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Mining on communal land as a new frontier – a case study of the Kunene Region, Namibia

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ABSTRACT

This paper is about mining under communal ownership which makes this kind of mining a new mining frontier. The newness of the frontier is that it has introduced a series of institutional complexities that is uncommon to artisanal and large-scale mining. Mining companies have to negotiate deals with communities and their leaders to be able to prospect for mineral resources. We also argue that the state's environmental legislation is poorly harmonised with the prevalent conditions in communal areas where mining is gaining greater importance. Legislation remains silent on the rights of those living on communal land. These rights remain in a state of confusion with often negative effects on the local communities who are exposed to a number of duplicating development programmes and legislative structures. The aim of this paper is to explore the dynamics communal mining in the Kunene Region in north-western Namibia.

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Introduction

Namibia is well known for the large scale extraction of diamonds and other minerals such as copper, gold and uranium, and metals such as tantalum and tin (Schneider, 2009; Wallace, 2011). The economic and environmental impacts have been well studied and evaluated (Mapaure, Chimwamurombe, Mapani, & Kamona, 2011; Rogers & Li, 2002). In contrast, little is written about the mineral resource extraction in the communal areas of Namibia. Yet mining on communal land is becoming increasingly important from a rural development perspective. Mining operations provide income and employment opportunities for many rural inhabitants, often in combination with small-scale and risk-prone farming and cattle rearing. While mining is already ongoing in the Kunene region of North-Western Namibia for over 50 years, we argue here that mining has gained a new momentum with the enactment of the Minerals Act (MA) of 1992 (Republic of Namibia, 1992) and the act of 1996 that granted usufruct rights to local communities (Republic of Namibia, 1996). The role of the state and the power to negotiate for benefits for local communities organised in so-called Conservancies has increased substantially since then. Little is known, however, as to where and how such negotiation takes place and what kinds of controversies and tensions mineral resource extraction spawns between miners, mining companies, brokers, villagers, local authorities and the state concerning the governance of the mining operations and the distribution of the value derived from it.

This forms one of the reasons for conceptualising communal mining as a new frontier in the mining sector. It is new in the sense that communal mining is from a technological and organisational perspective

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significantly different from large scale mining on state and privately owned land where people are barred from staying. It also differs structurally from artisanal mining. Communal mining also signifies that the frontier of extraction of mineral resources has shifted the issues and challenges in the mining sector in many ways, in Namibia but also elsewhere in the region (i.e. South Africa). Communal mining stands for a geographical shift to also include territories that are sparsely populated. Most significant of the new mining frontier is that, in contrast to private tenure arrangements, customary tenure of land and resources introduces an additional layer of complexity in mining operations. Access to mining sites has to be negotiated with representatives of communities that are organised in Conservancies. Conservancies are by law conceived as territory-based communities governed by a constitution that specifies and codifies the roles of managers and elected committees in the day-to-day management (Bollig, 2016; Nuulimba & Taylor, 2015). In a registered communal conservancy, the rights over the land are limited to its utilisation rights over the wildlife on its territory. Figure 1 shows the geographical locations of Namibia's 83 registered conservancies.¹ At the same time, the state tries through a series of environmental laws and regulations with a variety of regulations to control and monitor mining operations. Being registered a conservancy implies that it has to submit and implement a land-use management plan accordingly. Mining claims by companies by law need to submit an Environmental Impact Assessment (EIA) report to register a claim legally.

The focus and aim of this paper are to depict mineral resource extraction in communal areas as a new mining frontier. We employ the case study method (Bernard, 2006; Yin, 2017) to unpack the frontier. More specifically, we debate the nature of the spaces of negotiation that occur and emerge in the mining operations by exploring the kind of interfaces that the new frontier produces when local conditions in communal areas of Namibia, mining entrepreneurs and the environmental laws of the Namibian State converge. Distribution of proceeds from mining, community politics, contractual agreements with private entrepreneurs, the implementation and enforcing of environmental laws emerge as key issues.

The paper begins with sketching our theoretical entry point for the analysis of communal mining as a new frontier. Given our focus on the role of the state, we provide a succinct summary of the legal and regulatory framework pertaining to land and natural resources in Namibia. We also depict the mining sector in Namibia. This is followed by an account of communal mining and the way minerals are extracted in the Kunene region, and more specifically in the Ombujokanguindi, Okangundumba and Otjambangu conservancies. In the concluding section, we briefly depict the situation that mining claims by companies are disputed by the conservancies. Part of the problem also concerns ownership of minerals under Namibian law, and whether participation rights of 'traditional' communities can or should be derived from the existing ownership rights and integrated into the current mining licencing process. This depiction sheds light on the shortcomings in the implementation of laws and policies for mining on communal land, especially when it comes to involving rural communities and reconciling environmental, social and economic concerns.

Data sources

The data for our paper derives from a series of four field visits by a team of the Legal Assistance Centre's (LAC) Land, Environment and Development (LEAD) project during September-October 2017. The lead author together with two research assistants – Marcia Fagnoli and Christiaan Bakkes who were both employed as LAC consultants at the time of the study – attended public meetings in the Ombujokanguindi, Okangundumba and Otjambangu Conservancies where the mining operations take place or are proposed. The LAC is registered as an Interested and Affected Party, which allowed the team to attend public hearings and to access the relevant legal documents and company records. During the field visits the mining operations were studied on-site, specifically what was mined and how. The team visited two operational mine sites and a proposed mining site. The purpose of the interviews was to find out about the nature of the benefits for the local community, but also about the negotiations between private foreign and local businessmen and the relationship



Figure 1. Map of Namibia with the location of the three conservancies and large scale mining operations

with the state. Interviews were held with community representatives such as the Conservancy chairpersons. Interviews were also held in company offices with representatives of mining companies on-site as well as in Windhoek to find out about company strategies and future investments. A series of interviews with officials from the relevant ministries (i.e. Ministry of Environment and Tourism, MET) and Ministry of Mining and Energy, MME) was conducted during the course of the study to explore the role of the state and specifically about the gazetted and monitoring of environmental laws. We also consulted the EIA's and the Background Information Documents (BID) of the mining claims that were visited. The BIDs are written by environmental consultant agencies (GSC, 2017; JSI Consultancy, 2017a, 2017b).

Data about the internal dynamics of the Conservancy community were not among the objectives of the field visits. We drew on our work elsewhere as supervisors or initiators in community based national resource management projects implemented by Conservancies to derive a picture of income distribution, power and gender relations (de Vette, 2009; de Vette, Kashululu, & Hebinck, 2012; Kashululu, 2008; Kiaka, 2018; Lubilo, 2018). There is no reason to assume that the socio-political

structure of the Ombujokanguindi, Okangundumba and Otjambangu Conservancies and their mode of organisation are dramatically and substantially different.

Theoretical entry point

One of our goals is to analyse to what extent communal mining constitutes a new frontier in the mining sector next to existing and well-documented frontiers in mining: i.e. the large scale and artisanal mining. Land, scale and ownership of mining operations, we argue, are part of the process and social relations that generate different frontiers in mining. These processes have a historical grounding and need to be seen as interconnected in each of the frontiers. The interconnections play out differently in each frontier.

Frontier

The notion of frontier has evolved in the social science literature from its original geographical meaning as borderland or empty land. Classically the frontier is located in the expansion of colonialism and is presented as the border area where Western defined modernity meets the pre-colonial form of modernity. We draw on Kopytoff (1987) to extend the notion as characterized as highly contested places, in which both exogenous and endogenous forces try to gain social control, reduce the mobility of the social actors and impose their authority over them and their territory. For Kopytoff (1987) frontiers unfold as an area over which political control by the regional metropolises is absent or uncertain or still has to be established. The frontier is shifting progressively by imposing control on other conquered land. The shift of the frontier is in Kopytoff's understanding essentially one of a politically constructed space. Rasmussen and Lund (2018) associate frontier in line with Kopytoff with the expansion of capitalism which produces contestations over the definition and control of resources. Extractive industries, they argue, have an inherent drive toward continuous expansion. On a global scale, new patterns of resource exploration, extraction, and commoditization create new frontiers, creating in turn new or different sets of dynamics. Applying Rasmussen and Lund (2018) understanding we translate and unpack these new dynamics on the one hand as leading to violence and displacement (see also Korf, Hagmann, and Doevenspeck, 2013). This is well addressed in the literature concerning mining by, for instance, Abuya (2017) and Bebbington, Bornschlegl, and Johnson (2013). Namibia, however, with exceptions in situations of nature conservation,² is not known for the displacement of communities from their ancestral land for the purpose of mineral extraction.³

On the other hand, frontiers generate new sets of *opportunities* and simultaneously *spaces for negotiations* for a range of social actors to access resources they previously were denied off or were only recently discovered. The socio-political struggles for Independence in Namibia in 1990, or for a new democratic dispensation in neighbouring South Africa from 1994 onwards, created new frontier moments that gave way to a political order that initiated new institutional orderings that are based on (1) *different property regimes* (Von Benda-Beckmann, Von Benda-Beckmann, & Wiber, 2006b), (2) *new forms of authority* (Sikor & Lund, 2009), and (3) the connected *struggles for legitimacy over the ability to define proper uses and users* (Kronenburg García & van Dijk, 2019; Long, 2001). In the spirit of Kopytoff (1987) the frontier creates spaces of socio- and political *negotiations*. Jensen and Zenker (2015) in similar ways operationalized the former homelands in South Africa as intense zones of negotiation creating new opportunities and new dynamics, and not as zones of margins. This offers, we argue, a perspective for unpacking communal mining in Namibia.

Frontiers as spaces of negotiation or arenas

We rely in this paper on a well-known tradition in sociology and anthropology to conceptualise spaces of negotiations as *arenas of social struggle*. Communal mining we argue unfolds in an arena.

We treat these as concepts expressing similar development situations and we use these here interchangeably. The notion of 'arena' which we derive this from the work of Giddens (1984) and Long (2000, 2001), resonates well with the setting or site of enactment of practices (i.e. communal mining) and processes (i.e. the 'arena' is the setting where interested parties negotiate their business deals to create new opportunities). Long (2001, p. 59) defines arenas as '*social locations or situations where issues, resources, values and representations contest with each other*'. These arenas unfold either as spaces (i.e. as new frontiers) in which contestations associated with different practices and values of different domains take place or as spaces within a single domain where attempts are made to resolve discrepancies in value interpretation and incompatibility between the various actors' interests.

Such an interpretation of frontier fits our analysis of communal mining as a new frontier for two reasons. (1) One is that communal mining requires and involves negotiations between a range of social actors operating at various levels of society to access the mineral wealth. Getting access to and a fair share of the benefits derived from such access is not always a straightforward process (Ribot & Peluso, 2003). We will address that in some degree in this paper. (2) The vast literature on community studies (Guyer, 1981; Leach, Mearns, & Scoones, 1997; Ostrom, 1992; Poteete & Ostrom, 2004) and community-based natural resource conservation in Namibia (Bollig, 2016; de Vette et al., 2012; Kiaka, 2018; Lubilo, 2018; Schnegg, 2018) clearly brings to the fore that communities are often socially differentiated and are entangled in struggles with others, including outsiders over the monitoring of resource extraction activities and the (re)distribution of the proceeds. Abuya (2017) showed this perfectly for a situation in Kenya.

Taking this to the unravelling of the complexities of communal mining as a new frontier implies that we approach conservancies as resource communities that are riddled with conflict and more importantly for our analysis here, for the overlapping of authority and rights and community and state laws. In terms of customary rights, rights and resources in communal conditions are considered the inalienable property of the community, given to a member and inherited according to lineage membership. In terms of Namibia's statutory provisions, namely the Communal Land Reform Act (CLRA) (Republic of Namibia, 2002), people may have a certificate of registered customary land right or a right of leasehold with regard to communal land. Such arrangements have been reshaped over the years of exposure to modern state law and the implementation of a land reform programme since Namibia's Independence in 1990. This layer of laws is, as the legal anthropology literature on common property resources points out, complex and potentially conflictive (Meinzen-Dick & Pradhan, 2001; Von Benda-Beckmann, 2002; Von Benda-Beckmann, Von Benda-Beckmann, & Wiber, 2006a). Von Benda-Beckmann (2002, p. 39) conceptualises this social phenomenon as the 'co-existence of law or legal orders' within a given society and draws attention to the fact that:

'... people are aware of alternative normative repertoires and/or procedures in which these can be used. But generally, the condition of legal pluralism challenges the exclusiveness and self-evidence of any single normative system. (...) [I]n the context of legal pluralism, different participants and decision-makers may refer to the same law. But they often mobilize different legal repertoires against each other.' (Von Benda-Beckmann, 2002, p. 69)

In other words, the co-existence of legal repertoires implies different types of interactions or encounters between actors and social practices constituting an arena where normative repertoires are contested and used as 'weapons' in the struggle with others over land and resource benefits. Von Benda-Beckmann (2002, p. 35) stipulates that there are many possibilities where legal pluralism can be studied. Depending on the focus, it could be a politico-administrative space, but also a structural place like a household or the new mining frontier constituted by communal mining.

Mining in Namibia and the role of the state

The mining sector is generally of strategic importance for the state, society and the national economy (MET & MME, 2017, p. 5). Mining is not just a major source of wealth for shareholders of globally operating companies but also a significant tax contributor to the state and a foreign-exchange earner for the Namibian national economy. In 2016, mining contributed 11.1% to Namibia's GDP, with a turnover of N\$28.85 billion or US\$2 billion (Chamber of Mines of Namibia, 2016). It also provides a substantial share of employment and skills. But mining is also an activity associated globally with unequal distribution of wealth. Mining comes at a considerable cost to people living near mining operations, and to the environment. Well-known environmental impacts from open-pit mining, in particular, are permanent landscape alteration, soil and water contamination, erosion, loss of critical habitats for sensitive plant and animal species, and ultimately, extinction of biodiversity (Hilson, 2003; Lombe, 2003; Mapaure et al., 2011).

Mining in Namibia is predominantly organised by global operating companies on a large scale in the desert and coastal regions of Namibia. The last 20 years mining in communal land is gaining in importance. Artisanal mining as we know it from elsewhere in Africa (e.g. notably in the Democratic Republic of Congo, Tanzania, Zimbabwe, Ghana) (Aryee, Ntibery, & Atorkui, 2003; Bryceson & Geenen, 2016; Chigumira, 2018; Fisher, 2007; Hilson, 2003, 2010; Jønsson & Bryceson, 2009) is virtually absent in Namibia. Below we expand on the role of the state through its laws and regulations. We also depict shortly the large scale and the communal mining sector in the country.

Formation of the mining frontiers in Namibia

The state plays a crucial role in the formation and ordering of the mining frontiers in Namibia. Through the enactment, implementation of laws and regulations and the formulation of policy aims, it laid down the foundation for the formation of Namibia's mining frontiers. Theoretically, the land and environmental laws and regulations can, with reference to a Foucauldian perspective (de Vette et al., 2012; Foucault, 1991) be interpreted as a 'technologies of rule' applied by the state to order the mining sector in large scale and communal but also to monitor and discipline the actors that operate in the mining sector. The laws and regulations pertain concretely to land, its categorisation and fixing the usufruct rights of the proceeds of the land. Questions related to issues of scale and ownership pose crucial questions for how, and in what direction the frontiers develop, and these differ per mining under large scale and communal mining conditions. The significance of scale – large and small – is that it intersects in different ways with the nature of ownership (of e.g. land and company), the legal dimensions of state control (e.g. the laws and their implementation and enforcing) and the materialities of the mining operations (the organisation of the labour process, technologies for excavation and processing). For the sake of brevity, only the most relevant land and environmental legislation as it relates to this paper are mentioned below. Each of these laws has specific tools to monitor operations.

The Namibian Constitution is the primary law, against which all other laws must be measured. Numerous constitutional provisions are relevant to mining on communal land, particularly Article 16 concerning the right to property, Article 100 concerning ownership of natural resources, and Article 95(l) promoting sustainability and protection of the environment.

The different categories of land in Namibia are the product of Namibian history (see Wallace, 2011). Land is classified as 'state', 'communal' or 'commercial' land. Each of these categories gives certain rights and responsibilities to the people holding rights over the land. The control of the state over land use and environmental impact varies. *State land* belongs to and is owned by the Government of the Republic of Namibia. Large scale mining of diamonds and uranium occurs on state land, e.g. the Namib Desert and the Coastal area. *Commercial land* is land held under freehold tenure by individuals, families or private businesses. Commercial land can be bought and sold. This land is well surveyed and the registration is well managed by the Deeds Registry in Windhoek (Legal

Assistance Centre & Namibia National Farmers' Union, 2009, p. 1–2). Commercial land carries a history of displacement and alienation (Wallace, 2011; Werner, 1993). The situation regarding *communal land* is much less clear. Communal land, in terms of section 17 of the Communal Land Reform Act of 1992 (Republic of Namibia, 2002) and the Constitution's Article 100 and Schedule 5, is *vested* in the State. Hence, one is not permitted to privately own, buy or sell communal land (Republic of Namibia, 2002: 1). This is significant given that communal land makes up 41% of the country's territory – with 70% of the population depending on access to communal land for 'subsistence' farming and their livelihoods.

The *Minerals (Prospecting and Mining) Act* of 1992 (MME, 2004) vests all of Namibia's prospecting and exploitation rights in the State, with the power to grant licenses given to the Minister of Mines and Energy (MME). It also gives the Minister the authority to appoint a Mining Commissioner to assist in the licensing process. All applications for mineral licenses must be made on forms distributed by the Ministry, accompanied by payment of a small fee.

The *National Policy on Prospecting and Mining in Protected Areas Policy* developed jointly by MET and MME, is one of the most recent official documents on mining. It is used to guide decision making concerning exploration and mining in 'protected areas', which make up 17% of Namibia's landmass (MET, & MME, 2017, p. 11). The Policy was developed to complement various regulations and policies relevant to prospecting and mining, to minimise negative environmental impacts. The aim is to be achieved through identification of key ecological and culturally sensitive areas within Namibia's protected areas, development of a Decision Support Tool, and improvement in the procedures for granting different exploration and mining licences.

The MME developed the *Minerals Policy* (2004) to 'ensure compliance with national environmental policy and other relevant policies to develop a sustainable mining industry' (MME, 2004, Section 1.6). The Minerals Policy calls for compliance with existing economic and environmental regulatory frameworks when mining within protected areas but has no legally binding authority. Furthermore, the Policy highlights the importance of the environmental impact assessment process, recommends that rehabilitation be guaranteed when mining in protected lands, and specifies the development of a Final Mine Closure Plan and funding mechanism through an Environmental Management Plan before any mining or prospecting activity commences on any land.

The *Environmental Management Act* (Republic of Namibia, 2007), passed by Parliament in 2007 and enacted in 2012, promotes community involvement in the management and benefit sharing of natural resources and public participation in decisions affecting the environment. The Act also calls for Environmental Impact Assessments for all activities that may affect the environment and requires those who create waste and pollution to use the best possible practices for reducing the waste or pollution, including any associated costs, as well as to take the necessary precautions to prevent environmental damage.

The *Communal Land Reform Act* (CLRA) (Republic of Namibia, 2002) aims to improve the rights to land in areas with communal land tenure. The CLRA itself does not refer to mining on communal land. Yet, Regulation No. 2926 under the CLRA provides that every person who wants to carry out any prospecting or mining operations on communal land must notify the Chief or Traditional Authority of the community and the relevant Communal Land Board. The extent of this participation right for traditional communities is discussed later. According to Article 66 of the Constitution, *customary law* is also a source of law in Namibia. It can only be applied insofar as it does not conflict with the Constitution and other statutory law, but it ranks higher in the hierarchy of norms than regulations and is on par with Common Law (Renkhoff, 2011, pp. 362–365)

The MME and MET are the responsible state actors for crafting and implementing Namibia's mining policy. While the MME promotes the optimal exploitation of Namibia's mineral resources and integrates the mining industry with other sectors of the economy, the MET's mandate is ensuring proper environmental management. The MET is charged with monitoring the environmental assessment process in mining licence applications (Legal Assistance Centre & Stanford Law School, 2009, p. 9).

The prevailing opinion when it comes to who owns the rights to Namibia's minerals, is that all rights in Namibia are *vested* in the State (*Agnes Kahimbi Kashela v Katima Mulilo Town Council and Others* (SA 15/2017) 2018; Government of the Republic of Namibia 1990 article 100; Government of the Republic of Namibia and Another v *Cultura* 2000 and Another (SA 2/92) 1993; MME 2004, p. 7; Van der Walt 1999, p. 316⁴). The state possesses the exclusive rights. The concept of custodianship over natural resources also entails the State's custodianship of communal land. Thus, when it comes to mining on communal land, the State holds the role of custodian of both the nation's natural resources and its communal land.

The State plays a central role in the mining licencing process. The applicant has to hand in a written form at the Mining Commissioner's office. Sections 47(2)(a) and 92(2)(c)(ii)(bb) of the MA of 1992 specifies that the Minister may not grant an application for the registration of a mining claim unless such mining operation will minimise or prevent any pollution of the environment, and that the holder of such a mining licence shall take all reasonable steps necessary to prevent or minimise any pollution of the environment. The State, as the custodian of natural resources, is obligated to structure the mining licencing process *for the benefit and protection of the people*. This would include involving affected community members in the licencing process to enable them to voice their opinions and influence the licencing decision for mining on 'their' land. This means that a representative of the traditional community must be informed by a company seeking to carry out a mining or prospecting operation before it can apply for any licence.

Large scale mining

The large-scale mining sites are geographically concentrated on state-owned desert land and in marine and coastal areas (see [Figure 1](#)). Excavation, production and marketing are controlled by the Namdeb Diamond Corporation, in which the Namibian State holds 50% of the shares, while the globally operating De Beers holds the other 50%.⁵ These mining areas, notably where diamonds are extracted, are exclusive territories. After the discovery of the first diamonds in 1908 the then German colonial authorities established the *Sperrgebiet* (Prohibited Area), limiting entry to the entire region to licensed miners, prospectors and their labourers. The *Sperrgebiet* like the Namib Desert was and remains an inhospitable area not fit for settlement. The first mining activities by foreigners, which consisted of the exploitation of the large guano deposits on the offshore islands, as well as various coastal fishing enterprises dates back to 1850 and onwards. This extraction of natural wealth resulted in little direct contact with the local population (Melber, 2010, pp. 22, 23).

The *Sperrgebiet* diamond mining area, located in the Namib Desert of southwestern Namibia, stretches from the Atlantic coast in the west to about 100 km inland, from the Orange River, on the border with South Africa in the south, to 72 km north of Lüderitz. It covers an area of 26,000 square km. During the 1940s, as the mining emphasis moved to the shores and sea. The majority of diamond mining in Namibia is nowadays marine mining, along the coast and a few km west into the sea. CDM was granted its first offshore mining license in 1961. This led to the development of several innovations for mining in this new environment, including vacuum extractors, dredgers, floating treatment plants and probe drilling platforms. Besides, diamond mining ships were built to allow passage from the shallow waters of the coast. The few remaining land-based operations are near Oranjemund, with several small satellite mines near Lüderitz and alluvial mines along the Orange River.

Communal mining in the Kunene region

Communal mining in Namibia, we assume, takes place in institutional conditions that are rather similar to those we found in the three conservancies Ombujokanguindi, Okangundumba and Otjambangu. The region is sparsely populated. The people live in scattered hamlets around the village of Otuani, which has a school, a clinic and some government offices. Ombujokanguindi has

been registered since 2012 as a conservancy, covering 1,160 km² and inhabited by about 758 people. Okangundumba, a registered conservancy since July 2003, covers 1,131 km² and consists of about 1,845 people. Otjambangu, registered in 2009 as a conservancy, covers 348 km² and caters for about 932 people. In total, mining operations occur on a surface of 2,439 km² providing essential livelihood opportunities for approximately 3,535 people. The majority of the people in the area are of Herero and Himba descent (Wallace, 2011). Being registered as conservancy implies that they share the benefits that are derived from land and the natural resource in their registered territories. The benefits translate in income from tourism and trophy hunting operations as well as income and employment opportunities from mining and processing.

The Kunene Region in north-western Namibia is known for its rich deposits of minerals. According to mineral consultants, excellent diopside and cerussite, cuprite, malachite, shattuckite and wulfenite specimens are found and excavated in Kunene. Associated minerals include rare secondary bismuth species such as bismuth-rich mottramite, beyerite and bismutite (Bowell, Ermolina, van der Plas, van Us, & Steiner, 2013, p. 2). The mining and processing case studies on which we dwell to analyse the complexities that arise in their exploration are situated on land where three conservancies have been proclaimed. The area is in the catchment area of the Noibab or Skelm River in the Kunene Region (see [Figure 1](#)). The region is known as the Kunene Copper Belt which has been actively explored for over 50 years. Exploration is being carried out by Teck Cominco, INV Metals, Kaokoland Mining and Exploration Company and Siberia Metal Traders as well as several independent prospectors (Bowell et al., 2013, p. 5).

The region is semi-desert with a rainfall of about 200 mm per annum. The terrain in these conservancies is mountainous and part of the north-western escarpment, also known as the Joubert Mountains which are classified as Dolomite mountains (Hoole, 2008; Jacobson, Jacobson, & Seely, 1995). The Skelm River drains into the Hoanib River 60 km to the south. The Hoanib is an important ephemeral river which forms one of the main sustaining arteries to life in the Kaokoveld section of the Namib Desert. Because of the mountainous terrain and extreme runoff, the Skelm River floods every year and fills the Hoanib with rainwater for short periods during the brief rainy season. The Hoanib River flows towards the Atlantic Ocean and enters the Skeleton Coast Park. Within the boundaries of the Park, it dams up against the dune fields and creates a floodplain. This floodplain is of great ecological importance, as it sustains a vast area of desert flora, which in turn attracts a great variety and number of desert wildlife throughout the year. Notably, this floodplain serves as host to the resident elephant population of the Hoanib River after it has flooded each year. Leopard, zebra, giraffe, kudu, hyena, black-backed jackal, cheetah and ostrich are commonly sighted.

The botanical diversity of dry-land flora is extensive, with several rare and near-endemic species of plants and trees (Craven, 2002). Some of the trees, including several Combretum and Boscia species, are important sources of nutrition for livestock and wildlife alike. Mopane grows in abundance and serves as a source of food as well as firewood and building material for the rural communities. Observations during field visits to the area gave the impression that local people within these three conservancies function within the arid environment despite challenging environmental conditions. Their source of livelihood stems mainly from large and small livestock. Their cattle, goats and sheep feed in the hills and around alluvial soils in the river valleys. The cattle drink from several boreholes in the area, as well as from springs and wetlands within the Skelm River bed and catchment area. Members of the community also hunt games species like kudu and springbok for subsistence purposes (Bollig & Olwage, 2016), but not in big numbers according to the conservancy records.

Cases of communal mining at three sites

Below we provide more details on the material characteristics of communal mining. We visited three different sites: one in Outani and the second in Omao. The third one, in Okaaru, is a proposed site.

Site 1: copper mine and processing plant in Otuni (Luxury investments mining claims 69776-69781)

The copper mine at Otuni is situated approximately 5 km west of the settlement on a hill within the catchment area. The mine has a workforce of about 50 employees. Structures on the site include office buildings, workshops, a broken-down truck and containers. There is also a scrap-metal yard and waste material lying around. At the entrance of the mining site, there were at least six heavy earthmoving vehicles, including back-actors, bulldozers and heavy trucks. Staff accommodation included a compound with several park homes (Odendaal, Bakkes, & Fagnoli, 2017a).

The mine at Otuni is a mechanised open-pit mine (see [Figure 3](#)) extracting bornite and chalcocite ore that has a copper content of up to 25% (Bowell et al., 2013, p. 7). The site is several hectares large in circumference. The mine-operation process includes blasting material from an open pit, then several different forms of crushing and screening, with water added to the process. Cattle is seen drinking the runoff water from the mine (see [Figure 2](#)). Large mountains of boulders, rocks and rubble have been mechanically excavated and are piled up around the crater which currently is around 100 metres deep. The crater has reached the water table that lies exposed at the bottom of the crater. Ore is treated to recover the copper ore. Water from the constructed dams is used for separation. Slimes are separated from the water and gangue material is separated and stockpiled on-site (JSI Consultancy, 2017a).

There is also a processing plant with a two-storey-high multiple crusher and conveyor system. There are massive mounds of gangue waste material lying in the open that visibly drains into the river system and blows in the wind. The overall impact of this mining activity on the environment, human and animal life could not be assessed during the current field visits.

Luxury Investments 192 (Pty) Ltd, registered in Namibia as a Namibian company, applied for approval to continue the extraction and processing of copper sulphate ore at the Otuni site. Next, to Luxury Investments, two other companies registered as Namibian companies have an interest in this mine: Kaokoland Mining and Exploration, and Premier Construction. The application of Luxury Investments is registered as Mining Claims 69,776–69,781, each 18 hectares (ha). The JSI Consultancy (the EIA company) confirms in its BID that the above-mentioned activities are listed in terms of the EIA Regulations of 2012 (JSI Consultancy, 2017a). The BID confirms that the main mining activity undertaken by Luxury Investments 192 (Pty) Ltd at Otuni is extraction, crushing and screening of copper ore (copper sulphate) concentrate, consisting of lead (Pb), Silver (Ag) and Gold (Au) from shale formations. The company claims in the BID that no chemicals are used within the mining process.



Figure 2. Cattle drinking runoff water from the Otuni mine (by Marcia Fagnoli).



Figure 3. Oturangi copper mining pit (by Marcia Fagnoli).

Site 2: proposed copper processing facility in Omapo (South-East Atlantic Mining Company, SEAMCO)

SEAMCO has proposed to build a copper processing facility which is not directly part of any other mine or mining claim in the area. According to the Scoping Report (GSC, 2017), the copper ore will be provided to the processing facility from the mining claims owned by the community members manually (i.e. using pickaxes and handpicking the copper ore). The processing plant is proposed for Omapo because this village is near the mining claims in the area. It will employ 20 to about 80 people. The facility will accept only copper oxide.⁶ SEAMCO will collect the ore (in 1-ton bulk bags) from the claims utilizing a 5-ton utility pickup truck. The claim owners who supply more ore regularly will obtain a percentage beside the income they receive from the ore sales. The plant will be limited to an operation of 200 ton/month and would be able to service mining claims within a 15 km radius (GSC, 2017). Once the copper ore is collected from the mining claims, it will be taken to the crushing unit and crushed to smaller manageable sizes. The next step after crushing is leaching when the bags containing the crushed copper ore are submerged into leaching ponds of water with a 12% volume of sulphuric acid (6,000 litres each). The ore will remain in the ponds to extract the copper (ibid.). After leaching, the copper goes through electro-winning, whereby the solution from the leaching ponds is mixed with a chemical that selectively removes the copper from the original acidic solution, leaving behind most of the impurities. The copper-rich solution is filtered, heated and then passed through a series of electrolytic cells. The copper precipitates out onto stainless sheets to form high-purity cathodes (99.99% copper). The cathodes are lifted out and hung in suspension until the plates are air-dried (GSC, 2017). The Scoping Study mentions that the bags with 'unwanted' ore material are rinsed off with clean water and then the waste is transported back to the claim areas for backfilling purposes (GSC, 2017, p. 11).

Site 3: copper mining claims in Okaaru (Kaokoland (mining claims 67568-67575))

Kaokoland Mining and Exploration cc hold these claims in the Kunene Region, each 18 ha in size, The JSI Consultancy states in the BID that the above-mentioned activities are listed in terms of the EIA Regulations of 2012, and that the MET requires an Environmental Scoping Report and an Environmental Management Plan in order for an application for an Environmental Clearance Certificate to be made by the proponent (JSI Consultancy, 2017b).

According to the BID, the main planned activity to be undertaken by Kaokoland Mining Exploration at Okaaru is exploration. The exploration procedure includes core drilling and exploration of holes using a tractor loader backhoe and hand excavation. Air core drilling is also used to cut samples from unconsolidated soil and rock for it to be analysed. The claims include copper quarries

originally owned by local miners throughout the area who entered into partnerships with Kaokoland Mining. These sites are scattered over a wide area, dotting the hillside. Some of the sites have been excavated with earth-moving equipment supplied by Kaokoland Mining, and others work on a smaller scale. At the time of writing, none of the areas has become as industrialised as the mining claims at Otuanani. However, the quarries have still caused damage. There is a new road that cuts through a stretch of rocky woodland. Adult mopane and Commiphora trees were cleared to construct the road (Bakkes & Fargnoli, 2017; Odendaal, Bakkes, & Fargnoli, 2017b).

Communal mining in Kunene as a new frontier

In this section we explore some of the dynamics of the communal mining frontier as it evolves and the implications for the three conservancies that were studied.

The members of the three conservancies signalled in our conversations that they were content with their customary lifestyle consisting of rearing cattle, hunting, gathering, remittances, old-age pensions and other welfare payments, and migrancy. The Traditional Authorities are the accepted form of governance and executive authority within the conservancies. The tribal elders are respected and community members adhere to their counselling.⁷ The only evident source of discontent and division within these communities is associated with the irregular mining activities conducted by people and companies from the outside. The mining activities, they conveyed to us, threaten to undermine the local, communal and cultural integrity of their lifestyle and the constitution of their communities. The ambiguity is that direct income, as cash from mining licences and agreements, as well as some indirect benefits such as the provision for unskilled workers, are as a potentially welcome source of benefits for the conservancies. From our investigations, we did not get a clear insight into the real monetary contribution to peoples' livelihoods and how the direct and indirect benefits are distributed.⁸

It is important to note that at the time of our visit to the Outani mine site, the tailing dams were empty because production was halted due to a claim dispute. This is an essential dimension of communal mining and which constitutes the core of communal mining being an arena. This transpired during the public meeting held on 2 September 2017, with the community, the three mining companies, JSI Consultancy and the LAC. The community representatives asked the CEO of Kaokoland Mining and the accountant of Premier Construction to leave the meeting. They publicly stated that *'we do not want to speak with these representatives of the companies'*. The community only wanted to engage with the representative of Luxury Investments and the representatives of JSI Consultancy present. But even after the departure of the representatives of Kaokoland Mining and Premier Construction, the meeting did not progress. Several community members were clearly upset. They demanded to see the legitimate mining licences for the companies present. They insisted that not every stakeholder was present and, that therefore, the meeting was not legal. They wanted the Mining Commissioner, the Regional Governor, the alternative mining investors and the police to be at the meeting. Shortly afterwards, the meeting was adjourned.

Further enquiries on-site as well as in Windhoek, learned that:

- (1) The mine is on a mining claim and not a mining licence. Neither Kaokoland Mining nor Luxury Investments could produce a mining licence.
- (2) The claim of Kaokoland Mining had expired in 2015.
- (3) Mr Otniel Koujo who is unknown to us has become the rightful claim holder. He owns another mining company, with alleged Chinese investors ready to take over the mine. He has no licence for copper and base-metal prospecting, but only for semi-precious stones.⁹
- (4) The representative from Kaokoland Mining clearly stated that the mine is not on a mining licence, and that *'things escalated'* when the copper deposits were found.
- (5) The Environmental Impact Study has not been completed for this copper mine.¹⁰

On 13 February 2017, SEAMCO called a public meeting for the proposed copper processing plant at Omao. The meeting was held in the pouring rain at the local shop at Omao. It was impossible to visit the site because the Skelm River was coming down in flood. The downpour clearly illustrated the potential effect floods could have on the catchment area. One important question was left unanswered: what precautionary measures are the mining companies going to implement to avoid soil and water contamination in this important catchment area? The Scoping Report mentions water and soil pollution and loss of vegetation as amongst the potential and major impacts of the processing plant (GSC, 2017, pp. 13, 14). The report critically refers to the employment and development promises as a spin-off for the region.

At the public meeting on 18 July 2017 for the claim sites at Okaaruu with Kaokoland Mining and Exploration, Luxury Investments, Premier Construction and JSI Consultancy, the community requested the licence and legal documents that confirmed that the company was allowed to operate in the area. Headman Kavare said at the public meeting that he did not feel comfortable with the companies in their area without clear authorisation from the Government and that there was no authorisation for the meeting since the Governor had not been involved and did not inform the community (Odendaal et al., 2017b). The community agreed that they had not been informed by the Government that the company was allowed to be in the area. The Headman argued that the meeting must be stopped at once and that the company should get everyone involved and come back to conduct the meeting again.

One of the local small-scale miners, Mr Hauanga Tjiteo, gave us a letter discussing a claim dispute that had been signed and submitted by the small-scale miners and the Headman to the Ministry of Mines and Energy.¹¹ The letter explains the complaint of Mr Hauanga Tjiteo and Mr Urora Tjiimbi, residents of the mine area in Outjoue. The letter states the full history of the mining claims in the area and explains that Titeo and Tjiimbi discovered the original green stones in April 2001. The letter further described how they went about registering their claims until eventually they were registered under the company Kaokoland Mining, of which these residents/small-scale miners were legally apart. At some point, the company had told them that their claims had expired. They followed up on this with the MME in Windhoek and found that their claims had not expired. The mining claim in this area is similar to Otuaani, still in dispute.

Discussion: the complexities of communal mining

The above cases studies demonstrate a few key dimensions that are typical for communal mining frontiers. We point at two key dimensions. One is that there are loopholes and problems in the legislation and the capacity of the State to monitor and discipline the sector. The technologies of the rule of the state are rather ineffective and inefficient (see also Scott (1998)). At the more practical level, we point at the legal anthropological dimensions of overlapping rights and authority.

Legislative loopholes as examples of ineffective technologies of rule

The MA and the Environmental Management Act has loopholes that become more apparent in the communal areas because there are insufficient or no mechanisms for checking that the law is being implemented. When bringing these issues from the communal areas to the authorities in Windhoek in charge of implementing legislation, it became evident that there is a gap between the understanding of mining implementation processes within the affected rural communities and the government officials based in Windhoek, and that the information available in Windhoek and these rural areas are often completely different. Scott (1998) understands this as that the state operates through prostrate institutions.

The MA has particular loopholes, with no specific requirement for completing an EIA of the mining claim areas, although there are still some provisions relating to the environment. The MA requires an application for the registration of a mining claim to include *'an estimate of the effect which the proposed prospecting operations and mining operations may have on the environment and*

*the proposed steps to be taken to minimize or prevent any such effect.*¹² Although an Environmental Impact Study is explicitly required under the MA for holders of both mining licences and exclusive prospecting licences,¹³ it is not specifically required for mining claims.¹⁴

The MA does not specifically define the scale of mining allowed on a mining claim, but it does allow for the building of accessory works.¹⁵ However, in this case, the legislation requires the holder of a mining claim to obtain prior written permission from the Mining Commissioner to build these accessory works.¹⁶

MME officials have differing opinions as to what scale of mining should be allowed on a mining claim. Because this is not defined in the legislation, it appears that the MME officials have different approaches to this topic. At the Ministry's Exclusive Prospecting Licence office, the LAC was told that an industrial mine is not allowed on a mining claim, but only in a mining licence area.¹⁷ However, at the Ministry's Mining Claims office, the LAC was told differently, i.e. that an industrial mine is allowed on a mining claim, provided that the size of the claim is under 18 ha.¹⁸ Thus, the lack of specifics of the law makes way for a loophole, since the type of mining allowed on site is not explicitly defined in the legislation.

This gap in the legislation allows for large mining companies to take advantage by constructing an industrial-scale mine on several adjoined mining claim sites. Because this is undefined in the Minerals Act, it leaves a problematic gap in the legislation which allows mining companies to proceed with industrial-scale mining on mining claims where an Environmental Impact Assessment is not required.

In the case studies mentioned above, Interested and Affected Parties' concerns had not been adequately addressed or captured in the Scoping Report submitted to the Environmental Commissioner.¹⁹ The concerns raised by residents at public meetings did not match what was discussed as concerns in the scoping studies.

In practice, this means that the Environmental Commissioner will make decisions based on no real knowledge of the concerns of the Interested and Affected Parties, including community members residing in the area and those directly impacted by the mining and processing activity. Community members in rural areas do not have regular access to the Internet or transportation to bring their concerns directly to the Environmental Commissioner's office in Windhoek. In most situations, community members do not speak English, which allows for a further gap in concerns being accurately captured and presented to the Environmental Commissioner. Ultimately this means that the goal of considering the concerns of the communities under the Environmental Management Act is not met.

The case studies also highlight the difficulty of implementing a law when the responsible authorities do not visit an affected area. In the case of the Otuaní mine, it became clear that the company operating the mine on the mining claim had been operating illegally since 2015 since their claim had expired.²⁰ No administrative authority took any steps to stop this.

The MET was unaware that the mine had been operating illegally.²¹ At the MME Mining Claims office, the officer was aware of the illegal status but stated that the company had just made a minor error and was correcting it. The officer was aware of their Environmental Clearance application for the mining claim for base metals (copper).²²

Meanwhile, information from the Mining Claims office, learned that another company, allegedly run by Chinese investors, was granted the claim over the area, thereby creating a conflict over ownership of the mine site. To add further confusion, the new claim holder was granted a claim for semi-precious stones, not for base metals such as copper. The Mining Claims officer supported the previous company's stake in the mine and said that the new company was operating illegally because their claim was only for semi-precious stones.²³ In summary, the Otuaní case study highlights the inadequate piecemeal and subjective implementation of the law.

Overlapping laws

The cases discussed in this paper introduces the layer of an overlapping of laws upheld by the state and customary arrangements that mediate people's relationships and attributes regarding land and natural resources. Both are normative institutional arrangements constructed by actors involved in

land and resource issues, and these repertoires sometimes overlap and sometimes do not. Post-independence legislative reform addressed the discriminatory practices and laws of the past. The Nature Conservation Ordinance 4 of 1975 (Republic of Namibia, 1995a) was amended after Independence to create communal conservancies, allowing black persons utilisation rights over wildlife (Jones, 1999; Republic of Namibia, 1996). The CLRA and the Traditional Authorities Act (Republic of Namibia, 1995b) were enacted to create the institutions necessary to ensure that communal land rights are protected. The Minerals Act (MME, 2004), however, remains silent on the rights of those living on communal land. Besides, an ambitious programme to develop land use plans for all of Namibia's 14 regions was started in the mid-1990s. However, only a few of these regional land use plans were finalised. As a result, communal land user rights and access to natural resources often remain in a state of confusion, with often negative effects on the local communities who are exposed to several duplicating development programmes and legislative structures.

In the conservancies where we conducted our field investigations, the conservancy management's role is to organise regular general meetings at which decisions on how to (re)distribute conservancy income are reached through debate and negotiation. Those in managerial positions of power and decision making are expected to raise awareness in the community and implement social and community projects that add value to the conservancy members' wellbeing. The management committee strikes deals with mining companies to mine the mineral deposits.²⁴ These companies have to register with the MME and apply for a mining licence, after which they negotiate a deal with the conservancy in exchange for a cash payment and/or provision of employment for community members.²⁵ The mining companies are mostly foreign-owned (predominantly Chinese state-supported entrepreneurs²⁶ but also Canadian and Australian companies), and they work through local brokers who are Namibian citizens. These are either influential community members or often businessmen from Windhoek. Most of them are well connected to the ruling party, SWAPO.²⁷ In our field investigations, we observed the importance of the interfaces between conservancy management and community, brokers and consultants when issues concerning mining operations arise.

Conclusions

Communal mining is a new frontier created and offered opportunities through negotiations for employing local people. Communal mining, however, also has its ambiguities in that it may represent threats to the environment and the cultural integrity of the community. These fears were clearly expressed. The new frontier also brings with a series of institutional complexities that threatens the longevity of communal mining. These including the following aspects.

- (1) *Multiple interactions and negotiations between the actors involved in mining operations and decision-making.* The new frontiers are constituted through negotiations between social actors (e.g. brokers, foreign companies, community members, traditional authorities, the state). These operate at different levels and have different political agendas and interests. More importantly, they occupy in theory different positions of power but are not all equally in a position to exercise their authority. The case material legitimizes the conclusion that there is little trust in the arena and the evolving social relationships between conservancy members, state representatives and mining companies.
- (2) *Overlapping rights often resulting in conflicts amongst and between the actors involved.* This is due to a combination of the nature of customary arrangements about access and control over land and the (re)distribution of value. That many mining claims are contested amongst and between communal land rights holders attest to this.
- (3) *Overlapping and conflicting laws and regulations concerning land management and the environment.* The environmental laws enacted by the state do not resonate well with the predominant conditions of communal mining in Namibia. This is also confirmed by Littlewood (2014, 2015)).

Therefore, we need to look at how communal mining is affected by the formulation and implementation of the mining and environmental laws that historically have been drafted based on the conditions predominant in the large-scale mining sector in the country. The Mines Act of 1992 mentions contractual agreements between freehold owners and mining companies, but it is silent on communal landowners and mining companies. Simultaneously the legislation has not been adjusted and amended to resonate with the dynamics occurring and emerging interfaces at the new frontiers. An important element in the newness of the communal mining frontier is that the state, policymaking units and the legislator have not sufficiently been challenged by civil society organisations. There are no court cases that confront the legislator with the question of whether people in communal land all have mining rights over land. Nor is there jurisprudence of various shortcomings in the current mining licencing process; the disregard for participation rights of 'traditional' communities; the lack of compensation for mining on communal land; and the legislative loopholes when it comes to mitigating the adverse environmental effects of mining. Existing cases concern freehold land (such as the Orange River Farmers' Cooperative versus some mining companies).

The ongoing drafting of a new Minerals Bill would be a good opportunity to make changes to the currently outdated applicable legislation. Legislative loopholes concerning EIAs of Mining Claim areas could be closed to mitigate adverse environmental effects of mining claims. Also, the application process could require mining licence applicants to make, in advance, adequate and sufficiently liquid financial provisions for the costs of an environmentally sustainable maintenance and mine closure, holding mining companies accountable for any environmental damage. The Ministry of Mines and Energy should conduct detailed background checks on corporations as well as individuals to detect any history of prior environmental violations or other illegal practices. About community involvement, the mining licencing process should be made more transparent and the legislation could define how exactly concerns of Interested and Affected Parties should be considered. The participation rights of the communities should not be reduced to a mere formality, and the customary law of each traditional community should be considered in the mining licencing process. For communal land that mining renders unusable, a just compensation or leasehold payments should be paid to the affected communities.

The environmental laws enacted in Namibia to protect people's rights and the environment typically fail to bring on board local conditions, and above all, the relationships amongst and between the community members but also with 'outsiders' (i.e. mining companies and businessmen from Windhoek). Any attempt to improve the governance of the rural resources must be based on a nuanced understanding of the complexity of actually existing livelihoods.

Notes

1. In total, these conservancies cover 163,017 km², with over 189,230 people registered as members (www.nacso.org.na).
2. The Etosha case for instance; see Koot and Hitchcock (2019).
3. The literature on displacement because of mineral extraction is in contrast to displacement because of dams rather small and limited to the well-known cases of contemporary a few African states (i.e. South Africa, Democratic Republic of Congo, Zimbabwe, Mozambique, Mali, Botswana, Ghana and Kenya). See for an overview Terminski (2012). The occurrence of peoples' displacements from their ancestral land turns mining also into human rights issue, and not just an environmental or social concern.
4. In the Kashela case, decided on 16 November 2018, the Supreme Court found that customary tenure rights are indeed protected under the Namibian Constitution. Thus, customary land rights holders are entitled to 'just compensation' as provided under Article 16 (Property clause) of the Constitution. The implications of the Kashela case on communal landholders whose rights are affected by mining operations are yet to be determined.
5. In 1914, as WW-I erupted and after seven million carats of diamonds were mined in the region, diamond mining was halted for nearly a year, until South African forces conquered the region, ending the German rule over Southwestern Africa. In 1920, Ernest Oppenheimer consolidated the region's pre-war diamond mining companies into a single entity called the Consolidated Diamond Mines of South West Africa, later to be renamed CDM,

which became part of De Beers. In 1923, CDM was awarded the exclusive right to mine diamonds in Sperrgebiet and it went on to discover diamondiferous rocks along the ocean beach by and north of Orange River, thus developing one of the longest mined diamond resources. Over nearly 80 years, the company mined 65 million carats of high-quality large diamonds (<https://www.ehudlaniado.com/home/index.php/news/entry/diamond-mining-in-namibia-past-and-present>). In 1994, CDM and the Government of Namibia agreed to form a new company, Namdeb Diamond Corporation.

6. This is not the same as the copper sulphide which comes from Otuni mine.
7. This does not mean that there are no disputes. See Bollig and Gewald (2000) for an analysis of the relationships among the Herero.
8. A range of field-based studies provides a detailed insight into income distribution in conservancies and the mechanisms that shape redistribution. See for instance Kiaka (2018) and Lubilo (2018). Nuulimba and Taylor (2015) provide an overview of the achievements of conservancies in Namibia.
9. Marcia Fargnoli and Christiaan Bakkes interview with Asser Goagoseb, Mining Claims Officer at the Ministry of Mines and Energy, Windhoek, 11 October 2017.
10. Marcia Fargnoli and Christiaan Bakkes, interview with Simon Hangula and Rika Shikongo, Ministry of Environment and Tourism Department of Environmental Affairs, Mine Inspection office, Windhoek, 11 October 2017.
11. Letter of Complaint (2017), addressed to the Permanent Secretary of the Ministry of Mines and Energy and signed by Mr Tjazuvaka Tjiteo (Headman), Mr Hauanga Tjiteo and Mr Urora Tjiimbi (21 May 2017).
12. Minerals (Prospecting and Mining) Act 33 of 1992, §33 (2)(c)(vi)(bb).
13. Minerals (Prospecting and Mining) Act 33 of 1992, §50(f)(i).
14. It is quite possible that the authors of the Minerals Act intended mining claim areas to deliver a maximum benefit to Namibians and did not want to place any expensive requirements on applications, as Environmental Impact Assessments can be expensive. According to the Minerals Act, a mining claim application does require the holder to be a Namibian, or if it is a company, to have 100% Namibian shareholding. See Minerals (Prospecting and Mining) Act 33 of 1992, §25.
15. See Minerals (Prospecting and Mining) Act 33 of 1992, §31(1)(e). According to section 1 of this Act, accessory works include any building, plant or other structure required for mining operations or the disposal of any mineral or group of minerals won or mined in the course of any such operations. Accessory works include, *inter alia*, any water borehole, well, pipeline, drilling rig, pump station, tank or dam; any workshop, hangar, store or office; any explosives magazine; any sampling plant, processing plant, smelter or refinery; any waste disposal site; or any campsite or temporary or permanent residential area.
16. Minerals (Prospecting and Mining) Act 33 of 1992, §31(3).
17. Interview by Evan Carr, an intern at the Legal Assistance Centre, with Frieda Flavianu, Chief Geologist, Ministry of Mines and Energy, Windhoek, September 2017.
18. Interview by Marcia Fargnoli and Christiaan Bakkes, consultants for the Legal Assistance Centre, with Asser Goagoseb, Mining Claims Officer, Ministry of Mines and Energy, Windhoek, 11 October 2017.
19. See Scoping Report and Environmental Management Plan for Luxury Investments 192 (Pty) Ltd. Project: Small Scale Copper Mining and Exploration in Mining Claims 69776–69781 in Otuni, Kunene Region – JSI Report No: 2015/12.0001 (August 2017).
20. Interview by Marcia Fargnoli and Christiaan Bakkes, consultants for the Legal Assistance Centre, with Asser Goagoseb, Mining Claims Officer, Ministry of Mines and Energy, Windhoek, 11 October 2017.
21. Interview by Marcia Fargnoli and Christiaan Bakkes, consultants for the Legal Assistance Centre, with Simon Hangula and Rika Shikongo, Ministry of Environment and Tourism, Department of Environmental Affairs, Mine Inspection office, Windhoek, 11 October 2017.
22. Interview by Marcia Fargnoli and Christiaan Bakkes, consultants for the Legal Assistance Centre, with Asser Goagoseb, Mining Claims Officer, Ministry of Mines and Energy, Windhoek, 11 October 2017.
23. Interview by Marcia Fargnoli and Christiaan Bakkes, consultants for the Legal Assistance Centre, with Asser Goagoseb, Mining Claims Officer, Ministry of Mines and Energy, Windhoek, 11 October 2017.
24. It is not necessarily only management committees which strike the deals; individuals and outsiders may be involved since any person can apply for an exclusive prospecting licence and start prospecting on Namibian soil.
25. There is no provision in the applicable legislative framework to compel mining companies to employ members of local communities or to compensate them for the fact that mining activities take place on their land. Any employment and/or compensation to local communities are voluntary and depend on the 'goodwill' of the mining company. Also, when it comes to private land, the participation rights of the private landowners are regulated in terms of section 52 of the Minerals Act, which requires obtaining the permission of the landowner. Although, as we have seen, many of the mines operate on communal land, the Minerals Act stays silent where communal land is concerned.
26. Chinese entrepreneurs are predominantly organised based on family relations and capital (see (Dobler, 2008, 2017; Kaplinsky & Morris, 2009) Their involvement in mining is unknown. There are, however, some large investments by Chinese companies in the mining sector, notably uranium (Melber, 2018).

27. See for example 'Swapo's secret company', *The Namibian* (national daily newspaper), 31 October 2018, at <https://www.namibian.com.na/182763/archive-read/Swapos-secret-company> (accessed 25 February 2019).

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