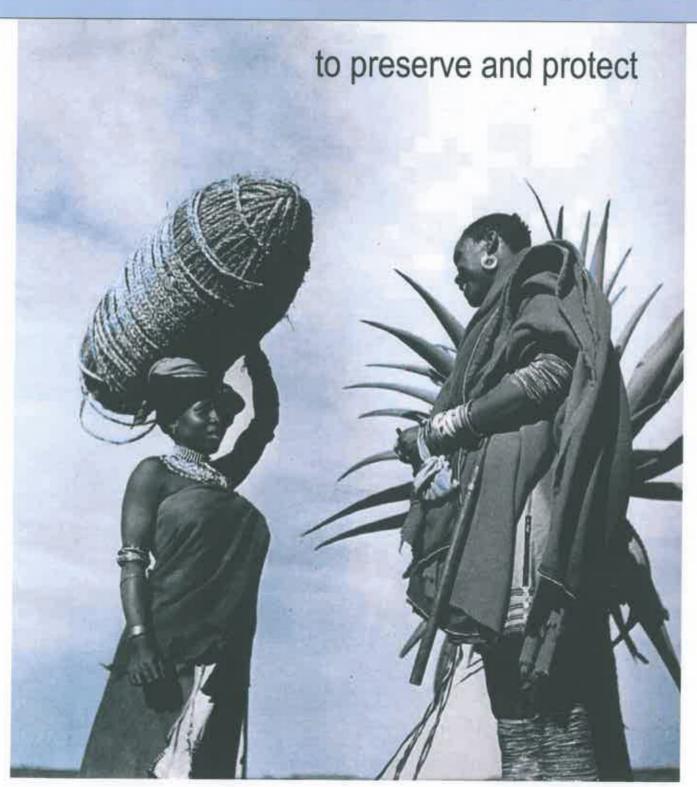
## Indigenous knowledge



The African saying, "When an old person dies, a library burns down' epitomises the nature of indigenous knowledge, handed down orally from generation to generation and preserved in 'human databases'. CATHERINE NDINDA and colleagues examine approaches that have been used elsewhere to protect, preserve and promote indigenous knowledge and look at the implications for policy in South Africa.

s the elderly, who are mainly the custodians of indigenous knowledge (IK) pass on, this knowledge is threatened with extinction. Yet this same knowledge has guided and preserved the existence of indigenous people for centuries and governs the lives of the majority of the population from the cradle to the grave.

For example, 80% of the South African population – and this is probably true for the rest of Africa – relies on traditional medicine for their wellbeing, even when they consult modern medicine.

Given the importance of IK in the lives of the African population, the South African Department of Science and Technology (DST), in collaboration with the HSRC, initiated a process to develop a national policy for the protection of the existing IK databases.

## IK and the World Trade Organisation

In 2004 the World Trade Organisation (WTO), through the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), sought to establish the link between TRIPS and the Convention on Biodiversity (CBD), and the protection of indigenous knowledge and folklore.

The TRIPS agreement sets minimum standards for the intellectual property rights instruments (patents, trademarks, copyrights) for the protection of industrial-type intellectual property – the type that is most dominant in developed countries.

Ironically, about 95% of patents are held by developed countries and only 5% by developing countries, which hold most of the genetic material and IK required for the development of new inventions. Because IK is communally owned and handed down through the generations, it is difficult to protect it using the conventional intellectual property rights instruments as required by the TRIPS agreement.

Most knowledge in developed countries is legally protected, but in developing countries it is not, a situation which presents a serious imbalance and leaves much IK in developing countries open to biological piracy and other forms of misappropriation.

The exploitation of the genetic resources of Southern Africa is likely to be worsened by the signing of the TRIPS agreement, to the disadvantage of the poor countries that are the holders of much IK.

## Policy options

Most developing countries support the protection of IK at an international level, since protecting it at a national level would have little or no effect beyond the borders of the state. Developing countries sought to amend the TRIPS agreement so as to protect their IK resources.

Most knowledge in developed countries is legally protected, but in developing countries It is not, a situation which presents a serious imbalance and leaves much IK in developing countries open to biological piracy and other forms of misappropriation.

To guard against 'bad patents' based on misappropriation of traditional knowledge, some developing countries have proposed that before patents are awarded to applications relating to biological materials, the applications must disclose the country of origin and IK used in the invention; provide proof of prior informed consent obtained through relevant authorities in the country of origin; and show evidence of fair and equitable benefit sharing.

These conditions are legally binding defensive measures but are inadequate to guard against the loss of biodiversity and its commercialisation without benefits accruing to the holders of IK.

India is an example of a country that has used the defensive approach to protect its indigenous knowledge through the Traditional Knowledge Digital Library (TKDL). Taking the defensive approach implies that South Africa would require patent applicants in any other part of the world to disclose the source and country of origin of the traditional knowledge used in their invention, provide proof of prior informed consent from recognised authorities, and proof of benefit sharing from the patent.

Taking the positive approach to the protection of IK entails the creation of a sui generis database (literally meaning 'of its own kind/genus or unique in its characteristics') and this implies that adding information to the database automatically 'constitutes establishing a legal claim' over it.

Another form of positive protection consists of declaring the rights of indigenous peoples and local communities and recognising their ownership of traditional knowledge. This approach has been used in Venezuela and Bolivia.

The recognition of customary law in national legislation is also a form of positive protection of indigenous knowledge. Taking a positive approach would entail South Africa availing its TK databases to the international community so that when there is a patent application in any part of the world the South African databases can be searched for the existence of the information on which the patent is based. A third option is to use a combination of the two approaches, and that, too, has consequences for the protection, preservation and promotion of IK in South Africa.

Whatever approach adopted, there is no doubt that there is urgent need to protect, preserve and promote IK in South Africa. ◄◄

Dr Catherine Ndinda, African research fellow, Population Health, Health Systems and Innovation, Dr Mbithi wa Kivilu, former director of the Education and Skills Development programme and recently appointed deputy CEO of the Kenyan Examination Board; Carol van Wyk, deputy director, Knowledge Management, Department of Science and Technology (DST); Tom Suchananda, director of the same unit, DST.



## review Volume 9 no. 2 June 2011

