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Making sense of access and benefit sharing in the rooibos industry: Towards a holistic, just and sustainable framing

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ABSTRACT

Over the past decade, a series of controversies has arisen about equity and justice in the rooibos industry, centred both on the biological resource and on the traditional use and knowledge that fostered the growth of this lucrative trade. Accusations of biopiracy, meaning the misappropriation and patenting of genetic resources and knowledge without consent, have taken centre stage, leading to a reassessment of the conditions under which rooibos is traded. Claiming to be the primary holders of traditional knowledge relating to rooibos, indigenous San and Khoi have also launched demands—to date unmet—for a stake in rooibos benefits. Meanwhile, small-scale coloured rooibos producers, despite their involvement in fair trade, remain marginalized. All remain embedded in a political history of rooibos that is characterized by dispossession and adversity, having been propped up by the South African apartheid system.

The melding of these issues with a complex and ambiguous legal framework has led to a situation described by some as “the mother” and “testing ground” of so-called access and benefit sharing. Such approaches stem in part from the Convention on Biological Diversity and its Nagoya Protocol, which lay down new and more equitable ways of treating trade in genetic resources and the use of traditional knowledge. With growing international interest in rooibos tea and its bioactive compounds, a surge of patents associated with the plant, the successful granting of geographical indication status, and threats to the industry of changing climates, ecologies and ecosystems, the stage is set for a reconceptualization and transformation of the industry.

Drawing on longitudinal research over the past 20 years, this review paper aims to bring conceptual clarity and a holistic analysis to an often emotional, divided and, to date, narrowly framed debate. Through exploration of rooibos histories and traditional knowledge claims, bioprospecting and patent activities, and conservation imperatives, this paper reviews the spectrum of issues that require attention when considering access and benefit sharing in the rooibos industry and provides suggestions for a more integrative, environmentally responsive and just approach.

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Abbreviations: ABS, access and benefit sharing; CBD, Convention on Biological Diversity; BABS Regulations, Bioprospecting, Access and Benefit Sharing Regulations; DEA, Department of Environmental Affairs.

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1. Introduction

Against a backdrop of inequality enforced by the former apartheid regime, the high conservation value of the country's biodiversity, and an interest in sustainably developing the nation's natural resources for economic development, South Africa ratified the United Nations Convention on Biological Diversity (CBD) in 1995. In what has been called the "Grand Bargain" (Gollin, 1993), the CBD laid down a new way of treating trade in genetic resources and regulating bioprospecting: in order to gain access to genetic resources, users needed to give the provider country fair and equitable benefits, including technology transfer; to receive such benefits, a provider country needed to facilitate access to genetic resources ("access and benefit sharing"). The rights of indigenous peoples and holders of traditional knowledge were also strongly recognized, and bioprospecting was conceptualized as an important mechanism to create incentives for conservation.

Coinciding with the democratic elections of 1994, this heralded a new era for South Africa. Conservation and social justice became integrally intertwined in a new set of biodiversity and bioprospecting laws and policies that entrenched equity and benefit sharing (Wynberg, 2002a; Kepe et al., 2005). After decades of often unscrupulous exploitation, companies and researchers wishing to use the country's biological resources—or traditional knowledge associated with these resources—were now required to demonstrate that they had both received the prior informed consent of communities who were resource or knowledge owners, and negotiated a benefit-sharing agreement based on mutually agreed terms (Taylor and Wynberg, 2008). Without a so-called access and benefit sharing (ABS) permit, issued by the Department of Environmental Affairs in terms of South Africa's National Environmental Management: Biodiversity Act (NEMBA), Act 10 of 2004 (hereafter referred to as the Biodiversity Act) and its 2008 regulations, those found to be non-compliant faced the risk of a hefty fine or even imprisonment.[1]

A suite of benefit-sharing agreements has been negotiated since the promulgation of the Biodiversity Act. This was spearheaded to a large extent by the case of the succulent plant *Hoodia gordonii* (Masson) Sweet ex Decne, long used to stave off hunger and thirst by the indigenous San, the oldest—and most marginalized—human inhabitants of Africa (Deacon and Deacon, 1999; Lee et al., 2002; Wynberg and Chennells, 2009). The active ingredients of the plant were patented in 1998 by the South African-based Council for Scientific and Industrial Research (CSIR), alongside the negotiation of lucrative deals to develop anti-obesity products. This was done without the consent or knowledge of San communities, despite being based on their traditional knowledge. The CSIR was subsequently forced to negotiate with the South African San Council (hereafter referred to as the San Council), which represents the three indigenous San communities of South Africa—≠Khomani, !Xun and Khwe.[2] This in turn led to a benefit-sharing agreement in 2003 (CSIR and South African San Council, 2003).

Although *Hoodia* was later abandoned as a commercial product due to safety and efficacy concerns (Blom et al., 2011), the case has been precedent-setting. Claiming to be primary traditional knowledge holders of all Southern African biodiversity, representatives of indigenous San and, more recently Khoi, are now at the frontline of many deals in the region. *Sceletium tortuosum* (L.) N.E. Br., for example, a succulent plant well known for its mood-enhancing properties, is the subject of a benefit-sharing agreement between the San Council and HG&H Pharmaceuticals (HG&H and the South African San Council, 2011). San Council benefits include 5% of net proceeds received by HG&H and an annual exclusivity payment of 1% on sales. In a similar example, an agreement between the San Council, the National Khoisan Council[3] and a local pharmaceutical company (Cape Kingdom Nutraceuticals et al., 2013) gives the San and National Khoisan Councils 3% of the profits from products emerging from the use of buchu [*Agathosma betulina* (Bergius) Pillans and *Agathosma crenulata* (L.) Pillans], an essential oil used widely in international flavour and fragrance industries and also an important tonic, anti-inflammatory, antiseptic and diuretic (Moolla and Viljoen, 2008).

Attention has now turned to South Africa's most successful and oldest indigenous natural product industry—rooibos tea [*Aspalathus linearis* (Burm.f.) Dahlgren], and the array of new products that incorporate rooibos, such as cosmetics, slimming preparations, novel foods, extracts and flavourants. First commercialized at the turn of the 20th century, this is today a R300 million (US$22.2 million)[4,5] local industry, employing some 5000 people and trading amounts of up to 15,000 tons per annum (DAFF, 2014). Although rooibos tea constitutes less than 0.3% of the global tea market, it represents 10% worldwide of the growing herbal tea market and 30.9% of the South African tea market (DAFF, 2014; Phakathi, 2016).

Like many other historical enterprises in South Africa, however, these economic feats have been mirrored by a history of dispossession and marginalization (Hayes, 2000; Coombe et al., 2014). Beginning with the genocide of San and Khoi in rooibos-growing landscapes centuries ago (Penn, 2006) and continuing with the relocation of coloured and black people[6] in the area through the 1913 Natives Land Act and the ongoing marginalization of such groups through apartheid policies, the geographical and political backdrop to the rooibos industry is one of dispossession and adversity. Moreover, for nearly 40 years (from 1954), the rooibos tea industry operated as a government monopoly, serving as the sole buyer from producers and the sole seller to approved exporters and tea processors (Hayes, 2000). While the abolition of both apartheid and this system in the early 1990s opened the door to coloured producers, about 200 of whom now trade rooibos tea as South Africa's only indigenous fair trade product (Nel et al., 2007), most of these farmers remain marginalized, and will continue to be so—physically, because of their remote location; environmentally, thanks to the harsh, drought-prone conditions under which they farm; and economically, on account of their limited marketing capacity and continued struggles to gain access to extension services, credit and land. Inequality continues to characterize the industry: less than 7% of rooibos tea lands are today controlled by coloured farmers, who produce about 2% of rooibos tea volumes, with white farmers cultivating about 93% of the planted area (Wynberg, 2002b; Sandra Kruger and Associates, 2009).

Over the past decade, a new set of controversies has arisen about equity and justice in the rooibos industry, centred both on the biological resource and on the traditional knowledge that fostered the growth of this lucrative trade. Accusations of biopiracy, meaning the

[1] Biodiversity Act, Section 98(2).

[2] The South African San Council was established in 2001 as part of the Working Group of Indigenous Minorities in Southern Africa (WIMSA). WIMSA is charged with uniting and representing San communities from Botswana, Namibia and South Africa. As Chennells et al. (2009) explain, the South African San Council represents the modern form of San leadership, aiming to represent different San communities in South Africa democratically. Although the council is not the only body that claims to represent San communities, it is the largest, and has been a central actor in negotiating benefit-sharing agreements based on traditional knowledge claims.

[3] Although absent from *Hoodia* negotiations, the National Khoisan Council, established by former President Nelson Mandela in 1999 to accommodate Khoisan historical leadership within South Africa's constitutional framework, has increasingly become a partner to various benefit-sharing agreements, in collaboration with the South African San Council. The Khoisan historically comprise five main groupings, namely San, Griqua, Nama, Koranna and Cape Khoi.

[4] Calculated as of 14 August 2016, oanda.com.

[5] These figures exclude export sales and non-tea products such as cosmetics and extracts.

[6] These terms, despite originating from apartheid's racial categories, are still used widely in South Africa as a form of self-identification, in official publications and in popular discourse. In the context of this paper, the term "coloured" is used to refer to mountain communities in many of the areas where rooibos grows naturally. These groups are typically mixed-race descendants of settlers, former slaves and Khoi people. "Black" refers to black Africans, with major groups including Zulu, Xhosa, South Sotho, North Sotho, Venda, Tswana, Tsonga, Swazi and Ndebele.

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