

Knowledge and Power: Law, Politics and Socio-cultural Perspectives on the Protection of Traditional Medical Knowledge Systems in Zimbabwe

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INTRODUCTION

This article aims to explore the protection of traditional medical knowledge systems (TMK) through a combination of legal, political and socio-historical perspectives. A key theme of this article revolves around the idea that the search for strategies and tools for protecting TMK should be informed by a clear understanding of the reasons for its marginal status. The following questions are crucial in this pursuit: Why has TMK remained unprotected by the formal legal system? What are the actual needs and expectations of the traditional communities that are the custodians of this knowledge? Most legal analysis begin from the premise that TMK should be protected and proceed to search for solutions without first exploring the actual situation of TMK systems in the communities in light of changes that have taken place over time. The result is that there is a proliferation of themes that privilege cultural and religious aspects of TMK while underplaying the economic aspects which were always key within the traditional set up and have become even more significant in the modern environment in which traditional communities live. This article uses field research carried out in Zimbabwe between June 2001 and June 2003 to explore these questions and inform the discourse on the approaches to protection of TMK. While the focus on Zimbabwe reflects the field-based research, it is submitted that the arguments presented in this article may apply with equal force in respect of other jurisdictions, particularly those sharing similar characteristics in Sub-Saharan Africa.

CENTRALITY OF KNOWLEDGE IN THE GLOBAL ECONOMIC SYSTEM

It is useful to place the issues under discussion within the contemporary international context. The protection of knowledge has become a major point of interest in recent years. This is partly because of the increasing importance of knowledge in the economic affairs of nation-states across the world. The centrality of knowledge in today's global economic system has given rise to what has been termed the "knowledge economy" in which the weight of global economic activity is shifting towards knowledge-oriented products and services (Ryan 1998). This is enhanced by the growth of global technologies, which make it easier to store, retrieve, process and disseminate information and related products. As Drahos has put it "Information is becoming "the prime resource" in modern economic life" (2000: 245).

The prime position of knowledge has made it a centre of various economic, social and political claims and conflicts between different stakeholders at the local, national and international levels. The pursuit of knowledge and related products has increased competition in research and development activities of key players in the research and

corporate community and brought close attention to different kinds of knowledge in various parts of the world. The interest in TMK systems by major pharmaceutical companies and research institutions is part of the manifestation of this growing attention to different types of knowledge and resources.

TRADITIONAL KNOWLEDGE SYSTEMS

Traditional medical knowledge systems are part of the broader traditional knowledge systems (TK) that embody the experiences, developments, heritage and lifestyles of the traditional communities normally living in their traditional communities. It has been noted that such traditional knowledge illustrate(s) how the traditional people learned to cope and survive within their environment (Veitayaki 2002: 401). Scholars have emphasized that while terms like "traditional" might suggest that such knowledge is old and static, the reality is that these are dynamic forms of knowledge that are constantly changing in accordance with need and development over time (Blakeney 1999, Chavunduka 1985). The TMK systems grew out of the need to cope with disease and misfortune in the traditional people's daily lives. They are not static but continually develop as new challenges arise. Traditional communities refer to people that are the original inhabitants of a given geographical space and whose attachment to that land pre-date the other communities that later occupied their territories markedly during the period of imperial conquest and the onset of colonialism¹. They have a unique and traditional way of life and can easily identify themselves with the territory. Traditional communities developed unique systems of medicine which uses holistic methods that encapsulate the application of both the physical and spiritual elements. Traditional communities rely on the plants and animals within the environment for the supply of medicine, food and other uses. Through generations such knowledge has been passed on and developed so that the communities or some members of the communities possess a vast quantity of expertise on the uses of plant and animal matter for curing disease and other spiritual problems.

In recent years, the scientific research and commercial pharmaceutical community has become more interested in these forms of traditional medicine. The knowledge of plant and other biological materials with key medicinal properties has become a primary point of research in the search for commercial drugs to deal with various ailments (Kongolo 2000). This primary knowledge, developed and passed on through the years in the communities is being used to identify the biological material and medicinal uses for purposes of developing laboratory and clinical research. The allocation of rights arising from the products of that process has not been properly regulated with the result that the

¹ The definition of traditional communities has been debated in many forums by researchers, activists and policy-makers. Also known as Indigenous communities, there is no single specific meaning although various international instruments such as the Draft Declaration of the Rights of Indigenous Peoples and the ILO Convention the UN Convention on Biological Diversity confirm the general acceptance of the existence of communities that fall within that bracket. It seems safe to accept that an international norm recognising the existence of and the rights of traditional or indigenous peoples is now firmly established. The Special-Rapporteur of the

powerful commercial and research community has seemingly been reaping the benefits while the traditional communities have been left empty-handed. Therefore, problems have arisen in the search for new drugs, with battle-lines drawn between the research and commercial entities on the one hand and the traditional communities holding the key knowledge and resources on the other hand.

A recent example in Southern Africa is the case involving the San traditional communities. The story is that for generations the San people have been using the *Hoodia Gordonii* plant, which has ingredients that among other things help to reduce appetite. So on their hunting expeditions or in times of hardship, they could consume this plant and stave off hunger and other benefits. Exploiting this primary knowledge, the Centre for Scientific and Industrial Research (CSIR) in South Africa conducted clinical research on this plant. In collaboration with Phytopharm, a UK pharmaceutical company, they produced a medicinal drug that can be used to deal with obesity problems. Pfizer now holds the rights to the medicinal drug, which currently is undergoing clinical trials but it is understood that given the market for the obesity drugs, the potential rewards from the success of the drug will be immense. The undeniable fact is that this potentially lucrative drug was developed using the primary knowledge of the San people. However, at the initial stages, the San were neither acknowledged nor rewarded for their contribution. Indeed at some point during the dispute it was alleged by Phytopharm that the communities responsible for the primary knowledge could not be identified as they no longer existed. After a protracted battle a deal was eventually agreed whereby the San communities are now entitled to some benefits from the commercial rewards of the drug.

Another example is the Zimbabwean case involving the Snake-Bean (Mutukutu) plant. The plant has long been used by traditional communities in Zimbabwe to treat fungal infections while the pods are used to kill snails. In 1995 an agreement was entered between the University of Zimbabwe (UZ) and the University of Lausanne of Switzerland in terms of which the Department of Pharmacy at the UZ would screen species of flora that is used in traditional medicine in Zimbabwe. The selection and collection of plant material was to be done by the National Herbarium and National Botanical Gardens' taxonomists in Harare while the Department of Pharmacy at the UZ was tasked with the preliminary extraction of essential compounds. Lausanne would supply financial resources and other materials and also perform further research tasks.

Under the agreement, the Swiss would gain access to more than 5000 species of medicinal plants used in Zimbabwe. The agreement cited Lausanne and the UZ as the two beneficial parties and it also provided for the *"joint application of any patent filed"* and the proceeds would specifically benefit the same parties. Any modifications to the agreement were to be on mutually agreed terms. However, without the knowledge of the UZ, a patent application was filed in respect of a drug to treat fungal infections. After it was granted, Lausanne negotiated licencing arrangements with a US pharmaceutical company, Phytera.

When this anomaly was discovered a protracted battle ensued and at the time of the research negotiations were taking place to resolve the dispute. The state intervened to safeguard its rights under the CBD which had not been recognised while the traditional

practitioners have also been involved to protect their rights since they supplied the primary knowledge to the UZ. At the time Zimbabwe did not have legislation as required by the CBD. Interestingly, Lausanne used the all too familiar argument that the traditional knowledge was not documented, as if to suggest that what is not put in writing does not exist. The Head of research at Lausanne, Mr Martson is quoted as having said, **“I don’t want to pretend nobody has used it in any antifungal activity in traditional medicine, but we don’t have any documented evidence”**¹ of the uses.

These two cases demonstrate the key problems in connection with the protection of traditional knowledge systems. This article identifies the following characteristics at the centre of the problems regarding the protection of TMK:

- The exclusion of traditional communities that are the developers and custodians of traditional knowledge
- The rejection of traditional knowledge as a valid and legitimate form of knowledge
- The state’s incapacity or lack of political will to protect traditional knowledge and communities’ interests
- Power imbalances among the key players

The prime question occupying legal scholars has been how to protect the traditional knowledge of communities faced with such problems as described above. How can traditional communities’ rights to their knowledge be protected in the face of this onslaught by the commercial research community?

As indicated in the introduction, this article argues that the proper approach in devising appropriate solutions for the problems of TMK, is to identify why and how traditional knowledge systems have not been given legal protection as accorded to other forms of knowledge such as the dominant western knowledge systems (WKS) that are largely subject to protection by the medium of intellectual property rights (IPRs). It is argued in this article that the lack of legal protection of TMK arises from the marginalization of such forms of knowledge in political, socio-cultural and economic terms when compared to the treatment of the dominant WKS. The protection of TMK is not simply a legal matter but is a key social, cultural, political and economic issue centred around dynamics of power relations between key stakeholders. Legal literature has tended to focus too much on the technical reform of the legal structures such as laws, rules and institutions without taking sufficient account of these social, economic and political factors that are of major significance. The reform of existing IP laws or new laws such as the much vaunted *Sui Generis* systems are unlikely to achieve much unless closer attention is given to the context within which TKS remain marginalized.

THE STRUGGLE THESIS

The "Struggle Thesis" is advanced to offer a framework for exploring and understanding two of the key questions pursued in this article, i.e. Why and How were TMK systems marginalised and therefore not formally protected. It is at the same time a set of propositions and a practical demonstration of the historical and practical of TMK systems vis-à-vis the western forms of knowledge in traditional territories over the years.

This framework also creates the context for the justification of the legitimacy of the claims for the protection of the TMK. The Struggle Thesis rests on the foundation that knowledge has a central place in economic, social and cultural life and as such it is a site of contests and resistance. In an agrarian society where land is the central asset, the socio-economic relations are determined by the patterns of distribution of and title to land. Likewise where knowledge or information is the central element relations will be determined by distribution of, access and title to knowledge. In a knowledge economy, knowledge is a site of struggles as people seek to assert claims and gain rights for their contributions to knowledge.

The Struggle Thesis can be divided into two distinct but related parts:

- Struggles Between Systems of Knowledge and
- Struggles Between Mechanisms of Knowledge Protection and Systems of Knowledge².

The Struggle Thesis is based on the assumption that an encounter between two or more different entities is likely to generate struggles for the greatest portion of the available space. The competition for positional superiority leads to domination and subordination of one system over the other. Consequently the struggle for space creates the phenomenon of the "Dominant" and the "Other" in terms of the relationship between the entities. On the part of the subordinated entity this struggle moulds itself into a movement to reclaim entitlements and space against the dominant entity while the dominant reinforces its position even by extracting and incorporating elements of the subordinated systems. The second aspect is that there is a link between the position of a knowledge system and the availability or otherwise of mechanisms for its protection. The dominant knowledge system is likely to receive more attention and protection compared to the subordinated knowledge system. Thus protection mechanisms are designed for the dominant system that assumes positional superiority while the subordinated system receives no protection. However, problems arise when the dominant system pirates and extracts elements from

² These struggles are manifestations of the physical encounter between holders of the different knowledge systems.

the subordinated system in order to enhance its position while dismissing the subordinated systems as invalid and illegitimate³.

In this assessment, from an historical perspective the study identifies at least two systems of knowledge competing for space within traditional communities. First, there is the TMK of the traditional communities, which they have held and relied on for thousands of years. Secondly, there is the WKS, which were introduced upon the occupation of the traditional territories more prominently at the advent of imperialism. The existence of two forms of knowledge developed and understood in two different traditions caused the competition for space within the territories. While the TMK of the traditional people fought to retain its place, the new WKS introduced by the settler communities also fought to gain dominance and influence change. Thus there was competition for positional superiority. The essence of the struggle is that for a number of reasons the WKS gained positional superiority over the TMK. Crucially TMK were marginalised not because they were inferior or invalid but because the WKS were supported by more powerful forces and were assisted by the advance of Colonial state and the Christian mission. It was as much cultural and ideological battle as it was a physical fight for power and domination between the colonised and settlers. Significantly, the TMK systems have continued to resist and a struggle between the two systems has been taking place since the encounter. The research from within the WKS into the TKS is a manifestation of the WKS' parasitic behaviour towards other knowledge systems, which it nonetheless continues to dismiss as invalid, archaic and illegitimate. As a process, research represents images of the subordinated systems through the lens of the dominant systems. Research also leads to the phenomenon that the things that may be unknown within the dominant but are known in the subordinated systems are labelled "discoveries". As Tuhiwai-Smith points out in respect of the traditional communities in New Zealand,

"European conceptions of knowledge and of research have meant that while being considered "primitive", Maori society has provided fertile ground for research" (1999: 70) (added emphasis).

More importantly, it is at this point that problems arise since the dominant claims as its own the "discoveries" despite the fact that they are already part of the other systems. Proponents of each system lay conflicting claims to the rights to those "discoveries". The current struggle over the benefits arising from research into TMK systems is thus a modern day manifestation of the Struggle Thesis – a demonstration of the continuing fight between two forms of knowledge which has now been taken from the local to the global stage.

³ The irony is that while dismissing the subordinated system as invalid and unworthy of protection, the dominant system still engages in this process of extraction from that subordinated system.

The result of this historical process is that due to its dominant position WKS provides the standard for measuring the validity of what is claimed to be knowledge. An interesting example in this context is in the case of advocates for the introduction of databases to record, store and protect TMK. Invariably in most of those schemes the measure for whether knowledge should be recorded and stored is whether it meets the accepted standards of scientific measurement. In a way, it simply perpetuates the image of science as the arbiter of what counts as knowledge, which is a tacit rejection of TMK as valid forms of knowledge in their own right. Do they really need to measure up to scientific criteria to be accepted as knowledge worthy of protection? Therein lies the problem of perpetuating images that represent the marginal and subordinate status of TMK. For as long as the inclusion of TMK in databases is done according to standards set by and in response to the needs of western science, the positional superiority of WKS will remain. Consequently, it will remain difficult to convincingly persuade policy-makers and key other stakeholders in general to recognise the validity and legitimacy of TMK as an independent body of knowledge.

The second part of the Struggle Thesis focuses on the struggle between knowledge systems and knowledge protection mechanisms. At the primary level, this initially involves the encounter between the mechanisms designed for the protection of different knowledge systems. It rests on the idea that each knowledge system has a mechanism that is devised for its protection and preservation (Laurie 1997). This protection recognises the rights of individuals or groups to gains arising from the knowledge systems. Its holders value their knowledge system and they design systems for its distribution, acquisition, use and dissemination within and beyond the community. Indeed,

“All societies have had to devise norms for regulating the ownership and use of different kinds of information ... One can thus identify customary equivalents [in indigenous communities] of intellectual property.” (Drahos 2000: 248).

The main proposition is that the dominant knowledge system is more likely to be accompanied by a mechanism that is designed and employed to protect it. The protection mechanism becomes part of the institutional structures created to augment its power and position in relation to other forms of knowledge.

The struggle between protection mechanisms will, as at the first level produce a situation where the mechanism of the dominant knowledge system dominates and sidelines the mechanisms devised for the subordinated knowledge system. The result is that the dominant protection mechanism will be imposed on the subordinated knowledge systems regardless of the possibility of incompatibility between them. In essence, the mechanism for the dominant knowledge system becomes the dominant legal norm by marginalizing the norms that exist in indigenous territories. Like the WKS, the dominant western legal norms establish “positional superiority” over the local norms. The crucial question that arises is whether the dominant legal norm is able to properly cater for the requirements of the subordinated local knowledge system. If, as expected, it cannot cater for its needs,

it exposes the subordinated knowledge system to all forms of piracy and extraction which prejudices its holders.

In the context of this paper the system of IPRs is identified as the protection mechanism devised principally to meet the needs of the dominant WKS. However, where IP law was devised for the protection of WKS, the traditional communities also developed their own mechanisms for the protection of their own knowledge systems². Each protection mechanism takes into account the unique characteristics of each knowledge system and responds to the needs of the community within which such knowledge is developed and held. There are various considerations that influence the nature of each protection mechanism. The rationale for protection of knowledge may also differ from one community to another. These can range from social, economic, cultural and political factors and their influence varies from one community to another. Nonetheless due to the force of imposition, like the WKS, the dominant western legal norms (IPRs) established "positional superiority" over the traditional norms existing in indigenous communities.

As noted in the preceding paragraph, the crucial point is that when a protection mechanism devised for one system of knowledge is applied to another system there is bound to be a conflict arising from the probable incongruity³. This framework can be applied to assess and understand the relationship between IP law and TMK systems. IP law embodies distinctly Western liberal conceptions of personhood, private property and the ideology of "possessive individualism" (McPherson 1988). It is bound to conflict with a different cultural context in which collectivism and individual duties within society are privileged compared to private individual rights against society. The idea of legal globalisation and struggles against it highlight the struggles for power between the various actors on the global stage. The local systems resist the perpetuation of the myth of the superiority of the laws that are subject to globalisation.

Therefore, in this context there is vast potential for a clash between the dominant legal norm (IPRs) and the subordinated TMK system. As Coombe demonstrates, the legal tools that embody Western cultural ideals cannot be easily exported or imposed on a different context without causing harm (Coombe 1998). The ultimate consequence of this clash and potential incompatibility is the creation of a vacuum in the formal protective mechanisms as far as the subordinated knowledge system is concerned. In the circumstances the subordinated knowledge system finds itself vulnerable, as there will be no formally recognised protection mechanism to meet its requirements. The objective of the struggle therefore is to seek an appropriate mechanism to suit the needs of the vulnerable knowledge system. This therefore can be used to explain the vulnerable position of TMK systems. They have no legal protection because there was never a formal mechanism that was put in place simply because as noted at the first level TMK is not considered to be valid knowledge worthy of any protection.

In summary, the essential elements of this framework of analysis are as follows:

- The clash of knowledge systems produces a “Dominant – Subordinate” relationship whereby the WKS dominate and sideline the TMK systems. Consequently, the WKS attain “positional superiority” over the TMK.
- The WKS as the dominant knowledge system brings along the protection mechanism designed for its conditions (IPRs) and this mechanism becomes the dominant legal norm by also marginalising the local norms in traditional communities. The positional superiority of the WKS translates into a positional superiority of the legal norms designed for its protection, in this case IPRs;
- The result is that the subordinated TMK systems are left exposed and vulnerable to exploitation because there is a vacuum in the formal protection system;
- Knowledge remains a site of struggles and the holders of subordinated knowledge systems continue to assert claims for the legitimacy of their knowledge and for rights relating to use, distribution and acquisition of knowledge. In short they seek to fill the vacuum created by the imposition of a legal mechanism that fails to protect indigenous knowledge. These battles intensify when the dominant knowledge system tries to extract from the TMK at the expense of its custodians.
- The state plays a key role determining the position of individual knowledge systems by the way it treats them. This is also complimented by the role played by other non-state institutions in advancing the cause of individual knowledge systems.

THE TRADITIONAL MEDICAL KNOWLEDGE SYSTEMS IN ZIMBABWE: EXPLORING THE MARGINALISATION AND LACK OF LEGAL PROTECTION

It is useful to explore a demonstration of the Struggle Thesis within the context of Zimbabwe. Using the framework laid out above, it is possible to identify the process by which traditional systems were marginalized in Zimbabwe. It helps to show why and how TMK was marginalised and consequently it is useful in demonstrating what it will take to actually achieve viable and useful protection. At least three phases can be identified to analyse the treatment of traditional knowledge systems in Zimbabwe: Pre-Colonial, Colonial and Post-Colonial.

PRE-COLONIAL PERIOD (Before 1890)

In the pre-colonial period holders and practitioners of traditional medicine enjoyed high prestige within the community⁴. They were accorded high positions within the local structures because they were responsible for the health of the nation. Consequently TMK was highly valued as a resource within the communities. The practitioners of TMK performed many functions in the traditional state system (Chavunduka 1985).

Apart from being medical specialists who treated disease and illness among the people, they also acted as counsellors and political advisors to the traditional authorities. They helped the military during times of war and they also assisted hunters when they went on

their expeditions. They led rainmaking ceremonies and were responsible for helping farmers as they were believed to have powers and knowledge of medicines/charms to increase yields and prevent pests and diseases. The traditional midwives played a key role in the primary health care system. As the link between the spiritual and living worlds, they were also religious and cultural leaders and were therefore highly revered. The traditional knowledge systems played a crucial role in sustaining the power and authority of the traditional state and political system.

It was also only system of medicine known to the traditional people. Consequently, there was heavy reliance on that system and structures were created to protect it. The community played a crucial role in the preservation of knowledge by adhering to the systems meant to preserve biological diversity. At that time people also fully believed in the traditional African religion and that ensured that cultural values were upheld⁵. The protective mechanisms for TMK were based on the traditions and customs in traditional society. That ensured that the people who believed in it and adhered to its callings were able to uphold the protection systems.

COLONIAL PERIOD (1890 -1980)

It was during this period that the bulk of the WKS were introduced into traditional communities by the settler communities. It was also at this stage when the competition between traditional and new forms of western knowledge intensified. Colonial governments and early Christian missionaries despised TKS, which they saw as stumbling blocks to the penetration of Christianity and colonial influence⁶. As indicated in the last section, the TKS was an important part of the power structures in traditional communities. It enhanced the authority of the leadership and the belief system strengthened the bond between the people and the traditional authorities. Colonial authorities saw it as a key part of the traditional system that needed to be dismantled to establish firm authority. The denigration of traditional medicine was part of the strategy to undermine the traditional systems and authority. At the same time colonial medicine was introduced in the communities. Western medicine played a crucial role in the settlement of the new communities.

The colonial state sought to use medicine as a tool to convince the traditional communities of the superiority of western civilisation and the traditional medical system was portrayed as a backward system that had to be abandoned⁷. While the local communities accepted western medicine, they did not abandon their systems of medicine. The efforts to marginalise indigenous medicine succeeded at the official level but on the ground the people continued to rely on it⁸. There were several reasons for the state's policy of marginalising IMK systems. It was largely due to ignorance of the validity of the traditional systems. These systems were associated with witchcraft and sorcery and considered to be archaic and useless. In addition, the desire to establish political roots and dismantle local systems ensured that the traditional belief systems had to be dismissed and marginalized.

A number of measures were applied to marginalize TMK in favour of the WKS.

- **CHRISTIANITY AND WESTERN EDUCATION**

The provision of Christian education was seen as a strong way of changing mentalities and beliefs among the Indigenous Peoples. In 1938 a priest called Father Shropshire commented that,

“Not until a truly Christian and scientific education has corrected the balance of the present native psychological complex and enabled the Africans to meet their phobias with critical mind ... will they throw away the beliefs in magic and sorcery” (quoted in Chavunduka 1994: 7).

The traditional beliefs are closely connected to the IMK systems. The strategy was to dismiss and marginalise the traditional world-view. The success of this strategy, would lead to the demise of the TMK system. The traditional people were advised to abandon the tradition of worshipping the ancestors and to avoid consulting the TMPs as the practice was ungodly⁹. In many ways, the church largely continues to preach against the traditional belief systems, which are a crucial part of the IMK system.

While the use of Christianity did not entirely eradicate the local traditional beliefs many traditional people were converted during the colonial period. In attempts to cope with Christianity without entirely abandoning their traditional systems some people formed their own churches. Thus in Zimbabwe today there are many churches that grew within this context. In addition many of the people who converted to Christianity did not entirely abandon their traditional beliefs but continued to consult TMPs in times of need.

In addition to the TMPs there is now a proliferation of healers who call themselves “Faith Healers”. According to premier body representing TMPs, the Zimbabwe National Traditional Heales Association (ZINATHA), most of the people who claim to be Faith Healers are actually TMPs from the traditional system now practising under the guise of Christianity. To that extent, Faith Healers are considered as a genre of TMPs. All in all despite attempts to break down the TMK system through Christianity, the systems have survived and continue to be used by people from all religions.

The colonial education system was weighed heavily against traditional education systems. The system excluded the traditional ways of learning and much of the content was foreign to the traditional communities. The elders lament that education succeeded in large measure to convert the local people and turn them against their traditional systems.

- **CULTURAL VIOLENCE AND LINGUISTIC IMPERIALISM**

This domination extends deep into the realm of linguistic imperialism. Languages serve

"as dynamic bridges between the past and the future and as vehicles for the continued and continuously innovative, transmission of a community's knowledge, beliefs, values and practices" (Maffi 2002: 386).

There is a strong connection between linguistic diversity, biological diversity and traditional knowledge. It is argued that

"linguistic ecologies and biological ecologies are mutually related through human knowledge, use and management of the environment and through the languages used to convey this knowledge and practices" (ibid. at 388).

Language is the main repository for traditional knowledge systems, which have traditionally been stored and transmitted by oral means. When a language loses space and becomes restricted in use it gradually faces the danger of losing its capacity to move on from one generation to another. This ultimately affects the transmission of knowledge that is stored and communicated through that language.

People were forced to learn foreign languages and to use the foreign languages in their studies and communication. The English Language became a dominant language and the indigenous languages were only limited to domestic use. As the eminent African writer, Ngugi points out the marginalisation of traditional languages,

"... makes them see their past as one wasteland of non-achievement and it makes them want to distance themselves from the wasteland. It makes them want to identify with that which is furthest removed from themselves; for instance with other people's languages rather than their own" (Ngugi 1986: 5).

This is clearly demonstrated in the current context by the following comment by one scholar who lamented about,

"Third-world western trained doctors who show total disregard and disdain for the importance that herbal medicine plays in the world's health system ... Some of these same doctors seem unaware that the major pharmaceutical houses are constantly searching for new active compounds from the medicinal plants of developing countries" (Ayensu 1983: 125)¹⁰.

Ngugi also vividly illustrates the violence characterising the clash between the traditional and Western knowledge systems when he states that,

"one of the most humiliating experiences was to be caught speaking *Gikuyu* [local language] in the vicinity of the school. The culprit was given corporal punishment – three to five strokes of the cane on bare buttocks..." (1986: 6).

This is not an uncommon scenario in many parts of Africa, even in the post-independence period. Traditional languages are considered as useless for economic purposes, and opponents argue that the main languages such as English ought to be promoted at the expense of the traditional languages because it is important for business purposes. Similarly, in Canada at the schools where aboriginal children were forced to attend, "native languages were prohibited, and many people have memories of severe beatings and punishments for "speaking Indian" (Coombe 1998: 235). It was a wider agenda aimed at marginalizing the indigenous way of life, including their knowledge systems. These statements add strength to the view that the local knowledge systems were displaced through violence and that the new systems were established through domination and conquest.

- **USE OF THE LAW**

The colonial state also used law as a way of subjugating the traditional people generally and controlling their way of life. Law was applied as an instrument of suppression and creating a particular socio-economic order that suited the political interests of the colonising force. The colonial government suppressed and outlawed their spiritual practices in order to disrupt their integration (Coombe 1998). In that sense, the law was part of the instruments applied to suppress the growth and use of TMK systems. Outlawed knowledge and practices could therefore not be protected. In the area of TMK and beliefs the state passed the Witchcraft Suppression Act in 1898¹¹. That Act is still in force and has continued to be a point of contest between the state and TMPs. TMPs believe that the Act was designed to suppress the work of TMPs. The Act imposes criminal sanctions for conduct that is part of their practice. It does not clarify the difference between witchcraft and genuine traditional medicine. For example it prohibits the naming of persons as witches. Since the work of TMPs necessarily involves dealing with witches and exorcising evil, the ban was tantamount to banning the practice of indigenous medicine in general. The Act represents an attempt by the colonial state to use the law as means of controlling people's belief and knowledge systems.

In addition, the Medical Council of western medicine in colonial Zimbabwe did not recognise TMPs as medical practitioners because the system of medicine they practised was not recognised as a knowledge system. The state did not create space for the recognition of traditional medical practice and attempts to find that space were thwarted. This was despite the fact that indigenous medicine continued to play an important role in helping the health needs of indigenous communities. The indirect discrimination of indigenous medicine extended to the workplace. While labour laws could be used to excuse an employee to take leave to consult a conventional medical doctor the same leave could not be extended if he wanted to consult an IMP. While the western medical doctor's note was acceptable that of the IMP was rejected as evidence of having visited a doctor. These measures had the effect of casting a bad reflection on the local medical system and also the local knowledge system that sustained it. They also ensured that the local systems remained outside the margins of the legal and acceptable from an official perspective.

- **NEGATIVE IMAGES**

The use of bad publicity and disparaging terminology is one way in which IMK systems have been placed in bad light. IMK was also silenced by making negative and exaggerated accounts of the indigenous medical system and cultural life. The informal travellers' tales about Indigenous Peoples found their way to the Western world and gradually assumed authoritative status about many aspects of their way of life (Tuhiwai-Smith 1999). Western science created the impression that IMK was all about witchcraft and superstitions ignoring the fact that IMK included empirical medical knowledge (Chavunduka, 1994). The terms used to describe TMPs were disparaging and enhanced the negative impressions of the tales. Such terms included Witch-doctor, Sorcerer, Magician, Diviner, etc. (Smith 1999; Chavunduka 1994).

As indicated earlier the western system also claimed the title "scientific" and consigned the "unscientific" tag to the indigenous systems that did not fit into its scheme or world-view. The indigenous systems and way of life were described as archaic, barbaric and primitive. These terms were not merely descriptive of the nature of the subject matter but were assertions of power and superiority of those making the descriptions. The structures that form and legitimise a system of knowledge while simultaneously subordinating the alternative ways of knowing demonstrate the link between knowledge and power (Shiva 1993).

The dominant knowledge system created an exclusive monopoly and refused to take other systems into account. Ultimately, as Shiva aptly puts it,

"Dominant scientific knowledge breeds a monoculture of the mind by making space for local alternatives disappear ... very much like monocultures of introduced plant varieties lead to the disappearance and destruction of local diversity" (Shiva 1993: 83).

Throughout the historical encounters spaces for traditional systems and knowledge were restricted and their claims for protection were dismissed.

The empirical nature of their medical knowledge was ignored and their system was defined as being merely superstitious. This language changed ways in which some of the people in the indigenous communities viewed their knowledge systems as it was considered inferior and primitive.

In conclusion, as Coombe puts it, in the case of traditional communities in North America the central point of the fight against traditional knowledge and culture of the Natives was to extinguish cultural identity and autonomy. It was **"denied, suppressed, and/classified, named, and designated by others"** (1998: 233). She also quotes Sir John A. Macdonald who in 1887 stated that,

"The great aim of our civilisation has been to do away with the tribal system and assimilate the Indian people in all respects" (ibid.).

The colonial phase was the saw the dismissal of TMK systems in traditional territories and the domination of the WKS. It entrenched the preferential treatment of WKS and the failure to establish protection mechanisms for TMK systems, which were not recognised as valid and legitimate knowledge systems.

c.) POST-COLONIAL PHASE (1980 - PRESENT)

This phase has been dominated largely by forces of continuity from the colonial phase and limited change. The return to independence revived ideas about return to the traditional systems but changes over the 90 year colonial period could not be ignored. Recognising the crucial inspirational role of traditional leaders and practitioners during the war of liberation, the Zimbabwean government made some initial favourable overtures to the traditional practitioners.

The first step was to recognise the existence and valuable contribution of TMPs in the health system. In 1980, the new Minister of Health Dr Herbert Ushewokunze himself a Western trained medical doctor initiated the formation of a unified body of TMPs. On the 13th July 1980 the Zimbabwe National Traditional Healers Association (ZINATHA) was formed with the support of the state. There was considerable debate and interest on the new organisation that brought together the various divided organisations that purported to represent TMPs before independence. The formation of ZINATHA was significant because the unified body was a triumph of unity over divisions that existed among the TMPs during the colonial period. Its first leader was Gordon Chavunduka who was a professor at the University of Zimbabwe and had periodically carried out extensive research in the field of TMK and the work of TMPs since the late sixties.

The new government also saw it as a useful system that assisted in providing primary health care¹². The Traditional Midwives' status was raised given the important role they played in community health. The most significant official recognition came in 1981 when the government enacted the **Traditional Medical Practitioners Act** (No. 38/1981). It assisted the development of traditional medicine in Zimbabwe by recognising the ZINATHA as the legal association of traditional healers in the country. It also established the Traditional Medical Practitioners Council, which is empowered to oversee the registration and practice of indigenous medicine in Zimbabwe¹³. In this way, law was now being used as an instrument of empowering the local systems.

The state and TMPs initiated collaborative efforts towards research into indigenous medicine in 1985 when they held the first national collaborative workshop. This workshop brought together practitioners from the traditional and modern medical knowledge systems and signaled the flowering of a relationship that was meant to bear fruits. However, these efforts were temporary as they failed to bring in desired results. The lack of political will and commitment on the part of the state is largely to blame for the failure of these programmes that seemed to have much promise at the beginning.

While initially the TMPs were pleased that for the first time they were being taken seriously at the official level and were keen to be involved and show their worth and

value of their medical system. Their struggle has always been to demonstrate the value and legitimacy of their knowledge system. In their attempts to demonstrate this, the Indigenous Peoples have exposed their knowledge systems to the WSK system in the event opening up avenues for further extraction. Those are some of the pitfalls of the struggle. A set of resolutions was made at the 1985 workshop. The following were some of the pertinent the resolutions:

- Establishment of sound dialogue between traditional and conventional practitioners;
- Compilation of traditional medical pharmacopoeia with the first edition to be published by the end of 1986;
- Government to establish a scientific research institute on traditional medicine;
- Cultivation/Propagation of traditional medicines of proven therapeutic value;
- Establishment of a pharmaceutical processing plant to manufacture pharmaceuticals from traditional medicines by 1990;
- Government to protect the rights of traditional healers whose medicines are to be utilised after mass production;
- Stringent penalties to be enforced against any person found to be trafficking indigenous medicine outside the country;
- Traditional medicine to be taught in the medical school¹⁴. (Chavunduka 1994)

However, by 1994 the resolutions had not been implemented. In fact, to date nothing has been done to ensure the implementation of these resolutions. The reasons that have been given for the failure include:

- lack of manpower to carry out the research;
- lack of funds and motivation among the scientists and the State;
- lack of sufficient and sustained dialogue between IMPs and scientists and
- Failure of the mainstream academy to accept IMK systems. The University of Zimbabwe rejected an attempt to introduce the teaching of aspects of traditional medicine in the curriculum of medical studies (Chavunduka: 1994: 20).

The resolutions can be interpreted as an attempt to bridge the gap between indigenous and western knowledge systems that had been created over the years during the colonial era. They were attempts to resolve the struggles between knowledge systems as

articulated in the Struggle Thesis. Nonetheless the failure to implement the resolutions is also an indication of the difficulties faced in bridging this gap.

TMPs are also unhappy that some laws that had been used by the colonial state to suppress their activities in the colonial era are still on the statute books¹⁵. The failure to repeal laws such as the Witchcraft Suppression Act is seen by practitioners as a betrayal by the post-colonial government. This represents continuity of marginalisation by the state.

In addition while the modern medical practice continues to receive state support, there have been no similar efforts towards indigenous medicine. When the ZINATHA established the School of Traditional Medicine in the 1980s it was seen as an improvement on the part of the IMK system. The school was created to encourage the teaching of traditional medicine across the communities. It was an effort to spread IMK by widening the old apprenticeship programme. However it did not receive state support and by 2002 it had closed down because of lack of sufficient funding¹⁶. This represents a major setback on the development of the IMK system in the country¹⁷. The institutional changes were only done in piecemeal fashion and ZINATHA has described Government's efforts as being merely "symbolic"¹⁸. The rhetoric has not been translated into any tangible policies and structures to promote and enhance the status of IMK systems in the country.

Despite these positive changes there was also intense opposition by most Western trained medical doctors who still believed that it was a primitive and backward system of knowledge. Therefore, regardless of the structural changes there remained greater ideological barriers that IMK had to surmount in the struggle for space. Professor Chavunduka, who championed the cause of IMPs and the IMK system within the mainstream academy at the University indicates that he was accused by his academic colleagues of soiling the image of the institution and he was branded as the "professor of witchcraft"¹⁹. The public press also joined in the assault and in an article entitled "*Heading back to the Stone Age*" the author accused Chavunduka of,

"Persuading the people of Zimbabwe to denounce progress and all the scientific achievements represented by modern architecture ... all technology of the modern age and return to the Stone Age and its barbaric primitive beliefs" (Zimbabwe Sunday Mail, 27 June 1982).

It is quite clear from this statement that there was a lack of appreciation of the validity and legitimacy of IMK as a body of knowledge worthy of recognition. It was seen as a "Stone Age" knowledge system with all the elements of being primitive and archaic. Against that standard was the western medical system which was represented as if it had no blemish. In other words, everything science represented was progressive and beneficial against everything that the IMK system represented which was retrogressive and useless. That perspective holds that the latter were to be placed on the sidelines and forgotten.

In addition, the hostile attitude can be seen in the reaction to the efforts of the new Minister of Health who was trying to integrate the two medical systems by bringing the indigenous systems into the mainstream. A commentator issued a scathing attack saying,

“Dr Herbert Ushewokunze’s [Minister of Health] support of *n’angas* (IMPs) is a source of great surprise. Here is a man who took about seven consecutive years studying as a doctor, after six years in high school and eight years of primary education. But he accepts as fully-fledged doctors people who have no medical training whatsoever.” (Zimbabwe Sunday Mail, 27 June 1982).

This criticism also shows how education was used as a tool for disempowering and sidelining TMK systems. Education had been meant to help the indigenous communities to overcome the burden of their archaic beliefs and knowledge systems. It also shows the limited view that is taken in the sense that anything that does not come through the western education systems does not meet the criteria of legitimacy and validity. Specifically, the implication of the statement is that any medical person who does not go through the western education system does not qualify to be a doctor. This is because in the scheme of things medical training is viewed largely from the Western perspective which privileges Western ideas about knowledge over the indigenous ones. It totally ignores the systems that exist in indigenous communities, which is an expression of the power that WSK enjoy over the alternatives. The struggle of TMK was thus a **“challenge [of] the dominance of modern [western] medicine”²⁰**.

THE IP LAW SYSTEM IN ZIMBABWE

Since Zimbabwe was a British colony, the legislation passed in the area of intellectual property rights over the years has been similar to the UK legislation. Historically, there is also Roman-Dutch law influence in the common law from South Africa. Legislation has traditionally covered all areas including trademarks, patents and copyright. At independence in 1980, the key legislation in this field was retained. However in the post-TRIPS era, there have been legislative changes to reflect the new international regime for the protection of intellectual property. Thus parliament has amended the **Copyright Act** by introducing the **Copyright and Neighbouring Rights Act** (26: 05) while introducing new laws on the protection of trademarks and patents as well. These changes are direct consequences of Zimbabwe's obligations under the World Trade Organisation to meet the minimum standards set under the Agreement on Trade Related Aspects of Intellectual Property rights (TRIPS). Of the new statutes, the Copyright and Neighbouring Rights Act specifically deals with aspects of indigenous knowledge since it provides for the protection of folklore. While this is restricted to areas of copyright, it is in part a reflection of the acceptance of the seriousness of the claims of the indigenous communities.

The institutional framework for the administration of intellectual property in Zimbabwe is fairly well established and advanced by Sub-Saharan standards. The Office of the

Registrar of Patents and Trade Marks is responsible for the administration of the relevant IP rights in Zimbabwe while the Controller of Copyright, Registrar and examiners work at the Copyright Office to administer laws in that branch of IP law (Moyo 2001). The Magistrates court, the Intellectual Property Tribunal²¹, the High Court and the Supreme Court are all responsible for the resolution of disputes that may arise in the administration and enforcement of IP rights in Zimbabwe. Thus structurally, Zimbabwean law largely conforms to the major requirements of the dominant IP law regime at the international level. Except in the new Copyright and Neighbouring Rights Act not much has been done however to protect the rights of Indigenous Peoples to their knowledge in medicines and related aspects. For that one has to leave the realm of IP law and enter the area of environmental law.

THE ENVIRONMENTAL LAWS AND POLICIES

The issue of knowledge of useful medicinal plants, which is at the centre of this study, is mainly covered by the new Environmental Management Act (20: 27) (hereafter the "the Act") which was passed by parliament in 2002. This legislation falls within the realm of environmental law rather than specifically for purposes of IP law. It follows a long period of negotiating since the Convention of Biological Diversity (CBD) was adopted in 1992. Although the Act was only passed in 2002 the first Bill had been presented to parliament in 1997 (Nhamo 2003). Its primary objective is to give effect to the resolutions and obligations accepted under the CBD. Under Zimbabwean law, it is necessary to enact legislation in order to give force and effect to ratified international agreements²². Essentially, the Act is aimed at promoting sustainable management of natural resources and the protection of the environment. It brings together a unified set of rules that had hitherto been fragmented²³.

The Act provides for the establishment of the Environmental Management Agency (hereafter "the EMA") whose primary task is to formulate and oversee the implementation of environmental policies in the country. In terms of the S.11 of the EMA, the operations of the Agency are controlled and managed by an Environmental Management Board (EMB). This board consists of professionals appointed by the responsible minister. Section 7 of the Act also provides for the creation of the National Environment Council (NEC) which is also appointed by the responsible minister and oversees the work of the EMB and the Agency.

For the purposes of this study one of its key functions in terms of S.10 1 (b) (xv) is,

"To regulate and monitor access by any person to the biological and genetic resources of Zimbabwe"

The relevant portion of the EMA to give effect to this function is Part XIII. In Sections 116 and 117 this part deals with issues relating to the regulation of access to biological and genetic resources. In particular S.116 which deals with conservation of and access to biological diversity places an obligation on the responsible minister to take measures that may be necessary for such conservation and to fulfil Zimbabwe's obligations under the

CBD. In order to achieve those objectives under S.116 the minister is given various options that he may take such as:

- i. identify the components of the biological diversity of Zimbabwe;
- ii. determine the components of biological diversity which are threatened with extinction;
- iii. prepare and maintain an inventory of the biological diversity of Zimbabwe;
- iv. determine actual and potential threats to the biological diversity and devise such measures as are necessary for preventing, removing or mitigating the effect of those threats;
- v. protect the indigenous property rights of local communities in respect of biological diversity;
- vi. support the integration of traditional knowledge on conservation of biological diversity with scientific knowledge;
- vii. prohibit or restrict access by any person to or the exportation of any component of the biological diversity of Zimbabwe.

The minister is also empowered to establish germplasm banks, botanical gardens, zoos, animal sanctuaries for conservation purposes. Section 117 empowers the minister to create regulations for the control of access to the biological and genetic resources of Zimbabwe by any person. The regulations may prohibit the exportation or importation of germplasm unless it is subject to the conditions of a licence issued by the minister. They may also provide for the equitable sharing of benefits arising from the technological exploitation of germplasm originating from Zimbabwe.

Undoubtedly, the Act provides a solid platform for the development of the institutional, legal and policy framework that is necessary for developing a sustainable environmental protection system. The Act correctly identifies the problems arising from the use of biological and genetic resources and attempts to provide the platform upon which measures can be built for purposes of solving the problems. The legislature accepted the claims that indigenous knowledge is an important tool in the protection of the environment. Its commitment to meet its international obligations is confirmed by the enactment of this Act. Nonetheless there are some weaknesses as far as the key area of this study is concerned.

Firstly, while it attempts to give effect to the requirements of Article 8 (j) of the CBD in respect of protecting bio-diversity and providing for benefit sharing, the institutional framework does nothing specific to include the indigenous communities in policy formulation and implementation. Indeed all three key institutions set up in terms of the Act, that is, the EMA, EMB and NEC consist of various specifically named professionals but key stakeholders in the area of indigenous knowledge are not specifically included in any of them. Only paragraph (e) of section 7 provides for representatives of NGOs who may be appointed by the minister but even this section does not direct the minister to

appoint a member of the groups representing key stakeholders in the community. Therefore, while the Act complies with the CBD in affirming national sovereignty, it fails to recognise and promote autonomy of local indigenous communities and their participation in the system remains in the margins.

Secondly, the creation of three bodies namely the EMA, EMB and NEC under the Act in addition to the Ministerial involvement creates a long chain of command which is likely to lead to further bureaucracy and consequent delays. The local communities will be alienated even further by a system that is unnecessarily heavy at the top. It is the structures at the grassroots level that are more vital than the Act's emphasis on the bureaucratic bodies. The views of the local people might take very long to filter to the top under such a system and coupled with their exclusion from the bodies, the concept of participatory involvement is unlikely to be fulfilled under this framework.

Another weakness is that the Act fails to define the meaning of "benefit sharing" arising from the yields from the use of knowledge and biological materials is concerned. The precise practical meaning of this term has always been problematic even at the international level since the CBD, but it was expected that individual countries would formulate policies that reflect their own circumstances. However, by failing to give operational content to this term, the Act simply restates the generalised understanding of the CBD.

The biggest limitation however, is that in Section 117 (2) (e) the Act gives power to the Minister to make regulations in respect of sharing benefits "arising from the technological exploitation of germplasm originating from Zimbabwe between the **owner of the technology and the government**" (my emphasis). This places the government as the primary beneficiary and excludes the local indigenous communities as autonomous parties for purposes of benefit sharing. The regulations ought to be clear on the position of the local communities. At present the problem will simply remain between the government and the local communities. While the CBD recognises national sovereignty over biological diversity, it provides for state parties to make provisions for the allocation of benefits to local communities. By taking the primary benefits under the laws the state is simply continuing with the historical marginalisation of the local communities. It will still be necessary under regulations, to give meaningful content to the concept of "benefit sharing" to enable it to be of practical significance to the local indigenous communities.

While the Act makes provision for the preparation of inventories and establishment of germplasm banks following the examples set by countries such as India, reports over the recent years indicate that this has already been taking place. Indeed, Zimbabwe has a number of nature reserves across the country while the National Botanical Gardens and Ewanrigg Gardens in and close to Harare have been used for the conservation of rare species over the years. The Department of Research and Specialist Services (DRSS) has also established a genebank for purposes of preserving plant species threatened with extinction and biological piracy²⁴. However, despite the statement of the law and the rhetoric, the involvement of the local indigenous communities is hardly given adequate space. It appears that with the help of the state's institutional structures, the researchers and professionals are continuing with old policies that sideline the local communities. The protection of the local indigenous communities rights to their knowledge and resources

cannot be effectively satisfied by placing everything in the hands of the state and its institutions while excluding them from the legal framework.

The law in Zimbabwe is still quite inadequate as far as the protection of indigenous knowledge and biological resources is concerned. Although it makes vague references to "indigenous property rights" there is no effort to identify what those systems are and whether using the term "property rights" is the most appropriate one to describe the local systems. The Act ought to define these key concepts so as to avoid confusion over meanings and scope when rights are being enforced. The present state of vague statements does not augur well with the need to create a more effective and workable system. The Act is a useful step in the right direction but it needs to provide for greater participation of the local indigenous communities at all levels so as to be more effective in achieving the goals. The state does not always meet the interests of local communities and bureaucracy might push them out further. Simply restating the general principles adopted at the CBD in 1992 will not be enough. In any event, there is a specific need to address the issue of rights to knowledge in relation to the more dominant patent system. The Act is more concerned with physical biological and genetic materials but it is necessary to deal specifically with issues in connection with knowledge itself. That could be a separate matter but there is no reason why it cannot be connected with the issue of physical materials to create more synergies in the system of regulation.

In conclusion, while the post-colonial state showed initial signs of interest, they have paled over the course of time. The TMK system remains marginalised and there is no formal system for effective protection. Although it remains an integral part of the primary health care system because the majority of the population uses it, most of the transactions take place beyond the official zone. The discrimination it suffered during the colonial era remains in place and it has not been fully integrated in the national system. The fundamental question is why despite the initial indications of support the situation of IMK systems has not changed much at the official levels. It is arguable that the new government has retained the same mentality as the colonial governments due to lack of will to appreciate the value of the system in full. The initial expressions of assistance were merely symbolic and have not been translated into practical reality for the communities.

RESEARCH INTO THE TMK SYSTEM IN ZIMBABWE: IMPACT AND CONSEQUENCES

Traditionally research is the avenue through which knowledge is developed and expanded. Researchers investigate phenomena and the information and products that they acquire add to the store of knowledge that is already available. Arguably, this takes place in all systems of knowledge. Historically, despite the general dismissal of IMK systems, there has been interest from the WSK systems in trying to extract and incorporate the elements that enhance them. The research into IMK systems is consistent with the "Struggle Thesis" position that the dominant knowledge system usually attempts to know and extract from the subordinated system by selecting elements that extend its domain and power. This demonstrates that despite the apparent conflicts between IMK and WSK systems there have been instances where efforts towards collaboration have

been pursued. Research is the point at which the knowledge systems make contact and interact. The problems arise where the dominant system is credited with the findings and the other knowledge systems are ignored.

A prominent early example in Southern Africa is the effort by Dr Fitzgerald in *Xhosaland* in the 18th century (Gordon 2002). He recognised the significance of knowledge held by local Xhosa healers. He was convinced that they could diagnose illness and possessed vast knowledge of medicinal substances derived from natural products such as plants and animals. However his efforts were hampered by the colonial state which sought to manipulate western medicine in its colonial project. It wanted to use the power of western medicine as an ally for imposing its authority over the Indigenous Peoples. An attempt to promote legalisation of indigenous medical practice by the likes of Dr Fitzgerald was thwarted despite his foresight regarding its potential for the enhancement of scientific knowledge and medical practice. This indicates that interests in the indigenous forms of medical knowledge have a long history that predates the current problems associated with the interaction between the knowledge systems.

Professor Michael Gelfand is the most notable researcher from the western scientific community who conducted considerable research in colonial Zimbabwe²⁵. He was interested in the workings of the traditional systems and believed that the system worked for the people that used it (Gelfand 1983). He was keen to know how the system worked. He therefore carried out sustained research into IMK system and has produced publications on the traditional life of the indigenous *Shona* people, their culture and medical systems. His team of researchers was keen to know the indigenous communities' views on the cause and treatment of disease among the *Shona* people. Gelfand and his teams learnt and published accounts on the diagnostic and treatment methods and how they differ from the Western systems.

The most comprehensive research is published in Gelfand's text entitled *The Traditional Medical Practitioner in Zimbabwe* (1983). It is a detailed account on the work of the IMP and the treatment methods and medicinal plants used in Zimbabwe. It was the outcome of a comprehensive research process that had begun in the early 1970s. The Department of Medicine at the University of Rhodesia (now University of Zimbabwe) launched the research in conjunction with the National Herbarium and the National Botanical Gardens in Harare. They decided to do the research out of concern that the delay in recording the information would lead to further loss (Gelfand 1983). They felt that due to the fact that the traditional systems and lifestyles were being sidelined by the modern lifestyles it might lead to the loss of valuable medical knowledge. Also population increase in limited communal areas was putting pressure on the resources and it was felt that this might lead to the loss of the medicinal plants and consequently the IMK that informs indigenous medicine. In addition, the herbalists were also keen to share their knowledge in order to demonstrate its validity. Arguably, they saw this as an opportunity to get the recognition that they had been fighting for.

Prior to this effort there had been collections of medicinal plants in the *Chinamhora* and *Murehwa* districts of Zimbabwe in 1956 by Gelfand and Wild. The National Herbarium in conjunction with the National Botanical Gardens was also carrying out parallel research of its own and IMPs were urged to bring in medicinal plants for identification and compilation. During the research the researcher was shown indigenous plants that have

been planted in the National Botanical Gardens for purposes of preserving them from extinction. Notably, the IMPs were paid a small fee and travelling expenses for their effort. Thus generally, there was an effort to learn more about traditional medicines and to record the uses of medicinal plants. The book sets out in detail the work of the IMP in Zimbabwe. It also tabulates and profiles in detail the indigenous and scientific names of medicinal plants, their uses and distribution around the country. These can be viewed as the initial efforts to record IMK opening up avenues for appreciation of the value of IMK but simultaneously it would inform future scientific research to extend the domain of the WSK systems. It is a useful guide to any researcher intending to access the IMK and biological resources in Zimbabwe.

It also sets out that some herbal remedies used in Zimbabwe are also used in other African countries for similar or different ailments. They found that the flora of Zimbabwe consists of more than 5000 species of flowering plants and ferns and about 500 were known to have medicinal properties. The researchers suggest that a more comprehensive study in all areas could uncover more plants of medicinal value. Thus 234 of the 500 medicinal plants found by the researchers were also used for medicinal purposes in Central, East and West Africa. 60 of the plants were used for the same complaints and other purposes while 168 were used for completely different purposes. This shows that one plant can have different uses in the same places and in other places. Gelfand, et al state that they, "are hopeful that a number of the medicinal plants employed by *n'anga* (IMP) will prove to be of help to man" (1983: 76). They concluded that "There is a need for chemical and pharmacological research into the plants which are widely recommended by *n'anga* (IMP) to determine their medical value..." (1983: 242). They noted however that this process could be expensive and requires a larger base of skills.

Another text that has been recently published which discusses the use of medicinal plants in Zimbabwe and most of Africa is entitled *Chemistry, Biological and Pharmacological Properties of African Medicinal Plants* (1996). The book represents a compilation of different aspects and results of research on the pharmacological properties of African medicinal plants. It was published in 1996 and is edited by Professor Hostettman et al. It is notable that Professor Hostettmann is the same individual at the centre of the dispute between the Zimbabwe and the University of Lausanne, Switzerland over the patenting of a drug derived from a Zimbabwean medicinal plant. This text shows that there is much research into indigenous medicines that is already going on as a matter of fact. The publications of results encroach into the secrecy arrangements dominant in the indigenous communities and the efficacy of indigenous protection systems will have to be measured against these realities. Contrary to the past or idealised situations crucial and significant parts of the IMK system are no longer in the exclusive domain of the Indigenous Peoples and any strategies for protection will have to acknowledge that reality.

In addition the Pharmacy Department at the University of Zimbabwe has for many years been carrying out research into the indigenous medicinal plants used by TMPs in their practice²⁶. The TMPs make contributions to the research by providing the plant and animal samples with medicinal properties. It was revealed that out of about 700 plant samples so far 95 have proved to be effective for medicinal purposes. Some cures for ailments such as coughs, sores, diarrhoea, herpes and other venereal diseases have been identified in the experiments. Research is taking place on the drug PMZ that is believed

to help in the treatment of some AIDS symptoms and can help patients to have higher life expectancy. The researcher was also shown a drug called *Gundamiti* that is being developed by ZINATHA in conjunction with the scientists at the UZ²⁷.

Archival searches in the medical library also showed that many Zimbabwean pharmacy students are taking an interest in the local medicines. Several projects have been undertaken in the last twenty years that deal with the research into indigenous medical remedies and their potential for further development on a wider scale. It is now recognised that traditional medicine plays a significant role in the primary health care system in many developing countries. Its potential to augment the dominant modern medical system and the development of drugs is now well acknowledged. The research primarily focused on the indigenous medicines supplied by the local people and the biological resources used were collected from the local communities around the country.

The effect of research is that a large quantity of TMK is now available in the public domain. It is easy for researchers to refer to the documented research for the knowledge and they only have to negotiate entry into the communities to collect the biological materials. In most cases where the traditional herbs and plants have been collected and cultivated in places such as the National Botanical Gardens or recognised woodlands, they could have easy access without requiring the assistance of the traditional communities. Given this scenario, approaches that recognise this reality need to be considered. It is not enough to simply refer to traditional knowledge as if it is exclusively in the hands of TMPs in traditional communities. This requires the active participation of the state and regulatory authorities in safeguarding the resources and ensuring that there is a regulatory structure to avoid unfair exploitation.

OTHER CHALLENGES TO THE TMK SYSTEMS

At present besides marginalization, threats of uncontrolled research and biological piracy, IMK systems are faced with both internal and external challenges including cultural transformation, uncontrolled trade in knowledge and biological resources. There are a number of problems currently challenging the IMK System in Zimbabwe. Although some of the old mechanisms continue to be used in response to these factors the real question is how far these responses have gone to effectively counter the problems arising. As indicated, the current mechanisms relied on the cultural life of the community. However the religious and cultural foundations in the indigenous communities continue to be disturbed by the introduction of new religions, urbanisation, western education and related external influences. This has caused the dissipation of respect for the traditional cultural values and tenets that bound society together.

Modern medicine was introduced in the indigenous territories during a period of great social and political changes. The colonial state manipulated the western medicine by using it as a tool of colonisation by attempting to demonstrate and consolidate the supremacy of the western colonial powers. While the majority of indigenous Zimbabweans have embraced western medicine they also continue to rely on the

indigenous medical system. Therefore while western medical systems play a significant role in society, the indigenous systems also continue to play a crucial part. Nevertheless, the problems and challenges are threatening the survival of the IMK systems that form the base of the indigenous medical system. Over the years the impact of colonisation and attendant forces has posed significant challenges to the IMK systems. These forces range from the impact physical displacement from indigenous territories to the changing attitudes to IMK arising from attempts at modernisation. The major problems are:

- i. Disruption of Socio-cultural life of the traditional communities
- ii. Development of secondary markets
- iii. Environmental damage and loss of biological diversity

DISRUPTION OF SOCIO-CULTURAL LIFE

One of the major threats to IMK is the general disruption to the socio-cultural life of Indigenous Peoples by the advent of modern western-oriented lifestyles among the communities. The social fabric within which the systems were interwoven has been transformed such that the systems no longer enjoy the same exclusive status of the old era. The advent of colonialism brought in many external factors that were hitherto unknown in traditional societies. Urbanisation, influence of other religions such as Christianity, Islam, etc have contributed to the disruption of the way of life of Indigenous Peoples. Arguably it was the single major event that brought in massive changes in the way the local people lived and conducted their affairs. Christianity and Western education were manipulated by the politics of the day to displace and annihilate the IMK system.

The result has been that some of the indigenous people have lost contact with their cultural life and as such the ties that bound people to their environment, rules and norms have been fundamentally altered and weakened in the process. The rules for protecting and preserving IMK have lost authority over these people and their efficacy as protective mechanisms has been drastically reduced. This has led to some bad practices whereby people easily give away knowledge to prospectors without restraint or some locals use it for commercial profits without paying due regard to the community rights. Indeed during fieldwork the researcher visited a number of open markets such as *Mbare Musika* and *Mupedzanhamo* in Harare where an unregulated trade in indigenous medicine takes place²⁸. The loss of the values that bound society together means that protection mechanisms such as the taboo system no longer have the desired effect of restraining individuals.

This disruption also means that the traditional means of transmitting knowledge have also been affected as some people in different faiths refuse to perform the required rituals. The use of apprentices is useful but it only caters for the herbal side of indigenous medicine and does not help the continuation of the spiritual aspects. The urbanised and converted who refuse to accept the gifts of knowledge endowed on them cut the transmission systems and hence the survival of the knowledge system in the long run.

DEVELOPMENT OF SECONDARY MARKETS

Over the years and particularly in recent times there has been a major development of secondary markets for indigenous medicine. This is constituted mainly by ordinary individuals who sell indigenous medicine on the open market. This is partly due to the economic difficulties that people are facing in Zimbabwe and also because of the lack of availability of access to conventional medicines because they are expensive and scarce on the market. The Aids pandemic, which affects one in every four Zimbabweans has also contributed to general fear which leads people to buy whatever charlatans advertise and popularise as a possible traditional cure for ailments. In the late 1990s there was a popular traditional plant, commonly known as the African Potato, which became available on the streets of Harare and most urban areas. It was prescribed by vendors as a cure for all ailments. According to Chavunduka, while it was true that there is a plant called the African potato, which has a number of medicinal properties, most street vendors were selling fake versions of the plant to the unsuspecting public²⁹. ZINATHA, which has become the public voice of authority on traditional medicine in Zimbabwe had to issue warnings to the public about the fake medicine which was being sold on the street markets.

The more fundamental concern is that such public sales mean that anyone can gain access to the knowledge and resources without any regulation. It has the effect of destroying the traditional and customary ways and practices of holding and exchanging knowledge and biological resources. It also amounts to the creation of IMK as objects and merely confined to herbal elements thereby sidelining the crucial spiritual aspects attached to the knowledge. Since things like the African Potato were being wrongfully marketed as "cures for all" there is a danger that if did not work or caused side effects it would continue to perpetuate negative images about IMK³⁰. Crucially, the practices alienate the key stakeholders of the IMK system whose practice according to customary norms is overshadowed by the urban practice of street vending. Street vendors are simply business people whose interest is the economic value that comes from their sales and they do not account to clients in the same way of the traditional practitioners. The key point here has been the failure by the government to react to this wrongful trade and protect the integrity of the IMK system from abuse by hundreds of charlatans. It has been left to ZINATHA to react but it lacks the necessary legal powers and resources. These secondary markets pose great danger to the IMK and the preservation of biodiversity due to over-harvesting of resources by vendors.

ENVIRONMENTAL DAMAGE

The threat to the survival of certain plant and animal species also threatens TMK. TMPs in urban areas whose access is limited to a small part of the land tend to over-harvest the little that is available. General deforestation for fuel and building purposes contributes to the loss of plant species. The over-harvesting and exploitation of plants has resulted in scarcity of medicinal plants and animal species³¹. The majority of the indigenous

population has lived in restricted communal areas for over hundred years as a result of the colonial land distribution patterns. The access to resources has been restricted leading to overuse of the little that was available. If the necessary plant and animal species disappear, it is difficult to sustain IMK that survives through usage. If not applied it runs the risk of facing extinction.

The land invasions in Zimbabwe at the turn of the century have meant that former nature reserves have been invaded and people indiscriminately cut down key plants and slaughter wild animals without due regard to the environmental impact of their actions³². This has been exacerbated by the influx of street vendors harvesting medicinal plants for re-sale in the urban markets as medical cures for ailments. The government has not done anything to stop this and in fact encouraged the chaotic land distribution exercise. Environmental damage affecting indigenous plant species has also resulted from the influx of exotic plant species introduced during the colonial era. This has been a particular concern in the Eastern Highlands area of Zimbabwe where pine and wattle trees have invaded and engulfed the natural habitats. Pine trees dominate the landscape and since they drain moisture and nutrients at a high rate they deprive the local indigenous species of space for growth³³. As a result farmers and other individuals have been undertaking projects to reduce the colonisation of the natural forests by the pine and wattle trees. The colonisation of the forests means that indigenous plants and animals could be severely affected thereby also affecting the survival of indigenous knowledge systems that depend on their survival.

WHICH WAY FORWARD?

Having explored the different issues and challenges facing TKS, it is arguable that a wider and more comprehensive approach to the problems is required. This calls for an approach that goes beyond the mere restructuring of the legal architecture. Principally, attitudes and the social structures in which knowledge systems are located will have to change. There must be the necessary political will and efforts must address environmental issues and the social structures must be dealt with effectively. First it is important to identify the traditional communities reasons for their calls for protection and to dismiss some myths that have been constructed about them.

NEEDS AND EXPECTATIONS OF TRADITIONAL COMMUNITIES

It is necessary to carry out wide ranging research to discover the needs and expectations of the traditional communities. The key to finding appropriate solutions is to understand the realities obtaining in the communities and to tailor the solutions to the interests of the communities. A top-down approach that imposes solutions without taking into account such realities runs the risk of creating mechanisms that may never be put to practical use. The first key question is to make detailed enquiries into the reasons that

traditional communities put forward for the protection of their knowledge. What exactly are the motivations that drive traditional communities to claim protection rights for their knowledge. The findings from the fieldwork research in Zimbabwe indicate that the reasons can be categorised into social, cultural and economic considerations. This article highlights the key economic factors that are often underplayed.

SOCIO-CULTURAL CONCERNS

i. CULTURAL INTEGRITY

Indigenous Peoples regard the knowledge that they hold as part of their cultural heritage. IKS are diverse and include such aspects as music, dance, art, designs, artefacts, spiritual knowledge, medical knowledge, sacred sites, agricultural techniques and plant/animal breeding, etc. External influence arising dominantly from the entry of Western communities in the 19th Century has had impact on the cultural aspects of the traditional communities. While communities have largely kept their systems they have also adapted to meet the changing circumstances. There is still scepticism about external forces that erode their cultural base. In particular the exploitation of IMK is seen as part of the cultural colonisation that violates cultural values and disrupts their traditional systems.

Consequently, they demand protection of their knowledge systems on grounds of cultural integrity. In addition, the Indigenous Peoples view some aspects of knowledge as sacred and beyond desecration. In respect of indigenous plants of medicinal value for example they want certain customs and ethics to be followed when they interact with the non-Indigenous researchers as a matter of culture. Some sites and areas such as *Njelele* in the *Matopos* Hills, *Nharira* Hills in Zimbabwe have immense religious significance for the local communities and would need their cultural tenets to be respected (Ranger 2000).

ii. DIGNITY

Additionally there is a desire to stand for and prove their dignity. As indicated in the Struggle Thesis, Indigenous Peoples were treated with contempt and marginalised during the colonial period. Other than being regarded as primitive, they were considered to be uncivilised and could therefore not produce knowledge. Thus wherever Europeans went in indigenous territories, they claimed to have "discovered" something. It was "discovery" because it was not known within the WKS regardless of the fact that it was already common knowledge within the IKS. In other terms, what was known in the indigenous communities was not considered as knowledge in the WKS.

This had negative implications on the Indigenous Peoples who already lived in those territories according to their own ways and had already discovered these things before. In this context, Indigenous Peoples have always been keen to prove that contrary to the old images they in fact exist and have immense knowledge of their world. Therefore it is not only demeaning when someone claims to have "discovered" a medicine when in fact they already knew of it before and in fact supplied the primary knowledge to that person.

As a matter of human dignity, they want their contribution to human knowledge to be acknowledged and recognised. It is part of their "struggle" from the periphery to be recognised as contributors to knowledge. It is not the West that is the sole source of all knowledge but they are also a source of knowledge and that should be accepted hence the need for protection from wanton disregard of what they regard as rightfully theirs.

ECONOMIC INTERESTS

Traditional people have become aware that while their contributions to research and the development of knowledge have not been acknowledged they have also not been awarded the economic benefits that are produced. While IMK has been used to produce useful drugs and food supplements by the pharmaceutical and food industries they have not derived any benefits from it. Instead, the researchers who have used knowledge from Indigenous Peoples have published work and received recognition and resulting economic benefits. On the other hand the Indigenous Peoples have received very little if any, economic rewards. The fieldwork findings indicate that they are angry about a system that rewards the end users of their knowledge but ignores the original source.

In short, traditional people realise the economic potential of their knowledge systems and how others are exploiting that capacity at their expense. Findings indicate quite clearly that Indigenous Peoples do expect some of that economic potential to benefit them and the proceeds to flow to their areas as well. Most communities are now surviving in the mainstream socio-economic framework, which places economic demands upon them. The economic returns from the use of their knowledge could prove to be a source of useful income for these societies as they struggle to survive in mainstream society. There is a moral obligation to have fair and equitable sharing of the economic benefits.

ECOLOGICAL PROTECTION AND SUSTAINABLE DEVELOPMENT

As noted in the fieldwork findings IKS are part of the general system of environmental management in indigenous territories. This is because for example, IMK relies heavily on the existence of plants and animals. In the days when they lived exclusively they were able to implement their own policies through certain practices and customs that were essential for protecting the species that they needed. For instance the taboo system was maintained to ensure that certain species of plants and animals were protected. Cultural beliefs played a major part in maintaining the efficacy of the taboo system.

However due to the external impact through colonialism, territories were expropriated and the Indigenous Peoples were pushed to marginal reserves. Some of the species were not found in those areas and consequently IMK was lost over generations as they could not teach information about species that were non-existent. The species that were available were put under immense pressure due to over-use and deforestation. The dearth of species leads to the dearth of knowledge systems because if they do not exist, they will be out of use and over time, there will be erosion of the knowledge system.

Thus the symbiotic relationship between ecological diversity and IMK is being severely tested by the pressure on resources. Commercial harvesting of plant and animal species is negatively affecting the balance. Therefore linked to exploitation of IMK is also the exploitation of ecological species, which ultimately threaten the existence of the knowledge system in the long run. In a nutshell, Indigenous Peoples would want to keep their knowledge system because it is an integral part of environmental protection and they would also like to protect the ecological diversity because it sustains their knowledge system. The protection of IMK generates incentives for local communities to conserve the environment and manage bio-diversity.

SELF-DETERMINATION

The fight for self-determination has been at the centre of many struggles of Indigenous Peoples. It was that desire that sustained the struggles for political independence in many African, Asian and Latin American countries that were under the yoke of colonialism. It is also the same desire that fuels the struggles for self determination in countries like Australia, USA, Canada and other Latin American countries where some Indigenous Peoples have remained minorities in their former territories.

In the case of knowledge systems, Indigenous Peoples seek protection of their right to self-determination as far as the use and application of their knowledge is concerned. They require the platform and mechanisms to be able to deal with their knowledge systems as they please, without the constraints of bureaucracy that often leaves them out of the process. They want to be consulted about the use of the knowledge and local resources and they want to be given the right to consent or reject any proposals regarding their knowledge. That decision should not be the prerogative of some external individual but of the community or its chosen representatives. In short, they want to be participants and not mere objects or listeners in the making of decisions regarding the use of their knowledge.

This is the summation of the reasons for the protection of knowledge in indigenous communities as revealed in the research process in Zimbabwe. It is suggested that when making policies for the formulation of mechanisms for the protection of IMK these concerns must be taken into account. A proposal that fails to take them into consideration will fail to meet the needs of the indigenous communities. In the end it will either be rejected or will fail to have the necessary effect and will become redundant. Similarly, a proposal that accounts for only one of the reasons at the expense of the others will also fail to have the desired effect.

RECONSTRUCTING RESEARCH IN TRADITIONAL COMMUNITIES

As the connecting nexus between the WSK and the TMK systems, research is the site of the struggles between the two systems and the respective holders. The manner in which research has been conducted and the way in which the results and benefits of research

have been allocated have produced tensions that characterise the dialectical relationship between the two knowledge systems.

One conclusion from the field research in Zimbabwe is that the Indigenous Peoples are not necessarily opposed to research in principle. Indeed, for many years they have been pushing for collaboration in their struggle to demonstrate and establish the validity and legitimacy of their knowledge system. The crucial aspect is that despite the denial of its legitimacy and validity, research into the local knowledge systems has been taking place since the encounter between the Indigenous and Non-Indigenous Peoples. The lack of acknowledgement of its legitimacy and inequitable allocation of benefits in the face of the continued research is chiefly responsible for the Indigenous Peoples' mistrust of the whole process and their claims for means by which their rights can be protected.

This study has concluded that the contact between IMK and the WSK is unavoidable. Bhola (2003) echoes this view, pointing out that the contact and interaction is inevitable. While hostilities have characterised the encounters between WSK and IMK the possibilities of collaborative connection have also been observed. This contact between the systems has ensured that there has been continual, if slow integration. The integration has however been characterised by the extension of the WSK system without necessarily the acknowledgement of the contribution of the IMK system and this study has established that this is one of the major areas of contention between researchers and indigenous communities. It is arguable that while IMK is important for the Indigenous Peoples both culturally and for developmental purposes, by itself it may not be sufficient in the light of pressures for integration. Indigenous Peoples are no longer living in isolation but are inextricably linked to and participants in the socio-economic life in the country. The demands that such participation places on them means that they have to develop systems to be able to survive. The same cause that drove the Indigenous Peoples to innovate in order to survive within their local environments can be adapted to apply in the new environment which is no longer closed and exclusive but presents new challenges. Under the circumstances, the protection of IMK is not an end in itself but ought to be seen as a means to achieve some beneficial results for the Indigenous Peoples.

The dissemination of the results of research has affected the efficacy of the ways by which the Indigenous Peoples traditionally hold and protect their knowledge within their communities. This is particularly because of the way in which research has been published thus exposing hitherto secretly held knowledge to the general public beyond the confines of the community. This implies that some of the means by which the Indigenous Peoples protected their knowledge may no longer have the same efficacy they had within their strict territorial and traditional confines. Meanwhile, the process of globalisation has led to increasing interaction and integration between people and their knowledge systems in different parts of the world. The new technologies within the WKS make it easier to gain access, retrieve and store information. Is it possible to stop the process of contact between the knowledge systems?

It seems unlikely that this process can be stopped given the fact that a lot of TMK in Zimbabwe and other indigenous communities has already been published and is therefore easily available to wide readership across the world. Given these developments it is highly probable that in some cases researchers have reached a point where they have

direct access to the TMK system without necessarily consulting the TMPs or communities. Indeed the fact that the general public, TMPs and ZINATHA itself are actively engaged in the marketing and selling of drugs developed from the TMK system means that researchers can easily access the medical knowledge for research purposes. The interaction is therefore taking place in several ways although arguably under unfair conditions from the perspective of the communities. Arguably the major challenge is to control and regulate this interactive process in order to establish a system that distributes benefits fairly between the stakeholders.

As Bhola aptly puts it,

“the challenge before us is really not to save the Indigenous from the Modern (which is an impossibility) but to organise a dialectic that is neither cannibalistic nor exploitative, but mutually enriching” (2003: 10).

It is necessary to recognise the gravity of history and develop fresh perspectives on IMK systems with a view to recognising their status as valid and legitimate knowledge systems. The historical processes that have shaped the encounter have ensured that the WSK systems are at an advantage in the struggle and currently hold a monopoly as to what counts as valid knowledge.

The socio-historical exploration of the encounter and relationships between IMK and WSK and in relation to the modern state have indicated that the IMK systems have long been sidelined and arguably this accounts for their poor position and vulnerability in the present circumstances. In addition, the exploration of the international political economy of knowledge protection has shown that the major determinants of what counts as knowledge remain largely the western industrialised nations and the attendant knowledge systems. Consequently, the prevailing international legal regime for knowledge protection privileges the WSK at the expense of the IMK that remain largely vulnerable.

COMPREHENSIVE OVERHAUL: ADDRESSING THE NON-LEGAL LANDSCAPE

One key part of the Struggle Thesis is that the vulnerability of IMK generally is an historical product of various external influences other than the law. Indeed the law is only one of the tools that have been used to undermine IMK systems. This leads to the conclusion that the enactment of a law *per se* will not necessarily change the circumstances of IMK systems. This suggests that more is needed in order to overcome the various problems uncovered in this study. In addition to the contemplated legal changes, it is necessary to reconstruct the non-legal structures that continue to undermine the status and legitimacy of the IMK systems.

RECOGNITION OF THE STATUS OF TMK AS A LEGITIMATE AND VALID BODY OF KNOWLEDGE

The restoration of the status of the IMK systems as a valid and legitimate system of knowledge has already been suggested in the discussion of the principle that should guide research. The issue is not about a comparison between IMK and WSK but simply according IMK recognition in its own right. The fact that IMK is being widely sought should support the cause for recognition as a valid and legitimate body of knowledge. The practice of trying to validate it from the perspective of WSK undermines its claims as a self-standing body of knowledge.

It is therefore important to restore IMK to its status as a valid and legitimate body of knowledge that deserves protection. One key implication of this is that for example when the patent system is in operation, IMK can also be properly considered as a legitimate body of knowledge which must be considered as prior art for purposes of assessing elements such as novelty and non-obviousness. The fact that it is not in written form should not necessarily disadvantage IMK because it will be accepted that knowledge can be recorded and recognised in diverse forms. It will give a stronger option to holders of IMK to challenge bad patents that have been obtained contrary to the prior existence of knowledge from another part of the world or more positively it will spur others to acknowledge the contributions of Indigenous Peoples.

The restoration of the status IMK not an event but a process that must be carefully nurtured and could take many years as a number of social and psychological barriers have to be overcome. It will require the removal of long-standing negative representations of IMK. This may require considerable changes in the education systems in order to take into account aspects of IKS generally and IMK in particular. There have already been good precedents in other regions. In New Zealand the movement towards the restoration of indigenous culture and tradition has gathered pace over the years and the use of *Maori* language is quite active and widespread (Tuhivai-Smith 1999). However for as long as the social structures are constructed in such a way that everything indigenous is ridiculed and marginalised attitudes will not change and consequently the efficacy of legal changes will be minimal. The IKS generally will continue to be seen in the periphery. Many people in Africa recognise and use the indigenous medical system but few are keen to publicly acknowledge it due to the negative images portrayed. People will have to regain confidence but that begins by the dismantling of the structures that made it appear so inferior and primitive. The education system must in addition to the focus on WKS be re-oriented to take into account aspects of IKS to reflect the values and developments in indigenous communities.

PROTECTION OF LANGUAGES AND CULTURE

The Struggle Thesis has shown that the undermining of languages is part of the means that were used to marginalise IMK over the years. The close relationship between indigenous languages and IMK has been established³⁹. Language is important in the development of knowledge because it is the medium of communication of ideas, thoughts and beliefs especially in an oral-based system. Language is therefore an important part in the storage and communication of IMK from one generation another. Coombe (2001) echoes this view when she states that contemporary linguistic studies demonstrate that

traditional knowledge disappears with the disappearance of languages. Invariably, the death of the languages in indigenous territories takes away valuable knowledge developed through generations. Therefore, it is important to protect indigenous languages to ensure that indigenous knowledge is also conserved. So in places where the indigenous pupils are forced to speak the English or French language and beaten up when they speak the indigenous language at school, the process must address the use and proliferation of indigenous languages.

A key goal must be to ensure that there are better ways to encourage and establish the connection between linguistic diversity and biological diversity. This includes encouraging and protecting linguistic human rights and promoting education policies that ensure the use and survival of languages. There has also been a growth of the relevance of linguistic human rights as one of the key issues for the protection of linguistic diversity. There is need for more funding to promote language revitalisation programmes that are initiated or led by the indigenous communities themselves⁴⁰. One of the key strategies is to document and record languages and also to promote its use in everyday life. It is also important to revitalise linguistics as an academic discipline "and conferring it new relevance within and beyond academia" (Maffi 2002: 387). The key is not simply to preserve language in texts but to promote its conservation *in situ* by promoting its use and development within the relevant contexts.

Although the international context is an important platform, the key is at the level of the nation state. As Maffi says, "individual countries at best pay lip service to linguistic human rights but do not adequately implement them - particularly in terms of providing opportunities for education in indigenous and minority languages" (2002: 390) Some even provide arguments for example the diversity in languages threatens national unity. The education system was very influential in sidelining the local languages in colonial Zimbabwe. In the post-colonial set-up there has been no significant change in the status of indigenous languages. The English Language remains the official language in the country and the dominance of English is reflected in the education and employment arena. While it is compulsory to study the indigenous languages at primary school level, it is optional at higher levels though English remains compulsory. While it is important to study one of the dominant international languages, it is equally vital to ensure that people have choice and that indigenous languages receive equal status.

It is therefore crucial that the language policy in the country be re-aligned with a view to promoting indigenous languages among the Indigenous Peoples. The promotion of an environment that is conducive to the survival and promotion of indigenous languages is a key part of furthering the interests of biological diversity and ultimately the protection of indigenous systems of knowledge that are carried through these languages. There must be sufficient attention from both the national authorities and international agencies. In addition, funding bodies can do more to promote revitalisation projects at the local community level⁴¹.

When the languages are valued and respected, this enhances the status and position of IKS generally. The example of the enhancement of languages in New Zealand is quite indicative of the importance of wide-ranging projects in the quest to protect IKS. The reclamation of languages is part of the broader project of restoring and protecting IKS.

REGENERATION OF INDIGENOUS PLANTS

It is vital to counter deforestation, which as field research has shown is one of the major threats to the survival of IMK systems. The implementation of reforestation programmes of known indigenous plants would be a solution to this problem. The state could assist by providing logistical and financial support.

In addition the state can provide incentives so that the Indigenous Peoples can cultivate these plants instead of the exotic varieties that have been encouraged and grown for commercial purposes. The present research data already indicates the types of plants of medicinal value and the National Herbarium has been cultivating species at the National Botanical Gardens. However, it is necessary to improve the cultivation *in situ* so that people can easily access the plants when needed. Some of the financial resources from the exploitation of medicinal knowledge and plants must be ploughed back into the re-cultivation of these plants.

Ultimately the greatest incentive to the protection of biological diversity is the protection of IMK systems and ensuring that the benefits of the use of the plants accrue to the local communities. The CBD (1992) encourages this and Zimbabwe must put this into practice to ensure that communities benefit and have the willingness to save the species. Those medicinal plants that are already known and published can be saved from potential extinction by cultivating them on a greater scale. This should also sustain the knowledge of the local people.

POLITICAL WILL

There is evidence to suggest that the international movement towards the protection of Indigenous Peoples and their assets has gathered more pace and significance in the previous twenty years. As such according to Posey and Dutfield (1996), there are many existing tools that can be mobilised in order to defend the rights of Indigenous Peoples within the international legal framework. However, while there have been some advances in Latin America, Asia-Pacific regions there has been slower pace in Africa. The major impediment to change is lack of political will to implement the measures in the available instruments. There is still hostile treatment of some indigenous groups in places such as Botswana and Namibia where the indigenous San tribal communities are being relocated by the state in the name of modernism against their will.

Thus there has been no translation of these conventions and declarations into national policy or actual action on the ground. What is needed is the will on the part of those who wield state power to take action and implement the recommendations that have been advanced in international conventions and academic publications. The implementation of these programmes requires an appreciation on the part of the power holders so that they can secure and uplift the position of the local people. Despite the government of

Zimbabwe showing some interest in indigenous medicine, it has failed to translate rhetoric into practical programmes. That explains why the efforts by organisations of IMPs such as ZINATHA to establish schools of indigenous medicine, develop pharmacies and engage in collaborative research have largely failed in the past.

CONCLUSION

This article sought to explore key areas that are normally excluded in legal discussions on this subject. The area of protection of TMK systems is by no means the exclusive domain of lawyers. Once a clear exploration of the context within which the problems faced by traditional communities and their knowledge systems is done, it becomes clear that no matter how beautifully crafted laws may be, they will not be adequate. History matters too. We need to identify what causes TMK systems to be at the margins and how that might be changed. Law, together with changes in attitudes, policies and generation of the necessary political will are all vital as a total package. In a nutshell there are three points worth highlighting:

- i. Recognition of knowledge systems in their own right as valid and legitimate
- ii. Recognition and Compensation for what is extracted and used by another system
- iii. Attention to factors, legal, social and political that continue to undermine traditional systems.

The story of the creation of knowledge is not that of the lion alone, but of all animals.

END

¹ "Bitter remedies: The search for plants that heal generates international feuding" The Wall Street Journal 8th June 2001 also at <http://www.lind.org.zw/people/herbs/snake_bean.htm> (last visited on 15/05/03)

² The WIPO has recognised this through their research in indigenous communities Draft Report on Fact Finding Missions (1998 – 1999)

⁴ Chavunduka Unpublished paper on file, Mpande, Paper presented at a conference 2000

⁸ Interviews with Professor Chavunduka

⁹ Interview with Mr Kanda in Harare. Mrs Chando does not believe in the traditional systems and believes that the practices are ungodly and that IMPs are agents of evil.

¹⁰ Fanon also refers to the difficulty that Algerian medical doctors trained in Western medicine had in relating to their local communities (1965).

¹¹ Similar pieces of legislation were passed in a number of colonies in Sub-Saharan Africa and in New Zealand, the Tohunga Suppression Act is a prime example

¹² Interviews with Mr Mushita and Professor Gundidza in Harare

¹³ Although the law prescribes these rules, the reality on the ground is that due to lack of funding, the TMC is largely ineffectual.

¹⁴ Also echoed by Professor Gundidza and Dr Mashava in interviews.

¹⁵ Interview with Sekuru Sibanda in Harare

¹⁶ See also "*No Cure for School of Traditional Medicine's Financial Problems*" Article in The Daily News (Zimbabwe) 19/11 2002

¹⁸ Chavunduka, Unpublished Paper 2001

¹⁹ Speech by Professor Chavunduka at a workshop in Harare March 2002

²⁰ Interview with Professor Chavunduka. He added, "The idea was not to say that western medicine is bad or that indigenous medicine is better. We fight for the recognition that indigenous medicine has value and we also accept western medicine. We are against people who ridicule the indigenous system and dismiss it yet in the dark of the night they come and pick up the medicine and develop it within their system. That is dishonesty"

²¹ Established under section 3 of the Intellectual Property Tribunal Act (26 : 08)

²² Section 111 (b) (i) of the Constitution of Zimbabwe

²³ Examples of previous legislation dealing separately with environmental issues include the Natural Resources Act, Noxious Weeds Act, Forestry Act, Seeds Act, Hazardous Substances and Articles Act, etc.

²⁴ "Research Department launches genebank" Report in The Daily News 5 May 2001 It was stated that "The Genebank of Zimbabwe would be responsible for promoting conservation and sustainable utilisation of plant genetic material for food and agriculture" According to the Head of the Genebank

Claid Mujaju. "The Genebank is the pivot for identification and documentation of plant species resources (sic). It collects, characterises, evaluates, stores, regenerates, multiplies and distributes plant genetic resources accessions of indigenous or exotic origin important for food and agriculture."²⁵ Interviews with Professor Chavunduka and Professor Gundidza

²⁶ Interview with Professor Gundidza

²⁷ Interviews with Dr Ndlovu and Sekuru Sibanda at ZINATHA.

²⁸ See section below on development of secondary markets

²⁹ Interview with Chavunduka

³⁰ More recently, there was the popular marketing of a liquid product called *Musimboti*, which was also touted as a cure for everything. Again ZINATHA had to come up and clear the issue with the public. Interestingly *Musimboti* was being sold even in major shops and not just on the streets.

³¹ Mpande 2002 – Unpublished paper supplied during fieldwork

³² In the years since 2000 Zimbabwe has been engulfed in a political and economic crisis which has seen the destruction of commercial agriculture as a result of unlawful farm invasions.

³³ It has been reported that "their remarkable fertility and very easy dissemination of their seeds leads to propagation that is virtually out of control in the Eastern Highlands." Article by Mills H. " **Campaign to restore indigenous flora and fauna gathers momentum**" in The Daily News 30 November 2000

³⁴ See article by Mukumbira R. "Shock treatment for widows as pandemic ravages Zimbabwe" AfricaNews March 2002 located at http://www.peacelink.it/afrinews/72_issue/p1.html (last visited 20/01/04) Also another article in which ZINATHA requests for the arrest of the *Tsikamutanda* who are using fake ZINATHA certificates "Arrest Witch-Hunters, Says Zinatha" July 24 2004 located at <http://allafrica.com/stories/printable/200407260134.html> (last visited on 28/07/04)

³⁵ "Too old to be sacrificed" The Zimbabwe Standard 18th – 24th April 1999

³⁶ "Ritual murders and trade in body parts on the increase" The Sunday Mail, 18th April 1999, "Couple in alleged ritual killing granted bail" The Daily News 30th March 1999

³⁷ According to Kenneth Gumbo in Zvishavane, "Of all patients suffering from asbestos-related ailments I have examined, those whose problems have also been attended to by traditional healers have worsened. This is probably due to the conditions in which patients are attended to. The utensils used to mix the medicine are not sterilised. The environment is always dirty and polluted because traditional healers always have one thing or another to burn. Poisonous or not, plants are prescribed for everything." He is quoted by Mukumbira R. in an article "More People Turn to Traditional Medicine" published at <http://lists.peacelink.it/afrinews/msg00192.html> (last visited on 12 May 2004)

³⁸ Interviews with Professor Gundidza at the University of Zimbabwe

³⁹ There is need for more detailed research to discover the detailed connections between language and environmental diversity.

⁴⁰ Maffi points out that the Draft Universal Declaration of Linguistic Rights submitted to UNESCO in 1996 has not been widely accepted or approved by the agency. Regional policies such as the European Charter on Regional and Minority Languages which was adopted in 1992 has fared better since it has been signed by a number of European countries. .

⁴¹ Already there are some efforts to promote the revitalisation of indigenous languages. This has been demonstrated by such international organisations such as *Terralingua: Partnerships for Linguistic and Biological Diversity*. It was formed for the purpose of promoting linguistic and cultural diversity and supporting the links between linguistic and biological diversity. The strength in the diversity of languages has been replaced by arguments for the strength and unity provided by using the dominant languages (Maffi 2002).

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