Recognising the traditional knowledge of the San people: The Hoodia case of benefit-sharing

The Issue

The relationship between intellectual property rights, prior informed consent, benefit sharing and the protection of traditional knowledge is an international issue of debate that involves many parties, including indigenous communities. The San tribes of the Kalahari are among the oldest communities in Southern Africa. They are holders of traditional knowledge on the use of Hoodia gordonii, a succulent plant found in the Kalahari dessert, which they have historically consumed to stave off hunger on their long journeys. The San peoples were initially unaware that the South African Council for Scientific and Industrial Research (CSIR), an arm of the South African government, had been granted a patent on P57, an appetite suppressant derived of an extract of the Hoodia succulent through research carried out by the CSIR, and had plans to commercialise a Hoodia pharmaceutical product without their consent or their sharing of the benefits derived from the patent and commercialisation. The CSIR then negotiated an exclusive licence that transferred rights to further research and commercial exploitation of the patent to Phytopharm, a pharmaceutical company with a plant extract division, for the development of Hoodia products, which later granted licences to the pharmaceutical company Pfizer and to the food multinational Unilever.1

With the involvement of NGOs, the San people and the CSIR negotiated one of the first benefit sharing agreements that gives the San people a share of royalties derived from the sale of products containing the patented P57. Although the agreement has received criticism, it serves as an example for potential future benefit sharing agreements and other mechanisms to ensure that traditional communities receive recognition for their traditional knowledge and gain a fair share of the commercialisation of the products based on such knowledge.

In the case of the patenting of P57, the South African San Council, representing the San people, argued that the CSIR did not consult with the San people nor adequately recognised their role as original holders of knowledge concerning the properties of Hoodia, in accordance to the principles laid out by the Convention on Biological Diversity (CBD) and the Bonn Guidelines related to ensuring prior informed consent and benefit sharing arrangements with traditional knowledge holders. Moreover, the South African San Council also pointed out that in the agreements between the CSIR and international partners for the development and commercialisation of P57, the San people had not been included. The validity of the patent granted to the CSIR was also questioned by NGOs and the South African San Council, but not legally challenged, on grounds of lack of novelty. For several NGOs that became involved in the Hoodia case, the main goal once the patent on P57 had been granted to the CSIR was to ensure that the San people would enjoy a significant amount of the benefits derived from its commercialisation, and obtain proper recognition within the South African legal framework of the rights of the San indigenous people concerning their traditional knowledge of the properties and use of Hoodia, as recognised in the CBD and the Bonn Guidelines.

A central problem in seeking an agreement with the CSIR to ensure fair and equitable sharing of benefits derived from the P57 patented Hoodia products was the deficiencies in South African legal framework for the protection on biodiversity and traditional knowledge. In the Hoodia case it was difficult to assert the claims of the San people regarding the P57 patent and the future commercialisation of Hoodia products because of the lack of a clear regulatory framework establishing their rights. The hardships suffered by the San people, that have in time have become dispersed and impoverished, also made it difficult for the community to assert their legitimate claims. Only recently have the San been acquiring new land rights and efforts are being made to recover their heritage and reunite the San population.2 These difficulties are exemplified by the fact that during the early stage of the negotiations for a benefit sharing agreement the CSIR had argued that the San people no longer existed and hence they had not been consulted prior to the patent application for P57 nor had they tried to approach the San to negotiate any benefit sharing agreement once the patent was granted.

The CBD recognises that States have sovereign rights over biological resources, but also calls on governments in Article 8(j) to “respect, preserve and maintain the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.” Each State is free to determine the legal framework under which it will protect traditional knowledge, implement the principle of prior informed consent of the indigenous communities hold such traditional knowledge prior to accessing such resources and to provide for adequate compensation when the product is commercialised. Intellectual property rights can be a means to protect traditional knowledge, but there can be other sui generis alternatives, which are being discussed in several international fora, including

It has been argued that the biodiversity legislation in South Africa is weak in terms of the recognition of the customary rights of rural communities vis-à-vis the rights of the State to regulate access and use of use of the countries' biological resources, and the enforceability of the rights of rural communities and proper inclusion of prior informed consent. Access and use of biological resources is regulated in South Africa by the State through a permit scheme. The government issues research or plant collection permits to researchers and bio-prospectors to study and use its biodiversity. It has been noted that rural communities are normally not involved in the decision-making process through which the research or plant collection permits are issued or refused to prospective applicants, and thus they are not legally empowered to control access and to minimize the misappropriation and over-exploitation of resources such as the Hoodia plant in their territory. \(^4\)

While in the Hoodia case was a success in the sense that the South African San Council was able to conclude a benefit sharing agreement with the CSIR after long negotiations and pressure from NGOs, there are still many challenges for the San people in their struggle for the proper recognition of their associated knowledge. The San people are currently not receiving any revenue from the sales of many Hoodia-based products currently being traded in the international market because such products are being commercialised outside of the CSIR agreement and thus their commercialisation would appear to be in violation of Article 8(j) of the CBD and the Bonn Guidelines in terms of prior informed consent and access and benefit sharing. Currently several NGOs and the South African San Council are campaigning for governments to take steps against the perceived illegal sale of these products. \(^5\) The pharmaceutical and food companies involved in the development of the patented Hoodia gordonii product are also making efforts to contain the illegal sale of products containing Hoodia. \(^6\)

The campaign for the sharing of benefits derived from the commercial use of Hoodia products

The traditional knowledge of the San peoples on the use of Hoodia had been collected and documented as far back as the 1930s, and at that point was free to be accessed by researchers and for commercial exploitation, given that there were no requirements for prior informed consent of the communities before accessing and using their knowledge or benefit sharing of the commercial rewards of the exploitation of such knowledge, under South African laws or any international treaty such as the CBD. The CSIR in South Africa was the main agency carrying out research on the use of Hoodia. In 1996 the CSIR was granted a patent no. no. 983170 for the P57 appetite suppressant derived from Hoodia, which it was claimed, complied with standards of patentability, including non-obviousness, novelty and industrial applicability. In August 1998 the CSIR concluded a licensing agreement with Phytopharm for the further research, development and commercialization of P57. The San people had not been informed by the CSIR of their intentions to patent the P57, the granting of the patent or the negotiations with the companies for the possible development of products based on P57.

International media and South African NGOs were responsible for bringing to the attention of the San community and the broader public of the patenting of P57, the potential for commercial exploitation of the product and the fact that the San community, as holders of the traditional knowledge from which the P57 was derived had not been consulted before the patent application nor had been offered compensation. In June 2001 the British newspaper The Observer reported on the commercial development of Hoodia without the consent or involvement of the San people. \(^7\) The NGO Survival International then informed the Working Group of Indigenous Minorities in Southern Africa (WIMSA), an NGO formed in 1996 that unites various San peoples of the patenting of P57. Local NGOs, particularly Biowatch, were pivotal in the process in providing information to the San people and to the public that would otherwise have not been available and supported WIMSA. An important personality in the Hoodia case was Roger Chennells, a lawyer with the human rights law firm Chennells Albertyn in Stellenbosch who had been engaged in the land rights campaign for the San people acted for WIMSA and its support organisation, the South African San Institute (SASI), in representing the various San peoples in South Africa in the Hoodia case. \(^9\)

The group of NGOs, including those directly and legally representing the San peoples of South Africa, approached the CSIR to ask why, prior to the P57 patent application and subsequent negotiations with international companies for the commercial use of Hoodia and associated traditional knowledge, the CSIR had excluded and/or sidelined the San peoples. The NGOs argued that the CSIR should have sought informed consent of the San before acquiring and using the information concerning Hoodia and associated traditional knowledge in commercial activities, in recognition of their contribution to the conservation and preservation of Hoodia and their traditional knowledge. It was argued that the rights of the San to control and to determine the grounds for the use of Hoodia were undermined because they were not consulted or involved in the process, including that the granting a collection permit to the CSIR for Hoodia plants. Allegedly, two of the arguments given by the CSIR concerning the exclusion of the San were that 1) all the San people had died, and 2) the CSIR were reluctant to engage the San...
in the discussions because they may have raised
demands that would have been difficult to satisfy.\textsuperscript{10}

Once the San communities and civil society were
informed about the patenting of P57, they forcefully
campaigned to be included in subsequent negotiations
and influence their outcome. Given that the research
and further processes related to P57 by the CSIR
where already on their way, reversing such process
was not seen as a realistic option by the San
communities. Hence, they focused their efforts on
achieving a benefit sharing agreement between the
CSIR and the South African San Council, a voluntary
association established by the Khomani, the Xun and
the Khwe San communities of South Africa. Following
months of negotiations, including workshops and
meetings funded by the CSIR that brought together
representatives of the San, CSIR, government
representatives and NGOs,\textsuperscript{11} on 1 February 2002, an
agreement in the form of a Memorandum of
Understanding was reached between the CSIR and the
South African San Council. The agreement was
considered a significant step forward in that the CSIR
recognised the San as holders of traditional knowledge
of Hoodia and became committed to negotiating a
benefit sharing agreement with the South African San
Council in recognition of their collective rights, including
reaping monetary benefits of the commercial
exploitation of the P57 patents. Between February
2002 and March 2003 the negotiations on the terms of
the agreement between the CSIR and the South
African San Council continued until a benefit sharing
agreement was signed on 24 March 2003. The
agreement specified the percentage of the total
payments, including royalty payments (6%), made to
the CSIR that the San people would receive upon the
commercial release of P57 products.\textsuperscript{12} Although there
are debates as to whether the shares in terms of
royalty payments allocated to the San in the event of
successful development of pharmaceuticals based on
P57 were fair and sufficient or whether the San could
have negotiated a better deal, the benefit sharing
agreement could result in important financial returns for
the San people.

**Successes and Lessons Learned**

Although far from ideal in terms of equity and process,
the benefit sharing agreement reached in the Hoodia
case is a step forward in the recognition of the
collective rights of indigenous communities as holders
of traditional knowledge related to biodiversity. Importantly, it sets a precedent for future benefit
sharing agreements to be negotiated. In the Hoodia
case the role of NGOs, including those representing
the San people, was fundamental in reaching the
agreement and ensuring that it was as fair and
equitable as possible. Important elements that lead to
the successful conclusion of the agreement was the
trust that was achieved between the different parties in
the negotiation and the constant communication between
them that allowed for misunderstandings to be clarified
and concerns to be voiced. The CSIR recognised that in
the first instance it should have asked for the informed
consent of the San people prior to the application for the
P57 patent and sought to negotiate an agreement, in the
case that the San gave their informed consent for the
patent, that would ensure the equitable benefit sharing of
the products derived from the P57. The case serves then
as an example of the necessity of ensuring prior
informed consent of traditional knowledge holders and, in
cases where such prior informed consent has been
achieved and a patent or other form of intellectual
property is granted over elements derived from
biodiversity of which traditional communities are
knowledge holders, ensuring that the benefits of their
commercial exploitation are equitably shared.

The Hoodia case also highlights the need to ensure that
the national legislation with respect to the biodiversity
provides adequate recognition to the rights of traditional
communities, in accordance to the principles and
objectives set out in the CBD and the Bonn Guidelines.
The Hoodia case highlighted the fact that South Africa
currently lacks a regulatory framework that can properly
ensure the legal protection of the rights of the rural
communities over biodiversity, including recognition of
prior informed consent and protection of traditional
knowledge. In this regard, it is important to ensure that
adequate legislation is developed, whether based on the
intellectual property system or a sui generis model.

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1 See Berne Declaration, San of Southern Africa urge governments to act, Windohek, Cape Town, Zurich, Bonn, 6 March 2006, http://www.evb.ch.en/p25010803.html


3 The most robust piece of legislation on biodiversity in South Africa is the Biodiversity Act of 2004, but it is argued that it is inadequate in ensuring the protection of the rights of rural communities. For example, the Biodiversity Act of 2004 does not include adequate provisions reflecting customary laws and introducing prior informed consent. See Tonye Marcelin (2006), Biodiversity Regulatory Options: Involvement of Rural Communities in Decision-Making Processes in South Africa, The Journal of World Intellectual Property 8(6), 809-824.


5 For example, recently the Working Group of Indigenous Minorities in Southern Africa (WIMSA) and NGOs including Biowatch, the Berne Declaration and the Church Development Service wrote a letter to the governments of South Africa, Germany and Switzerland
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to stop the illegal trade in unauthorised Hoodia products. See Wezi Tjaronda, San cry foul over Hoodia trade, GRAIN, March 9, 2006, originally published in New Era, Windohek.

6 See, for example, http://www.phytopharm.co.uk/hoodia_faq.html


8 Rachel Wynberg from Biowatch has been significantly involved in the Hoodia case and in the development of the South African legislation on biodiversity. See http://biowatch.org.za

9 See Chennels Roger (2003), Genetic Research, Ethics and Law; Indigenous Peoples, Biodiversity, Biotechnology and the Protection of Traditional Knowledge, St. Louis, 4-6 April 2003.


12 For details of the benefit sharing agreement and the negotiation process leading to the agreement, see Chennels Roger (2003), Genetic Research, Ethics and Law; Indigenous Peoples, Biodiversity, Biotechnology and the Protection of Traditional Knowledge, St. Louis, 4-6 April 2003, p.10. For further information and details about developments in the Hoodia case and the South African legislation on biodiversity, see Rachel Wynberg (2004), Rethoric, Realism and Benefit-Sharing: Use of Traditional Knowledge of Hoodia Species in the development of an Appetite Suppressant, The Journal of World Intellectual Property, November, Vol.4, no. 4, p. 851-876.