

# How do indigenous healers benefit?

There is worldwide commercialisation of indigenous medicinal plants, but indigenous knowledge holders often do not benefit from this. Government recently passed legislation to address this problem.

**Anouk Verheijen** reflects on the new regulations to assess whether knowledge holders will truly benefit.

**T**he herbal sector is a booming business: medicines based on indigenous medicinal plants such as Devils Claw, African Potato and Sutherlandia are widely available at South African chemists and are very popular abroad. The rise of biotechnology in the 1980s has widened the ways in which medicinal plants can be used in

drugs development, and therefore, the pharmaceutical industry has also shown an increasing interest in these plants. Information on traditional use of medicinal plants facilitates drug development and thus is of high economic value.

But what about the people who are the holders of this knowledge who are mostly traditional healers? What are their opinions on the commercial use of their knowledge, which is often sacred information? How are they involved in this process? What benefits do they receive?

The South African government tries to regulate the use of indigenous knowledge in the National Environmental Management Biodiversity Act (NEMBA) of 2004. What does this new legislation entail and to what extent will the implementation of this Act lead to benefits for indigenous knowledge holders?

## REGULATION OF BIO PROSPECTING

NEMBA deals with protecting and managing South Africa's unique biodiversity. South Africa is one of the countries with the richest biodiversity in the world: 80% of its biological resources (plants, trees, fungi, animals) occur within its borders.

The Act regulates bio-prospecting – the acquisition of indigenous biological resources or extracts for commercial and non-commercial purposes. South Africa's rich

biodiversity, together with a good research infrastructure, make it a bio-prospector's paradise. The main stakeholders in bio-prospecting are pharmaceutical companies and businesses working in cosmetics, botanical gardens, research institutes, university departments and individual plant collectors.

Many developing countries assume their biodiversity is a goldmine which can be exchanged for financial benefit with developed countries with a poor biodiversity. Often, this is not the case.

Bio-prospecting can, when the right procedures are followed, strengthen scientific research and build the capacity of local researchers, but its contribution to conservation and development is often minimal. This is mainly due to obstacles in developing countries, such as the absence of national law on the control of access to biological resources, the unequal negotiation position of developing countries compared to their international partners, and the absence of national government in such negotiations.

Through NEMBA, the government tries to address these challenges. Access and Benefit-Sharing (ABS) regulations have also been drafted. As soon as these regulations are implemented, bio-prospecting can take place only when permission is obtained from the land owners – government, communities and private

Grass Aloe (*Aloe myriacantha*)Pig's Ear (*Cotyledon orbiculata*)Baby Necklace Plant (*Crassula rupestris*)

Philip Crous

Some indigenous plants used by traditional healers

landowners such as farmers. This is called Prior Informed Consent (PIC). As soon as PIC is obtained, the bio-prospector and the provider need to negotiate a material transfer agreement. In addition, both parties have to enter into a benefit-sharing agreement, stipulating fair and equitable sharing of benefits arising from bio-prospecting.

Furthermore, when bio-prospectors obtain information on plant use from indigenous knowledge holders, they are forced to go into a benefit-sharing agreement with these stakeholders as well, even if this knowledge is in the public domain. Examples of non-monetary benefits for indigenous knowledge holders could be co-authorship of publications, training in scientific, legal and management issues or equipment and infrastructure support.

Benefits shared can be monetary *and* non-monetary. In the research stage of product development, benefits are mostly non-monetary. Benefits range from support for conservation to environmental education and scientific capacity development.

Before going into detail about these ABS regulations, it is important to note that only limited indigenous knowledge is of relevance for commercial product development.

Secondly, much indigenous

knowledge of possible commercial value, is already part of the public domain, either because it is widespread or part of past research. While knowledge in the public domain is freely accessible, this does not mean that indigenous knowledge holders feel that everyone has the right to use this knowledge. This can be explained by the differences between the African notion of property ownership and Western concepts.

Exchange of knowledge is not uncommon within African societies, but this is accompanied by obligations. Indigenous medicinal knowledge, for example, is often viewed as sacred and it is expected that people use this knowledge in a respectful way. This is contrary to the way property is transferred between owners in Western societies where it is a monetary transaction. The ABS regulations challenge this inappropriate use of indigenous knowledge by making knowledge in the public domain part of PIC and benefit-sharing agreements. However, the regulations do not address the obligations of bio-prospectors towards indigenous knowledge in addition to benefit-sharing.

Nevertheless, taking the limitations of ABS regulations into account, in some cases ABS is a workable instrument to secure benefits for indigenous knowledge holders. In bio-technological

inventions, it is often difficult to trace the use of indigenous knowledge in the development of such products. Indigenous knowledge on a particular plant can be crucial to an invention, but as inventions are a sum of various parts, the role of indigenous knowledge within an invention often remains unidentified. In such cases, ABS legislation can ensure benefit-sharing with indigenous knowledge holders in the early stages of product development when the indigenous biological material and knowledge are acquired.

How has the government proceeded in implementing the ABS regulations? The final draft regulations were gazetted for public comment on 16 March 2007, but the implementation of the ABS regulations will only begin by the end of 2007. Until then, provincial conservation authorities will still grant permission for collection of indigenous material, and in some cases, as in the Eastern Cape, environmental legislation dating from the apartheid era is still in place.

#### HOW THE REGULATIONS WORK

The regulations aim to promote ABS in a controlled but simple way, instead of being bureaucratic, while ensuring benefits for stakeholders.

It attempts to reduce the administrative burden by regulating

access to indigenous resources by a permit system of three types. These are a research permit for the discovery phase of bio-prospecting; a bio-prospecting permit for the commercialisation phase; and an export permit for commercial purposes.

In most cases, MECs for Environmental Management or Nature Conservation will issue these permits, while the Minister of Environmental Affairs and Tourism will provide national oversight. Transfer agreements and benefit-sharing agreements between the applicant and the provider of indigenous resources or knowledge on traditional use, is required for every type of permit.

The national oversight in this permit system is a major improvement to the current system in which provincial Environmental Affairs departments are responsible for issuing a permit. National oversight will make the permit system compatible in each province and it will level the playing field in negotiations on benefit-sharing.

However, it is still questionable if complete equal footing can be ensured. Until now foreign collaborators have initiated agreements. They have a much stronger negotiating position than their South African counterparts. Due to apartheid's long period of economic isolation, South African institutions are eager to set up foreign commercial platforms. They are unaware of the powerful interests that such cooperation offers to their foreign collaborators.

In addition, the regulations do not make provision for any legal assistance to indigenous communities in negotiating benefit-sharing. While they cater for capacitating communities in

negotiating fair and equitable benefit-sharing, this provision is not strong enough. The government should provide legal assistance during negotiations.

What about sharing benefits with indigenous knowledge holders? Will the regulations secure this?

The regulations stipulate that bio-prospectors have to share benefits with communities providing access to a resource and also with parts of communities such as herbalists, diviners and birth attendants that hold particular knowledge.

However, this does not completely resolve the problem around identifying communities holding indigenous knowledge. Often knowledge is shared between communities (sometimes spread over different countries), and therefore, the group of knowledge holders could be much broader than the party allowing access to a particular resource. The regulations prescribe that the Minister of Environmental Affairs and Tourism will act as stakeholder when knowledge is held throughout South Africa. However, should this role not rather be played by representatives of nationally based traditional healers organisations?

Further concerns exist around paying all monetary benefits arising out of bio-prospecting into a National Biodiversity Trust Fund. The regulations do not stipulate within which time frame money paid into the Trust Fund will be transferred to stakeholders. This should be provided to make sure stakeholders get paid within a reasonable period.

## CONCLUSION

The ABS regulations are a great step towards securing ethical standards for research and commercial product development. However,

benefits for indigenous knowledge holders are expected to be low.

Firstly, this is because most indigenous knowledge is not suitable for commercialisation. Secondly, the regulations do not fully address the inappropriate use of indigenous knowledge, as it does not set obligations to bio-prospectors on how to use the knowledge.

Furthermore, the regulations have not managed to completely resolve the issue of how to identify the exact group of indigenous knowledge holders involved. This means that possibly not all stakeholders will be included in benefit-sharing agreements. Although national oversight is put in place, equal footing in benefit-sharing negotiations is still not guaranteed because South Africa has a hunger for foreign investment and legal assistance to communities is lacking.

Many have also expressed concerns around the implementation of regulations and the danger of bureaucratic constraints hampering research rather than promoting ethical research. This would negatively impact on indigenous knowledge holders. However, if the regulations are implemented properly, they are a valuable contribution to the recognition of indigenous knowledge.

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*This article is based on research by the Africulture Project of Umbathhi Training Project, based in Grahamstown in the Eastern Cape. The Project is developing training in the cultivation of medicinal indigenous plants. It also supports local Traditional Healthcare Practitioners.*