

# Biopirates in the Kalahari?

How indigenous people are standing up for their rights –  
the experience of the San in Southern Africa



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# Introduction

Throughout the world, indigenous peoples are struggling to assert their traditional rights. They are demanding recognition of their rights to land and cultural self-determination. And they are defending themselves against biopiracy, against multinational corporations who want to market plant-based raw materials and knowledge developed over generations – without obtaining the people’s consent or giving them any share in the profits. When these corporations also apply for patents, indigenous peoples definitively lose any influence over the way their own traditional knowledge is commercialised.

What they want, instead, is to be able to decide for themselves whether to allow others to exploit their knowledge and resources – and if so, when and how. “Surely picking fruit from other people’s gardens is illegal in Europe, too” they say. And Victoria Tauli-Corpuz, Director of Tebtebba, an EED partner which campaigns internationally for the rights of indigenous peoples, comments: “It is unacceptable to exploit our knowledge on the one hand, and ignore our rights on the other.”

The EED supports the development efforts of indigenous peoples in a variety of ways: by means of financial support, secondment of professionals, and advisory services. And it campaigns for international agreements to be formulated with the interests of disadvantaged groups in mind – as it did at the Conference of the Parties to the Convention on Biological Diversity, held in February 2004 in Malaysia. The initial progress made on that occasion will, hopefully, help to reinforce the rights of indigenous peoples when their plants and traditional knowledge are turned into products and marketed for profit by companies in the North.

This is what was done with the plant named Hoodia, which is native to Southern Africa. The San people have been using Hoodia for centuries to suppress hunger. It contains an active ingredient that overrides the natural appetite, and could become a best-selling slimming aid for the overindulgent societies of the North. As

well as providing financial support to the San, the EED has seconded a development professional to Windhoek, the capital of Namibia, to advise them on such issues as setting up the regional organisation, WIMSA (Working Group of Indigenous Minorities in Africa).

In the struggle for their rights, the San have achieved one important element of success. After the appetite-suppressing ingredient of Hoodia had already been patented, they managed to conclude an agreement assuring them of a share in any future profits generated by the slimming aid. Unfortunately, full recognition of their rights to land and cultural self-determination was not part of the deal. Today the active ingredient of Hoodia belongs to the owners of patents and licenses, and is no longer owned by the San. They are very dependent on those who hold the patent, and hence the exclusive rights to the use of Hoodia.

To change this in future, international conventions must include binding guarantees to protect indigenous people’s rights – against violations by their own governments as well as international corporations. At the same time, the San will need ongoing support in their struggle to assert their rights. Which is what this brochure hopes to inspire. Both endeavours will call for dogged determination. Success will only come gradually, and rarely if ever will it be spectacular. But the efforts of the poor to stand up for their rights will not be in vain.

Monika Huber  
*Director International Programmes*

Wilfried Steen  
*Director Development Policy and Domestic Programmes*

“We [the San] are delighted that a part of our traditional knowledge is being honoured on this historic occasion. For us it is an occasion to celebrate. It is of critical importance to us that CSIR has acknowledged our traditional knowledge of the Hoodia as the source of information that started the process leading to the granting of the patent in 1995,” were the words of Kxao Moses ‡Oma, the chairperson of the WIMSA Board, expressing the San communities’ satisfaction with the benefit-sharing Agreement signed in March 2003 between the San and the South African Council for Scientific and Industrial Research (CSIR).

Above and beyond the finalised contractual clauses, the real quality of the agreement lay in the negotiation process itself: it featured various rounds of negotiations, lengthy discussions and a series of workshops in which a considerable number of San representative bodies were involved. This procedure formed the very essence of a capacity-building process, which

strengthened the San organisations and restored the confidence in their capabilities.

Since the inception of the Working Group of Indigenous Minorities in Southern Africa (WIMSA) – a regional San advocacy and networking organisation – representative bodies such as the WIMSA board, the South African and Namibian San Council, the San Culture and Education Committee and the Khwe Language Committee were appointed. Except for the latter, all San bodies and the WIMSA annual general assembly (AGA) played a crucial role in the decision-making process leading to the Hoodia benefit-sharing agreement. At the 2002 AGA – WIMSA’s highest official organ – the San delegates from Angola, Namibia, Botswana and South Africa decided that any benefits deriving from the Hoodia will be shared equally by all of the broader San communities in all countries in which they live. Furthermore they mandated the South African San Council (SASC) and WIMSA’s legal

Impoverished and oppressed: the San in Southern Africa





advisor, Roger Chennells, to negotiate with the CSIR on behalf of all San communities. The first round of negotiations resulted in the signing of a memorandum of understanding between the two parties. Between the first and second round of negotiations a workshop on benefit-sharing options and strategies was held and attended by representatives of all relevant San bodies, government and CSIR officials. The subsequent series of meetings between the SASC and CSIR led to draft agreements and eventually to the final version of a benefit-sharing agreement.

After the signing of the agreement the San's learning process did not come to a halt. In October 2003, San representatives from Botswana, Namibia and South Africa met and drew up a joint proposal for the apportionment of future profits from the agreement: 70% should go to development projects and 30% should cover the administration of the San Councils. The suggestions were discussed at the 2003 WIMSA annual general assembly and unanimously approved.

Through the truly concerted efforts of the San representatives from Angola, Namibia, Botswana and South Africa to put the agreement to effective use, the San in general contributed to both a sense of unity and a regained pride in their traditional knowledge and intellectual property.

The WIMSA team  
*Working Group of Indigenous Minorities  
in Southern Africa*

# Biopirates in the Kalahari?

**F**or once, the Kalahari Desert is green. In February and March, heavy and prolonged rain fell, after three years of drought. The tall grasses, the creepers with pink, yellow and white blossoms, and the fresh foliage of camel-thorn trees and other kinds of acacia briefly belie the fact that, for most of the year, this is a hot and sandy wasteland, a hostile environment where little can survive. Scanning the surroundings intently, her eyes riveted to the ground, Magdaleen Steenkamp strides between the clumps of grass. Suddenly she stoops, and scoops out three or four handfuls of sand to uncover a small tuber, the colour and size of

a new potato. To her well-trained gaze, just a few tiny cracks in the sandy soil advertise the presence of a buried Kalahari truffle. Despite its unassuming appearance, this edible fungus is a local delicacy, baked in hot ashes or boiled in salted water. Magdaleen, a member of the ǀKhomani San tribe, cheerfully admits that her gathering expeditions have also brought her face-to-face with a puff adder more than once.

## The open-air free-for-all

The great outdoor superstore where Magdaleen 'shops' for supplies is on three levels: the basement, where buried delicacies like the truffles

Bush, semi-desert and savannah – the habitat of the San





are found; the ground floor, with bushes, grasses and creepers; and the upper level, the tree-tops, including camel-thorns, other overhanging acacias, towering primeval baobabs and fruit-bearing marula and manketti trees. On every level, food is there for the taking – roots, cucurbits, beans, tubers, honey, seeds and leaves. The delicatessen section stocks tree fungi, morama nuts and mopane worms. In the drinks department – vitally important in a semi-arid region with low and erratic rainfall – there are water-storing succulents and tubers, fruit juices and melons, but also seeds to make coffee, leaves for tea, and sugary berries for stronger liquor. Elsewhere there are tobacco plants and horn for whistles, a range of cosmetics, and a full complement of hardware and

The huge open-air pharmacy carries a wide array of medicinal plants and tonics, like the anti-inflammatory Harpago, or Hoodia to give sustenance, strength, motivation and stamina for the hunt. Close by, watch out for the poison cabinet, where deadly nerve poisons made from beetle larvae and roots are side by side with the materials for quivers, bows and arrows. And everything is free. You just have to find it – and know how to use it.

In the months after the rainy season, the store is fully stocked. The longer the drought, the more the risk that certain items will go ‘out of stock’. Then the menu becomes increasingly poor. But even in September or October, fruits and nuts can still be found, along with roots and tubers which stay fresh under the ground for months. And there is always something from the live meat counter: kudu, eland antelope, springbok or warthog.

### The San: expelled and enslaved

Once the ǀKhomani, Khwe, !Kung, Hai||om, Jul’hoansi and other San tribes were hunters and gatherers, with the freedom of the entire territory between the Atlantic, the Cape and the Indian Ocean. They are known to be the most ancient inhabitants of Southern Africa. Their language contains distinctive clicking sounds, which are written down with symbols such as !, || or ǀ. In thousands of rock paint-

ings, some dating back over 20,000 years, they recorded scenes of daily life and hunting, hunters with bows and arrows and a multitude of wild animals, possibly as a tribute to the gods.

The first incursions into the region were made by nomadic pastoralists, African Bantu tribes from the north. From the mid-17th century, they were followed by European explorers, adventurers and colonialists. Portuguese voy-



Their livelihoods depend on their skills as trackers, hunters and gatherers

construction materials like wood, clay and grass; there are tools, string made from plant fibres, and extra-hard wooden digging sticks. For the home, huge baobab fruits make water containers; grass and palm can be turned into baskets and wild cotton into pillows. There is even a small department for toys, jewellery, amulets and musical instruments, like rattles made of chrysalis cases, seed necklaces and bracelets, and ostrich-egg bowls.



agers landed in the west and the east, the Dutch and the English in the south. The Germans, as latecomers to colonialism, made their mark with a brief but bloody period of occupation in German South West Africa, present-day Namibia. From the coasts, these groups advanced towards the continent's interior, on their quest for land, water, and mineral resources – there were rich pickings of diamonds, semi-precious stones, gold, copper and uranium.

The San (or 'Bushmen', the derogatory name given to them by settlers) were driven off their land, away from their ancestors' graves and their sacred sites, and enslaved. At times they were hunted like animals and murdered. They had their names, their languages and their culture taken away, and replaced with Christian names in Afrikaans or English. The apartheid laws in South Africa forced them to conceal their identity. Today there are only around 100,000 San left, probably less than one-tenth of the indigenous population in the pre-colonial era. Half of them live in Botswana, 36,000 in Namibia, and a few thousand in each of Angola, South Africa, Zambia and Zimbabwe – a dwindling minority everywhere. Nowadays very few are allowed to hunt like their forebears, with the exception of two thousand Jul'hoansi in the Nyae Nyae Conservancy in Tsumkwe District near the Botswanan border.

Although the San still live on their ancestral land, they have lost control over it and its natural resources, which were taken over both by the colonisers and by today's intruders. Some of the San became herdsmen on livestock farms, for meagre food and primitive lodgings. Others became servants. Often they ended up as bondsmen, similar to slavery. A few of them made use of their talent for tracking: their abilities were in demand by the army of the South African apartheid regime. They helped track down the fighters of the Namibian liberation movement SWAPO. In Namibia, this role is held against them to this day, and used as justification for the continuing discrimination they suffer, even though members of other ethnic groups such as the Ovambo or the Herero also collaborated with the white South Africans.

### Not enough land for game

"This will do," thought the Boer settlers, after trekking inland with their ox-carts for weeks on end. The savannah must have grown drier and sandier, more barren and more monotonous by the day, and they named the place where they finally reached a halt Vergenoeg, "far enough". Today the 300 kilometres from Windhoek to Vergenoeg, close to the Botswanan border, can be covered in three hours. For the most part, the land is as flat as a skillet. But the plains are broken up by scattered hilly ridges, scoured smooth by wind and rain. The knee-high Bushman's grass glistens gold in the sun like flax, rippling in the wind like an ocean of sand with small green islands of scrub, dwarfed by towering camel-thorn trees and other acacias. The dead straight road is lined with never-ending fences to the left and right. Every few kilometres a farmstead looms into view, with barns, pens, and a wind turbine for the borehole. They have strangely German names, like Loreley and Heimat. Locally, Gobabis District is known as Cattle County.

Today Vergenoeg is a communal farm. The government bought it back from its white owners for a princely sum, and the 6000 hectares were split up into a number of 'posts'. But when the land was allocated, most San families who live here came away empty handed. Only those who owned cattle or, failing that, sheep and goats, stood a chance. But most San had no livestock, not even chickens. So all they got was a small plot where they could put up a hut out of sticks, corrugated iron and mud, with shutters made of rusty tin. Outside, two or three dilapidated donkey carts are parked in the shade of a few trees. Someone has tried to mark out flowerbeds with stones, but there is not enough water.

Frits Kamte has proudly written his name in large letters on the wooden door, and beneath it, 'Councillor'. Next door he has improvised an office out of wooden stakes and corrugated iron, equipped with a few threadbare camping chairs. Frits Kamte and his deputy, Augustus Jacobs, have been elected as the representatives of the San in Vergenoeg, but the authorities have yet to recognise them. So among other things, they may not take part in meetings of the Land Board Committee which is responsible for land allocation.

The only work available is as a day labourer on one of the farms. Or the odd opportunity to perform in an exotic dance troupe at the nearby tourists' lodge. The older people, like Frits and Augustus, receive a small pension of 250 Namibian dollars a month, equivalent to 35 euros or 43 US dollars. Without state

food assistance, nobody here could make ends meet. The trouble is, access to the great open-air superstore is barred by the fences of private farms. What is more, the livestock eat the shelves pretty bare.

Livestock farms and fences have also reduced wild animal populations. The ostriches, oryx

## San Art



Museum in the Drakensberg district, one of the world's largest open-air rock art galleries and a UNESCO World Heritage Site, was nearing completion – and the San had not even been consulted. Petrus Vaalboi, chairman of the San Council, considered this a “grave insult”. Just in time, the government managed a volte-face: it held a series of negotiation workshops with the San, and Petrus Vaalboi would be invited to speak at the opening ceremony. Since then,

With the land that farmer David Blaine bought, years ago, he acquired some bizarre rock formations that look like rugged towers, stacked up by giants. On these rocks, some time later, he discovered drawings – of eland, springbok, and hunters with bows and arrows. Now he earns a living not just from his cattle, but from lucrative “Bushman Rock Art”: a small shop sells “San Art” – necklaces, pictures, carvings. But the descendants of the original “rock artists”, now farm hands living in dilapidated huts, see not a penny of the money.

What David Blaine is doing in a small way, the government of South Africa tries to do on a much grander scale. In the summer of 2002, the South African San Council was shocked to discover that the construction of the Didima

the San have been the acknowledged owners of South Africa's “rock art”, and scientists have begun to take its interpretation seriously.

Music, paintings or sculptures: at every turn, there is callous and tasteless marketing of the San's cultural heritage – and even of the San themselves. Yet they alone receive none of the benefits.

In the meantime, at least one safeguard has been introduced: in a change from the past, filmmakers, authors, researchers and journalists now have to sign an agreement acknowledging the intellectual property rights of the San. Only after that can they ask their questions and make their films.

Devil's Claw:  
an unobtrusive  
desert plant  
with spectacular  
medicinal effects



antelopes and elephants that remain, in national parks and on private game farms, are reserved for the tourists and hunters who will pay large sums of money for a kill. To eat meat once in a while, the only option is poaching. "What else can we do, if our wives and children want meat to eat?" says Frits Kamte in self-justification, "Hunting is our tradition, our culture."

### Plant raiders

Yet the San of Vergenoeg are sitting on buried treasure: gamagu, or Harpago. Augustus scrapes away the sandy soil to expose one side of the taproot of an unprepossessing creeping plant with dark pink blossoms, which seems to grow everywhere. Carefully he then follows one of the horizontal side roots. After twenty or thirty centimetres it thickens into a distended tuber. This is the plant's store of water, to tide it over the rainless season. The San have used it for generations as a homespun remedy for inflammations, pain and fever, a locally grown version of aspirin that is also very effective against dyspepsia. Cut into slices and dried, it is chewed or made into an infusion. The other name for gamagu, 'Devil's Claw' comes from its black woody seed capsules which have long, pointed barbs.

Without the San, probably nobody would ever have realised that, hidden in its side roots, the nondescript ground-covering plant with

the bizarre seed capsules produced a substance with such varied medicinal effects. But during fighting with the Herero resistance, G. H. Mehnert, a soldier with the German colonial troop, happened to observe how a San healer cured an injured opponent, and made him divulge his knowledge about Devil's Claw.

Since then its fame has spread to natural therapy clinics and health food shops throughout the industrialised world, especially in Europe. One early advertisement went so far as to say: "Through the ages the black witch doctors have been familiar with the health giving effects of Harpago-Tea. Their secrets have now been discovered by science." Patents were registered for the extraction and processing of the active ingredients. In the last decade especially, demand has exploded. Today Namibia is the largest supplier: in 2002, exports of more than 1,000 tonnes of Harpago generated the equivalent of around 5 million US dollars. The most important market is Germany, where Harpago is considered the cure for rheumatism and the third most frequently used natural remedy of all. However, packets of Harpago Tea from the natural remedy company, Salus, one of the market leaders in the health food shop sector, give no indication of how Devil's Claw was discovered, nor any information on its Southern African origins.

Although gamagu grows in abundance in and around Vergenoeg, for all the rapturous acclaim for its miraculous properties, the San reap very few benefits from its commercial success. Even if they know how to apply for the necessary permits to harvest and ship it, it is very difficult for them to manage the process unaided. Or they do not have the money to deliver the product to the exporters themselves, in order to cut out the greedy middlemen. Often they get only three or four Namibian dollars for a kilo of dried tubers, a mere fraction of the prices paid by consumers in Europe. For the harvesting season between March and October, profiteers sign up groups of collectors who will work their fingers to the bone for no payment other than food and drink. To increase profits, the parent tuber is often dug out at the same time, destroying the whole plant.



Land-use plans should safeguard the San's settlement and hunting rights

### Domesticated Devil's Claw

Rising demand, excessive use, and expanding livestock herds have led to a situation where the supply is becoming scarce in certain regions. Fears that Harpago might be threatened with extinction led German Friends of the Earth (BUND) to apply, in the year 2000, to have it included on the list of endangered plant species protected under CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora. This would have placed restrictions on trade, so Namibia and South Africa were quick to quash the initiative.

However, the venture also made it clear that if there was to be any further expansion in the promising market for natural remedies, the supply would have to be put on a sustainable footing. Therefore several companies, including Salus, tried to domesticate the wild plant gamagu and to propagate it from seeds, offsets or in the test tube – a far from easy undertaking. So far the most successful method involves warming the seeds in a solution, the ingredients of which are a closely guarded secret. This outsmarts the germination-

inhibiting mechanism that is common in desert plants.

However, as cultivation starts to become a practicable possibility, high levels of investment will be required: in laboratory facilities, greenhouses and irrigation systems, suitable agro-ecological conditions, and technical expertise. Such conditions are most likely to be achieved on large, commercial farms. These are better able to satisfy the buyers' many demands simultaneously: reliable delivery, consistent quality, a stable concentration of active ingredients, and purity. But in that case, the San who gather Devil's

Claw in the wild would not get a look-in: one of their few sources of income would be lost.

That does not affect the San alone: it puts Namibia's market-leading position under threat. In neighbouring South Africa, farmers have already begun to grow Devil's Claw commercially. Farmers in Peru, Turkey or Morocco could follow suit. If competition heightens, the supply could be increased enough to force prices down. Effectively, remarks Dave Cole of the non-governmental research centre CRIAA in Windhoek, "the expropriation of the rights of the original providers of traditional knowledge regarding Devil's Claw will have been completed," – a process begun over a hundred years previously by a German colonial soldier named Mehnert. The only winners would be the commercial farming and pharmaceutical sectors.

### Land – the core issue

Hence, argues Dave Cole, the San as the traditional users must be enabled to participate in the economic opportunities offered by the cultivation of Devil's Claw. For example, research

## Who is WIMSA?

It was a significant step, at the beginning of the 1990s, when deputations from different San groups in Southern Africa came together for the first time to discuss the issues and problems affecting their lives, and their future perspectives. The San, living in small kinship groups without marked hierarchical structures and organised largely on egalitarian principles, had never mounted any coordinated resistance to the centuries of progressive land theft which had forced them into the inhospitable margins of the Kalahari. But now they began to discuss collective representation of their interests. At the two development conferences held in Windhoek in 1992 and Gaborone in 1993, delegates of the San called for an organisation of their own to be established. Only after the United Nations had declared a “Decade of Indigenous Peoples” in 1994 and numerous studies had explored the situation of San communities and brought them into the public eye, their time had finally come: in 1996, the “Working Group of Indigenous Minorities in Southern Africa” (WIMSA) was brought into being.

In the meantime, membership of the network which is a registered public-benefit organisation has grown to 30 San organisations from Angola, Botswana, Namibia and South Africa. WIMSA’s work is coordinated by a central office in the Namibian capital of Windhoek. Once a year, delegates from all the member organisations meet up at a general assembly to define goals and priorities for their work. These meetings are used for planning measures in the fields of basic and further training, ownership and promotion of culture, securing land tenure and natural resources, defending human rights, HIV/AIDS education and the continued development of representative bodies.

Since it was founded eight years ago, WIMSA’s activities have constantly expanded and the first successes are now being registered. For instance, WIMSA facilitated a programme that supports the San in documenting their oral traditions, as a means of boosting their awareness of the value of their own culture. WIMSA is also helping the San to protect their intellectual property, such as their knowledge about



the therapeutic effects of traditional medicinal plants, and their own personal rights in the face of all those who want to exploit and profit from San knowledge and culture. To safeguard their ownership rights to free communal land, inhabited by the San for generations, WIMSA arranges legal assistance, lobbies the responsible government offices and mobilises support from the general public through intensive work with the media.

In close consultation with the Legal Assistance Centre in Namibia and Ditshwanelo, the Botswana Centre for Human Rights, WIMSA also intervenes in human rights violations affecting the San. One of the most serious cases in which WIMSA and other organisations assisted the San in the fight for their ancestral land was the Botswanan government’s expulsion of 2,200 San from the Central Kalahari Game Reserve. According to the government the San were getting in the way of the area’s development into a National Park with a stronger emphasis on tourism. Now the government must account for its actions in court.



should not be geared solely towards commercial production, but also explore ways of improving the yields of gamagu grown in the wild on communal or state-owned land. Higher, more consistent yields, could improve the gath-

erers' income.

"Then the benefits would be shared out more equitably," thinks Dave Cole. However there are considerable barriers to be overcome: freely available land, 'communal land', is scarce, and competition to use it is growing.

On the map of Namibia hanging on the wall in the WIMSA office in Windhoek, only a few white patches remain, even though the country is sparsely populated, with fewer than two million people inhabiting an area one-and-a-half times the size of France. Around 40 percent of it consists of farm-

land, a dense tapestry of small squares, each several thousand hectares in size, connected by a network of good roads. A further 40 percent are protected reserves such as the Namib Desert, the exclusion zone for diamond mining and a few large national parks such as Skeleton Coast and Etosha Pan. The rest is communal land, as in Otjinene and Tsumkwe Districts; the latter until very recently was still officially known as 'Bushmanland'. These are the remotest regions in the country's interior, along the Botswanan border, or in the North West.

The team from Windhoek which WIMSA sent to Tsumkwe District West has convened a meeting of the !Kung-San. In July 2003, after lengthy wrangling with the government, a

9,000-square-kilometre area of this region was finally declared a 'Conservancy'. This step accords limited rights to San groups to exploit the game and other natural resources as a means of generating income. In order to safeguard game stocks from decimation as a result, and to protect the environment from degradation, joint work will be undertaken to draw up and agree a land-use plan for San settlements in the new Nǀa Jaqna Conservancy.

The first step is to take an inventory. Where are the huts located? Where are there water holes and vegetable gardens? How much game is left? After that, discussions take place on which areas should be used for agriculture and as pasture, and which should be reserved as forest and for the collection of 'bushfood'. The Ministry of Environment and Tourism has provided experts to help the WIMSA team, which also includes San people, to demarcate the borders with satellite positioning and to plot precise maps. When it comes to ensuring sustainable use, "community control is better than government control," says EED professional and WIMSA coordinator Axel Thoma.

Already the !Kung-San in the district of Tsumkwe West are mulling over plans for the future. Once the game population in the Nǀa Jaqna Conservancy has recovered, and bearing in mind the rock paintings in the nearby hills, there is potential for attracting tourists to the region. Then they could set up a small lodge to accommodate them. In addition, Devil's Claw and other plants could "generate income on a broad scale," believes Axel Thoma. Useful experience already exists. In Vergenoeg for instance, with advice from WIMSA and the Namibian Centre for Research-Information-Action in Africa (CRIAA), gamagu has been harvested for several years without destroying plant stocks. Direct marketing eliminates middlemen and results in better payment. For smaller quantities there is now even a process for organic certification. The 'organic' market niche holds out the prospect of higher prices, giving an incentive for sustainable use and the chance of reversing the downward spiral of low prices and undue exploitation.

### Disputed natural resources

This concept of sustainable resource use sounds like the ideal solution for giving both



Water – a source of conflict

humans and nature a better outlook for the future in the sensitive environment of the Kalahari. It combines environmental protection, food security and exploitation rights, allowing the San to uphold their traditional way of life, at least to a certain extent. They can take what they need from nature's open-air superstore, but also have money and ties with the market economy.

Nevertheless, in Bubi se Pos, one of the settlements where the WIMSA team is working on a land-use plan, a heated dispute is in progress. Two Herero men are disrupting the meeting, insulting and threatening the team, intimidating the San and holding up the proceedings of the gathering with their endless tirades. The Herero do not want a conservancy, let alone land-use plans which limit the amount of pasture available for their livestock. They point out their tradition as livestock herders. The beef cattle bring them good money. And export, to South Africa for instance, generates considerable foreign exchange for the state.

Herero and Ovambo people from the few fertile, and therefore heavily populated, regions in the north are encroaching onto more and

more of the communal land. They persuade or bribe local chiefs to allocate land to them. Or they ask San groups to let their livestock have access to their water supply. Little by little, the numbers of cattle coming to the waterhole creeps up. Soon the San no longer have enough water for their own needs. Cattle and goats do not confine their grazing to 'Bushman's grass'; they devour anything edible they can find. Then bushfood becomes scarce, so does building material, and so do medicinal plants like Devil's Claw. Resources are insidiously expropriated. A cow in the Kalahari is like a bull in a china shop.

In some regions this dispute over land and water, the conflict between San, Herero and Ovambo, between Devil's Claw and T-bone steak, nature and profit, has already ended in confrontation. Occasionally it is taken to its ultimate conclusion with firearms against bows and arrows. More often than not, the San come off worse. Then they might resort to the 'zero option': deliberately torching the Bushman's grass – no pasture, no livestock, no Hereros, no conflict.

Land in the Kalahari –  
a vehemently disputed  
resource





### H is for hope

“We need land and education,” says Petrus Vaalbooi, Chairperson of the South African San Council, “in order to safeguard our rights and our traditions.” A native succulent plant could help them to achieve this: Hoodia, a cactus-like plant which the ǀKhomani San call !Kkhoba. If everything works out, it could earn the San a lot of money. Then, instead of weaving baskets, working as day labourers or dancing to entertain tourists, they could buy land, give their children a good education, and revive their native language and their culture, once in perfect harmony with nature but now in danger of dying out. After years of oppression, discrimination and dispossession of their rights, Hoodia might hold out the hope of a better and happier future.

This promising turn of events is usually told as a ‘good news’ story, along the following lines: once there was a time when the ‘Bush-

men’ of Southern Africa used Hoodia to stave off their hunger and thirst during hunting expeditions. One day, scientists came along from the South African statutory research council, the CSIR. They pinpointed and patented the active ingredient, without asking the San. The British company Phytopharm obtained the exploitation rights to P57, and the American pharmaceutical group Pfizer was awarded a production licence. The poor people’s cure for hunger looks set to earn fat profits as an appetite suppressant for the wealthy but overweight: used fresh in salads, as a slimming drink, or a fat-busting pill. Luckily, the ‘biopirates’ were caught in the act. The South African San Institute, WIMSA and the work of a committed lawyer, everything turned out for the best: the San were given a share in the income from the patent. “Doomed culture of the South African Bushmen saved by the pharmaceutical industry” the German television



### Benefit Sharing

The South African San Council and the CSIR negotiated and entered into a Memorandum of Understanding during March 2002, in terms of which the parties agreed, inter alia, that

- The San people are custodians of an ancient body of traditional knowledge and cultural values, related inter alia to human uses of the Hoodia plant, resulting from their interrelatedness with nature in all its forms, over the ages.
- The CSIR acknowledges the existence and the importance of the traditional knowledge of the San people, and the fact that such body of knowledge, existing for millennia, predated scientific knowledge developed by Western civilization over the past century.
- The CSIR and the San Council, representing the San people in Southern Africa, and in anticipation of the commercial success of the patents covering the technology related to products derived from the Hoodia plant, committed themselves to a process of negotiations, in order to arrive at a comprehensive benefit-sharing agreement between themselves as primary parties.

The Hoodia succulent



Profits from the use  
of biodiversity must be  
shared equitably

news reported gleefully. And they all lived happily ever after...

### The obligations of property ownership

But the real story is far more complicated, and raises any number of questions and problems.

For instance, whose property is the unique biodiversity of the Kalahari and Southern Africa, of which Kalahari truffles, Devil's Claw and Hoodia are merely a few examples? The San may be the most ancient, but are not the only group today with knowledge of the effects of Hoodia and countless other plants. And South Africa is not the only country in which they grow. The answer has a commercial value, because natural resources, including genetic resources, contain vast potential for exploitation. According to estimates from the World Health Organization (WHO) for example, medicinal plants supply 70 percent of the raw materials for modern medicines. And with modern biotechnology and genetic engineering, the pharmaceutical and food industries have new tools for isolating and synthesising active ingredients, and for genetically modifying plants.

Most indigenous peoples and traditional communities have no concept of individual ownership of nature. Likewise, for the most part, their traditional knowledge about it is shared and made available to all. In industrialised countries, natural diversity was long

considered to be the 'heritage of mankind', meaning that it belonged to everyone – or no-one. Collectors, researchers and breeders have repeatedly set out to scour nature's bounty, which is most abundant in certain countries of the South. However, when they turned a profit from their 'discoveries', as they did with Devil's Claw, the countries of origin and the people living there were left with little to show for it.

A clampdown on such practices came in the form of the Convention on Biological Diversity (CBD), passed in 1992 at the United Nations 'Earth Summit' in Rio de Janeiro. For a start, it clarifies the matter of ownership rights. Under the Convention, each country of origin is assigned national sovereignty over its own biodiversity. This gives governments the right to rule on the use of flora and fauna occurring within their own territory. It covers not only whole plants and animals, but also all parts of them, including their genetic material.

By the same token, the Convention makes governments responsible for taking action to prevent the rapid loss of biodiversity, and for regulating the use of natural resources so that all exploitation – whether by national or foreign research institutions or companies – is on a sustainable basis. Profits from the use of biodiversity must be divided equitably among stakeholders. For instance, they could be shared between a pharmaceutical company and the country of origin.

Known as 'benefit sharing', this also has been extended to indigenous peoples and traditional communities, because their ways of life and traditional patterns of use, including the cultivation of plants and breeding of animals, have contributed to the conservation and development of diversity. Added to that, their knowledge, experience, and traditions can be helpful to bioprospectors. Just as the San have an infallible eye for the plants they gather and the

game or people they track in the bush, so they often give researchers vital clues about useful – and highly profitable – properties of nature. Just as they did with Devil's Claw a century ago. So, once again, the San's abilities as trackers are in demand.

### The vital clue

"There, look – and here, a really big one!" With boundless energy, Petrus Vaalbooi paces across the stony hillsides on the edge of the Kalahari National Park. The knee-high Hoodia plants are somewhat like stacked-up zucchini, firm and dark green. Except that they are far from smooth, with their prickly spines and lengthwise grooves. Petrus Vaalbooi cuts off a finger-length tip and scrapes off the spines. "In the old days, on the hunt, we didn't need to eat anything else for days on end," he says, and takes a bite as if to underline the point.

The farm on which Petrus Vaalbooi and other !Khomani families live was the property of white livestock breeders until a few years ago. After the apartheid regime ended, the human rights lawyer, Roger Chennells, negotiated a land claim on behalf of the !Khomani with the new South African government. The petition, based on new land laws, asserted the rights of the South African San to their old "hunting and gathering grounds". With Roger's assistance, the !Khomani were successful and the government subsequently handed over six farms to the San which had previously been sold by their white owners: 38,000 hectares of their forefathers' lands. Moreover, they have special permission to go gathering in the nearby Kgalagadi Transfrontier Park. In other countries, though, the San are still struggling to have their ancestral land rights recognised.

Hoodia's hunger-suppressing properties had first come to the attention of the South African army. Soldiers out on patrols with San trackers saw how they could keep going for days without eating any food, other than Hoodia. On learning of this, the CSIR set about conducting a systematic search for the active ingredient. If they help to separate the wheat from the chaff or to find the proverbial needle in a haystack, such leads are invaluable. They save time that would otherwise be wasted exploring blind alleys during systematic laboratory research – and that reduces costs.

## Brokering a consensus

The Convention on Biological Diversity (CBD) regulates the protection and sustainable use of biodiversity and equitable distribution of the benefits. A step forward was made in April 2002 at the negotiations on the implementation of the Convention. In the "Bonn Guidelines", principles and practical procedures were established internationally for accessing genetic resources and, in return, for benefit-sharing with countries of origin and local and indigenous communities. These are voluntary arrangements, however, and compliance with them is uncertain.

At the next opportunity, therefore, at the World Summit for Sustainable Development in Johannesburg in September 2002, the Group of Like-Minded Megadiverse Countries demanded that internationally binding regulations on benefit-sharing be worked out within the Convention framework. In response, further negotiations were initiated at the 7<sup>th</sup> Conference of the Parties to the Biodiversity Convention held in February 2004 in Kuala Lumpur. The problems yet to be resolved are numerous. For instance, whether industrialised countries could be bound by greater obligations to control biopiracy and to pun-

ish offenders. Or what shape a benefit-sharing arrangement might take if a genetic resource occurs in several countries, as in Southern Africa. It is also important for local communities and indigenous peoples to be allowed to make decisions on access and benefit-sharing, in relation to their own genetic resources and traditional knowledge. Many representatives of NGOs reject such negotiations outright. They fear that they will ultimately lead to the all-out marketing of natural resources, and pave the way for biopiracy in the guise of protection of biodiversity. Others, in turn, take a pragmatic approach and work to strengthen the interests of indigenous peoples and local communities within the Convention framework.

In Kuala Lumpur, irreconcilable differences between the industrialised and developing countries led, as so often, to the establishment of a working party. It will present its report by the time of the next conference in 2006. So it will take some time to put binding commitments in place to prevent multinational corporations from helping themselves to the genetic resources and traditional knowledge of the South, without offering payment or obtaining consent.



The benefit-sharing agreement puts the San on a 'business partner' footing with research institutes and companies

Which brings us to the next question: what is an appropriate, equitable or fair share in the profits, whether for the San or any other provider of indigenous knowledge? How much credit should be given to the scientific achievement, and how much to the contribution of traditional knowledge?

### An important model

Sixty million rand were invested in Hoodia research, the CSIR contends; a sizeable stake to place on such a risky outcome. According to Roger Chennells, the lawyer facilitating the negotiations between the San and CSIR, this issue gave rise to some hard-nosed negotiating. But finally, in March 2003, the agreement on benefit-sharing was signed. As a result, the CSIR recognises the San as owners of the traditional knowledge, as well as the significance of that knowledge to the research. By the same token, it insists that isolation of the active ingredient was its own 'discovery', which it was

legitimately entitled to patent. Under the agreement, the San become business partners and receive six percent of the royalties paid by Phytopharm to the research council for products containing the active ingredient P57. "So as a negotiator, I feel it ended fair for both sides – equally happy and equally unhappy," says Roger Chennells. The negotiations were made more difficult by the fact that, internationally, there are few comparable agreements to refer to. In any case, says the lawyer, depending on the success of the enterprise, six percent could be "a hell of a lot".

For Rachel Wynberg from the South African environment and development organisation BioWatch, however, the amounts seem like chicken-feed – "a miniscule sliver of a large, well-iced cake." She means that the San only receive a share of the CSIR's fee, not a share in the profits, let alone the revenues, from the product itself. What is more, they have to undertake not to make their knowledge about

Hoodia available to any other commercial users. Nevertheless, even Rachel Wynberg sees the agreement between the CSIR and the San as a “historic breakthrough”.

## Alliance of Megadiverse Countries

Hardly anyone would classify Colombia, Kenya or Indonesia as some of the richest nations in the world. But they are – they belong to the “megadiverse” group of countries with the greatest abundance of plants and animals. The 12 countries, including heavyweights such as China, Brazil, South Africa and India, are home to over 70 percent of the world’s biodiversity. The Group of Like-Minded Megadiverse Countries first teamed up in February 2002 in Cancún, Mexico. By joining forces they hope to bring their collective weight to bear in their dealings with industrialised countries and big business. With more equitable sharing of the benefits of their genetic resources, they could boost their own development. They do not want to be mere suppliers of raw materials. Instead they hope that technology and knowledge transfer will put them in a position to capitalise on their resources themselves.

One of the most important priorities is to prohibit biopiracy, the theft of genetic resources. In their Declaration of Cancún, they demand that countries should only authorise a patent if reliable evidence is provided of the origins of biological source materials, and “prior informed consent” (PIC) has been obtained from the indigenous or local population.

As the megadiverse countries forcefully underline, the traditional knowledge and cultures of indigenous and local communities are vital in the conservation and sustainable use of biological diversity.

And they undertake to support these communities in translating their knowledge into economically viable projects.

Indeed, many other indigenous groups and holders of traditional knowledge have been left empty-handed. With a cancer drug called Vincristine made from the Madagascar periwinkle, the American corporation Eli Lilly made annual revenues of 100 million US dollars. So far, the countries of origin have seen not a cent of it.

## Protesting their innocence

Accusations of attempted biopiracy were also levelled at the CSIR, one of Africa’s leading research institutions. The patent only came to light thanks to alert NGOs, and even then largely by chance, four years after the exploitation and marketing rights had been licensed to Phytopharm in 1997. The ethno-pharmaceutical company which proudly claims “to help tribal people to profit from their knowledge,” made a statement that, based on information from the CSIR, the San people had died out long ago, so it would be impossible to share future profits with them.

This provoked outrage, not just from the San but from the international community. So in the end, the CSIR had no choice but to negotiate a benefit-sharing arrangement with the San. After all, South Africa had ratified the Biodiversity Convention. The amicable agreement, certain critics say, does no more than legitimise the theft of the San’s intellectual property after the fact. At best, it is a very lenient punishment. Imagine if a thief could get away with his crime as long as he gave his victim a few percent of whatever the receiver paid him for the stolen goods.

In contrast, the CSIR does not see itself as a biopirate. Petro Terblanche is director of the Bio/Chemtek division in charge of bioprospecting. She rejects the accusation out of hand. “We thought about benefit-sharing right from the outset,” she asserts. “But first we wanted to wait and see whether our research would be really successful.” In view of the high risk of failure, it would have been wrong to awaken false expectations.

But this explanation has one serious flaw. The CSIR had not obtained the San’s “Prior Informed Consent” (PIC) for the research into the active ingredient, the patent registration, or the licensing of marketing rights to Phytopharm. Thus it breached a central and

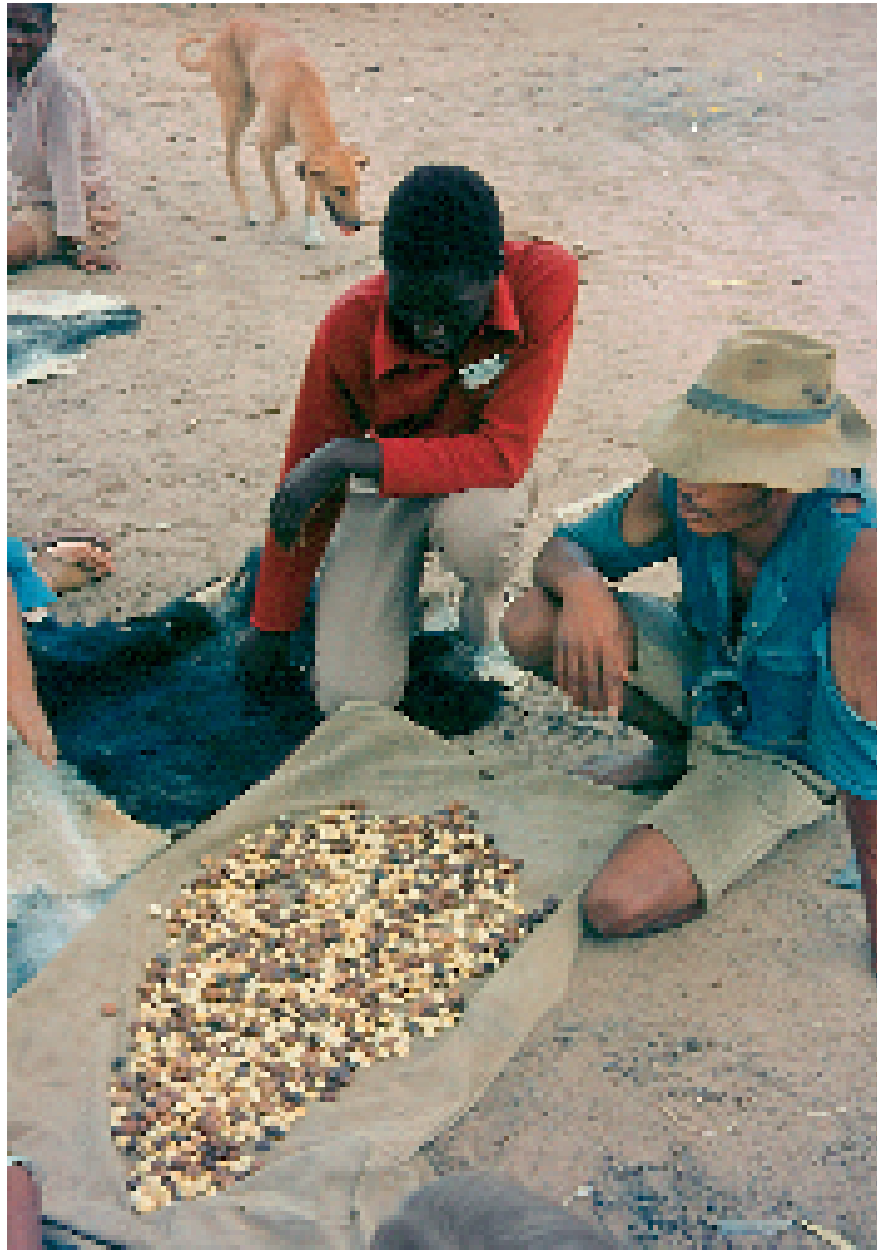


elementary principle of the Convention on Biological Diversity. It was a case of LIC rather than PIC, jokes Roger Chennells, meaning “Late Informed Consent,” obtained from the San after everything had been settled. “At first we were very angry when we heard that we had been robbed,” agrees Victoria Geingos, a Hai||om San woman at the WIMSA headquarters in Windhoek. “Now at least we can be glad we will get something out of it.”

Possibly though, it could have been more. “The Hoodia drug has the potential to be South Africa’s first blockbuster drug, and this should have all been sorted out before the patent was awarded,” says Rachel Wynberg, critically. That would also have put the San in a far better bargaining position. And they would have had the opportunity to say “No”, if commercial use were in conflict with their religious or cultural traditions.

The patent registration itself leaves them with very little say in such matters. It gives the CSIR and Phytopharm the sole right to make decisions. The San can only wait and hope that there will be something in it for them in the end. Supposing that straightforward exploitation rights had been licensed to several companies, such an arrangement would have given them much more scope to negotiate and exert an influence.

In any case, it is debatable whether the patent registration by the CSIR was actually legal. To qualify for a patent, the innovation has to be



The active ingredients of natural resources belonging to indigenous peoples may not be patented and marketed without their consent

an ‘invention’, not just the ‘discovery’ of a substance that occurs in nature. The CSIR wriggles out of this dilemma by insisting that isolating and identifying the active ingredient was its own original scientific achievement, and thus patentable, despite the San’s help.

On the other hand, Roger Chennells is sure “we could have filed a suit against the patent registration.” But it would have been “very stupid” he says, justifying the decision not to contest the patent. It would have meant lengthy proceedings with an uncertain outcome. It is

quite possible that the San would have ended up with nothing to show for it. “To criticise the San for signing the agreement is like criticising a drowning person for accepting a hand to save them from drowning.”

Joram Useb, the deputy WIMSA coordinator and member of the Hai||om tribe, is struck by another important aspect: the agreement with the CSIR taught the San to “make informed decisions about their intellectual property and eventually win their right to benefit from the marketing of that property.”

### Counting their chickens

Petrus Vaalbooi, Andries Steenkamp, Susanna Witbooi and other San representatives from South Africa, Namibia and Botswana have gathered in Platfontein near the South African diamond centre of Kimberley. They have plenty more questions: What is a patent anyway? Does the CSIR have the right to patent the active ingredient? They cannot comprehend how anyone can be allowed to own and privately profit from collective knowledge that is available to everyone. “Why doesn’t the CSIR go fifty-fifty with us?” asks Lappies Naftal, a Khwe from the Caprivi Strip in the far north of Namibia. And Collin Tsimba from Botswana objects to being

treated “like the junior partner”. In his view, the patent makes the traditional keepers of knowledge “invisible”.

Platfontein, the venue for the meeting, was once a private farm but a few years ago it was handed over to the several thousand San who had served in the South African army. It now houses a centre for !Xun and Khwe arts and culture, among other facilities. The meeting is to discuss the establishment of the Hoodia Trust. The trust’s role will be to manage and distribute the money that accrues to the San. It will have trustees from the CSIR and WIMSA as well as the San Council.

The very thought of the potential windfall “made us break out in a cold sweat,” says Axel Thoma, because the figures being tossed around to begin with were astronomical. By 2006, some estimates say, the diet market could be worth two billion British pounds, and as a natural remedy, Hoodia would have an enormous competitive advantage over synthetic compounds. A million dollars a year for the San would not be out of the question. “That could very easily lead to corruption,” says Axel Thoma, explaining his original disquiet. “A few make themselves rich, while the poor communities out there get nothing.”

## ABS and TRIPs: Systems in conflict

Two systems are battling out their differences in the international arena: benefit-sharing versus patenting, TRIPs versus ABS, an unequal tug-of-war over the use of biodiversity and genetic resources.

TRIPs, the Agreement on Trade-Related Aspects of Intellectual Property Rights was agreed by the World Trade Organisation (WTO). It commits all governments to implement minimum standards for patenting, modelling themselves on the industrialised countries. Strictly, only the rights to one’s own inventions can be protected. No evidence is needed of where the original materials and ideas came from, and nor do benefits have to be shared. In the view of many critics,

TRIPs creates a conflict between patenting and the protection of indigenous knowledge. Indirectly, it is advancing the cause of biopiracy.

The dispute is also a tug-of-war between two international organisations. At the WTO, the countries of the industrialised world have always been most influential. At the United Nations (UN), however, the countries of the South have more chance of making their majority count. The UN Convention on Biological Diversity (CBD) has placed a trump in the hands of governments in the South, by giving them sovereignty over their genetic resources. But the Convention’s regulations on access and benefit-sharing (ABS) have proved

somewhat ineffectual in comparison with patent law. And unlike the WTO, the countries who are parties to the convention have no means of punishing violations.

“Effectively” according to Chee Yoke Ling from the EED partner organisation Third World Network in Malaysia, “patent law is undermining benefit-sharing regulations.” Most non-governmental organisations are hoping that further negotiations will strengthen the Convention against patent law.



The Hoodia Trust is currently being established to prevent this. Moreover, the San representatives from the different countries have agreed to share benefits among themselves without regard for national frontiers. The CSIR will pay the San 6% of all royalties that the CSIR itself receives once the drug is commercially available. “In the old days, before the colonial era, there were no borders between us,” Mathambo Ngakaeaja, the WIMSA coordinator in Botswana had successfully argued, “and today we still belong together.” In that sense, the agreement had already brought about one direct benefit: “Thanks to Hoodia, our efforts to unite and strengthen the San in Southern Africa have come a long way,” says Axel Thoma.

At the moment, the worry is that they are counting their chickens before they have hatched. Since Pfizer gave back the licence in July 2003 because the group was withdrawing from the natural medicines sector, it is unclear who will step into the breach. And it could take four or five years to market a product that makes any real money, be it a drug, a ‘novel food’, a Hoodia drink, a slimmers’ tea or a weight-reducing muesli bar. Whatever the new product, it already has competition: a wide variety of slimming products allegedly containing Hoodia are being advertised for sale over the Internet.

### Competing locations

If Hoodia becomes the successful slimming aid that everyone is hoping, other profitable avenues will open up. Before long, natural supplies gathered in the wild might not be enough to satisfy the rising demand. WIMSA, the Namibian Ministry of Environment and Tourism and the South African San Council are already being swamped with enquiries from producers wanting to cultivate Hoodia commercially, including

Phytopharm. Near Stellenbosch, not far from Cape Town, the first such farm already exists, growing Hoodia under contract for an exporter. And other countries like Chile, with a similar climate to Southern Africa, are poised in the starting blocks.



The existing system of patents takes away the rights of indigenous communities to control their own resources

With great foresight, the CSIR had already secured the rights for cultivation and production for the South African market, while Phytopharm owns the rights for plantations outside South Africa. Developing the technology to propagate and produce Hoodia, which is just as complex to grow as Devil’s Claw, is a scientific achievement in its own right, explains CSIR

## No patent on life!

“We have come to the conclusion that the concept of access to genetic resources and benefit-sharing (ABS) must be understood in its own right without a linkage to patents. Patents must not be a pre-condition of ABS. The patent system, as promulgated by the TRIPs Agreement, rewards biopiracy, deprives communities of their ownership rights over their resources, disregards the requirement for benefit-sharing, and undermines measures for the preservation and maintenance of the cultural heritage of rural, agrarian and indigenous communities. (...) We firmly reject patents on all life forms. They pose a threat to biodiversity and traditional knowledge.”

*Extract from a joint declaration by the EED and 17 partner organisations from Africa, Asia, Latin America and Europe, adopted in June 2003 in Hyderabad, India.*

director, Petro Terblanche. Hence, these processes have also been legally protected. For the San, inexperienced in commercial agriculture, cultivated production is a non-starter. Buyers have high expectations, and the level of investment required is equally high. But Petro Terblanche ventures to hope that perhaps the San might find paid employment in the processing industry.

The prospect of business deals and foreign exchange generated by the commercial production, processing and marketing of Hoodia, Devil's Claw and other crop and medicinal plants, could still cause rifts between the neighbouring countries. Namibia fears that its chances are under threat; not least by the far more advanced state of agriculture and research in South Africa. Countries like Chile, brought in on the act by Phytopharm as a potential competitor, could also have an impact. In the end, the region of origin could end up losing out. Although such an outcome would contravene the spirit of the Convention on Biological Diversity, Namibia or South Africa could finish up all but dispossessed.

## Clinching the deal

In any case, under the same agreement, the CSIR secured the San's blanket consent to further bioprospecting, “for the benefit of both parties” according to the wording of the contract. In collaboration with the San, the research council wants to gather all the known information on local medicinal herbs and other plants. That would also provide a body of evidence which the San could use as proof of their traditional knowledge, for instance in disputes with possible biopirates.

Despite the assurance that this data and its use “are subject to CSIR regulations, and legislation and conventions on bioprospecting,” lawyer Roger Chennells thinks that considerable clarification is still needed. Bioprospecting is extremely complex and difficult to regulate. More to the point, it remains a legal ‘grey area’, with little relevant legislation yet in force. Namibia and South Africa are taking their time over national implementation of the Convention on Biological Diversity. Meanwhile, business in biodiversity is so lucrative that certain ruthless players will try every trick in the book. In such a climate, nobody wins concessions easily, least of all the San. Though the Convention requires states to recognise traditional knowledge and to promote its conservation, such obligations are of little help to the indigenous community in practice.

Organisations like WIMSA approach such agreements with great caution, unless there are adequate safeguards to prevent bioprospecting from crossing the line into biopiracy. So in future, all patents which derive from joint information gathering should be registered in both names, advises Roger Chennells, and be jointly owned by the CSIR and the San. Otherwise the San should withhold their consent.

In the light of the vast economic potential of biodiversity, one thing is clear: the CSIR and the state of South Africa had much more at stake than the imperative to clear their names of the biopiracy accusation by offering a ‘fair’ share of the proceeds. Throughout the negotiations on benefit-sharing with the San, big business deals were on the cards. Appetite suppressants and slimming aids containing Hoodia are no more than a tiny fraction of the great Kalahari superstore's true commercial potential. Far more lucrative ideas will follow: seed

production, propagation, cultivation, processing and export of products by no means confined to Hoodia and Harpago. Numerous other plants and ingredients are likely to be covered under bioprospecting agreements with the San, and under a similar agreement between the CSIR and traditional African healers.

With their knowledge and experience, the San hold the key to these treasures – but the CSIR has the scientists, laboratories, and contacts, and since sovereignty over natural resources is assigned to states and their governments under international treaties like the Convention on Biological Diversity, it controls the instruments for profiting from them. It holds the power to turn the key into gold.

### Money isn't everything

In the film, “The Gods Must Be Crazy”, a cola bottle falls from the sky and lands in the midst of a San family in the Kalahari bush, remote from western civilisation. They admire and caress the magical, transparent, glittering object. Everyone wants to hold it – and an argument breaks out. At this, one of the men

is charged with taking the ill-fated gift to the end of the world, and getting rid of it. It is the beginning of a daring quest through the bush and the modern world. Ultimately he tosses the bottle over a sheer precipice into the boundless waters of the ocean. And they all go back to their happy and contented lives...

In the same way, the promising partnership with the CSIR more or less landed in the laps of the San. It resulted from research work in distant laboratories, negotiated by lawyers, governed by international agreements and regulations, all stemming from a worldview completely at odds with that of the San. Unlike the family in the film, the San decided to keep the alien, unexpected and fascinating gift, make use of it, and work together to make the best of it.

How much the San will receive in material terms remains to be seen. It is also unclear when there will be any actual money on the table. Whether it will be enough to fulfil all their wishes is doubtful. They are the last link in the chain, the group with the least influence.



Agrarian communities possess traditional knowledge of plants and medicinal herbs which harbours vast economic potential

One thing is clear: the money will not offer a total solution to the San's wide-ranging economic, social and political problems.

In other respects though, they have gained a lot already: their organisation has grown stronger, even across national frontiers. Furthermore, "indigenous knowledge has received a huge boost of understanding," as Roger Chennells says. On the one hand, it has wrenched the San themselves out of their former oblivion and oppression. On the other

hand, it does their self-confidence good to realise that their traditional knowledge is very valuable, even in far-off Europe, even for the invincible modern world. As a consequence of the negotiations and developments of the past few years, the

San in Southern Africa have become more experienced and more confident. They want to learn more about their endangered traditions, languages and cultures, protect them and keep them in use. And they have grown warier and more reticent towards friendly visitors who show an interest in their traditions, medicinal plants, music and rock paintings, now that they know their potential value outside the Kalahari. Which means that biopirates will have it neither cheap nor easy in future.



The San are keen to use their traditional knowledge for the benefit of future generations

## Acknowledgements

Just a few weeks ago, I would not have known how to spell Hoodia, let alone how it tasted (juicy, but bitter). What a difference a few weeks make! For the opportunity to bridge these gaps in my knowledge, and to produce this publication, thanks are due, first and foremost, to the EED. They recognised that the story of an unassuming desert plant was a vital contribution to the debate on indigenous knowledge. Many people helped with my bridge-building efforts, especially Axel Thoma, Magdalena Brörmann, Joram|Useb, Victoria Geingos, Cameron Welah and many more in the WIMSA office, as well as Ian Agnew of the Omaheke San Trust, who took time out of their busy working lives to answer my questions patiently. Abraham and Ben made the long journey to Vergenoeg seem a lot shorter with their stories about Morama nuts, land distribution and iguanas. Frits Kamte and Augustus Jacobs not only showed me the secrets of Devil's Claw, but also told me about the hardships faced by the San. Stretch, maybe the oldest hippie in Namibia, shared his vast knowledge with me, including how to get the WIMSA minibus back on the road when it wouldn't start. From Andries and Magdaleen Steenkamp, among other things, I picked up a taste for Kalahari truffles; Roger Chennels remained calm as he explained to me, time and again, why the agreement between the San and the CSIR was right in spite of everything. The sincerity of the San Council's discussions on future work and the Hoodia Trust was impressive, and so was Dave Cole of CRIAA with his extensive knowledge about "Gamagu". But I learned the difference between the German and the Kalahari species of Devil's Claw from Dr. Dieter von Willert of the University of Münster. To all these people, and of course to the many others I have not managed to mention by name, I am sincerely grateful.

*Uwe Hoering*



### Biopirates in the Kalahari?

How indigenous people are standing up for their rights

The peoples of the San in Southern Africa have been using a plant called Hoodia for centuries. On hunting expeditions and when food is scarce, it staves off the sensation of hunger. Now industry wants to capitalise on this appetite-suppressing effect: churning out a mass-market hunger-curbing drug, in the form of diet pills or slimming bars, promises to generate sizeable profits.

What about the San? Are they victims of biopiracy? The active ingredient of Hoodia was used and patented without their knowledge. But they stood up for their right to a piece of the pie. The agreement they have managed to conclude assures them of a share in the profits. This is quite a success. But if all the provisions written into binding international treaties had been complied with, the San would be even better off today.