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TOWARDS A HARMONISED PROTECTION OF INDIGENOUS KNOWLEDGE SYSTEMS (IKS) IN THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC): ONE STEP AT A TIME

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Abstract:

This article explores the need for a policy, regional dialogue and cooperation on the protection of IKS in the Southern African Development Community (SADC). Since 2002 the SADC countries have held annual SADC programmes in the form of workshops on IKS policy development and cooperation. Steady progress has been recorded with many SADC countries now working on their country specific IKS policies that will inform a broader SADC policy. Having the most advanced policy and legal instruments on IKS, South Africa is playing a leading role in assisting other SADC countries to come up with their own IKS policies. Through its Advocacy and Policy Development Directorate, South Africa's main focus is on the development of legislation and policy both at national and regional levels. Thus, the development of a regional policy on the protection of IK and IKS is pivotal for a harmonised approach to the protection of IKS since indigenous communities on the country's borders often share common IK. A harmonised approach will also prevent exploitation by one country of IK gathered in another country. The article will explore the nature and scope of the proposed harmonisation and argues that the conclusion of a regional policy on IKS is long overdue. It recommends that SADC takes the lead with the support of South Africa in developing a robust regional IKS policy. This will entrench a more participatory approach where IKS protection should be seen as part of a broader system of governance from local to national, regional and international levels. Reference will be made to other regions that have made significant strides in the protection of IKS. The role of international structures dealing with intellectual property like World Intellectual Property Organisation (WIPO) will also be referred to since the regional policy should not be in conflict with international treaties where SADC members are signatories.

Key words

Indigenous knowledge, SADC, policy, protection of IKS, harmonisation, law

Introduction

The Southern African Development Community (SADC) has been guided by the desire to establish a regional integration bloc to link up member states' economies and political aspirations (Draper & Kalaba 2006). The bloc was initially established in 1980 as the Southern African Coordination Conference [SADCC] (Takirambudde 1999). The grouping wanted not only to reduce economic dependence on the then apartheid South Africa (Hancock 2010), but also to forge economic links for the creation of a genuine and equitable regional integration, and also mobilise resources to promote interstate and regional policies (Ahmed 2008). Thus, the idea of collective self reliance remains a cornerstone to integration efforts in SADC.

The SADC Treaty and its 23 protocols present economic integration as a way of achieving economic growth, self-sustaining development, as well as management and sustainable utilisation of natural resources (Article 5.1 SADC Treaty). Most of the indigenous knowledge systems (IKS) relate to the use of natural resources. Some of these resources are in many places being shared across borders. The protection of indigenous knowledge (IK) is therefore essential for communities in the SADC region where IK plays an important role in the economic and social life of the people. The terms 'IKS' and 'IK' will be used interchangeably in this article. The countries' borders are the creation of colonialism and in many instances they continue to hinder efforts of re-establishing communal ties that existed from time immemorial before colonialism.

The existence of these commonalities demonstrates the region's quest for collective stability and sustainable development, all of which can be realised through economic regional integration (Chauvin & Gaulier 2002).

The SADC IKS policy framework is therefore guided by the desire to mobilise resources to help promote the implementation of national, interstate and regional policies (Bhagwati 2008). There is a need to place value on IKS to achieve social and economic development goals such as sustainable agriculture, affordable and appropriate public health care systems, proper housing for all, and conservation of biodiversity. The writing of this article comes at a time when there is unprecedented debate on the protection of IKS using the intellectual property rights system, both at regional and international levels. According to Krugmann (2001), the preservation of traditional knowledge has become more important to the young generation.

Background

How far have SADC states gone in preserving IK in the region? IK is gradually disappearing (Ngulube, Masuku & Sigauke 2011:264). Since 2002 the SADC countries have held annual SADC programmes in the form of workshops on IKS policy development and cooperation. The perspectives that emerge from the discussions at the workshops, and the light thrown on how to address issues dealing with the institutional and policy aspects of protecting IKS aim to help national, regional and international agencies in designing and implementing their policy activities (Report of the second SADC workshop on IKS policy development and regional cooperation – 2007). Since then, steady progress has been recorded with many SADC countries now working on their country specific IKS policies that will contribute to a broader SADC policy. There is a need to ensure that IK preservation strategies are effective and tailor made for each society from which such knowledge is tapped (Ngulube, Masuku & Sigauke 2011:264). This development is also aided by the fact that IKS has been placed on the international agenda and its entitlement to protection against misappropriation has been recognised.

Various methods of protection have been proposed with no clear choice that meets the desired results. For this reason, a regional approach to IKS protection in SADC is long overdue. On the international front South Africa and other SADC member states have consistently been urging international forums such as the Intergovernmental Committee (IGC) on protection of traditional knowledge/traditional expression of folklore and genetic resources, Conference of Parties (COP), or Trade Related Aspects on Intellectual Property Rights (TRIPS) about the critical importance of IKS. These workshops offer valuable opportunities to bolster that campaign.

Defining IKS

The value of IK is growing (Anyira, Onoriode & Nwabueze 2010:1 in Ngulube, Masuku & Sigauke 2011). A universally accepted definition for IKS has not been found (Saurombe 2009). This is because IK may be perceived very differently by indigenous communities, governments, lawyers and international organisations. There is a need to appreciate the complex nature of the subject and employ the best definition that suits them (Ngulube, Masuku & Sigauke 2011). For the purposes of this article, a working definition from World Intellectual Property Organisation (WIPO) will be employed:

The term IKS or traditional knowledge refers to the content or substance of knowledge resulting from intellectual activity in a traditional context, and includes the know-how, skills, innovations, practices and learning that form part of traditional knowledge systems

and knowledge embodying traditional lifestyles of indigenous and local communities, or contained in codified knowledge systems passed between generations. It is not limited to any specific technical field and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources.

IK as a concept has also been referred to using a variety of names such as “indigenous knowledge” and “local knowledge” (Ngulube, Masuku & Sigauke 2011:264). Langill’s (1999:1) view of IK is relevant to SADC in that it is seen as “cultural knowledge in its broadest sense, including all of the social, political, economic and spiritual aspects of the local way of life”. Such knowledge covers contents and contexts such as agriculture, architecture, engineering, mathematics, governance and other social systems and activities, medicinal and indigenous plant varieties, and so forth (Onwu & Mosimege 2004). IK refers to the knowledge of indigenous peoples as well as any other defined community (Warren, 1992). Indigenous knowledge is generally transmitted across generations by an oral tradition and is an aspect of every human community (Puffer 1994:20).

The SADC IKS policy framework envisages the participation of governments, public and private institutions, civil society and local communities in the member states in the protection of IKS in SADC. The annual IKS SADC workshops are being used to assess the status of member countries’ progress on IKS policy as well as to initiate the process of developing a regional framework for the protection of IKS. The workshops also provide an appropriate forum for countries to jointly review their IKS experiences as well as plan future actions through a revitalised network of governments and other institutions.

The specific objectives of the IKS workshops are:

- to conduct an audit of IKS policy developments in the region;
- to map out the way forward in the harmonisation of the region’s policy framework within defined time frames; and
- to consolidate the SADC position on the Intergovernmental Committee on Traditional Knowledge, Cultural Expression of Folklore and Genetic Resources towards an international binding instrument.

The discussion will now focus on country specific IKS policy development and protection. This analysis is based on the country reports given at the last SADC IKS policy workshop held in Windhoek, Namibia in 2011. Some member states were not represented at the Windhoek workshop and their input is missing. However, this will not discredit the status of IK policy formulation in SADC since most of the experiences reflected in the following reports are representative of the regional status. The next SADC IKS policy workshop was being planned for Botswana at the time of finalising this article.

South Africa

The South African IKS protection mechanisms will be discussed in more detail compared to other SADC member states because South Africa is more advanced in that regard. In 2004 the Department of Science and Technology (DST) in South Africa finalised a national Indigenous Knowledge Systems (IKS) policy. In the same year the policy was approved by Cabinet heralding a significant breakthrough in the development, promotion and protection of IKS in South Africa. To date, South Africa’s commitment in recognising the undisputable wealth of IK that survived the past centuries of repression is validated by numerous programmes being implemented by various departments in response to the adoption of this policy.

The South African IKS plan has received international acclaim and has been regarded as a pace setter in the protection of IKS. It was tabled as a World Intellectual Rights Property (WIPO) working document at the ninth Intergovernmental Committee (IGC) on traditional knowledge, expression of folklore and genetic resources in Geneva. Under this policy framework, the Department of Science and Technology in South Africa established the National Indigenous Knowledge Systems Office (NIKSO) to coordinate government's efforts on IKS.

NIKSO has overseen the development of a hardware multimedia recording system to capture synchro-textual documentation such as the registration of IK holders, interviews and satellite information linkages. A number of IK centres have been established at local level and are being used as vehicles for capturing IK wealth located within various communities. In addition, IK centres have been established at a number of universities in South Africa. This initiative has been cemented by the establishment of IKS research Chairs based within higher education institutions (HEIs). NIKSO and the National Research Foundation (NRF) have established Chairs in the following priority areas: traditional medicines, knowledge studies and indigenous food security. The objectives of the IKS research Chairs are to increase the human capital required to do research and develop skills in IKS in various academic fields including chemistry, ethno-mathematics and farming, among others. These IKS research Chairs are perceived as one of the ways in which DST can mainstream IKS as a science and address the question of the shortage of scientists in this field. Furthermore, the IKS research Chairs are contributing towards the positioning of IKS within the National Systems of Innovation (NSI). Through these initiatives, the Department of Science and Technology is creating an enabling environment for the participation of local communities in research and development work. Cooperation of holders and practitioners of IKS with the Department encouraged the move to progress towards an overall protection of this knowledge.

In summary NIKSO's priorities are as follows:

- Wealth generation/poverty reduction through science and innovation
- Skills development and job creations
- HIV/AIDS (Search for traditional medicines' contributions to fighting the scourge of HIV/AIDS)
- National research and development strategy
- Contribution to the knowledge society through knowledge development and management
- Cooperative governance
- Regional cooperation on IKS policy development.

The DST's collaboration with other departments ensures that all stake holders, for example traditional leaders, play a meaningful role in the protection and promotion of IKS, the conservation, propagation and uses of medicinal plants, safeguarding the intellectual property rights of indigenous knowledge holders, access and benefit sharing.

Swaziland

There are no coordinated efforts of running IKS in Swaziland; only individual efforts can be cited. There is neither documentation nor a recording system in place for IKS. The statutory instrument for research into traditional medicines remains in draft format and the establishment of an association for traditional healers and a herbarium at the University of Swaziland has not seen the light of day. In short, Swaziland faces challenges which include the following: public

neglect of own practices, there is no unit to coordinate IKS, no policy on science and technology and there are too many policy initiatives that result in reduced effectiveness.

Zimbabwe

Zimbabwe's economy is predominantly agro-based with at least 80% of the country's population living in rural areas. Most of those rural areas have limited access to "Western style civilisation", making IKS the main driver of rural economies. In Zimbabwe, IKS is applied in agriculture, health, industry and the environment and is viewed as complimentary and not antagonistic to "Western style science, technology and innovation". However, Zimbabwe still lacks a comprehensive IKS policy, and legal and institutional frameworks to coordinate the process. Even archivists do not seem to be seriously concerned with preserving IK (Ngulube, Masuku & Sigauke 2011:261) Some pockets of coordinated efforts exist in the agriculture and medicine fraternity. In agriculture the focus is on effective exploitation and protection, in medicine the thrust is on recognising, validating, mainstreaming and protection of IK, while in environment there is a preoccupation with bio-piracy and protection. There is ongoing work on testing for the efficacy and safety of traditional medicine. The Ministry of Environment and Tourism is working with stakeholders to document traditional knowledge associated with biodiversity. Some universities and research institutions are engaging IKS in its various formats, but these efforts are not well coordinated.

Malawi

Malawi has made considerable strides pertaining to IKS as it can be noticed from a number of initiatives that were formulated. The main initiatives are carried out under promotion, protection and development of IKS. Under promotion, they have made some major strides by scouting for grassroots innovations and traditional knowledge, documenting innovations such as salt extraction and processing, storage techniques for sweet potatoes, processing of cassava and maize flour, and innovations unveiled through the Innovation for Development Association (IDESIA) project. Other steps taken include validation studies of human, livestock and crop protection remedies after obtaining first hand information from communities. Malawi has ratified a number of international conventions like the CBD – signed on 15 June 1992; ratified on 28 July 1994; policy and legislation on the Environmental Management Act (1996). They have in place a Draft Bill on Access and Benefit Sharing of Genetic Resources (2006). Malawi has also formulated procedures and guidelines for access and collection of genetic resources for conducting research. Under protection, Malawi formulated Material Transfer Agreements (MTA) which defines provider and recipient institutions. However, the Agreements do not recognise individuals as providers or recipients. The Agreements also require prior informed consent from the community/communities concerned. In addition, the Agreements are specific for use on such issues as traditional knowledge and collections on customary lands. Under development, Malawi has strategies laid down in the national Science and Technology Policy which highlights IKS areas aimed at conducting studies to identify, isolate and document the indigenous knowledge; promoting training in IKS; promoting IKS with commercialisation potential; and establishing and promoting incentives that enhance the generation and utilisation of IK technologies.

Malawi has finalised the formation of a traditional healers' board; development of policy on traditional medicine; development of a code of ethics for traditional medicine practitioners and the production of a database. In addition, several institutions have taken part in the development and promotion of IKS – University of Malawi, Museums of Malawi, Malawi Library Association (MALA), National Archives, Malawi Traditional Healers Umbrella Organisation (MTHUO),

Traditional Healers Association, Department of Environmental Affairs, and the Ministry of Health.

Namibia

Namibia documents the country's Vision 2030 which addresses issues of IKS. They have formed the Traditional Healers Association of Namibia to deal with herbal medicine practices and applications. Additionally, the National Culture and Heritage Council of Namibia deals with IKS and folklore. Namibia has a National Botanical Research Institute database on Namibian plants. They have a database that holds written stories and practices IKS at the National Museum. They also have a digitalised archive system of the National Library of Namibia. Namibia is in the process of developing an IKS policy (Cheikhoussef *et al.*, 2011). In fact, IKS is one of the flagship programmes suggested in the National Science, Technology and Innovation Country Plan. As such, a working group on IKS has been established. Namibia would like to document IKS in their various categories, to speed up the consultation and dialogue regarding IKS National Policy Development and to establish more networks through cooperation agreement on Science, Technology and Innovation as well as integrating IKS into education curricula.

Mauritius

Mauritius does not have an indigenous population but has a dynamic IKS that has evolved with time as influenced by a multitude of interactions with other knowledge systems and cultures. The areas included in IKS coverage include agriculture, arts and culture, and use of local fauna, flora and other available natural resources. There is a regeneration of interest on IKS in Mauritius with the emergence of several studies on the local flora in medicinal plants. Research is being carried out in (i) perfume-making (ii) biomedical and bio-pharmaceutics and (iii) small scale medical treatment and massages using indigenous ingredients and expertise is becoming increasingly popular in several high end beach resorts. There is not much progress with regard to institutionalisation, infrastructure and legal framework in IKS. There were many separate initiatives at grassroots level. Therefore there is a need to better formalise and overarch a SADC policy on IKS, backed by specific bilateral collaborations, as guiding overarching framework.

Zambia

Zambian communities have used IKS as a cornerstone for their survival from time immemorial. This is in the area of medical and edible indigenous plants, management of local animals and farming systems for their nutrition. IKS is used in the prospecting and processing of various minerals including soda and traditional salt. It is in this context that IKS has been recognised as an important social and economic asset since it plays important roles in critical areas of sustainable livelihoods and food security, agriculture development, tourism and in the creation of pharmaceutical products. The direct or indirect use and application of IKS in various ways is common although its widespread use has been affected by lack of awareness education, appreciation of values and benefits, marketing and appropriate promotional policies. Work is continuing on ways of seeking to protect IKS under the intellectual property system, but there is no relevant legislation. The University of Zambia and the Zambia Agricultural Research Institute are conducting some work in the preservation of those resources. In the past, Zambia has hosted the Regional SADC Plant Genetic Resources Centre (SPGRC), which was carrying out research in genetic resources and worked in collaboration with local research and development institutions; government departments and agencies.

A number of challenges around the absence of IKS protection include poor recognition of IKS as contributing to sustainable development; commercial exploitation of these IP assets without fair and equitable sharing of benefits; poor appreciation of Indigenous and traditional innovations; under exploitation of benefits inherent in these IP assets; and difficulties of incorporating these IP assets into National Development Plans. The policy on IKS is in draft form and is awaiting finalisation before being submitted to the Cabinet Office for adoption by government.

Seychelles

The preservation and protection of IKS falls mainly under the responsibility of the Ministry of the Arts, Culture and Sports. The National Heritage Research Section (NHRS), which falls under this particular Ministry, consists of a unit called the Oral Tradition and Anthropology Unit, which works directly with the intangible aspects of Seychelles' culture which includes knowledge systems. Its work involves the researching and documenting of anything to do with that country's tradition. The Cultural Property Unit, which also falls under the NHRS, was also directly responsible for the safeguarding of traditional knowledge in all its aspects, making sure that nothing from Seychelles was taken as the property of another country. SADC will have to adapt this provision in its regional policy on IKS. It worked explicitly with the 1970 UNESCO convention on the means of prohibiting and preventing the illicit import, export and transfer of ownership of cultural property. However, no policy currently exists.

To note, the Ministry of Education also helps in the promotion of the knowledge systems such as putting elements of the traditional construction methods and habitat in the curriculum, although that was mainly concentrated in the primary level. It also organised quizzes, essay writing competitions and exhibitions, all of which to a certain extent encouraged students to conduct research upon certain traditional knowledge systems.

Lesotho

The Basotho have their own IKS mainly in the area of increased efficient production and management of their environmental systems. However, this IKS has not been incorporated in policy formulation, planning and decision-making. No policy exists. There is fear that IKS is being phased out because it is not in some cases as efficient as Western technologies. IKS technologies suffer from poor standardisation which limits accuracy and proficiency. There are negative attitudes towards IKS as inferior or backward (Holtman *et al.*, 2008). Mechanisation and automation of life and production present an easier life than IKS alternatives.

Botswana

Botswana has acknowledged the importance of IK but there is no inventory of IK. However, the government is working hard to formulate policies that regulate the IK stakeholders (Mosarwe 2011). Other institutions involved include the Ministry of Infrastructure, Science and Technology, the University of Botswana Centre for Scientific Research, Indigenous Knowledge and Innovations to assist in formulating an IKS policy for Botswana (Ngulube, Masuku and Sigauke 2011:268). This is a plan that does not include details of its actualisation. The project was launched in 2011 and was expected to be completed by 2012 (Mosarwe 2011).

Brief assessment and recommendations

The above country based analysis of SADC states IKS policy formulation exercise has shown that most of them are lagging behind and there is no urgency. South Africa appears to be way ahead of the rest. South Africa is also trying to assist the other member states develop their policies. This is a welcome development but over reliance on South Africa is not good enough since it is likely that South Africa may impose its blue print of IK promotion and protection. Such may not be compatible with these other countries, for example: South Africa is reluctant to use the *sui generis* approach in IK protection. South Africa is already well advanced with a well crafted legislation for IK protection through the intellectual property system. On the contrary, other SADC countries have started to develop *sui generis* systems that can allow people to develop a basis for future legal systems to protect the knowledge and resources (Chimwamurombe, Mapaire & Claassen 2010).

South Africa may also see an opportunity to promote and protect its own IK that may be subject to claims from its neighbours. Popular IK that is likely to be the subject of multiple claims in several SADC countries includes the popular *Hoodia gordonii* (Wong 2007; Wynberg, Schroeder & Chennells 2009). The San communities that are custodians of this IK are found in the three SADC countries of South Africa, Botswana and Namibia. The culture of these groups is extremely rich and they possess an excellent level of knowledge concerning the use of medicinal plant products (Matlhare 2002).

Access to generic resources and benefits sharing for *Hoodia gordonii* has been negotiated with all the communities in the three countries identified. Another case in point is that of the marama bean (*Tylosema esculentum*) (Keegan and Van Staden, 1981), where these beans are used for food by the indigenous people of this region. Marama bean seeds and tubers are edible after roasting and cooking; they are high in protein, fatty acids and essential oil content while the tubers have high starch and protein content either comparable or surpassing conventional domesticated crops (Chimwamurombe, Mapaire & Claassen 2010). The potential of this plant for malnutrition alleviation and bolstering food security in the region has been recorded and therefore the marama bean needs to be developed to bring improvement in food security (Graham & Vance 2003). In addition these plants have other ethno-botanical uses widely practiced by the Khoisan and Bantu people of Southern Africa, including Namibia, Botswana, Angola and South Africa. The plant has huge potential to address the problems of malnutrition and hunger in Namibia and other dry areas of SADC. Another popular plant is the “devil’s claw” medicinal plant found in the Kalahari Desert that is used by the indigenous people of Botswana, Namibia and South Africa (Grote 2003). The devil’s claw tuber is traditionally used for fever relief, blood diseases, and muscular aches and pains. It is also used as an analgesic during pregnancy and its pulverised root material is used as an ointment for sores, ulcers and boils, and for difficult births (Watt & Breyer-Brandwijk 1962 in Wynberg 2002; Giess & Snyman 1995 in Wynberg 2002). SADC will have to formulate a regional acceptable benefit sharing formula that includes all the member states involved.

The Namibia and the Kalahari eco-geographical regions make it a particularly lucrative destination for bio-prospectors and bio-pirates alike (Chimwamurombe, Mapaire & Claassen 2010). A number of medicinal plants get smuggled across borders in SADC and become the subject of successful trials that lead to patent protection. Genetic resources, as stated in the Convention on Bio-diversity (CBD), belong to states on whose territory such resources are found, implying a possibility of dual or multilateral ownerships as some of the resources occur across current political boundaries that do not respect geological and eco-geographical settings.

The SADC IKS policy will need to be clear on how to regulate this dual or multilateral ownership.

South Africa is likely to benefit from this owing to its technological advancement and mechanisms on testing that is already in place. It is highly unlikely that South Africa will compensate one of its neighbours after a discovery of medicine from foreign IK while the plant and resources are also available in South Africa. A number of herbal medicines smuggled from other SADC countries are freely available on the market in South Africa, for example a popular herb called *chupfumuro*, known for treating high blood pressure. This and many other traditional medicines are freely available at herbal street markets in south African cities, especially in Johannesburg. Thus, it is important that SADC countries develop a regional IK policy that can harmonise even the benefit sharing mechanism.

The SADC countries are at different levels of readiness with the Access to Genetic Resources and Benefit Sharing (ABS) laws and therefore different levels exist of preparedness in dealing with requests on accessing genetic resources by potential partners. (Chimwamurombe, Mapaure & Claassen 2010). In situations where there is a lack of ABS law, *ad hoc* procedures are in place, and these do not always give the best responses. In fact, in many cases requests have been delayed or totally disapproved of. Most countries are waiting for the finalisation of the international regime in Nagoya, Japan so they can develop their laws that will not be in conflict with the international regime (Chimwamurombe, Mapaure & Claassen 2010).

There is a need for a collective fight against Western biopiracy. The need for a joint effort in fighting biopiracy has become more important ever than before. Big corporates with huge financial muscles from Europe and the USA are always looking for new adventures in medicines. There are rogue corporate parties out there that are focussed on committing biopiracy and exploitation (Chimwamurombe, Mapaure & Claassen 2010). Currently, South Africa is fighting attempts by a French company to register rooibos as a trademark in France. The Department of Trade and Industry's (DTI) minister has indicated that the SA government will fight this registration attempt to its finality. South Africa is thus completely aware of the exploitation weak economies face in situations like these. The SADC IKS policy will however have to take cognisance of the fact that biopiracy can also happen in the intra-SADC region when member states and corporates steal IK from each other across borders.

SADC will have to learn from other regionally integrated economies like the European Union (EU). Through the EU integration, IP protection guarantees are extended to all 27 members of the union. There are already more than four registered patents in USA, Canada and other countries on *marama* and its products (Lezdey & Wachter 1999). Chimwamurombe, Mapaure & Claassen (2010) ask some relevant questions here: if this is a good development or a bad one? Is it morally correct to register biomedical or genetic patents? Are the San people going to benefit from the existing list of patents or not, and if not, why? Is the existing precedent of the *H. gordonii* a bad one or good one? Is patenting now an issue of rewarding luck rather than enterprise (Bobrow & Thomas 2001)? Who has good answers to these questions? These are important questions that need to be addressed by SADC as a region. They can be answered by a comprehensive IKS policy. This will not be a difficult exercise since SADC and the EU already have well established relationships at political, economic and social levels.

International initiatives

There are a number of initiatives dealing with IK promotions at international level. Due to the limited scope of this article, reference will only be made to the efforts of the WIPO. WIPO has

recognised that indigenous and local communities are the guardians of their indigenous knowledge and have the right to protect and control the dissemination of that knowledge. The organisation is also aware that existing protection mechanisms are insufficient for the protection of indigenous cultural and intellectual property rights and that the cultural and intellectual property rights of indigenous and local communities are vested with those who created them. WIPO is working through its three treaties to promote the protection of IK. These three treaties are: the Patent Law Treaty (PLT); the Patent Cooperation Treaty; and the Substantive Patent Law Treaty (Gallagher 2010). Collaboration at the IGC meetings at WIPO has ensured that the African countries are able to withstand the pressure of the developed countries in the negotiations on Indigenous Knowledge. This collaboration needs to be initiated, encouraged, and promoted (Mosimege 2001). At the 2013 Intellectual Property and Economic Growth and Development in Africa (Africa IP Forum 2013) held in South Africa, the WIPO Deputy Director General, Geoffrey Onyeama reiterated the organisation's commitment to developing an intellectual property protection system that is appropriate to the level of development of member states as well as a system that meet national development objectives.

Digital library development: Asian innovation in IK protection

It is also important to look at other international best practice in the protection of IK. Since 2005, the South Asian Association for Regional Cooperation (SAARC) for the South Asian countries agreed to create a digital library of the region's traditional knowledge and develop laws to prevent such knowledge being misappropriated through commercial patents. These countries have drawn a technical framework for classifying the region's traditional knowledge and linking it to the international patent classification system. The aim is to create a composite digital library comprising individual Traditional Knowledge Digital Libraries from each country in South Asia. The Library will contain information on traditional medicine, foodstuffs, architecture and culture.

Recommendations from SADC IKS policy workshops

These annual workshops recommend actions that are important and applicable in cross-sectoral areas of governance, management and partnerships, food security, traditional medicines, teaching curricula, training centres, communication ventures, mobilising financial resources and capacity building and sharing. These recommendations are for member states to take forward as they see fit, adapting them for use in their own countries, in accordance with their priorities and needs. Members' commitment to supporting the implementation of the recommendations and willingness to collaborate with partner countries is most welcome, particularly in the areas that require political attention. What is now required is an awareness and commitment, both at political and public level.

The first IKS Policy Workshop in Maputo recommended that:

- member states facilitate policy dialogue on key issues in IKS for sustainable socioeconomic human development and evaluate lessons learned from implementation of related policies;
- member states share successful innovations and best practices in promoting IKS aimed at all-round human development;
- member states reconvene annually to develop a regional framework for the protection of IKS.

There is a need to deliberate initiatives by governments and other stakeholders to promote and protect indigenous knowledge systems by enacting legislations and putting in place national

mechanisms to ensure compliance of laws in the protection of IKS. SADC member states have failed to meet annually. The last meeting was held in 2011. Botswana was the proposed host for the 2012 workshop but failed to organise it and is now highly likely that South Africa will take over in 2013.

SADC IKS workshops should facilitate the process of policy formulation and protection through patenting in the SADC member states.

SADC needs to establish regional training centres on IKS for SADC countries. Such an initiative would greatly assist member states train scientists and technicians in IKS to effectively handle IKS policies and research issues in the region and beyond (South African model of IKS centres of excellence).

IKS should be developed in its context and in terms that are authentic to its nature which can serve as models for indigenous systems of knowledge and practice. Such holistic and context based knowledge must be recognised and brought into the ambits of national policy implementation and where appropriate, rewarded accordingly. Once this is done, a regional approach will follow.

Follow the South African example of the work of NIKSO that is facilitating the creation of databases where knowledge must be documented and systematised following an audit of those existing at various institutions.

There is a need for massive awareness campaigns in matters of IK and these campaigns should be targeted at the communities that live with these resources every day (Chimwamurombe, Mapaure & Claassen 2010). Governments of SADC have to deal with these issues as individuals as well as a collective to avoid delays or deny benefits to local communities due to a lack of proper ABS regulations.

A clear agenda for SADC's IKS policy framework needs to be set with specific timelines and achievable objectives. Msuya (2007:7) suggests the need for appropriate policies that encourage and provide guidelines to promote and support IK innovation, conservation and preservation, the establishment of IK resources centres and IK databases, as well as the involvement of government and non-governmental organisation in IK development.

Conclusion

IK is a significant resource which can contribute to the increased efficiency, effectiveness and sustainability of the development process in the SADC region. For this to be realised the development of an IKS policy framework is a good starting point. This will lead to the protection of IKS and the SADC region will emerge as a key player in the global knowledge based economy. In striving to achieve this objective, it is imperative for the region to put in place the necessary mechanisms to ensure real collaboration between those in possession of IK, government, civil society and academia to create a large reservoir of intellectual capital. Ultimately, there is need for an equitable legal dispensation to protect IK that is built on the respect for human dignity and African cultural values. Intellectual property regimes that continue to deny protection to IKS and benefits for its practitioners need to be interrogated at the highest level. There is a need to develop an IK policy and build further mechanisms in the SADC region that will allow recognition, maximum benefits sharing, poverty eradication and growth in society and ultimately provide affirmation of African cultural values in the face of globalisation. A future article is expected after attending the upcoming IKS workshop. There is also a need to get

information from the countries that fail to attend these workshops. This article points to a need for urgency and judicious prudence when dealing with the issues of IK in SADC.

References

- Africa IP Forum. 2013. [Online]. Available WWW: <http://www.openair.org.za/content/africa-ip-forum-2013> (Accessed 28 February 2013).
- Ahmed, A. K. 2008. *An analysis of the regional integration in Southern Africa: a South African perspective*. Stellenbosch: tralac. [Online]. Available WWW: http://www.paulroos.co.za/wp-content/blogs.dir/12/files/2011/uploads/Ahmed_Final_20110614_edu.pdf (Accessed 25 January 2013).
- Bhagwati, J. 2008. *Termites in the trading system: how preferential agreements undermine free trade*. Oxford: Oxford University Press.
- Bobrow, M. and Thomas, S. M. 2001. Patents in the genetic age. *Nature* 409:763-64.
- Chauvin, S and Gaulier, G. 2002, *Regional Trade Integration in Southern Africa*. CRPII Working Paper 2002-12. Paris: [Online]. Available WWW: www.cepii.fr (Accessed 29 January 2013).
- Cheikhoussef, A., Shapi, M., Matengu, K and Ashekele, H. 2011. Ethnobotanical study of indigenous knowledge on medicinal plant use by traditional healers in Oshikoto region, Namibia. Windhoek. *Journal of Ethnobiology and Ethnomedicine*. [Online]. Available WWW: <http://www.ethnobiomed.com/content/7/1/10> (Accessed 30 January 2013).
- Chimwamurombe, P., Mapaure, I and Claassen, P. 2010. Understanding the relationship between indigenous (traditional) knowledge systems (IKS), and access to genetic resources and benefits sharing (ABS). *African Journal of Biotechnology* 9(54): 9204-9207.
- Draper, P and Kalaba, M. 2006. South African international trade diplomacy: implications for regional integration. 37. Friederich Ebert Foundation.
- Gallagher, K. P. 2010. *Handbook on trade and the environment*. Cheltenham: Edward Edgar Publishing.
- Graham, P. H and Vance, C. P. 2003. Legumes: importance and constraints to greater use. *Plant Physiol.* 131:872-877.
- Grote, K. 2003. *The increased harvest and trade of Devil's Claw (Harpagophytum procumbens) and its impacts on the peoples and environment of Namibia, Botswana and South Africa*. Global Facilitation Unit for Underutilized Species, Italy. [Online] Available WWW: http://www.underutilized-species.org/documents/publications/devils_claw.pdf (Accessed 20 February 2013)
- Hancock, K. J. 2010. *What role for the EU in the Southern African Customs Union (SACU): advocate, cajoler, or bully?* [Online] Available WWW: <http://ssrn.com/abstract=1740862> (Accessed 25 February 2013).
- Holtman, L.; Julie C., Mikalsen, O., Mtetwa, D and Ogunniyi, M. 2008. *Some developments in research in science and mathematics in Sub-Saharan Africa*. Somerset West: African Minds.
- Keegan, A. B and Van Staden, J. 1981. Tylosema esculentum, a plant worthy of cultivation. *South African Journal of Science* 77:387-387.
- Krugmann, H. 2000. International Bio trade in Devil's claw from Namibia. A review of activities, trends, opportunities and threats. Report presented to the Eastern and Southern Africa Regional Biodiversity Forum, 21-23 Feb. 2000, Mombasa, Kenya.
- Langill, S. 1999. *Indigenous Knowledge: a resource kit for sustainable development researchers in dryland Africa*. [Online]. Available WWW: <http://www.idrc.ca/plaw/11e-IK.html> (Accessed 25 January 2013).
- Lezdey, J and Wachter, A. 1999. *Dermatological and cosmetic compositions containing marama bean extract*. United States Patent 5869063. [Online]. Available WWW: <http://www.freepatentsonline.com/5869063.html> (Accessed 26 January 2013)
- Mathhare, T. 2002. Harvester and trade issues in Botswana. In: *Proceedings of the First Regional Devil's Claw Conference, Windhoek, Namibia, 26-28 February 2002*, pp. 111-19.

- Mosimege, M. 2001. *The developments and challenges facing indigenous knowledge systems program: South African experiences*. [Online]. Available WWW: <http://portal.usask.ca/purl/IKC-2001-Mosimege.pdf> (Accessed 1 February 2013).
- Mosarwe, Q. 2011. Traditional indigenous knowledge system study launched. *The Botswana Gazette*. [Online]. Available WWW: <http://gazette.com/index.php> (Accessed 10 February 2013).
- Msuya, J. 2007. Challenges and opportunities in the protection and preservation of indigenous knowledge in Africa. *International Review of Information Ethics* 7(9):1-8.
- Ngulube, P., Masuku, M and Sigauke, D. 2011. The role of archives in preserving indigenous knowledge systems in Zimbabwe: is (re) inventing themselves the answer? *ESARBICA Journal: Journal of the Eastern and Southern Africa Regional Branch of the International Council on Archives* 30: 261-278.
- Onwu, G. O and Mosimege, M. 2004. Indigenous knowledge systems and science and technology education: a dialogue. *African Journal of Research in Mathematics, Science and Technology Education* 8(1):1-12.
- Puffer, P. 1994. CIKARD. *Iowa Agriculturist*. 97(1):20-22.
- Rajasekaran, B. D., Warren, M and Babu, S. C. 1991. Indigenous natural-resource management systems for sustainable agricultural development--a global perspective. *Journal of International Development* 3(1):1-15.
- Report of the second SADC workshop on IKS policy development and regional cooperation – 2007* [Online]. Available WWW: <http://www.nikso.co.za/node/29> (Accessed 21 March 2013)
- Saurombe, A. 2009. *Intellectual property law protection for traditional knowledge/indigenous knowledge systems in southern Africa and selected Asian jurisdictions – a view from developing and least developing countries*. [Online]. Available WWW: <http://www.kmafrica.com/taxonomy/term/1059> (Accessed 13 February 2013).
- Swiderska, K. 2001. Participation in policy-making for access and benefit-sharing: case studies and recommendations. *Bio-briefs* 2:1-4.
- Takirambudde, P. N. 1999. The position of SADCC in the international division of labour and prospects for regional cooperation. *PULA:Botswana Journal of African Studies* 7(1): 97-116.
- Warren, D. M. 1992: *Indigenous knowledge, biodiversity conservation and development*. Keynote address for the *International Conference on Conservation of Biodiversity in Africa: Local Initiatives and International Roles*. Nairobi, National Museums of Kenya.
- Wong, C. 2007. Hoodia gordonii review. [Online]. Available WWW: <http://altmedicine.about.com/od/popularhealthdiets/a/hoodia1> (Accessed 12 February 2013).
- Wynberg, R. 2002. Sharing the benefits from trade in Devil's claw: challenges in achieving a fair and sustainable trade. In: *Proceedings of the First Regional Devil's Claw Conference*, CRIAA SA-DC Windhoek, Namibia, 26-28 February. 2002, pp. 125-34.
- Wynberg, R., Schroeder, D and Chennells, R. 2009. (eds). *Forthcoming, indigenous peoples, consent and benefit-sharing: learning from the San-Hoodia Case*. Berlin: Springer.