

EFFECTS OF COVID-19 ON URBAN AND PERI-URBAN FARMERS IN CENTRAL ZIMBABWE

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ABSTRACT

The COVID-19 pandemic has affected the global economy since its advent in 2020. The agricultural sector is among the sectors that have been significantly affected by the pandemic. The effect of the pandemic in the agriculture sector is cutting across all the value chains inclusive of production, marketing and input supply, among others. In addition, both small-scale and large-scale producers have been affected. This study looks at the effects of the COVID-19 pandemic on urban and peri-urban agriculture in Gweru, Zimbabwe with a view to derive lessons that can inform discussion on how the urban and peri-urban farmers can circumvent economic shocks such as COVID-19 in the future. Agriculture in and around urban areas is practised by a significant number of people in some continents including Africa. Urban and peri-urban agriculture has a noticeable contribution to food and nutrition security and has a potential to reduce poverty. Face -to -face interviews were conducted with a total of 40 individual farmers using a structured questionnaire and three virtual focus group discussions were held with a total of 24 farmers. Simple random sampling was used to select participants from a list of farmers provided by the Department of Agricultural Technical and Extension Services. Each member of the population had an equal chance of being selected. The study established that the pandemic has had several effects on these urban and peri-urban farmers including limited access to markets, loss of income, increased cost of farming, competition from non-traditional farmers, adoption of innovative delivery mechanisms, difficulty in accessing inputs and reduced farm labour. Farmers were forced to adopt information technology to enhance communication among themselves and other stakeholders. To protect and safeguard livelihoods within the agricultural system, the study recommends that the government increases spending on social safety nets for urban and peri-urban farmers, reform agricultural finance and improve financial support to smallholder farmers.

Key words: COVID-19, Agriculture, Urban, Peri-Urban, Food Security, Information Technology, Safety Nets



INTRODUCTION

This paper looks at the effects of the COVID-19 pandemic on urban and peri-urban farmers (UPFs) in Central Zimbabwe. The objective is to derive lessons that can inform discussion on how the urban and peri-urban farmers can circumvent economic shocks such as COVID-19.

The first case of COVID-19 in Zimbabwe was reported on 20 March 2020 [1]. In response, the government introduced a national lockdown to prevent the spread of the pandemic. This was done through the proclamation of Statutory Instrument 77 of 2020 in line with World Health Organisation (WHO) protocols [2]. The Statutory Instrument 77 of 2020 prohibited gatherings for any purpose, restricted movement of public traffic and people in local authorities. Local authorities were mandated to close and destroy premises which may likely favour the spread of Covid19. Under these measures most agricultural market stalls were demolished, hence leaving most farmers without places for doing businesses. The restrictive measures disturbed livelihoods of smallholder farmers through disruption of their social capital since it was no longer possible to work together to maximize productivity [3]. COVID-19 restrictions disturbed the value chains inclusive of the provision of agricultural extension services, access to agricultural markets and labour deficits [4].

The effects of the pandemic on agriculture are devastating in developing countries given that the sector is the mainstay of the livelihoods of the societies. Despite the decline in the share of agriculture in total production and employment across regions of the world, economies of most of these countries remain agro-based and livelihoods of the majority of the population are derived from agriculture [5, 6]. In Zimbabwe, Agriculture contributed on average 9.9% of the Gross Domestic Product (GDP) between 2012 and 2016 [7]. There are two main categories of farmers in Zimbabwe, namely, small scale farmers (smallholder farmers) with land holdings averaging 1.8 ha of arable land [8] and the large-scale commercial farmers who owned 2, 200 ha on average in 2000 and before [9]. Farm sizes for the latter sector have been decreasing since inception of the land reform programme in 2000 [8, 9]. Whereas the large-scale sector practises both irrigated and rain fed farming, smallholder farmers are largely into rain fed agriculture and practise mixed farming (cropping and animal rearing). On the other hand, although the large-scale farmers may practise both crop production and animal production, they specialise in one of these two systems.



Whereas most farming activities are carried out in areas outside urban centres, there are farmers who practise agriculture in and around urban areas and despite the controversies (in terms of the relative contribution to food and nutrition security and proportion of the urban and peri-urban population practising agriculture across regions) and challenges associated with UPA (urban and peri-urban agriculture), a significant number of urban dwelling people in Africa and Latin America engage in agriculture and the practice is beneficial to food security, particularly in Africa [10, 11, 12, 13]. Approximately 10-20% of the global food supply comes from UPA [13, 14]. The sector thus, has the potential to reduce poverty and increase food, nutrition, and income security to urban and peri-urban households. Urban and peri-urban farmers (UPFs) in Zimbabwe provide both animal and crop products to urban households directly (direct sales) or indirectly (via supermarkets). Land holding for peri-urban farmers is estimated at 2.5ha [9]. Urban and peri-urban agriculture is often considered a practice by the generally resource poor urban communities who seek to achieve self-food sufficiency and / or generate income [15].

The impact of the COVID-19 pandemic has been felt across the globe, with all economic sectors including agriculture equally affected. It appears the effects of the current COVID-19 pandemic have far outweighed those of the previously experienced pandemics, across the globe [16]. The effects of the pandemic on agriculture are currently occupying centre stage among economists and agriculturists as evidenced by various studies which have looked at the impact of the pandemic on agriculture. These studies have looked at the various facets of agriculture including agriculture extension, agricultural supply chains, agricultural mitigation measures and interaction between COVID-19 and global food systems [16, 17, 18, 19, 20, 21, 22, 23].

Both small-scale and large-scale producers have been affected by the pandemic. However, the responses of these farmers to the crisis have been varied in nature and magnitude, with large-scale farmers better prepared to circumvent the challenges through accessing capital to cushion short term losses whilst small scale farmers must innovate through shared labour, diversify to subsistence produce and sell assets. Smallholder farmers experienced challenges selling products or buying inputs resulting in a loss of income and produce thereby potentially affecting future cultivation seasons [24]. Small-scale farmers have limited resilience to shocks and fewer support structures in place to decrease the impact and increase the rate of recovery due to shocks [25]. This study seeks to determine the extent to which urban and peri-urban farmers have been affected by the pandemic.



MATERIALS AND METHODS

Field research was carried out to collect data between August and November 2020. The study population was all urban and peri-urban farmers in and around Gweru. The total registered farmers in the urban and peri-urban areas were 139 as of July 2020 according to the register kept at the Agriculture and Extension Services (AGRITEX), Gweru District office. A sample of 40 farmers (22 women and 18 men) was used for in-depth interviews and a further 24 farmers participated in virtual focus group discussions.

Simple random sampling was used to draw a representative sample from the Department of Agricultural Technical and Extension Services (AGRITEX) list of farmers in the urban and peri-urban areas of Gweru. Hence the sample frame for the study was the list with details of all farmers in urban and peri-urban areas in Gweru.

Data collection involved in-depth interviews and three virtual focus group discussions (FGDs), composed of eight participants each. Due to technological requirements for virtual discussions the participants for FGDs were relatively young farmers whose ages ranged from 32 -55 years and of the 24 farmers, 33.3% were female, and the remainder were male. Initial interviews were all face-to-face conducted on the farms. 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. Farmers also discussed changes they experienced due to COVID-19 and related regulations. Questions were also asked about any state and specific COVID-19 related external support received. The findings from the study were analysed thematically, based on the various themes discussed in the focus groups and interviews.

RESULTS AND DISCUSSION

The farmers indicated that their experience in urban or peri-urban farming was between 4 and 55 years, indicating diversity in experience among the farmers. Their ages ranged between 24 -74 years. Most of the farmers practised mixed farming comprising cropping and animal rearing, a practice typical of Zimbabwean smallholder farmers. The remainder practised cropping, solely. They were into local and export marketing of produce, with the greater proportion selling their produce locally. A few respondents sold their crops to both local and export



markets. Export markets were for two main crop types, flowers and garden peas, with the European Union being the destination.

The focus group discussions and in-depth interviews revealed that the COVID-19 pandemic and its attendant lockdowns disrupted livelihoods and value chains in urban and peri-urban areas. It exposed the agriculture system to a lot of challenges and brought about few positive developments.

Farmers narrated that they suffered loss in income at the beginning of the pandemic due to the lockdowns, but as movement restrictions began to be eased, impacts on income became muted. However, although income loss was reduced, households continued to experience shocks in the form of reduced food access. These findings are supported by other studies which established that the pandemic led to food export and import breaks, bankruptcy of enterprises, loss of income, unemployment, poverty, and inequality [26, 27, 28]. The results are discussed thematically below.

Access to markets

The advent of COVID-19 in Zimbabwe saw the government instituting a cocktail of measures to reduce the spread of the pandemic. Among the measures that the government put in place was the restriction on the movement of people. Initially only those in essential services sectors were allowed to move to and from their duty stations. The restriction in the movement affected urban farmers who found it difficult to get documents indicating that they were part of essential service providers. These documents (mostly a letter from a relevant authority) would allow them to pass police checkpoints. Literally, this meant that the farmers had limited access to local markets (including supermarkets in the city of Gweru) to sell their produce, leading to losses especially for perishable products such as tomatoes, and potatoes. Similar arguments have been cited in other studies [29, 30]. These studies argue that the pandemic's impact included losses of farmers' goods, especially fresh vegetables and milk products due to restrictions imposed in affected countries for movement and interactions. Losses of such crop and dairy products were due to farmers' inability to deliver the products to markets [31, 32].

Loss of income

Farmers indicated that their incomes were negatively affected when they failed to access markets. Some of them had standing arrangements with some big corporates to whom they supplied their produce. These corporates downsized their operations and hence reduced the amount of goods they purchased from the farmers. Large supermarkets which were also the major up-takers of farmers'



output reduced their orders in line with reduced business as there was restricted movement. This is consistent with other studies which established that the pandemic led to a reduction in demand for agricultural output as a result of closure of restaurants, hotels, and supermarkets which were off-takers of some of the produce [33, 34].

Increased expenditure

Farmers complained of increased expenditure because of the COVID-19 pandemic. They indicated that they had to incur increased expenditure due to holding and storage costs of the produce awaiting marketing. Further costs were incurred in searching for potential markets following the closure of conventional markets. Under normal circumstances farmers for certain commodities had ready markets but the advent of the pandemic meant the farmers had to look for alternative markets thereby incurring search costs. To manage some of the effects of COVID-19-induced hardships some farmers reported that they had engaged in information sharing on markets, preservation of produce and joint transportation of produce to far away markets.

Diversification

Farmers also highlighted that the pandemic forced them to adopt mixed farming, for both consumption and business purposes. Since sale of crops and / or animals was their major livelihood source, farmers were forced to think creatively to survive impacts of the pandemic. They also ventured into other small off- farm activities such as operating tuckshops to service local communities. This way they avoided heavy reliance on farming, to meet family needs.

Competition from non-traditional farmers

Farmers also indicated that there was increased competition as most households embarked on growing own crops and keeping chickens at their homesteads or opened “unused” areas (mostly state land) for this purpose, during the pandemic. Households had lots of time since they were at home most of the time hence, they ended up practising agriculture. This meant that they stopped relying on markets for their farm produce needs. This had the effect of reducing the demand for the produce from conventional farmers while, to some extent, increasing supply on the market. This then reduced the prices of the farmers’ produce, thereby reducing farmers’ income. The competition is likely to have negatively affected ecosystems through losses in flora and fauna due to widespread farming [35].

Innovative delivery mechanisms

Farmers adopted innovative mechanism of door-to-door delivery, especially for their established clients. In this case, farmers kept records of their regular



customers and would contact them through social media if they wanted to replenish clients' stocks. In this way the customers would not fall foul to the law enforcement for moving during the lock down period. The farmers also made sure they had enough supplies for their regular customers. Some of the satisfied clients would then refer others to the suppliers, increasing the client base for the farmers. The farmers would introduce a small mark-up to cover their transport cost. Some farmers did not deal directly with customers but dealt with community agents who became the go-between for the farmers and customers.

Difficulty in accessing inputs

With restrictions in movement under COVID-19 regulations, most farmers indicated that they faced challenges in acquiring inputs, for example, seeds, fertilizer, pesticides and farming equipment from their desired sources. Many farmers were used to accessing inputs and equipment from major cities but there were travel restrictions and inter-city travelling was banned. The situation was compounded by the closure of country - to- country borders. Some of the stockists bought their inputs from surrounding countries hence the restriction in the movement in and out of the country meant that these inputs were not readily available, hence affecting the planning process of farmers. Alternatively, the farmers ended up buying from expensive suppliers further reducing their profit margins.

Lack of Government Support

Farmers highlighted that they did not have access to government support to cushion them during the pandemic. Despite the government supporting various economic players, the urban and peri-urban farmers did not get any assistance. They felt that government was supposed to cushion them from the effect of COVID-19. Given that some of the farmers were employing several people, there was need for the government to safeguard jobs by supporting the farmers. This is important because it has been established that the restorative resilience of agriculture systems is dependent on exogenous efforts like governmental or international subsidies channelled to cover losses encountered by farmers due to reduction in food demand, fresh food losses or labour shortages [36, 37].

Failure to service debt obligations

Some farmers highlighted that they had debt obligations which became difficult to service. These obligations included bank loans, credit provided by service providers and input suppliers. The pandemic and its associated regulations dried the income sources of the farmers leading to failure to pay the debts. Faced with this situation, some farmers resorted to disposing of their household properties to pay their creditors.



Reduction of farm labour

To reduce the wage bill as income started to dry up, some farmers resorted to reducing the number of workers. Instead of using hired labour they resorted to using family labour. During most of the lockdowns families were always together at home, hence became the source of cheap labour for the reduced scale of operations. In cases where they hired labour it was for a few days rather than permanent. This reduced the cost of production.

Adoption of technology

On the positive side farmers highlighted that the pandemic forced them to adopt information technology as a major tool of undertaking business transactions. The marketing of commodities was now done through online platforms such as WhatsApp, hence increasing the reach of the clientele. The farmers established several WhatsApp groups where they were sharing ideas on production and marketing of their commodities. This reduced their transport cost as they no longer needed to physically go out and source markets or get ideas or solutions to their problems. They bemoaned the cost of data, a constraint identified also in literature [17]. They argued that social media was the preferred means of communication among farmers though the cost associated with acquisition of data and network connectivity were a constraint. There was need for telecommunication companies to reasonably cut data charges and make efforts to put infrastructure to cover the remaining unreachable areas [17].

CONCLUSION, AND RECOMMENDATIONS FOR DEVELOPMENT

The study established that the COVID-19 pandemic had several effects on the urban and peri-urban farmers in Zimbabwe. These effects include limited access to markets, loss of income, increased cost of farming, competition from non-traditional farmers, adoption of innovative delivery mechanisms, difficulty in accessing inputs, reduced labour, and the forced adoption of technology. To protect and safeguard the livelihoods of people associated with the agricultural system, the study recommends that the government increases spending on social safety nets for urban and peri-urban farmers and improve financial support for these smallholder farmers. There is also need to alleviate challenges related to costs of online communication and network connectivity.

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