



Complexities of Social Innovation and Social Entrepreneurship by Two Indigenous Organisations in Rural South Africa

Britta Rutert and Cath Traynor

Working Paper 20

Published: 19 December 2019



Contents

Authors.....	2
Abstract.....	2
Acknowledgements.....	2
Keywords.....	3
I. Introduction	3
II. Literature Review.....	4
A. Entrepreneurs in Rural Areas.....	4
B. Social Innovation, Social Entrepreneurship, Indigenous Entrepreneurship	4
C. The Place of Traditional Healing in South Africa	6
D. The K2C Region	6
III. Data Collection.....	7
IV. Findings.....	8
A. The Two Organisations' Emergence	8
i. Vukuzenzele Plant Nursery	8
ii. Kukula Healers	9
B. The Two Organisations' "Champions"	10
C. Challenges Faced by the Two Organisations.....	12
D. The Two Organisations' Interaction with Other K2C Stakeholders.....	12
V. Analysis	14
VI. Conclusion.....	16
References	17

Authors

Dr. Britta Rutert

Postdoctoral Research Fellow and Project Coordinator, Charité University Hospital, Berlin
Research Associate, Institute of Social and Cultural Anthropology, Free University Berlin
britta.rutert@gmail.com

Dr. Cath Traynor

Programme Director, Climate Change, Natural Justice: Lawyers for Communities and the
Environment, Cape Town
cathtraynor@gmail.com

The authors will be grateful for inputs and feedback on the contents of this Working Paper. Please use the authors' email addresses provided above.

Abstract

In this Working Paper, we present our findings in respect of the innovative and entrepreneurial behaviour of two local Indigenous¹ organisations in a South African rural area with high poverty rates and little access to financial and technological infrastructure. The paper focuses on the skills and capacities of two local organisations: the Vukuzenzele Medicinal Plant Nursery and Garden (Vukuzenzele Plant Nursery) and the Kukula Traditional Health Practitioners Association (Kukula Healers). These two organisations, situated in the Kruger to Canyon (K2C) Biosphere Region in South Africa's Mpumalanga and Limpopo Provinces, have built strong networking skills, made professional use of their traditional knowledge (TK), and have a stated aim to continue their community-based projects in dialogic collaboration with local, national, and international stakeholders. We argue that many of the actions taken by these two organisations in their efforts to grow and sustain their initiatives constitute forms of social innovation and social entrepreneurship. By necessity, as actors in a rural, economically disadvantaged area, these organisations prioritise, alongside economic aspects, socially-grounded innovative and entrepreneurial behaviours, such as: self-positioning; identity and group creation; capacity-building; networking; and the utilisation of their TK. We also argue that the actions of these two group provide evidence of the ways in which small enterprises can attempt to scale their enterprises through diversifying activities and increasing sustainability of activities, rather than through narrow pursuit of economic profits.

Acknowledgements

This work was carried out under the auspices of the Open African Innovation Research (Open AIR) network, which is a partnership among the University of Cape Town (South Africa), the University of Johannesburg (South Africa), the University of Ottawa (Canada), The American University in Cairo (Egypt), Strathmore University (Kenya), and the Nigerian Institute of Advanced Legal Studies (Nigeria).

¹ For a detailed discussion of the conceptually and analytically problematic elements of the term "Indigenous", see Barnard (2006), Friedman (2008), Kuper (2003), and Niezen (2003).

We acknowledge the support provided for this research by Open AIR, the Social Sciences and Humanities Research Council (SSHRC) of Canada, and the International Development Research Centre (IDRC). The views expressed in this work are those of the authors and do not necessarily represent those of the research funders.

We thank members of the Vukuzenzele Medicinal Plant Nursery and Garden, and the Kukula Traditional Health Practitioners Association, who participated in the research and gave generously of their time and ideas. We acknowledge, in particular Mr. Rodney Sibuyi, former CEO of the Kukula Traditional Health Practitioners Association, who sadly passed away in early 2018. We thank him for his openness to participate and support our field research, and for candidly sharing his perceptions. We offer thanks also to Ms. Rosie Makhubela, founder and CEO of Vukuzenzele Plant Nursery, for sharing her insights.

Keywords

Indigenous and local communities (ILCs), traditional healers, rural areas, social entrepreneurship, traditional knowledge (TK), Vukuzenzele Medicinal Plant Nursery and Garden (Vukuzenzele Plant Nursery), Kukula Traditional Health Practitioners Association (Kukula Healers), Bushbuckridge, South Africa

I. Introduction

“We do want to change, we do want to do something forward”, said Themba, a young man in his mid-20s and a traditional healer, in an interview at the Vukuzenzele Plant Nursery and Garden (hereafter “Vukuzenzele Plant Nursery”) (interview with healer, Vukuzenzele 2016). The nursery is situated on the outskirts of Thulamahashe, a small town in the Kruger to Canyon (K2C) Biosphere Region in Mpumalanga Province, South Africa.

The interview was one of 16 we conducted with traditional healers belonging to two organisations: the Vukuzenzele Plant Nursery and the Kukula Traditional Health Practitioners Association (hereafter “Kukula Healers”). These organisations were selected for two reasons. First, they are run by traditional healers holding traditional knowledge (TK) and traditional expertise. Second, they have constituted themselves in a spirit of self-determination and with ambitions for scaling-up their enterprises in a region that is geographically remote and blighted by poverty.

In this Working Paper, we provide our findings in respect of the elements of social innovation and social entrepreneurship displayed by these two organisations in their efforts to scale their activities.

II. Literature Review

A. Entrepreneurs in Rural Areas

Indigenous and local communities (ILCs) throughout the world suffer from social, economic and political marginalisation; chronic poverty; educational systems that mirror a history of abuse and discrimination; and poor access to health services (Migiro, 2018; UNDESA, 2017).

What has been called the “first wave” of economic assistance to Indigenous communities tended to disregard the systemic causes of Indigenous social and economic dysfunction (Foley, 2006). In what has been delineated as the “second wave” of assistance, Indigenous communities aimed at developing their own skills and making themselves independent from donors and outside agencies. The process was delineated at the point where the efforts of Indigenous communities themselves are concentrated to improve their social and economic position through entrepreneurial enterprise (Foley, 2006; Peredo et al., 2004).

What does entrepreneurship mean in this context? Originating from the French word *entreprendre* meaning “to take into one’s own hands”, the word *entrepreneur* relates to availing opportunity (Stevenson, 1985; Venkataraman, 1997; Austin, Stevenson & Wei-Skillern, 2006; Chell, 2007) and is linked to the “creation of something of value” (Chell, 2007). Entrepreneurship is defined as:

the manifest ability and willingness of individuals, on their own, in teams within and outside existing organizations, to perceive and create new economic opportunities (new products, new production methods, new organizational schemes and new product-market combinations) and to introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form and the use of resources and institutions. (Caree & Thurik, 2003, p. 441; Wennekers & Thurik, 1999, pp. 46–47)

Schumpeter (1934) defined entrepreneurship as the ability and initiative of entrepreneurs to create new opportunities for investment, growth and employment (pp. 83–84). Furthermore, he claimed, on a more general level, that new technological discoveries and advancements create new economic developments. The potential of entrepreneurs to improve and harness economic development has been well-recognised (OECD, 2003), particularly in developing countries (Mahemba & De Bruijn, 2003). However, ILCs in rural areas often have only minimal access to markets, technologies and infrastructure, and thus to the Schumpeter-proclaimed opportunities for investment, growth and employment.

B. Social Innovation, Social Entrepreneurship, Indigenous Entrepreneurship

Through adoption of a *social* orientation towards questions of innovation and entrepreneurship, it is possible to position process innovations, such as innovations in networking, collaboration, group formation, and organisational governance and management practices, as elements of entrepreneurship. Viewed in terms of this social innovation and social entrepreneurship orientation, many activities in ILCs can be deemed entrepreneurial, irrespective of their economic outputs

(Robson & Obeng, 2008; Rogers, 1995). The creative and innovative approaches of ILCs to producing not only tangible, alienable (economic) values but also developing inalienable (social) values and (inter)actions, opens the door to define entrepreneurship in social terms (Austin et al., 2006; Chell, 2007).

Innovations can emerge through self-organisation, self-empowerment and development (Tapsell & Woods, 2010). Human development includes not just economic growth but also the capability for longer, healthier and more fulfilling lives, which depend on innovation and creativity, with influences by social and economic relations (Cocchiaro et al., 2014).

There have been numerous definitions of social entrepreneurship (Hibbert, Hogg, & Quin, 2002; Dacin, Dacin, & Matear, 2010; Zahra et al., 2009). We want to extend these definitions to cover Indigenous entrepreneurship, because many of the cited definitions do not include the Indigenous context (Schonwetter & Van Wiele, 2018). We therefore chose Hindle and Lansdowne (2005), who describe Indigenous entrepreneurship as:

[] the creation, management and development of new ventures by Indigenous people for the benefit of Indigenous people. The organizations thus created can pertain to either the private, public or non-profit sectors. The desired and achieved benefits of venturing can range from the narrow view of economic profit for a single individual to the broad view of multiple, social and economic advantages for entire communities. Outcomes and entitlements derived from Indigenous entrepreneurship may extend to enterprise partners and stakeholders who may be non-Indigenous. (Hindle & Lansdowne, 2005, p. 132)

Indigenous entrepreneurship is particularly salient in contexts of South African apartheid politics where social cohesion, self-determination, and self-empowerment were and still are influenced and undermined by political structures. In the former homeland areas of South Africa, black ethnic groups were cut off from the economic centres and left to their own economic and political development. Indigenous entrepreneurship in these contexts can thus not only expand economic growth, but also ignite a process of “dialogic democracy”, processes of dialogic negotiations and cooperation, and “rights-based democracy” (Coombe, 1998; 2009; Coombe & Alywin, 2014). The pursuit of “dialogic democracy” by Indigenous entrepreneurs within their organisations, their communities, and in their interactions with government and the private sector, may also lead to more “rights-based development” to the making of possessive claims to act as market actors for economic purposes, and as new “environmental subjects” (Agrawal, 2005) for local development and sustainable environment.

There is already evidence in the relevant literature focused on African settings that individuals, organisations and ILCs in economically disadvantaged regions engage in economically focused modes of entrepreneurship (Boohene & Agyapong, 2017; Ngorora & Mago, 2017), with TK potentially playing a key role herein (Oguamanam, 2009; 2012), as TK has increasingly become an economic resource. At the same time, however, more intangible innovation and entrepreneurship practices, such as innovative processes of self-organisation, self-identification, and socio-cultural positioning, seem to be under-valued.

C. The Place of Traditional Healing in South Africa

Traditional healers in South Africa have an ambivalent position. Accused of performing witchcraft on the one hand and being accepted as an important authority of cultural and environmental knowledge and life in communities on the other, they fight for acceptance and acknowledgement (Ashforth, 2005; Flint, 2008). Healers' organisations have always played a vital role in the attempt to find a public voice and acceptance in the political sphere (Flint, 2008; Rutert, forthcoming 2020). Nevertheless, even today the battle continues, although healers have gained greater political acceptance due to recent national policies which have formally recognised traditional healers and their knowledge systems.² With this provision of support from the post-apartheid government, healers are gradually beginning to re-establish their dignity and acceptance in the wider society.

D. The K2C Region

The Kruger to Canyon (K2C) Biosphere Region stretches from the wildlife area of the Kruger National Park to the mountainous Drakensberg Escarpment where the Blyde River Canyon has its source. This largely rural, yet densely populated, area is facing modernisation processes and, concomitantly, a gradually declining area of intact natural habitats (Coetzer et al., 2013; Coetzer-Hanack et al., 2016).

Declared a Biosphere Region by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the K2C area is one of the most biodiverse and culturally rich areas of South Africa. Over the course of centuries, the area has transformed from an ethnically uniform agricultural society into a melting pot of different ethnic groups—and consequently a region of many ethnic and inter-ethnic traditions, and also inter-ethnic tensions, insecurities, and inequalities. The area has, for more than a century, been characterised by high local unemployment and high levels of labour migration to South African urban areas, both of which were exacerbated by colonial-era and apartheid-era racial segregation and forced economic underdevelopment.

With the enforcement of the Natives Land Act of 1913, the white minority South African Government of the day reserved the vast majority of land ownership for white South Africans. This pattern was reinforced during the apartheid era, beginning in 1948, with the Nationalist Government's gradual implementation of its homeland (bantustan) policy, whereby all "Africans"³ who were not employed in an urban area had to live in one of the 10 homeland areas. The homeland policy allocated the Bushbuckridge⁴ region partially to the Lebowa homeland (the bantustan allocated to the Pedi (Northern Sotho) people), and partially to the Gazankulu homeland (the bantustan allocated to the Shangaan people). The forced migrations imposed by the homeland policy generated numerous social ills as well as disruptions of traditional practices—including some elements of traditional healing, which came to be conflated with witchcraft (Niehaus, 2001; Ritschken, 1995), a dynamic traditional healers are still confronted with (Niehaus 2005; 2012).

Through these influences and movements, Bushbuckridge and the K2C area are, next to the bigger cities, probably one of the most ethnically and politically-historically heterogeneous areas in South

² Traditional Health Practitioners Act, 2004, amended 2007; Indigenous Knowledge Systems Policy, 2004.

³ Under apartheid, "Africans" were one of the four segregated population groups—the other three being the "Coloured", "Indian" and "White" population groups.

⁴ Bushbuckridge is one of the local municipalities that constitute the K2C area.

Africa. However, unlike the cities, the area has extremely limited access to technological innovation and infrastructure, a heritage of the segregation that continues to exist between former homeland areas and areas designated for white populations.

This is borne out by Bushbuckridge Municipality's statistics: the unemployment rate is extremely high (46%), many families depend upon governmental grants particularly child support and old age grants, and the dependency ratio is high and unsustainable. The key employers in the municipality are government community services (34%), and trade (25%), whilst agriculture employs only 6% (BLM, 2018). Key challenges faced within the municipality include limited access to basic services, a backlog of service delivery and limited infrastructure (BLM, 2018). Life in Bushbuckridge Municipality is thus shaped by poverty, and multiple, though limited ways, of income generation.

Poverty encompasses a range of elements such as a sense of vulnerability and insecurity, a lack of power, low levels of health, education, and literacy, and limited access to assets (Botha, Witkowski, & Cock, 2007a, 2007b; Chambers, 1996; Narayan et al., 2000). Therefore, it is not only the absence of infrastructure, finances and technology that hinders entrepreneurial enterprises in a region such as Bushbuckridge, but also the lack of education and lack of skills such as writing, reading, bookkeeping, project management, and even (potentially) fluency in the English language. These skills are all essential for business organisations that seek to interact and influence beyond a purely local level.

III. Data Collection

This study built upon our previous cooperation and research with the Kukula Healers focused on their Biocultural Community Protocol (BCP), and on their interim Access and Benefit-Sharing (ABS) agreement with the local cosmetic company Godding & Godding (see Cocchiario et al., 2014; Rutert, forthcoming 2020). Close professional and personal relations and mutual trust, resulting from previous cooperation, enabled us to have community access for this research.

Since 2009, the NGO Natural Justice (for whom one of the two co-authors of this paper, Traynor, is a staff member) has built strong working relations with the K2C Biosphere Region management and staff, as well as the Kukula Healers and Vukuzenzele Plant Nursery. Several workshops on developing the aforementioned BCP, and ABS regulations, manifested a strong and trusting relationship between Traynor and both the Kukula Healers and Vukuzenzele Plant Nursery. The other co-author, Rutert, who is an anthropologist, spent seven months in 2011–12 with the Kukula Healers for her PhD research on TK related to medical plants and on associated matters of intellectual property rights. For this research, Rutert was thus able to draw on long-term professional and personal relationships with Natural Justice, the Kukula Healers, and Vukuzenzele Plant Nursery.

The research data collection took several forms. First we reviewed relevant literature. In August 2016, a Natural Justice workshop was organised to update Kukula Healers on current policies regarding the rights of traditional healers and legal questions relating to land acquisition. Also in August 2016, 22 interviews were conducted. Sixteen of the interviews were with healers: 13 of the Kukula Healers, and 3 participants in the Vukuzenzele Plant Nursery.

The K2C Biosphere Region that is home to Vukuzenzele Plant Nursery and Kukula Healers is managed by the Kruger to Canyons Biosphere Reserve (K2C) Management Committee, which has a mandate to mediate between the interface of biodiversity, conservation, and sustainable development. Other institutions, such as the South African National Parks (SANParks) and the University of the Witwatersrand Rural Facility (Wits Rural Facility), also engage at various levels in the protection and preservation of nature and culture in the area. In this endeavour, they closely cooperate with local communities and organisations, among them the Vukuzenzele Plant Nursery and the Kukula Healers.

In an effort to understand the social and professional networks and opportunities these two organisations had built up, we conducted interviews not only with the organisations' participants but also with representatives of stakeholders with which the organisations interact. Our stakeholder interviews were with SANParks (2 interviews); K2C (3); Wits Rural Facility (1); a lawyer from Richard Spoor Attorneys (1); a chief from a local tribal authority (1). These interviews aimed to broaden our understanding of: the challenges these organisations face in actualising their projects and future visions; and what the experiences and perspectives of these two organisations revealed about the nature of innovation and entrepreneurship in an Indigenous community in a rural, economically disadvantaged South African context.

All interviewees provided informed consent to be interviewed. The interview transcripts were analysed with the qualitative data analysis programme MAXQDA according to a grounded theory approach, which included open-coding to structure the data thematically, and focused coding (Charmaz, 2014; Glaser & Strauss, 1999) to identify relevant categories. Additionally, so as to supplement the data collection, we accompanied members of the Kukula Healers organisation on visits to companies which build their businesses on a local plant, the fruit of the Marula tree.⁵

IV. Findings

A. The Two Organisations' Emergence

i. Vukuzenzele Plant Nursery

Vukuzenzele Plant Nursery came into existence in 1990, before the end of the apartheid regime (which happened four years later, in 1994, through the country's first democratic elections). The nursery was initially started by "Mama Rosie" (Rosie Makhubela) and her husband David. At that time, Mama Rosie was highly engaged in Bushbuckridge community projects, including bee-keeping and honey production. Over time, she earned the reputation of being an engaged and dedicated project organiser and was invited to courses in plant-breeding and bee-keeping overseas and in South Africa.

Gradually, with the support of the government department that is today the South African national Department of Agriculture, Forestry and Fisheries (DAFF), Mama Rosie started a small nursery on the outskirts of Thulamahashe. She, her husband David, and a group of approximately 10 other healers

³ The company produces liquor from the Marula fruit (see <http://www.amarula.com>). It contracts local communities for fruit collection. African Essential produces the valuable Marula oil from Marula kernels. The company also closely cooperates with local communities.

prepared the land for the nursery, built a fence against grazing cows, and managed to get a water pumping system financed by the national government (DAFF) that allowed the watering of the fresh seedlings produced.

For several years, the Mpumalanga Provincial Government purchased seedlings from the nursery, on an annual basis for reforestation projects, but these purchases eventually came to an end, for unknown reasons, putting the project in jeopardy. At this point, Mama Rosie, her husband David, and a healer known as “Mama Sina”—most of other healers had left the project by then—managed to source funding from the national Department of Social Development (DSD) for two houses, which were built on the Vukuzenzele premises. Although Vukuzenzele as a nursery had stopped generating any significant income with the termination of the yearly provincial governmental purchases of seedlings, the enterprise managed to stay alive through renting out the two houses as office space to K2C management and as housing for visits to K2C by students from South African and overseas universities. Students from all over the world visited the nursery to learn about its use of plants for medicinal purposes.

K2C also employed Mama Rosie and Mama Sina as environmental monitors, as part of K2C’s environmental sustainability programme. In addition, Vukuzenzele started a market garden project where they grow vegetables to sell to the surrounding communities.

At the time of our research, Mama Rosie and Mama Sina were in their 60s, and they were facing challenges in finding interested younger people to take over the project. Mama Rosie told us that few young people were interested in medicinal plants and TK: “The young ones, they always need cash. If a project is not moving, or maybe in a project there is no money, [...] the young ones can't be interested in that project” (Mama Rosie interview, 2016).

ii. Kukula Healers

We found that the emergence of the Kukula Healers had some similarities to, but also important differences from, the story sketched out above of the emergence of the Vukuzenzele Plant Nursery. The birth and evolution of the Kukula Healers organisation were, as with the Vukuzenzele experience, also clearly reliant to a great extent on a key individual but were at the same time intensely group-oriented—to a much greater extent than was the case for Vukuzenzele. Another pronounced difference we found between the two organisations was that the Kukula Healers organisation was more focused than the Vukuzenzele organisation on its members’ roles as traditional healers.

The idea of the Kukula Healers⁶ was born after an initial meeting was convened, by the organisation Natural Justice and by Mama Rosie from Vukuzenzele, to discuss the development of a biocultural community protocol (BCP). A number of healers were invited to the meeting, among them Rodney Sibuyi and Adah Mabunda, who subsequently decided to establish their own healers’ association, the

⁶ An earlier case study, in 2011–12 (see Cocchiari et al., 2014), examined the formation of the Kukula Healers organisation and analysed its knowledge governance structures at the time of its development of a biocultural community protocol (BCP) and of an access and benefit-sharing (ABS) agreement reached with an outside party in terms of the BCP.

Kukula Healers.⁷ Mama Rosie was, at the time, occupied with the Vukuzenzele Plant Nursery, and so development of the BCP was delegated to the newly-formed Kukula Healers.

The aim of the BCP was to govern the medicinal plant-related TK held by Kukula Healers members via a mix of openness and controlled access, i.e., openness and sharing among members of the association combined with procedures for negotiated, controlled sharing, on an access and benefit-sharing (ABS) basis, with external parties. The BCP formed the basis for a “TK commons” maintained by the Kukula Healers based on an agreed-upon knowledge-sharing system. The knowledge-sharing system allowed the Kukula Healers to share knowledge among themselves—a practice that was uncommon because South African traditional healers, as experts in their particular knowledge, have tended to keep their TK secret within families, passing it down from generation to generation. In the process of developing the BCP and the TK commons, awareness was created among the Kukula Healers that they were the stewards of their shared knowledge and intellectual property (IP) in instances where interested external parties might approach them seeking access to this knowledge and IP (Rutert, forthcoming 2020).

In terms of the BCP, the Kukula Healers signed an ABS agreement with an external party for product development based on their TK and medicinal plants. While this product development ultimately failed, and thus the sharing of benefits could not occur, we found that the process itself increased the healers’ collective self-actualisation and increased their organisation’s recognition in the K2C area. According to previous research in 2013 undertaken by Rutert (forthcoming 2020), the Kukula Healers were subsequently able to commence a negotiation process with tribal authorities in an effort to secure permission to occupy (PTO) for a piece of land which they sought to use for future projects (Rutert, forthcoming 2020).

B. The Two Organisations’ “Champions”

An interviewee from SANParks, one of the external stakeholders Mama Rosie had collaborated with on the Vukuzenzele project, pointed to the importance in such projects of having a “champion” such as Mama Rosie, who was not focused primarily on short-term economic gain but was, rather, focused on long-term sustainability. In the words of this SANParks interviewee:

Look at Rosie and how long she has been working at Vukuzenzele. One of the main reasons it is working is because she hasn’t given up. Having a champion person who’s dedicated and is not looking for quick money is one of the drivers of success in projects like this. (SANParks interviewee, 2016)

This interviewee also pointed to Mama Rosie’s capacity to organise diversified income sources (SANParks interviewee, 2016). It was clear, at the time of our research, that Mama Rosie was the driving motor and champion of Vukuzenzele Plant Nursery. She was engaged with keeping Vukuzenzele operational as a nursery, including its office and its teaching space where student groups were hosted, and she was also engaged with a number of key stakeholders in the area. She was

⁷ The original name of the organisation was the Bushbuckridge Traditional Health Practitioners Association (BTHPA, later changed to the Kukula Traditional Health Practitioners Association, shortened in this article to “Kukula Healers”).

working in a larger project, with SANParks, which aimed to distribute Pepper-bark trees⁸ to communities next to Kruger National Park, and she had also accepted several invitations to visit SANParks nurseries.

In our analysis, Mama Rosie's desire and ability to keep the Vukuzenzele project running over a long period of time with only minimal economic benefit to herself and her project partners, via emphasis on innovative connections with both external stakeholders and members of her local community, makes her a very clear example of a *social innovator* and a *social entrepreneur*. At the time of our research, Vukuzenzele Plant Nursery did not produce a profit, and all income that was generated went back into developing the project further.

We found that Mama Rosie, in cooperation with Mama Sina, not only generated her own income, but also continuously looked for new opportunities, and created new networks and social relations, thus bringing about new opportunities. A SANParks scientist whom we interviewed summarised it thus: "An entrepreneur is someone who always looks for opportunities and capitalises on those opportunities" (SANParks interviewee, 2016). In our analysis, Mama Rosie clearly fit the SANPark interviewee's conceptualisation of entrepreneur. We found evidence that Mama Rosie had, through and for the Vukuzenzele Plant Nursery project, devised innovative ways to connect with and develop new social relations, networks, and knowledge capacities of value to the project, while at the same time ensuring that the project remained grounded in the project members' profession as traditional healers who possess deep TK in respect of medicinal use of plants.

We found that Mama Rosie, in particular, had expanded her knowledge, through her networking and participation in workshops, of plants and plant-breeding. She had proved to be adept at accumulating and disseminating knowledge and yielding benefits from it. Additionally, we found that Mama Rosie partnered (somewhat ambivalently, though) with the Kukula Healers. She had participated in the Healers' workshops on access and benefit-sharing (ABS) and development of their BCP for management of their TK.

Although Mama Rosie had never been directly involved in an ABS agreement, she was clear "that her knowledge belongs to her, and to the ancestors" (Rutert, forthcoming 2020). Her ability to make innovative use of networks in order to access and leverage available scarce resources had helped to keep the Vukuzenzele Plant Nursery alive over many years and has also helped the organisation develop a reputation as an engaged and reliable project partner for the many stakeholders in the K2C area. It was less her role as a healer, and more her personal connections and capacities, that had enabled her to craft innovative linkages with the social, political and economic actors present in the K2C area.

The Kukula Healers' Chief Executive Officer (CEO), Rodney Sibuyi, like Mama Rosie, was cited as being a charismatic leader and champion for his organisation (SANParks interviewee, 2016). We found that Sibuyi was highly regarded among the Kukula Healers, and that he, like Mama Rosie, was key to the

⁸ The Pepper-bark tree (lat. *Warburgia Salutaris*; Shangaan: *Shibaha*) is a priority species for conservation and cultivation in gardens because it tends to be over-harvested in the wild for medicinal use and is a popular item for sale at street markets (see <http://pza.sanbi.org/warburgia-salutaris>).

Healers' cooperation with external stakeholders. Among Sibuyi's important attributes, he was fluent in English and had completed his high school education. Most members of the Kukula Healers, as with the participants in the Vukuzenzele Plant Nursery, were not literate and lacked skills in bookkeeping and business development.

C. Challenges Faced by the Two Organisations

A SANParks interviewee indicated that the challenges faced by Vukuzenzele Plant Nursery and the Kukula Healers included capacity (in terms of both knowledge and resources, including financial resources); lack of opportunities; and identification of means to access potential markets (SANParks interviewee, 2016).

Specific locations within the K2C area are touristic and relatively developed, with relatively high employment rates because of available jobs in the many tourist game reserves and luxury lodges in the area, and in the orchards around Hoedspruit.⁹ However, it was found that for the traditional healers, it was difficult to participate in these industries beyond very low-wage jobs. As health providers, the traditional healers were intimately tied to their communities: community-bound and lacking literacy, most lived off their services as healers. Another challenge they faced was navigating the dynamics of environmental issues and the myriad stakeholders linking themselves to these issues.

Localised socio-cultural norms and localised political dynamics also presented challenges. Entrepreneurs in Indigenous settings typically face local obstacles and boundaries which derive from close and tight social relations, and jealousy and envy. This tightness of social bonds is particularly pronounced in rural areas, as opposed to urban settings where social bonds are often more diffuse. As one interviewee pointed out, in areas such as K2C where there is resource-scarcity, success can lead to jealousy, which can in turn result in social isolation (Wits Rural Facility interviewee, 2016). And indeed, both organisations studied had in some cases decided not to pursue possible business opportunities in order to avoid potential conflicts. The Kukula Healers, for instance, decided not to follow up opportunities regarding the supply of Marula fruits and oils to companies because it could lead to conflicts within the community over who has rights of access to Marula trees and to the benefits from them.

D. The Two Organisations' Interaction with Other K2C Stakeholders

K2C management has deliberately included the traditional healers as cooperation partners in pursuit of one of the main aims of the K2C region: maintenance and preservation of the area's cultural and environmental elements. The healers have been included as interested parties in conservation initiatives and have participated in public consultations regarding development of a Kruger National Park strategic plan, and development of a local pilot study concerning developing a biodiversity management plan for medicinal plants in the municipality. Additionally, individual healers have been employed as environmental monitors, and "rhino ambassadors", by the K2C management group.

Additionally, as holders of specialist knowledge concerning medicinal plants species and their healing properties, the Kukula Healers have entered into reciprocal processes of knowledge-sharing with the

⁹ Hoedspruit is a mostly white trading town and does not belong to one of the former homeland areas.

Skukuza Indigenous Plant Nursery of Kruger National Park (a SANParks nursery), and with a veterinary facility from a local university. Moreover, the Healers have explored opportunities to legally and sustainably harvest specific medicinal plants from a nearby forest reserve. As a result of these interactions, some of healers have been employed by the K2C management as environmental monitors, tasked with supporting biodiversity conservation, ecosystem conservation, and livelihood development.

In respect of the Kukula Healers' relationships with the Natural Justice NGO and with K2C, we found in our 2016 interviews that there was to some extent a wish to "stand on our own feet" and to "continue without Natural Justice or K2C" (Kukula Healers, interview 2016). At the same time, however, the majority of the interviewees were of the view that such connections produced additional opportunities. The majority felt that rather than seeking to go it alone, the organisation should deepen existing networks and cooperation.

One strategy being utilised by the Kukula Healers to support their engagements with external stakeholders was to harness the law. National laws, in particular laws and regulations pertaining to tribal leadership and Indigenous knowledge systems, have generally strengthened the position of traditional healers in South Africa.¹⁰ Within their own communal areas, the Kukula Healers had been negotiating with local healers as well as with the local Chief and the Mayor of Bushbuckridge, for greater recognition for the Kukula Healers and for their needs to be incorporated into land use and management decisions.

In these negotiations, the Kukula Healers sought to highlight how their customary law necessitates conservation based on principles of sustainable use of natural resources, and tasks them with encouraging sustainable use of these resources in their community. During negotiations with protected areas managers, the Kukula Healers outlined their rights with reference to articles in provincial and national laws that specify their constitutional rights to secure, ecologically sustainable development and use of natural resources; and their rights to participate in and benefit from the environmental governance and management of protected areas. Among the Kukula Healers' aims was to be able to collect medicinal plants in protected areas near their community.

At the same time, in the spirit of the aforementioned "stand on our own feet" statement, the Kukula Healers had entered into a lease for a plot of land that they hoped to use for development of further cooperation and project ideas. The plot had originally belonged to the father of the CEO Rodney Sibuyi. The father, who still maintained PTO for the land, had agreed to lease 2 hectares to the Kukula Healers. The healers had collectively paid a fee to the local chief, as per customary regulations, and the chief had officially recognised that the land has been transferred for the use of the Kukula Healers. The leasing of the land was a reflection of Sibuyi's sentiment, expressed at a 2016 Natural Justice workshop, that "[w]e must not wait until someone supports us, we must act on our own" (field note from workshop with Kukula Healers, 2016).

¹⁰ See RSA (2004; 2007).

At the same workshop, Sibuyi stated:

Also, we will build a small school with a small hall so that the school can be used by outside visitors. Also, researchers with interests in Indigenous knowledge can live and stay here. And in the long-term we want to get sand from the river and build bricks. (field note from workshop with Kukula Healers, 2016)

Although a specific plan for use of the land had not been finalised at the time of this research, the opportunities that potentially came with leasing the land had clearly opened up new thinking processes for the Kukula Healers.

We found that since the beginning of the organisation in 2009, the Kukula Healers had managed to connect to an extended network of local, national, and international stakeholders, and to continue to disseminate their knowledge and organisational structure on a national and international level. At the local level, they were engaged with the tribal authorities, and were invited to local development forums to participate as active voices regarding matters of traditional healing. Key members of the Kukula Healers had also presented at, and participated in, national, regional and international workshops on diverse issues including traditional knowledge, ABS frameworks, customary law, and protected areas conservation.

In offering to make their knowledge available to external parties, in a controlled manner via their BCP, the Kukula Healers had taken an innovative step that sought to conform to the demands of a global knowledge economy. The Kukula Healers had, at the time of our research, excelled at building an innovative, social entrepreneurial network for themselves. In the course of these processes, the Kukula Healers cooperated with a number of local stakeholders, including: Mnisi Tribal Authority; K2C; SANParks; Marieskop Forest Reserve; Wits Rural Facility; and numerous student groups from South African and international universities.

V. Analysis

In all of the findings presented above, we detected evidence that the Vukuzenzele Plant Nursery and the Kukula Healers, had of necessity adopted nuanced, *social* approaches to innovation and entrepreneurship. We found that the two organisations had, among other things, managed to develop—as key to their ongoing existence, success, and sustainability—innovative governance and management practices; sharing systems of, and protective attitudes towards, their (traditional) knowledge; and commitment to environmental sustainability (Cocchiaro et al., 2014; Rutert, forthcoming 2020).

At the same time, our interviews with members of Vukuzenzele Plant Nursery and Kukula Healers found that they could not readily provide direct translations in their local languages (XiTsonga/Shangaan or SeSotho) for the English words “innovation” or “entrepreneur”. Our interviewees from the two organisations generally had very little to say about what innovation meant, beyond the fact that it was connected to developing something new. (“Openness”, meanwhile, seemed to be well understood, and was connected by the interviewees with being open

about sharing their healing knowledge with other healers or interested business partners, under specific conditions.)

But while specific definitions of entrepreneur and innovation were not elicited from the interviewees, we found that, in fact, the broader concepts were widely, if only implicitly, understood. For example, a member of the Kukula Healers interviewed at her home in Hluvukane,¹¹ when we asked if she knew the word “entrepreneur”, stated:

No, I don’t know the word. Maybe it is picking some new idea that one might think of developing in some kind of business? But there is not much business here in the villages. Some sell chicken, some build bricks and sell them. The Pakistani people are better business people. They partner themselves, they can do better business. (Kukula Healer interviewee, 2016)¹²

Indeed, the area studied did not offer much opportunity for development of mainstream businesses. Selling chicken, vegetables, or pre-paid mobile phone airtime, were the only mentioned options for businesses run by women; and car washing, barber shops, or, on a larger scale, copy and internet shops, were the only male-run business opportunities cited. When we asked other Kukula Healers if they had ever been involved in, or had developed any form of, business or business idea, the answer was always a clear “no”. We received a similar reaction when we asked about involvement in “innovation”. However, at the same time, motivations to diminish poverty, to generate income, to access or maintain land, and to stay independent whilst still receiving support from external stakeholders to achieve certain goals, were frequently mentioned in the interviews with the healers.

As is suggested in the quotation above from the female healer interviewed at her home in Hluvukane, there was a perception that the area was not one where local people were entrepreneurial—which, in our analysis, makes the motivations and ambitions of the Vukuzenzele Plant Nursery and Kukula Healers of particular interest. These organisations have come together and formed innovative structures able to foster openness, sharing of knowledge, and elements of innovation and entrepreneurship. This we find was remarkable given the prevailing socio-cultural, economic and political dynamics of the area (Rutert, forthcoming 2020).

Building a network of value, and taking advantage of—and developing—opportunities presented through this network of value, are characteristics which we feel make the members of the Vukuzenzele Plant Nursery and the Kukula Healers social innovators and social entrepreneurs. We believe that the fact that the healers did not readily position themselves in entrepreneurial terms must be seen in the light of the profession of traditional healing being a calling, not a free choice. Becoming a healer means being committed to the ancestors and the community, and is not, or should not be, primarily motivated by economic interests. Also, healers usually work as individuals, not in groups.

¹¹ Hluvukane, Thulamashé and Acornhoek are the three main towns that mark the area where we conducted our research. Most of our interviewees were living either in one of these towns or in small villages scattered between them.

¹² In South Africa’s urban townships and former homeland areas, small-scale businesses such as local tuck shops and grocery shops, known colloquially as “spaza” shops, are often run by migrants who are often better-resourced and more successful than local owners of South African origin. See, for example, Charman, Petersen, and Pipe (2012), and Crush and Ramachandran (2014).

In a region where healers have more commonly partnered within families and clans, rather than within associations and organisations, the building and maintaining of these two innovative organisations seem clearly to us to be socially innovative, socially entrepreneurial phenomena. As one of the Wits Rural Facility interviewees pointed out, collective groups hoping to develop entrepreneurial opportunities face a hard job, as the entrepreneurial trait is typically predominantly an individualistic rather than collective trait, and there may be some members of any group who seek to hold back the entrepreneurial urges of others (Wits Rural Facility interviewee, 2016). At the same time, however, there is surely hardly any entrepreneur who is able to bring plans and ideas to fruition without the support and backing of a group. This creates the need for collectives seeking to be innovative and entrepreneurial, socially or otherwise, to craft innovative governance and management mechanisms.

Both of the collective Indigenous organisations studied managed to create new and challenging organisational structures based on ideas of knowledge-sharing and project development in an area where people mostly rely on family and clan structures. In addition, in the process of developing democratic and dialogic structures, they also managed to develop close links and relationships with external stakeholders in the realms of environmental protection and national, provincial, municipal and traditional council politics. As such, they had managed, at least to some extent, to escape from a relatively deprived position—as ambivalently-regarded and even marginalised healers—and become significant players at local, regional, and even to some extent national and international levels. This, in our view, situates them clearly as social innovators and social entrepreneurs.

VI. Conclusion

We found that the social innovations and entrepreneurship exhibited by the Vukuzenzele Plant Nursery and the Kukula Healers were largely ones of *process*. Their innovations and entrepreneurship were grounded in processes of:

- creation of innovative knowledge governance structures and policies; and
- social and political relations and networks with stakeholders who previously had not communicated and/or cooperated with traditional healers or other local Indigenous groups.

We found evidence that the two organisations had developed new skills and knowledge in respect of how to make use of their TK and traditional practices. Their cooperation, negotiation, and organisational skills had enabled positive group formation processes, which had in turn led to development of functioning, relatively cohesive groupings. We also found that the innovative, entrepreneurial processes developed by Vukuzenzele Plant Nursery and Kukula Healers were highly dependent for their development and implementation on internal champions—i.e., key people serving as driving forces—and that in the absence of such people, the social innovations and entrepreneurship could not have been fully realised.

We conclude that for Indigenous organisations operating in South Africa's rural areas where resources and infrastructure are limited, the social process aspects of project development are crucial to innovation and entrepreneurship. We position the innovation and entrepreneurship that we found present in the actions of these two groups as *social* because, while economic interests were

among the motivating factors, economic gain was not the core envisioned result of their endeavours. Human development includes not just economic growth but also the capability for longer, healthier, and more fulfilling lives, which in turn often depend to a great extent on social innovation and social entrepreneurship.

In our analysis, for these two organisations, TK is a means to an end. It is key to the success of the two entities, and yet at the same time stands—in respect of social innovation, entrepreneurship, and scaling—somewhat in the background. In the foreground are the relations created in the process of developing “something new” (Botha et al., 2007a) in a rural area of South Africa where innovation and entrepreneurship are not known as formal categories or lived practice.

The two organisations studied have devised and developed new entities, capacities and skills, thus enabling creation of strong and valuable networked relationships and cooperation that did not previously exist. Accordingly, they have managed to improve the scale of their activities and objectives via achievement of increased influence on their partners and increased sustainability of their endeavours grounded in TK. The experiences of these two organisations thus suggest that the notion of scaling, as with notions of innovation and entrepreneurship, need to be approached with nuance in South African small enterprise settings—as elements of enterprise-scaling can be achieved through actions that may not have a direct economic return, such as expansion in scope of activities and increasing sustainability through innovative organisational behaviours.

References

- Agrawal, A. (2005). Environmentalism: Community, intimate government, and the making of environmental subjects in Kumaon, India. *Current Anthropology*, 46(2), 161–190. <https://doi.org/10.1086/427122>
- Ashforth, A. (2005). *Witchcraft, violence, and democracy in South Africa*. Chicago: University of Chicago Press.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship: Theory and Practice*, 30(1), 1–22. <https://doi.org/10.1111/j.1540-6520.2006.00107.x>
- Aylwin, N., & Coombe, R. J. (2014). Marks indicating conditions of origin in rights-based sustainable development. *University of California Davis Law Review*, 47, 75–786.
- Barnard, A. (2006). *History and theory in anthropology*. Cambridge, UK: Cambridge University Press.
- Boohene, R., & Agyapong, D. (2017). Rural entrepreneurship in African countries: A synthesis of related literature. *Journal of Small Business and Entrepreneurship Development*, 5(1), 43–54. <https://doi.org/10.15640/jsbed.v5n1a5>
- Botha, J., Witkowski, E. T. F., & Cock, J. (2007a). Is ‘something better than nothing’? The impacts of ten outreach nurseries on South African community stakeholders. *Forests, Trees and Livelihoods*, 17(3), 199–221. <https://doi.org/10.1080/14728028.2007.9752597>

- Botha, J., Witkowski, E. T. F., & Cock, J. (2007b). Commercial viability of conservation and social forestry outreach nurseries in South Africa. *Agroforestry Systems*, 70(2), 135–156. <https://doi.org/10.1007/s10457-007-9042-0>
- Botha, J., Witkowski, E. T. F., & Cock, J. (2008). Plants for peace? Conflict management in the development of ten South African outreach nurseries. *Human Ecology*, 36(4), 485–501. <https://doi.org/10.1007/s10745-008-9173-6>
- Bräutigam, D. (1999). Local entrepreneurs, networks and linkages to the global economy in Southeast Asia and Africa. CMI Working Paper. Bergen, Norway. http://bora.cmi.no/dspace/bitstream/10202/258/1/WP1999.2%20Deborah-07192007_1.pdf
- Buame, S. K. (1996). *Entrepreneurship: A contextual perspective; discourses and praxis of entrepreneurial activities within the institutional context of Ghana*. Lund, Sweden: Lund University Press.
- Bushbuckridge Local Municipality (BLM). (2018). Final Integrated Development Plan 2018/22.
- Carree, M. A., & Thurik, A. R. (2003). The impact of entrepreneurship on economic growth. In Z. J. Acs, & D. B. Audretsch (Eds.), *Handbook of entrepreneurship research: An interdisciplinary survey and introduction* (pp. 437–471). Boston: Springer. https://doi.org/10.1007/0-387-24519-7_17
- Chambers, R. (1996). *Rural development: Putting the last first*. London: Longman.
- Charman, A., Petersen, L., & Piper, L. (2012). From local survivalism to foreign entrepreneurship: The transformation of the spaza sector in Delft, Cape Town. *Transformation: Critical Perspectives on Southern Africa*, 78(1), 47–73. <https://doi.org/10.1353/trn.2012.0035>
- Charmaz, K. (2014). *Constructing grounded theory*. London: Sage.
- Chell, E. (2007). Social enterprise and entrepreneurship. *International Small Business Journal*, 25(1), 5–26. <https://doi.org/10.1177/0266242607071779>
- Cocchiaro, G., Lorenzen, J., Maister, B., & Rutert, B. (2014). Consideration of a legal “trust” model for the Kukula Healers’ TK commons in South Africa. In J. de Beer, C. Armstrong, C. Ougamanam, & T. Schonwetter (Eds.), *Innovation and intellectual property. Collaborative dynamics in Africa* (pp. 151–170). Cape Town: UCT Press.
- Coetzer, K. L., Erasmus, B. F., Witkowski, E. T., & Reyers, B. (2013). The race for space: Tracking land-cover transformation in a socio-ecological landscape, South Africa. *Environmental Management*, 52(3), 595–611. <https://doi.org/10.1007/s00267-013-0094-9>
- Coetzer-Hanack, K. L., Witkowski, E. T. F., & Erasmus, B. F. N. (2016). Thresholds of change in a multi-use conservation landscape of South Africa: Historical land-cover, future transformation and consequences for environmental decision-making. *Environmental Conservation*, 43(3), 253–262.
- Coombe, R. J. (1998). Intellectual property, human rights and sovereignty: New dilemmas in international law posed by the recognition of indigenous knowledge and the conservation of biodiversity. *Indiana Journal of Global Legal Studies*, 6(1), 59–115.

- Coombe, R. J. (2009). The expanding purview of cultural properties and their politics. *Annual Review of Law and Social Science*, 5, 393–412.
<https://doi.org/10.1146/annurev.lawsocsci.093008.131448>
- Crush, J., & Ramachandran, S. (2014). *Migrant entrepreneurship, collective violence and xenophobia in South Africa*. Migration Policy Series No. 67. Waterloo, ON: Southern African Migration Programme (SAMP). <https://doi.org/10.2307/j.ctvh8qxcj>
- Dacin, P. A., Dacin, M. T., & Matear, M. (2010). Social entrepreneurship: Why we don't need a new theory and how we move forward from here. *Academy of Management Perspectives*, 24(3), 37–57. <https://doi.org/10.5465/amp.24.3.37>
- Friedman, J. (2008). Indigeneity: Anthropological notes on a historical variable. In H. Minde (Ed.), *Indigenous peoples: Self-determination, knowledge, indigeneity* (pp. 29–40). Delft: Eburon.
- Flint, K. (2008). *Healing traditions. African medicine, cultural exchange, and competition in South Africa, 1820–1948*. Athens: Ohio University Press, OH. <https://doi.org/10.1353/book.7003>
- Foley, D. (2006). *Indigenous Australian entrepreneurs: Not all community organisations, and not all in the outback*. Discussion Paper No. 279/2006. Centre for Aboriginal Economic Policy Research, The Australian National University, Canberra.
- Glaser, B. G., & Strauss, A. L. (1999). *Discovery of grounded theory. Strategies for qualitative research*. Milton Park, UK: Taylor & Francis.
- Hibbert, S. A., Hogg, G., & Quin, T. (2002). Consumer response to social entrepreneurship: The case of the Big Issue in Scotland. *International Journal of Nonprofit and Voluntary Sector Marketing*, 7(3), 288–301. <https://doi.org/10.1002/nvsm.186>
- Hindle, K., & Lansdowne, M. (2005). Brave spirits on new paths: Toward a globally relevant paradigm of Indigenous entrepreneurship research. *Journal of Small Business and Entrepreneurship*, 18(2), 131–142. <https://doi.org/10.1080/08276331.2005.10593335>
- Hitchcock, R., & Vinding, D. (2004). *Indigenous peoples' rights in Southern Africa*. Copenhagen: International Work Group for Indigenous Affairs (IWGIA).
- Kiggundu, M. N. (2002). Entrepreneurs and entrepreneurship in Africa: What is known and what needs to be done. *Journal of Developmental Entrepreneurship*, 7(3), 239–258.
- Kuper, A. (2003). Return of the native. *Current Anthropology*, 44(3), 389–402.
<https://doi.org/10.1086/368120>
- Mahemba, C. M., & De Bruijn, E. J. (2003). Innovation activities by small and medium-sized manufacturing enterprises in Tanzania. *Creativity and Innovation Management*, 12(3), 162–73.
<https://doi.org/10.1111/1467-8691.00279>
- Manda, L. D. (2008). Africa's healing wisdom: Spiritual and ethical values of traditional healthcare practices. In R. Nicholson (Ed.), *Persons in community: African ethics in a global culture* (pp. 125–139). Scottsville: University of KwaZulu-Natal Press.

- Migiros, P. S. (2018). Access to health services by indigenous peoples in the African region. In UNDESA (Ed.), *State of the world's indigenous peoples: Indigenous peoples' access to health services* (pp. 10–28). United Nations Department of Economic and Social Affairs.
- Narayan, D., Chambers, R., Shah, M. K., & Petesch, P. (2000). *Voices of the poor. Crying out for change*. New York: Oxford University Press. <https://doi.org/10.1596/0-1952-1602-4>
- Naudé, W. A., & Havenga, J. J. D. (2007). An overview of African entrepreneurship and small business research. In L. P. Dan, & R. B. Anderson (Eds.), *International handbook of research on indigenous entrepreneurship* (pp. 28–45). Cheltenham: Edward Elgar.
- Ngorora, G. P. G. & Mago, S. (2017). Rural entrepreneurship and welfare in South Africa: A case of Nkonkobe Municipal Area in the Eastern Cape Province. *Journal of Economics*, 7(2-3), 169–178. <https://doi.org/10.1080/09765239.2016.11907831>
- Nieman, G., Visser, T., & Van Wyk, R. (2008). Constraints facing tourism entrepreneurs in South Africa: A study in the Gauteng and Mpumalanga provinces, South Africa. *Development Southern Africa*, 25(3), 283–295. <https://doi.org/10.1080/03768350802212063>
- Niezen, R. (2003). *The origin of indigenism. Human rights and the politics of identity*. Berkeley: University of California Press.
- Niehaus, I. (2001). Ethnicity and the boundaries of belonging: Reconfiguring Shangaan identity in the South African lowveld. *African Affairs*, 101(405), 557–583. <https://doi.org/10.1093/afraf/101.405.557>
- Niehaus, I. (2005). Witches and zombies of the South African lowveld: Discourse, accusations and subjective reality. *Journal of the Royal Institute*, 11(2), 191–210. <https://doi.org/10.1111/j.1467-9655.2005.00232.x>
- Niehaus, I. (2012). *Witchcraft and a life in the new South Africa*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/CBO9781139060929>
- Nussbaum, M. C. (2000). *Women and human development: The capabilities approach*. Cambridge, UK: Cambridge University Press.
- Nussbaum, M. C. (2011). *Creating capabilities: The human development approach*. Cambridge, MA: The Belknap Press of Harvard University Press. <https://doi.org/10.4159/harvard.9780674061200>
- Organisation for Economic Co-operation and Development (OECD). (2007). *Innovation and growth: Rationale for an innovation strategy*. Retrieved from <https://www.oecd.org/science/inno/39374789.pdf>
- Oguamanam, C. (2009). *Beyond theories: The intellectual property dynamics in the global knowledge economy*. Retrieved from https://works.bepress.com/chidi_oguamanam/1
- Oguamanam, C. (2012). *Intellectual property in global governance*. London: Routledge. <https://doi.org/10.4324/9780203807040>

- Peredo, A. M., Anderson, R. B., Galbraith, C. S., Honig, B., & Dana, L. P. (2004). Towards a theory of indigenous entrepreneurship. *International Journal of Entrepreneurship and Small Business*, 1(1-2), 1–20. <https://doi.org/10.1504/IJESB.2004.005374>
- Republic of South Africa (RSA). (2004). Indigenous Knowledge Systems Policy.
- Republic of South Africa (RSA). (2007). Traditional Health Practitioners (THP) Act 22.
- Ritschken, E. (1995). *Leadership and conflict in Bushbuckridge: Struggles to define moral economies within the context of rapidly transforming political economies*. PhD thesis, University of the Witwatersrand, Johannesburg.
- Roberts, D., & Woods, C. (2005). Changing the world on a shoestring: The concept of social entrepreneurship. *University of Auckland Business Review*, 7(1), 45–51.
- Robson, P., Haugh, H., & Obeng, B. (2009). Entrepreneurship and innovation in Ghana: Enterprising Africa. *Small Business Economics*, 32(3), 331–350. <https://doi.org/10.1007/s11187-008-9121-2>
- Robson, P. J. A., & Obeng, B. A. (2008). The barriers to growth in Ghana. *Small Business Economics*, 30(4), 385–403. <https://doi.org/10.1007/s11187-007-9046-1>
- Rogers, E. (1995). *Diffusion of innovations* (4th ed.). New York: The Free Press.
- Rutert, B. (forthcoming 2020). *Contested properties: Peoples, plants and politics in post-apartheid South Africa*. Bielefeld: Trascript Verlag.
- Schonwetter, T., & Van Wiele, B. (2018). *3D printing: Enabler of social entrepreneurship in Africa? The roles of FabLabs and low-cost 3D printers*. Open AIR Working Paper 18. University of Cape Town and University of Ottawa: Open African Innovation Research (Open AIR). Retrieved from <https://openair.africa/2018/10/15/3d-printing-enabler-of-social-entrepreneurship-in-africa-the-roles-of-fablabs-and-low-cost-3d-printers>
- Schumpeter, J. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Stevenson, H. (1985). The heart of entrepreneurship. *Harvard Business Review*, March–April, 85–94.
- Takyi-Asiedu, S. (1993). Some socio-cultural factors retarding entrepreneurial activity in Sub-Saharan Africa. *Journal of Business Venturing*, 8, 91–98. [https://doi.org/10.1016/0883-9026\(93\)90013-U](https://doi.org/10.1016/0883-9026(93)90013-U)
- Tapsell, P., & Woods, C. (2010). Social entrepreneurship and innovation: Self-organization in an indigenous context. *Entrepreneurship & Regional Development*, 22(6), 535–556. <https://doi.org/10.1080/08985626.2010.488403>
- Thornton, R. (2002). Environment and land in Bushbuckridge, South Africa. In L. Zarsky (Ed.), *Human rights and the environment: Conflicts and norms in a globalising world* (pp. 219–240). London: Earthscan.
- Tutu, D. (1999). *No future without forgiveness*. New York: Image, Doubleday. <https://doi.org/10.1111/j.1540-5842.1999.tb00012.x>

- United Nations Department of Economic and Social Affairs (UNDESA). (2017). *The state of the world's Indigenous peoples: Education*. New York: UNDESA.
- Van Dijk, M. P. (1997). Small enterprise associations and networks: Evidence from Accra. In M. P. Van Dijk, & R. Rabelotti (Eds.), *Enterprise clusters and networks in developing countries* (pp. 131–154). London: Frank Cass & Co.
- Van Wyk, B.-E., & Gericke, N. (2000). *People's plants. A guide to useful plants of Southern Africa*. Pretoria: Briza Publications.
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research: An editor's perspective. In J. Katz, & R. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence, and growth* (pp. 119–38). Greenwich, CT: JAI Press.
- Vesely, M. (2003). New technology for an old continent. *African Business*, 289, 20–22.
- Wennekers, A. R. M., & Thurik, A. R. (1999). Linking entrepreneurship and economic growth. *Small Business Economics*, 13, 27–55.
- Zahra, A. S., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing*, 24(5), 519–532. <https://doi.org/10.1016/j.jbusvent.2008.04.007>



Recognizing Africa's role in the global knowledge economy.

<http://openair.africa>

Open African Innovation Research (Open AIR) is a unique collaborative network of researchers investigating how intellectual property (IP) systems can be harnessed in open, participatory ways that have the potential to maximise knowledge access, innovation, and the sharing of benefits from innovation inclusively.

For more Information about Open AIR, please visit our website: <http://openair.africa>

or contact one of our Program Managers:

ottawa@openair.africa

capetown@openair.africa



This document is by Open AIR under a Creative Commons Attribution 4.0 International Licence. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0>

Open AIR is carried out with financial support from the International Development Research Centre, Canada, the Social Sciences and Humanities Research Council of Canada, and Queen Elizabeth Scholars Program. More information about Open AIR's current and previous supporters can be found at <http://openair.africa/supporters>. The views expressed herein do not necessarily represent those of Open AIR's funders.

