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EXPERIENCES AND LESSONS LEARNED REGARDING THE USE OF EXISTING INTELLECTUAL PROPERTY RIGHTS INSTRUMENTS FOR PROTECTION OF TRADITIONAL KNOWLEDGE

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(KENYAN EXPERIENCE)

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INTRODUCTION

As we approach the 21st century Kenya has set as one of the main objectives to transform to a newly industrialised country (NIC) by the year 2020 (sessional paper no 2 of 1996). The eighth national development plan, for the 1997-2001-preparatory period-seeks to lay down the strategies for the foundation of industrialisation. Agriculture and industry are recognised as the twin engines which will propel the country towards the achievement of the above objective. Recognised as one of the major challenges, in the promotion of industrialisation, is the management of the resources based on sustainable basis in order to meet the present and future needs of the society. Sound management of the biological resources - as the source of raw materials for use in agriculture, pharmaceutical and other industrial innovations (Vincente Sanchez, 1994) - in addition to being one of the most significant component of our environment it is certainly a priority if sustainable industrialisation is to be achieved. It is in this view that the government of Kenya undertakes in the current national development programmes to:-

- enhance harmonisation, implementation and enforcement of laws for the management, sustainable use and protection of the environment,
- provide economic incentives and penalties to encourage sustainable use of natural resources and ecological functions,
- Improve decision making process by developing an efficient national environment education and information system within easy reach of users in all parts of the country and
- enhance co-operation with regional and international environmental programmes, treaties and agreements among other activities.

Central in the management and use of the biological resources, among other players, indigenous people and local communities perform a key role in the conservation and sustainable utilization despite some of their activities and practices not being adequately incorporated in the national economic planning. It should be realised that due to their reliance on these resources to meet their daily needs over the past generations they have continued to innovate and accumulate vast amounts of knowledge on sustainable utilisation and conservation of local biological resources. This effectively has increased the value of genetic resources and continued motivation for conservation. The knowledge so generated has presented new economic opportunities for the modern society nationally and internationally. Recent developments in technology and opening up of new market opportunities for the local biological resources and the relevant traditional knowledge and innovations has increased the demand for these important resources. The increasing poverty levels of the indigenous people and their communities, population pressure, materialistic culture, lack of information, adequate effective regulatory and conservation measures have greatly threatened the continued existence of the genetic diversity. Influx of the western culture during and after the colonial era has continued to frustrate and marginalize traditional practices despite their compatibility with the modern principles of conservation and sustainable use of genetic resources. Many of the legal instruments used during the colonial era to further the economic interests of the West have remained in force. Even policies,

legal and administrative measures taken during the past three decades of post- colonial era have never given adequate recognition of traditional practices. This legacy has resulted in continued theft of indigenous peoples property as their knowledge get commercialised without them fairly benefiting.

<u>Background and development of industrial property rights.</u>

Prior to the enactment of Kenya Industrial property Act (Cap 509 of 1989), Kenya depended on the United Kingdom's patents Act in granting industrial property rights.

There were several shortcomings inherent in this system which resulted in its inability to address the development priorities of Kenya as a sovereign nation. Lack of examination procedures, inaccessibility of the system by local innovators and lack of recognition of some of the local innovations in addition to other inadequacies undermined technological development and the interests of Kenya as an independent nation.

Born out of the need to promote domestic technology growth and stimulate domestic research and innovations that Kenya industrial property act was enacted in 1989 and commenced on 2nd February 1990. The act repealed Patent registration act (Cap 508), and established Kenya Industrial Property Office (KIPO). The Office was given the mandate to:-

- examine applications for and grant industrial property rights
- screen technology transfer agreements and licences
- provide patent information to the public and
- promote inventiveness in Kenya.
- registration of trade mark and service marks

Under the act three categories of industrial property rights are recognised. This Includes Patents, Industrial designs, Rationalisation models and Utility models.

Incidentally when KIPO was being established other international events in the field of Intellectual Property Rights (IPR's) were taking place. Among them, the intergovernmental negotiations for the Convention on Biological Diversity (CBD), which was concluded and adopted in May 1992, signed the same year in Rio and entered into force in December 1993. Due to their direct bearing on conservation, sustainable use and benefit sharing, IPRs were included as part of the negotiations. The issue of IPRs was soon to prove contentious prompting the Bush administration not to sign the convention in Rio.

Another important international event was the conclusion of the Trade Related Aspects of Intellectual Property Rights Agreement (TRIPs) under the auspices of General Agreement on Trade and Tariffs (GATT's) in 1994. Under the TRIPs an undertaking was made to globalise the standards of IPRs protection particularly those of developed countries. All members of World Trade Organisation (WTO) are expected to abide with the standards by the year 2005, developing and least developed countries were given a period of 4 and 10 years respectively. This has left the developing countries with no other option but to amend their intellectual property laws to conform to the standards. Under Article 27

member shall provide protection for inventions in all fields of technology provided that they are new, involve an inventive step and are capable of industrial application.

It is in the spirit of keeping pace with the evolving world of IPRs that Kenya is embarking on reviewing its intellectual property rights system to conform with among other agreements and conventions the two above.

Unfortunately lack of clarity in the ownership law and regulatory arrangements has persisted, presenting opportunities for firms, individuals and multinational corporations to continue bioprospecting at the expense of traditional knowledge, innovations and biological resources in this country.

IPR system in Kenya

The current Intellectual property rights (IPR) system in Kenya does not recognise nor protect the rights of indigenous people and local communities to their knowledge and innovations. As a consequence bioprospecting has continued without the indigenous people benefiting fairly from commercialisation of their knowledge and innovations.

Under the current system in Kenya seven categories of IPRs are recognised. These include: Trade Marks and Service Marks, Patents, Utility models, Industrial designs, Rationalisation models, copyrights and plant breeders rights. The first five are administered by Kenya industrial property office (KIPO) under two Acts of parliament; the Kenya industrial property Act (Cap 509) and the Trade Marks Act (Cap 506) while plant breeders rights are administered by Kenya Plant Health Inspection service (KEPHIS) under seed and plant varieties Act (Cap 326). The other category is administered under the copy rights Act (Cap 130) by the Attorney General Chambers.

Patents

A patent is a legal certificate that gives an inventor exclusive right to prevent others from exploiting the subject matter of an invention for commercial gains for a fixed period (17 years in the Kenyan system) without his authorisation. Legal action can be taken against those who infringe the patent. As in other kinds of property, patents can be used as objects of trade i.e. can be sold, hired, licensed or inherited by succession. In order to acquire the rights one has to lodge an application in the prescribed manner with the Kenya Industrial Property Office. Usually the applicant may be an individual, a corporation or an institute. Once the application is received by the office a thorough examination and search is done before the rights are granted and a certificate issued. A successful patent application must satisfy the examiner that the invention is :-

- *novel* - i.e. was not available in the public domain before the application was filed.
- *non obvious*-in consideration of the prior art available at the time of filing the application it would not have been easy for a person skilled in the art to make the invention. Particularly critical is the level of human intervention in the existence of the invention.
- *industrially applicable* - this means that the invention can be produced commercially or be used to produce commercial goods.

Certain inventions are particularly excluded from patentability. These include; plant varieties, inventions contrary to the public order, morality, public health and safety, principles of humanity and environmental conservation. The act also empowers the minister to exclude certain inventions for short periods (10 years) but the periods can be extended.

Once the rights have been granted the practical enforcement depends on the ability of the holder to identify and institute infringement proceedings against the infringer.

Patents versus indigenous knowledge and innovations.

As it has dawned to many in various national and international forums, traditional knowledge and innovations cannot be adequately protected under the present patent regimes. Recommendations reached advocate formulation of *sui generis* systems that will take into account the traditional practices of indigenous people. Despite the failures of the present regimes to address the issue of ownership of indigenous knowledge and innovations to some degree they can still be used , for example contesting the rights of others to patent inventions whose substantive matter is already common knowledge to the indigenous people. However this does not deter commercialisation of indigenous people's property without them fairly benefiting
(see the *kiondo* case below)

A domestic innovation becomes an article of international trade.

Talk of commercialisation of indigenous peoples property and one innovation will be remembered by many Kenyan traders; the *Kiondo*- basket(traditional Kamba / Kikuyu community basket)

The origin of this innovation is not known but it is believed to have originated from either the Kamba or Kikuyu community several generations ago. The initial innovation was made using locally available fibres obtained from local biological resources. Skills of weaving and making the *kiondo* has been passed down from mothers to daughters over several generations and was mainly a part time occupation commanding only a small proportion of articles traded in by these communities. The innovation was a household item used for ferrying produce from farms to the homesteads and market places among other uses.

Effective penetration of this innovation into the local and international markets in the early 1980's stirred some interests both locally and internationally. This turned what was once a part time occupation for some women in these communities to almost a full time occupation and small cottage industries started coming up in response to the growing demand locally and internationally. This cultivated some interests among industrialists in the developed countries particularly Japan and Korea. Already these countries have mechanised the production and protected the innovation as a utility model. The impact of this has already been felt by local traders who had ventured into international trade with this innovation. In terms of price the industrially made outcompetes the handmade (selling at 3-5 US $ compared to 8-10 US $ for the handmade). This resulted in an outcry in the country about indigenous property being stolen. It dawned on the state that it was not possible to take

claims as according to the intellectual property regime the innovation was already in the public domain and not protected.

Over time this innovation has undergone several modifications from the original one with an open top and made using fibres extracted from the bark of certain locally available shrubs to one made of sisal fibres with more elaborate lid and suspendors made of leather. The innovation also comes in various colour patterns and designs adopted to meet the market requirements. Despite these new designs being eligible for protection under the Kenya Industrial Property act none of the innovators has ever come up to seek exclusive rights for the same. This can be attributed to lack of information or ignorance on the side of the innovators.

Several problems arise in the use of the patent regimes in force in protecting traditional knowledge. These problems include:

1. Inability to formulate requests that meet the stringent requirements of patentability. It is important to note that the request determines the scope of the rights. Expertise is required in formulation of the request for a strong, successful and enforceable patent. Drawing up such a request is not within the capacity of most indigenous people.
2. Financial inability .Most of the indigenous people cannot afford the high fees required by patent offices in addition to the cost that may be involved in enforcing the rights.
3. Lack of information. Certainly one has to be vigilant to be able to identify infringements. Most of the indigenous people live in rural and marginalised areas where modern forms of communication are relatively unavailable. This problem is also compounded by the level of ignorance and illiteracy.
4. Low level of documentation of traditional knowledge and innovations. Examiners in patent offices heavily depend on documented literature in ascertaining novelty of patent applications.
5. Most of the indigenous knowledge and innovation particularly in herbal medicine may be patentable if they are given modern technological touches. Unfortunately, to many of the indigenous people this technology is relatively unavailble. Screening and describing the active components of the herbal medicine in modern scientific terms makes them recognisable not only by the patent offices but also the society in general, health and pharmaceutical sectors.

Utility models

"Utility model means any form, configurations or dispositions of some elements of some appliance, utensil, tool, electrical and electronic circuitry, instrument, handicraft mechanism or other object or any part of the same allowing better functioning, use, or manufacture of the subject matter or that gives some utility, advantage, environmental benefit, saving or technical effect not available in Kenya before and includes micro- organisms or other self-replicable material, herbal as well as nutritional formulations which give new effects**."**

In the definition above and the provisions of the said act as regards registration of utility models an attempt was made to include under the present IPR system, innovations which despite deserving intellectual property rights can not be protected under the patents e.g.

herbal medicine. Usually these are regarded as lower forms of protection and the period term is shorter (five years in Kenya). The requirements for granting are less stringent hence requests under this category are not subjected to the rigorous examination and search as patents. Rights granted can also be traded in like those under patents.

Due to the basic similarities in procedure and requirements, the same problems as under the patents are experienced when granting utility model rights for indigenous innovations. During the formulation of the act it was presumed that all innovations could be disclosed in the same format as patentable inventions. This has proved not to be the case particularly with herbal medicine. The manner and form in which they occur does not fit within the system as provided.

Trade marks

"Trade mark is a mark used in relation to goods for the purpose of indicating a connection in the course of trade between the goods and some person having the right either as proprietor or as registered user to the mark".

In Kenya trade marks and service marks are registered under Trade Mark Act Cap 506, which is administered by Kenya Industrial Property Office. There are very many trade marks registered in this Office mainly from companies and multinationals. There are many products already in both local and international market produced by the local communities through use of traditional knowledge. Although these products are selling very well in the market none of them bears a trade mark. This could be attributed to the lack of information attached to a trade mark in connection in the trade or ignorance on the side of the local communities. A long time before the colonial era and even to date local communities e.g. the Kamba people use certain marks on their herds of cattle/goats/sheep to differentiate herds of cattle from different clans within the Kamba community.

Industrial Design

"An industrial design means- any composition of lines or colours or any three dimensional form, whether or not associated with lines or colours that gives a special appearance to a product of industry or handicraft and can serve as a pattern for a product of industry or handicraft"

There are many designs which have been developed in traditional knowledge of handcraft. These industrial designs can be protected under the current IPR regime. Most of the industrial designs are selling very well both in local and international markets. These includes:- wood and soft stone calving for various wild animals, birds and the local basket and marts by various local communities in this country. Unfortunately none of these designs are protected. This could be attributed to the general lack of information or ignorance on the side of the innovators.

Geographical indications

" Geographical indication in relation to goods or services means a description or presentation used to indicate the geographical origin, in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of goods or services are exclusively or essentially attributable to environment, including natural factors, human factors or both"

The current regime of the IPR systems in Africa including Kenya have not put in place the legal structure/instrument for protection of the geographical indications, despite the countries having quality exports e.g. coffee and tea in the world market. Under the local communities many products have penetrated the world market (e.g. *kiondo* -local basket and products from the local handcraft industry). This particular sector has offered many local people employment. These products are selling very well in the international market and earn alot of foreign money for this country although without any mark to indicate their geographical origin.

KIPO has however drafted Geographical Indications bill 2000, which is being distributed to various stakeholders for comments. We hope this bill will be introduced to parliament very soon.

Copy right

The particular Act is administered under the Attorney General Chambers and protects only the producer. This Act does not protect the folk songs which are community based produced. Some sections of the folk songs have been produced through use of modern equipments. The producers have registered these songs under their own copy right and local communities get nothing in return as a benefit arising from the use of their traditional song.

Trade Secrets

The herbalists maintain their knowledge in secret. At present there is no mechanism for protecting traditional knowledge and innovations in herbal medicines and they stand disadvantaged and particularly so because trade secret are not expressly provided for under the IPR regime presently in operation in Kenya. Before the colonial era the local communities used to recognize the their traditional knowledge, practices and innovations and members of their community who came up with innovations especially in the field of herbal medicine, were recognised and awarded a form of honour by the elders.

Plant variety protection

Kenya acceded to UPOV convention of 1978. In Kenya, Kenya Plant Health Inspection service (KEPHIS) is charged with registration of new plant varieties under Cap 326. Through traditional knowledge our local farmers/indigenous people have for a long time continued to use and build their knowledge in collecting, selecting and breeding traditional crop varieties that are suited to the ecological zones they occupy. These selected breeds

have always contained important traits such as drought resistance, pest resistance in addition to nutritional value. Most of the local farmers have little formal education and after having developed new varieties for a long time, they are not in a position to describe their varieties to meet the criteria of registration of new plant varieties i.e. the variety to be Distinct, Uniform and Stable. The local farmers have not applied for registration for their varieties and this has given the modern researchers for agricultural development an opportunity to continue to draw from these resources, "novel" genes to improve and enhance the performance of modern crop varieties which are registered under the ownership of the researcher and the local farmer does not benefit from the proceeds accruing therefrom.

It is important to note that the pharmaceutical industry, personal care and food industries are continually getting exclusive rights to exploit the innovations derived from the indigenous people. Having been left out of the mainstream of direct beneficiaries indigenous people continue to pay a price for the very products and processes they provided the basis of development. It should be realised that although most of the robust biotechnology, personal care products and pharmaceutical industries are located in the developed countries the highest proportion of the benefits accruing from utilisation of biological resources ends in the north. As a consequence the developing countries continue losing in terms of biodiversity and future potential markets.

It is important to note that KIPO having realised that there is lack of information on the importance of IPR system in the country, launched an outreach program to create awareness in the public on the vital role played by the IPR system in development of trade and industry. We have also established information and documentation center (IPDOC) which has got a lot of technological information. The program involves our officers going to visit industries, research institutes, universities, mass media and the informal sector to share with them the information we have on the IPR aspects. It also involves organising seminars and workshops with steakholders to share the information. This program has created a big impact in the public and this has already been witnessed by the large number of people already visiting our office for searches and other IPR related information.

Value and importance of traditional knowledge.

Despite having been marginalized and regarded as devilish, heathen and witchcraft during the colonial era, practice in traditional medicine has survived the test of time and proved its worth .It is believed that over 80% of the African people depend on biological resources and the traditional knowledge embodied in them to meet their health demands. This is particularly so with communities living in marginal areas where access to modern health facilities is limited and the western culture has not managed to totally disrupt the traditional culture and beliefs. In recent years Kenya has seen increased use of traditional medicine and consequent invasion of urban centres by herbalists. The increased use can be associated with increasing poverty, deterioration of health facilities and limitations in modern medicine in management of certain diseases. More often than not modern African man turn to traditional medicine when the conventional medicine fails or is out of reach and surprisingly to many it has proved to be an appropriate alternative

It is estimated that 20 to 25 % of human drugs produced in industrialised countries were derived from plants. A good proportion of these drugs are developed using leads provided by indigenous people. Traditional knowledge and innovations are not only important in pharmaceutical development but has also played a great role in agriculture, personal care products and biotechnology development.

Traditional methods of generating new knowledge and innovation.

Traditional methods of innovating and generating new knowledge are quite different from the modern science conventional methods. The traditional knowledge and innovations are usually cumulative and informal, more often being diffused into the general community without any commercial consideration. this is one reason why it is hard to assign private rights as advocated by the modern IPR systems.

Adding value to traditional Knowledge.

As we approach the second millennium Kenya's economy continue being under the burden of imported technologies for which hefty loyalties have to be paid annually; yet a very low proportion of it get effectively domesticated to contribute substantially to the advancement of the general technology status in the country. While this is happening a vast amount of traditional knowledge and innovation has not been given adequate recognition in the economic planning, policy and law regimes. The present and possible future contribution that can be made by traditional knowledge and innovations remain un-appreciated and particularly in the present process of industrialisation. It should be realised that some of the indigenous knowledge and innovation have turned out to be of great commercial importance to industries particularly those in developed countries.

Covering traditional knowledge and innovations with IPRs.

The present forms of IPRs do not adequately protect traditional knowledge against the onslaught of western cultural developments. Due to the continued sharing of the traditional knowledge over the generations, it is already considered to be in "public domain". Hence a good proportion of traditional knowledge may not be patentable. However all is not lost because the knowledge can be used to bar those who would attempt to obtain exclusive rights on innovations whose main component is the traditional/indigenous knowledge. Unfortunately indigenous people due to their disadvantaged position may not be able to use the present patent regimes this way but the state can make an inventory of this knowledge. This inventory can be used by the patent office as a searchable data base for use in the routine course of patent examination. Amendments can also be made on the patent laws to make them more sensitive to traditional/indigenous knowledge by putting it as a requirement that where an invention is derived from traditional knowledge, adequate disclosure of the source be made in the application. Further to this, the patents can be made registerable subject to deposition of a letter of consent from an authority recognised by the indigenous (where the knowledge of the community is the subject of patentability) or the individual innovators/ where the subject matter of an invention is derived from individual innovation.

One of the major issues that has never been effectively addressed is the extent of ownership of indigenous knowledge and innovations. There is no clear demarcation between what belongs to the general community, specific community, or individuals within the communities. Certainly for the herbalists treat herbal knowledge as personal property. However, some of the knowledge they possess is relatively available in the same form in the general community due to the older tradition of sharing knowledge. It is hard to determine how the benefits should be shared if there is no clarity in the ownership. The inventory as proposed above can be used in determination of individual rights and those of the general community.

It is also important to note that Organization of African Unity (OAU) has taken an initiative to address the issue of traditional knowledge. It has organized several workshops for all its members to discuss the same. There is already a draft legislation addressing the issues of traditional knowledge, farmers rights and benefit sharing which has already been distributed to all the members for comments.

Conclusion

There is urgent need to put in place legal structures as regards protection of traditional knowledge, practices and innovations, and also to create public awareness as regards the importance of the IPR systems among the local communities so that they can get benefits associated with the same above.

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