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COVID-19 Rapid Socio-Economic Impact Study: Agricultural Value Chains in the Western Cape

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EXECUTIVE SUMMARY

This report has set out to estimate the potential economic impact of COVID-19 on the agricultural sector in the Western Cape. Since the sector has been classified as "essential", the estimated impacts are not expected to be as severe as others that are currently in total lockdown. However, as this report points out, the agricultural value chain is highly dependent on goods and services from other sectors of the economy, as well as on a stable macroeconomy and efficient trading conditions, both locally and in international markets. COVID-19 will have a direct and significant impact on the agriculture and related subsectors for reasons explained in this report.

Using a detailed breakdown of sub-sectors within the agriculture and agri processing sector, COVID-19 impacts are estimated based on industry feedback and publically available information at the time of writing. The results from the analysis suggest that under a "best case" scenario, the agricultural sector's turnover and export values are expected increase by +2.9% and +7.75% respectively and shedding around 2 500 jobs. In the "worst-case" scenario the decline is more severe as global demand drop significantly, logistical bottlenecks hamper sales and agritourism remain restricted for the rest of 2020. In this case, turnover declined by -10.8% and agricultural exports contract by -7.69% from the 2019 baseline. In this case, farmworker employment is expected to decline by 12.5%.

Although this is a starting point to analyse COVID-19 impacts, more detailed analysis and data are needed to update these predictions as the situation on the ground unfolds.

1 INTRODUCTION

There is no doubt that the current Coronavirus (COVID-19) will have major implications for both global and domestic agricultural value chains, as well as impact food security at both a macro and micro level. The regulations published to govern how the "lockdown" would be implemented was published in the Government Gazette (2020) highlighting a set of "essential goods and services" to be excluded from the lockdown implementation. This set of goods and services understandably includes the production of food and non-alcoholic beverages and all goods and services which support the production and distribution thereof.

Although the agricultural sector is not expected to be as hard hit as some others (tourism, transport etc.) because of these are in total lockdown, there various factors to consider when attempting to analyse the impact of COVID-19 on the agricultural economy. As things stand, four major agricultural sub-sectors are not included as part of the essential services during the lockdown period and are therefore expected to experience financial losses. Those particularly important to the Western Cape include industries such as (1) wool, (2) flowers, (3) mohair, and (4) wine. In an amendment published on 7 April 2020, the Minister of Transport has now issued directions that during the lockdown period, transportation and export of wine is now allowed (Republic of South Africa, 2020). Furthermore, some of these industries have also received clarity and many on-farm activities have picked up, but these products are not permitted to be sold locally.

The interconnectedness of agricultural value chains, as well as the reliance of key imported intermediate goods for production, makes anticipating the impacts of COVID-19 difficult. In some cases, the agricultural sector is set to benefit from responses related to COVID-19, but will for most parts be influenced by what happens elsewhere and how quickly the South African economy can be revived. Instability in the South African economy, in particular the depreciating Rand, is a serious concern for food security and the affordability of agricultural inputs (feed, chemicals, fertiliser and machinery). It has been argued that since the country is self-sufficient in producing major agricultural commodities that there is enough food available for the next 6-12 months (BFAP, 2020b). However, critical food products imported are rice (100% dependent on imports), wheat (50% dependent on imports), and palm oil (100% dependent on imports) and there is some concern that the availability of such goods could be limited by countries severely impacted by COVID-19. Since most grains and other staples have a relatively long shelf life one would expect substitutability with products locally produced in abundance, but these will also have implications on food prices.

This report sets out to analyse the economic impact of COVID-19 on the agricultural and related sectors in the Western Cape. Since these sectors are heavily dependent on exports, the departure point is to gauge the current trends in world markets. This will be done by firstly scanning the supply and demand characteristics already observed for agricultural products to some of our major trading partners. The next section will focus on the Western Cape agricultural value chain, its complexities and performance pre-COVID-19. The impact analysis to predict the COVD-19 impacts on the agricultural economy is then based on a 2018-19 baseline compiled for 32 agricultural industries with shocks informed by a set of assumptions developed through consultations with industry stakeholders. The report concludes with some recommendations.

2. THE GLOBAL AGRICULTURAL MARKET

With the onset of the COVID-19 pandemic and the subsequent rapid spread of the virus, a series of significant policy interventions and stimulus packages have been announced by various governments around the world. These measures will have significant impacts on world agricultural markets, and as different policy positions around the world take effect, volatile prices will be the norm. These are a result of sudden demand changes and supply-side interruptions for certain products. However, an important long-run perspective to remember is that real commodity prices historically trend downwards (OECD-FAO, 2017). In general, food prices are highly dependent on supply and demand forces at play in global markets and long-term productivity growth drives prices down.

The question that arises is what the current situation is on the supply of major food products around the globe and what can be expected in terms of food price movement as a result of COVID-19? The answers are somewhat complex, and food prices in any particular country will be dependent on the trade balance mix, local production & consumption, exchange rate and many other factors. For the global market, Figure 1 provides food price movements for some major commodity groups since the 1980s (IMF, 2020a). These prices are given in US Dollar terms and provide some perspective on how world food prices react in global economic downturns, as was the case in the 2008/9 global recession.

In a brief released on 2 April 2020, the FAO (2020) expects the global cereal markets to be well balanced to supply cereals despite the worries of the impact of COVID-19. While localised disruption mainly due to logistical bottlenecks poses a serious challenge to the food supply in the short-run, their anticipated duration and magnitude are unlikely to cause significant impacts on global food markets. The reason for this stance is based on the

upward revised crop estimates for 2019 and that the FAO expects that the stock levels of world cereal in 2020 will still be at a comfortable stock-to-use level (FAO, 2020). Thus, for moment being and despite the current impact of COVID-19 measures, there is still evidence of downward, rather than upward pressure on food commodity markets.



Figure 1: Selected real commodity prices for cereal and meat, 1980-2020

Source: (IMF, 2020a)

As pointed out by Troskie (2020), real global food prices have shown a steady decline over the past decade which comes as a result of agricultural production consistently exceeding demand and confirms that stock levels are currently well resourced. Naturally, this situation could be drastically altered depending on the outcome of the virus spread and different measures imposed as a result. It is useful in comparing the performance of global Gross Domestic Product (GDP) with that the global agricultural sector experienced, especially during the 2009 financial crises which are reflected in Figure 2. The global GDP drop in 2009 is not followed by a similar drop in agricultural GDP which is partly explained by the commodity price increases, and the fact that large parts of the impacted industries were in the finance, rather than sectors closely related to the agricultural sector.



Figure 2: GDP growth rates for the global economy and agricultural sector

Source: (World Bank, 2020)

Although this trend is valuable, it is important to note that the current economic crises are expected to impact agricultural value chains to an extent that it will more closely follow the wider economy and related sectors than was the case back in 2009. To get a better understanding in which was COVID-19 are expected to impact the global food system, the next two sub-sections explains both supply and demand factors.

2.1 Supply-side impacts:

On the supply-side of agriculture and agri processing products, several critical factors of production are needed to produce goods. The basic production function, depends on access to capital, labour, land and entrepreneurs. Although the information on the magnitude and impact of COVID-19 shocks to agricultural production is scant, some reports are already pointing to some logistical challenges in global supply logistics, issues with access to migrant labour in parts of Europe and the United States and those various agricultural businesses are severely impacted by the current lock-down policies. Indeed, Sihlobo (2020) has pointed out that although developed countries are regarded as food secure, many of these are facing the prospect of migrant labour shortages due to current travel restrictions. Moreover, Reuters (2020) reports on how to milk producers in the US are dumping milk by the thousands of gallons because, although demand is suitable, a host of disruption in supply chains are causing bottlenecks that a perishable product like milk cannot tolerate. The mass closures of restaurants and schools have forced a sudden shift from foodservice markets to retail grocery stock which have created a host of challenges with the logistics and packaging requirements of manufacturing plants producing dairy

products. The fact that COVID-19 is now already confirmed in around 210 countries or territories worldwide makes its reach and impact on the global supply of products of concern and as long as the virus is spreading, the supply of critical agricultural goods could be affected.

Since COVID-19's global impact is unprecedented, one would expect to experience at least some unconventional outcomes. One of these could be "food protectionism" with some countries deciding to impose trade restrictions or aggressively stockpiling of strategic supplies of major exported crops to ensure food security for their citizens. CNBC (2020) reported that crop producing nations such as Vietnam (rice), Russia (grain) and Kazakstan (grain) have all implemented export restrictions due to COVID-19 interventions.

2.2 Demand-side impacts:

Global demand for food products are traditionally driven by factors such as income, food preferences, population growth, food scarcity and price movements. COVID-19 is having an impact on consumer behaviour and spending choices as a result of restrictions on movement and the fear of getting infected when doing food purchases. Consumers in many countries have reacted to the possibility of quarantine by stockpiling, foodservice options have been closed, and eating occasions have shifted into the home (Euromonitor, 2020). The result has been surging sales of certain products (and e-commerce growth). As evidence of this, many retailers across the globe are implementing measures to protect shoppers from the virus by limiting the number of shoppers entering at any given time into the shops, making shopping trips more time-consuming and restricted. Thus, if the current COVID-19 measures remain for several months, the world demand will be adjusted downward as many consumers decide to limit the number of trips to retail stores and might only buy the most urgent and needed food supplies to minimise time spent inside stores.

In the Annexure, a detailed breakdown is given on the current lockdown policies affecting consumption in the top twenty destinations for Western Cape agricultural exports. This information provides valuable insights into the medium impact on consumer demand in these countries, but an even more worrying situation might arise for world demand for food in the medium term. Consumers, in general, tend to be cautious when faced by the prospects of drastic economic hardships and spending will only pick up gradually once the spread of the virus has been confirmed. Add to this, many people are expected to lose their jobs, which will also dampen the purchasing power of millions of consumers worldwide. It is not clear how and by when countries are expected to be completely out of lockdown and

other restrictions, but some useful trends have emerged which are mainly driven by COVID-19 impacts (Euromonitor, 2020):

Snacking: Overall sales of snacks are expected to increase significantly in both value and volume terms in 2020 due to the stockpiling witnessed in Asia in the first quarter of 2020 and which is currently observed in America and Western European regions. With families forced to stay inside, there is a clear uptick in snack consumption and confectionery and ice cream for the kids.

Staple foods: Long shelf life goods have been stockpiled globally as consumers have prepared for social distancing, quarantine and possible supply disruption. In Italy, instant noodles, dried tomatoes and beans made the top list of categories with the highest share of online shopping in the week 9-15 March.

Cooking ingredients and meals: For cooking ingredients and meals, the most significant change in consumer behaviour across most markets impacted by COVID-19 is to the choice of meal solutions, given that many cities are on lockdown, foodservice outlets are shut down or (if open) have significantly lower footfall. The impact on sales of cooking ingredients and meals will also depend on the diverse range of cooking skills within households.

Dairy products and alternatives: COVID-19 has put pressure on dairy supply chains in the most affected regions. With foodservice outlets closed, and consumers stockpiling goods, fresh milk is set to be the most negatively affected category in absolute terms. In retail, the pandemic has created a demand for goods that can be stored for longer, benefitting long shelf-life milk. In the most affected Western European countries, Italy and Spain, long shelf life milk is traditionally consumed more than fresh.

Fresh Produce: Whilst some items across packaged food, beauty and personal care and home care are experiencing temporary sales boosts as consumers panic buy and stockpile key items, the uptick in certain fresh food sales seems less likely to result in a subsequent drop. For example, once a consumer has significantly stockpiled pasta, they will not need more for some time, but fresh fruit and vegetables must be consumed soon after purchase before they spoil. There is also an observed increase in demand for fresh fruit associated with health benefits to support people's immune systems.

3. COVID-19 IMPACTS ON THE WESTERN CAPE AGRICULTURAL SECTOR

To assess the economic impact on the agricultural sector and its downstream agri processing value chain, some important context is needed. The Western Cape agricultural sector is unique compared to the rest of South Africa mainly due to its Mediterranean, winter rainfall climate mixed with well-developed production and processing infrastructure that allows for stable production of a unique mix of agricultural produce (Partridge et al., 2019).

Table 1 provides the necessary context in explaining the contribution that the agricultural value chain makes to the economy in both South Africa and the Western Cape. In term of the contribution to GDP, agriculture and agri processing make up a combined total of 11%, whilst the contribution to employment is much higher at 13% (Partridge & Pienaar, 2020). In terms of the latter contribution, it is important to remember that the sector plays a critical role in employing mostly unskilled workers, particularly from rural areas. Agricultural value chains also play a significant role in generating income from exporting high-value products. Agricultural exports make up 54% of all exports from the Western Cape.

Item	Western Cape % Contr		South Africa	% Contribution
Economy (GDP)				
Total GVA	R590 billion	100	R4 341 billion	100
Agriculture	R23 billion	3.93	R106 billion	2.44
Agri Processing	R40 billion	6.78	R212 billion	4.88
Agri + Processing	R63 billion	10.73	R318 billion	7.33
Employment				
Total Employed	1.97 million	1.97 million 100		100
Agriculture	180 674 employed	9.17	845 374	6.92
Agri Processing	80 917 employed	4.11	401 435	3.28
Agri + Processing	pri + Processing 261 591 employed		124 6809	10.20
Exports				
All Products R129 billion		100	R1 247 billion	100
Agriculture	R37 billion	28.64	R74 billion	5.94
Agri Processing	R33 billion	25.74	R115 billion	9.20
Agri + Processing	R70 billion	54.38	R189 billion	15.14

Table 1: Economic Overview of Agriculture and Agri processing, 2018

Source: Quantec, 2020a; 2020b; 2020c

Since 2016, the Western Cape experienced one of the worst droughts in recorded history, leading to thousands of on-farm jobs and lost income losses (Pienaar & Boonzaaier, 2018). Unfortunately, the national accounts calculated by the National Department of Agriculture, Rural Development and Land Reform, together with Statistics South Africa, does not make provision to capture the true regional impact (BFAP, 2019). Some anecdotal evidence from some of the worst hit agricultural regions points to a situation where many farmers have struggled with cash flow, have had to extend loans and are cutting back on capital investment (WCDoA, 2018). Around the same time, the agricultural industry was also severely impacted by the outbreak of Highly Pathogenic Avian Influenza (HPAI) in South Africa. This outbreak leads to the compulsory culling of around 71% (3.3 million chickens) of the layer chicken population of the Western Cape and losses incurred aggregating to close to one billion Rand (BFAP, 2018). The ostrich industry, being classified within the poultry group, was also impacted with HPAI and exports of ostrich meat have been banned for some years since the outbreak.

Although most regions, in particular irrigated crop farming, have recovered from the drought due to the much-improved dam levels across the province from good winter rains in 2019, some regions are still battling drought conditions. To put this into perspective, between 2017 and 2019, the Western Cape Department of Agriculture has allocated around R650 million to support drought initiatives mainly in the form of fodder to livestock farmers (WCDoA, 2020)

The latest release of the Commercial Agriculture Census provides further evidence of the challenges faced by farmers in the Western Cape which have culminated into financial losses (StatsSA, 2020). In 2017 there were around 6 937 farming units covered in the census and on average, around 23% incurred losses due to crime, 7% pest and disease and 28% due to natural disasters (mainly drought). The numbers presented here points to a sector which has experienced some difficult seasons and there are already reports of increased theft of agricultural goods in the Free State since March 2020 (Landbou.com, 2020).

District	Farming Units	Percentage affected (%)			
		Crime	Pest & Disease	Natural Disaster	
Cape Winelands	1 995	41.35	6.17	42.11	
Central Karoo	363	10.19	10.74	28.65	
City of Cape Town	786	11.32	2.29	8.52	
Eden	1 270	15.83	9.53	32.13	
Overberg	980	21.73	8.88	22.14	
West Coast	1 543	14.65	6.03	20.09	
Total	6937	22.93	6.93	28.05	

Table 2: Western	Cape farms	experiencing	losses by	type in 2017
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Source: (StatsSA, 2020)

As part of analysing the economic impact of COVID on the agriculture and related industries, it is important to understand the interconnectedness and complexity within both upstream and downstream industries. BFAP (2020) released a COVID-19 brief in which it unpacks the complex nature of these chains, highlighting the web of interaction between formal and informal market participants.

Figure 3 gives the schematic representation of the South African agro-food value chain and related services on which these chains depend. The process of producing agricultural outputs requires various inputs and services rendered by both public and private institutions. Troskie (2020) highlights some of the main factors expected to affect the South African food system.



Figure 3: The South African agro-food supply chain and related services

Source: (BFAP, 2020a)

3.1 Bottlenecks at, and closure of ports:

Since the lockdown started, various reports of South African seaports not functioning well due to staff shortage and confusion in the regulations have already affected agricultural exports. The Cape Town port is currently operating at between 60-70% of its normal capacity and others are not faring better. This is not, however, the case only in South Africa, globally some restrictions are affecting trade efficiency and logistical flows such that the availability of limited containers, shipping capacity lowered, and in some cases port closures.

Another serious concern in terms of agricultural exports is the sudden drop in exporting cargo for air exports. In a letter to growers, Cape Flora SA's chairperson noted with concern that the reduction in global air traffic due to COVID-19 has resulted in a situation where cargo demand exceeds capacity and rates have increased by as much as 200% (Cape Flora SA, 2020). The sudden weakening of the exchange rate is also pushing freight cost much higher in Rand terms, and any respite from higher income due to the weaker currency is offset by the extreme demand decline for a luxurious good such as flowers. Amongst agricultural products that are currently affected by limitations on exporting goods using air transport (using March and April 2019 export figures) are flowers (953 tons), grapes (778 tons), apples (744 tons), figs (268), raspberries (260 tons) and abalone to name a few (PPECB, 2020). These products are highly perishable and income losses in these industries have already occurred.

3.2 Disruption of domestic value chains

As noted earlier, food value chains are complex and reliant on a number of other industries' goods and services. Amongst the concerns with the current lockdown regulations and the integrated linkages, one might ask what will be the impact if any key-value chain actor is suddenly not able to function. The port issue has already been mentioned, but critical market mechanisms such as livestock auctions, agri processing facilities, packhouses, distribution and retail need to function as a whole. A number of supermarkets have been closed due to staff members testing positive for the coronavirus. Other important stakeholders in the agricultural value chain include informal trade such as bakkie traders, fruit & vegetable stalls, farmer markets and the like being adversely affected by social distancing restrictions.

3.3 On-farm COVID-19 outbreaks

The Western Cape has around 185 000 farmworkers directly employed in primary agricultural production (StatsSA, 2020). Of these around 76 000 work on a part-time or seasonal basis, of which many stay in informal settlements around towns. Moving these labourers around is a serious challenge and although farms are naturally self-isolation sites, the spread of the virus would also impact on access to labour for farm production. The same challenges are prevalent for food processing industries and packhouses where in peak season many labourers work in close proximity to one another. Since the COVID-19 lockdown started, there is also sudden increase in absenteeism with many workers fearful of contracting the virus whilst working. Furthermore, agricultural employers are also having to impose stricter sanitary and hygiene control which is slowing down harvesting.

3.4 Inability to import key inputs & inefficiency in input supply

South Africa is a net importer of some key agricultural inputs (chemicals, fertilizer and seed) and farming technology (machines and implements). According to Troskie (2020), there are already examples where assembly lines for motor vehicles came to a standstill around the world because essential electronic parts could not be imported from Asia. Disruption in global logistics may create short-term challenges of importing these products, but some of these impacts are only expected in the medium to longer term as stocks of fertilizer, chemicals and machine parts become depleted and replacement of equipment are required. Figure 4 gives at least some indication of the import dependency for some key agricultural inputs, by showing the value of expenditure in South Africa in 2017 (StatsSA, 2020), measured against the value of imports of the same categories. South Africa is 100% dependent on crop remedies (chemical and sprays) and around 42% of the fertiliser is imported. Livestock remedies (24%), seeds (17%) and animal feed (15%) had lower import dependence, but any critical shortage of these products have dire implications for agricultural production. This import dependency is also relevant when discussing the impact of the exchange rate on the agricultural sector in the next section.





Source: (StatsSA, 2020) & (ITC, 2020)

3.5 Weakening exchange rate

The current uncertainty created by the COVID-19 virus has led to capital flowing from emerging economies into safer destinations. As a result, the US dollar, seen as a more stable currency, has appreciated while emerging market currencies have depreciated since the start of the pandemic. Since the first confirmed COVID-19 case recorded in South Africa on

5 March 2020, the rand has depreciated by 15.3 per cent against the US dollar, and by 11.8 per cent against the euro. The weaker rand was also affected by further credit downgrades of South Africa's sovereign debt by Moody on 27 March 2020 and Fitch on 3 April 2020. A significant currency depreciation over a prolonged period will increase input costs of agriculture technology, equipment, fertilizer and seeds for the agricultural sector. On the upside, the WTI crude oil price has declined by 45.18 per cent since mid-February 2020. The decline will place downward pressure on fuel and fertilizer prices. Western Cape agricultural exports will also benefit from a depreciating rand. The main regions for these exports broken down by value are in Europe (47%), Asia (24%) and Africa with 21% (Quantec, 2020).

3.6 Slowdown in the Global and South African economy

Most economic and financial observers believe that the global economy is set for a major contraction, the only contention is how long and how deep it will be. The South African Reserve Bank (SARB) announced that they expect a -2% to -4% GDP-contraction for the South African economy for 2020, with major job-losses and firm insolvencies. Then, a few days later, the SARB adjusted their GDP-growth down to -6.1% for 2020 (SARB, 2020). The International Monetary Fund (IMF) also released its world economic outlook projections, estimating an -3% global economic contraction for 2020 (IMF, 2020b). Their estimate for South Africa was -5.8%, with Africa as a region expected to contract by -1.6%. To put these sobering numbers into perspective, during the 2009 financial crises, the world economy's growth was -1.6%, with a relatively quick recovery with growth in 2010 reaching 4.3%. At the time of writing, there are major concerns that the duration and severity of the current economic crises will far exceed the impacts felt in 2009.

If this is the economic environment in which the agricultural sector finds itself, demand for products will be driven downward, especially for many of the high-value exports such as alternative crops. Africa is also an important trading region and it is at this stage difficult to predict how the continent will be able to cope with COVID-19 pandemic.

3.7 Implications for Agri-tourism

Although there are no official statistics for the value of agricultural tourism which takes place in the Western Cape, the newly released agricultural census provides some indication. It has a category for "other" non-farm income-related activities, of which already a host of other income categories has been subtracted. In all likelihood, the R2.3 billion recorded for the Western Cape should mostly include agritourism activities such as wine tastings, farm restaurants, outdoor activities, 4x4 routes, weddings and accommodation to name a few. The impact of the lockdown will have immediate and drastic impacts on these tourism activities, since these are linked to the tourism and hospitality industry, and are halted during the lockdown. In the Western Cape districts expected to be impacted by declining agritourism income will be Cape Winelands, West Coast and the City of Cape Town.

4 IMPACT ASSESSMENT OF AGRICULTURE SUB-SECTORS

In order to make initial impact estimates for the impact that COVID-19 might have on agricultural value chains, it is important to analyse the major industries and explain how each of them is expected to be impacted. To do this, the research team have reached out to various producer associations and made use of publicly available data to assist in this effort. Since agriculture and most parts of its value chain have been classified under essential goods and services, the immediate impact is expected to be somewhat small, especially compared to other sectors of the economy. However, there are naturally some agricultural industries that will still face severe consequences due to the lockdown which will be discussed in this section.

The methodology used to do the impact assessment was to create a dataset of around 28 primary agricultural sub-sectors and another 8 of the major agri processing sub-sectors in the Western Cape. For each of these, the value of production and exports was estimated, as well as the total jobs calculated for the Western Cape using mostly 2018-19 statistics. From the analysis presented on global demand, the impact of COVID-19 is predicted for every quarter throughout 2020 and using the 2019 level as the baseline. To do this, it is obvious that the assumptions made will heavily impact the results and by the time this report may be read that those assumptions could be considered wrong. The current environment of uncertainty around how long the lockdown will be in South Africa, what restrictions will be in place after lockdown and how other countries will make policy responses to COVID-19, makes this task extremely difficult. Also, at this point there is no concrete data that points to the magnitude of the shocks related to agriculture.

The general feedback from primary agricultural industries are that those directly impacted by the lockdown (aquaculture, flowers, raspberries, wine, wool & mohair) have lost trading income for the lockdown period, and even for those able to absorb this shock whilst paying workers in full, there will be serious cash-flow difficulties. Some have had to already cut back on jobs in their industries and in some cases around 10-20% report absenteeism for fear of exposure to the virus. In terms of export trading to industries that are classified as essential, a report from the Fresh Produce Exporters Forum (FPEF, 2020) points to already some degree of challenges getting fruit to markets and economic impacts felt as a result. From the baseline scenario, this is not expected to continue for long and will have a marginal impact on business, but some industry's export have a higher probability of being impacted by COVID-19. Figure 3 below shows the percentage share of total exports for each industry during the 2019 calendar year in terms of volumes exported (PPECB, 2020). The bulk of pome fruit (apples & pears), citrus (oranges, lemons and naartjies) and flowers (cut flowers) are taking place from March onwards (after the dotted red line indicating the lockdown period). Fortunately, the majority of table grapes, stone fruit (apricots, nectarines and peaches) have already taken place before major COVID-related factors could impact these industries.





The breakdown of the various sub-sectors within the agriculture value chain in the Western Cape is highlighted in Table 3, giving a short description of the COVID-19 impacts expected. This is generated based on industry reports and feedback, as well as benchmarking against similar industries elsewhere. The comments and feedback are then used in an attempt to measure the impact of COVID-19 on agriculture, taking note of all of the factors that might influence the severity of the current global crises.

Table 3: Western Cape agricultural sub-sector in 2018-19

Sector	Turnover (R million)	Jobs	Export Value (R million)	Comment on COVID-Impact
Stone fruit	2 165	19 233	1 252	Sector has been under pressure because of persistent drought and area planted coming down. 2019/20 harvest completed before COVID-19 lockdown
Pome fruit	6 639	35 724	6 987	Season is about halfway with good export volumes, some reports of shipments diverted, availability of containers and closure of ports expected to have a short-term impact. Slower picking rate and logistical bottlenecks
Wine grapes	5 020	39 081	0	Harvest have just ended which is expected to be similar to 2019, expect pressure on prices with global demand stalling and RSA export impacted by lockdown. Concerns over losing self-space in key markets.
Table grapes	3 679	28 725	6 317	Had a good harvest, which ended just before lockdown. Expect minimal impact in the short & medium term. Industry had a good year after two seasons of drought
Citrus	2 100	8 197	10 800	Expect uptake in demand due to health benefits and high prices currently in the market. Consumers are buying the products due to their Vitamin-c properties
Sub-tropical fruit	201	829	463	Some reports of lack in demand and challenges with logistics, but WC avocados and mangoes not affected at the present moment. Expected medium-term impacts
Grains	3 649	6 718	1	Season only starts in winter and global stock looks sufficient. No drastic impact expected
Nuts	99	520	311	No significant impacts. WC trees are young and export really commence only in September. Stocks in world markets are relatively low so price are good. Expect some challenges of moving goods to China.
Vegetables	3 607	18 114	473	Potatoes, onions, butternut & carrot-all look to be trading at normal levels with price spikes showing in some vegetables, but mostly normal trading.
Flowers	1 759	2 333	336	Immediate impact on export numbers and the industry will be heavily impacted by COVID since flowers are highly perishable and a luxury product. Flowers were also not allowed to be sold in supermarkets due to lockdown in South Africa and no clarity on how the world market will react to COVID in terms of flower trading.
Berries	1 600	5 280	1 773	Almost all blueberries have been exported for the 2019/20 season, raspberry tail impacted mainly due to air transport cost and flight options
Animals (meat)	10 225	8 026	304	Meat markets not showing any sudden price changes at auctions
Animal Products	5 953	9 081	775	Milk and eggs are expected to be impacted in the medium term, as food service industries and restaurants are closed during lock-down. Expect a shift into different products and pressure on prices.
Aquaculture	1 107	2 500	985	Air transport limiting factor, China coming back online, but turnover and jobs already being lost due to the lockdown.
Total	49 197	184 362	30 777	

Source: Own Compilation from various sources

Sector	Turnover (R million)	Jobs	Export Value (R million)	Comment on COVID-Impact
Wine	6298	4080	8400	Immediate impact on export of wine numbers during the lockdown. Will have knock-on impacts on wine stock and potential pressure on wine prices globally.
Processed fruit	3984	8726	908	Uptake in the short term due to snacking, stockpiling and low perishability of food.
Fruit Juice	3197	2034	3533	Uptake in the short term due to snacking, stockpiling and low perishability of food.
Wool + Mohair + Ostrich	1201	2877	559	Immediate impact on export numbers for wool, mohair, feathers and leather products. Medium to long term is dependent on feed markets and open borders.
Total	14 680	17 718	13 400	

Table 4: Western Cape selected agri processing sub-sector in 2018-19

Source: Own compilation from various sources

Using then the turnover and export values for the Western Cape, we attempt to predict the impact of COVID-19 on the agricultural sector, providing both a best-case and a worst-case scenario for all the quarters of 2020. Unfortunately, the data is not given in quarters so we predict the impacts on a quarterly, annualised basis from 2019 onwards. In the best case, turnover on farms are projected to decline in real terms in both quarter 1 and 2, mainly driven by a drop in agri-tourism and some industries not allowed to trade locally. In the best case, agricultural turnover bounces back quickly in quarter 3, with good growth in quarter 4. In total, the best-case scenario for total turnover in 2020 the sector is expected to grow by 2.9%. In the worst-case scenario, the COVID-19 impact on output is similar, but deeper than the best case and extending into quarter 3, after which some recovery occurs. In this case the global demand for goods and logistical challenges are adding up to a situation where gross farm income is down by 10.8% in 2020.

Moving to the anticipated impact of COVID-19 on agricultural exports, the immediate impact for the best case is driven by good export performance just before lockdown to the extent that any large losses from air transport, trade bottlenecks and moving of some goods are somewhat offset by the depreciating currency. In this case, we expect the sideways movement of the value of exports into the 2nd quarter and then a recovery towards the end of 2020 to get to a positive total of +7.75% for 2020. Part of this scenario is the strong performance of the sector recovering from drought. On the downside risk, the worst-case scenario sees a contraction of agricultural exports of -7.69% in real terms. In this scenario, perishable exports by both air and sea transports are affected by inefficient local and international supply chains, as well as a drop in consumer demand for key agricultural products. Although industries such as citrus are expected to do well in the medium term,

pressure on world trade and weakened retail demand push export volumes down. The recovery is somewhat more V-shaped with some recovery towards the end of 2020.





Source: Quantec, 2020a & 2020b; Own compilation

Looking at agricultural employment reports from farms that absenteeism, heightened worker safety regulation and transport of workers (between province and between town and farms) will have a net negative impact on jobs for 2020. In the worst-case scenario, agriculture in the Western Cape sheds around 24 000 jobs (12.5% lower compared to 2019), whilst the best-case sees jobs in the sector declined by 2 500. In both scenarios, it is mostly seasonal jobs impacted, although it is expected that some permanent jobs also be lost.



Figure 7: Farmworker employment in the Western Cape & COVID-19 Scenarios

Source: Quantec, 2020a & 2020b; Own compilation

5 CONCLUSION

This report is the first attempt at predicting the economic impact of the COVID-19 pandemic on the Western Cape agricultural sector. Although this impact is dependent on several factors and assumptions about the future, it is anticipated that the global economic downturn, the interconnectedness of the sector and challenges with agricultural export will impact the sector negatively. The global supply and demand for agricultural goods are already significantly impacted by the spread of the disease and some agricultural industries will be hit harder than others.

The scenarios presented in this report, informed by the important context explained in Section 3, 4 and the Annexure, Western Cape agricultural turnover for 2020 is predicted to decline by 10.8% in 2020 in the worst case or increase slightly by 2% in the best-case scenario. Agricultural exports show a similar impact, with agricultural jobs to be shed in the process of restriction on the movement of people, absenteeism and cash flow of farm coming under pressure. Farmworker jobs could decline anywhere from 2 500 to 24 000 depending on the different scenarios presented.

In conclusion, although agricultural goods and services are classified as "essential" and are continuing during the lockdown, the factors presented in this report suggest that an economic contraction and job losses will be felt in the agricultural sector throughout 2020.

DISCLAIMER:

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ANNEXURE

In an attempt to highlight the demand for Western Cape exported agricultural products, this annexure provides details of each of our main trading partners that are affected by COVID-19. Most countries that opted for a lockdown – full or partial – do allow their citizens to purchase foodstuffs and other essential goods. However, non-essential workers in these countries are not able to earn the same salaries that they made before COVID-19, even though some governments have done their best in trying to subsidize incomes. Most of the lockdowns have also meant that restaurant businesses had to close. It is therefore inevitable that the lockdowns will significantly negatively impact the Western Cape agricultural sector, particularly in the form of demand for products, but also due to changes in consumer demand as already explained in section 2.

It is difficult to predict at this stage what the economic impact will be, given that many countries are still fighting to flatten the disease infection curve, and with greater likelihood that the dates for lifting lockdown might change. The table provided below gives an overview of the current expectation of the measures imposed, the timeline for lockdown, as well as the impact on consumers. The Western Cape exports for each of these major trading partners are also given monthly in order to show what products are exported during the year. Using a broad definition for agricultural exports (HS-code two-digit 1-23), the top trading partners are summarised below.

- 1) Netherlands
- 2) United Kingdom
- 3) Namibia
- 4) Germany
- 5) China
- 6) United States of America
- 7) Botswana
- 8) Russia
- 9) Spain
- 10) Hong Kong

- 11) United Arab Emirates
- 12) Italy
- 13) Canada
- 14) Malaysia
- 15) Japan
- 16) Saudi Arabia
- 17) Swaziland
- 18) France
- 19) Portugal
- 20) Bangladesh



These 20 major importers of Western Cape goods make up 38% of total agricultural exports









































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