



National Policies and Legal Frameworks Governing Traditional Knowledge and Effective Intellectual Property Systems in Southern and Eastern Africa: The Case of Traditional Healers in Tanzania

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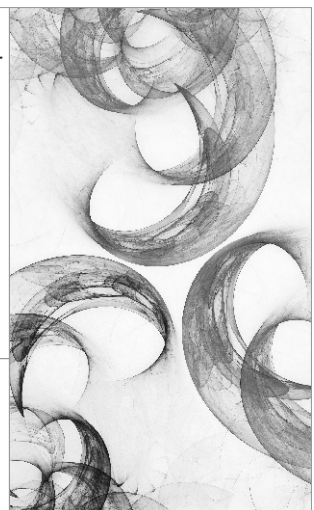


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List of Acronyms

ADRI	Animal Disease Research Institute
ARIPO	African Regional Intellectual Property Organization
CA	Content Analysis
CBD	Convention of Biological Diversity
CIPR	Commission on Intellectual Property Rights
CIPR	Coalition for Intellectual Property Rights
COSTECH	Tanzania Commission for Science and Technology
ESRF	Economic and Social Research Forum
FAO	Food and Agriculture Organisation
FFM	Fact-Finding Mission
FGD	Focus Group Discussion
ICTSD	International Centre for Trade and Sustainable Development
IP	Intellectual Property
ITM	Institute of Traditional Medicine
LDCs	Least Developed Countries
LinKS	Local and Traditional Knowledge Systems
MoHSW	Ministry for Health and Social Welfare
MUHAS	Muhimbili University of Health and Allied sciences
SPSS	Statistical Package for Social Sciences
STI	Science, Technology and Innovation
TFNC	Tanzanian Food and Nutrition Centre
TH	Traditional Healer
TK	Traditional Knowledge
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nation Educational and Scientific and Cultural Organisation
URT	United Republic of Tanzania
USDM	University of Dar es Salaam
WHO	World Health Organisation
WIPO	World Intellectual Property Organisation
WTO	World Trade Organisation

1. Introduction

This working paper reports about a study on the National Policies and Legal Frameworks Governing Traditional Knowledge and Effective Intellectual Property Systems in Southern and Eastern Africa: The Case of Traditional Healers in Tanzania, which was conducted from January 2010 to October 2010. The study has explored the existing policy and legal frameworks and the community protection mechanisms of traditional knowledge in Tanzania.

The study also examined previous studies undertaken on protection of traditional knowledge and synthesized the recommendations thereof, for the purpose of suggesting possible modalities for the protection of TK to be proposed to the global ongoing debate on TK protection. The study included literature survey of the policy and legal frameworks relevant to protection of TK existing in Tanzania; literature survey on the global and regional situation on the subject matter; and data collection on the protection mechanisms for TK by the traditional healers in their community. Data was collected using questionnaire and traditional healers' focus group discussion, district officials responsible for culture, environment, forestry and agriculture in the two districts.

The paper comprises of six sections. The first one is the introduction, which provides information about the study. The second part is on the objectives of the study. The third section is on literature review. It gives definition of TK and the general overview of the protection of TK. Additional information is provided on the protection situation in Tanzania; global overview of the protection of TK and initiatives developed to establish protection regimes on TK; the analysis of TK in Tanzania; and the establishment of TK systems in the country. The fourth section is on the methodology that was used in the study. Section five is about the field

work data and preliminary analysis. Section six provides conclusions and recommendations.

1.1 Background Information

In Tanzania, TK has no official protection mechanisms, except for the folklore, of which its protection provision is provided by the Copyright and Neighboring Right Act, Cap. 218, RE 2002 (URT, 1999). The laws governing protection of industrial property do not have provisions for the protection of TK. These are the Patent Act, Cap. 217 RE 2002, Trade and Service Mark Act, Cap. 326 RE 2002 (URT 1986, URT 1987). The ARIPO Instrument on the protection of traditional knowledge, genetic resources and folklore has been discussed in several fora, but yet there is no law enacted to provide protection for TK.

In the case of traditional medicines, a law was enacted in 2002 – The Traditional and Alternative Medicine Control Act No. 23 of 2002. A National Office was established as the Traditional Medicine Section of the Department of Curative Services at the Ministry for Health and Social Welfare (MoHSW) in 1998. Currently, there is a Registrar of Traditional Healers (TH) at MoHSW. Also the Institute of Traditional Medicine (ITM) was founded in 1974 at the current Muhimbili University of Health and Allied sciences (MUHAS) WHO, 2005).

1.2 Problem Statement

The issue of protection of TK has been a debate in a number of fora, but to date there is yet a global agreed mechanism on how TK should be protected. The focus has always been to fit TK protection in the existing classic protection mechanisms. Article 27 (3) (b) of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement has given provisions to member states to consider protection of TK using existing intellectual property systems, as well as geographical indications and sui generis forms of protection (WIPO, 1997). These are just provisions with no proper ways to enable TK be protected as some of the requirements for the protection by the current system cannot be met by TK. For instance the protection through patents requires that the invention be by an individual, but most of the TK is owned by communities. For obtaining a proper protection mechanism there are a few questions that need some considerations: how should TK be protected? What do indigenous communities wish to protect and what is the best method of achieving this? Most of the considerations made so far have not taken into account that the indigenous communities had their own

means of protecting their IP. The study has considered to un-earth the indigenous protection systems and proposes them to be incorporated into the existing conventional system. This has been done through investigating the traditional healers in two districts in Tanzania.

Tanzania, like many African countries, is rich in Traditional Knowledge, Expressions of Folklore and Genetic Resources. However, no comprehensive or appropriate mechanism is available for protection of rights arising out of the use and exploitation of the respective subject matters.

2. Objectives of the Study

2.1 Objective

The major objective of the study was to build a body of knowledge in the area of protection of traditional knowledge in Tanzania.

2.2 Specific Objectives

1. To examine the existing legal and policy frameworks relevant to protection of TK in Tanzania.
2. To examine previous studies on protection of traditional knowledge and synthesize the recommendations thereof, for the purpose of suggesting possible modalities for the protection of TK to be proposed to the global ongoing debate on TK protection.
3. To gather and document existing protection mechanisms among the communities. The case of traditional healers in two districts of Tanga region.
4. To gather the mechanisms in which the traditional healers transfer their knowledge to others.
5. To synthesize the mechanisms of indigenous protection of TK and propose a strategy to adopt them in the system of protection of TK.

3. Literature Review

3.1 Traditional Knowledge-What is it?

Traditional knowledge has played and still plays an important role in the lives of many people globally. It has particularly been essential for food security and health care for millions of people in developing countries. Up to 80% of the population in these countries depends on traditional medicines in meeting their health care demand (CIPR, 2002).

There is no exact definition for Traditional Knowledge (TK) globally, but TK has raised a debate on how it should be protected in the recent years. The World Intellectual Property Organization (WIPO) is currently using the following definition:

The term traditional knowledge refers to the content or substance of knowledge resulting from intellectual activity in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems and knowledge embodying traditional lifestyles of indigenous and local communities, or contained in codified knowledge systems passed between generations. It is not limited to any specific technical field and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources
(Saurombe, A. 2009).

3.2 Protection of Traditional Knowledge

The issue of protection of TK has been debated in a number of fora, but there is yet a global agreed mechanism on how TK should be protected. The focus has always been to fit the TK protection in the existing classic protection mechanism. Article 27 (3) (b) of TRIPS Agreement has given a provision to member states to

consider protection of genetic resources using existing intellectual property systems, as well as geographical indications and sui generis forms of protection (WIPO, 1997). These are just provisions with no proper ways to enable traditional knowledge be protected as some of the requirements for protection by the current system cannot be met by TK. For instance, the protection through patents requires that the invention be by an individual, but most of the TK is owned by communities. To obtain a proper protection mechanism, there are a few questions that need some considerations: How is traditional knowledge protected?; What do indigenous communities wish to protect?; and What is the best method for achieving this? Most of the considerations made so far have not taken into account that the indigenous communities had their own means of protecting their IP.

The major question is whether the conventional protection mechanisms could be applied to traditional knowledge or not. However, on analyzing these conventional mechanisms for the protection of intellectual property; it appears that they are ineffective in protecting traditional knowledge. For instance, the high cost of effective protection by patents is far beyond the means of most holders of traditional knowledge and the limited period of protection does not fully compensate for the disclosure of the knowledge which was guarded for hundreds of years. Furthermore, the novelty of traditional knowledge which was used over several centuries may be legally challenged. Trademarks may be useful to protect expressions of traditional knowledge like handicrafts, but they are of no use in protecting traditional knowledge itself. Similarly, geographical indications will protect the product but not the traditional knowledge. Copyrights for traditional knowledge will not be effective as well as it would be difficult to enforce. Traditional knowledge that has not been documented survives today usually as a “family secret” similar to a trade secret. However, traditional knowledge maintained as family secrets have a tendency to leak or gradually move into the public domain and their leakage cannot be effectively prevented unlike trade secrets in the corporate sector.

One of the solutions will be to institute the sui generis system for such protection. Also defensive protection through documentation of traditional knowledge could be used so that the TK should not be used by others in patenting.

3.3 Global Overview on TK

Traditional knowledge has played and still plays an important role in the lives of many people globally. It has particularly been essential for food security and health care for millions of people in developing countries.

The issue of protection of traditional knowledge has just come recently from the pressures of many developing countries, holders of traditional knowledge and campaigning organizations. This was due to a number of cases on the appropriation of knowledge and genetic resources of farming and indigenous communities by individuals or institutions seeking monopoly control (bio-piracy) (CIPR, 2002).

In the international arena, issues of attempting to recognize and protect traditional knowledge started in 1981 when WIPO and UNESCO adopted a model law on folklore. This was followed by the 1989 recognition of the farmers' right which was introduced by FAO in its International Undertaking on Plant Genetic Resources. The 1992, Convention on Biological Biodiversity (CBD) also has emphasized on the protection of traditional knowledge. The protection of traditional knowledge is further being discussed within the framework of CBD in other international organizations such as FAO, UNESCO and UNCTAD (CIPR, 2002; ICTSD, 2003). Furthermore, the Doha WTO Ministerial Declaration directed the TRIPS Council to do further work on the protection of traditional knowledge.

Another international initiative to seek a way to protect traditional knowledge was through the WIPO Fact-Finding Mission (FFM). WIPO needed to know and understand the needs and expectations of the traditional knowledge holders. This was carried out between 1998 and 1999. FFM identified a number of needs and expectations for the traditional knowledge holders of which it is evident that some are conflicting or reflect competing policies. The needs identified pose a challenge to the entire IP community and collaborative effort by other relevant organizations and processes are needed (WIPO, 2001).

At a WIPO Meeting on Intellectual Property and Genetic Resources which was held in 2000, it came out clear that there is an interrelation between genetic resources and the new global issues of TK, folklore and biodiversity. WIPO should facilitate the continuation of consultations between member states and other relevant organizations, through conduct of legal and technical studies and

setting up of an appropriate forum within WIPO for future work. This led to establishment of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore in 2001. So far, there is yet to be a comprehensive regime to govern protection of traditional knowledge.

3.5 Analysis of Traditional Knowledge in Tanzania

Tanzania, like many African countries, is rich in Traditional Knowledge, Expressions of Folklore and Genetic Resources. However, no comprehensive or appropriate mechanism is available for protection of rights arising out of the use and exploitation of the respective subject matters.

It is undisputable that due to lack of a comprehensive system for protection of the said subject matters, Tanzania has lost and continues to lose opportunities both in form of utilization, transfer and transformation of otherwise Traditional Knowledge based technologies into Intellectual Property Rights in absence of any formal and binding agreements for possible equitable benefits sharing.

The historical background of Traditional Knowledge surrounds local communities and indigenous people's mode of life, in which case, their systems of protection was largely depended on the respect for communal and common understanding of their respective cultural norms and values.

In essence, the social economic development brought about by what could simply be associated with “civilization”, has rendered the said systems unrespectable, ineffective and hardly sustainable.

Tanzania has exploited the traditional health practices for a long time even before the arrival of foreigners. Over 60% of health seeking population has a traditional healer as the first point of contact. In the year 2000, it was estimated that there were about 75,000 traditional health practitioners in the whole country, exemplifying a ratio of traditional health practitioner over people population as 1:400, while that of doctors over patients was 1:20,000 (Mhame, 2000). Like in the other societies, in Tanzania, the people have over the centuries, developed a wide variety of technologies from exploration of medicinal properties of plants, extracts of animals and marine life. Most of such indigenous knowledge was handled down, through the ages, by oral tradition.

4. Methodology

4.1 Study Area

Tanzania is located in Eastern Africa, and lies between longitude 29° and 41° East and latitude 1° and 12° south¹. Tanzania has an estimated land area of about 945,000 km², with a population of about 42 million people and the population is growing at the rate of 2.9% per annum². The current official per capita income is estimated at TZS 548,388 (USD 540) in 2007 and about 50% of the population live below the poverty line³ ranking Tanzania among the world's Least Developed Countries (LDCs). The study was carried out in two districts of Tanga region in the north-eastern part of Tanzania namely: Lushoto and Handeni. Both districts are well known for having reliable traditional healers.

4.2 Data Collection

Data was collected using various research instruments including: documentary review, focus group discussion and questionnaire survey.

4.2.1 Documentary Review

Intensive literature review was made on analysing the global overview and traditional knowledge in Tanzania as well as analysing the relevant legislation and policies in respect to protection of TK in Tanzania. The main bodies that have legislation provisions on protection of TK include: The National Arts Council Act, The Alternative and Traditional Medicine Act, Institute of Traditional Medicine Act, Foods and Drugs Act, Animal Disease Research Institute (ADRI) Act, Patents Act,

¹Tanzania, United Republic of (2010), "Country Profile" <http://www.tanzania.go.tz/ministriesandinstitutions.html>

²Tanzania, United Republic of (2010), "Hali ya Uchumi wa Taifa, 2007" <http://www.tanzania.go.tz/ministriesandinstitutions.html>.

³*Ibid.*

Trade and Service Marks Act, Copyrights and Neighbouring Rights Act, National Institute of Medical Research Act, National Commission for Science and Technology Act, The Protection of New Plant Varieties (Plant Breeders' Rights) Act, and African Regional Intellectual Property (ARIPO) Traditional Knowledge Model Law. The policies which were reviewed include: National Health Policy; Science, Technology and Innovation (STI) Policy (draft); Forest Policy; Agricultural Policy; Environmental Management Policy; and Trade Policy.

Previous studies on protection of TK were also studied and analyzed. The following studies were analyzed:

- > Msuya (2007) “Challenges and opportunities in the protection of Indigenous knowledge in Africa”
- > Bridel “Status of Protection of the Environment, Traditional and Plant Medicine in Uganda, Tanzania and Kenya” in the “Study of Indigenous Plants and Non-Timber Products as Related to Traditional Medicine in the Nuba Mountains and Southern Blue Nile Region of South Sudan”.

4.2.2 Focus Group Discussion

A focus group discussion which included among others the traditional healers and the district officers dealing with forest, cultural, and environmental issues was held. In this meeting, the study was introduced and opinions were sought on the research and the issue of protection of traditional knowledge. Discussions were made with the District Cultural Officer, who identified the traditional healers who were invited to the focus group discussion. During this meeting a pre-testing of the questionnaire was conducted. Discussions were also made with the District Executive Director on the study.

4.2.3 Questionnaire Survey

Three different questionnaires (for traditional healers, beneficiaries of the traditional medicines and officials) were administered and data was collected. Data requested for in the questionnaire covered different main areas as shown below:

Questionnaire for Traditional healers: This included: the personal particulars with 9 questions; diseases cured by the traditional healer and access to medicinal plants with 8 questions; protection mechanisms with 20 questions.

Questionnaire for Beneficiaries: This included: the personal particulars with 9 questions; utilizing services of traditional healers with 9 questions; protection

mechanisms of traditional knowledge with 8 questions.

Questionnaire for Authorities: This included: the personal particulars with 6 questions; coordination, registration and protection of traditional healers' knowledge with 10 and access to medicinal plants with 12 questions.

The data was collected by enumerators who were mainly the Ward Executive Officers who knew who the traditional healers in their wards were.

4.3 Sampling

The Lushoto district has got 8 Divisions and 32 Wards. Out of the 32 Wards, 10 wards were selected randomly for the administration of the questionnaire. Similarly, in Handeni district, 10 wards out of 19 wards were selected randomly for administering of the questionnaires. In each district, 100 questionnaires for the traditional healers, 200 hundred questionnaires for beneficiaries and 20 questionnaires for officials were administered. In total 200 questionnaires from traditional healers were collected. Two hundred and fifty (250) questionnaires for beneficiaries were collected and 37 questionnaires for officials were collected. There was no affirmative decision on the gender issues. In these communities, men are the spokespersons of their household.

4.4 Data Analysis Techniques

The data collected were analyzed using the Statistical Package for Social Sciences (SPSS) programme. Other data collected was analyzed using content analysis (CA) approach.

5. Field Work Data & Preliminary Analysis

5.1 Legal Frameworks

Tanzania has no comprehensive and appropriate mechanism for protection of rights arising out of use and or exploitation of Traditional Knowledge. The main legislation which could have provisions on protection of TK include: The National Arts Council Act; The Alternative and Traditional Medicine Act; Institute of Traditional Medicine Act; Foods, Drugs and Cosmetics Act; Animal Disease Research Institute (ADRI) Act; Tanzania Patent Act; Trade and Service Marks Act; Copyrights and Neighbouring Rights Act; National Institute of Medical Research Act; National Commission for Science and Technology Act; The Protection of New Plant Varieties (Plant Breeders' Rights) Act; and African Regional Intellectual Property (ARIPO) Instrument on the protection of Traditional Knowledge, Genetic resources and Expression of Folklore.

5.2 Policy Frameworks

The main Policies that would have provisions for the proper protection of Traditional Knowledge include: National Health Policy; Science, Technology and Innovation (STI) Policy (draft); Forest Policy; Agricultural Policy; Environmental Management Policy; and Trade Policy. These policies were analyzed to find out whether they have got policy statements concerning protection of traditional knowledge.

In the analysis, it was found out that the National Healthy Policy of 2007 which has a policy statement of working together with the traditional healers, traditional nurses and is recognizing the importance of both traditional and alternative

medicines as the only one stating issues relevant to TK. The policy has no statement on the protection of TK.

5.3 Utilizing Services of Traditional Healers

The study has revealed that traditional medical services are being used by most people particularly in the rural settings 98% (N=229) though they have ranked it as second choice in their preference 72.1% (N=176). The Commission on Intellectual Property Rights (CIPR) (2002) has reported that up to 80% of the population in the developing countries depends on traditional medicines in meeting their health care demand.

5.4 Awareness on TK related Legislation

Investigation was conducted to test the level of awareness of the traditional healers on related legislation. This is a question which most of the traditional healers did not respond 61% (N=122). It is an indication of the lack of awareness on the legislation of concern to the traditional healers. On the remaining 39% (N=78) who responded, the result indicates that most of the healers are aware of the Traditional and Alternative Medicines Control Act - 64% (N=50). This is an Act which provides a provision of promoting control and regulation of traditional medicine and alternative medicines and regulates the conduct of practitioners and registration of practitioners. Registration of the traditional healers provides them with recognition. It is logical that many had interest in obtaining some information about this Act.

5.5 Mechanisms of Indigenous Protection of TK

The identified indigenous protection of traditional knowledge is through secrecy and training of children as a way of protecting their knowledge. Documenting of traditional medicines and the diseases the medicines cure was also identified as a mechanism for protection. But also the documentation will be kept secret by the beholder of that knowledge.

6. Preliminary Conclusions & Recommendations

6.1 Conclusions

Protection of traditional knowledge is yet an issue for further debate. This study revealed that protection mechanisms among the community is mainly secrecy, which cannot be recommended as a means of protecting the TK. Leakage of the secrecy could lead to no protection. As TK is not documented there is a danger of losing this knowledge. There is a threat of TK extinction due to lack of recording and problems associated with preservation and protection of the knowledge from pirates.

The service of traditional healers is required and has got its contribution to the health care of the society. Though the respondents rate traditional medicines as the second choice, most of them use this service. There is a need for respect for this contribution. Few traditional healers are aware of the legislation concerned with the conventional intellectual property protection mechanism. This concurs well with the general tendency in Tanzania on lack of awareness on intellectual property rights issues. This is because the whole issue of IPR is relatively new to the public in Tanzania.

There is no policy with relevant issues to TK except the National Health Policy of 2007, which has a policy statement of working together with the traditional healers, traditional nurses, is recognizing the importance of both traditional and alternative medicines.

The current legal framework do not provide for protection of TK. The proposed

ARIPO Instrument on the Protection of Traditional Knowledge and Expressions of Folklore is providing for protection of TK.

6.2 Recommendations

6.2.1 Establishing a Legal Frame Work for Protection of TK

It is recommended that Tanzania needs a comprehensive legal mechanism for the protection of Traditional Knowledge, lack of which the country has lost and continues to lose opportunities in the cause of utilization, transfer and transformation of Traditional Knowledge based technologies. An instrument could be developed based on the ARIPO Instrument on the Protection of Traditional Knowledge and Expressions of Folklore.

6.2.2 Emphasizing on the Documentation of TK

It is recommended that it is very necessary to take purposeful efforts to document traditional knowledge as it is in the danger of being extinct. Database such as that of ESRF should be promoted to ensure that the TK is documented.

6.2.3 Need to Establish a Traditional Knowledge Policy

Tanzania should establish a TK policy that encourages and provides guidelines on the innovation, conservation and preservation of TK. The policy is expected to address among other things: Government appreciation of TK; Political commitment on TK; Use of TK; Statement on Protection of TK; Preservation of TK; Distribution of benefits accrued from TK.

6.2.4 Outreach Programme

From the study it is established that the traditional healers are not aware of IPR issues especially on the protection of their traditional knowledge. Therefore there is a need to create awareness on IPR issues as well as on benefit sharing. This could be done through establishing an outreach programme for creating this awareness. This will also include creation of knowledgeable and skilled Human Resource and the public, in general, on IPR. The programme will have a training and awareness creation on IP components and benefit sharing. The overall goal of the outreach programme is to inculcate a culture of innovativeness, creativity, protection and exploitation of TK. Among the proposed methods are to make use of: mass media campaigns, booklets, banners, radio & TV programmes, competitions, training and workshops, etc.

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