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The impact of Covid-19 on black farmers in South Africa

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ABSTRACT

Covid-19 is impacting on food systems and food security around the world, including in South Africa, revealed most starkly in rising food prices and increasing food insecurity. Debates on what kind of food system we need to respond to this crisis remain unresolved and lacking in a good understanding of the impacts of Covid-19 on farmers who are key actors in food systems. This article contributes to these debates by revealing the experiences of black fresh produce farmers in South Africa since Covid-19 arrived in the country and the government responded with a range of emergency regulations. This is based on in-depth research with 40 market-orientated black small- and medium-scale farmers. Giving particular attention to black farmers is essential in South Africa given the high levels of continued wealth and racial inequalities. The study has found that, despite overall growth in the agricultural sector, these farmers are facing many challenges and receive inadequate support. The outcomes of Covid-19 related impacts include reductions in production and incomes as well as job losses. If not addressed there could be long-term negative consequences that undermine the food system and reinforce existing inequalities. A holistic food system approach, better informed by an understanding of black farmers and the networks they are part of, will be valuable to finding solutions.

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1. Introduction

There has been a lot of concern and speculation, in South Africa and internationally, about how the Covid-19 pandemic will impact on food systems, agriculture, land rights and food security (Cotula 2021; FAO et al. 2020; PLAAS 2020; Schmidhuber 2020). As the pandemic conditions have continued it has become clear from various surveys that indeed there are increasing levels of food and nutrition insecurity in South Africa. Millions have lost incomes and a basic basket food has become ever more expensive, the result is shown in two thirds of households running out of money to buy food, at some point since Covid-19 (PMBEJD 2020; Spaull et al. 2021). At the same time, agriculture was the best performing sector of the economy with record exports of some crops (Tempia et al. 2020). Within this situation there has been little research that looked at the actual experiences of farmers since the outbreak of Covid-19.

The question this paper addresses is, what has happened to agriculture and farmers over more than a year of living with Covid-19? More specifically, what have been the experiences of small- to medium-scale black vegetable farmers? The purpose is to derive lessons that can inform

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discussion on the kind of farming and food system that can best contribute to ensuring food and nutrition security and creating a more equitable agricultural sector in South Africa.

While the effects of Covid-19 and regulations introduced to respond to it¹ are still being felt and evolving at the time of writing, we can now get some picture of how farmers and their operations have been impacted. This study focuses on black farmers as, despite the 27 years that have passed since the end of apartheid, politicians and academics agree that progress in land and agrarian transformation has been limited and more needs to be done to develop black farmers (Cousins 2015; Didiza 2019; 2021). It has been suggested that the development of small- and medium-scale market-orientated black commercial farmers can make the greatest contribution to a more equitable agricultural sector and much needed employment creation (Cousins 2015; NPC 2011). Covid-19 has already been seen to pose a threat to this as, among other impacts, it may undermine the ability of small-scale farmers to sell their produce, potentially affecting farm viability and leading to distress sales of land (Cotula 2021).

This paper sets out below the methodology used, then some background information on the emergence of Covid-19 and government responses to it, which are important to understanding how farmers were affected. Section 4 provides an overview of the farmers who participated in the research and their farming operations, before section 5 shares details of the findings on the impacts of Covid-19. The article concludes with a discussion of the findings and their implications.

2. Methodology

This article is largely based on field research carried out between September 2020 and May 2021 and it was written in June 2021, which was 15 months after Covid-19 started to have an effect in South Africa. The 40 black farmers who were the main research participants were all producing fresh vegetables on less than 50 hectares of land and selling their produce. They could be said to fall within the categories of farmers Cousins (2015) proposed as the focus for land and agrarian reforms and described as market-oriented black smallholder farmers; Small-scale black capitalist farmers; and Small- to medium-scale commercial farmers. The focus on vegetable producers is due to the well-established importance of fresh vegetables for a healthy diet (Wallace et al. 2020) and the agrarian reform potential that has been identified in vegetable production and markets in South Africa (Cousins 2015; NPC 2011).

The farmers were identified through existing projects and networks of the research team and because they were known to be producing and selling fresh produce. The research team – that comprised staff and students from the University of the Western Cape, University of Pretoria and the Association for Rural Advancement – did not have any prior knowledge of whether or not these farmers had been affected by Covid-19. The participants comprise 13 farmers from Limpopo, 12 from Gauteng, 11 from KwaZulu-Natal, and four from Mpumalanga, made up of 22 women and 18 men. This is not a statistically representative sample, but it does cover a diversity of experiences and provides a good basis for deriving lessons about the real impacts black farmers in this sub-sector have experienced from Covid-19.

The research involved in-depth interviews, using a structured questionnaire supplemented with additional open ended discussions with the farmers. Initial interviews were all face-to-face on the farms. Repeat visits to the farmers and follow up phone calls were used to track how they were affected by and responding to the pandemic during the research period. The interviews first established information on the farm operations and then looked at changes that had occurred since the beginning of the Covid-19 pandemic. Questions were asked about the changes experienced, which could have been positive or negative, and what changes were considered to be due to Covid-19 and related regulations. Questions were also asked about any state and specific Covid-19 related support received. The analysis involved post-coding the responses to identify particular phenomena, and what could reasonably be ascribed to Covid-19. This included exploring specific impacts experienced and what the broader outcomes of these were for the farm operations.

In addition to farmer interviews, the same research project has carried out interviews with a range of other actors in fresh produce distribution, including municipal market agents, shop managers and

street traders selling fresh produce. These interviews involved a similar questionnaire and process as used in interviewing farmers. Already published research, articles, and available agricultural and market data were also used to get a wider picture of the Covid-19 impacts on food systems and related debates.

It is important to understand and analyse the experiences of farmers within a food system framework. This makes us more aware of the interconnectedness of many elements that make up the food system and how shocks and interventions in one part of the system will impact elsewhere including on production and on who benefits and who loses out (Devereux, Béné, and Hoddinott 2020). The High Level Panel of Experts on Food Security and Nutrition have given this definition: “A food system gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes” (HLPE 2014, 29). The approach also recognises the interrelatedness of the food system with other social, economic and ecological systems and thus other development goals. A holistic understanding is increasingly understood to be essential for us to deal with the complexities of food production and distribution and all the factors that enable and impinge on that (FAO 2018; FAO et al. 2020; HLPE 2020). This increased interest is confirmed by the United Nations convening the first international Food System Summit in 2021 (UN 2021).

In simple terms, for this study, a food system approach means that while the impacts of Covid-19 on agriculture and farmers are central this can only be understood by situating farmers in relation to inputs, markets, the communities they are part of and wider societal factors. These factors include the impacts on food and nutrition security, the livelihoods of others within the food system, and the relationship with the wider challenges South Africa faces, such as inequality and poverty.

3. Background

On 11 March 2020, the World Health Organisation declared the Covid-19 a global pandemic, that is a disease prevalent throughout the world (WHO 2020). On 15 March, with the first cases confirmed in the country, the President of South Africa declared a National State of Disaster. In the following weeks disaster regulations were put in place with the aim “to address, prevent and combat the spread of COVID -19 in South Africa” (COGTA 2020, 3). The regulations included a lockdown that required all people to stay home, aside from essential service providers who needed permits to operate, for an initial period of 21 days from midnight on 26 March 2020. That was then extended for two weeks until 1 May, when there was a limited relaxation of the measures. From that time, until the time of writing in June 2021, the country has lived with a continued legal National State of Disaster that has involved varying degrees of restrictions that are adjusted from time-to-time in response to risk assessments. These restrictions have, among others, included complete bans on alcohol and public events for periods of time, curfews, restrictions on travel, restrictions on gatherings and social distancing requirements (South African Government 2020). The government also announced a range of support interventions for the agricultural sector to the value of R1.2 billion, that were said to be “mainly targeting financially distressed small-scale farmers” (DALRRD 2020).

While food supply was always deemed an essential service, there was confusion around what activities related to food were allowed to continue. On the retail side street traders and spaza shops were initially prevented from operating despite them selling food and there were also challenges experienced in accessing permits that were required for people working in the food sector (Battersby 2020; Wegerif 2020).

It seems clear that we are now facing a Covid-19 triggered food crisis. In May 2021 a 4.8% month on month increase in world food prices, the highest since 2010, added to previous increases to show a 39.7% increase in food prices since May 2020 (FAO 2021). Food prices in South Africa also maintained an upward trend with food inflation exceeding core inflation every month since the beginning of the pandemic by an average 64.2%.² An ongoing survey of the cost of a basket of basic

food, purchased by low income women, found the basket was 12.6% more expensive in March 2021 than a year earlier, about 4 times the core inflation rate (PMBEJD 2021). This has combined with a 43.2% unemployment rate (using the expanded definition) and substantial numbers of people losing incomes to leave more people food insecure (Spaull et al. 2021; Stats 2021). The BFAP (2020, 7) food affordability tracker showed that by October 2020 “healthy eating [was] not within the reach of the least affluent 50% of households in South Africa”, even when receiving government support grants. Yet, at the same time there have been well-publicised reports that agriculture is one of the best performing economic sectors in South, with an optimistic outlook for the future (BFAP 2021; Majola 2021). The drivers of food price inflation, and the link with agricultural production, are complex. They include not only Covid-19 during these times, but also factors such as international food prices, production costs, exchange rates, weather changes, and fuel prices (SARB 2021). In this situation, it is useful to explore what kind of food system is needed to respond holistically to the crisis of food insecurity and for that it is important to understand more about the Covid-19 impact on farmers.

4. The farm operations

This section of the article gives an overview of the farming operations of the research participants before Covid-19. It is divided into five main areas: land, labour, inputs, production and markets.

The farmers involved include 22 women and 18 men. The youngest is 23 and the oldest 70 with an average age of 48. The years of experience since they had begun farming ranged from 1 and a half to 32. Encouragingly 13 of the farmers are youth (35 years or less) and just over half of them had been farming for five years or less (Table 1).

The newer farmers include quite a number of the youth as well as some of the older farmers who started farming after retiring from other jobs. Eight of the farmers had other jobs or businesses and a further five had other business activities that were closely linked to the farming, such as agricultural training and processing. For the rest (27), aside from the pensions some received, farming was their only source of income. The education levels range from those with very little basic education to a few with masters degrees.

4.1 Land

The 40 research participants were all using land of less than 50 hectares with five using less than quarter of a hectare. The largest number (23) used between 0.25 and 5 hectares. Eight were producing on between 5 and 10 hectares, and just four had over ten hectares. It should be kept in mind that some farmers who had small amounts of land used intensive production processes including in tunnels and hydroponics.

There were also a wide spectrum of land tenure arrangements with most of the farmers (23) using communal land in former homeland areas and five on private land they had bought. Two are renting land from private owners and two are renting land from land redistribution programme beneficiaries

Table 1. Farmers' ages and years of experience.

Ages	Number of farmers
35 and under	13
36–60	18
Over 60	9
Years since started farming	Number of farmers
5 or less	21
6–10	6
11–20	10
more than 20	3

who are not producing on the land themselves. One is producing on land her community became owners of through the settlement of a land claim. Six of the participants are farming on land allocated to them within agri-parks that are part of government programme of support offered to emerging black farmers (South African Government 2021). These arrangements in the agri-parks are temporary, intended to be for three years, with the expectation the farmers will acquire their own land after that. The farmers we spoke to, however, did not have the resources to acquire land. One of the farmers is using an urban roof top space for hydroponic farming.

The land access arrangements among the 23 farmers in communal areas vary considerably and in a number of cases involve the use of multiple pieces of land obtained in different ways. This included those growing in gardens of less than quarter of a hectare around their homes up to others accessing up to ten hectares of arable land. Access to the communal land was also obtained in different ways, including inheritance, using land of relatives, renting from others, buying (even though this does not constitute a full freehold purchase), and being allocated by traditional authorities with permission to occupy.

These findings confirm the continued importance of communal land for black farmers. It is unfortunate to find productive black farmers – eleven in this sample, including those in the agri-parks – who rely on short-term and rental arrangements as they have not been able to get secure and long-term rights to land. The disjuncture between the land redistribution programme and agricultural development is reflected in the situation of productive black farmers renting from land redistribution programme beneficiaries who were not able to use the land themselves.

4.2 Labour

Most of the farmers work on the land themselves, some assisted by relatives, and the majority employ additional labour. In total 22 had permanent employees and another overlapping group of 22 employed temporary labour; some have permanent but no temporary employees and others only employ temporary labour. Seven of the farmers had ten or more permanent employees before Covid-19.

4.3 Inputs

Across the farms the full range of inputs are used with farmers purchasing seeds, seedlings, fertiliser, pesticides, herbicides, packaging materials, and using tools from hand hoes to tractors. Most of the inputs are purchased at typical agricultural supply shops, for example NTK in Limpopo, in the towns nearest to the farms. Farmers in the agri-parks receive a proportion of their inputs from the department of agriculture and five others, all in KwaZulu-Natal, had received a limited quantity of seeds or seedlings from agricultural support services. Electricity is another important, and increasing, input cost that gets used to power pumps for irrigation and cold rooms for those who have them.

Other interesting sources of inputs for certain farmers are online purchases and local hawkers. Seedlings come from a diversity of growers, including large corporate suppliers, but also from other farmers.

4.4 Production

Most of the farmers used conventional production practices with the levels of mechanisation depending on crops and the scale of operation. All use forms of irrigation and some are using tunnels and shade cloth, with others planting in the open. Only two said they use organic production techniques, with the rest (38) using chemical fertilisers or pesticides. Quite a number are, however, trying for low external inputs approaches, especially in terms of fertiliser use; 14 farmers in the study who do use chemical pesticides are not using any chemical fertilisers, rather relying on animal manure and composting. For a few this is because they believe it is a healthier and more

environmentally friendly way to farm, while others said they could not afford to buy fertiliser. Pest management is clearly a challenge even for those who prefer more agroecological approaches. One farmer related how she started with the intention of doing organic production, but after losing too many crops, she resorted to pesticides,

4.5 Markets

The overall most important market for these farmers are small-scale and micro-enterprises that are often referred to as “informal”. This includes: street traders or hawkers the majority of whom are women; bakkie traders who buy and collect from the farms; selling locally either to people who buy direct from the farm or the farmer themselves selling in the street or door to door in their neighbourhoods; and a few spaza shops. This sector has been widely recognised as important for food systems and food security (Nordhagen et al. 2021) and in this study is confirmed as important because it is used by most (35) of the farmers and it is also said to give the best returns due to better prices, normally without transport costs, and the sales being in cash.

Produce that farmers sell through municipal markets can also end up with the informal sector food traders who make up a large proportion of the buyers at municipal markets. Sales to the informal sector have been estimated to account for 50% of sales at the Johannesburg Fresh Produce Market, which is the largest such market in the country (Wegerif 2020). Only five of the farmers did not identify part of the informal sector as one of their markets and this was due to them producing high value items that are not generally in demand within their local communities and that fetch better prices when sold to often distant end markets, such as restaurants and hotels.

It is important to point out that the informal market is not just important for smaller farmers. All of the seven medium-scale farmers – counted as those with ten or more permanent employees – sell at least part of their produce through informal markets; in particular to street traders and bakkie traders. Four of these stated that these were the most important or best markets for them in terms of volume and/or prices received. Another farmer who had nine fulltime employees and also employed additional temporary workers sold exclusively to street traders that he said were all women.

The next most commonly used form of market are the municipal fresh produce markets, that just over half (22) of the farmers sold to. There are three main advantages of these markets. First, they create a market opportunity for higher value vegetables (such as herbs, green beans, baby marrow, chillies). Even some of the smallest scale farmers located far from municipal markets, such as in Vhembe District of Limpopo, sell to the Johannesburg and even Cape Town fresh produce markets. Second, for some of the larger-scale producers, the municipal markets can take the volumes they want to move in what for the farmer is a single transaction. This is likely to be a more important factor for farmers that are larger than any of the medium-scale operations in this study. Thirdly, for a number of farmers who prioritise other higher paying clients, the municipal markets create a market of last resort where they have a good chance of selling what they could not move elsewhere. This last role may not be ideal for these markets and the agents who work there, but it is important for farmers.

Farmers do have complaints about the municipal markets, as well as good experiences to share. The complaints are largely about the high transport costs (which can't be blamed on the market), low and unreliable prices, and poor communication. For small-scale farmers far from markets the transport costs as a proportion of their sales income is large. Farmers in Limpopo explained the high costs involved in getting produce to collection points, sometimes over 50 km away, and then putting it on trucks that go to Johannesburg. Nevertheless, these transporters perform a key function and give farmers access to markets they wouldn't otherwise have. Farmers shared stories of having sent produce to the market only to find it was not sold and left to rot. Others talked of seeing money deposited into their banks that was far less than they expected.

Where the municipal markets are working well it is always due to an agent the farmer has developed a relationship with and it involves quick sales of produce and good communication. As one farmer said: "I work beautifully with that agent, you know, she would hook me up to so many people". Another said: "The agent is so good for me. We communicate every time and he offers me advice as to what I need to plant and also what is paying best at a particular time."

Twelve of the farmers sell to supermarkets from among the large supermarket groups. This included one who sells to a main distribution centre, while the other 11 sell directly to particular branches through arrangements with the local store management. The experiences with supermarkets were quite varied. The common complaint was about low prices (less than selling to informal traders) and some experienced abrupt reductions in prices and delays in payments, while others appreciated the steady demand and were paid in cash.

Three farmers made direct sales to restaurants and hotels. Quite a number who sold through municipal markets also believed their produce was destined for restaurants and hotels, something that became important in terms of the Covid-19 impact. A few farmers sell to independent local shops and one exports some of her produce to neighbouring countries.

5. The impact of Covid-19

This section addresses what were found to be the impacts, positive or negative, of Covid-19 on farmers and their agricultural operations. It is organised first around the same five areas of land, labour, inputs, production and markets. Then some additional impacts from Covid-19 as well as non-Covid-19 related challenges are identified.

5.1 Land

Unexpectedly, there were two cases of farmers already losing access to land. In a case in KwaZulu-Natal and another in Gauteng, women farmers who had been using school land abandoned it after theft and destruction of equipment and fencing. They attributed this to the schools not being occupied during the Covid-19 lockdown and indeed theft and vandalism at schools were widespread in this period (Mvumvu 2020). One of these farmers found that after she stopped using the land the school "sold" it to someone else. For now, she is only producing at her home garden. The other set up production at a new location.

There is a danger that more farmers, especially those who have gone into deeper debt and those who have stopped production, could lose land in the future.

5.2 Labour

Ten farmers reported various disruptions to labour availability. During the first hard lockdown some workers could not get to the farms. There was uncertainty about who was allowed to travel, difficulties obtaining permits and limited transport available. The labour challenges did not stop with the end of the hard lockdown, farmers reported that many workers just did not come back to work. It appears that many workers, and some farmers, were afraid of Covid-19 and felt that it was just not worth the risks. One farmer in referring to the labour challenges said "some went away, they were scared when it started, everyone was very tense." Other farmers received requests for higher pay due to Covid-19 risks and transport challenges. After the hard lockdown, continued limits on the number of people that could be carried in a vehicle and on the hours public transport was moving, as well as curfews, made it hard to reach work on time. Picking up workers in a crowded bakkie, as many farmers do, was also not a good option with the risks of the coronavirus transmission and this resulted in increased transport costs.

Workers and farmers' fears were not unfounded; higher than usual death rates were experienced around the country (SA-MRC 2021). At least two farms in this study had workers who died with

Covid-19 and many also lost close relatives, including relatives involved with the farming. Organising funerals for relatives was also reported to have disrupted work.

Worker availability was not the only challenge as farms with larger work forces also needed to reduce the number of workers in one place, especially in operations such as packing. They also incurred extra expenses in purchasing personal protective equipment such as masks and sanitisers.

In total nine farmers reduced the number of people they employed. This was not due specifically to the labour disruptions mentioned above, but more to cope with a general decline in business due to the combination of different Covid-19 impacts (Table 2).

5.3 Inputs

Ten farmers reported disruptions to input supplies and 12 said input prices had increased. The disruptions were due to factors such as transport limits, shops closing and lack of availability of some items. In one case a supplier worked for a time on an appointment only system and this negatively affected smaller-scale producers who were not prioritised for appointments. Seedlings were the most affected inputs with farmers reporting that they were often not available and that prices rose; doubling in one case. Certain packaging material and seed trays also increased in price and in a few cases had not been available.

The farmers' claims of increased input prices are supported by macro-level industry data. International prices for key fertilisers, such as Di-Ammonium Phosphate and Urea, increased by close to 50% from February 2020 to February 2021. The South African domestic price increases were ameliorated to a limited extent by a strengthening Rand, but there were still substantial increases; Urea and Mono-Ammonium Phosphate went up by 26.2% and 21.7% respectively over the same period (NAMC 2021).

5.4 Production

Just over half the farmers (21) reported reducing their production, including six who stopped production completely for a period of time. Of the six, three had started again at the time of writing and three say they will soon. The reasons for reducing or stopping production are related to a combination of reduced market demand and a range of factors that directly impacted on production. These are grouped into eight Covid-19 related direct impacts on farmers that negatively affected production:

1. Increased input prices;
2. Disruption to supply of inputs;
3. Disruption to labour;
4. Covid-19 deaths;
5. Increased theft;
6. Agricultural advisors (private and government) not visiting farms;
7. Travel disruptions; and
8. Uncertainty and anxiety.

When these combine together they make continuing production a serious challenge. Fifteen farmers lost crops or stock for Covid-19 related reasons, such as production disruptions that prevented harvesting at the right times, while others were unable to sell produce already grown.

On the positive side, six farmers responded to changing demand by starting the production of new crops, with three of them starting to produce crops for local markets that they had not served before, and the other three starting to produce new higher value crops such as herbs and okra. In all cases, this diversification of production reduced risk and ameliorated some of the losses experienced.

None of the farmers had yet managed to benefit from the well-publicised demand and price increases for garlic and ginger. The big challenge being that these crops take time to mature. A few farmers planted garlic, but were yet to harvest. One explained that it is about having the experience of growing these new crops in their particular soil and weather conditions, it tends to take trial and error before one gets the best results. The other danger that farmers spoke of is that many will go into these crops when they see the high prices and then in a few months when they all harvest the prices could crash again.

This study was not set up to compare agroecological production with conventional agriculture. The negative impacts of increased input prices do, however, indicate the advantage for farmers of not being dependent on buying inputs. Three of the farmers responded to the situation by starting to produce their own seedlings and one started using kraal manure instead of buying fertiliser. Internalising within the farm more of the processes – such as producing seeds, seedlings and compost – is a way to create more autonomy and resilience for farmers in such crisis situations (Van Der Ploeg 2020).

5.5 Markets

The biggest negative impact of Covid-19 for farmers has been the drop in demand for their produce (27), combined at times with receiving lower prices (9). The reduction in demand can be attributed to two main processes. One is the stopping of large events along with the closure of restaurants and hotels during the strict lockdown and then their reduced level of operation under later restrictions. Curfews, social distancing measures and the dramatic decline of tourism all had an impact (Sucheran 2021). The limitations on events also reduced the sales for local events, such as funerals, family societies and weddings. A number of the farmers sold directly or indirectly to restaurants and hotels and at least one of these suffered a complete halt in all sales for over two months. That farmer was only able to stay in operation thanks to substantial financial support, that they will be paying back for years, from a large and patient investment partner; the kind of support many black farmers do not have.

The second process that reduced demand for a larger number of farmers, is the substantial drop in buying power, especially for poorer people, due to general economic decline and the related loss of jobs and income. The National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM) longitudinal survey found that 3 million people lost their jobs and a further 1.4 million were furloughed (did not get paid) in the first months of Covid-19 emergency measures. These losses hit the poorest hardest with a 31% decline in employment for the poorest 50% of workers compared to a decline of just 3% for the richest 25% (Spaull and Oyenubi 2020). While there has been some recovery, by March 2021 employment was still substantially below pre-Covid levels and women and the poorest remain worst affected (Spaull et al. 2021; Stats S.A. 2021). This has hit black farmers hard, because the informal food market that is so important to them sells largely to the hardest hit poorer consumers who rely on this as a source of accessible food (Battersby, Marshak, and Mngqibisa 2016; Rudolph et al. 2021). Most households use supermarkets as a source of food, but this tends to be once per month for people in poorer neighbourhoods who more frequently use informal street markets and buy up to five times a week from local shops and spazas (Rudolph et al. 2021).

Seven farmers responded to the loss or reduction of their previous markets by shifting to more local markets, such as selling in their local community or to street traders, rather than to supermarkets and municipal markets. This indicates the returns farmers can get from such informal sales, even when this sector is experiencing declines. Transport disruptions that blocked access to markets, including stopping bakkie traders from coming to farms, also drove moves to very local markets.

Nine of the farmers experienced an increase in demand. This does not mean they experienced higher incomes as the increases were usually for certain produce, including new crops, while demand dropped for other produce. Further, one of the only farmers that reported an overall increase in demand, did so because they reduced their prices. They explained that their clients,

who were women street traders selling to poorer people, did not have the money to pay more and could not increase the prices for the commonly eaten vegetables they sold. The farmer said his profits declined and he struggled to survive as he paid more for inputs while lowering his prices because “more people lost their jobs and others experienced pay-cuts, difficult times, people survived through buying our products at a low price.”

Others who experienced increased demand could not benefit due to production disruptions, as one farmer explained: “there were advantages on other produce, such as potatoes, because the demand and price increased during Covid, but I lost out since I didn’t have supply.”

Three of the farmers in KwaZulu-Natal had been suppliers to the National School Nutrition Programme (NSNP) through Enterprise iLembe, an economic development agency of the local municipality (iLembe 2021). This arrangement stopped in March 2020, coinciding with the Covid-19 lockdown and closure of schools. This was not, however, due to Covid-19, it was because of the end of the contract period and the introduction of changes in the NSNP tendering procedures. It is unfortunate that what appears to have been the effective use of state food procurement to benefit small-scale black farmers was ended just as it could have been most useful in a time of crises.

5.6 Government assistance

Only four farmers received specific Covid-19 relief funds and three of these were already within government run agri-parks. Four others got seeds from extension officers and one received fertiliser, but this assistance did not appear to be specific Covid-19 relief. Even in these few cases where support was received, farmers were not impressed. One farmer complained that the limitations on where and what they could use vouchers for prevented them getting what they really needed. Another received seedlings, but had no manure or fertiliser needed to grow them. Assistance with transport or transport costs to reach markets was suggested by a number of farmers, but is not currently available.

5.7 Gender

On the face of it there were no clear gender differences in the farming operations. Women and men were found among the largest and most entrepreneurial farmers as well as among the smallest-scale of producers. Nevertheless, the only two farmers to lose access to land are women, indicating that women may have more challenges in getting secure rights to land than men. Further, five of the six farmers who halted production completely were women.

One women farmer who stopped production said “I stayed at home with no income, I had to look after my husband and three children.” Another said, “I was worried about my well-being and my family, I asked to stay at home”. These examples indicate that the additional responsibility women carry in the home and for childcare is limiting their ability to engage in farming. Covid-19 increased the burden of these responsibilities due to health fears and children being at home when schools were closed. The June 2020 NIDS-CRAM survey found twice the number of women compared to men were not able to work or found work difficult due to childcare (Spaull and Oyenubi 2020).

Two other women farmers did not have childcare responsibilities, but stopped production due to a combination of labour and market difficulties. The sample is too small to make firm conclusions, but it would appear women farmers, compared to men, may have less financial and other resources needed to cope with a crisis.

5.8 Anxiety

A general uncertainty and anxiety was an important impact of Covid-19 that contributed to decisions to reduce or stop production. This is a sensitive issue to uncover in an interview and one many

research participants may not have felt comfortable mentioning. Nevertheless, more in-depth discussions with farmers revealed how, among other things, they were unsure about what would happen with markets and with their workers and experienced anxiety about their own health as well as their economic circumstance. As one farmer said “let’s give it another month, so that is how we are operating now, just give it one more month to see what happens”. Another said “you invest money and you hope that by the end of March you will get R15,000 from your harvest, when you see that R15,000 diminishing you become depressed, and that means life has stopped.”

5.9 Poverty and food and nutrition security

All the negative impacts of Covid-19 put poorer farmers closer to poverty. After losing crops, one farmer could no longer afford their life insurance or pay the transport their two children needed to get to school; a year of schooling was lost. Another explained that the whole family depends on her and said “there is less money, we are not eating like we used to.” An advantage for a number of the farmers is that even when the markets failed they at least had food, as one said: “Fortunately we had food from our fields, we ate from there”.

A potentially wider negative impact on poverty and food and nutrition security could arise if more black farmers who supply small-scale food enterprises and the informal sector reduce or stop their production. This could damage a sector that is a source of livelihoods for many and a source of accessible and affordable food for even more people (Nordhagen et al. 2021; Rudolph et al. 2021; Wegerif 2020). Comparisons of prices were done for this study on a range of vegetables bought from a major supermarket and street traders in two areas of Johannesburg (the CBD and Ivory Park). This revealed that street traders are selling vegetables at prices averaging around half those of the supermarket. This makes street traders and the food production and distribution networks they are part of the difference between poorer families affording a balanced diet or not.

5.10 Non-Covid-19 impacts on farmers

In the discussions with farmers about the changes in their operations over the last year, they often raised factors that had a significant impact on them, but were not attributable to Covid-19. These included ongoing difficulties, such as not having cost effective access to viable markets and shocks, the most prominent of which were crop damage from cold spells including frost, and heavy rains, even floods. A few farmers also had problems with irrigation at key times leading to significant crop losses. What came across clearly is the way Covid-19 related shocks exacerbated the ongoing challenges that farmers face.

6. Discussion

The findings of the research shared in this article show that Covid-19 has directly impacted farmers through anxiety and sickness and deaths among workers and relatives. The government responses have further disrupted farmers operations in numerous ways and many farmers have not benefited from the government, or other, support intended to relieve the impacts. While food production should have been allowed to continue, farmers experiences show that not all parts of and activities in the food system were considered in the regulations and their implementation. There was a need for action to reduce the spread of the coronavirus, but the lack of effective mitigation of the impacts on farmers was unfortunate and can broadly be attributed to the government’s failure to take a holistic and well informed food system approach (Devereux, Béné, and Hoddinott 2020; HLPE 2020).

Despite the challenges there have been a few positive experiences worth mentioning for possible lessons. Only one farmer reported a higher profit during this period than they had before. This was achieved by him selling more door-to-door in his neighbourhood, whereas he had sold more to

Table 2. Overview of key findings and analysis for the participating farmers.

Outcomes	Reduced savings/wealth. Higher debts. Discouraged farmers and prospective farmers			
	Reduced income		29 ⁿ	
	Reduced production		21 ⁿ	
	Lost crops or stock		15 ⁿ	
	Reduced number of employees		9 ⁿ	
	Stopped production (temporarily)		6 ⁿ	
The results of these for farm operations	Production costs and challenges			Reduced demand for produce
	Increased input prices	12 ⁿ		Less sales
	Disruption to supply of inputs	10 ⁿ		Lower prices
	Disruption to labour	10 ⁿ		27 ⁿ
	Covid-19 related deaths of workers or relatives	10 ⁿ		9 ⁿ
Direct impacts experienced	Increased theft	3 ⁿ		
	Agricultural advisors not visiting	2 ⁿ		
	Travel disruptions affecting markets and production	(10 ⁿ)		
	Uncertainty and anxiety			

ⁿ total number of research participants 40ⁿ

traders in the past. Only one research participant claimed no impacts on their farming due to Covid-19. They are a full-time farmer with two workers growing a range of vegetables – lettuce, spinach, tomatoes, onions, beetroots, carrots, and green paper, pumpkin – on 3ha of land in a communal area. They rely on animal manure obtained from other local farmers rather than fertiliser and sell to women street traders from a nearby town.

Nine farmers reported that despite various impacts they neither lost nor increased their overall level of income. They experienced negative impacts from Covid-19, but managed to sustain their farming enterprises at the same level as before through hard work and diversifying their crops and markets.

For most of the farmers the impacts attributable to Covid-19 were overwhelmingly negative. The direct impacts on production and market demand, as summarised in Table 2, combined to create five main negative outcomes experienced by farmers since the outbreak of Covid-19: reduced income; reduced production; lost crops or stock; reduced employment; and the stopping of production. These have all contributed to outcomes with potentially longer-term impacts; farmers have dug into savings reducing their wealth and others have gone deeper into debt to keep operating despite the losses made. This is leaving black farmers in a weaker position and is discouraging not only current farmers but other prospective farmers. Even with improvements in farming conditions, it will take years for many of the farmers to fully recover. Particular efforts are needed to ensure that the needs of women farmers are addressed as they appear to be more vulnerable to the negative impacts. If there are no improvements, these factors could lead to the loss of land and further declines in production by black farmers, despite these being farmers who have proved themselves capable, under normal conditions, of effective and in many cases high quality production.

These farmers have not benefitted from the agricultural sector growth in this period, which has been driven by bumper harvests and record exports especially of produce such as wine and citrus (Majola 2021; Tempia et al. 2020) and also a 98.5% increase in cereal exports (BFAP 2021). They have no access to those international markets and have seen the markets they depend on shrink at the same time as input prices and production challenges increased. This highlights the need for an in-depth and differentiated understanding of different parts of the agricultural sector and food system.

Farmers have made efforts to adjust, but the nature of farming – with its long-lead times for crops and dependence on particular weather and ecological conditions – makes it difficult to shift quickly in response to the fast changes that occur in a crisis. It is for these reasons that the

government needs to have a more structured approach to enabling and sustaining farmers in general and specifically black farmers, given South Africa's historical and continuing racial inequalities.

Sustainable solutions need to be ecologically regenerative and build greater autonomy for farmers to reduce their vulnerability to input disruptions and price rises. Agroecological production can do this – reducing input costs and bringing good returns to farmers – and should be promoted, including through learning from existing best practices and farmer to farmer exchange (Côte et al. 2019; Rosset et al. 2011). This should build on the steps farmers are already taking towards lower external input production and be considerate of the time needed and challenges involved in such a transition.

A diversified approach to markets will be more resilient. It should start with the existing local and informal markets farmers have, especially the street and bakkie traders, and build on these as the core for developing stronger territorial markets (CSM 2016). Finding ways to replicate more of the good experiences that farmers have had with municipal markets would be another useful route to securing more distant and wealthier markets that black farmers also need access to.

7. Conclusion

The positive macro level picture of the agricultural sector in South Africa, in 2020 and early 2021, with its strong economic growth and exports, hides the challenges many farmers are facing due to Covid-19. The Covid-19 related factors have acted in combination with the other challenges and shocks farmers already faced to have severe impacts on some. Many black farmers are badly hit because they lack the resources and scale of operation needed to weather the storms. This is resulting in the reinforcement of existing inequalities in the country, along with related poverty and food insecurity.

The government interventions to address Covid-19 and the support measures put in place to ameliorate the negative effects have not adequately considered the particular conditions of black farmers and the production and distribution networks they are part of, notably the informal sector of small enterprises that play a key role in food systems, but have often been overlooked. This was most clearly shown with early lockdown measures that caused major disruptions to these networks, but it has continued and manifests in the lack of effective support to address the impacts being experienced by black farmers.

The situation of black farmers needs to be addressed with holistic support and the creation of an enabling environment for the flourishing of the many successful initiatives they are already undertaking. This needs to focus on the parts of the food system important to black farmers and address the regulatory environment (including Covid-19 regulations), land issues, transport costs, financing, and markets. This is essential because of the role black farmers can play in the much needed transformation of the agricultural sector and meeting the livelihoods and food and nutrition security needs of many people in poverty. This requires both urgent action, given the ongoing Covid-19 pandemic and the growing food price crisis, and a long-term approach that improves agrarian reform and agricultural support.

How this will be achieved needs to be the subject of more debate. Debate that will be more productive if it is more inclusive and takes a holistic food system approach informed by a better understanding of the experiences and initiatives of small- and medium-scale black farmers and the actors in the networks they are linked to.

Notes

1. For the sake of brevity, henceforth when this article refers to the impacts of Covid-19 it will, unless explicitly stated otherwise, mean the impacts of the disease itself as well as the government responses to it.
2. This is from the authors calculations based on analysis of the Statistics South Africa monthly P0141 Consumer Price Index Statistical Releases, from April 2020 to June 2021.

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