



the dti

Department:
Trade and Industry
REPUBLIC OF SOUTH AFRICA

The Protection of Indigenous Knowledge through the Intellectual Property System

A Policy Framework

Contents:

Introduction

Purpose of this document

Background to the IKS Policy

International practice in protecting IKS

National steps towards the protection of IKS

Problem statement: Use of intellectual property to protect indigenous knowledge

Objectives: What can be achieved with the Policy

Discussion: Various intellectual property tools in the protection of indigenous knowledge

Patents

Trademarks

Geographical Indications

Industrial Designs

Copyright

Contractual Arrangements

Trade Secrets

Civil and Common Law Principles: Unfair Competition

Defensive protection

Sui generis Protection

Recommendations and Conclusions

Country Review

1. INTRODUCTION

Purpose of this document

The Indigenous Knowledge Systems (IKS) Policy, adopted in November 2004, was the result of an interdepartmental effort to create a guide for the recognition, understanding, integration and promotion of South Africa's wealth of indigenous knowledge resources. One of the areas of action identified by the policy is the protection of indigenous knowledge, and the holders of such knowledge, against exploitation. This will also include ensuring that communities receive fair and sustained recognition and, where appropriate, financial remuneration for the use of this knowledge.

The purpose of this document is to present the findings and recommendations of **the dti** with regards the use of **intellectual property** as a tool for protecting indigenous knowledge systems. It is the framework for a proposed Protection of Indigenous Knowledge through Intellectual Property Policy, hereinafter referred to as the IP Policy for ease of differentiation.

This framework will describe how the various forms of the South African intellectual property system - trademarks, geographical indications, patents, designs and copyright - can be used to protect traditional knowledge systems. It also makes a business and economic case as to why there is a need to protect and commercialise issues pertaining to traditional knowledge systems. Finally, it makes conclusions and recommendations on how best to implement this protection, including the amendment of intellectual property legislation to bring it in line with the objectives of the IKS Policy and the contents of this latest policy framework.

Background to the IKS Policy

In 1999 the then Department of Arts, Culture, Science and Technology approached Cabinet to formulate a policy on indigenous knowledge systems. An interdepartmental task team embarked on what turned out to be a complex process of consultation and research which took a lot longer than anticipated. However, the result was a policy which encompassed a wide scope of actions and recommendations pertaining to indigenous knowledge systems, including, *inter alia*, integration of IK into the national education, research and development systems, proposed administration of IK systems, institutionalisation, funding and legislative imperatives.

The Indigenous Knowledge Systems Policy was adopted by Cabinet in November 2004. Since then, various departments have been tasked with developing policies and legislative amendments that will support the objectives of the IKS Policy.

International practice in protecting IKS

The use and exploitation of traditional knowledge by other nations has become a topic of discussion at many international forums. Developed and developing countries alike have engaged in debate and concluded agreements which include the protection of indigenous knowledge. Intergovernmental organisations such as UNESCO, WIPO, WTO, UNEP and UNCTAD have opened debates on the possible protection of indigenous knowledge, referred to in the Policy as traditional knowledge (TK), using intellectual property systems.

Led largely by debate from developing nations, UNESCO formulated the Convention on the Protection of the Diversity of Cultural Contents and Artistic Expressions and this has been adopted recently by the member states.

Unfortunately, negotiations at the WTO around amendments to the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) surrounding traditional knowledge have collapsed. Article 27(3)(b) of TRIPS empowers member states to consider protection of traditional knowledge using intellectual property systems. During discussions on the review of the TRIPS Agreement at Doha, Qatar, developing countries proposed amendment of article 27(3)(b) to cater for the protection of the use of traditional knowledge that leads to an invention. Developed nations are opposed to this, leading to the collapse of negotiations. WIPO has established an Intergovernmental Committee (IGC) to initiate discussion on the protection of traditional knowledge, genetic and biological resources and folklore using intellectual property systems. Although treaties that can protect these issues are under discussion, many developed nations are opposed to formulation of such treaties and negotiations are on the verge of collapse.

United Nations Environment Programme (UNEP), which is the custodian of the Convention on Biological Biodiversity (CBD), has requested WIPO, WTO and FAO to consider protection and benefiting of local communities that have contributed to an invention or intellectual property development. WIPO convened the ICG mentioned above and UNCTAD has voiced support, emphasising the economic value of traditional knowledge systems.

Regional organisations such as the Asia and Pacific and the African Union have started to issue treaties and conventions regarding the regulation of traditional knowledge. Member states of these regions are legislating accordingly.

The Protection of IKS locally

Against this international backdrop, and considering the systems and processes available locally, the IKS Policy identified that there are various means of protecting indigenous knowledge in the South African context. These would include the intellectual property system, databases, *sui generis* laws (laws of a special kind) and registers.

However, these systems fall under different departments and care must be taken to ensure that issues that are crosscutting in nature are dealt with in a cohesive manner. For example, genetic issues should be protected in terms of both the patent system and environmental legislation.

All participating departments agreed that each should initiate legislative amendments based on the IKS Policy. For example, **the dti** initiated amendments to the Patents Act, 1978, now the Patents Amendment Act, 2005 and DEAT initiated amendments to the Biodiversity legislation (Biodiversity Act, 2004).

the dti is proud of the fact that the Patents Amendment Act, 2005 is being used at the WTO and to a certain extent at WIPO as model legislation in this regard.

Although patents have been considered and adapted to the IKS Policy, **the dti** must now explore the appropriate use of remaining IP tools, namely trademarks, copyright, designs and geographical indications to protect and commercialise traditional knowledge.

This IP Policy framework therefore deals with the protection of traditional knowledge using the orthodox intellectual property system. It must however be pointed out that in many circumstances, the IP system is not the best vehicle for the protection of traditional knowledge, particularly if not adapted or used in conjunction with other mechanisms.

PROBLEM STATEMENT:

Use of Intellectual property to protect indigenous knowledge

Limitations of the IP system

There are essentially two main concerns with regard to the protection and commercialisation of traditional knowledge in South Africa using the intellectual property system:

The current intellectual property system allows individuals to protect their inventions and intellectual property rights, but does not allow communities to collectively protect their knowledge in all areas; and

In those areas where collective intellectual property registration is possible, communities are not exercising their rights.

As a result, in both South Africa and internationally, traditional knowledge is not generally protected using the intellectual property system. However, the intellectual property system has been protecting traditional knowledge using geographical indications in the area of wines and spirits exceedingly well.

Misappropriation of indigenous knowledge using the IP system

Even though the intellectual property system is limited, in the absence of its protection, other users are “poaching” or “misappropriating” indigenous or traditional knowledge under the auspices of intellectual property. In other words, they are using the IP system to register ownership of an idea without appreciating or benefiting the holders of any pertinent traditional knowledge.

The traditional knowledge holders are disadvantaged economically and socially without protection and the country is disadvantaged economically if no immediate protection is afforded. The pharmaceutical and agricultural industries are major contributors to the economy and if there is no protection of traditional knowledge, the locals and the country are the major losers.

Whilst the largest threat in this regard is from foreign sources, unfortunately, “poaching” of traditional knowledge also takes place at national level by local companies and research institutions.

International resistance

Internationally, developing countries and least developed countries support the use of intellectual property to protect traditional or indigenous knowledge. Developed countries, however, are not in favour for this approach, possibly due to the fact that multinational pharmaceutical companies from these countries are the greatest “poachers” of traditional knowledge from their developing counterparts. As mentioned above, many developed countries do not support treaties and debate which will lead to the protection of traditional knowledge at international forums such as WTO and WIPO. Some of them, including the United States are also not members of the Convention on Biological Biodiversity (CBD), which encourages the protection of traditional knowledge through the IP system.

Benefits of using IP to protect traditional knowledge

Various sectors would immediately benefit from the adoption of the IP Policy to protect traditional knowledge:

Culture

Laws of copyright, designs, trade mark and geographical indications may be used to protect indigenous culture. Designs unique to South Africa, for example, could be protected using the laws of design. There is a need for aggressive marketing of these products and there should be market access.

Pharmaceutical and chemical sectors

These sectors work closely with genetic, chemical and biotechnological resources in formulating inventions. Local communities are also involved and benefit-sharing arrangements may be entered into in terms of the Patents Amendment Act, 2005.

Agriculture

The agricultural sector also hinges on biological diversity. If indigenous knowledge is used in securing patents, protection and befitting of the local communities may take place under the law of patents. Geographical indications may be used to protect and commercialised names of both plants and animals that are peculiar to geographic areas, e.g. Nguni cattle.

Medical or health sector

Traditional medicines are being used as complementary medicines in the health sector. Traditional healers may use the laws of trade secrets or patents to protect and

commercialise this traditional knowledge. Benefit-sharing agreements would assist in this regard.

South Africa is rich in diversity and there is a need to update its laws, including the intellectual property laws, in order to protect this diversity. The most important reasons why TK should be protected at a commercial scale are to assimilate the TK holders into the mainstream of the economy through providing a fair environment for all role players.

Special concern:

Agricultural biodiversity is not catered for in the possible protection of traditional knowledge using the IP system. There is a need for the National Department of Agriculture to amend its legislation like the Plant Varieties Act to be in line with the CBD and Food and Agriculture Organisation (FAO) approaches. This means that TK associated with plant varieties should be protected using international treaties (e.g. UPOV). Equally, the Plant Varieties Act can be amended to complement both the Biodiversity Act and the Patents Amendment Act, 2005. This can be done without ratifying the ITPGR or UPOV 1991.

3. Objectives

What can be achieved by the IP Policy

The purpose of the Protection of Indigenous Knowledge through Intellectual Property Policy is to argue for the protection of traditional knowledge using the present system of intellectual property. Thus far, the IP has not been used to protect traditional knowledge but has in fact been used to usurp traditional knowledge, without any benefit to the knowledge holders.

Note:

While this policy demonstrates the possibilities of protecting traditional knowledge using the IP system, it does acknowledge that there are other systems that protect traditional knowledge very well, e.g. trade secret and *sui generis* laws that may be crafted under other departments.

The objectives of using the IP system to protect traditional knowledge would be:

3.1 To improve the livelihoods of traditional knowledge holders and communities

Indigenous peoples depend on traditional knowledge for their livelihoods and well-being and so they can manage and exploit their local ecosystems. Local communities also depend on traditional medicines for their primary health care. If traditional knowledge is protected and commercialised, individuals, communities and national economies will benefit.

3.2 To benefit national economies

Traditional products such as handcrafts, medicine, agricultural products and non-wood forest products (NWFP)¹ are traded locally and internationally and provide substantial benefits for the exporter country. Internationally, NWFP trade alone generates around US\$11 billion per year.

Traditional knowledge is also used as an input into industries such as pharmaceutical, botanical, cosmetics, agriculture and biological pesticides. The market value of plant-based medicines is in the hundreds of billions (US\$) per year. And the value added globally to rice yields by use of land races is estimated at US\$400 million per year. South Africa is rich in similar trends and it is up to us to quantify benefits for the individual, communities and national economy. For this reason alone, South Africa should proceed in protecting and commercialising traditional knowledge using the IP system.

¹ Examples of NWFP include products used as food and food additives (edible nuts, mushrooms, fruits, herbs, spices and condiments, aromatic plants, game), fibres (used in construction, furniture, clothing or utensils), resins, gums, and plant and animal products used for medicinal, cosmetic or cultural purposes.

3.3 To conserve the environment

Traditional farming methods by nature ensure the protection of the environment upon which they depend. Land races, rotation of crops and other methods not only protects the land, but in fact increases harvest yields.

3.4 To prevent bio-piracy

Bio-piracy refers to either:

the unauthorised extraction of biological resources and/or associated traditional knowledge (usually from developing countries); or

the patenting, without compensation, of “inventions” based on such knowledge or resources.

The failure to recognise and compensate for intellectual property contributions, past and present, of traditional communities is a form of intellectual property piracy.

3.5 To provide legal protection

In South Africa, as in other developing countries, there is no legal redress that addresses either the protection or commercialisation of traditional knowledge and no legal instruments that deal with collective ownership of traditional knowledge or benefiting traditional knowledge holders. As a result, issues of economic, social and socio-economic development cannot be addressed.

Approval of this policy should result in a review of IP legislation. There is also a need for **the dti** to play an advocacy role with a view to influencing other departments to effect similar legislative reviews in their areas of authority.

4. DISCUSSION:

Various intellectual property tools in the protection of indigenous knowledge

Each of the tools of intellectual property which may be used to protect traditional knowledge has different benefits and shortcomings. It is not enough to say that the IP system can protect traditional knowledge, rather each tool has been examined in terms of this unique set of new circumstances. The following gives a brief overview of the findings:

4.1 Patents

Nature:

A patent is a set of exclusive rights granted by the government to a person(s), usually with regard to an invention, for a fixed period of time. In South Africa, a patent's lifespan may range from fifteen to twenty years.

TK protection:

If an invention took place because using knowledge of local peoples, then the following must occur:

There must be a disclosure of the origin of indigenous genetic/biological resources;

There must be a disclosure of traditional knowledge;

There must be a prior informed consent of the indigenous peoples;

There must be benefit-sharing agreements; and

There must be co-ownership of the patents (where applicable).

Benefits / shortcomings

Patents are one of the best IP tools for protecting traditional knowledge as the scope for ownership and commercial sharing is great. The only significant shortcoming is the limited time frame, which does not allow for perpetual benefits to the knowledge holders.

Recommendations

There is no need for legislative changes as Parliament has already passed the Patents Amendment Act, 2005 in order to cater for the protection of traditional knowledge.

It is incumbent on South Africa to influence other developing countries to also legislate in this regard. If China, the African and Asian regions legislate in this area, international forums such as WIPO will be forced to formulate a treaty in this regard. These regions are the richest in biodiversity and any dealing with them should be in their terms.

4.2 Trademarks

Nature:

A trademark is a brand name, a slogan or a logo used to distinguish goods and services of one trader from another. The lifespan of a trademark is ten years and can be renewed indefinitely.

Benefits / shortcomings

Trademarks may well be used to protect culturally recognised names or symbols, since the lifespan of cultural names or symbols is perpetual in nature and trademark law can accommodate this scenario.

Certification marks (a form of trademark) can be used to certify that a product is made in a manner which has certain characteristics which are as a result of the efforts of an indigenous group, e.g. the process of growing and processing Rooibos tea.

Collective marks are owned through associations or authorities that are mostly semi-government institutions and permission must be obtained to use such a mark. Collective marks are used effectively in the wine and spirits industries of South Africa, Chile, Peru and

France. Other countries such as Greece and Bulgaria are using collective marks in other agricultural products.

Recommendations

Government should encourage the Rooibos industry to trade mark Rooibos tea and market it accordingly. Rooibos tea brings a lot of revenue to small farmers via exports.

4.3 Geographical Indications (GIs)

Nature:

A geographical indication is a sign used on goods that have a specific geographical origin and process qualities or reputations that are due to their place of origin. If a connection between the goods and a geographical area can be established, a GI can be claimed to distinguish the goods and the protection will be perpetual. A collective trade mark may sometimes qualify to be a GI.

TK protection:

The examples of Rooibos tea and wines given above are illustrative of products which can be protected using geographical indications. Internationally, there are numerous examples of crafts and other traditional knowledge that has been protected by GIs, including Talavera de Puebla (pottery hand-made in the town of Puebla, Mexico), Jablonec Crystal Ware \Jablonec Jewellery (from the region of Jablonec and Nison, Czech Republic) and Modranska Majolica (hand-painted pottery made in the town of Modra, Slovakia).

Benefits / shortcomings:

Unauthorised parties may not use GIs if such use is likely to mislead the public or consumers as to the true origin of the product. Local communities can ensure that their GIs do not become generic by registering them and promoting their use in the public domain. Again, Rooibos tea is a good example of a GI that is fast becoming generic due to a lack of protection as a GI or a collective mark.

A country does not have to follow formalities in declaring certain names to be GIs. This can be done unilaterally without consulting with trading partners. Many countries have compiled

registers of products that they deem to qualify as GIs and are commercially marketing them successfully. In bilateral trade agreements, the countries request that these products should be recognised as GIs. For example, South Africa was asked by France to renounce the use of the name “champagne” with reference to sparkling wines, and by Peru not to allow the use of the word “tequila” in liquor products. South Africa has already conceded to France’s request, but has not done so for Peru.

The salient point is that countries (or regional organisations) do not have to wait for an international dispensation. At the WTO level, there is no agreement to have an international register of GIs outside the realm of wines and spirits.

Recommendations:

South Africa should not be afraid to have a legislation that protects GIs and should legislate for the protection of GIs and appellation of origin. Collective and Certification marks under the Trade Marks Act are just starting points. GIs legislation should apply in all areas of products if they comply with the definition. Rooibos and honey bush tea are two excellent examples.

In this regard, South Africa can draw from international instruments such as:

- The Paris Convention for the Protection of Industrial Property, 1883;
- Madrid Agreement for the Repression of False and Deceptive Indications of Source on Goods;
- Lisbon Agreement for the Protection of Appellations of Origin; and
- Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS),

4.4 Industrial Designs

Nature:

Design law protects registered designs, either aesthetic or functional, based on the shape, form, appearance, pattern, ornamentation and configuration of a product or article.

Protection is afforded to aesthetic designs for a period of 15 years, and to functional designs for 10 years.

TK Protection:

Indigenous designs could be protected using industrial design law. However, there are certain factors that should be taken into account if this protection and commercialisation has to take place in a fair manner, as outlined in recommendations below.

Recommendations:

It is recommended that design legislation be adapted to protect TK, with the following in mind:

- Traditional literary and artistic productions must be protected against unauthorised reproduction, adaptation, distribution and performance, including insulting derogating and/or culturally and spiritually offensive use.
- Handicrafts and other cultural goods should be protected using, for example, their “style” (GI, certification and collective marks can also be used). The recent UNESCO convention on the protection of cultural goods is illustrative of this point.
- Prevention of false and misleading claims as to the authenticity or originality and failure to acknowledge source (unfair competition and GI).
- Defensive protection of traditional signs and symbols. A community’s secret or sacred place may be protected defensively. The community may also register a symbol or name as a trade mark or design so as to prevent use by third parties. This is called defensive registration.
- An Advisory Board or authority should be established to advise the Registrar regarding traditional names or symbols in order to prevent unauthorised registration. Traditional communities could seek representation in the Advisory Board, based on their area of expertise.

4.5 Copyright

Nature:

A copyright is an exclusive right given by law for a term of years to an author, designer, etc. for his/her original work. The Copyright Act protects certain classes or categories of original works, including literary, broadcast, artistic, musical etc. For a work to be eligible for copyright, it must be written down, recorded or otherwise reduced to material form. The lifespan of copyright depends on the type of work protected but is usually in the order of 50 years.

Benefits / shortcomings:

Copyright protects only the *expression* of an idea. If a community collectively owns the copyright, there is no limited lifespan of a “copyright owner”. Defensive protection, unfair competition, and protection of confidential information may be used to protect copyright of a local community. The holders would allow the right to make reproductions via licensing and as such could obtain continuous payment of royalties. Communities could establish collecting societies or trusts that would administer their collective rights and therefore negotiate and receive royalties for sharing.

Recommendations:

Licensing of traditional knowledge would be more favourable than the deed of sale that is currently under the Copyright Act. Licensing would result in the continuous payment of royalties as opposed to a once-off payment that would result from the sale of the intellectual property. In this regard there is a need to amend the Copyright Act, 1978.

Lessons can be learned from New Zealand and Australia, which are both good examples of countries whose courts use the common law to protect traditional knowledge.

4.6 Contractual Arrangements

Contractual agreements can also be used to protect the traditional knowledge of indigenous peoples. Courts in South Africa, New Zealand and Australia have on a number of occasions protected traditional knowledge through the interpretation of contracts.

Benefits / shortcomings:

Contractual agreements can be set up to allow for benefit sharing. In South Africa an example of this is the agreement between the Khoi and San communities and the Council for Scientific and Industrial Research (CSIR) concerning patents around the patents derived from the hoodia plant using the traditional knowledge of the Khoi and Sans people.

Artists or owners of folklores may license their work to third parties for exploitation and thereafter receive royalties on agreed terms. This is how the saga around the ownership of the song Mbube (folklore of the Xhosa tribe) should have been resolved.

Recommendations:

Developed countries are in favour of traditional knowledge protection through contractual arrangements instead of legislating it through the IP system. However, developing countries, where most of the unprotected traditional knowledge is vested, are of a different view. In South Africa, contractual agreements should not be the primary tool for protecting traditional knowledge and should be applied within the context of a protective IP legislation.

4.7 Trade Secret

Nature:

Trade secret has been used from time immemorial to protect traditional knowledge and is in fact the traditional means of passing down secret knowledge. Trade secret is a practice which is kept secure within a business or similar entity in order to give an advantage over competition. The recipe for popular products such as Coca-Cola are protected using trade secret.

Benefits / shortcomings:

The disadvantage for using trade secret as a method of protection is that if third parties innocently (by chance) discover the knowledge and its use, the secrecy is no longer in force. However if an internal or an associate person that have a duty to keep the information secret but such a person reveals such confidential information, the trade secret is protected and the knowledge holder has legal recourse.

Recommendations:

Trade secret is perpetual if not discovered innocently by a third party and may thus be the best method of protecting traditional knowledge under most circumstances. However, traditional knowledge holders should be encouraged to use trade secret with caution.

Note:

Traditional healers use mainly trade secret to protect their methods. Health authorities that wish to protect the IP of traditional healers should be careful not to demand disclosure of secrets during clinical trials on traditional medicines.

4.8 Civil and Common Law Principles: Unfair Competition

The principle of unfair competition may be used to protect traditional knowledge. In this regard, article 10 of the Paris Convention is applicable and provides that member states ensure that there is an effective protection against unfair competition in their jurisdictions. Any act of competition contrary to honest practices in commercial matters constitutes an unfair competition. The following in particular are prohibited:

All acts aimed at creating confusion with the establishment, the goods, or the industrial or commercial activities of the competitor.

False allegations in the course of trade aimed at discrediting the competitor.

In terms of traditional knowledge, examples of false and misleading claims would be selling a souvenir item carrying a label falsely indicating that it is “authentic,” “indigenous made” or originates from a particular community.

Recommendations:

Unfair competition law, trade practices and labelling laws could be helpful in protecting traditional knowledge from exploitation in this way. Geographical indications, collective marks and certification marks as discussed above may also be helpful. The Rooibos tea example can easily be protected using these principles.

Defensive Protection

Defensive protection is a means of preventing third parties from gaining or maintaining illegitimate intellectual property rights, but does not stop others from actively using or exploiting traditional knowledge.

For example, Shona descendants may prevent the registration of the Mapungubwe rhino and its derivatives as a trademark, but cannot prevent others from using the symbols. The Registrar of trademarks may also protect indigenous names by refusing registration of such indigenous names as trademarks, e.g. “vuvuzela”, “mhalamhala”, “phalaphala”, and “phalafala.”

The main focus of defensive protection has been in the patent system where an application is assessed against the so called “prior art”, which is the defined body of knowledge that is considered relevant to the validity of a patent.

Recommendations:

There will be both legal and practical considerations in protecting traditional knowledge by means of defensive protection:

Legally, steps must be taken to ensure that the criteria defining relevant prior art apply to traditional knowledge. This would also mean ensuring that orally disclosed information is taken into account since much traditional knowledge is transmitted orally.

Practically, it will be necessary to ensure that traditional knowledge is actually available and accessible to search authorities and patent examiners, and will likely be found in a search for relevant prior art.

The development implications of this issue are that, as the reach of intellectual property extends to the indigenous and local communities, their traditional knowledge will constitute an increasingly relevant body of prior art, the effective identification of which will be increasingly important for the functioning of the IP system. Creation of databases and registers of this knowledge may be helpful.

This will of course mean disclosure to the registers and possible failure to protect the information contained in registers and databases is a cause for concern to owners of the knowledge. The knowledge should not be in the “public domain” and any user should pay a fee and the owners of the knowledge should benefit. Countries such as India and Venezuela have created such registers and toolkits but unintended consequences have resulted. The communities who were supposed to be benefiting are not benefiting at all.

4.10 *Sui generis* Protection

Nature:

Sui generis is Latin for "of its own kind," and is used to describe something that is unique or different. What makes an IP system *sui generis* is the modification of some of its features so as to properly accommodate the special characteristics of its subject matter (traditional knowledge) and the specific policy needs which led to the establishment of a distinct system.

TK Protection:

In an effort to extend protection to traditional knowledge, various countries have adapted existing IP systems to the needs of traditional knowledge holders through *sui generis* measures. These take different forms. For example the Chinese have a team of patent examiners specialising in traditional Chinese medicine.

Several countries have adopted *sui generis* laws for traditional knowledge protection. These include Peru, Costa Rica, Portugal and Thailand. When policy makers seek to develop a *sui generis* system, the following key issues must be considered:

What is the policy objective of the protection?

What subject matter should be protected?

What criteria should the subject matter meet to be protected?

Who are the beneficiaries of the protection?

What are the rights?

How are the rights acquired?

How are the rights administered and enforced?

How are the rights lost or how do they expire?¹

¹ www.wipo.org , Intellectual Property and Traditional Knowledge, Book 2

5. RECOMMENDATIONS AND CONCLUSIONS

It is the strong recommendation of **the dti's** task team that South Africa implement this Protection of Indigenous Knowledge through Intellectual Property Policy and review relevant legislation in order to protect its rich bio-diversity. If the proposed recommendations are implemented, growth and development will be spurred on in numerous areas and sectors, including:

Health

Pharmaceuticals

Biotechnology

Chemical

Agriculture

Environment

Cultural

Research and development

Innovation

There is a need for South Africa to be guided by foreign, regional and international best practices, but there is no need for us to wait for the evolution of these practices. The country must implement this Policy to use intellectual property to protect indigenous knowledge, including the review of relevant legislation without delay.

This IP Policy is not the same as the IKS Policy of 2004 but rather is will be important in complementing the IKS Policy of 2004 and there should be a co-coordinated approach by all government tiers its implementation is to be a success.

South Africa should also influence the regional and international regimes in this area. It is not difficult to conclude that there are certain areas where the IP system can best protect TK-based innovations.

Overall Recommendations

In view of the above **the dti** recommends that South Africa should:

Embark on a legislative review based on the IP Policy deliberations;

Have a co-coordinated (departmental) approach when legislating for the protection of traditional knowledge;

Influence member states of the regional trading blocks such as SACU, SADC and others in legislating for the protection and commercialisation of traditional knowledge;

Adopt the IP Policy approach when it conducts trade negotiations and cultural relationship;

Not wait for international solutions in this regard;

Work closely with UNCTAD, relating to the Biotrade Initiative;

Adopt the CBD's approach (see section 6.1), that biodiversity and genetic resources should fall under the sovereignty of government;

Establish a dedicated team to handle crosscutting issues in this area (nationally, regionally and internationally);

Approach the issue of traditional knowledge holistically and evenly, for example not promoting genetic issues at the expense of cultural issues;

Build appropriate capacity for implementing the IP Policy and legislation, including developing negotiation skills of communities, formation of development trusts, establishing national authorities and collecting societies, etc; and

Do a benefit analysis of the traditional knowledge "industry".

Specific sub-recommendations

South Africa should adopt the approach of the Peru Project (see section 6.3) in conducting intellectual property law reviews, negotiating trade agreements and conducting regional and international negotiations.

South Africa should accede to the ITPGRFA (see section 6.1) and related treaties. The Plant Varieties Act and related legislation should be amended accordingly, towards which **the dti** will play an advocacy role.

Awareness and advocacy programmes of the Policy must be put in place.

Costing of the policy and implementing legislation

No studies on benefits have as yet been conducted in South Africa, but UNCTAD studies can be taken as conclusive in that there are quantifiable benefits associated with traditional knowledge. The benefits to be derived from the implementation of the IP Policy and supporting legislation should outweigh the costs related to the enforcement thereof.

The Policy will also necessitate review of legislation in, *inter alia*, IP, agriculture, environment, health, water and forestry.

Costs benefit analysis of the TK-related industry should be conducted but this should not delay the implementation of the Policy and allied legislation.

Capacity in relation to implementation of the Policy

Capacity can be built around the implementation of the IP Policy and supporting legislation. As a start, cross-functional departmental teams should be formed to monitor and evaluate the effectiveness of the implementation. Capacity-building should then be focused on the following areas:

Establishment of national authorities in relevant departments, e.g. well staffed IP Office, National Biodiversity Office, development trust funds, community trust funds and collecting societies for cultural expressions;

Training of personnel in implementing agencies;

Training of communities to participate in decision-making regarding traditional knowledge; and

Establishment of enforcement agents for the IP Policy and supporting legislation.

Regional formations at SACU/SADC/IBSA may enhance capacity on enforcement of the Policy and legislation.

Effective enforcement of TK policies and legislation will be evolutionary as countries are not yet united on the recognition of traditional knowledge. Developing countries and least developed countries should make an effort to succeed on enforcement of these policies and legislation as commercialisation of traditional knowledge could be the backbone of their economies.

Education and awareness among the public will also assist in effective implementation of the traditional knowledge policies and legislation.

Implementation Strategy

the dti will develop an implementation strategy for the IP Policy including, *inter alia*:

Employing effective communication, such as conducting seminars and workshops to various stakeholders; publishing the Policy in the Government Gazette, Government and **the dti** websites;

Employing advocacy of the Policy at national, regional and international levels; and
Effective legislative review.