

# **The Challenges of repackaging Traditional Knowledge in the Context of Intellectual Property Rights: Case of Zimbabwe and Uganda**

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by

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## *Abstract*

*This paper is based on two case studies of Uganda and Zimbabwe. It gives a brief overview of Traditional Knowledge (TK) and defines the key concepts: TK/IK, Intellectual Property and repackaging of information. Through observation, face to face interviews and literature analysis, the paper discusses: Role of Higher Education Institutions in promoting TK, challenges of TK with special reference to challenges related to characteristics of TK, Challenges of protecting TK and Challenges of Repackaging TK. The paper further discusses women's role in the preservation of TK and the reasons why traditional knowledge is lowly appreciated with recommendations towards repackaging traditional knowledge to spur development.*

**Keywords** Traditional knowledge, Indigenous Knowledge, Intellectual Property

## **1. INTRODUCTION**

***“When an elder dies, a library is depleted”.***

In Africa, Traditional Knowledge remains unwritten science, for example, in medicine, most of the information on the properties of medicinal plants has remained undocumented and it has even remained as a secret to traditional healers.<sup>1</sup> The lack of information about traditional knowledge systems has resulted in low acceptance of traditional knowledge systems. For example, people despise traditional medicine during the day even though they secretly visit traditional healers during the night. Traditional knowledge encompasses the wisdom, knowledge, and teachings of local communities. In many cases, traditional knowledge has been orally passed for generations from person to person. Some forms of traditional knowledge are expressed through stories, legends, folklore, rituals, songs, and even laws.

Such knowledge typically distinguishes one community from another. Some communities depend on their traditional knowledge for survival. For instance, in Uganda, there is a

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clan known to perform some rituals, the 'Ngabi' clan known for joints fixing incase one got a bone fracture (broke his/her bone).

Traditional knowledge, on the other hand, may be perceived very differently by indigenous and local communities themselves. For some communities, traditional knowledge takes on a personal and spiritual meaning to reflect a community's interests. And, sometimes, Traditional Knowledge (TK) is not recognized as "vital knowledge" by local communities because it includes beliefs, superstitions, values and practices.

## **2. DEFINITIONS OF KEY TERMS**

### **2.1 Traditional knowledge?**

Jeremy defines traditional knowledge as the body of knowledge, science, and techniques used by local people to solve day to day problems.<sup>2</sup>

enquiry peculiar to that culture and concerning that culture or the local environment in which it exists.<sup>9</sup>

## **2.2 Intellectual Property**

<sup>10</sup> Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. It is divided into two categories: Industrial property, which includes inventions (patents), trademarks, industrial designs, and geographic indications of source; and Copyright, which includes literary and artistic works such as novels, poems and plays, films, musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural designs.<sup>11</sup> Any intangible asset that consists of human knowledge and ideas.

## **2.3. Repackaging of Information**

Stilwell<sup>12</sup> observes that repackaging of information is an information service that selects appropriate materials, reprocessing the information in a form that can be readily understood and arranging all these materials in a way that is appropriate to the user.

## **3. Role of Higher Education Institutions in promoting Traditional Knowledge**

Africa's institutions of higher education learning are central to the cultural and social transformation insofar as traditional knowledge intersects with research and teaching in educational settings. These institutions should help in the conversion of indigenous knowledge to tangible knowledge through the application of Knowledge management principles. These institutions should prioritize inter-disciplinary and inter-institutional research in traditional knowledge as it is part of the knowledge production. Mbeki states that the African curriculum should have Africa as its focus and at the same time being indigenous grounded as this will help to change the mind set of African towards their traditional knowledge systems.<sup>12</sup> The author further argues that African institutions of higher education need a paradigm shift from a "Eurocentric" to a to an "Afrocentric" system of university education which will unleash or release the endogenous creativity and realization of cultural identities of African people through promoting the effective utilization of traditional knowledge systems.

“...We need distinctively African Knowledge systems, which would have objective goal of recovering the humanistic and ethical principles embedded in African philosophy...knowledge system would also constitute an effort to develop both a vision and a practice of education that lays the basis for African people to ...fulfill the vision of learning to know, learning to do, learning to be, and learning to live together as equals with others.”<sup>13</sup>



Furthermore, most traditional knowledge is transmitted orally from generation to generation and thus remains largely un-documented.

## **4.2 Challenges of protecting TK**

Tsiko argues that the flow of investment and knowledge from the north has led to the abandonment of traditional values and practices and the dismantling of the economic basis on which the survival of indigenous cultures depend.<sup>19</sup>

Chavunduka notes that the protection of traditional knowledge faces challenges when it comes to patenting and intellectual property rights. He further notes that foreign researchers can appropriate traditional knowledge and apply for a patent, claiming to have invented a new product since traditional knowledge has attributes of communal ownership. Chavunduka argues that since knowledge is power there is need to protect traditional knowledge through research, documentation and explaining to the world that Africa has identifiable authors and inventions. Matonho observes that, African governments need to devote resources to the development of mechanisms for the management of intellectual property rights within the context of African Model Law.<sup>20</sup> Intellectual Property is inadequate and inappropriate for the protection of traditional ecological knowledge, because it recognizes individual not collective rights.

Professor Claude Mararike and Prof. Nabudere also echo similar sentiments when they state that there is need to protect traditional knowledge through collaboration within the region and other parts of the world. The Professors further lament that institutions of higher education are not doing enough to promote indigenous resources through documentation. "... We as Africans are not doing enough...another big issue is disorientation, total disorientation of the mind...we need to redirect our thinking to live within our context...there is no way you can develop yourself when you are not standing on your platform. If you stand on borrowed platform then your mind becomes a borrowed mind..."  
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exploitation of traditional knowledge. These instruments tend to be more effective in protecting intellectual property associated with individual ownership at the expense of traditional knowledge which has collective ownership.

However, the greatest challenge is that of patenting and intellectual property rights of the traditional knowledge. There is lack of intellectual property protection systems that can name the source of genetic material or traditional knowledge used in product discovery. For example, Jordan noted that the South African government was battling to save the South African plant “pelargonium” from being pirated by Western companies because of its extracts which are used to cure fatigue, pain, and AIDS Related infections.<sup>22</sup> State intervention is critical in situations whereby existing patent laws make no provision for traditional knowledge. Traditional healers and elders within African communities do complain that foreign pharmaceutical companies take advantage of loop-holes in current patent laws.

In most cases those who pirate traditional knowledge disregard the communal ownership on the grounds that, from a scientific perspective for one to claim knowledge of a plant species and its uses, there is need to have a written chemical formula. Tsiko notes that Africa suffers from the negative image of people towards traditional knowledge and there is need to transform these perceptions in order to bring on board the healing practices not as an appendage to Western medical systems but as a competitive and complementary force on the continent's health delivery systems.<sup>23</sup> There is also need to change or transform the mindsets of Africans through education so that people will appreciate knowledge governance through the formulation of policies that help in the crafting of global policies meant to create and achieve impartial system of access and benefit sharing of traditional knowledge.

The other challenge is that of investing more capital in research and development in indigenous knowledge systems and resources for the benefit of humanity. Knowledge is indeed power and as a result there is greater need to protect indigenous knowledge through research, documentation and explaining to the world that African in general, Uganda and Zimbabwe in particular have individuals, identifiable authors and inventors who have contributed immensely towards the production of Uganda's and Zimbabwe's accumulated heritage of intellectual capital in the form of traditional knowledge.

## **5. WOMEN AND THE PRESERVATION OF TK**

Groenewald acknowledges the role of African women in the preservation of indigenous knowledge because they are the natural managers, for example, through socialization women play a critical role by bringing up children and in their nurturing role they pass on knowledge to their children and share traditions with the next generation.<sup>24</sup> The writer further states that women play a critical role in the preservation and in the practice of cooking for public gatherings, rituals, tilling the land and caring for the ill.<sup>25</sup> Groenveld notes that in many communities women are the natural resources manager because they possess in-depth knowledge of the environment and they are credited with keeping traditional knowledge alive and passing it onto the next generation. For instance, Dr. Grace Nambatya a Chemotherapist and one Namutebi popularly known as Mama Phina of Ndeeba, who is also the President of Traditional healers in Uganda, among others, have played a critical role

Another source that preferred anonymity testifies that,

"When I was six I was stricken by measles, a disease that has tormented Africa for decades," he recounts. "The symptoms were all too familiar. My eyes were itchy; I was coughing a lot and had a fever and a rash."

Concerned that he would not survive, his family called for a traditional herbalist who boiled the crushed roots of a local grass together with a handful of miniature Mukene fish from a nearby river and fed him the mixture on a regular basis and the rest was history.

In agreement, Nyero explains,

"Traditional healers still play a significant healthcare role in our country. I have personal experience in the power of their knowledge about Uganda's flora and fauna."

## **6. WHY TRADITIONAL KNOWLEDGE IS LOWLY APPRECIATED?**

Sindiga notes that the failure to accept traditional knowledge system can be attributed to colonialism and the Christian crusade that in the name of Christianity, commerce and civilization sought to acculturate the conquered in a bid to establish firm control over them.<sup>29</sup> Onayade states that in Africa traditional medicine that is part of traditional knowledge relies on the use of plants as herbal remedies to heal wounds, extracting pus as well as for infected and festered wounds. In support of Onayade's assertion, Kazembe and Mashoko note that herbal remedies are used as anti-venom to cure snakebites, stomach aches and reproductive problems.<sup>30</sup> It is noted that more than seventy five percent (75%) of the modern medicine is plant based while twenty five percent (25%) is derived from synthetic materials and this proves that there is need to come up with sustainable environmental management strategies to protect indigenous plants. In Zimbabwe the ministry of Environment and Tourism, together with other quasi-governmental organizations like Environmental Management Agency (EMA), Forestry Commission of Zimbabwe and the non-governmental Southern African Foundation for Indigenous Resources (SAFIRE) have contributed towards the promotion and protection of biological species.

The Sunday Mirror (a Zimbabwean Newspaper) stated that one of the greatest paradoxes of the Zimbabwean psyche is that it snubs the powders and herbs prescribed by a doctor whose knowledge is based on traditions, customs and prescriptions passed on from one generation to the other.<sup>31</sup> The article goes further to state that if big drug or pharmaceuticals company were to come to Zimbabwe to patent and repackage many herbs used by indigenous doctors by giving them new names, it would not be surprising that the same people who sneer at traditional medicine and knowledge system would be the first to queue for the drugs. The colonial dispensation undermined the value of such traditional medicine by labeling it as inferior. It is acknowledged that traditional medicine and knowledge systems are very much alive in Uganda and Zimbabwe.<sup>32</sup> In most cases in Uganda and Zimbabwe, many people have been known to disparage the fecundity of traditional knowledge systems in public but to surreptitiously seek them out when they think no one is watching them. Furthermore, in Uganda, TK has been lowly appreciated because some people have turned the practice for personal gains and interests. Either because of unemployment or some other reason, unethical members of the community have registered into the practice and have brought this service low into the eyes of the public. For instance, kids have been slaughtered, people's money has been robbed, and discouraging songs composed about the practice and some Churches are condemning anything related to IK and practice without isolating some useful areas. Herbal medicine has been associated with witchcraft and hence labeled bad.

## **7. WAY FORWARD**

The Intellectual Property Rights should guarantee both an individual's and a group's right to own, exploit and benefit from its own cultural discoveries, creations and products. The African Union published the African Model Law in 2002 for the protection of the rights of the local communities, farmers, and breeders and for the regulation of access to

biological resources such as plants and animals.<sup>33</sup> The African Model Legislation For the Protection of the rights of Land of Communities, Farmers, and Breeders and for the regulation of access to biological resources including agricultural genetic resources and knowledge and technologies in order to maintain and improve their diversity as a way of sustaining life support systems.

Many African countries are yet to adopt this model legislation but generally significant progress has been made. Matonho states that the document is set as a model for use by African countries that wish to develop their own national laws pertaining to traditional knowledge systems and Zimbabwe is signatory to such a convention.<sup>34</sup> Kawoyo notes that even though African countries, especially those in Southern Africa have acceded to regional and international laws, treaties, protocols and agreements on intellectual property rights, there appears to be lack of clear cut policies on the concept in most African countries.<sup>35</sup>

The African Science and Plan of Action (2005) states that the NEPAD framework document emphasises the importance of protecting and promoting Indigenous Knowledge and related technological innovations.<sup>33</sup> The documents laments over the lack of protection and promotion of IK. For example, in most African countries, institutions to safeguard the rights of indigenous knowledge holders are so porous and also there is lack of coordination between formal research and development institutions and local communities that hold and use traditional knowledge. Patent offices in most African countries are so small as compared to first world countries like the United States of America whose Patent office employs thousands of employees.

The NEPAD framework values traditional knowledge as a critical component of culture that must be protected for the benefit of humankind as evident in the statement,

“...Culture is an integral part of development efforts of the continent. Consequently it is essential to protect and effectively utilize indigenous knowledge...and share this knowledge for the benefit of humankind...special attention... the protection and nurturing of indigenous knowledge...inventions and all other tradition based innovations and creations.”<sup>36</sup>

## **8. CONCLUSION**

Overall, there is an urgent need to promote more empirical research on how traditional knowledge can be utilized to complement the modern knowledge systems in the area of health, education, and law among other areas. Africa has immense potential in developing and repositioning itself in the global knowledge economy. The challenges of repackaging traditional knowledge can be turned into opportunities that will facilitate the rise of new information driven economy. It is important that since Zimbabwe is signatory to International conventions on intellectual property rights and it should use such platforms to further the traditional knowledge agenda so that through further research this knowledge can be utilized as a survivalist strategy in dealing with developmental issues in health, education, agriculture, environmental management, tourism among other areas. It is also through promoting collaboration between institutions of higher learning,

industry and government that meaningful benefits can be realized from research on traditional knowledge and how it can be applied in science and technology.

## REFERENCES

1. Sandiga, I.(et.al)Traditional Medicine in Africa.Nairobi:Educational Publishers, 1995.
2. *ibid*.p.34.
3. Warren, Michael .D. (et. al.) **The Cultural Dimension of Development: Indigenous Knowledge Systems**. London: Intermediate Technology Publications, 1995.
4. Ocholla, Dennis.Marginalised Knowledge Knowledge: An agenda for knowledge development and integration with other forms of knowledge. IN:International **Review of Information Ethics(IRIE)** Vol.7.September, 2007.
5. Hansen, S.A. and VanFleet, J.W.**A handbook on issues and options for traditional knowledge holders in protecting and maintaining biological diversity**.Washington, D.C.:American Association for the Advancement of science(AAAS), 2003.p.30.
6. Warren, Michael. D.*op.cit*
7. Hansen, S.A. and VanFleet, J.W.*op.cit*
8. Groenewald, Y.The secrets of African women:IN:**Mail and Guardian**, 12<sup>th</sup>. of .August, 2005.p.26.
9. Mugabe, J.(et.al) Traditional knowledge, Genetic Resources and Intellectual Property Protection:Towards a new International Regime[Internet]Available from <http://www.ielrc.org/content/wo105.pdf>.Accesed 11mAY, 2009.
10. *ibid*.
11. Greaves, T.Intellectual Property Rights for indigenous peoples: A sourcebook. Oklahoma City: Society for Applied Anthropology, 1994.
12. *ibid*.
13. Hansen, S.A. and VanFleet, J.W.*op.cit*
14. Hansen, S.A. and VanFleet, J.W.*ibid*
15. Groenewald, Y.*op.cit*.p.26

16. *ibid.*p.26
17. *ibid.*
18. Hansen, S.A. and VanFleet, J.W.*op.cit*
19. *ibid.*
20. Tsiko, S.Traditional knowledge must be repackaged. IN: The **Herald**, 4th. September, 2006.p.7.
21. *ibid.*
22. Tsiko, S.Vital to document traditional knowledge .IN: **The Herald**, 26<sup>th</sup>.November, and 2004.p.9.
23. Onayade, O.A.and Sowora, **A. Wound Healing with plants: The African perspectives in IOCD Chemistry, Biology and Pharmacologic properties of African medicinal plants**, and 1996.p.77-111.
24. *ibid.*
25. **Traditional Knowledge systems and Health** .IN: The Sunday Mirror, 12th.February, and 2006.p.8.
26. *ibid.*
27. **The African Model Law for the protection of the rights of local Communities, Farmers and Breeders and for the regulation of access to biological resource in Relation to International Law and Institutions**, 2002.
28. Matonho, T.Use of combined knowledge systems empower communities to seek alternative solutions to their problems through discerning strengths and weaknesses: Assess knowledge that nurtured Africa.IN:**The Herald**, 5<sup>th</sup>.September, 2006.p.5.
29. **Africa's Science and Technology consolidated Plan of Action**, NEPAD. August 2005.p.17.
30. *Ibid.*p.17-18.
31. Tsiko, S.*op.cit*
32. *ibid.*

33. Matonho, T. *op.cite*
34. Tsiko, S. *op.cit*
35. Mbeki, T. Africa: The role of higher education. IN: **New Africa**. April, 2005.p.66.
36. *ibid.*
37. Geingos, V. and Ngakaeaja, M. **Traditional Knowledge of San of Southern Africa: Hoodia gordonia. Paper presented at the Second South South Biopiracy Summit.** ‘Bipiracy –Ten years post Rio’ 22-23 August, 2002, Johannesburg, South Africa.
38. Tsiko, S. *op.cit*
39. Bobby, Jordan. Drug Companies looting SA’s bountry of medicinal plants: State to protect shrubs and traditional healers rights. In: Sunday Times 7<sup>th</sup>. October, 2009.p.8.
40. Tsiko, S. African traditional medicine [http:// 303.3 472.44 30.36 0.6 re3\[](http://303.3.472.44/30.36.0.6/re3/)