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12 Pastoralists under COVID-19 lockdown

Collaborative research on impacts
and responses in Kenyan and
Mongolian drylands

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Introduction

In the early months of the COVID-19 pandemic, catastrophic prophecies about the tragic fate of poor countries under the impact of the SARS-CoV-2 circulated widely (Burke 2020; Nyenswah 2020). Yet, while American and European sophisticated health systems were buckling under the pressure of the new coronavirus, dryland countries in Africa and parts of Asia—and their pastoral areas in particular—were reporting few, if any, related casualties. Dryland pastoralists are well known for living off environmental stochasticity (Krätli and Schareika 2010) and bouncing back from disasters, including epidemics and epizootics (Waller 1988; Tiki and Oba 2009). At the same time, harsh governmental contagion control measures—among the toughest in the world (Tallio 2021)—could be expected to challenge the lives of populations that already grapple with marginalization, political instability, land grabs, food insecurity, aggressive infrastructure development, scarce governmental services, and increasing climatic volatility (this volume). In the face of this new, global crisis, we wondered how pastoralist societies whose resilience builds upon mobility, reciprocity, and solidarity would deal with State injunctions to ‘stay at home’ and be ‘socially distant’.

Based on first-hand accounts of pastoralist friends and collaborators, this chapter examines how Kenyan and Mongolian livestock keepers experienced and

responded to early State-enforced lockdown measures (hereafter, ‘lockdown(s)’). We found that, like elsewhere, lockdowns have exacerbated existing socio-economic vulnerabilities linked to gender, age, and structural power inequalities (Leach et al. 2021). But our case studies also suggest they promoted different kinds of mobility, collective action, pastoral knowledge transmission, and cultural revitalization, and created space for specific livelihood strategies to blossom.

In April 2020, some of us, members of the *Drylands Facing Change* COST Action,² became curious about the role that the SARS-CoV-2 would play in drylands’ economic, social, political, and environmental dynamics. But investigating this in the field was off-limits because of pandemic travel restrictions. To overcome this obstacle, we reached out to friends and former research assistants in dryland communities and, in close partnership, explored how they were negotiating lockdown-related closure of borders, roads, markets, schools, places of worship, and grazing areas. A timely small grant allowed us to organize a working group and collect data remotely on the pandemic’s impacts as they developed over time.³

While the working group covers a broad range of geographies and livelihoods, here we focus on how Kenyan and Mongolian (agro)pastoralists responded to governmental lockdown measures when these were at their strictest. In what follows, we first describe our working group’s remote and participatory approach to these and other questions. Second, we share qualitative findings resulting from collaborative knowledge production with Kenyan and Mongolian (agro)pastoralists of both genders. Through case studies covering the period when the firmest restrictions were enforced (Kenya: March–July 2020; Mongolia: January–May 2020, followed by a ‘weaker lockdown’ until May 2021), we highlight how our research collaborators, their families, and their communities tackled lockdown hardships; and how some resorted to creative solutions and pastoral knowledge, practices, and institutions to adapt, resist, and, in some cases, thrive. But, first, a few words on how we collected data without leaving our desks.

Collaboratively researching the dryland COVID-19 experience while in lockdown

With stringent travel restrictions in 2020, investigating the encounter of (agro)pastoralists with SARS-CoV-2 had to rely on remote ethnography (Postill 2016), which, in the wake of the pandemic, has become the new normal in social scientific research (Hermans et al. 2021).

Starting in May 2020, we invited friends and former research assistants living in arid and semi-arid areas of Burkina Faso, Cameroon, Chad, Ghana, Kenya, Namibia, Sudan, Uganda, Israel (Bedouin community), and Mongolia to tell us about their lives under strict lockdown. Together, we have explored responses to the impacts of the lockdown across different groups (gender, livelihoods, minorities). Our collaborative researchers (henceforth, co-researchers) are women, men, elders, and youths who are (agro)pastoralists, farmers, and urban residents. Some are also university students, tourism workers, community activists, and civil servants. They have shared their experiences by sending us regular

updates on their pandemic experiences through mobile phones, social media, and email.⁴ Most have no formal training in research. Guided (for inspiration) by a list of comparative research questions about local understandings of the disease and about impacts on food security, mobility, land/water issues, education, social, cultural, and religious practices, and environmental conservation (Roque de Pinho et al. 2020), co-researchers also explore the questions *they* find most relevant, choosing when and how to share their data. Some send weekly audio and text messages. Others favour sharing typed or image files of handwritten monthly reports. Yet others, speaking from their homes, shine as online presenters at our working group's weekly meetings, which feature a member presenting findings, followed by group discussion and analysis of cross-site patterns.⁵ This flexibility is crucial given co-researchers' living circumstances (e.g. unstable internet connections).

From humble beginnings in the early stages of the pandemic, this project has developed organically and adaptively, without an imposed hierarchy, nor claims of methodological or disciplinary supremacy—following instead multiple, evolving relationships and exchanges among academics and mostly non-academic dry-land residents. Best described as rhizome-shaped research (see Clarke and Parsons 2013), this approach embraces inter- and transdisciplinarity, collaboration, flexibility, open-endedness, and surprise (Clarke and Parsons 2013; see also Hermans et al. 2021). Beyond helping to overcome travel restrictions, it is also best suited to examining relentlessly surprising virus-human interactions (Stephen et al. 2015).

Reflecting the fluidity of our rhizome-based network of researchers and co-researchers and the importance of our mutual friendships, our writing style is narrative and informal. To translate the multiplicity of voices involved in this work, the four case studies presented below are written in their lead authors' first voice and include direct contributions from their respective co-researcher(s)-*cum*-co-author(s), who have verified and approved this account. By voicing how the lockdown has upended their lives, and through their own analyses of ensuing processes, co-researchers assume a dual role, that of key informants *and* researchers in their own terms, with whom we share authorship of research outputs (Gubrium and Harper 2013).

'People are really suffering'—Loita, Narok County and Rombo, Kajiado County, Kenya

On 15 March 2020, two days after the first coronavirus case was reported in Kenya, President Uhuru Kenyatta announced the first COVID-19 lockdown measures. International flights were suspended; schools, churches, markets, and bars were closed, and social gatherings were banned. People were further advised to wash hands regularly, wear masks, and keep social distance. Those above 60 and those chronically ill were told to self-quarantine. As the coronavirus continued to spread globally, more measures were introduced, including a countrywide dawn-to-dusk curfew, a lockdown of COVID-19 hotspot counties, including Nairobi, and the closure of Kenya's borders with Somalia and Tanzania.

The closure of the border between Kenya and Tanzania undermined the food security of Maasai (agro)pastoralists. The border line drawn by the British and German colonial powers during the 1880s ‘Scramble for Africa’ ran right through Maasailand. While this boundary artificially created ‘Kenya Maasai’ and ‘Tanzania Maasai’, it had remained porous and under little government control, and strong cross-border relations existed reflecting family ties and inter-ethnic marriage and trade. The pandemic changed this: control of border areas suddenly increased, limiting the erstwhile fluid movement of people, goods, and livestock. There were now regular police patrols, and, in unmanned border points, deep, wide trenches were dug to prevent vehicles, motorbikes, and bicycles from crossing.

The Maasai are organized into several sections, which are Maasai territorial sub-groups with their own leadership structures. I (Angela) worked with three Maasai co-researchers; one is a Kisongo Maasai, which is the largest Maasai section; and the other two are Loita Maasai, one of the smallest sections. Both sections straddle the Kenya–Tanzania border.

Daniel Mayiani (Kisongo, in his late sixties) is an old friend of my father. I call him *mpaapa* (father) because he and my father are from the same generation. Daniel lives in Kitengela near Nairobi with part of his family, but his roots are in Rombo, where he has land and cattle and is a recognized community leader. Before the pandemic, he used to go there every two weeks. But during the lockdown, a chronic health condition and medical facilities in Nairobi kept him in Kitengela under the watchful eye of his wife. Daniel gathered information through phone interviews with friends and relatives in and around Rombo. These include Kisongo Maasai on both sides of the border, and Chagga, a Tanzanian agricultural community. He also consulted the Kenyan national archives for information on past disasters, wrote two reports following the comparative questions list, and emailed additional information (our main means of communication).

My other two co-researchers, Lenaai and Matinkoi ole Mowuo, are brothers from Loita, in their late thirties/early forties. Matinkoi was my research assistant in 2001 when I was doing fieldwork in the Loita Hills for my master’s degree and Lenaai assisted me in 2007–2008 during my PhD fieldwork. Back then they were unmarried and belonged to the ‘warrior’ age-group; now they are both family men and have nearly completed all necessary age-group ceremonies to become ‘elders’. We call each other *enkanashe* (sister) and *olalashe* (brother).⁶ Lenaai and Matinkoi sent me regular Facebook and WhatsApp text and audio messages and photos, often in response to direct questions. While Matinkoi mainly reported on his and his family’s experience, Lenaai asked women, elders, and youth around him, seeking to get a broader, more balanced picture of lockdown impacts on the Loita Maasai community.

Both Rombo and Loita abut the Tanzania border. Rombo, eastern Kajiado County, is located in the dry plains between Mount Kilimanjaro in Tanzania and the Chyulu Hills in Kenya, between Amboseli National Park to the west and Tsavo West National Park to the east. Loita is in the highlands west of the Rift Valley in Narok County. It is a rather isolated area flanked to the east by the Naimina Enkiyio forest and the Nguruman escarpment. To the north and

west, the Loita Maasai are surrounded by the more numerous and politically well-connected Purko Maasai (another Maasai section); to the south, Loita territory extends into Tanzania. About 50 years ago, Maasai in Rombo and Loita started farming and now combine pastoralism (cattle, sheep, and goats) with cultivation (primarily maize and beans).⁷ Land in Rombo was privatized as a group ranch in the 1970s and has been subdivided recently with individual title deeds issued. Loita was for long one of the remaining Maasai areas under customary land tenure although individualization has happened informally (Kronenburg García 2015).

The closure of the international boundary hampered the trade of foodstuff and cattle and the movement of farm workers, affecting food security in Rombo and Loita. In Rombo, Chagga women from Tanzania would come during market days to sell cheaper fruits and vegetables and buy milk from Maasai women. With the border closure, this trade was restricted, hiking up food prices on the Kenyan side, sometimes as much as 50%. Maasai farmers in Rombo and elsewhere in Kajiado County rely on the horticultural knowledge and skills of casual Chagga farm workers, but now farms were unattended, stoking fears of failed harvests. The livestock trade also suffered, as Tanzanian traders could not come to the Rombo livestock market and prices plummeted. This, in combination with livestock market closures throughout Kenya, meant that families dependent on livestock sales for their household needs found themselves in trouble.

Lenaai and Matinkoi reported similar dynamics in Loita, where everyone was trying to sell their animals to buy food. Also, with (boarding) schools closed and those who lost jobs returning home, there were more mouths to feed at home, and putting food on the table became a challenge. A general food shortage in Loita, partly due to the border closure, also resulted from other factors. First, with the weekly food markets closed, shops were the only place one could buy foodstuff (rice, sugar, cooking fat). However, the Nairobi lockdown affected the food supply to Narok town, on the main supply route to Loita, and stores gradually emptied. At the same time, the roads to Loita became nearly impassable due to heavy rains. Finally, maize and beans were not ready for harvest. To survive, people relied on milk and slaughtered animals for meat. Men organized meat camps (*ilpuli*), which are secluded gatherings where they consume large amounts of meat and blood and exclusively drink herbal soups. The little food available in the shops was bought at much higher prices. The dire situation in Loita did not remain unnoticed, and food relief was distributed to the community's neediest, first by individuals (a South African missionary and friends) and later by the county government.

In response to the border closure and food shortages, cross-border smuggling increased, and black markets for livestock sprang up in Loita and Rombo. In Loita, illegal livestock trading took place in hidden places 'in the bush' at the border, very early in the morning or late in the evening, and sometimes overnight, and on different days from the usual market days. This was risky business and those caught by government authorities faced heavy fines. In Rombo, traders who struggled to access wholesalers in locked-down counties, especially Nairobi and Mombasa, opened illegal crossing points to import foodstuff and other goods from Tanzania. Others travelled long distances on foot to buy food in Tanzania

to bring back to their families in Kenya. Meanwhile, across the border, there was officially no pandemic and Tanzanians lived without restrictions: Kenyans started to cross to drink in bars and go to church. Ironically, the cross-border movement continued and perhaps increased, although in a covert form. Worries about food availability continued, however. During past disasters, Maasai had sought refuge among agricultural neighbours when faced with famine—‘there was some form of hope’, as Daniel explained. Now, there was nowhere to run to because COVID-19 ‘is affecting the whole world’.

‘They see [COVID-19] as a bad thing which they cannot even mention with their mouth’—Kalacha, Marsabit County, Kenya

The COVID-19 pandemic has placed us all in the same situation: a combination of health crisis, restrictions imposed by governments on their citizens, and deep uncertainty. Troubled by the crisis in the world and in Israel, my home country, I (Nurit) asked an old friend from northern Kenya how the pandemic was affecting her community. A fateful, unexpected partnership led to my research with Sabdio Wario Galgalo, who serves as a government officer representing the President of Kenya and is titled ‘the Chief’ in her community, Kalacha.

Sabdio and I first met a few years ago while I was going to Loiyangalani. Our truck driver stopped when he saw her along the dirt road and gave her a lift. This brief encounter with an impressive young lady wearing a red dress in ‘the middle of nowhere’ was the beginning of our enduring friendship. Sabdio is from Kalacha, an oasis located in the heart of the Chalbi Desert, ‘the land of white soil’. A former trading post (Schlee 2019), it includes eight scattered villages with around 5,000 people within Marsabit County, one of Kenya’s poorest counties (KNBS 2013). Most Kalacha residents are Gabra, an Oromo-speaking group of camel pastoralists and Catholic Christians (Tobolino 1999; Adugna 2014). The arid land, limited rainfall, and never-ending search for pastures are inherent to their identity and a source of regional conflict (Imai 1982; Stiles and Kassam 1991; Linke et al. 2015).

When I first contacted Sabdio, in June 2020, the news of the pandemic and ensuing government lockdown regulations had already reached the area. Since shortly thereafter, Sabdio and I have regularly chatted on WhatsApp, and she has shared her views and information through written documents, photographs, and short videos. At that time, there were no COVID-19 cases in Kalacha, but lives had been affected and changed. Together, we mainly explored the ways in which COVID-19 affected pastoralist lives and livelihoods, especially those of women.

In Kalacha, strong restrictions were introduced to people’s lives. However, compared with a year earlier, the good rainy season and greening pastures brought satisfaction and the promise of a better future. The horrors of a global epidemic were not neglected, but they did not obscure the local joy. The common view was that it would be over soon, and for most it was not even real. Some NGOs arrived in the area and started campaigning from house to house, providing face masks, soaps, and sanitizers. ‘The message has reached everyone, so far our

county, Marsabit, is safe from COVID-19', Sabdio explained. Yellow plastic water containers became part of the local landscape as handwashing stations. At that time, regional ethnic conflicts did more to disrupt daily life than the pandemic.

While there was a general feeling that people were safe as they were not in urban centres, it was the lockdown measures taken by the Kenyan and Marsabit County governments that had the strongest impacts—most particularly the closing of churches, which motivated people to worship privately at home, and of educational institutions. Boarding schools and universities sent students back to their homes in the villages, where they found themselves out of the formal educational system and unemployed. This was most influential. According to a letter from the Ministry of Interior and Coordination of National Government that circulated among local community leaders:

The country has witnessed an alarming increase in pregnancies. The pregnancies not only disrupt young girls' quest for education but also pose serious physical and psychological health challenges to the young girls. This trend, if not checked, will have far-reaching negative socioeconomic impacts to the nation.⁸

Sabdio emphasized that the issue was solved among the Gabra by the strength of Christianity and traditional Gabra beliefs, as explained below.

With young people now in their family homes, the formal education system was replaced temporarily by their parents' presence (especially that of mothers) and informal, traditional employment instead of teachers and school classes. While boys were sent out to herd the camels, young girls were kept in the house. Sabdio explained the new situation: 'The girls are around house to learn how to cook, wash and get skills of basketry from their mothers so that they make them better housewives in the future'.

According to a national survey, 57.5% of the Kenyan population reported moving to self-learning at home, while 17.0% of households discontinued all formal education (KNBS 2020). In remote rural areas such as Kalacha, this took on its unique shape of 'home schooling'. While in Israel my students went online and sat long hours in front of screens, in Kalacha teenagers got acquainted with tradition. The government restrictive measures drove Gabra women to adjust to the new situation. They transformed a challenge into positive social change by introducing young people to traditional Gabra norms, skills, and practices, which also supported the household economy. Incorporating local indigenous knowledge into the daily lives of youth became an ad-hoc response to the crisis.⁹

In the first months of the pandemic, Kalacha pastoralists, and especially the women, experienced profound changes in their daily lives. Their ability to cope with the new uncertainty was rooted in a solid religious belief, Gabra cultural norms, and—no less—in powerful local leadership. When the restriction on public gatherings was lifted, the Church reclaimed its central role in public life in Kalacha, promoting a revival of worship and providing an important meeting place on Sundays. Sabdio added that Gabra people thought the virus would not

survive the hot and sunny environment. She explained this as a ‘conservative attitude’ of people attached to their cultural beliefs and explanations of a religious nature, according to which the harsh arid conditions are difficult not only for people but also for viruses. Emphasizing the conservative nature of her community, she added that people do not talk about the pandemic as ‘[they] cannot even mention [COVID] with their mouths’. In contrast, she stressed her own role as a community leader in demonstrating proper hygiene and installing handwashing stations.¹⁰ Above all, however, even with these new challenges and community practices (e.g. sanitation)—whether there will be enough rain remains the central question for northern Kenyan pastoralists.

‘It’s funny, we’re doing the normal Maasai life’—Talek and Narok, Narok County, Kenya

Contrasting with the positive mindset in Kalacha, fear shaped early reactions to the pandemic in pastoralist communities around the Maasai Mara National Reserve (MMNR) in Kenya. Located to the West of Loita, in Narok County, this protected area is a leading tourist destination directly connected to international travel—and thus a potential entry point for the coronavirus. Around the reserve, Purko Maasai combine pastoralism, some cultivation, and tourism-related employment and businesses. The sudden shutdown of tourism was a major economic blow to individuals (self-)employed in the hospitality industry centred on the reserve and surrounding wildlife conservancies. Paradoxically, by freeing the area of conservation restrictions, it also paved the way for a revitalization of the pastoral economy and culture.¹¹

To document local responses to the lockdown, and their consequences, I (Joana) partnered with two former collaborators with whom I first worked in the context of a visual anthropology project (Roque de Pinho 2013). Stanley ole Neboo and Debra Seenoi, both in their thirties, lost their jobs in tourism when the lockdown came into force. But, as we will see, their trajectories soon diverged, suggesting how intersecting factors such as gender, access to land, and ownership of livestock differentially shape resilience around the reserve.

Stanley is a livestock keeper who lives with his family in a multi-household traditional homestead in Mpuuai, a tiny rural community bordering the reserve, near the town of Talek, inside the former Koyiaki Group Ranch.¹² A ‘freelance safari guide’ before the pandemic, he is a member of three wildlife conservancies, leasing parts of his land to the tourism/conservation organizations that manage those tracts of land set aside for wildlife conservation. Conservancy membership entitles landowners to monthly lease payments but restricts livestock grazing within the conserved area. When I first met Debra, she was a schoolteacher and lived in Mpuuai. After divorcing, she moved with her children to Narok, the county capital, working as an online consultant for a Kenyan tourism company.

In addition to our regular contacts via WhatsApp, phone interviews with Stanley and Debra helped probe their personal experiences and observations. Both are keen speakers and regularly share their findings and analytical insights at our online working group meetings.

Stanley first heard about Italian ‘corona’ deaths in February 2020 and felt scared for Europeans. Around him, people talked about the ‘end of the world’. On 15 March, parents like him were given one day to gather their boarding-school children, city-employed people returned to their villages, and all businesses closed. ‘A strong policeman, more feared than corona’, he said, enforced the curfew, roadblocks, and tourist departure—adding to the sense of dread exacerbated by social media misinformation. In that first week, ‘staying at home’ meant safety. In Mpuuai, people kept to their homesteads, gradually relying on milk, fat, meat, and blood from their animals, and ‘natural honey’ and herbs. Livestock-poor households (re)discovered the strategy of adding a herb (*Olkirowa*) to water to ‘extend the little milk’ in it. In contrast, urban residents like Debra dashed to the food stores before they closed. Later, Debra subsisted on scarce boiled-meat soup and relief food provided by private and non-governmental donors. ‘Putting food on the table’ remained a problem for her.

On the second week, ‘men ran to the bushes’, with Stanley and others joining meat camps (*ilpuli*). Rather than preparing for war and cattle raids as in the past, this time the goal was to ‘immunize our bodies’ with the medicinal beverages. Stanley thoroughly enjoyed these meat camps’ unusually intense exchange of ideas and information. At home, out-of-school children cared for the animals, and women cooked enormous quantities of special dairy foods to welcome the men returning from the meat camps. Men had fun drinking five litres of milk, a practice whose disappearance senior elders blame on ‘small stomachs’ caused by farming. With their hired shepherds gone, elders enjoyed herding full-time. And with churches closed, people worshipped at home. Food sharing and solidarity increased, blurring wealth differences at the time. Fear eventually subsided, surpassed by the pleasure of husbands and wives spending time together and elders imparting pastoral skills and knowledge to youngsters. More positive sides emerged: ‘Corona is supporting Maasai culture by making pregnant *mamas* stay home’, elders said; and with markets closed and fearing contagion through money, people bartered small stock and milk, as in ‘the normal Maasai life’, as Stanley explained, laughing.

Three weeks into the lockdown, Stanley and friends started illegal livestock ‘bush markets’, away from police control. They would also ‘relocate [their] cows’ on lorries (permitted) and sell them across county lines (forbidden). Together with other factors, this encouraged a turn to cattle production and invigorated Maasai pastoralism, as I explain next.

First, because of tourism revenue loss, conservancies halved their lease payments to Maasai landowners and in return granted them access to the pastures inside the conserved areas. With ‘the best rains ever’ occurring then, and abundant grass, this allowed animals to fatten without having to move and run into police. Second, another virus intervened to boost cattle trading: ‘scarier than corona’, the Blue Tongue Virus had decimated sheep flocks by April 2020, so people fell back on cattle. Finally, in May 2020 Kenya’s largest dairy company started purchasing milk in Maasai households around Talek. This encouraged herders to strategically acquire Maasai cattle and achieve a fast production of calves and milk. Selling milk became women’s main source of income, and the milk cow became the hottest commodity on the market—so profitable that owners of cars

and urban plots used those assets to invest in cattle. With businesses closed, urban plots were no longer desirable anyway. Debra also reported urban youth groups investing in cattle. This was unprecedented: before, Stanley explains, ‘people were afraid of conservation’ and restrictive policies had encouraged smaller herds of improved cattle breeds. Now, people enjoyed herding and trading Maasai cattle, while being tourists on their own land—watching wildlife and holding meat camps in the deserted conservancy hotels.

Maasai pastoralism at large was energized. With ‘everyone at home’, organizing graduation ceremonies was enthusiastic, and more people than ever attended—even Evangelical Christians and university graduates. Massive numbers of animals were purchased, exchanged, donated, slaughtered, and consumed. Senior elders felt vindicated by this long-awaited re-centring of life around the Maasai cow: ‘We cannot benefit from *your* car, but everyone can benefit from *our* cow’, they happily told younger pastoralists. Those who had kept large herds, previously considered ‘not modern’, were now celebrated. Younger men were proud of overcoming lockdown challenges without external support: ‘We solved the problem ourselves’, Stanley said. For him, free access to pastures inside protected areas was key. Counter-intuitively, the very conservation policies that had restricted pastoralism now offered ‘space for livestock grazing’.

Contrary to Stanley’s reports, and reflecting her difficulties as an urban single, unemployed mother with bills to pay, Debra never sounded quite as upbeat about opportunities afforded by the lockdown. In fact, to her, there were none. Landless and stockless, she could not capitalize on livestock. Her data, instead, emphasized her and other women’s struggles. She worried about girls’ lockdown-related forced marriages, teenage pregnancies, and school leaving; and church closures that left women’s groups without meeting places and their pastors’ spiritual comfort. Where Stanley saw increased solidarity, she experienced less sharing than usual. In town, around her, parents unable to pay rent and feed their children became mentally disturbed. Some committed suicide. With her children staying in her ex-husband’s village, Debra frequently felt lonely. She turned to YouTube and WhatsApp to learn farming and start a small business.

Clearly, lockdown life was better in the villages than in town. Around Talek, pastoral strategies and cultural institutions safeguarded physical and mental health, and cattle production was boosted. Ironically, the MMNR was created after the 1880s Rinderpest pandemic had depopulated large swathes of East Africa of people and cattle (Hymas et al. 2021). This time, a coronavirus emptied the Talek area of tourists and created space for pastoralism to rebound and sustain rural communities—a lesson that elders expressed as, ‘See? The cow is more blessed than money’.

‘We have our meat and milk; what more do we need?’— Khentei, Bulgan, and Zavkhan Provinces, Mongolia

In fact, Mongolia did not have a COVID-19 pandemic in 2020. In January, the country closed the border with China. This prevented thousands of Chinese

workers from returning after Chinese New Year and effectively isolated the country. News of the pandemic spread to even the remotest pastoral regions. Television covered government announcements, news reports presented the details, and people shared and re-shared information on social media. In the countryside, herders visited family and neighbours to discuss the coronavirus, improvised masks from old cloth, and went on with work, trying to keep the animals warm (it was winter) and prepare for the birthing season. As the mysterious disease gradually became a global threat, herders accepted restrictions on daily life to prevent its spread. Yet pastoralists sensed they were safe, protected by geographic isolation and the knowledge that the country had no cases.

With much interest, Batbuyan Batjav, a long-time friend and research partner, and I (Troy) started collaborating in June 2020. Batbuyan would give regular COVID updates through Skype and presented in online meetings about his conversations with herders. We developed this preliminary work into a successful grant proposal that enabled more systematic field research with herder households in November 2020 (Sternberg et al. 2021a). Batbuyan, Bolor-Erdene Battengel, and Enkhbat Sainbayar travelled to three regions (Khentei, Bulgan, Zavkhan) visiting herders. Friendships with these families opened a window on pastoral perspectives, thoughts, and responses to COVID-19. They shared milk, tea, and conversation in herders' *gers* (yurts). Already cold outside, there was time for informal discussion centred around the list of comparative questions. Families were together, children attempted remote schooling, women and men liked talking about life on the steppe. What emerged was a common approach and strong civic response to 'prioritize the nation's safety and citizen's health', as one woman explained. As part of a shared, countrywide effort the herders felt a valued part of society and at the forefront of the national response.

Across hills, plains, and valleys, co-researchers conducted 57 semi-structured interviews (36 men and 21 women) in regions east, north, and west of the capital Ulaan Baatar. Participants spoke of an intense initial response when normal life stopped. The government took swift action and implemented restrictions. Schools closed and children returned to family homes. Face masks were required, travel to district centres was discouraged, and roads to the capital were blocked. With much community interest, local clinics were converted to 'COVID wards'—a room where beds were separated by plastic sheeting. Then Mongolian New Year Tsaagan Sar celebrations, set for February 2020, were quickly cancelled to prevent super-spreader events. This pivotal decision made clear to citizens how serious the disease was. Then in March, a French mining engineer became the country's first COVID patient. News spread rapidly and protection efforts were redoubled. Still, throughout the countryside no cases were reported.

Meanwhile, lives continued, animals were born, and work needed to be completed (Figure 12.1). Most herders live kilometres apart, so taking herds to pasture or watering points could be done without fear of contagion. Explanations of individual and community responses were conveyed in a gracious, thoughtful manner. True to Mongolian ways, people spoke of the unexpected positives: families were together now that schools had closed, children could develop herding skills



Figure 12.1 Spring 2021, Khentei Aimag. Photo by Batbuyan Batjav.

and knowledge. Elders spoke of new respect for herding and national appreciation for the importance of pastoralism; now it was the turn of rural residents to support and provide food to the capital. Because of COVID restrictions, shipments of meat and milk to urban areas had been curtailed. Convoys of slaughtered sheep, goat, and horse were sent to relatives in the capital from each region. Health workers canvassed households, explained COVID-19's symptoms, and encouraged safe behaviours. The Health Department sent out informative text messages to mobile phones every three days. Communities came together to help each other—for instance, by bringing food to elders who could not get to shops. Neighbours checked on each other across the vast distances. Through raised awareness people's health actually improved, they exercised more, and the government's alcohol ban made for safer and more pleasant towns.

There were burdens. Most participants complained about collapsing children's education; many felt the school year had been lost. Efforts at distance learning were poorly regarded. This was 1–2 hours by grade level over TV or internet. Yet mobile herders often had difficulty getting a signal or access. Lessons were designed for city students; children often felt lost. Travel restrictions meant selling animal products was difficult and that traders could not come to town or camps. Prices fell, reducing income and making debt repayment a burden. COVID-related government assistance was key; most important were child benefit payments, then cashmere price supports. The constraints on mingling went against Mongolian's open nature and placed people in a social limbo. Regular health care visits to doctors and hospitals had been suspended, so some medical issues went unattended. The response had been immediate and impeccable, but after ten months residents had grown weary of the impositions. Whilst grateful there had been no cases in their area, respondents wondered if, and how much longer, the restrictions were needed.

Co-researchers Batbuyan, Bolor, and Enkhbat, living in Ulaan Baatar, found the research of great interest. Rather than the city-focused response emphasis

that usually dominates Mongolian politics and planning, the fieldwork refreshingly presented the pastoral perspective. The countryside, covering 99% of the territory, was key to isolating the nation, particularly along the long Chinese border. In Mongolia, the local issues became part of the national dialogue and news cycle. Like weather reports, each province provided daily updates on the COVID-19 situation and actions taken. The effectiveness of digital tools and media in initiating a rapid response was eye-opening to one co-researcher, who is now Deputy Minister of Digital Development and Communications, as it showed how rural residents had embraced smartphones and media platforms. Over time, mobile technology became central to the government's National Emergency Action Plan. Unexpectedly, the pandemic created a ground-breaking opportunity with herders as a keen, engaged group that could be reached over great distances through digital technology. This success has received global attention (Samarajiva 2020; Stevenson 2021) and placed pastoralists as trendsetters in using mobile communication as an effective means of communicating COVID-19 information in rural communities.

Mongolian herders' lifestyles, adaptability to changing circumstances, and historical resilience enabled a successful response to COVID-19 in 2020 with zero rural deaths recorded. Remoteness, rapid engagement with COVID-19 challenges, and feeling like an integral part of the national effort were points repeatedly stressed in interviews. One male herder (56) stated: 'We have our meat and milk; what more do we need?' A sense of independence whilst being part of a strong community stood out in the herders' stories. Pastoralists were proud that they were able to adjust to the pandemic through traditional practices and strengths. In Mongolia, herders survive and thrive in the contemporary world.

Discussion

In remote, but close, collaboration with our Kenyan and Mongolian (agro)pastoralist friends and co-researchers, we qualitatively explored how their communities responded to COVID-19 lockdown measures. As we anticipated, these measures created challenges for populations already exposed to multiple climatic and political economic crises. In drylands elsewhere, they undermined livestock mobility and marketing (Simula et al. 2021), value chains (Krauss et al. 2021), tourism income flows (Gargallo and Heita 2022), and food security (Kansiime et al. 2021). Some of these disruptions also took place in our study areas. However, our co-researchers' experiences and observations reveal other shared, more nuanced patterns. These reflect a triple paradox whereby mobility, restricted in some places, popped up elsewhere; legal suspensions of individual freedoms fostered different liberties and spurred collective action; and 'social distancing' combined with rural marginality encouraged a re-centring of life on the 'home' and its social life and traditions.

First, and in contrast with other pastoral areas (Simula et al. 2021), mobility did not disappear. In fact, to restrictions on mobility and trade that impacted food security, Kenyan (agro)pastoralists responded with—sometimes clandestine—mobility and trade: in Rombo, people overcame government-dug trenches (see also Simula et al. 2021) and border controls to access Tanzanian products and

services. Around Talek, after legal barriers between Maasai-inhabited land and protected areas fell, cattle moved into previously restricted spaces. And Loita and Talek (agro)pastoralists moved into ‘the bush’ to set up markets and illegally traded animals across county lines and international borders (contributing to local, national, and regional food provisioning). Contradicting observations elsewhere of undermined informal economy and livestock marketing (Krauss et al. 2021; Simula et al. 2021), these responses based on mobility supported the local economies. In Loita and Rombo, they helped struggling families to access cash even as livestock prices fell; around Talek, livestock prices even boomed. As Leach et al. (2021) suggest, such responses challenge structural power relations: we saw herders evade state control over border crossing and long-distance trade; and in the Mara, the balance of power between Maasai landowners and conservation organizations shifted in potentially transformative ways.

Second, the legal suspension of individual freedoms to move and socialize had paradoxically liberating outcomes. In our marginalized study areas, the restrictions opened spaces of freedom (Kenyan conservation areas) or did not affect them (Mongolian pastures). Away from national centres, excluded from global (tourism) flows, family and community self-reliance grew. With some State financial assistance (Mongolia; see also Gombodorj and Pető 2022) and without any of it (Talek, Kalacha, and Rombo in Kenya), herders expressed pride in their capacity to solve problems autonomously. Counter-intuitively too, the lockdown stimulated socialization and collective action, with people coming together for events and worshipping, organizing ‘bush markets’ and long-distance trade (Kenya), and feeding urban centres (Mongolia). Overall, solidarity is perceived as having increased (see also Simula et al. 2021; Sternberg et al. 2021a), as commonly observed in the immediate aftermath of disasters (Kaniasty 2020).

Third, restricted movements, curfews, closed schools, and lay-offs promoted a re-centring of life on the home, altering people’s relationship with ‘tradition’. In both countries, while families struggled with online schooling, our co-researchers reported on elders transmitting pastoral knowledge to youth, and those formerly employed reconnecting with practices perceived as ‘traditional’. Impacted at first, cultural and religious life soon bounced back (Talek, Rombo, Kalacha), although the Mongolian government cautiously maintained its ban on ceremonies in 2021. The lockdown encouraged a positive (re)valuation of pastoralism at both the local level (Talek, Kenya) and the national level (Mongolia).

Yet, as we anticipated, a closer look at generally positive experiences reveals unevenly distributed socioeconomic impacts, shaped by structural inequalities. As the contrasting experiences of (agro)pastoralists in Loita and Talek, on the one hand, and those of Stanley and Debra in Talek, on the other hand, suggest, the ability to deploy certain responses varied with access to land, livestock, natural resources, and non-livestock assets, being further shaped by broader factors such as climatic variability. The first divide lies between rural and urban areas. At national levels, Kenyan and Mongolian (agro)pastoralists had zero COVID-19 cases in those early days, mostly felt safe, and were generally more food secure than urban residents (see also Gombodorj and Pető 2022). Relying on natural resources

has been a key lockdown coping strategy of dryland rural communities (Krauss et al. 2021), which depends on access to land and secure tenure rights (Walters et al. 2021). Maasai Mara pastoralists were lucky to have both, being further benefitted by their access to pastures inside protected areas. This helped sustain, then boost, livestock production. In Mongolia, a scarcely populated countryside allowed herders to care for their animals (their main food source) and move them without fearing infection and barriers to mobility. This was nationally beneficial as their meat donations supported nutrition in the cities. In contrast, those who lived in urban centres and/or had no livestock nor land to fall back on, like Debra, struggled nutritionally, economically, socially, and mentally—a globally observed pandemic pattern (e.g. Kang et al. 2021).

In Kenya, the second divide reflects the degree of dependence on farming. While the exceptional rains were a blessing everywhere because animals could graze close to home, in Loita, with crops yet to ripen, rain-damaged roads prevented the import of foodstuff. Rising food prices led to distress livestock-selling, exacerbating food insecurity. In contrast, with excellent rains and free access to previously restricted pastures, Maasai Mara pastoralists easily turned to cattle as a coping and investment strategy, which was crucial in the absence of any type of State support. This constitutes a major difference from Mongolia, where State financial support for pastoral activities helped soften the pandemic's economic impacts.

Finally, there were gendered impacts. For girls and some women, being at home full-time did not bring just joys and new teachings, and teenage pregnancies and domestic violence surged in Kenya (Stevens et al. 2021). While new women-led milk businesses thrived around Talek, the lockdown ruined women's milk selling in other pastoral areas (Simula et al. 2021). Mongolian co-researchers, however, did not report increased burdens for women.

Reflections on collaborative remote ethnography

Across our diverse geographies, we—researchers and co-researchers—shared the experience of 'staying at home' because of a coronavirus. This forced us to reconfigure our approach to research. Unknowingly at the time, we answered Pappagallo and Semplici's (2020) pre-pandemic (and prescient) call for methodologically embracing 'messiness' when conducting research in high-variability contexts. We did just this as we explored (agro)pastoralists' lives under high local and global uncertainties caused by the pandemic. Conducting 'messy' research—remotely, experimentally, and collaboratively—relying on insights from our friends in the drylands, and analysing findings without 'being there' entailed letting go of usual research hierarchies and relationships. Over time, through trial and error, as we adapted to evolving pandemic conditions at home and in our field sites, and in constant dialogue with our co-researchers and across our many disciplines, the research design morphed into a rhizome configuration (Clarke and Parsons 2013).

In practice, in lockdown ourselves, we approached data collection in ways that were both deeply grounded in our co-researchers' agency and knowledge and

responsive to their livelihood needs. This, for example, included waiting for their information while they moved with their animals. But ‘letting go’ also resulted in enlightening surprises as co-researchers improvised focus-group interviews and consulted national archives. Going with their flow, we opened ourselves to the perspectives and insights of directly affected individuals. Our friendships in the study communities have ensured trusting long-distance research relationships. And in our weekly online meetings, we have conducted collaborative analysis of findings, by discussing and comparing emerging patterns—whenever possible with the active participation of co-researchers.¹³ These processes of ‘co-collection’ of data and collaborative analysis contrast with early, also out-of-necessity remote but more conventional, COVID-19 research that used media sources and second-hand information (Brain et al. 2020), external expert opinions (Griffith et al. 2020), and surveys (Lendelvo et al. 2020; Kansiiime et al. 2021; Krauss et al. 2021; Walters et al. 2021).

Of course, triangulation of information was a casualty of working with one or two co-researchers per study area.¹⁴ Nevertheless, taken together, reports from multiple (agro)pastoral areas, as personal as they sometimes were, have exposed shared experiences and relative vulnerabilities of individuals and groups—and pastoralists’ own reflections on these. By sharing their pains, joys, and—for some—journeys of cultural (re)discovery, our co-researchers have co-created finely textured qualitative knowledge about the complexity of living under lockdown, while shining light on the interplay of local, regional, national, and global inequalities in these drylands. We agree with Pappagallo and Semplici (2020) that engaging pastoralists as co-creators of knowledge has led to a better grasp of how they have managed (pandemic) uncertainty, in the process answering Rogerson and Baum’s (2020) call for transdisciplinarity in COVID-19 research. Through this ‘messy’ process, we have strived for more inclusive and equal research partnerships—horizontal-collaborative rather than vertical-hierarchical ones. This has taught us all, from our diverse walks of life, valuable lessons and skills, preparing us to adapt our research to future crises, as Hermans et al. (2021) suggest.

Conclusion

While epidemics and epizootics are features of pastoral areas, a global lockdown is a new thing. In the face of early, severe state-enforced restrictions on mobility, social, and economic life, Kenyan and Mongolian herders responded with variable combinations of ad-hoc creativity and reliance on pastoral products, institutions, knowledge, and solidarity. As people grappled with curfews, closed borders, roadblocks, and economic insecurity, the lockdown exposed the contemporary relevance of livestock-based food systems (Krätli et al. 2012), pastoral institutions, ecological knowledge, and collective action (Reid et al. 2014). There was both adaptation (livestock-based foods, meat camps, traditional medicine) and resistance through evasion of state authority (illegal trading and smuggling) (see Engebriksen 2017; Köhler 2021). Some individuals and groups even thrived. Under this new

crisis, unprecedented in geographic scale, elements of Gabra, Maasai, and Mongolian more exclusively pastoral systems have emerged as strengths. By drawing attention to these, our co-researchers' stories help counter crisis narratives about the impacts of the pandemic in the global South.

So, one might say that things looked pretty good for some (agro)pastoralists in parts of Kenya and Mongolia during the pandemic's first year. However, as we know, the virus did not stop spreading when lockdowns ended. Over time, pandemic complexity increased with spatially and temporally variable containment measures, viral mutations, vaccination campaigns, and fake news, combined with attempts at restarting economies in politically and climatically unstable contexts. For instance, in the Maasai Mara, the resumption of tourism and conservation policies (July 2021) and an unseasonable drought (November 2021 to January 2022) have again restricted pastoralism, and cattle market prices tumbled to their lowest levels.¹⁵ In 2021, Mongolia saw infection rates increase, and restrictions toughened rather than eased. Though now differently from the lockdown period, evolving (post-)pandemic processes are still challenging the daily lives and aspirations of marginalized dryland populations. Exploring their legacies is an ongoing step in our research.

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Notes

- 1 Please cite this chapter as Roque de Pinho, J., A. Kronenburg García, N. Hashimshony-Yaffe, T. Sternberg, A. Pase, S. ole Neboo, D. Seenoi, D. Mayiani, L. ole Mowuo, M. ole Mowuo, S. Wario, B. Batjav, B. Battsengel, and E. Sainbayar (2023). Pastoralists under Covid-19 lockdown: Collaborative research on impacts and responses in Kenyan and Mongolian drylands. In: A. Kronenburg García, T. Haller, H. van Dijk, C. Samimi, J. Warner (eds.), *Drylands Facing Change: Interventions, Investments and Identities*, pp: 215–235. Abingdon: Routledge.

- 2 J. Roque de Pinho, A. Kronenburg García, N. Hashimshony-Yaffe, T. Sternberg and A. Pase were members of *Drylands Facing Change: Interdisciplinary Research on Climate Change, Food Insecurity, Political Instability* COST Action (CA16233), an EU-funded research network project (2017–2021).
- 3 The *Covid-19 in African, Asian and North American Drylands* Working Group includes dryland residents in the role of collaborative researchers and academics from a wide range of disciplines, who are mostly based in Europe: <https://converge.colorado.edu/working-groups/covid-19-in-african-asian-and-north-american-drylands/>. The working group is currently supported by the *Mobilities and Socialities: Covid-19 in the Drylands of Africa and Beyond* project, funded by the Cluster of Excellence Africa Multiple at the University of Bayreuth and the Deutsche Forschungsgemeinschaft (DFG), within the framework of the Excellence Strategy of the Federal Government and the Länder - EXC 2052/1 - 390713894.
- 4 The grant paid for their internet expenses.
- 5 Some co-researchers also participated in the Pastoralist-to-Pastoralist Forum on Covid-19 (Sternberg et al. 2021b).
- 6 I belong to their mother's clan because of the inclusion of my father in that clan.
- 7 In Rombo, which is drier than Loita, Daniel estimates that 20% of Maasai farm.
- 8 Office of the President, Ministry of Interior and Coordination of National Government, 30 June 2020.
- 9 Future research will address the importance of local knowledge.
- 10 The importance of community leadership will be most apparent after the first year and is beyond the scope of this chapter.
- 11 This continued well into the pandemic's second year and is explored in a forthcoming publication.
- 12 The group ranch was previously under collective title, owned and managed by a group of Maasai elders. It was subdivided in 2009. Its members are now private landowners.
- 13 At the time of writing (2022), co-researchers were sharing updates on pandemic-related impacts and responses.
- 14 Except for Mongolia, where multiple interviews were conducted.
- 15 How pastoralism and conservation policies intersected during the pandemic is explored in a forthcoming publication.

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