium, duality and brotherhood/solidarity are quite consistent across different ethnic groups. These principles give rise to the obligation to openly share bio-

²⁹ Ibid, p. 15.

³⁰ N. Myers, "Environmental Security: What's New and Different?"

Available at <http://www.envirosecurity.org/conference/working/newanddifferent.pdf> [Accessed on 11/10/2015], p.4.

³¹ Bob, U & Bronkhorst, S., 'Environmental conflicts: Key issues and management implications,' op cit, p. 27.

³² Crawhall, N., 'Indigenous knowledge in adaptation: conflict prevention and resilience-building,' op cit. p. 4.

³³ Ibid, p. 2.

resources and TK; to reciprocate/ exchange equally; to maintain harmony in society; to help those in need; and to respect nature.³⁴

The resilience of indigenous peoples and local communities, as sustained by their cultural systems which have adapted to local ecological niches over long timeframes, and the detailed and broad knowledge they have of adaptation, is affected negatively by the loss of land, ecosystem capacity, and alienation of culturally significant places, migration and losses in livelihoods.³⁵

The element of traditional knowledge includes moral and ethical statements about the environment and about the relationships between humans, animals, and the environment; the “right way” to do things.³⁶

It has correctly been observed that ecological knowledge does not function in isolation but it is, instead, embedded in institutions and local social norms.³⁷ Further, the structure and dynamics of institutions are critical for implementation of management practices based on ecological understanding in any society.³⁸ The coordination of appropriate resource use practices is often entrusted with traditional leaders.³⁹

Traditional conflict resolution practices reflect principles of reconciliation based on long-standing relationships and values.⁴⁰ They tend to be effective in addressing intra-community and even inter-community conflict, where relationships and shared values are part of the reconciliation process.⁴¹ Traditional mechanisms are rooted in the culture and history of the African people. They emphasize group unity, reconciliation of individuals or groups, and peaceful reintegration into the

³⁴ Mengesha, A.D., et al., “Indigenous Conflict Resolution Mechanisms among the Kembata Society.” op cit, p. 4.

³⁵ Crawhall, N., ‘Indigenous knowledge in adaptation: conflict prevention and resilience-building,’ *Conflict-sensitive Adaptation: Use Human Rights to Build Social and Environmental Resilience, Brief 10*. (Indigenous Peoples of Africa Co-ordinating Committee and IUCN Commission on Environmental, Economic and Social Policy, 2014), p. 2. Available at http://cmsdata.iucn.org/downloads/tecs_csa_10_indigenous_knowledge_in_adaptation_crawhall.pdf [Accessed on 10/04/2016].

³⁶ Mackenzie Valley Environmental Impact Review Board, *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*, July 2005, p. 6.

Available at http://www.reviewboard.ca/upload/ref_library/1247177561_MVReviewBoard_Traditional_Knowledge_Guidelines.pdf [Accessed on 10/04/2016].

³⁷ Berkes, F., et. al., ‘Rediscovery of Traditional Ecological Knowledge as Adaptive Management,’ op cit. p. 1258.

³⁸ Ibid, p. 1258.

³⁹ Ibid, p. 1258.

⁴⁰ Myers, L.J. & Shinn, D.H., ‘Appreciating Traditional Forms of Healing Conflict in Africa and the World,’ *Black Diaspora Review*, Vol. 2(1), Fall 2010.

⁴¹ Ibid.

community. Traditional techniques place the interest of the group above that of the individual. They assume that all parties are interested in and affected by the conflict. The goal is to reconcile the parties to the conflict so that there is a return to social harmony—the goal of cosmopolitanism.⁴²

It has rightly been argued that social realities within societies should be taken seriously and conflicts should be viewed as non-isolated events in their social contexts. This is because when Africans sit down to discuss a conflict, the talking usually covers all kinds of relevant background and goes into the thoughts and intentions of others. The elders from a family, clan or state see their traditional objectives in conflict resolution as moving away from accusations and counter-accusations, to soothe hurt feelings and to reach a compromise that may help to improve future relationships. They also dwell on values, aspirations, perceptions and visions.⁴³

However, it has been asserted that while local people possess a great store of knowledge which they can draw upon to manage their environments, often with great success, such knowledge should not be seen as an unchanging set of rules for conduct.⁴⁴ Indigenous knowledge—whether about farming or settling disputes, does not provide a set formula for community decision-making. It is simply a repertoire of ideas and actions from which individuals and communities faced with specific problems can draw, depending on their own level of knowledge, their preferences, and their ability and motivation to act.⁴⁵

There has been emphasis on the importance of achieving constructive conflict resolution in natural Resource Management (NRM) and highlight the importance of local government structures and traditional leaders in managing conflicts in developing contexts.⁴⁶ In this regard, *Community-based approaches to NRM and conflict resolution* are deemed to be useful, particularly to promote locally

⁴² Ibid, p. 3; Schaap, A., 'Reconciliation as Ideology and Politics,' *An International Journal of Democratic and Critical Theory*, 2008. Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8675.2008.00488.x/pdf> [Accessed on 23/04/2016].

⁴³ Utne, B.B., 'Indigenous conflict resolution in Africa,' p. 8, *A draft presented to the week-end seminar on indigenous solutions to conflicts held at the University of Oslo, Institute for Educational Research 23 – 24 of February 2001*. Available at http://www.africavenir.org/fileadmin/_migrated/content_uploads/BrockUtneTradConflictResolution_06.pdf [Accessed on 12/04/2016].

⁴⁴ Castro, A.P. & Ettenger, K., 'Indigenous Knowledge and Conflict Management: Exploring Local Perspectives and Mechanisms for Dealing with Community Forestry Disputes,' op cit.

⁴⁵ Ibid.

⁴⁶ Bob, U & Bronkhorst, S., 'Environmental conflicts: Key issues and management implications,' op cit. p. 25.

based, indigenous management strategies.⁴⁷ It has been suggested that drawing TK/IKS holders into decision-making and policy dialogue may valorize TK/IK knowledge, facilitate participation of traditional customary resource management institutions while informing and adjusting national or subnational policy to find equitable, socially just, and environmentally well-informed solutions during times of extreme weather shocks or threshold crises of natural resource systems.⁴⁸ This is based on the assertion that participation in both decision-making and locally-owned conflict resolution strategies are more likely to be sustained and respected. *Local institutions that are aligned to traditional values, clan systems or other local social network, may be able to identify opportunities for resolution that are not evident to outside arbitrators or judges* (emphasis added).⁴⁹

Since indigenous mechanisms of conflict management are based on the very values and tenets of the people, they maintain and protect the customs and traditions of the society. Thus, they are able to solve long standing disputes and promote durable peace.⁵⁰

5.1 Traditional Knowledge and Environmental Security

Environmental security is defined as environmental viability for life support, with three sub-elements; preventing or repairing military damage to the environment, preventing or responding to environmentally caused conflicts, and protecting the environment due to its inherent moral value.⁵¹ The notion of "environmental security," should also be understood to have two dimensions. On the one hand, in placing emphasis upon the environmental dimension, security means maintaining an ecological balance, at least to the extent necessary to sustain resource supplies and life-support systems. On the other hand, in emphasizing the dimension of security in the traditional sense, the term refers to the prevention and management of conflicts precipitated by environmental decline.⁵²

⁴⁷ Ibid.

⁴⁸ Crawhall, N., 'Indigenous knowledge in adaptation: conflict prevention and resilience-building,' op cit. p. 2.

⁴⁹ Ibid, p.2.

⁵⁰ Azebre, A.I., et al, 'Indigenous Mechanisms of Dispute Resolution among the People of Adaboya Traditional Area,' July 2012, available at <https://www.modernghana.com/news/534448/1/indigenous-mechanisms-of-dispute-resolution-among-.html> [Accessed on 10/04/2016].

⁵¹ Ayeni, A.O. & Olorunfemi, F.B., 'Reflections on Environmental Security, Indigenous Knowledge and the Implications for Sustainable Development in Nigeria,' *Jorind*, Vol. 12, No. 1, June, 2014, pp. 46-57 at p. 51.

⁵² J. Brunnee, "Environmental Security in the Twenty-First Century: New Momentum for the Development of International Environmental Law?" *Fordham International Law Journal*, Vol. 18, 1995, pp. 1742-1747 at p. 1742.

Environmental security has also been defined as the process of peacefully reducing human vulnerability to human-induced environmental degradation by addressing the root causes of environmental degradation and human insecurity.⁵³ The Constitution provides that the State shall, *inter alia*: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; protect and enhance intellectual property in, and *indigenous knowledge* of, biodiversity and the genetic resources of the communities; *encourage public participation in the management, protection and conservation of the environment* (emphasis added); protect genetic resources and biological diversity; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and utilise the environment and natural resources for the benefit of the people of Kenya.⁵⁴

In the Northern parts of Kenya, the negative climate change impact on natural resources, stress existing mechanisms for sharing resources like food and pastures, and there is always potential for tensions which can often escalate into serious clan fights for the available limited resources.⁵⁵ The pastoralists graze their cattle on the existing pasture leaving the soil bare. Recently, the Turkana community has turned to agriculture as a way of livelihood.⁵⁶ However, considering that there are other communities in the area who are still pastoralists, there is likelihood of tribal clashes over the resources found in the irrigated areas.⁵⁷

The Food and Agriculture Organization of the United Nations (FAO) has suggested that the promotion and protection of traditional and local food and agricultural knowledge will require

⁵³ F. Rita, “The Environmental Security Debate and Its Significance for Climate Change,” *The International Spectator: Italian Journal of International Affairs*, Vol. 43, Issue 3, 2008, pp.51-65 at p. 56.

⁵⁴ Article 69(1).

⁵⁵ Pkalya, R., et al, ‘Conflict in Northern Kenya: A focus on the internally displaced conflict victims in Northern Kenya,’ available at http://practicalaction.org/docs/region_east_africa/conflict_in_northern_kenya.pdf [Accessed on 23/04/2016].

⁵⁶ See African Development Bank, Socio-Economic Analysis and Public Consultation of Lake Turkana Communities – Draft Report, December, 2009, p. 141.

Available at

<http://www.afdb.org/fileadmin/uploads/afdb/Documents/ComplianceReview/PUBLIC%20CONSULTATION%20AND%20SOCIO%20ECONOMIC%20ANALYSIS%20OF%20LAKE%20TURKANA%20COMMUNITIES%20UPDATED%20VERSION.PDF> [Accessed on 23/04/2016].

⁵⁷ *Ibid*, p. 141.

international, intercultural and interdisciplinary approaches, communication and cooperation.⁵⁸ Coordination of indigenous and local communities' sustainable use, conservation and management of food and agriculture within and across ecosystems, landscapes and seascapes will also require synergies that link food security, livelihood sustainability, poverty alleviation and food and agricultural productivity to rural development processes based on *in* and *ex situ* conservation of food and agricultural genetic resources.⁵⁹

6. Traditional Knowledge in Kenya: A mirage?

While the formal recognition of TK or IK has existed in Kenya's laws for some time, this has not translated to active utilisation of the knowledge by communities for management of environmental conflicts. The practice has been to suppress them or even overshadow them using the formal mechanisms. This has also been evidenced by court pronouncements on the same which have not been consistent. In the case of *Joseph Letuya & 21 others v Attorney General & 5 others [2014] eKLR⁶⁰*, the Court observed that: "quite apart from the special consideration that needs to be given to the Ogiek community as a minority and indigenous group when allocating forest land that this court has enunciated on in the foregoing, this court also recognizes the unique and central role of indigenous forest dwellers in the management of forests. This role is recognized by various international and national laws. The Convention on Biological Diversity which Kenya has ratified and which is now part of Kenyan law by virtue of Article 2(6) of the Constitution recognizes the importance of traditional knowledge, innovations and practices of indigenous and local communities for the conservation and sustainable use of biodiversity and that such traditional knowledge should be respected, preserved and promoted." Such an affirmation from courts is to be lauded. Ideally, the same should be extended in entrenching the richness of TK/IK in environmental matters. However, while the Constitution recognises customary law as source of law in Kenya, the same has been subjugated to the formal sources of law.⁶¹ It is also clear from

⁵⁸ Food and Agriculture Organization of the United Nations (FAO), *FAO and traditional knowledge: the linkages with sustainability, food security and climate change Impacts*, 2009, p.9.

⁵⁹ *Ibid.*

⁶⁰ ELC Civil Suit No. 821 of 2012 (OS).

⁶¹ Art. 2(4) of the Constitution provides that any law, including customary law, that is inconsistent with this Constitution is void to the extent of the inconsistency, and any act or omission in contravention of this Constitution is invalid.

the foregoing case that the concerned community had to fight their way through formal courts to secure their rights.

It is also noteworthy that in the past, the position has been that courts do not take judicial notice of customary law (including environmental customary law and norms) and the same must specifically be pleaded and proved by the person seeking to benefit from it. In the case of *Kimani v Gikanga*⁶² the Court of Appeal for Eastern Africa was dealing with the issue of how the Court would establish customary laws as facts before it. The Court held that any person seeking to rely on customary law must prove the same in court. In other words, the Court will not take judicial notice of customary law. Customary law contains environmental norms and edicts on how to manage the environment. This position raises substantial questions as to the place of customary law under the current Constitution of Kenya, 2010. It has not specifically been overturned by Kenyan courts and could only be inferred that it was changed by the provisions of the current Constitution of Kenya 2010. However, even as the Constitution requires that, in exercising judicial authority, the courts and tribunals must be guided by the principles of, inter alia— alternative forms of dispute resolution including reconciliation, mediation, arbitration and traditional dispute resolution mechanisms must be promoted, subject to clause (3)⁶³, it is not clear as to how the repugnancy clause may be applied. This therefore poses the same risk of subjugation of customary laws. Customary law and traditional ecological norms thus have the problem of general acceptance by the law enforcing authorities.

While some of the foregoing case law seem to support and recognise the use of TK or IK, there has not been consistency. There is a need to clarify the place of traditional knowledge for environmental conflict management in Kenya.

⁶² Court of Appeal for Eastern Africa, [1965] E.A. 735.

⁶³ (3) Traditional dispute resolution mechanisms shall not be used in a way that—
(a) contravenes the Bill of Rights;
(b) is repugnant to justice and morality or results in outcomes that are repugnant to justice or morality; or
(c) is inconsistent with this Constitution or any written law.

7. Harnessing Traditional or Indigenous Knowledge: Walking the Talk

It has been proposed that traditional knowledge, either on its own or in conjunction with science, can greatly aid in predicting and preventing the potential environmental impacts of development, as well as informing wise land-use and resource management.⁶⁴ Proponents of traditional knowledge maintain that it can offer contributions to environmental decision making from a broader scope of environmental values, practices, and knowledge.⁶⁵ The United Nations 2030 Agenda for Sustainable Development⁶⁶ recognizes peace as a vital threshold condition for development, as well as a development outcome in its own right. The General Assembly of the United Nations, in adopting the 2030 Agenda for Sustainable Development affirmed their determination to foster peaceful, just and inclusive societies which are free from fear and violence. It also affirmed that there can be no sustainable development without peace and no peace without sustainable development.⁶⁷

Indigenous or traditional knowledge (TK) is used at the local level by communities as the basis for making decisions pertaining to food security, human and animal health, education, natural resource management and other vital activities.⁶⁸

Exploring the community's knowledge and knowledge of people dealing with agriculture, is deemed crucial to determine their norms, values, and belief in regards to their activities, particularly in the area of water and land management.⁶⁹ The way how people develop such knowledge by understanding their environment through observation and experiences determine the specific group of people's knowledge.

⁶⁴ Ellis, S.C., Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making,' *Arctic*, Vol. 58, No. 1 (March 2005), p. 66–77 at p. 67.

⁶⁵ *ibid* at p. 67.

⁶⁶ UNGA, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015 [without reference to a Main Committee (A/70/L.1)], Goal 16.

⁶⁷ Preamble, the United Nations 2030 Agenda for Sustainable Development.

⁶⁸ Gorjestani, N., 'Indigenous Knowledge for Development: Opportunities and Challenges,' in Twarog, S. & Kapoor, P. (eds), 'Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions,' (United Nations Conference on Trade and Development, 2004), UNCTAD/DITC/TED/10, pp. 265-272 at p. 265. Available at http://unctad.org/en/docs/ditcted10_en.pdf [Accessed on 10/04/2016].

⁶⁹ Retnowati, A., et al, 'Environmental Ethics in Local Knowledge Responding to Climate Change: An Understanding of Seasonal Traditional Calendar *Pranoto Mongso* and Its Phenology in Karst Area of Gunung Kidul, Yogyakarta, Indonesia,' *Procedia Environmental Sciences*, Vol. 20, 2014, pp. 785 – 794 at p. 787.

7.1 Constitution of Kenya 2010 and Indigenous Knowledge

The Constitution of Kenya 2010 provides for the national values and principles of governance that bind all State organs, State officers, public officers and all persons whenever any of them— applies or interprets this Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions.⁷⁰ These national values and principles of governance include, inter alia—sharing and devolution of power, the rule of law, democracy and participation of the people; human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalised; good governance, integrity, transparency and accountability; and sustainable development.⁷¹ Further, the Constitution provides that it recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.⁷² Notably, it also outlines the State’s obligation to— promote all forms of national and cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage; recognise the role of science and indigenous technologies in the development of the nation; and promote the intellectual property rights of the people of Kenya.⁷³ The Constitution also guarantees every person’s right to use the language, and to participate in the cultural life, of the person’s choice.⁷⁴

The Constitution also obligates the State to put in place affirmative action programmes designed to ensure that minorities and marginalised groups, inter alia—participate and are represented in governance and other spheres of life; and develop their cultural values, languages and practices.⁷⁵

One of the principles of land policy in Kenya is encouragement of communities to settle land disputes through recognised local community initiatives consistent with the Constitution.⁷⁶ These principles shall be implemented through a national land policy developed and reviewed regularly by the national government and through legislation.⁷⁷

⁷⁰ Constitution of Kenya, 2010, Art. 10(1).

⁷¹ Ibid, Art. 10(2).

⁷² Ibid, Art. 11(1).

⁷³ Ibid, Art. 11(2).

⁷⁴ Ibid, Art. 44(1).

⁷⁵ Ibid, Art. 56.

⁷⁶ Ibid, Art. 60(1) (g).

⁷⁷ Ibid, Art. 60(2).

The functions of the National Land Commission include, inter alia: to initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress; and to encourage the application of traditional dispute resolution mechanisms in land conflicts.⁷⁸

The obligations of the State in respect of the environment as outlined in the Constitution include, inter alia: protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; encourage public participation in the management, protection and conservation of the environment; and protect genetic resources and biological diversity.⁷⁹

The Constitution requires that, in exercising judicial authority, the courts and tribunals must be guided by the principles of, inter alia— alternative forms of dispute resolution including *reconciliation, mediation, arbitration and traditional dispute resolution mechanisms* which must be promoted, subject to clause (3) (emphasis added).⁸⁰ It is noteworthy that these mechanisms form part of the TK or IK since when they are applied in the community setting, they mostly rely on such knowledge for their effectiveness.⁸¹

The objects of the devolution of government are, inter alia— to give powers of self-governance to the people and enhance the participation of the people in the exercise of the powers of the State and in making decisions affecting them; to recognise the right of communities to manage their own affairs and to further their development; and to protect and promote the interests and rights of minorities and marginalised communities.⁸²

While the foregoing provisions are laudable in view of the fact that they have envisaged indigenous or traditional knowledge within the legal framework, the real task lies in implementing these provisions and creating opportunities for incorporation of such knowledge in decision-making. There is need to move beyond recognition of traditional knowledge in Kenya to ensuring that the

⁷⁸ Ibid, Art. 67(2) (f).

⁷⁹ Ibid, Art. 69(1) (C) (d).

⁸⁰ Ibid, Art. 159(2) (c).

⁸¹ Castro, A.P. & Ettenger, K., 'Indigenous Knowledge And Conflict Management: Exploring Local Perspectives And Mechanisms For Dealing With Community Forestry Disputes,' *Paper Prepared for the United Nations Food and Agriculture Organization, Community Forestry Unit, for the Global Electronic Conference on "Addressing Natural Resource Conflicts Through Community Forestry,"* op cit.

⁸² Art. 174.

same has been fully incorporated and reflected in decision-making and also left to function where the Constitution so requires. A good example of such provision is the application of traditional dispute resolution mechanisms in land conflicts (Art. 67) as well as dealing with the inter-community and intra community conflicts that are mostly natural resource based.

There is a clear need to integrate traditional and formal sciences for participatory monitoring, and taking feedback to achieve adaptive strategies for management of natural resources.⁸³ It has been argued that management of natural resources cannot afford to be the subject of just any single body knowledge such as the Western science, but it has to take into consideration the plurality of knowledge systems. There is a more fundamental reason for the integration of knowledge systems. Application of scientific research and local knowledge contributes both to the equity, opportunity, security and empowerment of local communities, as well as to the sustainability of the natural resources. Local knowledge helps in scenario analysis, data collection, management planning, designing of the adaptive strategies to learn and get feedback, and institutional support to put policies in to practice. Science, on the other hand, provides new technologies, or helps in improvement to the existing ones. It also provides tools for networking, storing, visualizing, and analyzing information, as well as projecting long-term trends so that efficient solutions to complex problems can be obtained.⁸⁴ Through assimilation of indigenous knowledge, it is possible to capture the interests and genuine desires of the locals in natural resource exploitation activities. This reduces conflict not only within the concerned communities but also between the communities and the authorities. Where they do not perceive a likelihood of their livelihoods being endangered, these communities are unlikely to reject development projects or even turning to unconventional ways of protecting their livelihoods.

7.2 Concerted Efforts

However, harnessing this knowledge is not a one person affair but instead calls for concerted efforts from all quotas. Non-Governmental organisations, academia and government institutions directly concerned can collaborate in creating awareness of the ways in which the scientific knowledge can be applied concurrently with IK/TK to manage environmental conflicts for peace

⁸³ Pandey, D.N., 'Traditional Knowledge Systems for Biodiversity Conservation,' available at http://www.infinityfoundation.com/mandala/t_es/t_es_pande_conserve.htm

⁸⁴ Ibid.

and sustainable development. Churches and other religious organisations can also come in to facilitate the actual processes of conflict management and also foster awareness creation efforts. Courts are also under an obligation to take lead role in promoting the use of traditional knowledge in environmental conflict management. They should offer support and uphold the relevant provisions where they are faced with such situations.

The need to involve everyone is affirmed in the Constitution which provides that every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.⁸⁵

8. Conclusion

There is clearly a link between traditional or indigenous knowledge and environmental conflict management in Kenya. TK or IK involve the knowledge of and application of conflict management mechanisms that are acceptable by communities and that promote peaceful co-existence.

TK, TEK and IK are based on inclusivity. Community members are given a voice-they are able to take part in the management of natural resources within the areas that they live in. Within TK is to be found certain environmental ethics that relate to how human beings deal with the environment. The idea of being in harmony with nature is one that can work towards minimizing environmental conflicts.

TK is relevant in conflict management in environmental matters. It may be used in tandem with other mechanisms to achieve the same end. Successful management of environmental conflicts has the desired goal of ensuring that Kenya achieves environmental security and sustainable development.

All knowledge including traditional knowledge, traditional ecological knowledge and indigenous knowledge should be brought to bear in a bid to address environmental conflicts in Kenya. Harnessing traditional knowledge for environmental conflict management is an idea that we cannot afford to ignore. The sustainable development agenda calls for an integrated approach to natural resources governance and management of associated conflicts to ensure that all groups and stakeholders are brought on board.

⁸⁵ Constitution of Kenya 2010, Art. 69(2).

References

- African Development Bank, Socio-Economic Analysis and Public Consultation of Lake Turkana Communities – Draft Report, December, 2009.
- Ayeni, A.O. & Olorunfemi, F.B., ‘Reflections on Environmental Security, Indigenous Knowledge and the Implications for Sustainable Development in Nigeria,’ *Jorind*, Vol. 12, No. 1, June, 2014, pp. 46-57.
- Azebre, A.I., et al, ‘Indigenous Mechanisms of Dispute Resolution among the People of Adaboya Traditional Area,’ July 2012.
Available at <https://www.modernghana.com/news/534448/1/indigenous-mechanisms-of-dispute-resolution-among-.html> [Accessed on 10/04/2016].
- Berkes, F., et. al., ‘Rediscovery of Traditional Ecological Knowledge as Adaptive Management,’ *Ecological Applications*, Vol. 10, No. 5. (Oct., 2000), pp. 1251-1262.
- Bob, U & Bronkhorst, S., ‘Environmental conflicts: Key issues and management implications,’ *African Journal on Conflict Resolution*, Special Issue on Environment and Conflict, Vol. 10 No. 2, 2010, pp. 9-30.
- Brunnee, J., “Environmental Security in the Twenty-First Century: New Momentum for the Development of International Environmental Law?” *Fordham International Law Journal*, Vol. 18, 1995, pp. 1742-1747.
- Castro, A.P. & Ettenger, K., ‘Indigenous Knowledge And Conflict Management: Exploring Local Perspectives And Mechanisms For Dealing With Community Forestry Disputes,’ *Paper Prepared for the United Nations Food and Agriculture Organization, Community Forestry Unit, for the Global Electronic Conference on "Addressing Natural Resource Conflicts Through Community Forestry,"* (FAO, January-April 1996).
Available at <http://www.fao.org/docrep/005/ac696e/ac696e09.htm> [Accessed on 10/04/2016].
- Constitution of Kenya, 2010, Government Printer, Nairobi. 2010.
- Convention on Biological Diversity, [1993] ATS 32 / 1760 UNTS 79 / 31 ILM 818 (1992).
- Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005*, Passed by the General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 3 to 21 October 2005 at its 33rd session.
- Crawhall, N., ‘Indigenous knowledge in adaptation: conflict prevention and resilience-building,’ *Conflict-sensitive Adaptation: Use Human Rights to Build Social and Environmental Resilience, Brief 10*. (Indigenous Peoples of Africa Co-ordinating Committee and IUCN Commission on Environmental, Economic and Social Policy, 2014). Available at http://cmsdata.iucn.org/downloads/tecs_csa_10_indigenous_knowledge_in_adaptation_crawhall.pdf [Accessed on 10/04/2016].

Dutfield, G., 'TRIPS-Related Aspects of Traditional Knowledge,' *Case Western Reserve Journal of International Law*, Vol. 33, Iss. 2, 2001, pp. 233-275.

Ellis, S.C., 'Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making,' *Arctic*, Vol. 58, No. 1 (March 2005), p. 66-77.

Food and Agriculture Organization of the United Nations (FAO), *FAO and traditional knowledge: the linkages with sustainability, food security and climate change Impacts*, 2009.

Gorjestani, N., 'Indigenous Knowledge for Development: Opportunities and Challenges,' in Twarog, S. & Kapoor, P. (eds), 'Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions,' (United Nations Conference on Trade and Development, 2004), UNCTAD/DITC/TED/10, pp. 265-272 at p. 265. Available at http://unctad.org/en/docs/ditcted10_en.pdf [Accessed on 10/04/2016].

Irobi, E.G., 'Ethnic Conflict Management in Africa: A Comparative Case Study of Nigeria and South Africa,' May, 2005, available at <http://www.beyondintractability.org/casestudy/irobi-ethnic> [Accessed at 23/04/2016]

Mackenzie Valley Environmental Impact Review Board, *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*, July 2005. Available at http://www.reviewboard.ca/upload/ref_library/1247177561_MVReviewBoard_Traditional_Knowledge_Guidelines.pdf [Accessed on 10/04/2016].

Mengesha, A.D., et al., "Indigenous Conflict Resolution Mechanisms among the Kembata Society." *American Journal of Educational Research*, 2015, Vol. 3, No. 2, pp. 225-242.

....., 'The Role of Sidama Indigenous Institutions in Conflict Resolution: In the Case of Dalle Woreda, Southern Ethiopia,' *American Journal of Sociological Research*, Vol. 6 No. 1, 2016, pp. 10-26.

Myers, N., "Environmental Security: What's New and Different?" Available at <http://www.envirosecurity.org/conference/working/newanddifferent.pdf> [Accessed on 11/10/2015].

Myers, L.J. & Shinn, D.H., 'Appreciating Traditional Forms of Healing Conflict in Africa and the World,' *Black Diaspora Review*, Vol. 2(1), Fall 2010.

National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009, Government Printer, July 2009, Nairobi.

Pandey, D.N., 'Traditional Knowledge Systems for Biodiversity Conservation,' available at http://www.infinityfoundation.com/mandala/t_es/t_es_pande_conserve.htm

Pkalya, R., et al, 'Conflict in Northern Kenya: A focus on the internally displaced conflict victims in Northern Kenya,' available at http://practicalaction.org/docs/region_east_africa/conflict_in_northern_kenya.pdf [Accessed on 23/04/2016].

Protection of Traditional Knowledge and Traditional Cultural Expressions Act, No. 33 of 2016, (Government Printer, Nairobi, 2016).

Retnowati, A., et al, 'Environmental Ethics in Local Knowledge Responding to Climate Change: An Understanding of Seasonal Traditional Calendar *Pranoto Mongso* and Its Phenology in Karst Area of Gunung Kidul, Yogyakarta, Indonesia,' *Procedia Environmental Sciences*, Vol. 20, 2014, pp. 785 – 794.

Rita, F., "The Environmental Security Debate and Its Significance for Climate Change," *The International Spectator: Italian Journal of International Affairs*, Vol. 43, Issue 3, 2008, pp.51-65.

Schaap, A., Reconciliation as Ideology and Politics,' *An International Journal of Democratic and Critical Theory*, 2008. Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8675.2008.00488.x/pdf> [Accessed on 23/04/2016].

Swiderska, K., et. al., 'Protecting Community Rights over Traditional Knowledge: Implications of Customary Laws and Practices,' Interim Report (2005-2006), November 2006. Available at <http://pubs.iied.org/pdfs/G01253.pdf> [Accessed on 10/04/2016].

UNGA, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015 [without reference to a Main Committee (A/70/L.1)].

United Nations Declaration on the Rights of Indigenous Peoples. 61/295.

Utne, B.B., 'Indigenous conflict resolution in Africa,' a *draft presented to the week-end seminar on indigenous solutions to conflicts held at the University of Oslo, Institute for Educational Research 23 – 24 of February 2001*. Available at http://www.africavenir.org/fileadmin/_migrated/content_uploads/BrockUtneTradConflictResolution_06.pdf [Accessed on 12/04/2016].

World Intellectual Property Organisation, 'Traditional Knowledge,' available at <http://www.wipo.int/tk/en/tk/>