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# Unpacking the Land and Socio-Economic Effects of the COVID-19 Pandemic in Rural Kenya

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**Abstract:** Following its outbreak in late 2019, the Coronavirus disease (COVID-19) has been reported to have had devastating human health, health systems, and socioeconomic impacts across the globe. Countries in the Global South are known to have been hit harder given the low level of resilience to crises amid high levels of poverty and limited social protection programmes. This includes countries in sub-Saharan Africa (SSA). Most of the existing studies on the COVID-19 pandemic in SSA, however, have focused on the puzzling nature of the considerably low rate at which the virus spread over the continent, the low level of hospitalisation, and the corresponding low morbidity rate. As such, little focus has been given to the social and economic effects of the pandemic in the local communities. Carried out in two rural communities in Kenya—Kilifi and Murang’a—the present study adopts a case study approach for an in-depth, real-life context and explores the socioeconomic (including land-related) effects of the COVID-19 pandemic on the vulnerable rural population and the social group of smallholder farmers. Outcomes of the study show that the local effects of the pandemic are context specific. The findings demonstrate that the pandemic has had far-reaching impact on access to and control over land for some households in the rural communities. It was also accompanied with other negative social and economic effects, including a notable rise in teenage pregnancy, intra-household conflicts, job losses, and businesses closures. Positively, it is also claimed to have contributed to food and nutrition security in some rural regions, following increased availability of nutritious food that could have, otherwise, been sold.

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## 1. Introduction

The Coronavirus disease (COVID-19) pandemic is the biggest crisis the world has faced—and is still dealing with—in the 21st Century. At different levels and scales, not a single country (developed or developing) across the world has been spared from the negative effects of the pandemic. Developing countries have been hit harder than countries in the west, because of low level of resilience to crises amid high levels of poverty and limited social protection programmes (Sumner et al. 2020; Ahmed et al. 2020). The effects of the virus on human health and health systems, and the socioeconomic impacts linked to the countermeasures instituted to curb the spread of the virus—lockdowns, curfews, and the ongoing administration of vaccines—have come up in public debates and on (social) media across the world. Indeed, literature on the health and socioeconomic impact and concerns over the pandemic has been increasingly surfacing. Workie et al. (2020) and Stephens et al. (2020) have generally highlighted an early, immediate impact of the pandemic on the agriculture sector and related effects on livelihoods and food security in developing countries and beyond. Barbier and Burgess (2020) have expressed concerns over the future success of the Sustainable Development

Goals (SDGs) amid a lack of international support due to the pandemic. Indeed, the United Nations report that the COVID-19 crisis has made it difficult for the international community to provide ‘maximum financial and technical support for the poorest and most vulnerable people and countries hardest hit’ (UN 2020). This suggests that the negative socioeconomic impacts of the pandemic are likely to have exacerbated the already existing development challenges in the Global South.

The majority of the existing studies on the COVID-19 pandemic situation in sub-Saharan Africa (SSA) have largely focused on the puzzling nature of the considerably low rate at which the virus spread over the continent, the low level of hospitalisation, and the corresponding low morbidity rate (Salyer et al. 2021; Maeda and Nkengasong 2021; Anjorin et al. 2021; Anjorin 2020; Bamgboye et al. 2021). Indeed, it would certainly have been dire if countries in sub-Saharan Africa had experienced similar rates of hospitalisation seen elsewhere, amid an ill-equipped healthcare infrastructure and a low capacity for emergency responses. Notwithstanding the reported realities of the health implications of the pandemic in the continent from international and local media and studies, a few have focused on the far-reaching socioeconomic implications of the pandemic. Two notable studies that have covered this topic include Nchanji et al. (2021) research on the effects of the pandemic on the bean value chain in select countries and Ataguba (2020) study of the economic costs of the pandemic. A broader understanding of the ways in which the pandemic and related measures (lockdowns and curfews) have affected already-known vulnerable communities and social groups (smallholder farmers, women and youth therein), along with the local response/coping mechanism, is urgently needed.

The present research set out to explore the effects of the COVID-19 pandemic on the vulnerable rural population and social groups—specifically, smallholder farmers—in Kenya. It focused on interrelated social and economic aspects, virus-related information transfers and responses, land and agriculture, rural employment, and coping mechanisms for the negative impacts of the pandemic. The following main research question guided the research: What have been the socioeconomic effects of the COVID-19 pandemic in rural Kenya?

In sub-Saharan Africa, Kenya was an ideal country for the study given that: firstly, in terms of numbers the country was the second-most affected country by the pandemic in SSA after Ethiopia, with an estimated 323,000 reported cases and 5648 deaths by 3 April 2022 (WHO 2022a). Secondly, early in the pandemic, the government imposed strict measures to mitigate the spread of the virus for nearly a year—lockdowns and curfews, the closure of some businesses and schools, banned public gatherings, etc. These measures are known to have disrupted socioeconomic activities and opportunities and services provision in the country. Thirdly, at least 35% of the Kenyan population lives below the poverty line, i.e. less than US\$1.90 a day prior to the pandemic onset, highlighting the severity of the vulnerability to the crisis. Fourthly, Kenya has diverse rural contexts in terms of livelihood opportunities and challenges for individual households and social groups, along with a decentralised government, implying different types of responses to the pandemic; thus, the effect of the pandemic is likely to have been experienced differently in different localities. This combination of factors presents an opportunity for a study that can provide nuance in terms of the impact of the pandemic in these diverse contexts, offering a broad coverage of issues, accordingly.

## **2. Materials and Methods**

### *2.1. Study Areas Description*

Two rural counties in Kenya were selected for this study: Murang’a and Kilifi. Located in the central part of the country, Murang’a is characterised by diverse climate conditions: the upper, central, and lower highlands are humid and pre-humid agroecological zones, and the lower midland includes semi-humid, transitional, and semi-

arid agro-ecological zones (Murang'a County Government 2021). A smallholder farmer household privately owns and cultivates an average of 1.4 acres, meaning that they are not able to produce large volumes, which is among the major reasons for local vulnerability (Murang'a County Government 2018). Kilifi county sits in the coastal region of Kenya. It is among the counties that has been hit the hardest by the COVID-19 pandemic. In 2021, because of the pandemic, at least 50,000 households in the county were at risk of starvation and depended on relief food from various organisations. While households own the land portions allocated to them, much of the land in Kilifi is communally owned. Presently, though, land ownership is increasingly in the process of privatisation into freeholds. The county has one of the highest poverty indexes, which "has attracted both local and international organisations who work with different thematic areas to compliment the efforts" (County Government of Kilifi 2018, p. 54).

We picked the two counties not only because of the high levels of hardship but also because they are significantly diverse in terms of the local governance structures and socioeconomic attributes. Based on the law in Kenya, land is categorised and governed within three classifications: private land, community land, and public land (Doshi et al. 2014). People with private ownership of land, as in Murang'a county, have the right to use and manage the land. Private ownership implies the "assignment of rights [to a] party who may be an individual, a married couple, a group of people, or a corporate body such as a commercial entity or non-profit organization" (FAO 2002, par. 4). Community land refers to land belonging to a distinct group of people, either on the basis of history, ethnicity/culture, or shared interest. In the Kenyan constitutions, community land may be lawfully registered, transferred, or declared to the community through legal processes, among other ways. It could also include unregistered land held under trust by the local government. As indicated, land in Kilifi has been unregistered and under customary control. Over the last two years, it has been undergoing an adjudication process—registration to individual households' freeholds. The adjudication process has led to several problems with respect to the use and management of land. Among the key problems that arise from the conversion of communal land to freeholds has been uncontrolled sales that take into account the rights of all family members, leading to landlessness (Matende-Omwoma 2018).

Owing to the varying local contexts in the two counties—with respect to land quality, access and use, and the socioeconomic conditions for the population—it is likely that the local effects and responses to the COVID-19 pandemic were different. The presumed different local scenarios paint a critical picture of the experiences of many Kenyans during the pandemic, albeit in different forms, levels and scale.

## 2.2. Study Approach, Data, and Analysis

For this study, we adopted a case study approach, which provides for "an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context" (Yin 2009, p. 14). The qualitative research methods were focus group discussions (FGDs) with community members and participant observations, which were employed for the data collection and analyses. This is known to provide a "systematic inquiry into social phenomena in natural settings" (Teherani et al. 2015, p. 669). The methods allow for an exploration of occurrences and related outcomes, as perceived by those involved—the study participants (Corbin and Strauss 2014; Bogdan and Biklen 2006).

The main topics of the focus groups were built around the general theme of the study—the socioeconomic effects of the COVID-19 pandemic in rural Kenya—with an objective to:

- Establish the opinion of the participants regarding how the participants and the communities in Kilifi and Murang'a counties received and reacted to the news of the COVID-19 outbreak and related information.

- Determine the degree to which the COVID-19 pandemic affected (and perhaps continues to affect) the access and use of land, other livelihood opportunities, and the social life in Kilifi and Murang'a.
- Find out how the participants and community members in Kilifi and Murang'a have responded to/coped with the effects of the COVID-19 pandemic and what the situation has been since the withdrawal of government measures.

The data that informed the present study were gathered in January and February of 2022. We targeted heterogeneous groups of people—adults and youth (different genders)—in order to ensure a full representation of the local populations, ensuring a relatively equal number of participants from Murang'a and Kilifi. In total, we reached 92 persons (30 males and 62 females). We gathered data from people representing different social groups to allow for the validation and triangulation of the research findings. Table 1 below presents a summary of the participant characteristics of the FGDs. To guide the FGDs, a semi-structured questionnaire was developed in a manner that captures the different aspects of the study theme. The FGDs were held in different communities to allow for a broad regional coverage. Two key informant interviews were conducted via phone with local experts to triangulate and add depth to the findings from FGDs.

**Table 1.** Research participants.

County	Area	No. of Participants	Male	Female	Social Group(s)
Kilifi	Bamba	11	5	6	Youth and Adult
	Ganze	5	-	5	Adult
	Tsangatsini	7	-	7	Youth and Adult
	Marereni	7	3	4	Youth and Adult
	Dida	5	3	2	Youth
	Ndatani	9	4	5	Youth and Adult
Murang'a	Kiharu	8	-	8	Adult
	Maragua	8	-	8	Adult and Youth
	Maragua	8	4	4	Youth
	Maragua	8	3	5	Adult and Youth
	Kigumo	8	8	-	Adult
	Kigumo	8	-	8	Adult and Youth

We used a thematic analysis approach whereby the transcriptions of the FGDs and interviews were cleaned and coded. Then, information on the study's key themes, patterns, and quotes was extracted to be used in the result part of this study.

This study is not without limitations. It only builds on qualitative data. For more substantive information and contexts, the study could have benefited from a mixed-methods approach. For instance, an integration of survey data could have helped in identifying the economic consequences of the pandemic on individual households.

### 3. Results

This section is organised around four key sub-themes explored in the present study: COVID-19 news and related information, land access and use, economic and social effects of the pandemic, and local responses. It compares and contrasts the situations in two focus counties: Kilifi and Murang'a.

#### 3.1. Coronavirus News, Vaccine Information, and Vaccine Uptake

All over the world, the news of the Coronavirus outbreak caught people by surprise, especially in places that had not been confronted by such major health crises in modern history. How efficiently the news spread, and whether it was believed and accompanied by appropriate (re)actions, were critical elements towards slowing the spread of the virus. Thus, knowledge on how the information was received and responded to is essential in

the event of similar crises in the future. Based on all the FGDs conducted in Kilifi county, news of the outbreak of COVID-19 in the country reached local people via a range of media, including radio, television, newspapers, public announcements by government officials, and word-of-mouth from neighbours, friends, family members, social media (Facebook), and healthcare workers. Based on the FGDs, initially, the virus was not perceived as a real threat by some, as they had not witnessed any cases. However, reality started to kick in following the government's mandates and news of widespread deaths abroad. The following statements from two FGDs participants from Marereni highlight the shift in opinions:

'When I first got the news, I did not quite believe it and wanted to get more information. I was later convinced by images on the news of people elsewhere who were gravely affected by the pandemic. There was also social distancing in public spaces, sanitizing, and the requirement to wear face masks.'

'I first saw a Facebook post one night from Italy which had an image of over 700 coffins which were meant for victims from the same area. That night I couldn't sleep; I thought the world was coming to an end. We are only 300 in our village and I was worried if it gets here, it will wipe us out.'

Over time, the news of the virus outbreak in the world and its entry into the country was received with worry and uncertainty. In the Bamba FGD, it was indicated that the community was concerned for its elderly population because persons of 60 years of age and above were said to be at a higher risk. Despite the guidelines to wear masks and wash hands, news of new variants increased the uncertainty of the effectiveness of these strategies, an uncertainty that still looms.

The information on the introduction of the COVID-19 vaccine reached the community largely via the same media that spread the news about the virus. Village elders and local government authorities (chiefs) were also involved. Ironically, while vaccine information and news on the virus outbreak was shared via similar communication channels, the introduction of the vaccine was negatively received by a large proportion of people in Kilifi county. Based on the FGDs, a significant proportion of people in the county had not been vaccinated despite availability and appeals for them to get their shots. In Marereni, only one person out of seven that participated in the FGD had been vaccinated. A lack of information, poor information, and/or misinformation fueled the negativity towards the vaccine. A male respondent in Bamba's FGD wondered how it was possible for the COVID-19 vaccine to be developed so quickly while people have lived with other diseases such as HIV for a very long period. Misinformation included rumours that people would die or become vegetables within a year following vaccination. Some believed certain diet choices would boost their immunity against the virus rather than getting vaccinated. Albeit controversial, the vaccine uptake has been rising recently following a government mandate that makes vaccination a requirement in order to receive public services.

Like in Kilifi, in Murang', the news of the Coronavirus outbreak reached the communities through diverse media: radio, television, social media (Facebook), word-of-mouth from friends and relatives, and government mandates—social distancing, masks, etc. The same was true for the delivery of the information on the introduction of and calls for COVID-19 vaccination. In contrast to Kilifi, healthcare centres and trained community members were/are also heavily involved in the COVID-19 vaccination campaign in Murang'a. Similar to Kilifi, the reality of the challenges the virus posed, along with local concerns, grew gradually in Murang'a. The following responses from respondents in the Maragua FGDs to a question regarding the COVID-19 outbreak sum up how local people received the news:

'We saw how scared the doctors were, yet they are the care givers. How much more terrified should we be if a doctor is afraid? Let us say we became fearful'.

'There was a lot of panic. People were worried is the world coming to an end'.

Among wild misinformation was the claim that the vaccine was being introduced by whites (western/eastern communities) to Africans so they could eliminate them and take over their land. According to a respondent in the female FGD in Maragua, 'considering that we owe China a huge debt, these rumours were not surprising'. In the mixed FGD in Maragua, a respondent said: 'we saw it as a way for the government to get financial aid, because see people dying in other places but none in our own'. There were claims that the vaccine would cause infertility, make people sick, and even cause death in two years. These forms of rumours—that the vaccine poses harm to those that take it—were mentioned in all FGDs.

Interestingly, despite the widespread misinformation, unlike in Kilifi, a majority of the people in Murang'a have been vaccinated. Over 95% of the people that participated in this study from the county had been vaccinated. Several participants saw no merit in some of the negative claims made about the vaccines. For instance, a respondent in the youth FGD in Maragua said: 'I agreed to get vaccinated because I knew of no one who got vaccinated and died as a result'. Fear of dying from the virus also motivated some people to get vaccinated. For some, the vaccine misinformation merely delayed their decision to get vaccinated. A respondent in the female FGD carried out in Kiharu indicated that, 'I saw and heard of people dying due to COVID-19 and decided I will not follow the propaganda'. Coercion also motivated vaccination in Murang'a. Based on a respondent in the female FGD in Maragua, 'some people agreed to be vaccinated after the government announced that no Kenyan would receive government services without proof of vaccination'. It is crucial to highlight that the unavailability and inaccessibility of the vaccine, seen elsewhere, contributed to the delay in vaccination. This has since changed following an increase in the supply and widespread distribution to the village level.

### *3.2. The COVID-19 Pandemic's Effect on Land Access and Use*

Land is central to rural life as a 'free' living place and a primary means of livelihood. In Kilifi county, the COVID-19 pandemic affected land access and use in several ways. First, it led to distress sales by some to cope with the difficult economic situation resulting from the pandemic. This implies a loss of the livelihood resources for the affected households. In all the FDGs conducted in Kilifi, it was reported that there were increased cases of land sales for diverse reasons. The sale of land is not a new phenomenon in Kilifi, where land has already been in the process of conversion from customary/communal ownership to private freeholds. The pandemic, however, exacerbated the problem. Another reason reported for the sale of land was to cover education costs, medical expenses, court bond fees, and dowries. The increase in court cases involved individuals' failure to adhere to COVID-19 mandates such as curfews (Accord 2022). In the Tsangatsini FGD, it was reported that land is sold at a throw-away price (cheaply). It is believed that the middlemen (brokers) took advantage of people's desperation due to the lack of livelihood opportunities to educate their children and/or to sustain their households and as a result of not knowing the true value of land. Brokers buy land at a cheap price and sell at a higher price to investors who often seek to speculate on increases in price over time.

Secondly, the COVID-19 pandemic exacerbated the pre-existing limited capacity of communities in Kilifi to invest in land and, at times, forced farmers to sell their farm assets. A respondent in the female Tsangatsini's FGD noted that her household survived by selling some of the livestock to get money to buy food. This implies a continued loss in farming capacity, especially for many farmers who use livestock to plough their farms. The land portions per household vary but are generally larger than the country's average, partly because the population in the region is not dense, and the land is relatively less productive (less-than-national-average rain). Farming in the county is predominantly rain-fed because there is no access to an irrigation system. Barely any of the FGD participants indicated that they can till their entire land portion, citing a lack of financial capacity to invest in the land and/or a lack of water for irrigation. In most parts of Kilifi,

the pandemic coincided with a drought, which implied that farming was not possible. However, in isolated cases, a farmer from one of the local villages in Marereni reported that his home area received rain during the pandemic. Positively, a respondent from this village noted that he benefited from being able to cultivate 2 acres of maize during the pandemic. Owing to a low harvest or a lack thereof in the rest of the county, he was able to obtain a large margin from the production.

Thirdly, the pandemic led to increased conflicts over land use and encroachment. The entry of pastoral Somalis in Kilifi county in search of pasture for their livestock is not unusual, especially during the drought periods. Given that most people were at home and paid considerably more attention to how they could earn revenue from their farm amid few opportunities, some rented their land to the pastoralists. The absence of physical boundaries resulted in occasional trespassing, sometimes leading to destroyed crops and/or important plants. Some of these incidents triggered conflicts in the community; deaths were even mentioned in the Marereni FGD. In Dida's FGD, respondents indicated that a Somali pastoralist was hurt with a machete for grazing in other people's land without permission. Because of the pandemic and social distancing mandates, cases of conflict increased, and most went unresolved because the local law courts had stopped arrests over a claim that the jails were full. Respondents in the FGD maintained that these conditions encouraged illegal activities. A serious case of encroachment was reported in Marereni. A salt company whose salt harvesting plant is located next to the sea in Marereni was accused of using the COVID-19 period to grab community land with the help of a corrupt land official in the region. The ban on public gatherings during the pandemic made it difficult for the community to mobilise protests against losing their land to the company.

The effects of COVID-19 on land access and use in Murang'a county mirrors those experienced in Kilifi county: conflict, distress sales, and the disruption of agricultural activities. Conflict over family land has been a common problem in Murang'a in recent decades. The problem is attributed to declining sizes (now averaging at 1 acre per household), a growing population, and the traditional practice of inheritance amid limited off-farm economic opportunities in the region and the country. The pandemic simply exacerbated these problems. Following the loss of or decline in economic opportunities in the city (Nairobi), where a significant proportion of Murang'a's residents have immigrated to for work, people were forced to move back to their rural homes to cope with the crisis. As a result, there was increased demand/competition over land for settlement and/or as an economic means (farming). In certain cases, such demands resulted in family conflict. The following statements by respondents in the mixed FGD in Maragua provide some context:

'Yes, there was conflict between those living here and those from Nairobi. The ones from Nairobi needed land to build, yet that portion had been farmed. It was not thoughtful to cut down plantations in the name of building a house.'

'There were conflicts between parents and sons. Parents were unprepared to share their land, yet their sons demanded it. Most of them asked for their share in order to sell. This angered their parents and resulted in violence.'

Incidences of distress land sale in Murang'a were less widespread like in Kilifi. Among the reasons given for the lower rate of land sales in Murang'a was that the plot sizes were too small to trigger a need to sell, along with competing interests (persons who claimed a right to the land). Furthermore, land rights in Murang'a are considerably strong given the private ownership and the fact that women have stronger claims to their rights in already-privatised settings. Those seeking to sell their land in Murang'a have to get approval from the local chief, provided that they have the right justification—spousal consent is required (except in cases where the chief is corrupt). Corruption is known to be a major impediment to local development in the country, and the land sector is considered to be among the most affected (Adili 2015; Reuters 2016).

Many of COVID-19 effects on land use in Murang'a revolved around a lack of and/or limited access to markets for agricultural produce. The county produces and supplies Nairobi and regional markets with a variety of food crops and animal products, including bananas, pumpkins, avocados, sweet potatoes, maize, beans, horticulture, tomatoes, French bean, spinach, cucumber, milk, and poultry (including eggs). The closure of open agri-good markets, schools, eateries, offices, and public events amid lockdowns prevented and limited the movement and sale of agri-food produce. FGD participants that produced banana for the market reported not being able to sell their produce to buyers (brokers) who did not show up due to restrictions and fears of contracting the virus. A farmer who produced French bean for export markets could not sell her produce because the market was closed. Dairy farmers reported being able to sell only half of what they sold in the pre-COVID-19 period. Farming and farm-related challenges extended to the cost of farming inputs such as fertilisers and animal feeds, which increased significantly (as reported in the FGDs).

The effects of COVID-19 on the use of land and related rural households' welfare were not all negative. A few respondents in the FGDs reported to have benefited from the increased sale of their produce. During a female FGD in Maragua, a respondent, a local maize farmer who produced partly for the market, maintained that the market for her produce greatly improved, enabling her to sell more than usual. This is perhaps because there was less competition in the market for those who managed to find an outlet. It was also reported that the pandemic led to improvements in food and nutrition security in Murang'a. For instance, instead of selling their fruits, they were consumed by the households, which was not the norm.

### 3.3. Economic and Social Effects of the COVID-19 Pandemic

Farming is an important source of livelihood in Kilifi, but because of the drought experienced during the period of COVID-19 lockdown and curfew mandates in 2020, it barely served as an economic means. Unfortunately, drought is common in the region, even more so in recent years. As such, individuals and households have become dominantly depended on off-farm economic activities such as running a business and wage labour, which also serve as means for livelihood. People in the county live in small-town communities from which they conduct non-farm livelihood activities. Two of the respondents in the FGDs carried out in Ndatani indicated that they have been involved in business and employment—specifically, selling vegetables and fish and teaching in a nursery school (employed by parents). In Ganze, a female respondent said that she used to make and sell *chapati* (a local bread). Another was selling fish imported from China. In Marereni, other forms of jobs were mentioned, including in entertainment, salons, grocery shops, and motorcycle transportation (*bodaboda*). When the pandemic began in the country and the government issued the restrictions mandate, nearly every respondent in the FGDs who had a business or was in unstable employment said they lost their livelihood opportunity. A small restaurant owner in Marereni informed us that, at first, there was a restriction in the number of customers; then, eventually, they were made to close the restaurant. A fish seller in Tsangatsini experienced losses because the curfew prevented her from working during evening hours (7–9 p.m.). The business remained closed for over nine months. An individual running a general retail shop began experiencing shortages in the number of customers at first, followed by a shortage in the supply of stock due to the cessation-of-movement mandate. The shortage in stock supply was accompanied by a significant increase in the prices of the items. For instance, it was reported that the price of cooking oil increased by more than 100 percent. Similar stories of the economic impact of COVID-19 were common in all FGDs. The following statement sums up the general trend in local experiences:

'I was very affected as I had my business completely shut down. My children who used to eat three meals a day had to contend with one meal a day and at



times that one meal lacked completely. I had saved up a bit and thought it was going to last for two months and then the government extended the lockdown and curfew. We really suffered. The kids drank porridge in the morning and only ate again in the evening’.

Besides having economic impacts, COVID-19 mandates—the closure of schools, lockdowns, and curfews—had far-reaching social implications. On top of the list in Kilifi were increased cases of pregnancy among underage schoolgirls. While this was a national problem pre-pandemic, the situation got worse during the lockdown and curfew period. Kilifi county was reported as leading in this respect during the pandemic (CitizenTV 2020). Some of the pregnancies were from girls’ peers, that is, the boys that they go to school with. Most disconcerting, however, was the fact that some of the perpetrators were senior members of the families of the victims/community. The community considers these as cases of gender-based violence, which is barely addressed by local authority. As mentioned in the FGD conducted in Dida, ‘cases go unreported to the authority due to the fear of shame’. Generally, the communities primarily attributed this phenomenon to the closure of school, job losses, and curfews, which meant people were mostly at home and idle. Because of pregnancies, the majority of the victims have not gone back to school, as they ended up having to take care of the kids and/or got married. Often, it is girls who are most affected, because they often discontinue their education. For school-attending boys, the social effects of the pandemic included an increased use of alcohol and drugs (weed) during the pandemic. Others engaged in business activities, particularly *boba boda*, as employees of more capable members of communities. Participation in monetary activities during the pandemic is said to have demotivated young people from going back to school. “After tasting the money, boys were no longer interested in going back to school” (FGD participant, Tsangtsini).

The COVID-19 pandemic period not only contributed to a rise in pregnancies among teenage girls but also among married women. This phenomenon was attributed to everyone being at home, particularly men, who are often either away for work for some extended period, come home late after work, or work away from home for months. Socioeconomically, the eventual growth in family sizes in already struggling communities implies an impending pressure on resources.

Intra-household conflict is also said to have increased during the pandemic, which resulted in, among marital problems, the breaking up of marriages. In Ganze’s female FGD, a respondent noted that ‘during the lockdown and curfew period, many marriages broke down because of the disputes fueled by rising incidences of hunger and poverty.’ In other communities, it was maintained that conflicts resulted from differences in parenting skills, where returnee husbands blamed their wives for poor parenting. This aspect is linked to the patriarchal idea that men are better at disciplining children than women. Positively, there are also those who felt that having husbands at home increased family cohesion, thus creating a positive feeling about the pandemic. Respondents in the Marereni and Tsangatsini FGDs indicated that having men at home increased security for the family, and in some cases, men assisted their wives with household chores and taking care of the children.

As expected, in Murang’a, like in Kilifi, for individuals and households that derive (extra) income from off-farm activities—businesses or (temporary) employment—the pandemic affected these opportunities. A businessperson who used to procure and sell clothes from Eastleigh (Nairobi) could not travel due to the lockdown; thus, her business collapsed (female FGD, Kigumo). Furthermore, rather than using her capital to buy new stock, money was spent on household food expenses. Another respondent in the Maragua female FGD said she owned a computer shop that trained young people to be computer-literate. The business, like others requiring close social interaction, was shut down. An individual who supplied chickens to the city market (Nairobi) could not continue to do so because all wet markets in the country were prohibited.

In another context, the relatives who had emigrated from the urban region back to Murang'a are said to have put heavy economic pressure on the rural areas, particularly on land and other farm economic resources. Based on the discussions in the focus groups, a significant proportion of the people that moved to the rural areas have not gone back to their previous place of work. Hence, they are still dependent on the meagre rural resources. In fact, some have fully settled in the village in their rural relatives' land and turned to farming for their livelihood.

The primary social effects of COVID-19 in Murang'a mirrored those that were mentioned in Kilifi County. The closure of schools and people spending a lot of time at home led to increased pregnancies among teenage girls and married women. In fact, a secondary school daughter of one of the respondents present in the Maragua female FGD is among those who got pregnant. She maintained that the situation really frustrated her because she had to care for her grandchild so her daughter could finish her education. School-attending boys took up businesses (*boda boda*) and indulged in alcohol and drugs. Married couples had been mostly at home. The social outcome in Murang'a was similar to Kilifi's—a positive effect (more family cohesion) or conflict and the breaking up of families. Perhaps the most disconcerting social outcome of the pandemic in Murang'a that was not experienced in Kilifi were increased incidences of homicides and/or suicides. These incidences were associated with economic hardships that made it difficult for households to bring bread to the table. Also reported were incidences of stigma about people who had or were presumed to have contracted the virus. Stigma towards COVID-19 victims was a major problem at the height of the pandemic (Chory et al. 2021; Population Council 2020). Access to specialised healthcare was reported to have been a challenge for some in Murang'a. The following statement by a respondent in Kiharu's female FGD paints the picture:

'Receiving treatment from the hospitals was also challenging. For example, we normally get X-rays and CT-scan images done in Thika (big town, located outside Murang'a county). The lockdown hindered such visits and this worsened the situation for the sick.'

### 3.4. Coping Strategies and the Situation in the Mandates' Aftermath

Following business breakdowns, job losses, and the fact that farming did not offer cushioning against the pandemic, people in Kilifi county had to find ways to cope. A local entertainer in Marereni reported that he bought a motorcycle and joined the *boda boda* business. Similarly, two respondents from Dida also bought motorcycles to get by after losing their jobs. In the same community, a lady who was employed at a *Mpesa* shop (mobile financial service provider), a job she lost, opened a tailor shop and began making face masks that were in demand at the time. A lady in Bamba whose salon business shut down began cooking food to sell to the people at local construction sites.

Complementing individual efforts in Kilifi, some select persons benefited from donations from the development community, private sector actors, and the local government. GROOTS Kenya, an NGO working in the community, was said to have been involved in providing sanitary pads to school-attending girls and food items. In the Ndatani mixed FGD, respondents indicated there were two forms of donation provided to the elderly—food items (such as maize and beans) and direct cash transfers (KSh 2000 every Tuesday) from the county government (generally, US\$ 1 is equivalent to KSh 110). In Ganze, it was reported that food donations came from a private cement company (Mombasa Cement) that has a factory in the county, and a monetary donation of KSh 2000 came from the government. In Tsangatsini, respondents indicated there was a little help in the form of a cash donation of KSh 1000 a week, lasting for three weeks. They also mentioned that there was a promise of monthly food donations that failed to materialise after the first month. In some communities, the donations are said to have lasted for nearly the entire period of the lockdown and curfew. A respondent who was involved in the

distribution of food maintained that the relief food was extremely helpful in her community. There were, however, complaints in some communities that the way the aid was distributed was not fair. The complaints alluded to corrupt behaviour by the people in charge of the distribution of the government and private sector assistance. In Bamba, for instance, a respondent reported that the individuals listed for receiving the relief were ignored in the final distribution.

Life has been improving since the government's COVID-19 mandates were dropped in late 2020, according to the FGD respondents. Irrespective of concerns over several waves after the mandates were dropped, only mask mandates remained (and even these were dropped in March 2022). Despite the general improvement in the economic situation across the country, the majority of people and households that lost their jobs and/or business continue to struggle. To reaffirm this, a respondent in Ganze's female FGD stated that businesses are picking up slowly, but those whose business shut down still have the problem of raising capital. In the mixed FGD conducted in Dida, a respondent said that 'even though the lockdown and curfews were lifted over a year ago, I have not been able to go back to work'. Those who sold their land resources are particularly more exposed to economic present shocks and stress because they lack fallback opportunities. It is evident, therefore, that most if not all households in Kilifi continue to suffer from the effects of the pandemic on their livelihoods. The same is true for the negative social implications.

In Murang'a, the story is the same with respect to coping with the pandemic and the aftermath of the government mandates. Those that lost their means of livelihood have been forced to seek out alternative ways to meet their needs. Those who immigrated from the city have shifted their focus to farming. This is particularly true for a youth in Maragua's FGD, who informed us that: 'I was employed earlier in the city. When it ended, I went back home and began farming. Later, I started selling milk'. In the rural areas, the sale of farm assets—land and livestock—was regularly mentioned as a coping strategy. There are those who took up wage labour in construction sites. Every person, particularly those who had lost their regular livelihood, had to find an alternative means to cope. Some supported their neighbours and relatives in some form (with food, mainly). A few respondents spoke of reverse remittance to their relatives in the city (often in the form of food items). To many, the hard economic times during the lockdown and curfew periods were an important lesson regarding the need to diversify their means of livelihood and to save. 'We learnt the famous proverb, do not put all your eggs in one basket,' said a respondent in the Kigumo female FGD.

As in Kilifi, there was some social support in Murang'a, primarily from the government and churches. They were targeted towards the most vulnerable in the community. The help offered, however, was quite limited compared to that offered in Kilifi. The government support, which was in the form of cash transfers (KSh 1000), only lasted for a few weeks for some of the recipients and for up to three months for others. It is not known why there was variation in the duration of the support. The government also distributed food, which many claimed had gone bad in the time it took to distribute, as it had been stored for a long period in poor conditions. There were complaints about issues of malpractice, which were also reported in Kilifi. Some of those most deserving of the aid did not receive it.

Regarding the aftermath of government mandates, it was reported that the situation in Murang'a was gradually improving, echoing claims made in Kilifi. Nevertheless, about a year and a half since the lockdown and curfew were dropped, many continue to deal with the economic implications of the pandemic, especially the high cost of living. The current experiences are summed up by the following statement from a respondent in the Maragua youth FGD:

'The economic cost of living is high. It is evident that the cost of living has gone up. For example, a seventy-shilling purchase has increased by twenty shillings. Between 45 and 50 percent of the young people have been affected. We have depleted our savings and our businesses cannot be restarted.'

#### 4. Discussion

It has been more than two years since the outbreak of the devastating COVID-19 pandemic in the world. Besides leading to millions of deaths in the world (WHO 2022b; UN 2022), it is widely known that the pandemic majorly impacted economies and social life, with early news reports focusing on exchange rates, the oil and gas sectors, the agriculture and tourism industries, and social restrictions and actions, among others (Gandasari and Dwidienawati 2020). It is without a doubt that people in developing countries were hit the hardest by the crisis, especially economically, because of a high incidence of poverty and limited social support or a lack thereof from their governments. Nevertheless, the socioeconomic effects are likely to have varied across individual households and communities owing to different levels of vulnerability and resilience across households and local regions. The present study set out to understand how the pandemic impacted people in two distinct communities in rural Kenya. The study findings highlight similarities as well as variations in the ways in which the pandemic affected people's social life and livelihood opportunities during the lockdown and curfew periods, how they coped, and the aftermath.

Prior to discussing the findings regarding the local socioeconomic effects of the pandemic and the response, it is critical to acknowledge the ease with which information on the outbreak of the virus and the introduction of the vaccine has penetrated even the most impoverished of communities in the country. This highlights major progress in the way critical information spreads and is linked to increased access to public information media among the public, including radio, television, and even internet-connected social media (e.g., Facebook). This implies that using these media to communicate critical information effectively and correctly to the public can only improve in the future. At the same time, however, the same media—particularly the social media—are known to have played a major role in the spread of misinformation, even in marginalised communities, which may have had devastating effects in communities. As such, the spread of information and misinformation about COVID-19 and vaccines across the globe highlights the power of social media, for instance in quickly spreading awareness in times of crisis, but it also calls for caution and regulations to ensure that the right information is shared (Viswanath et al. 2021; Tsao et al.; Gonzalez-Padilla and Tortolero-Blanco 2021; Lee et al. 2022; Goel and Gupta 2020).

The socioeconomic life of people in developing countries' rural communities largely revolves around land access and use for providing a space for settlement and/or for earning a livelihood through farming. Hence, the land-related effects of the pandemic are important to understand. From the study, we learn that while COVID-19 affected land access and use in both communities, the nature and scale of the effects varied because of the differences in how people in the two communities access and use land, among other contextual issues. As indicated, in Kilifi county, the pandemic led to violent conflicts between some residents and Somali pastoralists over access to pasture. The conflicts largely escalated because the community did not get support from the government for conflict resolutions amid COVID-related mandates. The inaccessibility of public offices and the ban on public gatherings (demonstrations, to be specific) during the lockdown and curfew periods were associated with incidents of encroachment of community land by private sector actors (salt mining companies) that saw an opportunity to acquire formal ownership of community land. The conflicts over land in Murang'a county arose for an entirely different reason—competition over limited land sizes amid relatives returning from urban regions following the loss of economic opportunities. Considering the average land surface per household is 1 acre, and it is the primary source of livelihood for people in the household, it is understandable that the increased competition for such a scarce resource would result in conflict. Conflict or not, competition over increasingly small land portions in Murang'a highlights the continued increase in pressure on land. Additional family members in the rural areas implied a decline in arable agricultural land when the land is used for settlement by returning migrants instead of food production. These

findings corroborate the results from similar studies carried out in other countries. For instance, Asegie et al. (2021, p. 9) showed that while “[...] the pandemic affected different dimensions of lives and livelihoods ranging from farming activities to small business and remittance, yet its effects varied depending geo-local settings and pre-pandemic livelihood activities”.

The issue of distress land sales to cope with the economic hardships caused by the pandemic was reported in both counties. Cases of land sales to cope with economic pressure during the pandemic were also reported rural India (Niyati and Vijayamba 2021). The sale of land means the loss of a primary asset in the rural areas. While this is a result of desperate circumstances, it is likely to drive those involved to extreme poverty in terms of living space and livelihood. As indicated, in most cases, the money from the land sold is spent on basic household needs—food, education, healthcare, among others—instead of alternative income-generating activities. Even more disconcerting are cases where some individual used the pandemic as an excuse to sell the household’s land so that they could fund their personal lifestyle at the expense of their household’s livelihood. While this is not a regular occurrence, it is not rare in rural Kenyan communities in that, occasionally individuals sell part of or their entire land to either cater for social (healthcare), economic needs or to satisfy their consumerism fantasies—e.g., buying a car.

Regarding agricultural production, we learn that the pandemic barely had an impact in Kilifi because it coincided with a drought in the region. Conversely, the residents could not depend on farming as a coping strategy for their food security and income, as seen in Murang’a. The situation highlights the problem of economic vulnerability during a crisis for people living in rural areas where the climate conditions are harsh and land resources are underdeveloped. In Murang’a, where the community combines subsistence and commercial farming, the pandemic impacted livelihoods by disrupting the market access for their market-oriented produce. It also raised the cost of agricultural production, meaning that farmers could not optimise their farming activities. While market disruption and people being mostly at home had positive impacts on local food security, it meant that Murang’a community members could not raise income through the sale of produce for other non-food needs (e.g., education and healthcare). Several other studies have more generally documented the impact of COVID-19 on agri-food systems all over the world (Benton 2020; Talukder et al. 2021; Weersink et al. 2021; Nchanji and Lutomia 2021).

Based on the findings from both Kilifi and Murang’a counties, it is evident that non-farm income-generating activities are an important part of rural communities, especially where agricultural activities are less successful. We learnt that all businesses were affected, either because the pandemic restricted business activities and movement or because people did not have sufficient money to spend. Overall, given that considerably fewer people in Kenya experienced the worst of the virus in terms of hospitalisations and deaths relative to what happened in some countries such as the United States of America, Brazil, and India, it is reasonable to maintain that the government mandates had far more devastating effects on Kenyan society. Hence, there are some merits in the widespread global claim that mandates such as the lockdowns caused more harm than the disease (Grover 2021). The findings in Murang’a demonstrate that rural areas serve as a buffer in times of crisis for a significant proportion of the urban population. In the Western world, the majority of people live in urban areas with little or no connection to rural areas. In developing countries, most people reside in rural areas, and the majority of those in the urban areas happen to have emigrated to cities and towns in search for better livelihood opportunities but have family connections in the rural areas. The findings have shown that urban migrants who could not cope because of collapsed businesses or loss of jobs moved back to the rural areas, whereas others in urban areas engaged in reverse remittance. Rural households in the Global South rarely pay for living spaces, and for those living in areas with a good agricultural climate, food is never a challenge.

During a crisis, people in any community are forced turn to some form of coping strategy to deal with emergent shocks and stresses. In both Kilifi and Murang’a, it is

evident that individuals and households made efforts to get through their economic hardships. As seen, some went to extreme measures by selling their primary assets—land and other production assets such as cattle and piglets, among others. Others turned to temporary employment such as wage labor in construction sites. Kilifi and Murang'a's situations highlight a difference in the levels of vulnerability to the crisis and the levels of resilience because of the different climate conditions, especially regarding the ability to produce one's own food. Kilifi's community was less resilient and had to rely more on external aid than Murang'a's community. In Kilifi, we saw the private sector playing an important role in food provisions during the crisis, a gesture not seen in Murang'a. This is largely because much of Murang'a county does not have food insecurity problems, but it is also because there are no large corporations such as those present in Kilifi county. Nevertheless, as demonstrated, the local governments in both communities played a role, targeting the most vulnerable with aid. Kilifi seems to have gotten more help than Murang'a, probably because the situation was more extreme in the former county. Issues of corruption with respect to the transfer of supportive funds and food distribution highlight a lack of good governance in the country—good local governments, more specifically.

## 5. Conclusions

In conclusion, COVID-19 triggered major economic and social crises that continue to be felt all over the world today—more strongly by people in low- and middle-income countries. There is no doubt that the worst of the pandemic was felt during the lockdown and curfew periods, following major disruptions in the movement of people and goods and the limited access to services. People in both researched counties reported an improvement in the social and economic situation following the withdrawal of the COVID-19 mandates in the country. Indeed, the end of the lockdowns and curfews meant that most economic and social activities could resume. Accordingly, as the study findings have indicated, people find that the situation has been improving in both Kilifi and Murang'a. However, irrespective of the positive outlook, people whose businesses collapsed or who used up all their savings have not been able to restart their business, as they lack the capital used up during the height of the pandemic.

Some of the socioeconomic effects of COVID-19 in both Kilifi and Murang'a will be felt for a long time. Such is the case for people who sold land, which potentially left them without resources to earn a livelihood or a place to stay. The increase in teenage pregnancies and drug use means that some of those affected can no longer complete their education, which is detrimental to their social and economic life in the future and for society at large. In Kilifi, an already highly impoverished community, more children imply increased socioeconomic pressure. The suicide cases in Murang'a county will have somewhat similar implications, especially economic-wise given that victims are important contributors to the livelihood in their households. Arguably, because of the negative economic effects in Kilifi and Murang'a, the pandemic has significantly reversed the progress that has been made over recent years in terms of reducing the number of people in poverty worldwide.

The COVID-19 pandemic is the first major country-wide crisis that Kenya has experienced since over several last decades, and the same is most likely true for other low- and middle-income countries. Hence, it is a major lesson for both people in these countries and their government. Evidently, the crisis has taught people the importance of livelihood diversification and saving despite living in a country where opportunities are few. During the lockdown and curfew, people in both communities pursued alternative means of livelihood to meet their household needs, especially food. These efforts were more pronounced in Kilifi because relying on farming was not an option. For the national and local governments, the pandemic highlights the importance of investing in social protection programmes and good leadership. While the government provided some aid, it was only limited to few individual and households. Yet, most people in the community,

especially in Kilifi, were vulnerable and in need for support. Worse, as the findings indicate, the aid did not always reach the intended persons due to malpractice by some of the individuals responsible for the distribution process. This is a result of poor governance, which remains a critical problem in developing countries and exacerbates the vulnerability of people affected by a humanitarian crisis.

The present study provides several avenues for future research. First, exploring the long-term outcomes of the new livelihood ventures that people took up to cope with the pandemic. For those who became successful in this endeavour, it is interesting to explore what became of their new ventures. Understanding this phenomenon is critical for building local knowledge on resilience in low- and middle-income communities in times of crises. Second, issues of suicide and homicide during the pandemic are highly disconcerting. Understanding that the phenomenon can be attributed to the pandemic but also applies in other economically difficult settings within households is critical for future efforts to prevent such concerning outcomes. Third, exploring the private sector's role in providing social protection to vulnerable communities. In developing countries, the private sector rarely plays a role in social protection programmes. In Kilifi, we saw private companies providing societal help in the form of food provisions. Exploring the means and the willingness of the private sector to invest in social protection programmes, especially in the most vulnerable communities where they operate, is another compelling area of future research.

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