Analysis of Traditional Healers in Lesotho: Implications on Intellectual Property Systems

African Technology Policy Studies Network
WORKING PAPER SERIES | No. 68

Analysis of Traditional Healers in Lesotho: Implications on Intellectual Property Systems

Pitso Masupha
National University of Lesotho; Crop Science Department

Lefa Thamae
Department of Science and Technology

Mofihli Phaqane
HIV and AIDS Civic Society

This paper should be cited as:

African Technology Policy Studies, ATPS 2013:Analysis of Traditional Healers in Lesotho: Implications on Intellectual Property Systems. [Pitso Masupha, Lefa Thamae, Mofihli Phaqane], ATPS Working paper 68

The African Technology Policy Studies Network (ATPS) is a multi-disciplinary network of researchers, private sector actors and policy makers promoting the generation, dissemination, use and mastery of science, technology and innovation (ST&I) for African development, environmental sustainability and global inclusion. ATPS intends to achieve its mandate through research, capacity building and training, science communication/dissemination and sensitization, participatory multi-stakeholder dialogue, knowledge brokerage, and policy advocacy.

Published by the African Technology Policy Studies Network
P O Box 10081, 00100 GPO Nairobi Kenya

ISBN: 978-9966-030-52-8

Table of Contents

Acknowledgement

This paper was produced as part of the implementation of the ATPS phase VI Strategic Plan, 2008-2012 funded by ATPS Donors including the Ministerie van Buitenlandse Zaken (DGIS) the Netherlands, amongst others. The authors hereby thank the ATPS for the financial and technical support during the implementation of the Intellectual Property Program. The authors particularly thank Prof. Kevin Urama, the Executive Director of the ATPS for his visionary leadership as programme director; Mr. Joseph Wekundah the Executive Director of the Biotechnology Trust Africa (BTA) and Prof. Moni Wekesa (Mount Kenya University) who were coordinators of the programme and Dr. Nicholas Ozor, Senior Research Officer (ATPS) and all the ATPS team members for their technical support during programme implementation.

List of Acronyms

ABS	Access and Benefit Sharing
AIDS	Acquired Immune Deficiency Syndrome
ARIPO	Africa Regional Intellectual Property Organization
ART	Anti Retroviral
AU	African Union
CBD	Convention on Biodiversity
ESA	Eastern and Southern Africa
HIV	Human Immune Deficiency Syndrome
IKS	Indigenous Knowledge System
IP	Intellectual Property
IPR	Intellectual Property Rights
KYS	Know Your Status
LDC	Least Developed Countries
LENEPWHA	Lesotho Network of People Living With AIDS
OAU	Organization of African Unity
R&D	Research and Development
SADC	Southern African Development Community
STIP	Science and Technology Policy
STD	Sexually Transmitted Diseases
S&T	Science and Technology
TB	Tuberculosis
TCE	Traditional Cultural Expression
TK	Traditional Knowledge
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNAIDS	United Nations- Acquired Immune Deficiency Syndrome
USA	United States of America
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

Abstract

Traditional healers in Lesotho and other African countries have since pre-historic times played a major role in primary health care, counseling and the rituals performed for different purposes in the society. Traditional healers in the past had their houses located very close to the main house of the village chief. This was to ensure that the healer is always accessible to the chief as they were not only entrusted in disease healing and driving away witchcraft but they were also the main advisors to the chief. The knowledge traditional healers have on forecasting certain events, protecting crops and animals from hail and thunder storm, healing the sick, and driving away the evil spirit is often not documented and as a result it is slowly going into extinction. This valuable knowledge is often not protected by law and known by a few.

The emergence and complexity of diseases like HIV and AIDS and other chronic diseases have always been interpreted by the society to be related to witchcraft. That misconception has resulted in many people also emerging especially in urban areas as traditional healers claiming to cure certain diseases including HIV and AIDS. It was noted during the interview that more than 50% of traditional healers don't believe in HIV and AIDS and they attribute it to certain diseases, witchcraft or failure to observe certain cultural activities.

The rapidly growing number of people claiming to be traditional healers has put pressure on the biodiversity as certain plant species are recklessly being harvested from the rural areas and sold in the cities. The study revealed that herd boys who are considered to be very knowledgeable about the herbs growing in the rangelands and the forests are used to guide in the identification of these herbs or harvest them. They are paid very little money for this activity therefore the community does not benefit from their genetic resources. Healers interviewed agreed that they now have to travel long distances to get certain herbs for their patients which never used to be the case. More than 80 % of the doctors interviewed agreed that there should be a policy in place that protects their knowledge and traditional medicine. Beneficiaries to traditional medicine pointed out that they would prefer to get traditional medicine packed in more hygienic containers and the healers should operate in more decent places like the modern doctors.

1. Introduction

1.1 Background

Lesotho is located in Southern Africa and it is completely surrounded by South Africa. It is on the highest part of the Drakensburg escarpment with the altitude reaching 3,482 meters above sea level at some places. It lies between 300 South and 290 Eastern longitude and has a total surface area of 30 648 km2 (Chakela 1999). Lesotho is divided into four agro-ecological zones namely the Lowlands, 1500-1800m high, the foothills 1800- 2200m high, and Mountains 2200-3000m. The Senqu River valley which is the fourth agro-ecological zone is the extension of the lowlands into the eastern mountain along the Senqu River.

Ever since the discovery of HIV and AIDS in Lesotho in 1986, Lesotho has continued to deteriorate from bad to worse. Lesotho is currently the third highest HIV and AIDS hot-spot in the world (UNAIDS 2007). Furthermore, Lesotho is confronted by a multiple crisis caused by high HIV prevalence, now estimated at approximately 23% of adults aged between 15-49, and that, 57% of all infection are in females (UNAIDS,2005). In addition to the 300,000 adults estimated to be living with HIV, at the end of 2007, approximately 20,000 children were also HIV positive, and by the end of 2007, close to 90,000 had lost one or both parents to AIDS.

The spread of HIV and AIDS, along with diseases like tuberculosis (TB), Multi-drug resistant TB, Pneumonia and high unemployment rate, mainly due to retrenchment of many Basotho miners, are among the most important causes of poverty and vulnerability. Along with the migration towards urban and peri-urban areas, and the absorption of many young female workers by the textile industries, these trends are affecting the traditional social structures within the household and at village level. As a result, the social protection mechanisms which so far have helped the Basotho people cope with shocks and stresses are in decline. At the same time, public welfare policies have failed to take over these tasks (Turner 2005).

Basotho, like other communities, have their own unique traditional knowledge, beliefs and culture that help them raise their children, unify them as a nation, protect themselves, their livestock and crops from natural disasters and diseases and to manage their environment better in a sustainable manner. However, this valuable knowledge is often hidden, undocumented, usually known by a few and mostly the elderly in the society. And in most cases, some of these elderly people die with this valuable treasure. As an old African proverb states “when the old man dies, the library burns to the ground”, societies are slowly losing some of the important knowledge as old people die. According to (Louise, 1998), indigenous knowledge is stored in people’s memories and activities. It is expressed in stories, songs, folklore, proverbs, dances, myths, cultural values, beliefs, rituals, community laws, local languages and taxonomy, agricultural practices, equipment, materials, plant species and animal breeds.

Lesotho Science and Technology Policy 2006 – 2011 fifth objective of the five objectives emphasizes on the Promotion and commercialization of indigenous knowledge systems. Important components of IK-systems like Intellectual Property Rights (IPR) and Access and Benefit Sharing (ABS) are not clearly articulated in the policy. Therefore there is a need for a national multi-stakeholder policy dialogue that will lead to the development of Indigenous Knowledge Systems (IKS) policy or strengthening of Science and technology policy on IKS. Murthi (2005), pointed out national development policies especially those related to agriculture and tradition, need to be taken into account when dealing with Traditional Knowledge (TK)-

based approaches in their considerations, from economic measures to the use of publicly funded Research and Development (R&D), devoted to participative research with TK using communities that feel they own and can use R&D to strengthen their innovative capacity and develop their own development systems.

The use of indigenous knowledge in innovation development has led to a number of surprising successes. The use of indigenous knowledge systems has demonstrated positive results in the fields of: Land and water resource management, use and conservation of genetic material and use of indigenous knowledge on medicinal plants (Hambly and Angura, ed., 1996; Mendoza and Luning, 1997; Leonti, 2003; Tshabalala 2005).

The importance of IKS in the sustainable development cannot be overemphasized. However, very few studies have been done in Lesotho to determine the existing, preservation, promotion, intellectual property rights and access and benefit sharing on indigenous knowledge systems.

2. Objectives

The overall objective of this investigation is to understand the role played by the traditional healers in primary health care systems and the cases of intellectual property Rights.

Specific objectives:

- To identify the sources of traditional knowledge systems especially traditional medicine.
- Determine the existing knowledge traditional healers have on HIV and AIDS and the role they play in primary health care.
- Determine the cases of access and benefit sharing and intellectual property rights in traditional medicine.
- To determine the use and confidence the society has on traditional healers.
- To determine if traditional healers realize their impact on biodiversity through harvesting herbs for medicine.
- Recommend ways in which traditional medicine can be promoted and commercialized to enhance the fifth objectives of Science and Technology Policy.

3.Literature Review

3.1 Traditional medicine and International Organizations and treaties

Herbal remedies are considered the oldest forms of health care known to mankind on this earth. Prior to the development of modern medicine, the traditional systems of medicine that have evolved over the centuries within various communities, are still maintained as a great traditional knowledge base in herbal medicines (Mukherjee and Wahil, 2006). World Health Organization (WHO), defines traditional medicine as sum total of all the knowledge and practicals whether, explicable, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing. According to M'Vunganyi (2009) in most African societies traditional medicine plays an important role in the lives of millions who cannot access western medicine. It is part of the first set of response mechanisms that people rely on in cases of medical emergencies. PAHO (1999) further states that in developed countries the use of traditional medicine is increasing because of better health care, while in developing countries the demand is due to economic issues and availability, as the only source of health care. Daniels (2007) also pointed out that the great majority of Africans routinely use the services of traditional healers for primary health care and the estimates put the number as high as 85% in Sub-Saharan Africa. Traditional healers remain popular because they are accessible, affordable, adaptable and culturally familiar and thus acceptable and respected in the wider community. Furthermore; Traditional medicine is highly popular in many developing countries because it is firmly embedded within wider belief systems. Stanley (2004) explained that Africa's traditional healers can be most instrumental in HIV and AIDS prevention. For starters, these specialists treat most of the cases of STD's which are believed to be major co-factors in the spread of HIV.

Conserve Africa (2004), explained that in rural areas one sometimes travels days before finding the nearest dispensary and pharmacy; therefore, people loose working days, transport fares and the high cost of medicine. In spite of the enormous role played by traditional medicine in primary health care, it continues to be disregarded in development planning and its contribution to the society is generally neglected. The majority of African countries including Lesotho are currently geared towards the privatization of state hospitals therefore the dispensation of free care and free medicine is no longer going to be in place; as a result, health services are going to be very expensive. International organizations like World Health organization (WHO), World Trade Organization (WTO), World Intellectual Property Organization (WIPO), African Union (AU) and the Regional bodies like SADC in Southern Africa, civil societies and the governments have started recognizing the role played by traditional herbalists in primary health systems. However, few African countries have a legal framework for controlling access to indigenous knowledge and biological resources, or ensuring benefits arising from their use are shared fairly (Hebden, 2006). Therefore, a number of strategies and the policy frameworks are continually being developed to increase formal participation and protection of traditional herbalists in the health systems.

The WHO 2002 - 2005 strategy on traditional medicine outlines a number of challenges on the use of traditional medicine. One of the challenges is lack of policy on traditional medicine by a number of WHO member states. Policy provides a sound basis for defining the role of traditional medicine on health care delivery, ensuring that necessary regulatory and legal mechanisms are created for promoting and maintaining good practice, that access

is equitable, and that the authenticity, safety and efficacy of therapies are assured. Another challenge concerns the intellectual property and patent rights, addressing questions about how best the benefits accrued from traditional medicine can be shared between the innovators and the holders of the technology. There are some international and regional organizations and agreements aimed at helping the member states to address these problems.

3.2 World Intellectual Property Organization (WIPO)

World Intellectual Property Organization (WIPO) which is a specialized agency of the United Nations mandated to develop a balanced and accessible intellectual property (IP) system works through a number of programs. Programs that specifically address traditional medicines are Traditional knowledge, genetic resources and traditional cultural expressions/ folklore program. WIPO's work addresses the role that intellectual property (IP) principles and systems can play in protecting traditional knowledge (TK) and traditional Cultural expressions (TCE) from misappropriation and in generating and equitably sharing benefits from their commercialization and the role of IP in access to and benefit-sharing in genetic resources. One of the decisions taken by WIPO's working committee on TK and TCEs in October 2009 is to take text-based negotiations with the objective of reaching an agreement on a text of international legal instrument which will ensure the effective protection of GRs, TK, and TCE and the text is expected to be completed by 2011.

3.3 Trade-Related Aspects of Intellectual Property Rights (TRIPS)

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) administered by World Trade Organization (WTO) attempts to narrow the gaps in the way these rights are protected around the world, and to bring them under common international rules. It establishes minimum levels of protection that each government has to give to the intellectual property of fellow WTO members. However; there are unresolved issues and disagreements between the Western World (America & Europe) and the Developing World on the TRIPs Article 27.3(b). The mentioned article states that WTO Member must provide Patent protection over micro-organisms and microbiological processes, such as those used in biotechnology today, but countries are free to exclude plants and animals from their patent law. However; all nations must provide intellectual property titles over plant varieties either through patents or through an effective Sui generis System. TRIPS therefore provide opportunities for countries to have alternative ways of protection rather than Intellectual Property Rights. Countries are therefore free to come up with policies and legal frameworks that address the needs of local people e.g. protection of Traditional Knowledge and Farmers` Rights. TRIPS have a number of agreements referred to as flexibilities which member states are expended to implement. These flexibilities include: transition period, compulsory licensing, public non-commercial licensing of patents, parallel importation, Exceptions from patentability, and limits on data protection (Musungu; 2005).

Transition period is divided into three categories based on the state of development (Developed, Developing and Least Developed countries-LDC) of each country. This agreement provides the transition period for the implementation of TRIPS minimum standards. The expiry date for the developed countries and developing countries lapsed in 2005 while the least developed countries like Lesotho, Angola, and Zambia in the SADC region have been given up to 2016 with the possibility of an extension (Mabika: 2006). Munyuki and Machemedze, (2010), recommended that the least developed countries in the Eastern and Southern Africa (ESA) regions must make their case at the WTO for the waiver of the transition period beyond 2016 and also for the extension on patent protection. This is in view of the fact that the European Community (EC) wants ESA countries to agree on protecting intellectual property rights especially for EU companies involved in Research and development. ESA countries will then be required to implement certain provisions that will favor EU countries at the expense of developing nations making them to pay heavy royalties for any technology developed by EU.

3.4 Africa Regional Intellectual Property Rights (ARIPO)

Africa Regional Intellectual property Rights (ARIPO) was formed after the member states realized the benefits they would derive from effective and continuous exchange of information and harmonization and co-ordination of their laws and activities in industrial property matters. In August 2010, ARIPO and its members adopted a protocol on the protection of traditional knowledge and expression of folklore. This was adopted in a conference that was held in Namibia at the coastal town of Swakopmund and the protocol was therefore named Swakopmund. The Protocol, upon entry into force, will empower the custodians and holders of traditional knowledge and expressions of folklore to utilize their knowledge for socio-economic development and wealth creation. The implementation of the Protocol will curtail the ongoing misappropriation, bio-piracy and prevent illicit claim of traditional knowledge-based inventions and patent applications and enable the ARIPO Office to register traditional knowledge and expressions of folklore that are trans-boundary and multicultural in nature, the so-called regional traditional knowledge and expressions of folklore (ARIPO 2010).

3.5 The Convention on Biological Diversity (CBD)

The African Union African Model Law (2000) has clauses on the Rights of Local Communities, Farmers and Breeders as well as the regulation of access to Biological Resources. The Law stipulates that the State and its people exercise sovereign and inalienable rights over their biological resources and communities also have rights over their biological resources, knowledge and technologies that represent the very nature of their livelihood systems and that have evolved over generations of human history. The Law further mentions prior rights which take precedence over rights based on private interests.

The Convention on Biological Diversity (CBD) is another important convention which has created a new environment for the protection of biodiversity and indigenous knowledge and for benefit sharing. It goes beyond conservation and addresses issues like bearing the burden and sharing the benefits fairly and equitably between countries which supply and countries which use biological resources on the one hand, and between indigenous and local communities and users in the modern sector on the other. Article 8(j), of CBD explicitly recognizes indigenous and local communities' contribution to biodiversity conservation, calls for respect and support for their knowledge, innovations and practices, and confirms indigenous people's rights over the knowledge they hold. The Article also calls for equitable benefit sharing. (WWW.CBD.int/convention) CBD is more specific on Access and Benefit Sharing which involves genetic resources where Traditional Medicinal Plants can be protected through various legal frameworks. According to Timmermans (2001), the main principles of the CBD of immediate interest in the context of traditional medicine are: State sovereignty over genetic and biological resources; Access to and use of genetic and biological resources and associated knowledge should be based on mutually agreed terms and be subject to prior informed consent of both the State and the providers of the resources/the holders of the knowledge; Fair and equitable sharing, on mutually agreed terms, of the benefits arising from the use of genetic resources and associated knowledge.

3.6 AU Declaration on traditional medicine and Africa health strategy

In a statement delivered by Gawans, B in 2005 on the celebration of the African Traditional Medicine day, he pointed out that in July 2001 the Assembly of OAU heads of states and governments at the summit held in Lusaka declared the period 2001 – 2010 as the decade for African Traditional Medicine. The health Strategy for Africa: 2007 – 2015 has indicated that African Union Member States should consider establishing coordinating mechanisms at national and regional levels to facilitate the implementation of the Traditional Medicine Plan of Action. Research in Traditional Medicine should be promoted and funded to identify efficacious and safe traditional medicines and assist Traditional Health Practitioners patent their products. Furthermore, countries should integrate African Traditional Medicine into their health systems recognizing its strengths and its limitations.

The priority areas for the strategy for the implementation of the Plan of Action on the AU Decade of African Traditional Medicine include:

1. Sensitization of the Society on Traditional Medicine
2. Legislation on Traditional Medicine
3. Information, Education and Communication
4. Resource Mobilization
5. Research and Training
6. Cultivation and Conservation of Medicinal Plants.
7. Local Production of Standardized African traditional medicines.
8. Protection of Traditional Medical Knowledge (TMK)
9. Partnerships
10. Evaluation, Monitoring and Reporting Mechanisms

3.7 SADC Pharmaceutical Business Plan 2007 – 2013

The overall goal of the SADC Pharmaceutical Business Plan is to ensure availability of essential medicines including African Traditional Medicines to reduce the burden of diseases in the region. Its main objective is to improve sustainable availability and access to affordable, quality, safe, efficacious, essential medicines including African Traditional Medicines. In order to achieve the overall goal and the main objective, the following strategies will be pursued:

i) Harmonizing standard treatment guidelines and essential medicine lists;
ii) Rationalizing and maximizing the research and production capacity of local and regional pharmaceutical industry of generic essential medicines and African Traditional Medicines;
iii) Strengthening regulatory capacity, supply and distribution of basic pharmaceutical products through ensuring a fully functional regulatory authority with an adequate enforcement infrastructure;
iv) Promoting joint procurement of therapeutically beneficial medicines of acceptable safety, proven efficacy and quality to the people who need them most at affordable prices;
v) Establishing a regional databank of traditional medicine, medicinal plants and procedures in order to ensure their protection in accordance with regimes and related intellectual property rights governing genetic resources, plant varieties and biotechnology;
vi) Developing and retaining competent human resources for the pharmaceutical program
vii) Developing mechanisms to respond to emergency pharmaceutical needs of the region; and
viii) Facilitate the trade in pharmaceuticals within SADC.

3.8 Lesotho Vision 2020

Lesotho's vision 2020 states: "Lesotho shall be renowned for its environmental management. The country's diversity of life systems will be supported and protected by a nation which is environmentally conscious and whose people are in balanced existence with the natural environment. Basotho will derive continuing benefits from the conservation and sustainable use of their biological diversity. The several global conventions and treaties that Lesotho has signed and ratified shall be translated into concrete actions which will sustain care and management of the environment at large."

3.9 National Biodiversity Strategy and Action Plan Priority Activities

Priority activities to enable implementation of biodiversity conservation goals are as follows:-

- Identification of biological diversity components through research and compile inventories to improve biodiversity conservation.
- Identification of processes likely to threaten Lesotho's biodiversity.

- Identify and implement strategies that ensure sustainable conservation of biodiversity components (PAs, RMAs, ERMAs, Botanical gardens, Maboella).
- Strengthening of legal measures.
- Develop human resources and improve the skills required for biodiversity management.
- Increase participation of rural households in forest activities through their own initiatives, for their own purposes and under their own control.
- Identify and enhance management of Lesotho's unique wetland systems.
- Reform agricultural practices in Lesotho, manage and constrain human activities that are responsible for destruction of biodiversity.
- Perform Environmental Impact Studies prior to implementation of activities that are likely to affect biological diversity adversely.
- Establish measures of benefit sharing.
- Develop material incentive program to change people's behavior so that future land title holders make appropriate conservation decisions.
- Engage in international strategies that facilitate security of national and regional biodiversity components.

3.10 Biodiversity Loss in Lesotho

Recently, there is also an alarming rate of over-harvesting of biological resources as ethno medicines and sources of fuel wood. Truckloads of plant medicines are seen crossing the border to the neighboring states and in particular into South Africa. The medicinal plants mostly harvested and sold in the markets of neighboring states and urban areas of Lesotho are the Alepidea amatymbica (Lesoko), Urginea capitata (Moretele o moholo), U. basutica Moretele o mofubelu), Pachycarpus ridigus and Phytolaica heptandra (Poho-Tšehla), Dicoma anamola, Teedia lucida (Hloenya), and Aloe polyphylla. These are harvested to extinction by unscrupulous Basotho acting on own account and in some instances acting as agents of foreign biodiversity merchants. For instance, the world reckoned Lesotho true endemic, the spiral aloe has been seen in home gardens of South Africa and as far afield as in southern Carlifornia, USA. (Lesotho first CBD report, 2000).

The fourth Lesotho CBD report has also reported that, lately medicinal plants are over harvested for commercial market, and in the advent of emergence of HIV Pandemic for instance, the use of indigenous herbs has intensified because of the assumed potency in managing the viral conditions, and relatively easier access associated with the herbs against the cost of conventional medication. This phenomenon has created a heavy demand on these herbs, hence their overexploitation of the resource thus invariably deplete some colonies completely. What then takes place is marginalization of the species populations, which ultimately affects the species diversity, because their relatives are subsequently accessed as substitutes.

3.11 Health Providers and their sources of knowledge

Lesotho society includes a complex of "indigenous" healthcare provision as well as "western" healthcare provision. Categories of indigenous health care include: Ngaka chitja (herbalist) generally obtaining knowledge from training by a recognized and acknowledged traditional healer, Ngaka ea litaola (diviner) also acquires the knowledge through training but they also claim to have ancestral guidance in diagnosing their clients, Ngakana- ka- Hetla those still under training and are not generally recognized as qualified health providers by the community, but play significant roles as healers and protect families from evil spirits. Marlise (2003) stated that the diviner usually provides diagnosis through spiritual means, while the herbalist then chooses and applies relevant remedies. Mbiti (1991) further clarified that diviners deal with the question of finding out why something has gone wrong. They tell who may have worked evil magic, sorcery, or witchcraft against the sick or the barren. For their work they use divination where pebbles, numbers, bones of certain animals, dice and other

means are used. Traditional healers also act as counselors, rain makers, seers and priests in the society.

Another large category is that of the Mathuela who are distinguished by their dress and form of training which is different from others. During their graduation ceremony they use a goat for the rituals, whereas amongst the Basotho people sheep is mostly preferred. According to Motlamelle (1988) Mathuela are not originally healers from Basothoand this is evidenced by their language which has Zulu connotations like Siya vuma, hlophe and mkoba. They normally function as diviners and healers.

Colonial powers and structures have played an overpowering role in changing the cultural landscape and practices of traditional healers. This has also led to the emergence of certain forms of Christian segments acting as traditional healers. Examples are Moapostola (a Basotho form of Zionism in which moapostola establish communities of health practice); Moprofeta (another form of Basotho Zionism, generally located in an already existing religious community); Pentecostal faith healers; religious leaders and health providers from Pentecostal, Roman Catholic or Protestant denominations. They use water, prayer and herbs in healing the patients. They obtain their knowledge of herbs from reading medicinal plants books.

3.12 Traditional healers' importance in primary health care

The WHO estimates that up to 80% of the population in Africa makes use of traditional medicine. In Sub-Saharan Africa, the ratio of traditional healers to the population is approximately 1:500, while medical doctors have a 1:40 000 ratio to the rest of the population (Marlise 2003). Madamombe (2006) pointed out that, traditional healers are often the first and last line of defense against the most contagious and debilitating diseases that plague the African lives. Although Western medicine is generally accepted throughout Africa, it has not replaced but rather augmented indigenous health approaches. With regard to primary health care in South Africa (SAMJ 2004) found that traditional healers are still firmly established health care providers in their respective communities. They are familiar to their clients. Both share the same language and how they view the world. Health and illness are perceived in the same light. Healers are consulted for a wide range of physical, psychological, spiritual, moral and social problems. Another important reason for seeking the healer's ministrations is prevention of illness and misfortune.

The study conducted by Amhed et. Al., (1999) in Southern Sudan showed people visiting traditional healers ranged between 21 and 40 years and were mostly women. Visitors were less educated compared to the general population in the area. The main reasons given for attending traditional healers sessions were treatment and blessing. It is clear that traditional healers play an influential role in the lives of African people and have the potential to serve as crucial components of a comprehensive health care strategy.

3.13 Traditional Healers role in Tuberculosis (TB) treatment

The President of Lesotho Traditional Healers Association Mr. Liau Malefetsane reported that thousands of traditional healers are helping in the fight against tuberculosis (TB) in Lesotho. They have been trained to recognize TB symptoms such as a persistent cough and are aware of their responsibility to advice patients with suspected TB to get properly diagnosed. In Lesotho, when people fall ill, it is customary for them to go to their traditional healers first. Healers don't have the equipment necessary to test for TB, neither are medical practitioners. Instead of trying to treat a suspected TB patient using traditional medicine, healers are trained to refer them to the nearest TB clinic.

Traditional healers have experience in herbal and mystical remedies and they live by their

trade of treating the community. Healers have a strong incentive to forego the revenue they would earn if they tried to treat the patient themselves, because they recognize that if clinical TB treatment is delayed, the disease can be fatal.

3.14 Traditional healers and HIV/AIDS

Traditional healers provide a substantial proportion of health care in resource-poor settings, including countries with high burdens of HIV in sub-Saharan Africa. Traditional healers have played many roles in HIV care, but some biomedical providers view them as obstacles in providing HIV treatment. The study that was conducted by Furin (2011) in two districts of Lesotho showed that traditional healers provide a wide range of HIV services prior to the anti-retroviral (ART) rollout. Traditional healers took on a variety of roles in the ART rollout, including HIV prevention activities, HIV testing, monitoring patients, and participating in joint learning sessions. The study further concluded that traditional healers can provide a variety of community-based HIV services and are not obstacles for advancing care in the communities they serve. According to Mills et al. (2006) currently, there is mounting evidence of the importance of traditional healers in the management of the HIV/AIDS epidemic although poorly researched and understood, and to reduce the impact that some traditional healing interventions may play on the spread of HIV/AIDS and unsafe treatment of infected patients. While there are few collaborative projects between traditional healers and biomedical health providers, there is an enthusiasm on the part of traditional healers to collaborate and learn from their western-trained counterparts. Burnet et al. (2007) also revealed that there was more support for collaboration among traditional healers than among formal health workers. Both traditional healers and formal health workers have significant and complementary roles in the field of HIV/AIDS in Zambia, but there is much debate concerning the relationship between them.

3.15 Lesotho Science and technology Policy (STIP) Objectives

1. To foster a stronger S&T human resource base

- Sustain relevant and accessible S&T programs of learning and advocacy in technical, vocational and science-based disciplines;
- Accord high priority to S&T education, funding and research;
- Appraise the education system and devise a funding scheme for S&T training and research programs;
- Set up plan to regularly upgrade critical S&T supplies & equipment for research laboratories, textbooks and journals for schools and universities.

2. To develop a culture of Innovation for technological production

- Develop and promote a S&T support network and activities targeted to entrepreneurs and SMEs;
- Enhance and diversify the export base; Provide cost-effective technical support to entrepreneurs and enterprises from production to marketing stages;
- Set up and nurture a national S&T innovation system and network;
- Facilitate access to national, regional and global S&T information networks.

3. To create job opportunities and poverty reduction through the use of S&T initiatives

- Build maximum synergy, cooperation and coordination between and among S&T users and R&D institutions;
- Undertake R&D and diffuse technologies that would improve quality of life;
- Ensure participation of women in S&T management, teaching, learning, R&D, etc.

4. Build a vibrant information society

- Take proactive approach to knowledge acquisition and information dissemination in line with the ICT policy, with a view to building a strong knowledge-driven economy

5. Promote and commercialize indigenous knowledge systems

- Safeguard the indigenous knowledge systems;
- Where possible, convert these to innovative products and services for both domestic and global markets.

3.16 Intellectual Property Systems in Lesotho

One of the greatest challenges facing the Country is the management of the Traditional Knowledge Systems especially traditional medicine, due to lack of regulatory framework. Important components of IK–Systems such as Intellectual Property Rights (IPR) and Access & Benefit Sharing (ABS) have no policies that safeguard them. The Industrial Property Order, 1989 and Copyright Order, 1989 do not address the issue of IK systems directly especially traditional medicine.

The industrial Property Order of 1989, Part II under matters excluded from patent protection has the following sections which totally exclude Protection of indigenous knowledge.
4.2, (b) "Plant or animal varieties or essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes";

(d) "Methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods practiced on the human or animal body. This provision shall not apply to products for use in any of those methods".

3.17 Access and Benefit Sharing

Specifically, ABS is the acronym for access (to genetic resources and associated traditional knowledge) and benefit sharing from their utilization. "Genetic resources" refers to the genes that make up every living organism. Seen to have commercial value, such genes have thus become "resources" that can be bought and sold, along with all the other vast natural resources that originate in Indigenous Peoples' territories. It is these genetic resources that governments and industry want access to for commercial exploitation and economic development. (Le'a Malia, 2010). Lesotho does not have a regulatory frame work on ABS. However, with the establishment of local councils at village level, the councilors use the provisions of the local government act 2007 which allow them to make their own by laws to ensure that they benefit from the utilization of their resources in their territory. Currently, the emphasis is more on natural resources such as building sand, thatch grass and quarries for road construction than medicinal plants and animals including traditional knowledge.

4. Methodology

4.1 Introduction

The study was carried out in the seven lowlands districts of Lesotho. The study comprised of two sets of questionnaires. The first one targeted the traditional healers whilst the second one was directed to the beneficiaries of traditional medicine which were basically households living in the villages with traditional healers. Since not all Traditional healers are registered with the healers association of Lesotho, they were identified with the help of the chiefs as custodians of culture in the villages. The questionnaires were piloted in three districts and these were done along with the Focused Group Discussions. Departments and Civil organizations linked to traditional medicine, access and benefit sharing and intellectual property rights were interviewed as key informants in this study.

4.2 Questionnaire Survey

Structured questionnaires used for the traditional healers had four major components: these were: household characteristics (i.e. marital status, sex, family size, education and employment). The second component was on sources of knowledge, access and benefit sharing. The third component was on the ability to cure diseases including HIV/AIDS and the fourth component checked Biodiversity issues, policy and the enforcement mechanisms. A total of ninety one traditional healers were interviewed. The second questionnaire on beneficiaries had three major categories. The first referred to household characteristics as in the first questionnaire, followed by the assessment of the communities' use and confidence to traditional healers. The last one centered on the policy and modernization of traditional medicine. One hundred and eight beneficiaries were interviewed.

4.3 Focused Group Discussion

Focused group discussions conducted in the three districts piloted were composed of 8 – 12 people selected from a number of villages. The group was composed of traditional healers; people involved in initiation schools and the village councilors. The discussions were mostly dominated by the elderly people with their age ranging from around fifty to eighty. The highest percentage of the participants was male. These people were identified and invited by the area chiefs. Discussions were on; sources of traditional medicine knowledge, preservation of traditional medicine, promotion of such traditional medicine (awareness), cases of access and benefit sharing, interaction with the modern doctors and ways in which their knowledge could be protected. A total of three focused group discussions were conducted.

4.4 Key Informants Interview

Departments and civic associations which their core business is related to traditional healers and medicine, intellectual property rights, Access and benefit sharing, HIV/AIDS and consumer protection were identified and visited. The following Government departments were visited: Department of Parks (CBD), Department of environment (ABS), Law office (IPR), Science and Technology (Traditional Knowledge system policy) and Parliament Portfolio committee on HIV/AIDS. Civic associations consulted were: Consumer association of Lesotho, Traditional doctors association of Lesotho and Lesotho network of people living

with HIV/AIDS (LENEPWHA).

4.5 Data Analysis

Data collected from traditional healers and beneficiaries were coded and analyzed using SPSS version 19. Analyzed information was presented in the form of illustrations, frequencies, percentages, tables and charts.

5. Results and Discussion

5.1 Age

Most of traditional healers range within the age group of 46-55 years (26.4%). They are within this range because it is at this stage whereby they have completed necessary rites of passage, notably initiation school. These are followed by those who are around 36-45 years of age (23.1%) who also constitute a reasonable number, thus in most cases these are newly inaugurated traditional healers. Although the age groups 56 – 65 and 66+ constitute lower percentages of 17.6% and 16.5% respectively, these groups are highly trusted by the community due to experience they have acquired and the number of doctors they have trained. Thus at this age their decisions are credible based on their maturity level.

5.2 Education Standard of Traditional Healers vs Beneficiaries

A significant number of Basotho traditional doctors has only gone up to primary level - 56%. Table 1 below shows that, 23% constitutes those who have not been to formal school and some (14.3%) of this group has only attended traditional school. This group possesses indigenous knowledge gained from initiation school and their elders while still tending livestock. Beneficiaries interviewed in this study were ordinary Basotho randomly selected from the population and these could be depicting the educational levels of the Basotho people especially those in the rural areas as the study covered mostly the rural areas. Therefore the greatest number of the rural population have gone up to secondary (41.7%) followed by high school (25%) and tertiary with 13%. The study therefore reveals that the majority of traditional healers are below formal educational level of the country.

Table 1: Educational standards attained by traditional healers and beneficiaries

Education	Traditional & no schooling	Primary	Secondary	High	Tertiary	No response
Traditional Doctors N= 91	23.1%	56%	14.3%	4.4%	2.2%	0
Beneficiaries N=108	3.7%	6.5%	41.7%	25%	13%	13%

5.3 Traditional Healing in Lesotho

5.3.1 Sources of Traditional Healing

Most people who are traditional healers have acquired knowledge from their ancestors (34%) through the process of “HO THOASA”. This is a situation whereby an individual receives instructions from his ancestors while asleep. These instructions are well packaged and will include the traditional healer who will train that individual on the use and other rituals concerning traditional healing and the sacred place where such rituals are supposed to be performed during the training. This is more common with the mathuela category of healers. The same percentage (34%) acquired the knowledge from their elders. Usually these people have been employees of traditional healers and they have acquired this knowledge through

being sent out to fetch herbs or medicinal plants and animals. The study revealed that there is another category with 28% who never went for any form of training but claim to have been shown various medicinal plants and animals whilst asleep by their ancestors.

5.3.2 Traditional knowledge transfer

The majority of the traditional healers (75%) are willing to share their knowledge with other people with a charge. Normally these are people coming to them either voluntarily or through a calling by their immediate ancestors. More than 28% obtained the knowledge without a cost. In most cases this revolves around the clan usually to the most trusted and disciplined members in the clan-family. Although more than 24% gained their knowledge through paying money compared to more than 19% who acquired it through paying livestock but the baseline for payment is livestock usually a cow, calculated in monetary terms. In the past before the advent of the money economy, livestock was the mode of payment hence the reason why traditional payments such as lobola are still quoted in livestock terms. However some traditional healers especially the elderly ones who still value their tradition demand payments to be done through livestock. As shown in table 2 below more than 13% of the interviewed healers are adamant that they cannot share their knowledge and close to 9% cannot share the knowledge for personal reasons while more than 7% are avoiding competition from their trainees.

Table 2: Knowledge transfer and costs on training

WILLINGNESS TO SHARE KNOWLEDGE WITH OTHER PEOPLE				
Yes, free of charge	**Yes, but at a cost**	**No**	**No response**	
8.8%	74.7%	13.2%	3.3%	
REASONS FOR NOT SHARING				
Not Applicable	**Avoid Competition**	**Retain Knowledge as Family Treasure**	**Personal**	**No response**
74.7%	2.2%	7.7%	8.8%	4.4%
COST INCURRED DURING TRAINING				
Not Applicable	**Nothing**	**Money**	**Livestock**	**No Response**
25.3%	28.6%	24.2%	19.8%	2.2%
COST CHARGED BY TRADITIONAL HEALERS ON CLIENTS				
Not Applicable	**Money**	**Livestock**	**Others**	**No Res**
22.0%	37.4%	35.2%	2.2%	3.3%

5.3.3 Traditional healers Relations with Modern Doctors

A majority of traditional healers 75.8% showed that they do not have any forum with modern doctors. As indicated in table 3 below 73.6% also pointed out that they are never consulted by the modern doctors in disease curing.

This was echoed by the president of Lesotho traditional healers association, Mr. Malefetsane Liau during a Key Informants Interview. He showed that they are never consulted in any way by their modern counterparts to demonstrate their knowledge in the field of medicine. This situation is different with what happens to the neighboring country of the Republic of South Africa, whereby both traditional healers and modern doctors do have forums where their information is shared. This absence of consultations with traditional healers is a clear indication that modern doctors in Lesotho have a negative attitude towards traditional healers. However there is a contradiction here, as some traditional healers indicated during the focused group discussions that they are sometimes consulted by the modern doctors, when they seek promotions or good fortunes in their surgeries. They normally come to traditional healers covertly. It is highly likely that 1.1% and 7.7% who showed that modern doctors have extreme and partial confidence, respectively, in them are those that are consulted by the modern doctors in this fashion.

Table 3: Traditional healers' relations with modern doctors

FORUMS ATTENDED WITH MODERN DOCTORS			
0	**Yes**	**No**	**No response**
1.1%	17.6%	75.8%	5.5%

MODERN DOCTORS CONFIDENCE IN TRADITIONAL HEALERS					
Not applicable	**Extremely**	**Partly**	**Very Little**	**Not At All**	**No Response**
74.7%	1.1%	7.7%	5.5%	7.7%	3.3%

INVOLVEMENT OF TRADITIONAL HEALERS BY THE MODERN DOCTORS IN PATIENTS' TREATMENT			
0	**Yes**	**No**	**No Reponse**
3.3%	3.3%	73.6%	19.8%

5.4 Traditional Healers capacity and their perception on HIV/AIDS

In all the diseases listed above and other illnesses, more than 70% showed competence in curing those diseases. The highest, (81%) showed ability to cure sexually transmitted diseases. Figure 1 below, indicated that 56.0% is aware of the existence of HIV and AIDS. However, in Lesotho it is highly important to note that 26.4% are totally denying the existence of HIV/AIDS and 15.4% are not sure. These numbers are highly significant considering the alarming rate of infection in the country. Lesotho is now estimated at approximately 23% of adults infected aged between 15-49, and that, 57% of all infection are in females (UNAIDS, 2005). Thus this cannot be left unchallenged, because this indicates a risky situation. The study revealed that the majority of these healers who deny HIV/AIDS existence or are unaware of HIV/AIDS, classify it as one of the sexually transmitted diseases such as syphilis, gonorrhea, or mahae, (a disease which is associated with someone who had sex with a woman whose husband has just passed away and is still in her mourning gowns). This could be one of the reasons why modern doctors consider them deceiving and misleading in the provision of primary health care. Ignoring the existence of traditional healers who are still in denial or ignorant could be fatal to the society as they are the first to be consulted in the community whenever people fall sick.

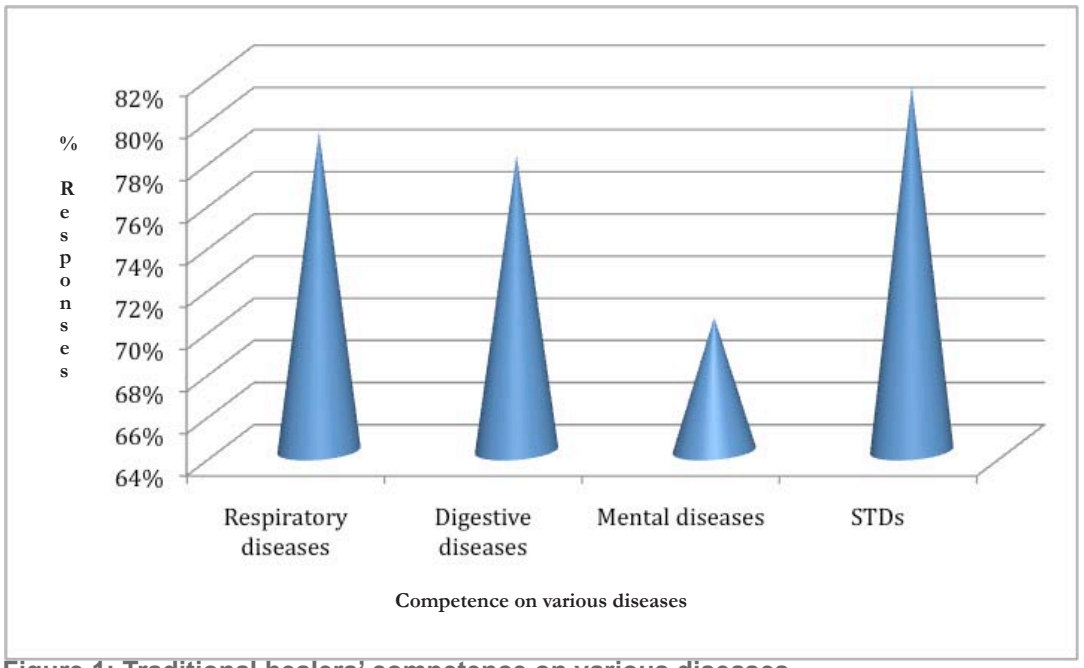

Figure 1: Traditional healers' competence on various diseases

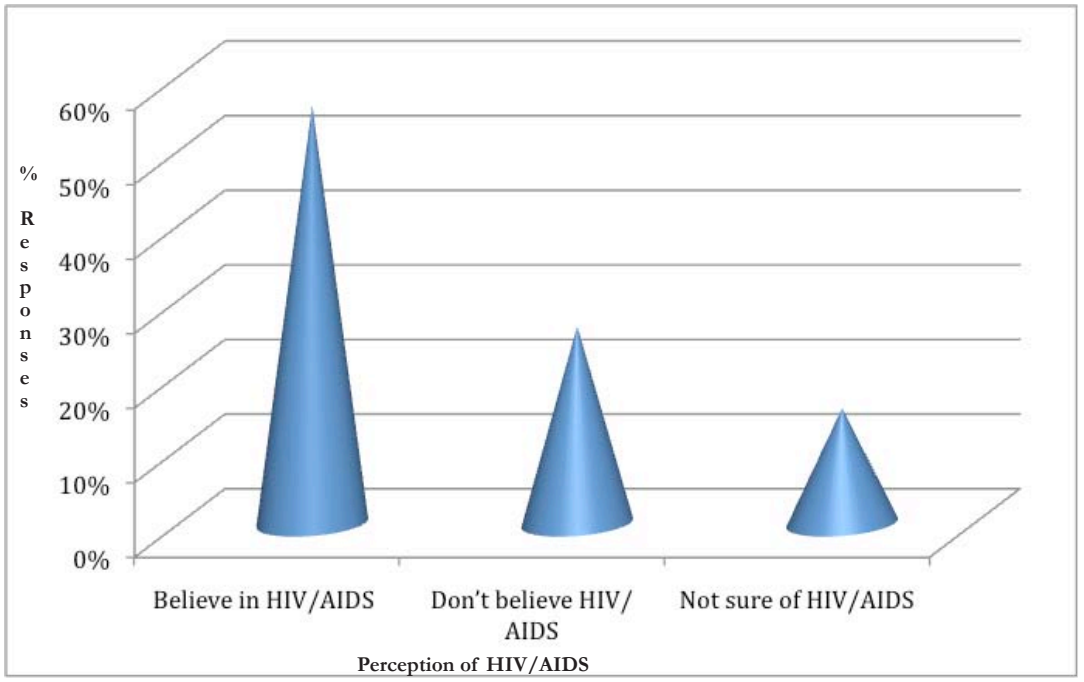

Figure 2: Traditional healers' perception on HIV/AIDS

5.5 The impact of traditional medicine on biodiversity

More than 86% of traditional doctors admitted being faced with declining sources of traditional medicine, plants and animals used in the preparation of medicines. The Lesotho fourth Biodiversity report showed that with the emergence of HIV Pandemic, the use of indigenous herbs has intensified because of the assumed potency in managing the viral conditions. Much of these herbs are harvested from the rural areas usually smuggled and sold in urban areas

where they are in high demand by the city dwellers. The reason for this is that most of the people in towns have migrated from rural areas and are still attached to their traditions and still consult traditional healers for medicine. It emerged during the Focused Group Discussions that this uncoordinated harvesting is done by people who are not licensed healers but grew up in the villages and are familiar with the herbs. It was further indicated that they often use the spades hence removing everything that would allow the plant to re-grow. Trained healers are very particular when looking for the sources of traditional medicines. They avoid harvesting young plants and killing young animals as they expect them to grow and multiply. In an attempt to counteract this erosion of herbs and animals, Ministry of Tourism, Environment and Culture has embarked on massive campaigns to educate traditional leaders, community councilors and traditional healers on environmental conservation. Currently 50.5% have shown that, they do not wait for plants to grow before harvesting them, while 39.6% have shown that due to the education they received and campaigns conducted by environmental officers, they do wait for plants to reach maturity and they have engaged themselves in the process of having their own community botanical gardens.

5.6 Access and Benefit Sharing and Intellectual Property Systems

5.6.1 Access and Benefit Sharing

Participants from all areas visited did not show any benefit reaped from the use of their biodiversity resources. It was gathered during the key informants' interviews with the Department of Environment that there were some people coming from South Africa who were smuggling some traditional medicinal plants from Lesotho for commercial purposes in South Africa. Some of these products are sold in the streets whilst some are sold to the fast growing traditional medicine industries in South Africa. Head boys are used in this massive harvesting. This normally takes place in the remote areas like the mountains and rangelands where this cannot be easily noticed. Interviews at the Department of environment showed that there is no regulatory framework on access and benefit sharing. However, due to overharvesting of certain plants and animals for medicinal purposes, the Department included in the Environment law as amended in 2008, protection of endangered species. This was instituted to prevent the harvesting of the species protected under this law without the permission of the environment authorities.

Local councils have the provision to make by laws under the local government act of 2004. It was noticed during the focused group discussions that some village councils have made by laws governing the use of resources in their territory by people coming from outside. However, this mostly applied to resources like building sand and quarry. The contract is signed between the two parties; usually to construct a graveled road or provide drinking or small irrigation facilities. Although this is outside the periphery of CBD but in principle, it is in line with some of the major requirements of CBD and the Nagoya Protocol on Prior Informed Consent (PIC), agreement of terms and benefits from the utilization of their resources. Therefore, once the national policy for Access and Benefit Sharing on genetic resources is in place, it will be easier to implement it based on what communities are doing already.

The Department of environment has applied for funding from Global Environment Facility to facilitate in the development of access and benefit sharing and ratification of the Nagoya protocol.

5.6.2 Intellectual Property

More than 92% of Basotho traditional healers believe that they should be legally protected. Lesotho, like any other country, has its own traditional healers system which dates as far back as pre-historic period; in fact, this is part of their culture. But this art is not legally protected. Although there is Industrial Property Order, 1989 and Copyright Order, 1989; the two acts do not explicitly spell out, to what extend are traditional healers protected by law within the country. Industrial Property order, 1989 has taken a stand of shall as opposed to may suggested by WIPO on under matters excluded under patents that "Methods for treatment of the human or animal body by surgery or therapy, as well as diagnostic methods practiced on the human or animal body. This provision shall not apply to products for use in any of those methods". Therefore, traditional healers' methods of diagnosis and healing cannot under any circumstances be protected for ethical reasons as stipulated in WIPO. However, ARIPO realizing the importance of traditional knowledge came up with the swakopmund protocol which has been adopted by ARIPO members but it is not yet operational. The protocol seeks ways of protecting traditional knowledge and expressions of folklore. According to the office of the registrar general in the Ministry of Law, Justice and Human Rights, various stakeholders were sensitized on the protocol prior to the signing and there is a radio program running on issues pertaining to the affairs of the ministry and intellectual property systems, related organizations and protocols form part of the programs.

5.6.3 Beneficiaries Perspective towards training and sensitization on IKS and ABS

More than 85%, agree that, community based leaders must be given adequate training on enforcing policies governing traditional healers. This also came up during the focused group discussions that some chiefs and community councilors connive with city street vendors for a bribe in smuggling some herbs from the villages. This sentiment extends further to the policemen. Before policies are formulated, traditional healers indicated that policymakers should have an induction course on Indigenous Knowledge System (IKS). About 90% of the traditional healers also agreed that the Police Service must also be trained on IKS policy and legislation so that they are enlightened to enforce it.

In general, 89% of traditional healers agree that, policy makers and the community at large should be sensitized or educated about issues of policies surrounding Indigenous Knowledge System. They strongly believe that if the community is aware of issues related to IP and ABS natural resources like the biodiversity can be used to the advantage of all. This will make it impossible for those who may try to manipulate the system. These include bogus traditional healers who are not only affecting the biodiversity, but are also killing innocent lives through maladministration of wrong herbs.

5.7 Traditional healers' consultations by the society

The results as shown in figure 3 indicates that more than 47% of the people interviewed have never been to a traditional healer in 2010. However, more than 50% had consulted the traditional healers with the majority being there four to five times. This is in line with what Gawans 2005 said at the common African Traditional day that Africans have relied on traditional medicine since time immemorial and still remains the mainstay of primary health care for the majority of those in the rural areas in Africa. This is partly because of lack of access to health care and services but also because of traditional belief systems.

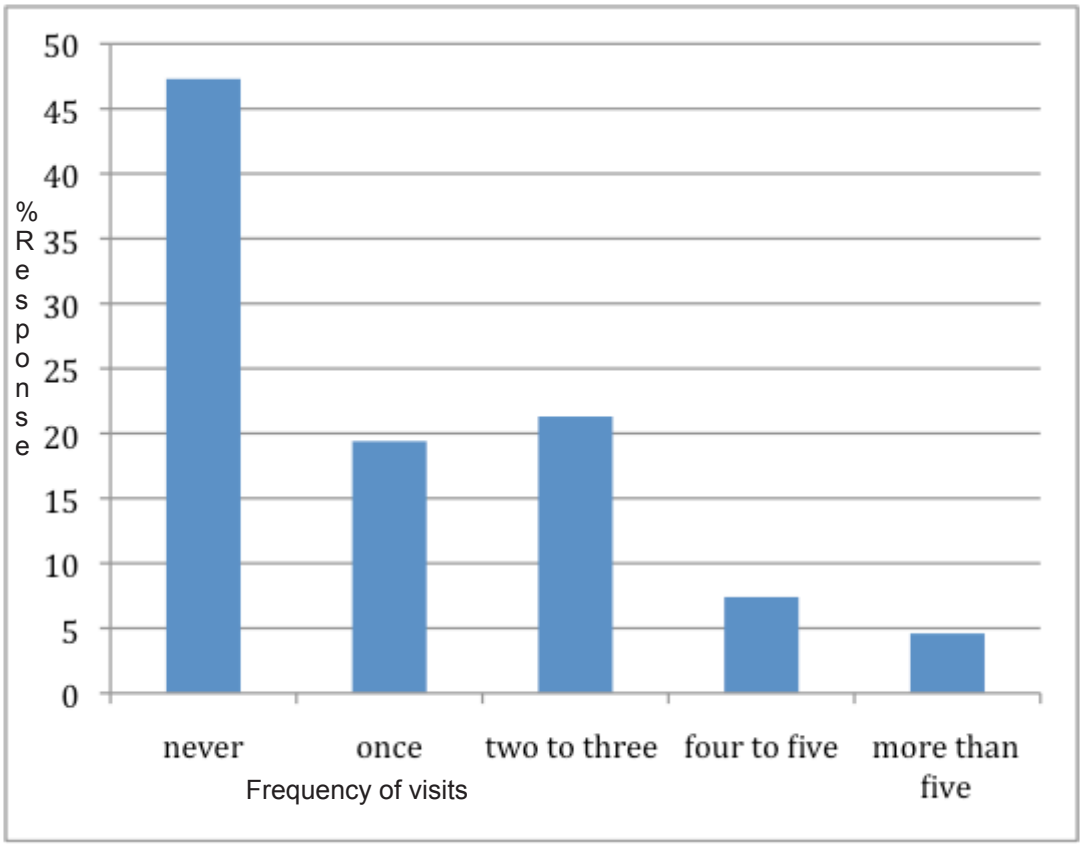

Figure 3: Frequency of visits to the traditional healers in 2010

However, the study indicated that more than 73% have modern clinics near their homes and 80% showed that they take less than an hour to reach the modern clinic therefore lack of access to health care services does not probably apply but believe in traditional medicine as more than 60% agreed that they go to traditional healers because they believe in traditional medicine. WHO estimates also show that about 80% of the African population reverts to traditional medicine when taken ill.

5.8 Modernization of Traditional Healers

The results as shown in figure 4 indicated that more than 90% of the respondents supported modern packaging of traditional medicine. These findings are in agreement with what was discovered in Nigeria that packaging, which enhances attractiveness and also increases shelf life, were not only appreciated by the usual low class customers of traditional medicine but attracted upper class consumers (M2 Magazine 2010). It has also been observed in Lesotho that packaging of traditional medicine in a modern way attracted people from all classes. Mrs 'Mamotlatsi Dlankamandla is one such traditional healer who has modernized her surgery such that it operates like a modern clinic. Her well packaged products are not only sold at her surgery but around the country and beyond the borders of Lesotho.

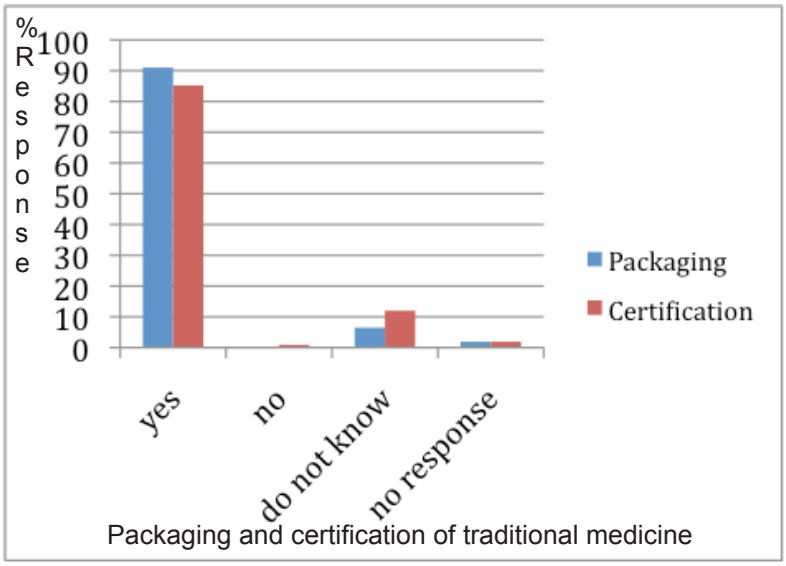

Figure 4: Modernization of traditional medicine

She has more than 50 employees around the country and she is one of the potential sponsors of a number of activities in the country. More than 86% agreed that traditional healers should be certified by the traditional healers association. Certification of traditional healers is done by the association of traditional healers, but this does not justify that people who are not registered and certified with the association cannot practice as traditional healers. Therefore, if there is no policy and the enforcement of that policy, registration and certification with the association will not help.

6. Conclusion and Recommendations

The existence of traditional healers and the influence they have on the day to day lives of both the rural and urban communities cannot be overlooked. Traditional medicine is one of the oldest concepts that people have been surviving on. There are quite a number of traditional healers international and regional declarations, strategic plans and conventions that African countries are party to, but very little has been done to implement them, protect and improve the knowledge. In the era of HIV and AIDS and other hard to cure diseases the knowledge is being taken advantage of for the purposes of self-enrichment by people who are not at all healers. This does not only pose as a threat to biodiversity and the lives of the people but also robs the people's money/resources that could have been spent on qualified traditional healers or modern doctors.

Traditional healers do have an association which is also responsible in giving out certificates to the healers. It must be noted that; certificates are not awarded on the basis of competence and there is no thorough scrutiny on the credentials of the individual before being awarded a certificate. This is simply done to increase the membership of the association to sustain it through the fees that is paid for registration and annual subscription. Therefore, it is important that a standardized competence test is offered to the healers before being registered with the association and practicing as traditional healers. It is also recommended that only certified traditional healer's clerks should be allowed to harvest the herbs in the villages.

The impact of uncoordinated harvesting of medicinal plants is a serious concern to the environmentalists and the communities as a whole. Medicinal plants are being harvested at an alarming rate despite the enactment of the environment act of 2009. It is also recommended that every traditional healer must have a botanical garden in his yard or field which will be protected by law from any form of intrusion. Another recommendation is that; medicinal plants being sold should be done by the people licensed by the traditional healers association and this activity must be governed by the association. Again, traditional medicine should be sold in decent buildings or shelters just like the modern pharmacy. As it has been shown from the results, that beneficiaries would prefer to have traditional medicine well packaged, it is therefore recommended that traditional pharmacies are guided by people trained in preservation and canning to have their medicines properly and hygienically packaged. This is already being practiced by some traditional healers in the country and the rewards are astonishing and there are quite a number of healers going into modernization of their businesses but quality and safety of their products is one area that must be researched.

It is shocking to discover that the majority of traditional healers either do not believe in the existence of HIV and AIDS or are not sure about it. This calls for immediate intervention by all the stakeholders dealing with HIV and AIDS, as traditional healers are also regarded as community leaders commanding much respect from the society. Their lack of knowledge about the disease holds serious problems for the community and the people they serve. Negligence by the modern doctors may be observed as one of the factors contributing to

their ignorance. It is therefore recommended that medical council of Lesotho Doctors and the Nurses Association of Lesotho should find a way of conducting awareness campaigns for the traditional healers on serious illnesses like TB and HIV and AIDS. This must be done in such a way that will not infuriate traditional healers otherwise that initiative will fail. This will make the doctors' jobs easier as some people spend most of their time consulting traditional healers on illnesses that they don't have capacity to diagnose and cure.

On the overall it has been observed that legal instruments (Industrial Property Order of 1989 and copyright order 1989) addressing intellectual property rights are silent on traditional knowledge especially traditional medicine. Therefore, it is important that the government fast tracks the formulation of IP policies on indigenous knowledge systems to facilitate a smooth implementation of Swakopmud protocol. It has also been observed that there is no legislation on ABS issues. Lesotho is party to CBD and has the right to ratify the Nagoya protocol. The protocol calls for nations to formulate legislations that would allow for the implementation of the said protocol, therefore, the country must act swiftly so that when this protocol is put in place draft policies, awareness campaigns and education have been carried out.

References

Africa Health Strategy: 2007–2015: Third Session of the African Union Conference of Ministers of Health. Johannesburg, South Africa.

ARIPO (2010) ARIPO and its member states adopt a new protocol on the protection of traditional knowledge and expressions of folklore. Harare, Zimbabwe.

AU, African Model Law (2000) Legislation on Farmers' Rights and community rights related to crop genetic resources. Algeria.

Biological Diversity in Lesotho, Convention on Biological Diversity. First country report to the COP 2000. Department of Environment, Maseru, Lesotho.

Burnett et al. (2007) Caring for people with HIV in Zambia: are traditional healers and formal health workers willing to work together? Lusaka, Zambia.

Chakela, Q. (1998) State of environment report 2000 Lesotho. Published by National Environment Secretariat. Maseru Lesotho

Conserve Africa, 2004. Overview on Medicinal Plants and Local Communities in Africa. www.conserveafrica.org.uk

Copyright Order, 1989. Order No. 13 of 1989. Government Printing, Maseru, Lesotho.
Daniels, U. (2007) Traditional Medicine in Africa: View Point. AfricanLoft.

Environment Act, 2008. www.Environment.gov.ls

Furin, J. (2011) The Role of Traditional Healers in Community-Based HIV Care in Rural Lesotho.

Hambly,-H. (ed.); Angura,-T.O. (ed.) (1996) Grassroots indicators for desertification: experience and perspectives from eastern and southern Africa

Hebden, S. (2006) 'African law' needed to protect traditional medicine". African Conservation Foundation.

Industrial Property Order, 1989. Order No. 5 of 1989. Government Printing, Maseru, Lesotho.

Leonti, M., Sticher, O. and Heinrich M. (2003) Antiquity of medicinal plant usage in two Macro-Mayan ethnic groups (México). Journal of Ethnopharmacology, Volume 88, Issues 2-3

Lesotho Fourth National Report on Implementation of Convention on Biological Diversity, December, 2009. Department of Environment, Maseru, Lesotho.

Lesotho Vision 2020. www.gov.ls

Mabika, H. A. (2006) SADC and HIV/AIDS – Countries should utilize TRIPS flexibilities. SEATINI Head office Harare, Zimbabwe.

Marlise, R. (2003) Traditional Medicines and Traditional Healers in South Africa. Johannesburg, South Africa.

Mbiti, J. S. (1991) Introduction to African religion. Heinemann Publishers. Johannesburg, South Africa

Mendoza-L,-M.C.; Luning,-H. (1997) Capturing resource user's knowledge in a geographic information system for land resource management: the case of the Kankanaey farmers in Benguet, Philippines. Geographical-Studies-of-Development-and-Resource-Use (Netherlands) 1997, no. 2, 26 p

Mills et al. (2006) African Herbal Medicines in the treatment of HIV: Hypoxis and Sutherlandia. An evidence and pharmacology. Mc Master University, Canada.

Motlamelle, M.P. (1988) Ngaka ea Mosotho. Morija Printing Works. Morija, Lesotho.

Mukherjee, P.K. and Wahil, A. (2006) Integrated approaches towards drug development from Ayurveda and other systems of medicine. Journal of Ethnopharmacology 103: 25-35.

Munyuki, E. and Machemedze, R. (2010) Implementation of the TRIPS flexibilities by east and southern African countries: Status of patent law reforms by 2010. East and Southern Africa Region.

Musungu, S. (2005) Rethinking Innovation, Development and Intellectual Property in the UN: WIPO and Beyond. Issue paper 5. Quicker International Affairs Programme. Ottawa, Canada.

M'vunganyi, M. (2009) Traditional Medicine in Africa- A wealth of knowledge on the verge of demise! Upfront Africa – Voice of America.

M2 Magazine, (2010) Traditional Medicine Packaging Keeps Growing. Marketing and Business Intelligence. Nigeria

PAHO, (1999) Traditional, Complementary and Alternative Medicines and Therapies. Division of Health Systems and Services Development. Washington DC, USA.

SADC Secretariat, (2007) Pharmaceutical Business Plan 2007 - 2013. SADC. Gaborone, Botswana.

Stanley, B. (2004) Recognition and Respect for African Traditional Medicine. IDRC. Harare Zimbabwe

Scheinman, D.: (2000) An Integrated Program for Developing Medicinal Plants: A Case Study from Tanga, Tanzania; Paper presented to Medicinal Plants Forum for Commonwealth Africa, Cape Town.

STIP Review of Lesotho: Implementation Strategy (2006 – 2011) United Nations Conference on Trade and Development.

The WIPO Intergovernmental Committee and its Mandate 2010-2011: Traditional Knowledge Division, WIPO.

Timmermans, K. (2001) TRIPS, CBD and Traditional Medicines: Concepts and Questions. Report of an ASEAN Workshop on the TRIPS Agreement and Traditional Medicine. Jakarta, Indonesia.

Tshabalala, V. M. (2005) Indigenous Knowledge lessons from IWRM in Lesotho. Department of water Affairs, Maseru, Lesotho.

UNAIDS, (2006) Collaborating with Traditional Healers for HIV Prevention and Care in sub-Saharan Africa: suggestions for Programme Managers and Field Workers. Geneva, Switzerland.

WHO, (2002) WHO Traditional Medicine Strategy 2002–2005. World Health Organization, Geneva, Switzerland.

www.cbd.int/convention

Appendix

Appendix 1

Questionnaire for Traditional Herbalists

1.0 How many people are there in your household?

I. Children [ ]
II. Adults [ ]

2.0 Which of the following age categories do you belong to?

I. 15-25
II. 26-35
III. 36-45
IV. 46-55
V. 56-65
VI. 66+

3.0 Gender

I. Male
II. Female

4.0 Marital status

I. Married
II. Single
III. Single parent
IV. Divorced

5.0 What educational level did you acquire?

I. No schooling
II. Traditional school (Initiation School)
III. Primary education
IV. Secondary education
V. High school

6.0 Do you do any work other than being a doctor? (please specify)

_____

7.0 How did you acquire the knowledge on traditional medicine?

I. Gift from the ancestors.
II. Gift from the ancestors and training by the herbalist.
III. Taught by the elders.
IV. Gift from God.

8.0 If you obtained it through training in 5 (II) and III) what was the cost?

II. Nothing.
III. Money.
IV. Livestock.
V. Others

9.0 Which human diseases are you good at?

I. Respiratory.

_____

_____

II. Digestive.

_____

_____

III. Mental

_____

_____

IV. STDs

_____

_____

V. Others

_____

_____

10. Do you believe that there is a disease called HIV/AIDS?

I. Yes

II. No.

11. If no what do you think HIV/AIDS is?

I. Cancer.

II. Syphilis

III. Other_____

12. If yes have you ever treated HIV/AIDS patient?

I. Yes.

II. No.

13. If Yes, In general, what was the outcome?

I. Patient completely cured.

II. Patient recovered but was not completely cured.

III. People come when they are too sick to cure.

IV. Failed to cure.

14. If completely cured how you can justify this?

I. Tests proofed him/her negative after my treatment.

II. The patient regained her/his normal weight/life.

III. Both I and II

IV. Nothing done

15. Any attempts to make the above information known to the public?

I. Yes.

II. No.

16. If yes what did you do?

I. Informed other herbalists.

II. Informed village local health personnel.
III. Informed the media.
IV. Informed community based leaders.
V. All of the above.

17. Is there any formal forum where you meet with the modern doctors and share ideas on your duties as doctors?
I. Yes.
II. No.

18. If yes, do you think they have confidence in you?
I. Extremely.
II. Partly.
III. Very little.
IV. Not at all.

19. Are there some cases where modern doctors involve you in patient's treatment?
I. Yes
II. No

20. If yes, which diseases are you always invited to treat?
I. Respiratory [ ] Yes [ ] No
II. Digestive [ ] Yes [ ] No
III. Mental [ ] Yes [ ] No
IV. STDs [ ] Yes [ ] No
V. Witchcraft [ ] Yes [ ] No
VI. Others (Specify)

21. In general what do you always use in treating diseases?
I. Plants
II. Animals
III. Both Plants and animals
IV. Water
V. Others_____

22. In most cases how do you prepare them?
I. Concoctions. [ ] Yes [ ] No
II. Juice extracted from plants . [ ] Yes [ ] No
III. Powder made from dried animal and plants [ ] Yes [ ] No.
IV. Paste from animal and plant products [ ] Yes [ ] No
V. Others_____

23. How do you administer them to your patients?
I. Consumed/drink orally [ ] Yes [ ] No
II. Inhaled [ ] Yes [ ] No
III. Infused through small cuts [ ] Yes [ ] No
IV. Fumigate [ ] Yes [ ] No
V. Others_____

24. As a traditional doctor, what challenges do you face?
I. Declining sources of medicine especially animals and plants. [ ] Yes [ ] No

II. Poor working relations with Modern doctors. [ ] Yes [ ] No
III. No policy on issues related to traditional knowledge systems. [ ] Yes [ ] No
IV. Failure of patients to pay their fees. [ ] Yes [ ] No
V. Traditional medical practices not being accepted by religious churches [ ] Yes [ ] No

25. For 22 above, (I), are you aware of the environmental degradation caused by harvesting medicinal plants.

I. Yes.
II. No.

26. If yes, what do you do to minimize the impact on the environment?

I. Replanting. [ ] Yes [ ] No
II. Defer harvesting until plants have grown and seeded again. [ ] Yes [ ] No
III. Work closely with Community Based Leaders (CBL) in proper land management. [ ] YeS [ ] No
IV. Others_____

27. Are you willing to share your knowledge with other people?

V. Yes, free of charge.
VI. Yes but at a cost.
VII. No

28. If yes, but with a cost. What is your charge?

I. Money
II. Livestock.
III. Others

29. If not, what are the reasons?

I. Avoid competition.
II. Retain the knowledge as a family treasure.
III. Others (Specify)_____

30. Other than human diseases, are there any skills that you have that you use to benefit the community?

I. Yes.
II. No

31. If yes, please indicate.

_____.

32. Do you think traditional medicine should be protected legally?

I. Yes.
II. No

33. If yes, what do you think should be done to enforce the policy on traditional medicine?

I. Training Community Based Leaders. [ ] Yes [ ] No
II. Training of Police on IKS. [ ] Yes [ ] No

III. Training of Policy Makers on IKS. [ ] Yes [ ] No
IV. Public awareness on IKS issues [ ] Yes [ ] No

34. Like modern medicine that is taught in schools, do you recommend traditional medicine in the school curriculum?

I. Yes.
II. No.

35. If yes at what level do you think it should be taught?

I. Primary.
II. Secondary.
III. High school.
IV. Tertiary.
V. All of the above

36. If taught at schools, must it be optional for only those who are interested?

[ ] Yes [ ] No

Appendix 2

Questionnaire For Traditional Medicine Beneficiaries

1. How many people are there in your household?

I. Children [ ]
II. Adults [ ]

2. Which of the following age categories do you belong to?

I. 15-25
II. 26-35
III. 36-45
IV. 46-55
V. 56-65
VI. 66+

3. Gender

I. Male
II. Female

4. Marital status

I. Married
II. Single
III. Single parent
IV. Divorced

5. What religion (denomination) do you belong to?

I. Roman Catholic Church.
II. Lesotho Evangelical Church.
III. Anglican Church of Lesotho
IV. Other;

6. Where do you reside?

I. Rural
II. Peri-urban
III. Urban

7. What educational level did you acquire?

VI. No schooling
VII. Primary education
VIII. Secondary education
IX. High school
X. Certificate or above

8. What is your occupation?

I. Unemployed
II. Self employed
III. Employed part time
IV. Employed full-time

9. How many times did you visit a traditional healer this year?

I. None
II. Once
III. Two to three times
IV. Four to six times
V. More than six times

10. Did other members of your family also visit a traditional healer this year?

I. Yes

II. No

11. Think back to 2004-2008. Have the number of times that you visited a traditional healer changed in the last few years?

I. I now go more often
II. I now go less often
III. I now go the same as before
IV. I no longer go

12. If you have changed your use, why?

_____

_____

13. Why do you visit a traditional healer? Indicate your level of agreement/ disagreement to the following reasons of why you might visit a traditional healer.

	Strongly Disagree	Disagree	Do not know	Strongly agree
1. I want traditional Medicine	[ ]	[ ]	[ ]	[ ]
2. I could not be cured at the clinics	[ ]	[ ]	[ ]	[ ]
3. There are no clinics close to where I live[ ]	[ ]	[ ]	[ ]	
4. Other medicines are too expensive	[ ]	[ ]	[ ]	[ ]
5. Other reasons	[ ]	[ ]	[ ]	[ ]

14. Which illness have you taken to the traditional healer this year?

I. Respiratory [ ]
II. Digestion [ ]
III. Mental [ ]
IV. STDs [ ]
V. Infertility [ ]
VI. Others [ ]

15. How long does it take you to reach the traditional doctor?

I. Less than an hour
I. 2-5 hours
II. A day
III. More than a day

16. How many times did you visit a medical doctor/clinic or doctor last year? (Not a traditional healer)

I. None
II. Once

III. Two to three times
IV. Four to six times
V. More than six times

17. How long does it take you to reach the doctor?
I. Less than an hour
II. 2-5 hours
III. A day
IV. More than a day

18. If you could get treated at a clinic, is it more expensive or cheaper than a traditional healer?
I. Cheaper
II. Same
III. More expensive

19. If you had the choice between going to a medical doctor/clinic and going to a traditional healer, what would you choose? (Your first choice, forgetting about the cost.)
I. Go to a traditional healer
II. Go to a modern clinic
III. It depends on what treatment I need
IV. Do not know

20. Do you think that you will use more or less traditional medicine in the future?
I. More
II. Less
III. The same
IV. Do not know

21. Would you prefer traditional medicines to be packaged in a more hygienic and modern way?
I. Yes
II. No
III. I do not know

22. Would you prefer traditional medicines to be certified by a healers association?
I. Yes
II. No
III. I do not know

23. Would you prefer to see the place where you buy medicines made more modern?
I. Yes
II. No
III. I do not know

Appendix 3

Key Informants Interviews

Director Parks: Mrs. Bokang Theko: Ministry of Tourism, Environment and Culture
The core mandate of her department is primarily to conserve Biological Diversity in Lesotho. She pointed out that the department holds community conservation forums, which work

closely with Assistant Environment Officers at district level. Their major purpose is to educate the community about the importance of the environment in their daily lives. Traditional healers are part of these forums as key players in the use of biodiversity resources. With the establishment of Local Government Authorities at local level, the officers have embarked on educating traditional healers, herds boys and the community at large about conservation of biodiversity and their response is highly encouraging. The legal protection of some medicinal plants from being harvested is a clear indication that the department is very serious on the protection of biodiversity, especially species likely to face extinction. There are plants such as Aloe polyphylla and Teedia lucida which are protected from being harvested by the Environment Act of 2009. Traditional healers are encouraged and assisted to develop Community Botanical gardens whereby they can plant species that are under heavy use and those protected by the law. Asked to explain on the measures taken to prevent smuggling of the indigenous medicinal plants out of the country; she pointed out that, at border posts, the immigration officers have been sensitized on plants which are protected by law and they cannot leave the country without permission from the ministry. Those who want them apply for permission from her ministry. Finally, she showed that by the year 2010 they celebrated International Year of Biodiversity and activities which took place during the celebration include planting of indigenous trees and educating communities about the importance of protecting the environment. They also have on-going districts' campaigns on conserving nature.

Mohau Mabote (Mr.) – President: Network of People Living With HIV and AIDS (LENEPWHA)

LENEPWHA was established in 2004 and formerly launched in 2005. The primary objective of this organization is to protect the rights of people living with HIV and AIDS.

Asked to explain on the role played by traditional healers in their lives; the president outlined that they do not have any relationship with them. He indicated that their people are not encouraged to attend to them for purposes of treatment. The reason for this is only that medicines prescribed by traditional healers are not scientifically proven. Again there is no monitoring and evaluation as is the case with people on ARVs. On the question of having any forums to share ideas about HIV and AIDS with them, he showed that in his current leadership there has never been such a forum. He showed that very few traditional healers (only 10%) believe on the existence of HIV and AIDS. Asked whether they are exploring ways of finding cure on the pandemic together with the traditional healers, he indicated that they only meet on prevention and support (through support groups at village levels), not on treatment of patients. Strongly, he indicated that there are no joint efforts on finding the cure together. Commending the approach by ATPS, he indicated that he now sees a need to have ongoing joint forums with the traditional healers in Lesotho.

Mr. Malefetsane Liau - President: Traditional Healers' Association of Lesotho

The Association dates as far back as 1960s, and its mandate is to protect the indigenous knowledge of the Basotho as a nation and the existence of traditional healers. It was emphasized during the discussion that Medical Association of Lesotho does not recognize their presence in the field of medicine. Therefore, they do not have any forums to share common knowledge on diseases affecting the nation and yet they are placed directly at the center of the community. Asked whether they are provided with any capacity building

workshops by professional medical practitioners; he said they are not equipped with such workshops. When showing their role during the period of HIV and AIDS, he showed that the disease has presented a serious challenge to them as they regard themselves as people who are supposed to protect and cure people from diseases. These challenges include lack of cooperation from medical practitioners, denial of access to treat their patients when in hospital and declining believe in the value of traditional healers by some members of the community.

Senator T. Khomari, Chairperson on HIV and AIDS Senate Committee

The Chairperson indicated that although their mandate is Constitutional as the Upper House of the Parliament, they find themselves obliged to engage in the fight of the pandemic because as a nation they are directly involved and it is Government Policy to engage in the fight against the pandemic. He showed that the committee is strategic due to its composition. It is largely made up of twenty-two Principal Chiefs from Lesotho. This means that chiefs have direct control and impact to their subjects at village level.

One of the major ongoing activities carried out by the committee is to support the chiefs to mobilize their people to take part in the government initiative on KNOW YOUR STATUS (KYS) Campaign which encourages people from all walks of life to know their HIV status and be able to take the right measure in the fight of the pandemic. More often, the chiefs encourage the youth to take part in campaigns aimed at reducing the rate of infection in Lesotho.

On the protection of medicinal plants in Lesotho, he pointed out that as the upper house of parliament, they are aware of The Environment Act of 2009, and the special species to be protected and fines to be paid by the offenders. However, he admitted that vigorous campaigns are needed to enforce this act from the village level. About the cooperation with traditional healers, he showed that his committee respects the knowledge possessed by the traditional healers and believes that if they could have joint efforts with the professional doctors by empowering traditional healers with accurate information on HIV and AIDS; this could be of great help to the nation as they are often the first people consulted whenever people are ill. He also added that in most cases, people prefer to see traditional healers particularly diviners when confronted with a pandemic when they are still in denial.

Mr. Khalema: Consumer Association of Lesotho

The core mandate of the Association is to protect the rights of the consumers in Lesotho. They represent them in various forums to ensure that decisions taken do not compromise their rights.

Asked whether they are also involved in protecting human health against misuse of drugs, especially traditional medicines; he showed that they do not have a direct involvement with both the traditional healers or those who sell them along the streets, but in forums where they are involved concerning health matters such as Protecting hawkers on HIV and AIDS matters, they do voice their concern about the display of traditional medicine directly exposed to sunlight and laid on dusty, dirty places. Furthermore, they also advice those in authority in terms of health to be aware that some of the people involved in the act of selling these medicines might completely lack the technical-know-how of the herbs

and poison the civilians.

Regarding the way these drugs are bottled, they pointed out that they do not believe that these people are able to mix the right ingredients as some are not licensed traditional healers. There is a high possibility of over-dosing which might be a source to some unexplained deaths. As the consumer association, they recommend that people selling these herbs should be in one hygienic place, and should have licenses allowing them to sell the indigenous herbs. On the impact of this exercise on the environment, he said that this put our indigenous medicinal plants and animals in danger hence appropriate measures have to be taken concurrently.

The African Technology Policy Studies Network (ATPS) is a multi-disciplinary network of researchers, private sector actors and policy makers promoting the generation, dissemination, use and mastery of science, technology and innovation (ST&I) for African development, environmental sustainability and global inclusion. ATPS intends to achieve its mandate through research, capacity building and training, science communication/dissemination and sensitization, participatory multi-stakeholder dialogue, knowledge brokerage, and policy advocacy.

African Technology Policy Studies Network
Contact the Executive Director at
The Chancery, 3rd Floor, Valley Rd.
P O Box 10081, 00100-Nairobi, Kenya
Tel: (254 020) 2714092, 2714168, 2714498, 2723800
Fax: (254 020) 2714028

http://www.atpsnet.org

Science, Technology and Innovation for African Development

ISBN: 978-9966-030-52-8