

7. Indigenous Knowledge Systems and their Economic Potential in South Africa

Otsile Ntsoane

University of the North-West, South Africa

Introduction

'Diet pill: San might sue Pfizer', reads the headline of a story in the 22 June issue of the *Mail and Guardian*, a South African weekly newspaper. 'South Africa may give the world a blockbuster drug, but there are claims that traditional knowledge has been plundered', the subheading continues.

The article details how a small firm based in the UK has made agreements with the giant international drug firm Pfizer to market a 'miracle' slimming drug isolated from a small cactus eaten by the San on their long hunting trips to stave off hunger and thirst. Pfizer believes the 'dieter's dream' may turn out to be as big a money earner in the US \$1 billion market for slimming as Viagra has proved to be in the male potency market. Ironically, the small British firm obtained the rights to commercialise the drug from South Africa's Council for Scientific and Industrial Research (CSIR), which has owned the patent since the early 1960s. The San, the *Mail and Guardian* reports, '... are angry, saying their ancient knowledge has been "stolen", and are demanding compensation'. This chapter focuses on the need for countries in the southern region of Africa to introduce and implement ways to protect such knowledge.

Many people in developing countries, including Botswana and South Africa, depend on their environment, the veld, for their survival and to meet basic needs such as fuel, health, food and shelter (Sekhwela and Ntseane, 1994). Sacks (1997) defines veld products as non-grazing products that provide food, craft material, tanning gums and so on. Moruakgomo (1996) shows that veld products such as *Artemisia Afra*, (*Lengana* in Setswana) are supplementary sources of medicines. In the Transkei (South Africa), for example, the plant is used commercially to cure a number of ailments such as swelling and sweating of the feet, and gout.

Van der Vleuten (1998) indicates that indigenous knowledge systems have a crucial role in rural community sustainability in terms of providing

employment, enriching nutritional content of foodstuffs and maximising the use of local resources. Few studies have been conducted on a comparative basis in the Southern Africa region on production and utilisation of veld products and their associated knowledge systems. Therefore a study into areas of sustainability and intellectual property rights, and their implications with respect to local knowledge systems, will be a contribution to the need to protect local knowledge systems from capitalist exploitative interest.

Studies by Mushita (1995) show that 75 per cent of 120 active compounds currently isolated from higher plants and widely used in modern medicine, show a positive correlation between their modern therapeutic use and the traditional use of the plants from which they were derived. However, commercialisation of such products often results in rural people losing ownership and control of their natural environment and knowledge systems. This is particularly so when commercialisation of veld products involves local and foreign capitalist companies concerned with profits rather than meeting community needs. Because of their strong dependence on the environment for survival, rural people are vulnerable to such commercialisation and are sensitive to the need to conserve their natural resources base.

Who is Protected?

Respondents interviewed in this study expressed reservations about private companies protecting their veld products and related knowledge systems, because of the companies' interest in profits rather than in the interests of the community, and feared that they would become alienated from the source of their being. Protection of cultural and intellectual components is essential, indivisible and crucial for local survival and development. Linked to this is the right of ownership and control of knowledge and resources.

This observation is supported by studies conducted by Thusano Lefatsheng (1994) in Kang, Botswana, showing that most people preferred the government and local community to provide protection for veld products. Matawanyika, Garibaldi *et al.* (1994) note that in South Africa the Bakgatla Community Development Organisation (BCDO) uses its tribal structures to mobilise its people's local conservation measures.

Interviews conducted in Magogoe and Dinokana Villages in South Africa showed that the greatest concern was the lack of regulatory measures and capacity to protect veld products and the local knowledge base, and knowing how to deal with agreements intended to benefit local people. Respondents who were members of the Dingaka Association and Traditional Healers

Organisations based in South Africa were concerned about their isolation from government on matters relating to sharing their indigenous knowledge and its benefits, including conservation methods and ecological knowledge.

Interviews conducted in both countries studied revealed a common agreement by respondents on the need to protect their local veld products and indigenous knowledge systems from exploitation and foreign control. They expressed concern about the limitation in South Africa of existing local, national, and international legislation such as the following:

- ♦ The Medical, Dental and Pharmacy Act No. 13 of 1928 that served to constrain traditional medicinal practitioners by restricting issuance of licenses to the Minister of Public Health, with the aim of reducing the number of practicing traditional medical practitioners in South Africa;
- ♦ The Natal Code of Native Law No. 19 of 1891 requiring that herbalists seek approval to practise from the regional African chief and stating that they must purchase a license to do so;
- ♦ A number of laws such as the Witchcraft Suppression Act No. 3 of 1957 which prohibit specific activities;
- ♦ The Forest Act No. 22 of 1984 and the KwaZulu Forest Act No 15 of 1980 which theoretically regulate the exploitation of plants;
- ♦ Local by-laws such as the Business Act and Tribal Regulations which legislate on trade and influence when and where medicinal products may be sold (Christoffersen *et al.*, 1996).

Legislation affecting the practice of traditional medicine has been in place since 1890, but until recently there was no law that enforced the protection of veld products and their indigenous knowledge systems. However, there are currently a number of Bills waiting to be enacted for the protection of indigenous knowledge systems, including the Bill on Intellectual Property Rights, the Heritage Resources Bill and the Protection of Indigenous Knowledge Bill. South Africa is also a signatory to a number of international laws and treaties that have a bearing on indigenous knowledge systems such as the International Convention on Biological Diversity that recognises indigenous knowledge practitioners and states that they should benefit from any commercial venture that uses their veld products or indigenous knowledge systems. The Convention on International Trade in Endangered Species of wild fauna and flora aims to protect any species that is regarded as endangered, but does not offer protection or benefit to local communities. Such treaties do not recognise the indigenous as defined in the South.

What is Indigenous?

Kaya and Maleka (1996) argue that indigenous does not necessarily mean traditional. They define indigenous as what the local community regards as authentic. Lalonde and Morin-Labatut (1993) support this when they argue that indigenous knowledge systems are not monolithic, because some elements are traditional and passed down from one generation to another with little or no changes while others are subject to innovation and integration of foreign practices. Indigenous knowledge systems are in constant transformation.

However, Lalonde and Morin-Labatut emphasise that indigenous knowledge systems and veld products have value not only for the cultures from which they emanate, but also for the scientific and commercial needs of outsiders. This argument has strong implications for the utilisation of indigenous knowledge systems and veld products in Botswana and South Africa. *Bio-Diversity Campaign News* (1996) states that the key strategy is to ensure that intellectual property rights of local communities are guaranteed, value is added to their knowledge, their entrepreneurial capacities are developed to generate returns to this knowledge and products, and that their cultural and institutional basis for dealing with their natural environment are enriched.

In accordance with Article 8 (j) of the International Convention on Biological Diversity (1992), national legislation on access to genetic resources must ensure the consent not only of the national government but also of the local or indigenous communities from which genetic material is taken or whose traditional knowledge is utilised for commercial purposes. Further to this, the Community Rights (Article 6) states that local communities have the right not to allow the collection of biological resources and access to their traditional technologies, knowledge and innovations, when doing so may threaten the integrity of their natural or cultural heritage.

Sing (1996) emphasises that existing intellectual property rights and regimes give the holder an exclusive monopoly to restrict the use (by copy, adapting and distribution) of the information embodied within the subject matter. It thus becomes a matter of grave concern when intellectual property rights agreements give a monopoly over the use of veld products to big companies which want to control the market (Convention on Biological Diversity, 1992).

A summit held in Ouagadougou in May 1996 was held partly in response to problems encountered when dealing with trade related intellectual property rights and the World Trade Organisation. At the summit, the Organisation of African Unity endorsed a draft Convention on Access to Biological Resources

and the Protection of Community Rights. It is on this basis that African countries pass national legislation enabling them to regulate access to their genetic resources and to legally protect the rights of their communities.

The problem that South Africa currently encounters (Sekhwela and Ntseane, 1994) is that strategies adopted usually do not take into account community-related intellectual property rights, traditional knowledge and techniques. Furthermore, whatever experts impose is often not accepted by the communities and thus not utilised because most external strategies contrast with indigenous ones that are authentic to the local community (Tikatikwe, A Supplement in Mmegi, *The Reporter*, 22 August 1997).

Botswana has passed laws, including the Agricultural Conservation Act (1977), that prohibit the extraction and distribution of devils' claws (*Harpogophytum Procumbens*). Under this Act, members of the public are required to have permits to dig and sell plants that are regarded as endangered. South Africa, on the other hand, has not fully protected indigenous plants from random and unmonitored extraction and distribution.

To ensure that any agreement for development optimises the benefits accruing to the local people is the greatest concern for respondent communities in Dinokana and Magogoe in South Africa. The challenge from the respondents' viewpoint is that Western intellectual property rights do not consider the interests and sustainability of the traditional rights of local communities over their resources and associated knowledge.

In the absence of policy legislation, enforcing agencies and empowered communities, the consequences are that country-related intellectual property rights and genetic resources will be exploited and developed by foreign companies with little gain to either the country or people from whom knowledge is gleaned. A policy structure will commit governments to develop legislation and establish tools to control access to genetic resources including veld products and related indigenous knowledge systems. Such a move will solve a current trend that reveals unfair distribution of costs and benefits in bio-prospecting ventures to the disadvantage of local communities who are the custodians of biodiversity and the related indigenous knowledge.

The scanty availability of information on the ecology and socio-economic impact affects the production of veld products. This was expressed in the fear of the potential hazard of over-exploitation and environmental degradation (Kgathi, 1987). This chapter looks into two examples of existing veld products that are used as medicines or food, and the contribution of veld products to

the socio-economic sustainability of the study communities in terms of employment, income generation, health and food security.

The Veld: A Closer Examination

The commercial potential of South Africa's veld-related intellectual property rights and products has been stressed in recent years (Materechera, Hansen and Nyamapfene, 1998), although at present the veld product sector is informal and does not make a specific contribution to GDP. However, for the poor who make up 60–70 per cent of the rural population, veld products are probably more important than livestock. The distribution of veld products has a bearing on settlement patterns since people adapt to their environmental conditions and exploit all available natural resources.

Imbrasis belina

Phane (*Imbrasis belina*) larvae in Southern Africa have attracted the interest of researchers who are investigating this edible species for a number of scientific reasons (Gashe and Mpuchane, 1996). In Botswana, *Imbrasis belina* is the major source of cash income for the harvesters as well as providing other members of the family with employment. The third source of cash income was beer brewing, followed by employment for cash (Ntsoane, 2000a). Dependence of rural communities on such natural resources is linked to their conservation and thus to sustainable development that provides food, generates income and employs rural people in natural resources projects. Most harvesters of veld products, including *Imbrasis belina*, are women who should be empowered to benefit more from their sustaining of *Imbrasis belina* that supplies significant amounts of high-quality protein. *Imbrasis belina* contains amino acids that are easily digested, thus making it suitable as a weaning food. The need for its sustainability is of great concern for the rural poor who depend on it for their livelihood.

Artemesia Afra

Artemesia Afra is another well-known medicinal plant in Southern Africa, known as wormwood in English, Wilde in Afrikaans, Longana in Setswana and Mhlonya in isiXhosa. *Artemesia Afra* belongs to the family of Compositae known as *Artemisia absinthium*. Economic rural development plans in the Ciskei, South Africa and in some villages in Botswana specifically exploit *Artemesia Afra*. It offers great promise as an alternative crop because of its adaptation to the environment and its high financial return. Consequently, there has been much interest in farming it as a commercial crop (Materechera, Hansen and Nyamapfene, 1998). In North Western Province and other regions of South Africa the plant is used in different preparations for a wide

variety of illnesses including lack of appetite; coughs, colds, and chills; dyspepsia; menstrual period pains; stomach ache, colic and other gastric derangements; croup and whooping cough; gout; and as a purgative. The infusion or decantation is used as a lotion to bathe haemorrhoids and as a hot bath to bring out the rash in measles. The vapour from boiled leaves can be inhaled for respiratory afflictions and can relieve neuralgia, mumps, throat inflammations, and sweating and aching feet. It can be used with tea or as a tea substitute.

Artemesia Afra requires lower inputs than conventional crops in terms of planting, tillage, fertiliser and pest control, so that it is relatively easy to establish, manage and maintain (Materechera, Hansen and Nyamapfebe, 1997). The species is rich in essential oils and a small worldwide demand exists for Artemesis-type oils for use as external medicines, perfumery and deodorant soaps. Artemesis also has potential as a substitute for more highly priced oils. A research team in Alice, Ciskei, reported that manufacturing techniques have already been evolved such as standard dry steam distillation procedures for extracting the oil, bulk handling equipment and methods, and for local processing of the crop.

Considering the different purposes and uses of *Artemesia Afra*, its economic potential is huge and its development should not be delayed. The plant should be developed, its economic potential explored and the intellectual property rights retained by the local community who can share the final product jointly with the developers.

Discussion

The term sustainable development stems from the 1980 World Conservation Strategy. The report of the World Commission on Environment and Development, 'Our Common Future' (the Brundtland Report of 1987), gives prominence to sustainable development. The fundamental premise of sustainable development is that there is an obligation to future generations and the notion that we owe them the choice to make their own decisions about the resources we bequeath them. However, there is growing evidence that the planet's natural resources are being steadily degraded and in some cases irreversibly damaged.

The Earth Summit at Rio de Janeiro laid down a challenge to nations to achieve sustainable development. People must change their attitudes to the use of resources, particularly to those from the biophysical environment of the interconnected ecosystem of land, air, water and biological species upon which

we depend for our life needs. To help this change in attitude, changes must be made to the laws and institutions that influence our behaviour and relationships with each other, and with the biophysical world. Sustainable development within such a context is a major policy cornerstone of the democratic government of South Africa, as stipulated in the Reconstruction and Development Programme (ANC, 1994).

Indigenous knowledge: some definitions

Definitions related to the topic are brief and to the point, but require deeper meaning that is involving, inclusive and in the interests of people in the southern hemisphere, especially sub-Saharan Africa. In the past, the meaning or the conceptual framework was defined in the interest of Western epistemology with little regard for African or Asiatic definitions of the world. The articulation of the definition, conceptualisation and operationalisation of the term 'Indigenous Knowledge' given here is based on a need to reintroduce an Afro-optimistic approach to knowledge production.

Any search for a definition should not be a short cut such as reverting to the dictionary definition. Neither should it be based on the definition of the coloniser whose language and culture obviously influenced the meaning of the term (Ntsoane, 2000b). North-South tensions have been linked to economic disparities (Mazrui, 1990) where definition was based on Western epistemology with little or no respect for the articulation of aboriginal or indigenous peoples. Such denial of articulation is common and well documented by many authors of Africa origin and scholars from the diaspora.

First, in Africa the issue of knowledge production, generation and use was not academically derived. The process was and is continuous, without words and concepts, or copyright. The process is open, highly participatory and commonly used. The production is not alienating (Ntsoane, 2000b). Ani (1994) puts it clearly when he says that the pragmatic implications of indigenous knowledge systems are that, unlike the European conception of science, they are secular and do not alienate. Rather they liberate, rationalising concepts and knowledge. The African way of explaining the world is not linear or alienating, and it is not written. Such concepts are the basis of the European tradition of science that deals exclusively with the physical world and in which the metaphysical is debunked as irrational, mystical and anti-scientific. Indigenous knowledge production consists of characteristic elements of the traditional heritage developed and maintained by a community of individuals that reflects their traditional expectations. Other definitions include, 'Local knowledge that is unique to a given culture or society. It is the basis for agriculture, health care, food preparation,

education, environmental conservation and a host of other activities. Such knowledge is passed down from generation to generation, usually by word of mouth.' Indigenous knowledge is culture-based and practised in ways that are effective, efficient and functional in those communities that hold them. Communities that practise indigenous knowledge also have a technical knowledge component. Apart from such technical knowledge, local communities also have non-technical knowledge or insights, wisdom, ideas, perceptions and innovative capabilities that pertain to ecological, biological, geographical and physical phenomena (Todaro, 1985; Ntsoane, 2000b).

Indigenous practice

This is the application of community skills and experiential knowledge to help people support, develop, and maintain their communities in combination and integrated with the knowledge and skills derived from appropriate professional knowledge systems.

Indigenous community workers

Although employed at the lowest scale, indigenous community workers are often expected to perform specialised functions without training or compensation. Many have years of experience in the service delivery field but receive no recognition of their experience and wisdom.

Conceptualised articulation of indigenous knowledge systems

In the current analysis of the use of veld products and related knowledge systems is the challenge faced when useful indigenous knowledge becomes delegitimised or lost with the growing dominance of imported technologies, Western scientific principles, and conventional development strategies. Most scholars in anthropology and the social sciences use the term indigenous knowledge synonymously with traditional and local knowledge to differentiate the knowledge developed by a given community from knowledge systems generated through universities, government research centres and private industry. Scholars thereby subject endogenous knowledge to knowledge of indigenous people or any other defined community. Unlike the word traditional, which commonly implies that something is static, indigenous knowledge is dynamic.

Indigenous knowledge relates to the ways members of a given community define and classify phenomenon in their physical, natural, and social environments. It provides a basis for local decision-making, frequently occurring through formal and informal community associations and organisations. Communities identify problems and seek solutions in such local forums, capitalising on indigenous creativity and encouraging experimentation

and innovation. Indigenous knowledge is tacit knowledge and therefore difficult to codify. It is embedded in community practices, institutions, relationships and rituals.

Larsen (1998), reporting on the outcomes of workshops on indigenous knowledge systems, defined it as concepts, facts, perceptions, beliefs, information and values, as well as particular economic, social and traditional political arrangements. Ntsoane (2000a) defines indigenous knowledge as a fusion of both traditional and local. He adds heritage. He says it is production consisting of characteristic elements of the traditional heritage developed and maintained by a community or individuals reflecting the traditional expectations of such a community. It is local knowledge that is unique to a given culture or society. It is the basis for agriculture, health care, food preparation, education, environmental conservation and a host of other activities. Such knowledge is passed down from generation to generation, usually by word of mouth.

Then comes the word 'endogenous', which means what grows from within. What needs to be conceptualised is the process that takes place during endogenisation on one side and indigenization on the other. Endogenous knowledge, which according to simple meaning is growing and originating from within, is mediated wherein people's common understanding of what is shared, what is found in the group's experience and is strongly linked to their common sources of such knowledge. It is based on ritual about ancestors and speech given from generation to generation by word of mouth. Within the endogenous come the aspects of cognitive experience that are unique to the place and the people who conceal, shape and filter the knowledge utilisation among them. Indigenization and localising, critical thinking and theory correlate easily with the colonial invention of the native, the rural, the uneducated; indeed, the whole list of pejorative and derogatory terms that can be found in the euphemism lexicon.

The skewed insight given to the indigenous by the colonial must be challenged and removed. Hence the endogenization of plural knowledge and practices is needed through mental decolonisation; something that puts the oral history and knowledge that is not written as worth considering. The process of endogenization is that of asserting the notion of thinking with the assistance of the self; the involvement of the liberated self, the involvement of the 'internal brains' and the growing from inside of the paradigm that will be responsible for re-appropriating and partially reinventing local paradigms. The whole process should be seen as a nationalistic reaction against Western domination, against the neocolonial, against the informal globalisation with

its neo-capitalist investor notions. The endogenization of African knowledge systems should draw on prestigious cultural traditions of the East. Unless Africa affirms its epistemology, cosmologies, ethical and ecological concerns, the West will set the agenda for her. Plurality of knowledge is what should drive the cultural forces of change in the African renaissance.

Indigenous knowledge systems can be further defined as the combination of knowledge systems encompassing technology, social, economic and philosophical learning, and educational, legal and governance systems. It is knowledge relating to the technological, social, institutional, scientific and broad development of communities. It consists of tangible aspects such as medicine, natural resources, crafts and the like. Intangible aspects, however, consist of the knowledge system behind the technologies, such as indigenous education, philosophy, cosmology, botany, and crop and animal husbandry. In indigenous communities, the tangible and intangibles are closely woven together. This indigenous knowledge is not new knowledge. Senghor (1963) states that we have inherited our own method of knowledge from our ancestors.

Non-South Africans have played an important role in campaigns for environmental justice, bio-watch and sustainable natural resource utilisation, including mobilising South African citizens into forums that have begun to address matters related to the environment and indigenous knowledge systems. It therefore suggests that the role of Africans and other peoples from regions that suffered the effects of colonialism and the appropriation by the West of intellectual property rights can share their experiences in promoting the protection of their indigenous knowledge and natural resources. Except for a few committed Western environmental groupings, most have an agenda and interest in the bio-piracy and biosphere of the natural resources of the South. The South must choose its friends carefully. What is important is to draft laws that will protect the rights of local farmers and of all communities that produce veld products and own the knowledge that is needed for their production.

A strong conveyor belt of indigenous knowledge is needed across the continent. Each country should contribute in sustaining its own cultural niche. Such a niche should be linked to an industrialisation of non-industrialised indigenous technology or natural resources. Through such a network, indigenous knowledge systems will contribute significantly to the renaissance of the continent.

South Africa should use the experiences of eastern countries such as China,

Malaysia and India. Through sharing with this non-South African citizenry, knowledge can be exchanged and thereby increase the awareness and the potential of indigenous knowledge in communities.

The industrialised world can also contribute to the development of indigenous knowledge systems, even if this proves uncomfortable. Just as Europeans and Americans were active in popularising Western knowledge, they should be involved in giving Africa authority over her own indigenous knowledge. The struggle to revitalise Africa's legitimacy over indigenous knowledge systems must be negotiated through a strategic commitment by those who have benefited at the expense of colonies in Africa. There cannot be another colonialism of the mind and resources that are related to indigenous knowledge systems.

Community awareness of the economic potential, as well as the cultural bond that common knowledge brings to nations, will directly result in the popularisation of indigenous knowledge systems as a means of socio-economic sustenance and cultural bonding. Indigenous knowledge should be made popular amongst people of all ages because of its important role in providing problem-solving strategies, especially for the poor. Indigenous knowledge is commonly held by communities rather than individuals, is tacit knowledge and therefore difficult to codify, and is embedded in community practices, institutions, relationships and rituals. Furthermore, indigenous knowledge represents an important contribution to global development knowledge and is an underutilised resource in the development process.

A network between South Africa and other countries will facilitate the development partnership and contribute to learning more about local practices in other countries. It will enable African countries to better adapt global knowledge to local conditions, and thereby help design activities that better serve country needs. The proposed network should facilitate a sharing of indigenous knowledge practices and innovations among local communities in a South-to-South exchange.

Knowledge production and dissemination determine knowledge utilisation. Differences are at the level of interpretation where locally produced knowledge seems to be denied. During the anti-colonial struggle in a number of African countries, knowledge was appropriated whilst knowledge produced in those states that were not colonised remained authentic to local interests. Epistemic communities that share the same source and modes of knowledge disseminate knowledge in modes that retain the meaning and content of such knowledge.

When popularising areas of indigenous knowledge systems and their related science and technology, it is important to consider the nature of the communities involved in the process of development. Knowledge is a universal heritage and a universal resource. The need, therefore, to popularise indigenous knowledge systems amongst schools both inside and outside South Africa is important in post-colonial Africa. Knowledge as a universal heritage has location and models for dissemination. It was in the process of the dissemination of Western knowledge that indigenous knowledge systems were ostracised and disregarded. Indigenous knowledge systems were not included in discipline clusters of scientific knowledge and technology.

Indigenous knowledge systems represent a knowledge heritage that, much as it is universal, is also a unique way of ensuring that it becomes part and parcel of informing policy making, research and teaching modules so that it becomes a pivotal aspect of knowledge development.

Through promoting indigenous knowledge systems in schools, work areas and in our different communities, all Africa will create a platform for articulation, which will demystify the Western domination achieved through the violent and linguistic measures of the former colony. Space allocation by educators for learners to bring their knowledge to classrooms will create a dialogue that will eventually show that the learners' knowledge, which in most instances is based on indigenous knowledge systems, is vital in determining the educators' input. We cannot treat our learners as ignorant of their environmental, social, political, ecological, scientific and technological cultures. It is, therefore, appropriate to adjust the learning areas to the learners' needs and those of the community.

In popularising indigenous knowledge systems around science and technology, special attention should be placed on the paradigm shift from a Western epistemology to an endogenous or indigenous epistemology. Such a shift of mindset demands new areas of articulation. It is at this stage that the knowledge production discourse is engaged. It is for a holistic knowledge framework that seeks to make whole that which was partial, incomplete, in large measure stunted and therefore stunting. The new framework which emerges involves principles that were present all along but were unknown to us. It includes the old as a partial truth and, by its framework, it transforms the traditional positions and the stubborn new observations, reconciling their apparent contradictions (Hountondji, 1997). Indigenous knowledge systems as an operational concept reject the skewed way of analysing the world, the one way of seeing and the only tool through which the masses of humanity can receive accreditation and license to be (Hopper, 1999).

Human rights, democracy and equality as inscribed in our constitution will have no meaning in reality as long as one knowledge system dominates, as long as the 'othering' is promoted. Nothing of social justice can be spoken about until the indigenous knowledge systems of those communities and countries that were colonised and served a resource for the economic development of the coloniser have platforms to influence policy in knowledge generating, validating and dissemination as notions of human rights. In popularising indigenous knowledge systems, we should declare a struggle to emancipate indigenous knowledge systems and thereby contribute to the development of its holistic operationalisation.