

Report on the Impact of Covid-19 on Socio-Economic (Livelihoods) Development in the Limpopo Province, South Africa

On behalf of the collaborating partners being:

Limpopo Provincial Government, Tshwane University of Technology (TUT),
University of Limpopo (UL), University of South Africa (UNISA), University
of Venda (UNIVEN) and Vaal University of Technology (VUT)

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This report is a product of a collective effort to share the experiences and impact of the Covid-19 pandemic in Limpopo, focusing on Capricorn District Municipality (CDM). The Limpopo Provincial Government, through the Office of the Premier, collaborated with the following institutions: the University of Limpopo, the University of South Africa, the University of Venda, the Tshwane University of Technology and the Vaal University of Technology, drawing experts to contribute to different topics.

The project was managed by the Office of the Premier through the Research & Development Unit, which was central to the conceptual framework. Ms MD Mathebula provided strategic leadership and oversight of the project.

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1. INTRODUCTION AND BACKGROUND

On 11 March 2020, the World Health Organization (WHO) declared the Coronavirus disease of 2019 (Covid-19) a global pandemic. This was after the virus had spread to all the continents and over 100 countries, including South Africa. In South Africa, the first case was reported on the 5th of March 2020. On the 15th of March 2020, the President of South Africa, Honourable Cyril Ramaphosa, declared a National State of Disaster. Thereafter, several structures and measures, which included the Presidential Command Council, Covid-19 Regulations and a hard lockdown, were put in place to coordinate and mitigate the spread of the virus. All spheres of government, including civil society, were expected to ensure compliance to reduce the spread of the virus. Within this context, the Department of Planning, Monitoring and Evaluation (DPME) requested provinces to provide reports on the response to combating Covid-19 in their respective provinces.

As required by DPME, the Limpopo Provincial Government provided a rapid report based on desktop research that was undertaken. The desktop research was an exercise to develop a Covid-19 provincial report, which would provide information on measures that were put in place in response to combating Covid-19 in the Limpopo Province, successes and challenges encountered in the process, as well as lessons learned and recommendations for the future.

In the quest of getting more detailed research and work done, in 2022, the Limpopo Provincial Government entered into a partnership with the Universities of Limpopo (UL), Venda (UNIVEN), South Africa (UNISA), Tshwane University of Technology (TUT) and the Vaal University of Technology (VUT). The rationale for this partnership was to inaugurate work under the newly established Limpopo Province Research and Innovation Hub, with a limited initial focus on a project entitled “The Impact of Covid-19 on the Socio-economic Development of the Limpopo Province of South Africa”.

This study aimed to examine the impact, response measures and recovery plans from Covid-19 within the Limpopo Province. Given the limited financial and other resources, the study was piloted in two Capricorn District local municipalities, namely: Polokwane Municipality and Molemole Local Municipality. The said district and its

local municipalities were purposively sampled after considering the available funds, and the need to have a predominantly urban and predominantly rural local municipality. It aspires that the project will be cascaded to other districts of the province with time and as resources permit. It is against this background that the study's findings and recommendations will assist the province to conceive a provincial-wide interventionist approach towards the socio-economic recovery of the province, from the repercussions of the Covid-19 pandemic. The study findings and recommendations will also provide the Limpopo Government with long-term partnerships, capacity enhancement, and rapid response teams for similar future pandemics and other disasters.

Both the current pilot and long-term comprehensive studies are guided by inter, trans, and multi-disciplinary project streams (PS) coordinated by the universities involved. Each PS pitched a mini proposal (MP) that was consolidated into this main proposal for the pilot study and also for the long-term work. To this end, the following MPs, following specific thematic research areas and coordinating universities, were conceptualised:

- *MP 1 (UNISA-VUT Coordinated):* Socio-economic, environment, agriculture, mining, and human settlement perspectives for Limpopo Province in the context of Covid-19
- *MP 2 (TUT Coordinated):* Governance perspective under the Covid-19 pandemic in Limpopo Province
- *MP 3 (UNIVEN Coordinated):* The impact of Covid-19 on the Limpopo Province healthcare sector
- *MP 4 (UL Coordinated):* Impacts of Covid-19 on social and community development in Limpopo Government.

The report will be presented per Project Streams and according to identified themes.

CHAPTER 1: GOVERNANCE

Authors: Prof RM Mukonza, Prof I Swarts, Dr C Mukonza & Mr MA Shopola

1. INTRODUCTION AND BACKGROUND

The current section reports on the research findings of the study that investigated the impact of Covid-19 on governance and service delivery in Limpopo Province. The investigation was limited to two municipal jurisdictions in Capricorn District Municipality (rural and semi-urban areas), namely, Molemole Local Municipality and Polokwane Local Municipality. This also included other provincial departments like Limpopo Department of Cooperative Governance, Human Settlements and Traditional Affairs (CoGHSTA), and the Office of the Premier. As a matter of emphasis, the theme under which this study was carried out was “governance”. Governance is one of the intricate but important elements of the political life of every state. As a concept, governance engenders various definitions that can be found in different disciplines such as geography, economics and public administration. Since the current study’s context is government, the term should be understood within the context of public administration, where it has been broadly defined as the exercise of economic, political, and administrative authority to manage a country’s affairs at all levels of government (World Bank, 2009).

Governance involves shared activities in which government and other sectoral partners, such as the private sector, research institutions and non-governmental organisations, are involved in meeting societal goals. This is also where the locus of the involvement of universities in conducting research investigations, such as the current one, is hinged. Nevertheless, governance generally comprises mechanisms and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. From an operational point of view, for governance to be effective, a number of activities ought to be observed. This would include an entity or institution of government selecting goals and having prior knowledge of the end goal, as well as integrating goals at all levels of government: goal reconciliation and coordination, which involves prioritisation of goals in a coordinated

manner between spheres of government; goal implementation; providing feedback and accountability.

In South Africa, the governance institutions include state departments at the national level and within the nine (9) provincial administrations, municipalities in the local spheres and other organs of the state. These institutions are responsible for ensuring efficient and effective service delivery, and the implementation of policy and laws of the republic. As a practice, governance appertains public resource management, which should translate into the public good. However, equally, governance has not been immune to challenges and some of these challenges arise from policy, ergonomics, human and financial resources, and cases of supervening impossibilities. The principle of supervening impossibility is important for this study as it refers to a disastrous condition, like the one that Covid-19 brought. Covid-19 did not only threaten human lives, but caused fragility to the entire governance system.

Meanwhile, the principle of supervening impossibility is catered for in the laws of the Republic – the Disaster Management Act 57 of 2002 was invoked to deal with the precarious condition of Covid-19. Essentially, this act provides for an integrated and coordinated disaster management approach that focuses on preventing or reducing the risk of disasters, mitigating the severity of disasters, emergency preparedness, rapid and effective response to disasters, post-disaster recovery, the establishment of national, provincial and municipal disaster management centres, disaster management volunteers and matters incidental thereto. The President admitted that the Covid-19 presented the risk of reversing the gains made in the long battle against the triple challenges of poverty, unemployment and inequality since 1994, more especially in 2019, the country was already under economic contraction, which led to further job losses.

It was, therefore, deemed appropriate to also encourage the use of technological platforms across government as a substitute for the traditional way of doing things. This was part of the governance matrix to apply solutions that would enable the government to have a better understanding of the challenges facing society, politics, economics and the everyday lives of citizens at a given time. With the additional dramatic changes introduced during Covid-19, it was obvious that these would frustrate the existing governance structures and service delivery plans. A classic example of these changes

includes the Cabinet/National Treasury decision to redirect the service delivery infrastructure budget to health services in the 2020/2021 financial year. Most crucially, these changes have also dislocated certain fundamental practices necessary for decision-making, service delivery, policy and resource distribution within the government arena.

Furthermore, due to the unitary nature of the South African state, it was expected that both the provincial and local governments, as the implementing agents of national policies, would be affected by the woes brought by Covid-19. Limpopo Province is no exception to this. It is common knowledge that before the Coronavirus pandemic, Limpopo provincial administration was going through a recovery process from the impact of Section 100 instituted by the national government, due to insolvency in 2011 and later uplifted in 2014. Limpopo is one the poorest provinces in South Africa with over 50% of the populace living below the poverty line (STATSSA, 2021). Poverty is considered a primary driver of unemployment in the province. As shown in the figure below, about two-thirds of the households in Limpopo fall under the low-income category, 13% of which do not receive any income.

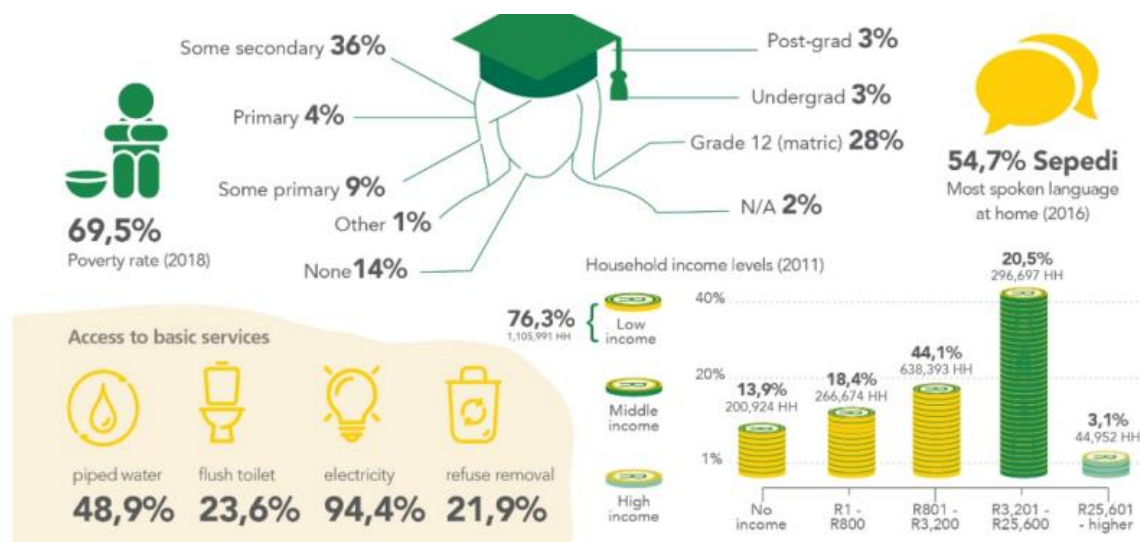


Figure 1.1: Limpopo socio-economic conditions

Source: Adapted from Limpopo Development Plan (2020–2025:49)

Meanwhile, the Limpopo Development Plan (2020–2025:viii) does accept that Covid-19 affected service delivery and development in the province, but the question as to how Covid-19 impacted governance and service delivery is yet to be answered either qualitatively or quantitatively, and this could affect institutional planning. In other words, a thorough and scientific account of the impact of Covid-19 on service delivery is needed to assist provincial and local forward planning. A key question that should be answered is: if Covid-19 or any similar occurrence were to happen again, is the government better prepared to continue operating? This study project investigates the areas of governance that were, in one way or the other, affected by lockdown restrictions and stages during Covid-19, and these include public participation.

If the current situation is anything to go by for future governance, therefore, the government's approach in its planning should include taking accurate stock of the impact that Covid-19 has had on different segments of service delivery. The current study was designed to carry out this activity of taking stock of the impact of Covid-19 on the Limpopo provincial administration, with a focus limited to governance issues. Against the context above, the study demarcated areas of service delivery within Limpopo Province's Molemole and Polokwane municipalities, from which various assessments on the impact of Covid-19 were made. The following objectives guided the study:

- To describe the impact of the Disaster Management Act of 2020 (as amended) on public participation during the Covid-19 hard lockdown restrictions.
- To assess the impact of lockdown stages on service delivery and the services that were most affected during Covid-19.
- To establish the experiences of management staff on the nature of provincial-national support to local government during Covid-19.

Apart from this introduction, this section is presented in four main segments, namely, methodology, findings and discussion, policy and managerial implications, and conclusion and recommendations. The research methods that were applied in collecting data are presented below.

2. RESEARCH METHODOLOGY

This theme employed a cross-sectional qualitative method and it was explorative in nature. The main objectives of the study are as follows:

- To describe the impact of the Disaster Management Act of 2020 (as amended) on public participation during the Covid-19 hard lockdown restrictions.
- To assess the impact of lockdown stages on service delivery and the services that were most affected during Covid-19.
- To establish the experiences of management staff on the nature of provincial-national support to local government during Covid-19.

The participants were sampled purposively based on their knowledge and experience on governance and implementation of Disaster Management Act, and on the services that were most affected during Covid-19. According to Creswell and Creswell (2018:185), purposive sampling is a researcher's exclusive judgement regarding who should be included and excluded in the selection or recruitment of research participants to gather primary data and attain the research objectives. Sixteen participants were involved in this study and the researchers began to experience data saturation signs. The inclusion criteria were that the respondents were officials and ward councillors of the selected municipalities in the province. An audio recording device was used during the semi-structured interviews after permission was granted by the participants. In terms of ethical guidelines, the respondents were given an information leaflet and they signed the informed consent letter. Participation was voluntary. The audios were safely stored in a digital format, which is password protected.

Concerning the trustworthiness of the study, authors have recommended four things to consider when it comes to trust which includes, credibility, transferability, dependability and conformability (Merriam, 2015:234). Credibility refers to how well the researcher's findings can be proven and verified, while transferability is concerned with the transfer of findings from one study to another. Dependability deals with how the researcher's processes and procedures followed during the interview session are deemed dependable by other researchers or peers. Conformability refers to how well peers could confirm the findings (Shenton, 2004:64; Merriam, 2015:234). This study used various measures to ensure credibility, transferability, dependability and

conformability. These included the verbatim capturing of participants' responses, the scrutiny and contrast of the current and past findings to establish congruence and compatibility, regular debriefing sessions, providing sites exploration information, meticulous description of techniques used to allow replication, step-by-step study audit to track progress and data triangulation. Wagner, Kawulich and Garner (2012:231) describe thematic analysis as an approach used in qualitative research to identify themes and report patterns that emerge from data analysis. This paper followed the four thematic analysis steps as recommended by Kumar (2014:278), namely, identifying the main themes; assigning codes to the main themes; grouping participants' responses under the main themes; and integrating themes and responses into the research report. The field notes provided the contextual setting of participants' perceptions and opinions during the interviews, and served as supplementary data for validating the participants' opinions on governance and service delivery in Limpopo.

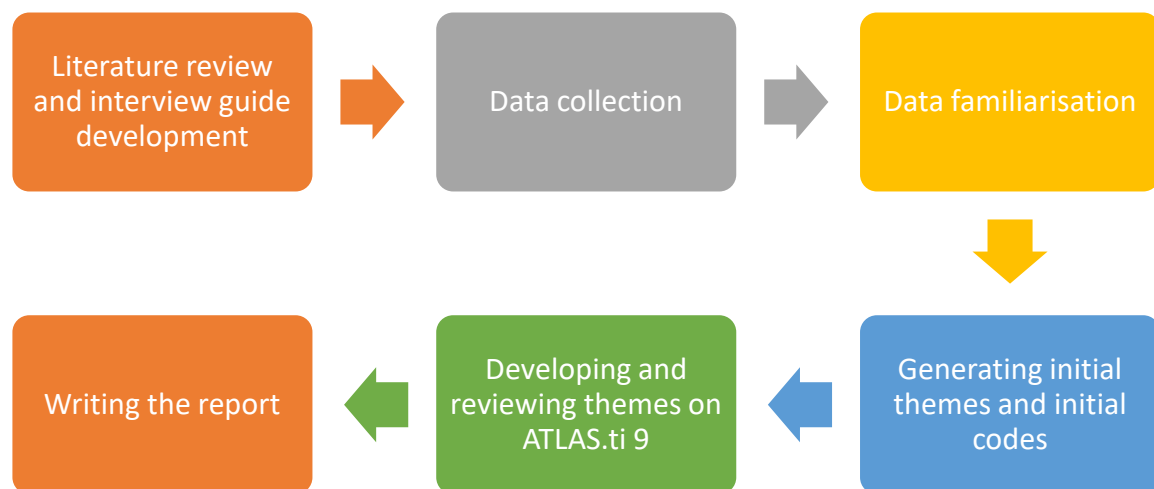


Figure 1.2: Phases of the research

3. RESULTS AND DISCUSSION

As per the objectives identified earlier, the following findings were established.

3.1 The impact of the Disaster Management Act of 2002 on public participation during the Covid-19 hard lockdown restrictions

This section provides an analysis of the affected legislative prescripts and governance procedures overridden by the implementation of the Disaster Management Act (DMA), as far as public participation was concerned. The findings revealed that the invocation of the DMA provisions had a direct bearing on the implementation of Local Government: Municipal Systems Act No. 03 of 2022 (as amended). A senior official in Polokwane Municipality pointed out that *“certain crucial provisions of the MSA which are prerequisites for IDP approval could not happen during the hard restrictions”*. Chapters 4 and 5 of the Systems Act call for municipalities to involve the public in the decision-making process through annual consultations.

The inability to conduct consultations not only trembled the above-quoted act, but further affected provisions in the Local Government: Municipal Financial Management Act 56 of 2003, which instructs municipalities to adopt Integrated Development Plans (IDPs) and budget on or before the 30th of April each year. This was not done due to Covid-19. Only a few municipalities countrywide tried to meet these deadlines, but have not done so without being litigated by pressure groups. eThekweni Municipality, for example, has been challenged in court for adopting IDP through virtual platforms during Covid-19, where it is alleged that a considerable number of community members were left off during participation. One of the factors that emerged from the collected data was that despite municipalities going the route of electronic platforms, such as local community radio stations, Microsoft Teams, etc. for the adoption of IDPs/SDBIPs, all the interviewed officials from the IDP units could not account for the question on the extent to which those platforms have reached the intended target audience.

3.2 The impact lockdown stages had on service delivery and the services that were affected the most during Covid-19

The focus of this objective was collating data about services that were affected most during the Covid-19 hard lockdown periods within the selected municipalities. As per the findings, an array of services was listed at both district and local levels. The following are the primary services that were most affected.

a) Local economic development

Local economic development is described in the White Paper on local government (1998) as one of the critical administrative cogs to drive the envisaged efficient and effective developmental local government. The interviewed officials in all selected municipalities decried and described how Covid-19 badly affected economic activities within their operational areas. Apart from street vending and hairdressing, which are considered key pro-poor business methods that municipalities promote, small and big businesses that benefit from gatherings within the municipality, such as sporting fields or football matches in stadiums, struggled to survive during Covid-19. This also extends to the tourism sector. One of the interviewed senior officials in Capricorn District Municipality indicated that Covid-19 caused “job losses in the tourism sector and some businesses in town ... also affected revenue collection in the municipality”. A full account of the impacts that Covid-19 had on the tourism sector has been detailed in Chapter 2 of this report.

b) Municipal planning services

According to the legislative and policy frameworks guiding local government planning (Local government: Municipal Systems Act 03 of 2022 as amended; White Paper on local government, 1998), when doing planning, all municipalities are expected to engage with relevant stakeholders and this was found to be impossible under the Covid-19 restrictions. Findings show planning services from water sections, town planning, waste management and other central planning units, like Integrated Development Planning and local economic planning, had to be somewhat stalled due to the nature of impossibilities presented by Covid-19. Activities like public participation, which are central to municipal planning, could not happen due to Covid-19. The other avenues,

which could have been used to achieve public participation, were also not feasible due to financial constraints and other socio-economic reasons faced by the municipal stakeholders.

c) Municipal public transportation

Of the selected municipalities, Polokwane Municipality is one that is rendering public transportation otherwise known as Integrated Rapid Public Transportation Network (IRPTN) Leeto La Polokwane. The bus is operating in the city and within numerous townships around Polokwane. Findings show that since Covid-19, especially during stage 5 of the lockdown, the bus only serviced “essential” workers who constituted less than a percent of the normal bus users. This means that the bus was operating at a loss, which then meant that it became a liability to the municipality. A further study needs to be done to understand the phenomenology around losses (in terms of figures) incurred by this public transport during the Covid-19 pandemic, how the municipality managed to keep the bus on the road after the hard restrictions and the responses from the users.

d) Water, electricity and sanitation

These services were deemed essential and municipalities had to ensure that communities had access to them. However, findings show that unlike in Molemole, which is predominantly rural, where the majority of communities cannot access water from their house taps and sanitation is still poor, Polokwane Municipality did not experience new challenges that they did not know about before Covid-19. The researchers could not pick any new potential issue, which is linked to Covid-19, except that the municipality experienced a shortage of water, which was deemed very essential during Covid-19.

3.3 The experiences of management staff on the nature of provincial-national support to local government during Covid-19

South Africa is a unitary State with federal characteristics (Kahn, Madue & Kalema, 2016). The Constitution of the Republic of South Africa 1996 in Chapter 3 provides a basis for intergovernmental relations in South Africa. Although South Africa has three spheres of government, they are expected to operate on principles of distinctiveness, interdependence and interrelatedness. Good cooperation among officials in the same

sphere and across spheres of government is what has been engendered in the Constitution, as well as the Intergovernmental Relations Framework Act (2005). This section, therefore, seeks to present the findings of the study about how officials were affected by Covid-19 in as far as intergovernmental relations were concerned.

3.3.1 Impact of Covid-19 on intergovernmental support to municipalities by the province

Provinces have a supporting and monitoring role in municipalities. Interviewees from the provincial sphere, who were asked about their understanding of intergovernmental relations, demonstrated knowledge of the concept in line with both literature and applicable legislation. One interviewee intimated that “IGR is the glue that holds government together. The ability of government to coordinate its policies and programmes, from national to the local sphere, is what makes government work”. Adherence to the constitutional and legislative regime was highlighted as important. Understanding government mandates, ensuring coherence in the implementation of policies as well as fostering a spirit of co-existence among government institutions across spheres were figured out to be important conditions for good intergovernmental relations. Interviewees concurred that good intergovernmental relations increase the chances of the government delivering on its mandate.

When asked about what support the province gives to municipalities within the jurisdiction of Limpopo, an interviewee who specialises in intergovernmental relations in the Office of the Premier, Limpopo, stated the following: “Working with CoGHSTA and the Provincial Treasury, legislative direction, strategic guidance, oversight, monitoring and evaluation are some of the support services that are given to municipalities by the Province”. In addition, there are important intergovernmental fora that were mentioned, which include the Premier’s Intergovernmental Forum, consisting of the premier, MECs for CoGHSTA and Provincial Treasury, and mayors in municipalities across the province. Any other department may be romped in depending on the nature of the issues under discussion. There are standing items on the Premier’s Intergovernmental Forum, for example, the audit outcomes.

3.3.2 The impact of Covid-19 on existing intergovernmental relations and support channels within the province

As alluded to earlier, Covid-19 disrupted “normal” life including operations of the government. One of the standout issues from interviewees was the inability of stakeholders to meet physically. This impacted negatively on the province to coordinate the implementation of national and provincial policies, as well as local programmes. Online meetings proved to be not very effective. Challenges such as load-shedding and poor network coverage compounded the problem.

On the top of the agenda for areas negatively affected by Covid-19 are: the interface of policies, monitoring the provision of roads service (RAL and municipalities were failing to attend to the dilapidation of roads in the province) and following up on the progress of how municipalities and provincial departments were attending to audit findings (in line with the audit strategy of the province). As stated earlier, digital platforms used for meetings proved to be inadequate for effective intergovernmental relations.

Digital platforms are seen as effective with small groups, for example, at the district level. However, it becomes ineffective with larger groups such as those trying to coordinate the Premier’s Intergovernmental Relations Forum, considering that Limpopo is predominantly rural and generally has a weak network signal. You can also add the high prices of data to that.

Another interviewee brought out how difficult it is to coordinate government programmes, more so during the Covid-19 period. In this regard, the interviewee pointed out to how difficult it was to monitor and evaluate programmes that municipalities and departments were undertaking. “It was difficult to verify what other officials claimed in terms of the progress they had made in a project. How do you do due diligence when your own life was in danger?” remarked the interviewee. The availability of Geographic Information System (GIS) services was proposed as a possible solution that will allow for monitoring and evaluation, especially for infrastructure projects. However, it was noted that the system was still in its infancy within the province.

Intergovernmental relations are complex and they became even more complex with the conditions imposed by the Covid-19 pandemic. During the pandemic, some positives

emerged and these include the effective use of structures, such as the National Command Council, the Provincial Command Council and the District Command Council, to disseminate information and directives pertaining to the Covid-19 being a tragedy that claimed many lives – there were lessons to be drawn from it. A good example is how intergovernmental relations were deployed to ensure that government as a whole responds coherently to problems that society was faced with.

There was also an improved interprovincial liaising where provinces met to share experiences, including best practices in dealing with the pandemic. This needs to continue beyond the Covid era and it also needs to spread to other areas, not just healthcare issues. One of the aspects that came out of the interviews is that Covid was sector-specific and that made it relatively easy to coordinate its response. Can South Africa not use this approach in dealing with the problems that it is faced with?

3.4 Possible ways to address public participation issues in the future

With the Covid-19 situation, public participation was hampered, reasonably so, in that the supervening impossibility prevailed. As reported earlier on, municipal planning and systems were affected. The following is recommended in the post Covid-19 local governance:

- Municipalities need to invest greatly in technology and related infrastructure. This will increase stakeholder participation and, consequently, the municipality will reduce costs associated with transporting communities to meeting points and unnecessary arrangements for social distancing, as is currently the practice.
- Internally, findings showed that ergonomics were also affected as employees had to change work times. Communication via technological platforms then became dominant, which meant an increased budget for gadgets and data, and it worked. With more partnerships, municipalities can extend connectivity to villages and townships through Wi-Fi installations to cover communities. Internet connectivity ought to be prioritised for increased public participation.
- Once connectivity is installed, municipal profiling ought to be done to determine the number of people who are technologically disadvantaged and need to be trained for basic skills.

3.5 Possible measures to improve intergovernmental relations by national and provincial governments on local government in the post Covid-19 period

There are several ways in which intergovernmental relations could be improved in the post Covid-19 era and these include:

- Making sector-specific intergovernmental relations structures. During Covid-19, the fact that the pandemic was a health issue and the national health department was at the forefront of coordinating provincial and local spheres, assisted in managing intergovernmental relations.
- Looking at ways in which the provisions of the Constitution of the Republic of South Africa 1996 can be amended to make intergovernmental relations simple and easy to implement.
- The use of technology in facilitating intergovernmental relations should now become engraved, not only in Limpopo, but in the entire republic. The 4th industrial revolution necessitates that government capacitates itself to be able to operate optimally in such an environment. Issues to do with the availability of gadgets, connectivity and data need to be addressed.
- The province's GIS services need to be up and running to allow for monitoring and evaluation, especially for infrastructure projects remotely.

4. POLICY AND MANAGERIAL IMPLICATIONS

The study identified the following policy and managerial implications:

- The impact that Covid-19 had on public participation and the extent to which the underlying legal framework in the form of MSA No 3 of 2022 (as amended) and MFMA 56 of 2003 were rendered impossible posed managerial implications in that the Service Delivery and Budget Implementation Plans (SDBIP) which almost entirely relies on the affected legislative processes like the "IDP process plan", for operationalisation and effective implementation, could not be monitored or fitted with necessary information.
- There is a need for government to address issues of poor network coverage in the province. This is a concern with rural municipalities that struggled to link with others online during the Covid-19 period, when physical meetings were difficult to conduct.

- The province's Geographic Information System (GIS) needs to be up and running as it could provide a mechanism for monitoring and evaluation, especially for infrastructure projects remotely.

5. CONCLUSION AND RECOMMENDATIONS

This section has captured the impacts that Covid-19 had on governance issues. Three themes were covered and these included the impacts of Covid-19 on public participation, service provision and intergovernmental relations, especially relating to the national and provincial support to local government. In terms of services affected, findings pointed to services under the local economic development, municipal planning services, and water and sanitation as the most affected in Molemole and Polokwane municipalities. The study concludes that public participation, as one of the municipal planning activities, stands out as a major area that the spheres of government should collectively pay attention to. It is understood from the findings that this area had both managerial and policy implications. Thus, despite efforts to adopt technological measures, findings showed that most communities, especially those in rural spaces, could not afford to participate due, in part, to socio-economic factors such as unemployment, poor connectivity and illiteracy. Due to the cross-cutting nature of these factors, and limited municipal resources and capacity, all of these need collective efforts from different government spheres.

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CHAPTER 2: ECONOMIC SECTOR

CHAPTER 2.1 TOURISM AND COVID-19 IN LIMPOPO

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1. INTRODUCTION

The Covid-19 pandemic had a devastating impact on the global economy with far-reaching implications for developing countries. Several researchers have sought to understand how Covid-19 affected various destinations in South Africa; nonetheless, a comprehensive analysis of the impact and response to the Covid-19 pandemic at the provincial level has been lacking. This section of the study explores the impacts, responses and challenges experienced with the recovery of tourism enterprises.

The study utilised a mixed method approach, which used a questionnaire comprising open and closed questionnaires, and also used data generated from in-depth interviews conducted between January and February 2023. The key questions that made up the interviews and questions include impact, response, challenges and opportunities businesses faced during the height of Covid-19, and challenges experienced during the recovery period. The total number of surveys administered to tourism managers and employees added up to 114, and 40 interviews were conducted. The questionnaire survey extended invitations to 149 respondents. Of those, there were 144 responses; the completion rate is pegged at 79.17%. The data was collected in two sampling sites, namely, Thabazimbi and Polokwane urban areas. Data was collected from hotels, restaurants, beauty parlours, lodges, a national park, an airport and other such tourism establishments.

The study respondents came from the broad sectors that are shown in Figure 1 below.

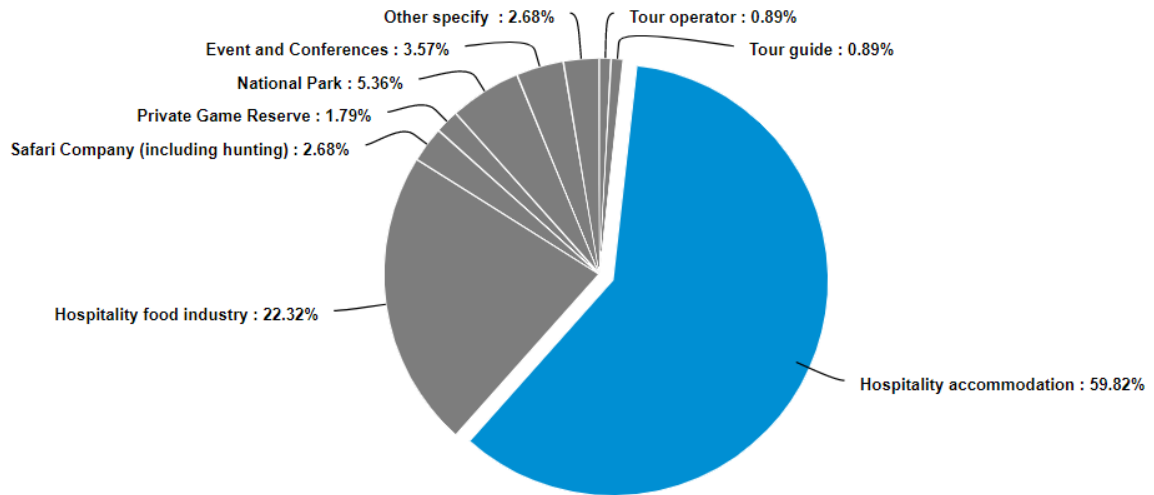


Figure 1: Sectoral distribution of respondents

2. KEY FINDINGS AND DISCUSSIONS

The study found that most of the surveyed businesses in tourism were more than ten years in operation, while about 40% of the businesses were operating for less than five years before the pandemic struck. This shows that a sizeable number of businesses in the sampled areas were still in their infancy. Of these businesses, about 51% of the businesses were described as struggling businesses before the pandemic began. This means that at the time of the pandemic, some tourism businesses were already struggling financially. Of the respondents to the state of business, 13% indicated that the business was thriving, 31% were stable and 5% were breaking even. From the collected data, it was clear that Limpopo's tourism market comprises 42% of the regional tourism market, 32% of the local market, and the remainder being 1% and 25% is the international market, according to survey data.

2.1 Impact of Covid-19 on tourism business operations

Based on the findings from the survey and interviews, Covid-19 largely had an adverse impact on tourism business operations in the Limpopo Province. Besides having an adverse impact on businesses and profitability, the pandemic also hurt conservation efforts in the province. A sizeable number of employees were left traumatised and emotionally scarred, and some are battling the adverse impacts of long Covid-19, which poses several challenges. Figure 2 shows the impact of Covid-19 on tourism operations

in Limpopo. Despite government efforts to assist with the Unemployment Insurance Fund Covid-19 TERS, the employees in the tourism industry suffered from temporary job layoffs and a considerable number of staff members were retrenched as a result of the challenges that Covid-19 imposed on tourism businesses. Given the fixed costs that tourism enterprises had to deal with, even when businesses were closed, such as insurance costs for buildings, medical aid bills, rates, taxes, levies, electricity and rental costs, amongst others, most businesses, even though they stopped salaries to their employees, witnessed a significant decrease in their savings and financial reserves during the Covid-19 pandemic. This means that most businesses would have had challenges with meeting some of their financial obligations during the recovery period.

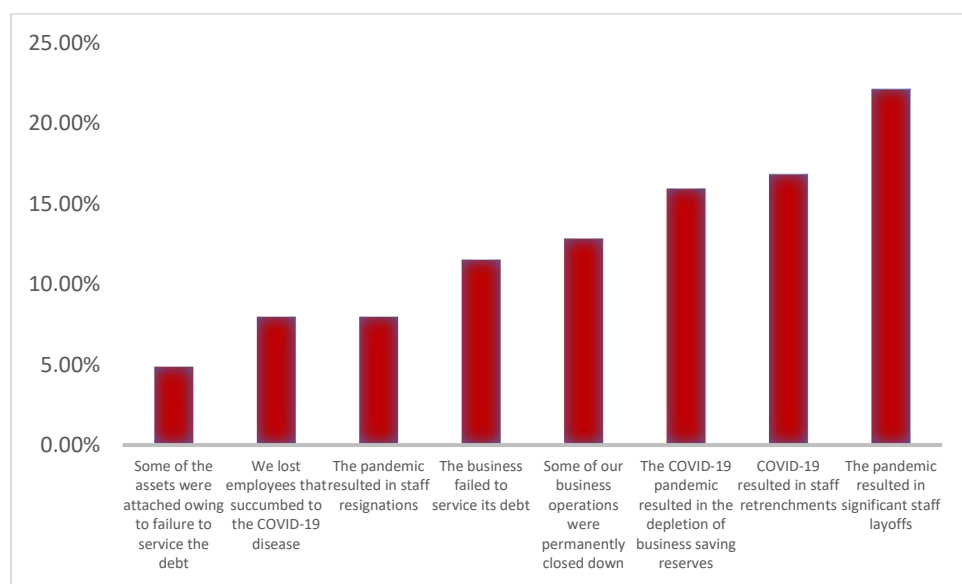


Figure 2: The impact of Covid-19 on tourism businesses in Limpopo Province

The study found that at least 15% of the respondents showed that some of the businesses they know or worked at, had permanently closed as a consequence of the Covid-19 pandemic-induced challenges. About 12% of the surveyed businesses indicated that they failed to service their debt due to cashflow challenges caused by the pandemic. It is, therefore, not surprising that the number of staff members that were rendered jobless was high. The study found that about 5% of the respondents had lost their assets, which were attached after failing to service their debt. This means post Covid-19, a sizeable number of the tourism industry were economically far worse than at the beginning of the pandemic, with detrimental impacts on the psychological and social well-being of employees.

Given the challenges faced by tourism and hospitality employees, about 8% of the respondents indicated that there are people working in their companies who resigned at the height of the pandemic. Given that several businesses suspended salaries and wages for employees at the peak of the pandemic, resignations could indicate a lack of confidence in the sector, due to the lack of job security at that time. The sector, therefore, could possibly have lost a lot of talented, experienced individuals, as shown in Figure 2.

At the height of the pandemic, there were some significant challenges concerning staff members who were considered front office staff members, who were infected by the Covid-19 virus and which resulted in deaths. About 8% of respondents indicated that they lost their colleagues who died after contracting the virus. This had a significant impact on the staff's psychological well-being. Evidence from the interviews revealed that a sizeable number of tourism employees were traumatised by the pandemic, with some still battling the effects of long Covid-19. Some employees indicated that since contracting Covid-19, they were never themselves again. Out of the companies that were surveyed, very few indicated that they had psychosocial support services for the employees, to help them navigate the wellness challenges and shock that emerged from the pandemic. A few staff members were quite upfront about their need for psychosocial support to better deal with the trauma caused by the pandemic. A small number of employees noted that they were fearful of contracting the disease during their daily work commitments, while the majority indicated that they had comfort in the health and safety protocols that were adopted to deal with the effects of the pandemic.

The Covid-19 pandemic, therefore, had a multifaceted adverse impact on tourism employees. Figure 3 demonstrates the severity and impact of the pandemic on tourism employees who witnessed a decline in income. At least 22% of the tourism employees reported that they were and could still be depressed by the events that took place during the Covid-19 pandemic. This confirms earlier assessment and corresponds to the findings from the interview data. The depression could be attributed to the loss of family members and loss of assets due to incapacity in servicing debts, which could have resulted in properties being attached. The recovery, therefore, from the pandemic in such scenarios will take longer than anticipated.

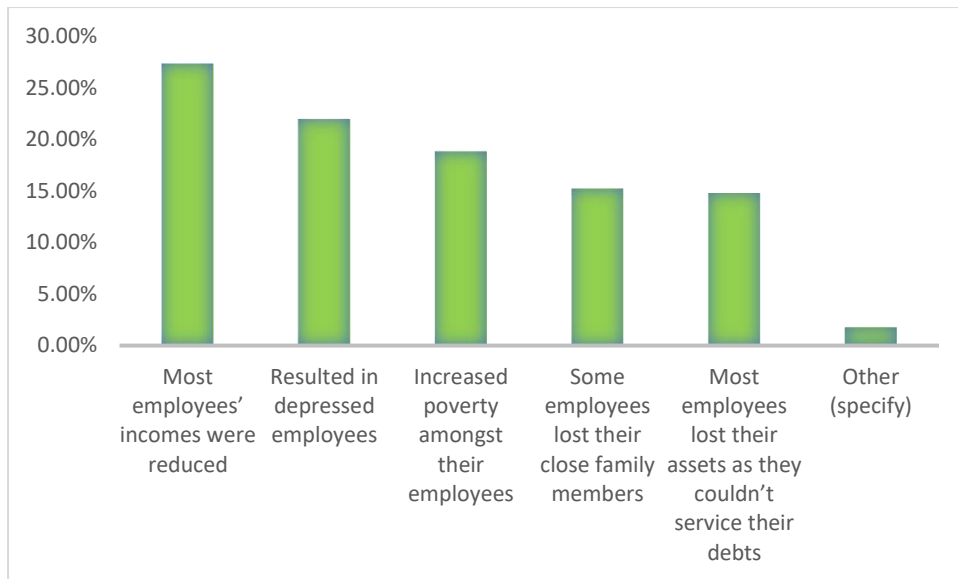


Figure 3: Impact of Covid-19 on tourism employees in Limpopo Province

During the interviews, tourism employees noted, in some cases, that they also had experienced changes in how they were paid, which has adverse implications on their livelihoods and security.

3. IMPACT OF COVID-19 ON AIRPORTS

The Limpopo Province has one servicing airport that connects it to the entire country, currently through the Polokwane International Airport. Due to the challenges imposed by Covid-19, the airport witnessed a decline in the number of aircraft departures and arrivals, as shown in Figure 4. Given the shutdown that was forced on the airport at the height of the pandemic, the airport could not conduct critical maintenance work. As a result, the airport was downgraded and could not land certain types of aircraft. The non-servicing of critical equipment meant that when the pandemic was over, the airport needed replacement of many things, such as runway lights. This adversely affected revenue collection for the airport.

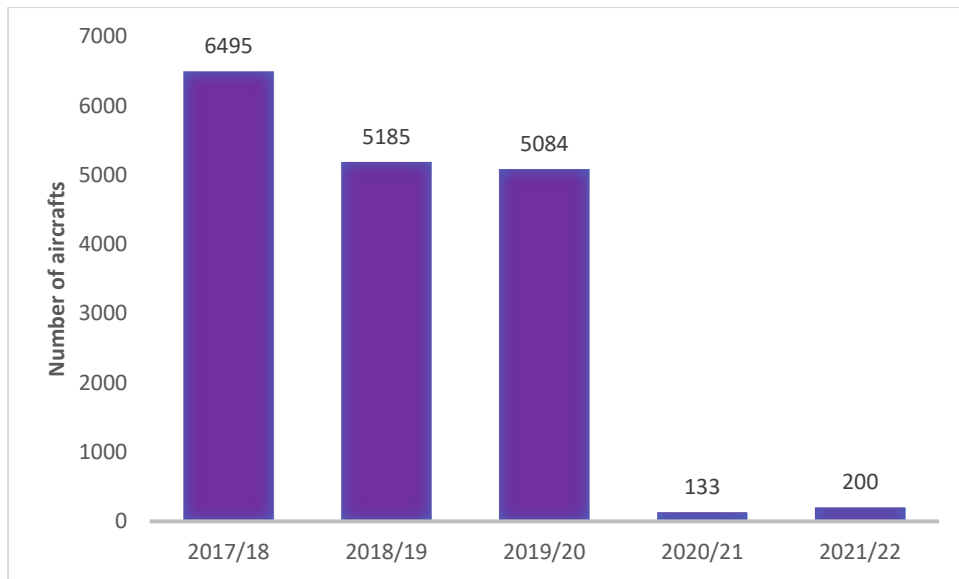
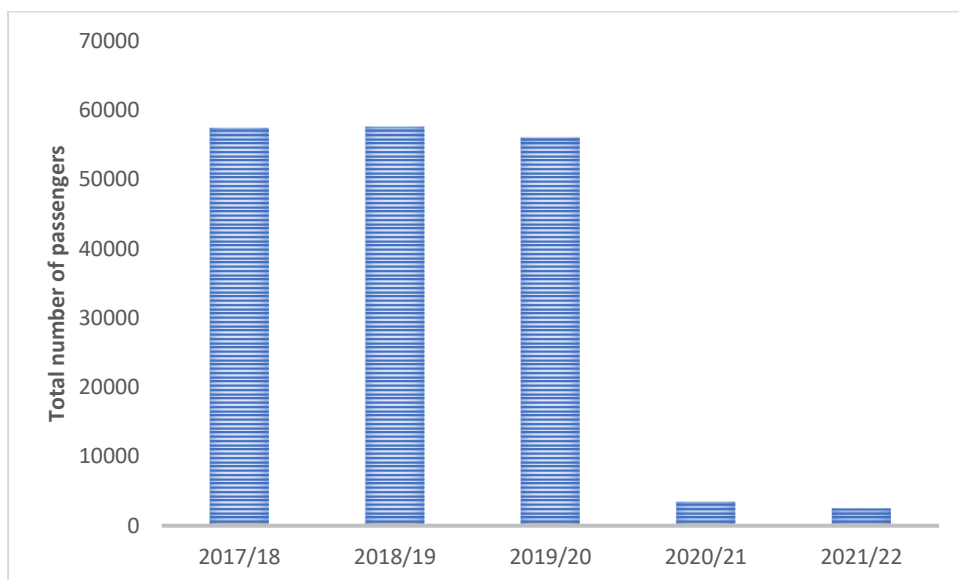


Figure 4: Impact of Covid-19 on aviation at Polokwane International Airport

The decline in flights to the airport consequently and equally affected passenger numbers. The airport witnessed a significant decline in the number of arrivals and departures. This resulted in a lot of revenue loss that normally comes with serving a passenger. This complicated the airport's financial outlook at a time when they needed funds to maintain and refurbish the airport.



Other business establishments that operate within the airport failed to service their rentals and battled to reopen after the Covid-19 restrictions.

4. CHALLENGES DURING AND POST COVID-19 PANDEMIC ERA

The tourism and hospitality industry in South Africa faces numerous challenges that still need to be addressed, to ensure the sector fully recovers, and realises its promise and potential. The prolonged restrictions left the sector financially drained. Most businesses require capital injection so that they recapitalise, refurbish their businesses, and respond to current demands and needs. The tourism industry players noted that, in the main, the growth in some respects was still below where tourism was in 2019, while in some instances, businesses have fully recovered to the pre-Covid-19 period.

Some entities noted that they are experiencing severe challenges with the hyperinflationary environment that characterised the post Covid-19 pandemic. The cost of doing business had significantly gone up regardless of customers' reduced purchasing power. The major cost drivers in the city of Polokwane were fuel, electricity and water, amongst other costs of doing business. The respondents noted that there is also a shift in travel patterns and behaviour as some of the usual customers, such as banks and government departments, are no longer as active in meetings and conferences, which means a drastic reduction in business. They noted that most of the major developments that emerged during the Covid-19 pandemic were the usage of technology such as Zoom and MS Teams, amongst others, to conduct meetings, resulting in the loss of revenue for conference venues in the sampled areas. Figure 5 captures some of the top challenges that the tourism industry is facing concerning tourism recovery in the province. Those who indicated other challenges cited electricity shortage as a major challenge that could affect their business operations.

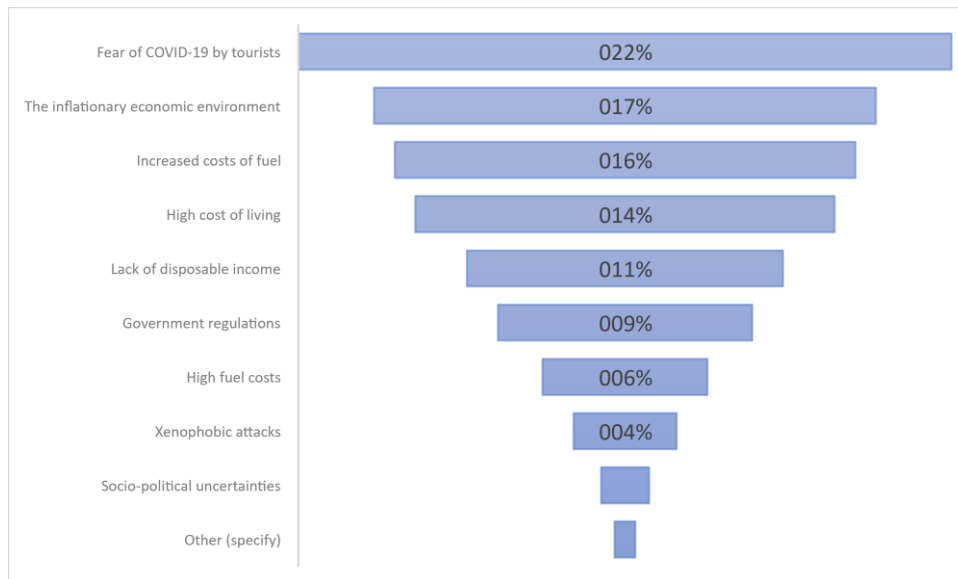


Figure 5: Challenges faced by Tourism Industry

The tourism industry in Polokwane bemoaned poor service delivery by the municipality as one of the major challenges they are facing. The tourism business complained that it takes ages for the municipality to attend to service delivery issues when reported, which sometimes frustrates businesses and customers. Post Covid-19, the respondents noted that service delivery has deteriorated in the municipality, with constant sewage outbursts and damaged roads that are often left unrepaired for prolonged periods. In Thabazimbi tourism areas, facilities are not reachable without a 4x4 vehicle, limiting the business of tour operators. Tour operators indicated the service delivery issue hurt the tourism destination image of the country. They indicated a need to effectively deal with this issue, as it causes severe challenges from a marketing perspective.

Perhaps the biggest challenge all tourism enterprises mentioned in their operations is the erratic electricity challenge. The post Covid-19 period in South Africa has been characterised by high levels of load-shedding. Small businesses that cannot supply backup power in the form of solar, inverter and/or generators, indicated that tourists ask about whether such backup power is available before they book with an establishment; they book elsewhere if there is no backup power. This results in a loss of business and revenue. Most businesses indicated that they would love to invest in solar technology, but the start-up costs are way beyond what they can afford, given the liquidity challenges caused by Covid-19. Those who use generators also complained of the increased cost of doing business through diesel purchases, to ensure that the business

is not severely affected by load-shedding. Electricity outages were also reportedly damaging equipment, which added additional costs to businesses.

The businesses in Limpopo also battled the unique challenge of a lack of water supply from the municipality. The tourism industry said it is reeling under water shortages. They have to outsource water from either boreholes or other sources, as the municipality is incapacitated from delivering on the same. The failure of the government to provide essential services was seen as a major challenge to the sector.

5. SECTOR RESILIENCE AND COPING MECHANISMS DURING COVID-19

Apart from a few accommodation establishments that moved away from the tourism industry to offer student accommodation, particularly in Polokwane, a few other enterprises were birthed at the height of the pandemic. Amongst the respondents, there were about five enterprises that indicated that they opened their doors at the height of the pandemic. Amongst these were women entrepreneurs in beauty and therapy, and restaurant owners who went on to innovate their businesses and are looking forward to business growth. While some industries in tourism closed, the new entrepreneurs seized opportunities to open new businesses, which are growing steadily. The traditional food restaurant owner, who opened a somewhat semi-mobile restaurant, indicated that her success and resilience could be ascribed to the ability to market the business and take food deliveries through their alternative-built food delivery system, which matches the services offered by Mr D Food and Uber Eats. In this way, they own their bikes, which are used to deliver food to their customers and this has allowed them to create extra jobs and extra income, rather than relying on large cooperates to provide this service.

The Covid-19 pandemic in more rural areas, such as Thabazimbi, also indicated that they managed to develop their own food delivery system, which assisted them in ensuring business continuity at a time when sit-ins were not allowed. The system, initially operated through telephone call-ins, was further developed and offered jobs for the delivery teams and some ray of hope for the restaurant industry.

The hospitality industry, particularly the accommodation industry, noted that part of their resilience building were the changes they did made to marketing, where the majority of the establishments moved to an online booking system on platforms such as Booking.com, which is a popular business marketing site for establishments in the

province. Businesses noted that the platform had allowed them to witness some modicum of recovery in their business operations. They, however, bemoaned the costs of such platforms. Most enterprises also indicated that they made efforts to improve their online presence, but lacked the required capital for such exercise and lack of digital skills to do the same effectively.

The game ranching industry noted that most establishments were left struggling due to a lack of international tourist markets, which is the mainstay of hunting and safari operations. The hunting industry noted that they reconfigured their industry to be more accommodating of the local market. This included adopting a two-tier price system for locals and the international market. Instead of solely relying on trophy hunting, some franchises moved in to develop game meat products, such as biltong. In this regard, some of the open establishments have a national footprint. The industry players, such as marketers, bemoaned the escalating costs of hunting as one of the stumbling blocks towards realising a full recovery. The hunting safari noted that it was still operating way below the 2019 levels and wished to see a better picture.

6. EVALUATION OF GOVERNMENT INTERVENTIONS DURING THE COVID-19 PANDEMIC

The government played a central role in managing the Covid-19 pandemic, from policy and regulation to resource allocation. Respondents were asked to indicate their level of satisfaction with government efforts, with varying levels of satisfaction (Table 1). Several tourism respondents, who were unhappy with the government's intervention during the Covid-19 pandemic, noted racial discrimination and the chaotic processing of TERS as a significant challenge. Some respondents also complained that the local government was not forthcoming in assisting with relief on rates and taxes, to offset financial pressure on struggling tourism businesses. It would appear that the majority were satisfied with the government's efforts during Covid-19. More than half of the respondents were happy with how the government dealt with the pandemic. Tourism businesses, however, feel that more could be done to support tourism businesses better, to recover from the pandemic.

Table 1: Satisfaction levels with government interventions

Statement	Agree	Strongly Agree		Disagree	Strongly Disagree	Overall
I was satisfied with the government's support during the Covid-19 pandemic.	40	17		13	13	108
	37.04%	15.74%		12.04%	12.04%	100%
Our business would have collapsed had it not been for the government support we got.	33	11		12	8	82
	40.24%	13.41%		14.63%	9.76%	100%
The government could have done more to support business operations during the height of the pandemic.	33	19		9	1	78
	42.31%	24.36%		11.54%	1.28%	100%
Government support was provided in a transparent manner.	23	3		9	9	77
	29.87%	3.9%		11.69%	11.69%	100%
I am satisfied with current efforts by the government to revive the tourism and hospitality industry.	25	6		15	9	75
	33.33%	8%		20%	12%	100%
I am satisfied with the implementation modalities used to control the spread of Covid-19.	35	8		7	4	73
	47.95%	10.96%		9.59%	5.48%	100%

7. CONCLUSIONS AND POLICY RECOMMENDATIONS

The impact of Covid-19 is well documented. What is clear from the study is that the sector was inadequately prepared to deal with the resultant impact of Covid-19 and the fallout that ensued thereafter. Despite some of the enterprises indicating that the period before Covid-19 was fairly good, in terms of economic performance, very few companies had savings to carry them through the pandemic. The study reveals the need for the sector to adequately prepare financially for disasters that might occur, such as Covid-19. Employees were left to deal with the challenges of the pandemic regardless of whether businesses had made profits in previous years.

The implementation of the Covid-19 relief fund was, in large, chaotic and procedures were unclear. This left several tourism employees battling to meet their financial obligations. This requires better planning in the future. Providing relief along racial

lines was insensitive and the government can be better accommodating in ensuring a spirit of belonging and social cohesion.

The tourism enterprises in Polokwane seem to be uncoordinated, which adversely affected its bid to get concessions during the height of the pandemic. A coordinated approach to tourism bidding offers numerous benefits, including destination marketing, as such structures are needed to foster marketing and recovery of the sector.

From a psychological and financial perspective, the pandemic deeply scarred tourism employees. An appeal to provide psychosocial support can never be over-emphasised in this regard, for dealing with the anxieties created by the Covid-19 pandemic. As part of health and safety considerations for the sector, tourism employees require protection going forward.

The sector's recovery is predicated on government support in many respects. There is, therefore, a need to continuously support the sector as it battles recovery to avoid further business failure, which has a devastating impact on employment patterns in the province.

CHAPTER 2.2 MINING SECTOR

Author: Dr Malebajoa Anicia Maoela – Unisa

Click or tap here to enter text. **The impact of the Covid-19 pandemic on the mining sector**

INTRODUCTION AND RATIONALE

South Africa's economy is based largely on mining, which is important for both the economy and society in rural areas (Fine, 2018; Harrison & Zack, 2012; Wilson, 2011). According to Minerals Council South Africa (2021), in 2019, the mining sector contributed 8.1% of GDP, R94.7 billion in direct investment and R348.2 billion in merchandise exports – a third of total export earnings. Like other economic sectors, however, the mining industry has not been spared from the negative consequences of the Covid-19 pandemic. The mining sector, among many impacted economic activities, underwent major strategic changes. These changes are likely to have unpredictable short-term impacts and long-term consequences on people's livelihoods and global economies (e.g., Atif et al., 2020; Krzysztofik et al., 2020; Marimuthu et al., 2022).

To this effect, in this section, our primary objective is to thoroughly analyse the ways in which mining activities have been significantly influenced by the unprecedented Covid-19 pandemic and the subsequent responses implemented within a period of two to three years. The aim is to gain a comprehensive understanding of the specific impacts, challenges and adaptations that the mining sector has undergone in the face of this global health crisis. By delving into the various aspects of the mining industry, such as production, labour, supply chains and market dynamics, we aim to shed light on the extensive ramifications brought about by the pandemic. This includes disruptions in mining operations, workforce availability and safety measures, transportation and logistics challenges, fluctuating demand and prices, as well as the overall economic and social implications for mining communities.

Furthermore, this study goes beyond a mere assessment of the past and present circumstances. It also puts forth a set of thoughtful and well-researched policy recommendations. These recommendations are designed to fortify the mining sector's resilience and preparedness for any potential future shocks akin to the nature of the

Covid-19 pandemic. They encompass strategies for risk management, contingency planning, health and safety protocols, supply chain diversification, technological advancements and government support.

By offering these policy recommendations, we aim to facilitate the development of a more resilient and adaptable mining industry. This will not only help the sector navigate through the ongoing challenges, but also ensure its long-term sustainability and ability to withstand future disruptions. By drawing on the lessons learned from the Covid-19 pandemic, we aspire to assist policymakers, industry stakeholders and decision-makers in making informed choices that will foster a robust and agile mining sector in the face of uncertainties yet to come.

1. METHODOLOGY

To comprehensively assess the impact of the Covid-19 pandemic on the mining industry, a robust methodology was employed to gather primary data. This involved the utilisation of interviews and questionnaires, which were carefully designed to capture relevant information. The questionnaire consisted of 47 questions, covering a wide range of aspects related to the mining sector and its response to the pandemic. The questionnaire was created through QuestionPro, a digital data-gathering software. It can be deployed both online and offline, making it suitable for unreliable internet connectivity in many parts of South Africa. The link to the questionnaire was administered face-to-face by the authors to employees in the mining sector, during a scheduled appointment. The participation of respondents was voluntary. The link to the online survey was also distributed by the authors via e-mail to their contacts in the sector. The contacts were advised not to publicise the survey via social media platforms (e.g., LinkedIn) to ensure, to the extent possible, that it would remain within the mining sector. The survey was designed to be simple and rapid, with an estimated completion time of fewer than 25 minutes. To minimise barriers to participation and to meet the requirements of ethical approval, respondents were not required to sign in and all responses were kept anonymous.

A census sampling approach was adopted. By adopting this sampling approach, the research study sought to gather data from every eligible participant to obtain a comprehensive and detailed understanding of the impact of the Covid-19 pandemic on

the mining industry. This approach ensures that there is no sampling error, as data is collected from the entire population, thereby providing a complete picture of the experiences, perspectives and responses of the mining industry as a whole.

Face-to-face interviews were used to collect data, since the study was conducted under adjusted lockdown conditions. Semi-structured interviews were the most suitable as they guided the researchers to probe participants for short essay responses to specific open-ended questions, with room to follow up (e.g., DeJonckheere & Vaughn, 2019). The convenience sampling method was used to recruit interviewees (e.g., Boas et al., 2020). To capture the lived experiences of the entire mine, interviewees were selected from all the stages of the mining value chain. To ensure consistency and quality of interviews and transcripts, the researcher personally transcribed each of the recorded interviews verbatim. Data collection took place from August 2022 to March 2023.

To ensure validity, reliability and trustworthiness of the data, several measures were taken: (a) validity: the items included in the questionnaire were based on existing literature and expert opinions; (b) reliability: appropriate statistical techniques were employed to assess the internal consistency and reliability of the collected data, such as Cronbach's alpha for measuring the reliability of scales; and (c) trustworthiness: was ensured through the use of rigorous research methodologies, including a mixed-method approach, combining both qualitative and quantitative data collection methods. Regarding data analysis, qualitative data from interviews was analysed using content analysis, identifying recurring themes, patterns and key insights. Quantitative data from the questionnaires was analysed using basic descriptive statistics, depending on the research questions and objectives.

2. RESULTS AND DISCUSSION

A total of 549 responses were received by the closing date, from mines mostly located in the Waterberg district municipality. Of the 549 responses, 300 contained sufficient information to be included in the analysis. The majority of the sampled mines were privately owned, operated at large scale and utilised surface/open cast mining methods to mine minerals such as coal, platinum, andalusite and chromium. Overall, we interviewed seven respondents. Each interview lasted for about 30 minutes and was digitally recorded.

2.1 Response demographics

Responses were received from individuals across different management levels, with the largest response from the general hand level (35% of the respondents; Figure 1A). Concerning their employment status, 90% reported being permanently employed, where others were either on a fixed term contract or work on a part-time basis (Figure 1B). In terms of the years that respondents have worked in the sector, responses were fairly evenly divided with the largest cohort of respondents indicating that they have been with the company for more than 20 years (41%; Figure 1C), and operate in the acquisition and exploration stage of the mining value chain (36%; Figure 1D). Respondents were asked to identify the sector in which they worked: acquisition and exploration, mine planning and construction, mineral extraction, manufacturing, and logistics/transportation. The respondents represented 34% acquisition and exploration, 21% mine planning and construction, 19% mineral extraction, 16% manufacturing, 7% logistics/transportation and 2% other (Figure 1D).

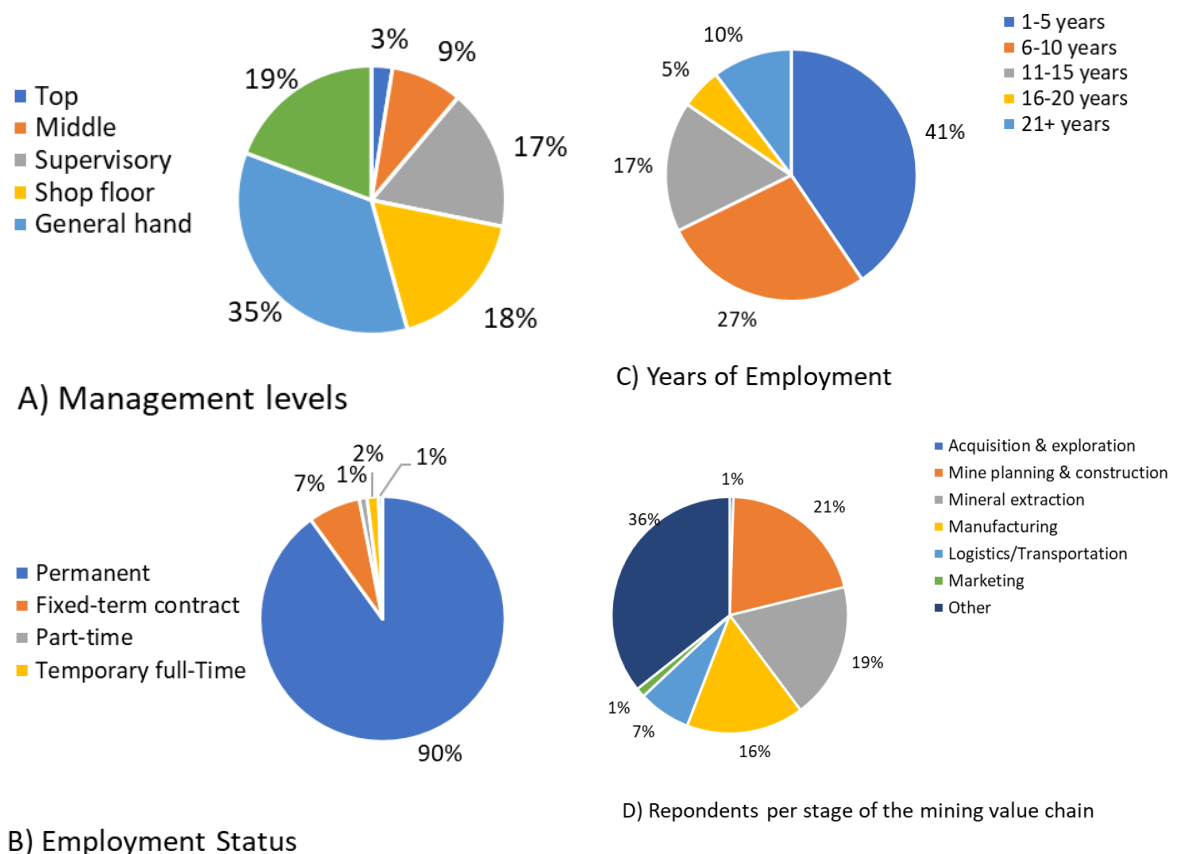


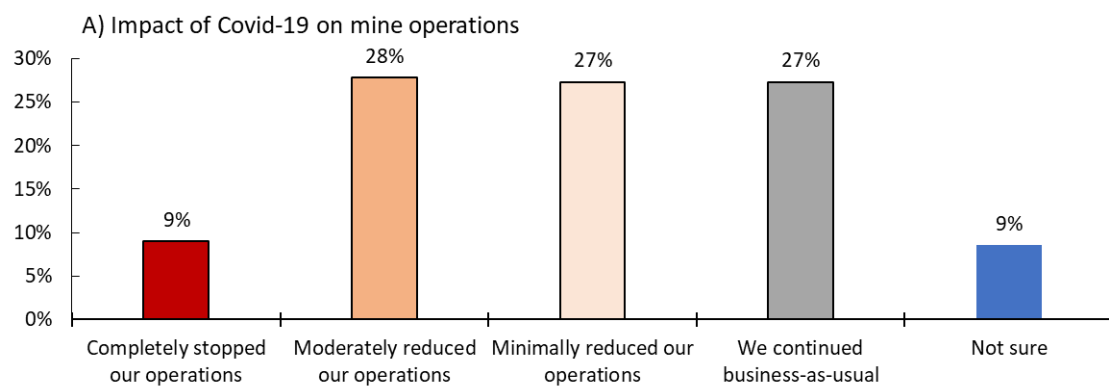
Figure 1: Mining sector Covid-19 demographic data. Responses by (A) different management levels, (B) employment type/status, (C) years of employment and (D) stage of the mining value chain

2.2 Impacts of Covid-19 on mining activities

The viability of the mining sector is heavily reliant on stable and predictable market conditions, and functioning supply chains (Ramdoo, 2020). Data from the interviews and surveys indicate that, despite strict economic lockdown policies, operation and production were minimally impacted (Figure 2A & B) since their services (e.g., mineral exploration, processing and related supply of goods) were declared essential services. Operations were only completely stopped for less than 30 days and during that period, 34% of respondents felt the entire mining value chain was impacted (Figure 2C).

Even though the mining sector was permitted to operate, they were not operating at full capacity. Lockdown measures disrupted mining industry supply chains because of sudden factory closures and the temporary suspension of land transportation, among many others. On the demand side, restrictions on the movements of people and the closure of non-essential economic activities had significantly cut down on consumption. This is summed in the following statement by the general mine manager representative:

“60% of the capacity of the entire mine value chain was lost during Covid-19, with 10-15% impact on the production. Apart from production, exports and revenues declined drastically since customers could not run at their normal levels”.



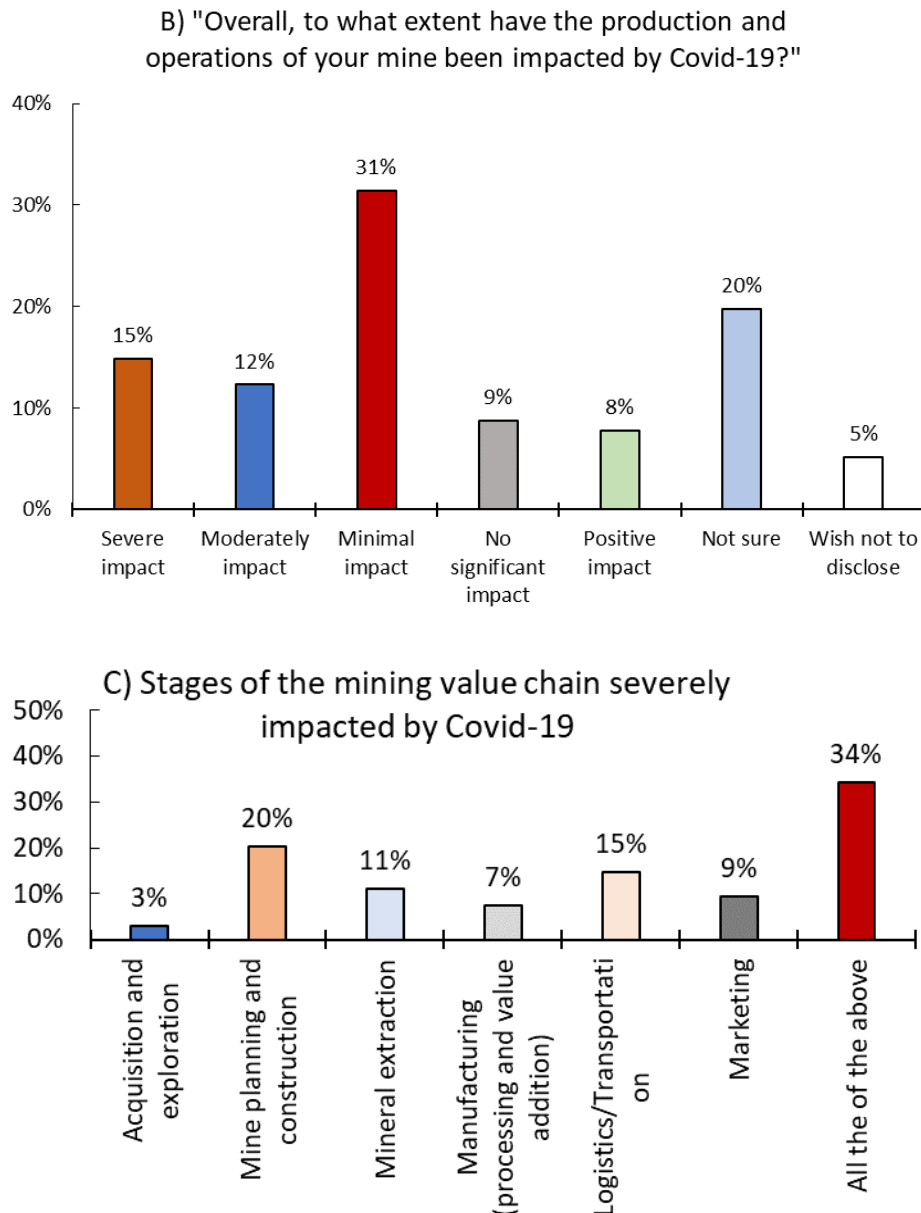


Figure 2: Covid-19 survey responses concerning the impact of the pandemic on mining activities. A. Whether the pandemic has affected the mining operations. B. The extent to which the operations were impacted. C. Stages of the mining value chain that were severely impacted by the Covid-19 pandemic

When asked about the main challenges that the mines currently face, due to Covid-19 related economic disruptions, 26% reported employees' absenteeism from work due to illness or government orders, whereas between 9-16% cited inadequate cash flow to maintain staff, business operations and delivering products to the markets, as some of the challenges facing the mining sector (Figure 3A). Looking to the future, 26% of the respondents forecasted the mining sector losing skilled labour, due to automation and

digitalisation of critical roles, while the rest indicated market disruptions (20%) and supply chain disruptions as some of the long-term impacts to be experienced by the mining sector (Figure 3B).

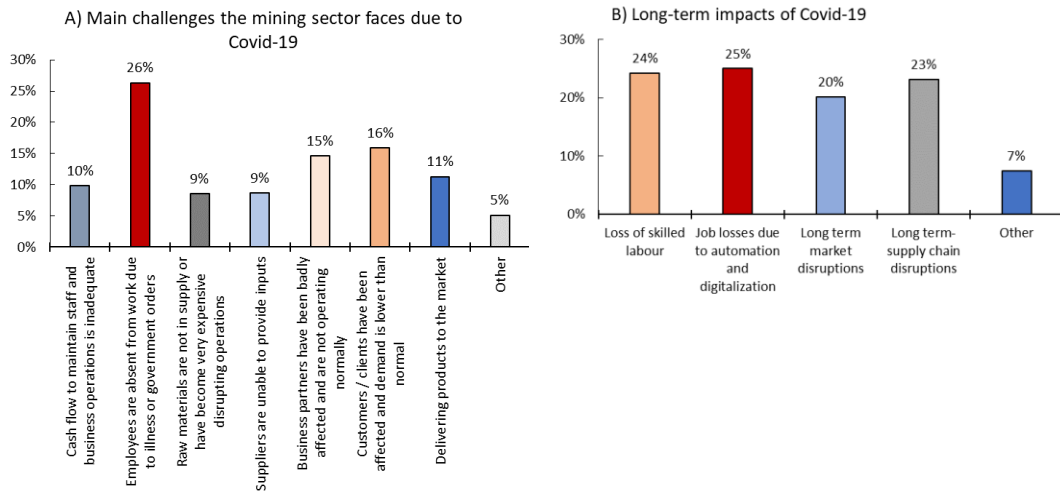


Figure 3: Survey responses on the current and future challenges facing the sector. A. Current main challenges the mining sector faces due to Covid-19. B. Long-term impacts of Covid-19 on the sector

2.3 Impact of Covid-19 on the well-being of mine workers

Covid-19 impacted on the well-being of mine workers and our findings indicate the following: (a) 48% were ever diagnosed with Covid-19 (Figure 4A), (b) over 58% of employees are fully vaccinated (Figure 4B) and (c) close to 20 deaths were recorded so far since the Covid-19 outbreak (Figure 4C). When asked if the prevalence of Covid-19 had a negative impact on their work and productivity (Figure 4D), 38% of the respondents reported that they are still struggling to finance their households due to Covid-19 (Figure 4E).

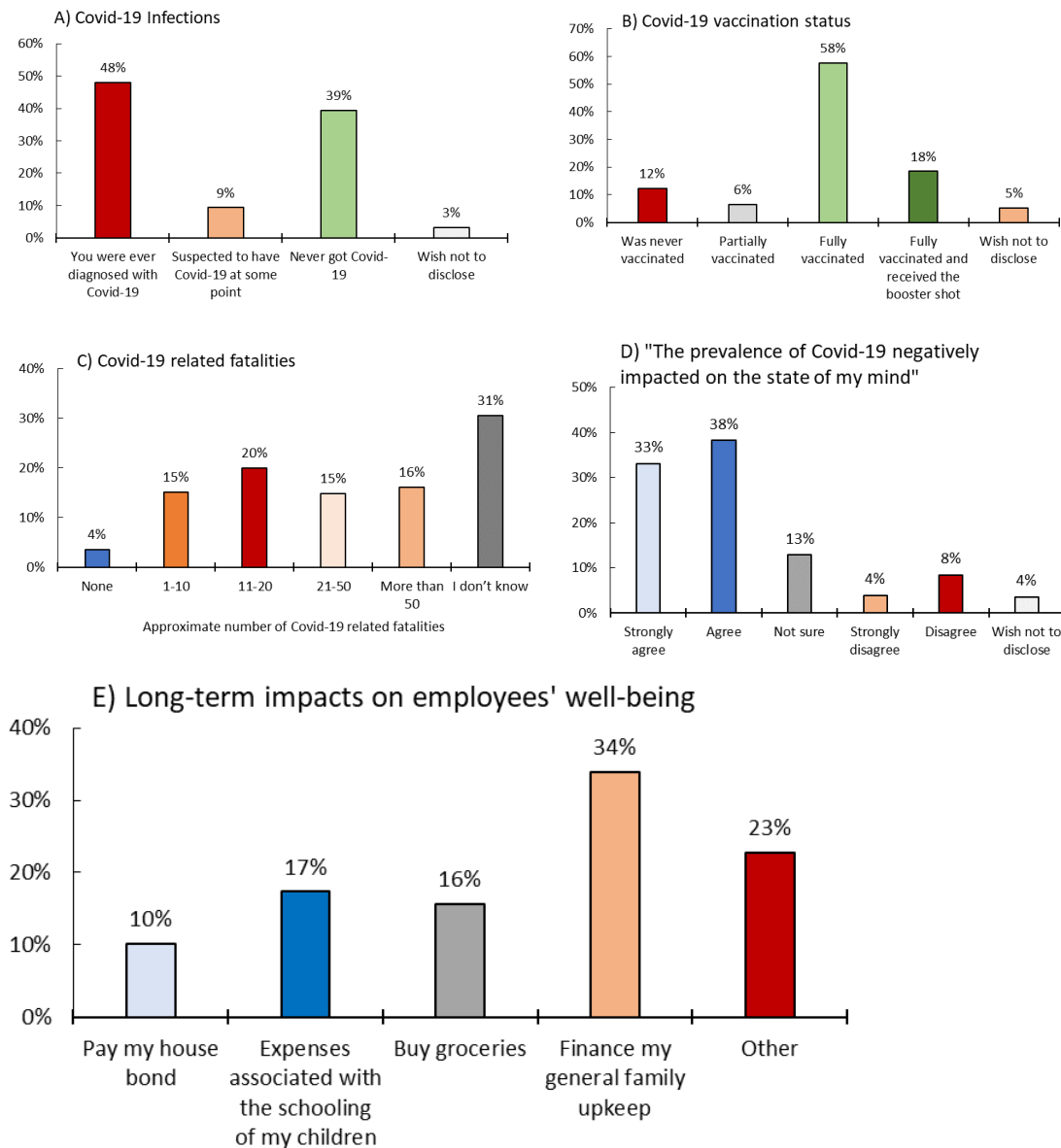


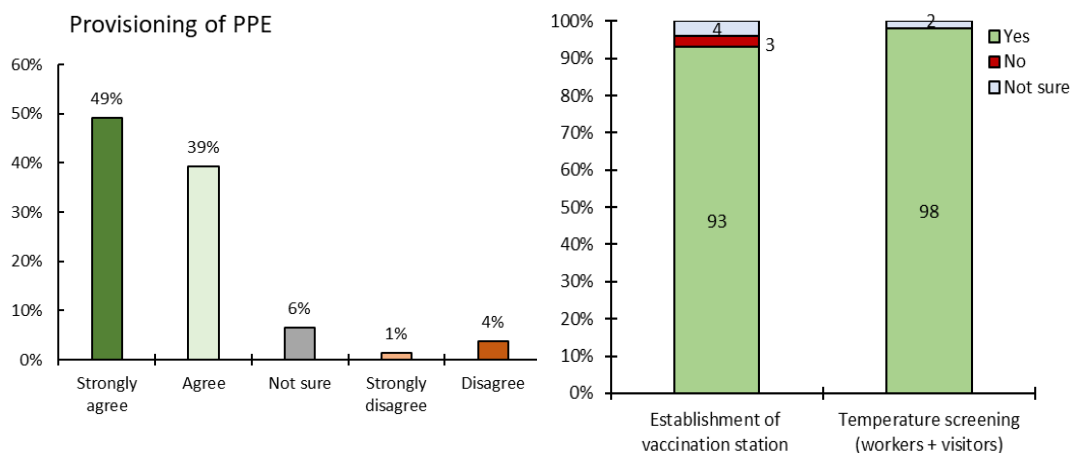
Figure 4: Short-term and long-term impacts of the Covid-19 pandemic on employees' well-being

Other challenges also causing the decline in mining revenue include: (a) delayed infrastructural developments/projects, given that construction companies closed during lockdown periods, (b) cable thefts – affecting coal dispatching, (c) destruction of railway infrastructure by extreme weather events and (d) electricity load-shedding.

2.4 Mitigation and adaptation strategies implemented

Various mitigation strategies, based on the information extracted from the questionnaire response and interviews, were implemented to halt the rapid spread of Covid-19 in the sector. Measures such as:

- Budget-cut measures were undertaken to insulate, or at least limit, the economic and humanitarian shocks of the pandemic. For example, one mine stated that R60–100 million were spent on the acquisition of PPE equipment, excluding infrastructural developments such as the Covid-19 testing laboratory, quarantines facilities and vaccination stations.
- Raising awareness about Covid-19 issues, social distancing measures, personal protective actions and many other non-pharmaceutical interventions (Figure 5).
- Mandatory Covid-19 testing before the cast could open.
- Amendment or revision of the Safety, Health and Environmental policies.
- The use of worker health surveillance, self-monitoring and contact-tracing app.
- The use of in-house medical and counselling services.
- Establishment of a multi-stakeholder engagement team composed of representatives from labour unions, medical doctors, psychologists, etc. The team is/was mandated:
 - to come up with emergency measures needed to facilitate access to healthcare, bridge public health gaps and support local businesses.
 - to engage with major employers within the municipality on how to capacitate local government hospitals and clinics.



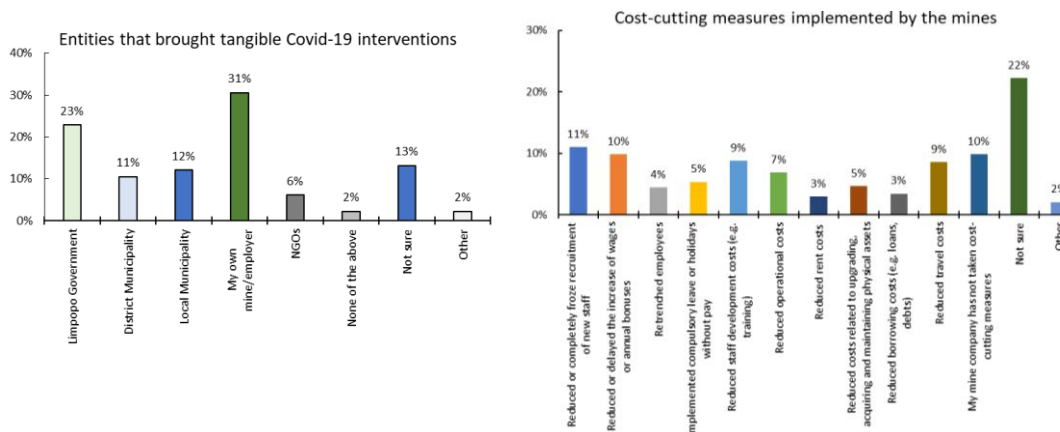


Figure 5: Measures implemented by the mines together with relevant stakeholders to secure the health of employees and prevent the spread of the virus

Further interventions that the sector would wish to have implemented relative to the Covid-19 situation in the country include: (a) the creation of job opportunities to cover those who have lost their jobs due to Covid-19, (b) reinvigorate vaccination campaigns and education, since a lot of complacencies have set in (this will aid in the eradication of myths associated with vaccinations), (c) introduction of touchless testing machines, (d) revisions of HR policies, (e) non-discrimination of non-vaccinated employees and (f) allocation of funds for the management of pandemics, of Covid-19's nature – no salary cuts.

2.5 Opportunities Covid-19 presented to the sector

Despite challenges posed by Covid-19, varying demand for commodities, reduced export incomes and higher occupational safety costs, there is renewed hope that the pandemic has created an opportunity for the industry to (a) relook at how it operates (e.g., improved shift planning and transportation of employees to and from their different workstations), (b) rethink and redefine the priorities that the industry needs to focus on, (c) explore and test the efficiency of employees working remotely, (d) promote and improve good industrial hygiene practices (such as the regular disinfection of workplace environments, including sanitisation of tools and equipment, particularly during shift changes), (e) fast-track the progression of the 4th industrial revolution and (f) force employees and consumers to embrace digital platforms as a necessity for daily functioning.

3. POLICY RECOMMENDATIONS

While the pandemic may be a once-in-a-generation event, the following policy recommendations for policymakers could help the sector weather other significant shocks of a similar magnitude in the future:

- **Drive towards automation technologies:** As long-term solutions to prevent risks likely to be posed by future pandemics to employees, mining companies are rapidly adopting mechanisation and automation technologies (e.g., self-driving haul trucks and remote operation centres). While this implies machinery substituting workers, it boosts the resilience in the sector to shocks such as Covid-19.
- **Increase and ensure the appropriate use of government revenues:** Given the shocks Covid-19 caused to government revenues, it is recommended that the government set aside funds to support relief efforts in the event that shocks disproportionately affect the mining sector.
- **Support national efforts to improve local content and value addition:** Even if mining operations (especially for coal mines) continued in a crisis such as the Covid-19 pandemic, the sector can be significantly impacted if the coal cannot be transported outside for processing. However, local value addition would significantly increase the resilience of the sector to such shocks.
- **Implement strategies for continuity in mining operations:** To ensure operational continuity, policymakers must collaborate with relevant sector stakeholders to develop mining industry-specific emergency preparedness and crisis management plans that are applicable not only to Covid-19, but also to other major shocks of comparable magnitude. Several mines did not have these plans in place prior to the pandemic, resulting in hasty and ad hoc response measures that were not always adequate.
- **Policy responses should provide stronger mechanisms to build a resilient workforce:** While being more stringent in their implementation and inspections on the ground, policymakers need to strengthen the regulatory frameworks and ensure consistency in their mine safety regulations. This is summed in the following statement by one of the respondents:

“Employers must pay us full salaries due to working at high risk of Covid-19 at some point in 2022 we felt like mine robbed us because we were required to use our transport to work at least to minimize crew on

the bus. Imagine being paid R41 (or less) as a petrol subsidy for the whole month for petrol and counting it for the kilometres and if you stay within 50 kilometres radius of your working place you will feel it because R41 it's nothing truly speaking".

- **Invest in research and development needed for the changing world of work and the 4th industrial revolution:** Given the catastrophic impacts of Covid-19 on earnings and livelihoods in the mining sector, it is imperative to increase private and public investments in research and development on innovative approaches to equip local businesses with digital solutions, allowing them to provide flexible working environments.

Future research should be conducted to assess the feasibility and effectiveness of the policy recommendations proposed in this study, and to rank them according to their efficiency and efficacy.

4. CONCLUSION

In conclusion, the study on the impacts of Covid-19 on the mining sector reveals significant disruptions and challenges, including decreased production, temporary mine closures, workforce disruptions and financial strain. Implementing health and safety measures is crucial for operational continuity, while addressing vulnerabilities in supply chains can enhance resilience. Mining companies faced liquidity challenges and implemented cost-cutting measures. The study recommends comprehensive risk management strategies, proactive planning, improved crisis response, and technological advancements for enhanced efficiency and adaptability.

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CHAPTER 2.3 AGRICULTURAL SECTOR AND FOOD SECURITY

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1. INTRODUCTION AND BACKGROUND

The Limpopo Province is one of the richest agricultural regions of South Africa, and is regarded as the bread and fruit basket of the country, due to its immense contribution to the country's fruits, vegetables, maize meal, wheat and cotton production. The province contributes "75% of South Africa's mangoes, 65% of its papayas, 36% of its tea, 25% of its citrus, bananas and litchis, 60% of its avocados, 60% of its tomatoes, 285.000 tons of potatoes and 35% of its oranges" (<https://www.limpopo-info.co.za/provinces/article/1019/limpopo-province-south-africa-s-food-basket>). The Limpopo Department of Agriculture and Rural Development seeks to achieve "a united, prosperous and productive agricultural sector for sustainable rural communities" (<https://provincialgovernment.co.za/units/view/59/limpopo/agriculture-and-rural-development>). This goal influences and can help to understand the support given by the government to the agricultural sector under normal circumstances and during times of crisis.

The practice of farming involves a lot of movement to secure inputs, movement of labour and transportation of produce to the market. Most agricultural produce are perishables and have to be delivered to the market as soon as possible after harvesting, to enable the sale of fresh produce. The Covid-19 movement restrictions, thus, presented a potential challenge to the agricultural sector. Literature indicates that the pandemic posed a significant risk to food security and poverty in Southern Africa (Nchanji et al., 2021). This study aimed to investigate the extent to which the agricultural sector in the Limpopo Province was affected by the Covid-19 pandemic. The objectives of the study were to assess the positive and negative impacts that the pandemic had on agricultural production and marketing, and to examine the coping strategies employed by the farmers and other stakeholders within the Limpopo Province. The study findings and recommendations will provide the Limpopo Government with insights for appropriate interventions or policy measures for similar future pandemics and, possibly, other disasters.

2. METHODOLOGY

Data was collected by means of a semi-structured questionnaire (with closed-ended and open-ended items) and semi-structured key informant interviews (including face-to-face and telephonic). The questionnaire was administered to farm workers while interviews were held with farm owners, farm managers and local agricultural extension officers. The local agricultural extension officers helped the research team to identify the farms for the study, in their respective areas. The farms were selected purposively, based on the scale (such as backyard, small scale or large scale commercial) and nature of farming (such as crop, livestock or mixed), in order to ensure diversity of farms studied.

Participants were identified using the convenience sampling approach, based on their availability and willingness to participate in the survey (Lopez & Whitehead, 2013). In the process, a total of 68 questionnaires were administered and 31 interviews were conducted, all in the Capricorn District Municipality, mainly from two local municipalities, namely, Molemole (38%) and Polokwane (47%).

Information relating to household food security (availability and access) was obtained using the general household questionnaire, covering various themes in the different streams in this study. Quantitative data from closed-ended questionnaire items was entered into the Excel spreadsheet, and SPSS for analysis and generation of visuals. Qualitative data from key informant interviews and open-ended questionnaire items was subjected to content analysis to draw themes.

Ethical considerations were observed during the study, such as obtaining informed consent from the participants and permission from local authorities. All responses were anonymous and treated as confidential. Participants were free not to answer any questions that they were not comfortable to answer, or to opt out of the interview or questionnaire survey at any stage, with no consequences.

3. FINDINGS AND DISCUSSION

3.1 Major farming categories

The questionnaire respondents were asked to indicate their farming category and the following results were obtained. Figure 1 shows that most of the participants fell into the small scale commercial category (53%), followed by the large scale commercial category (26%) (n = 68).

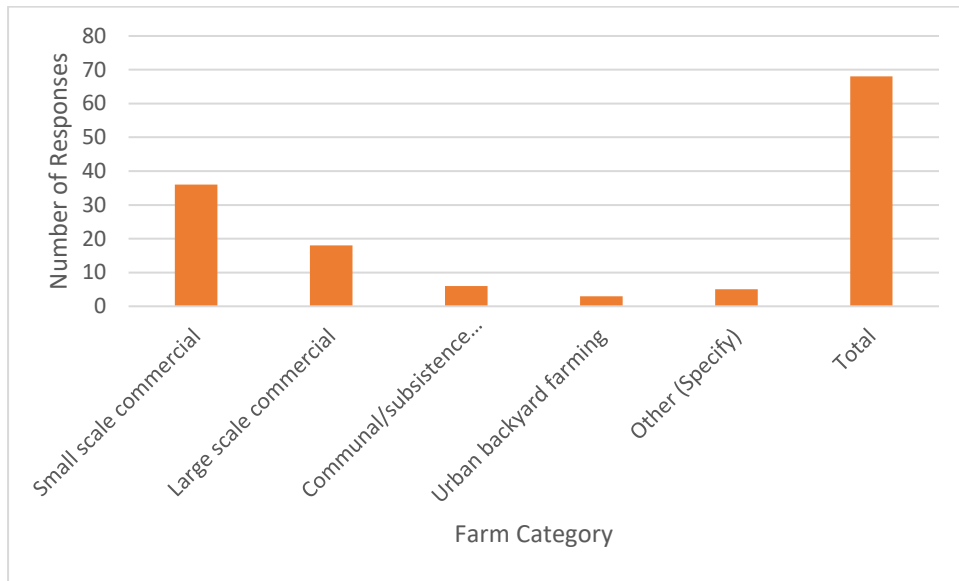


Figure 1: Major farming categories

In order to better understand the impact of Covid-19 on farming, the study sought to find out what the participants were producing in their farms. Table 1 shows the types of produce from the farms studied. Crop production was the most common activity with over half of the participants engaged in production of one or more crops, followed by livestock and poultry. One participant could indicate more than one type of produce. No aquaponics or hydroponics participants were included in the sample, perhaps because these are normally urban-based types of farming, whereas the sampled farmers in this study were mainly in the rural areas.

Table 1: Farm produce (multiple responses are allowed)

Produce	Percent (%)	Count (N)
Crops	51%	55
Livestock	17%	18
Poultry	14%	15
Dairy	0%	0

Aquaponics	0%	0
Hydroponics	0%	0
Fruit or plantation	3%	3
Game	1%	1
Mixed	13%	14
Other (Specify)	2%	2
Total	100%	108

3.2 Activities most affected

Respondents were asked to indicate three of their farming activities that were mostly impacted by the Covid-19 pandemic. Table 2 shows that income from farming and access to markets were most common among participants, followed by input supplies. Results show that there was demand for the products, but the challenge was how to access the market due to travel restrictions imposed during the pandemic.

Table 2: Activities mostly affected

Activities mostly affected	Percent (%)	Count (N)
Income from farming	23%	48
Input supplies	20%	42
Farm production processes and activities	11%	24
Farm produce quality	6%	12
Farm produce quantity	10%	22

Access to market	22%	47
Market demand	2%	4
All	2%	4
Other (Specify)	3%	7
Total	100%	210

3.3 Government support

Literature shows that governments in southern Africa could play a significant role in cushioning smallholder farmers against the impact of the pandemic, for instance, through providing subsidised agricultural inputs (Nchanji et al., 2021). Participants in this study were asked the question: “Did you receive government support to reduce the impacts of Covid-19 on your farming activities?” Figure 2 shows that a smaller proportion (43%) of the participants received support from the government to assist them to withstand the impact of the pandemic, compared to those who did not receive such support (57%). All the same, 43% is a relatively high proportion and could reflect that a significant part of the farming community was able to receive government support during the difficult times. The government department concerned may be commended for a great effort to ensure resilience of the farming sector and food security.

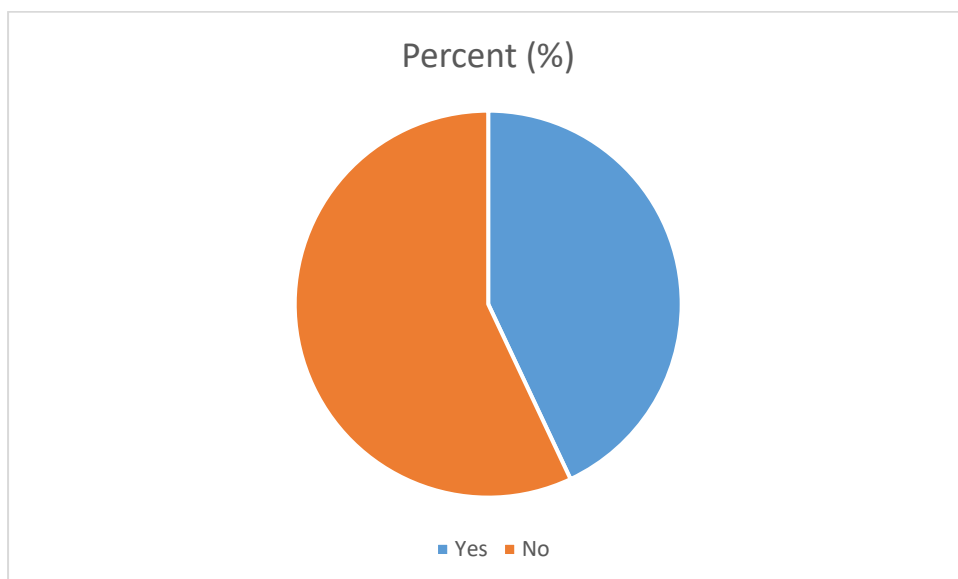


Figure 2: Confirmation of government support

The support was mainly the R1.2 billion Agricultural Disaster Support Fund for Smallholder and Communal Farmers made available by the Department of Agriculture, Land Reform and Rural Development (Department of Agriculture, Land Reform and Rural Development, 2020). Qualifying farmers could apply for a maximum of R50 000 grant. Participants in this study revealed that the grants were available in the form of vouchers, which beneficiaries could use to acquire farming inputs from designated suppliers.

3.4 Covid-19 induced supply-chain disruptions

Fifty-seven percent of the respondents indicated that they closed their operations temporarily or permanently ($n = 68$). Respondents experienced disruptions in farming operations including inefficient and unreliable transport systems (28%), increased cost of input supplies (39%) and disrupted input supplies (33%). Table 3 shows the long-term impacts of the pandemic on farming operations, as perceived by the participants. Long-term market disruptions were the long-term impacts perceived by the majority of participants, followed by loss of labour, particularly for commercial farmers, both small scale and large scale. Multiple responses were allowed.

Table 3: Perceived long-term impacts of the pandemic

Long-term Impact	Percent (%)	Count (N)
Loss of labour force	33%	39
Job losses due to automation and digitalisation	3%	4
Long-term market disruptions	42%	50
Long-term supply chain disruptions	16%	19
Other (Specify)	5%	6
Total	100%	118

Farmers that stopped operations completely, at some point in time, were further asked to indicate how long it took them to fully restore operations. For 22% of the farmers, it

took between 30 and 90 days for them to recover. It took over 90 days for 44% of the participants to recover, while 33% had not yet recovered by the time of this survey, that is, three years since the start of the pandemic.

Figure 3 is a photograph of land lying idle and there were signs of bush encroachment into the land, which used to be a flourishing crop production field in the previous three years. Prior to the pandemic, the land was used for cabbage production by one large scale commercial farmer who was interviewed during this study. The farmer had not yet restored operations due to lack of funds to secure inputs, equipment, and pay for labour and other running costs. The bank repossessed the farmer's trucks due to him failing to pay his instalments. The farmer had to sell some of his property in order to pay his debts including electricity bills and, at the time of this interview, he was still battling to repay an outstanding bank loan. This case study is a tip of the iceberg, a reflection of challenges commonly experienced by numerous other farmers. A number of small scale commercial farmers interviewed in the study aired similar experiences, particularly the loss of vehicles or trucks, because the banks repossessed them for failure to pay instalments, despite being given six months grace period.



Figure 3A



Figure 3B

Figure 3: A: Land used for cabbage production before the pandemic lying idle; bush encroaching. B: Infrastructure decay on the farm due to non-use since Covid-19 lockdown

3.5 Perceived impact on prices of farm produce and food prices

There were mixed perceptions regarding the impact of the pandemic on prices of farm produce, as indicated in Figure 4. Nineteen percent of the respondents in this study experienced an increase, while 18% saw a decrease. Twelve percent were not sure, while the greater portion (51%) perceived no change in the prices of agricultural

produce (n = 68). One smallholder commercial farmer indicated that he was able to make higher profit during the pandemic from the sale of potatoes, because many farmers had failed to plant potatoes due to the pandemic; the demand for potatoes was higher than the supply, resulting in price increases.

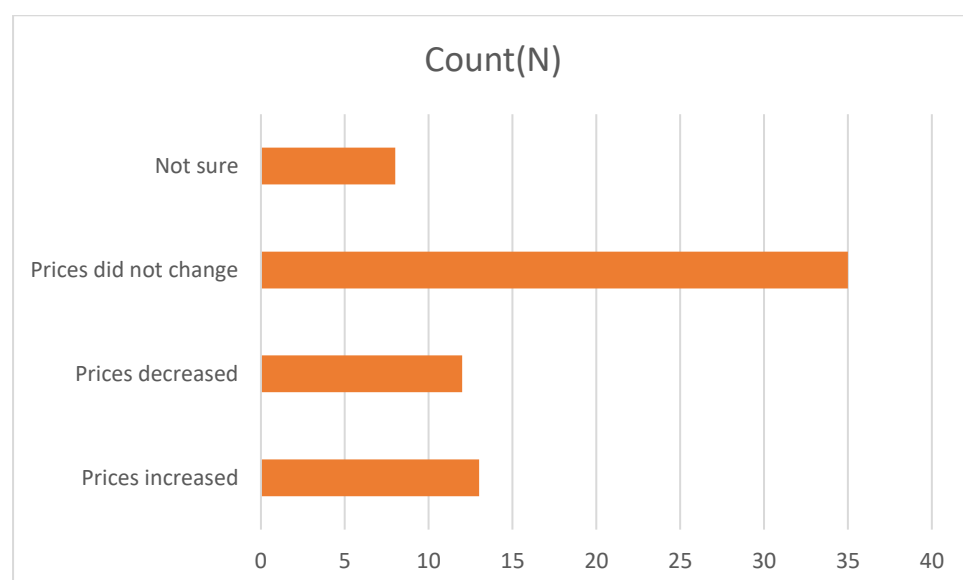


Figure 4: Perceived impact on prices of agricultural produce

3.6 Lessons learnt from the pandemic by farmers

Most (81%) of the participants in the questionnaire survey confirmed that Covid-19 was a wake-up call to enhance resilience of the farming sector. During key informant interviews, the participants were asked: “Would you say that the Covid-19 pandemic was a wake-up call to enhance resilience of the farming sector?” A typical response to this question was, “Yes, due to the struggles we have encountered a lot has been learnt and we are in a better situation to know what to do going forward.” Generally, participants indicated that there were lessons learnt from the experience and that they were better placed to deal with the next pandemic, if it recurs. However, some participants remained pessimistic and felt that the impact of a repeat pandemic could be worse, particularly for farmers who have not yet recovered.

3.7 Impact on household food security

Food security has been defined as “the right of all persons to have adequate physical, economical and safe access to meet their nutritional needs at all times, as well as to choose their food preferences for an active and healthy life” (FAO, 1996). The main sources of food during the Covid-19 lockdown, for participants in the general household survey in this study, were buying from shops and the market (4641 responses or 75% – multiple responses were allowed), and home gardens (946 responses or 15%). Buying food seems to be the main source of food under normal circumstances in South Africa. The sources of food that are expected to be prevalent during times of crisis had relatively low responses. For instance, food handouts (or vouchers) from the government were utilised by 94 (2%) of the participants; food handouts from relatives or neighbours were used by 115 (2%); sale of household possessions to buy food by 14 (almost 0%); tapped into family savings by 119 (2%) and handouts from NGOs (e.g., church) by 26 (almost 0%).

Eighty-five percent (or 3981) of the responses indicated either an increase or a drastic increase in food prices. Yet, 88% (4035) indicated that the source of food was reliable to very reliable during the pandemic (Figure 5). This finding aligns with the responses obtained when participants were asked, “how was your meals plan affected by Covid-19?”, to which 49% of the responses said that the plan remained unchanged, while 34% even had an increase in number of meals per day (mostly because they spent most of the day in the house) (n = 4678). However, when asked, “does your household still need to receive support for food?”, 70% of the participants indicated “yes”, while a relatively small portion (26%) indicated “no”, which appears contradictory to the responses to the above two questions. More so, 78% (2588) indicated that their households would need support for food for over one year (n = 3319). Thus, even participants whose meal plans were not necessarily adversely affected by the pandemic would still anticipate some food handouts or some form of support, to enable them to continue to have food on their tables, such as “food for work” and “cash for work” programmes.

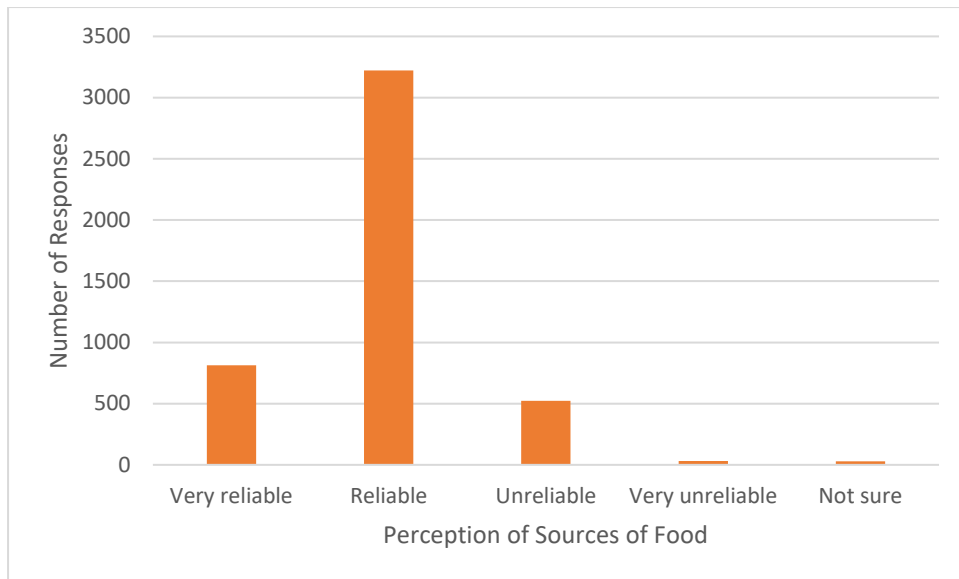


Figure 5: Perception of reliability of source of food during pandemic

3.8 Impacts on farm operations

The following impacts of Covid-19 on farming operations were revealed during the key informant interviews:

- a) *Loss of poultry* due to failure to access feeds or vaccinations/medication. For instance, one backyard commercial chicken farmer lost 1350 of her 1500 chicks during the pandemic. She said, “I had no permit to go out and buy feed – I had no knowledge of where to get the permit.”
- b) *Loss of workers*. Due to uncertainty regarding when the travel restrictions would end, workers left for their homes when the announcement for lockdown was made. Farmers experienced serious labour shortage, which resulted in reduction in production. Crop farming suffered a greater blow compared to livestock farming, because crops are more fragile, are perishable and require urgent marketing.
- c) *Lack of extension services due to restricted movement*. This adversely affected production.
- d) *Sudden loss of market*. Closure of schools, restaurants and marketplaces, where farmers used to sell products, left many large and small scale commercial farmers stranded with their produce. Some lost contracts for supplying to markets and never regained them. Closure of schools left one farmer stranded

with 930 000 cabbages that he had produced for supplying to school feeding schemes. “I lost about R1.9 million. Fifty-three workers lost jobs because I could not pay them; 60 bakkie owners who used to transport the cabbages to schools all lost business and their bakkies were repossessed by the bank,” said one farmer who was interviewed. Another smallholder farmer revealed a loss of R240 000 worth of butternuts that had to rot, because schools, which were the main market, had suddenly closed. Marketing was the part of the value chain most affected by the Covid-19 movement restrictions. Some buyers (particularly supermarkets) were hesitant to buy products from small scale producers, because of uncertainty regarding whether the produce was infected with Covid-19 or not.

- e) *Input loss.* Some chemicals that the farmers had secured for treating crops expired during the lockdown because they were not in use. In some cases, some seedlings that were due to be planted could not be planted, as farm workers were restricted from reporting for work. All such instances imply that financial losses were incurred.

3.9 Copying mechanisms employed by farmers

Participants were asked to indicate the strategies they implemented to cope with the pandemic. Many farmers made efforts, within their means, to minimise the impact of the pandemic on their operations. Some of the strategies adopted by farmers in specific contexts include the following:

- a) Members of some cooperatives contributed from their pockets to revive their farming project. Thus, instead of looking for external assistance, members pooled resources together to build their capital.
- b) Sale of belongings (household property or farm equipment) to pay creditors. In numerous cases, farmers had to sell some of their assets in order to raise capital for inputs.
- c) Use of family savings to cope with the pandemic. For instance, one backyard livestock farmer resorted to this strategy in order to buy livestock feed and medication. Another backyard chicken farmer had to use pension income to procure the necessary inputs to revive the farming operations.

- d) Extension service providers had to resort to the use of WhatsApp communication in order to reach out to farmers during the lockdown. WhatsApp groups were created for farmers to share information and to meet online with their respective extension officers. The study revealed that farmers could not conduct online meetings on more advanced platforms, like Zoom or MS Teams, because the farmers could not afford the mobile data that such technology requires. Often, the farmers did not have the appropriate electrical gadgets, such as smart phones or laptops.

3.10 Interventions and support required

The study revealed several areas in which the farmers need support. The question asked was, “What interventions or policy measures would you recommend the government to put in place to help your successful operation?” Participants responded based on their specific contexts. The following were the responses often received:

- a) Irrigation water storage facilities (reservoirs).
- b) Monetary injection into the farming to boost operations.
- c) Some small scale emerging farmers would request the government to constantly visit their farms to monitor their operations and provide the necessary guidance on time.
- d) Provision of seeds, chemicals, fertilisers and free tractors for tilling the land.
- e) Government subsidies on agricultural equipment and inputs.

3.11 Remarks

The study opened up for remarks by the participants in an effort to obtain any information relevant to the study, which had not been covered by the preceding questions. Participants were asked to make any remarks relating to the study or their experience of the pandemic. Some participants did not have any further remarks to make, while others took this as an opportunity to spell out their needs and the forms of support they would need. Some participants used this as an opportunity to appreciate the support they were given during the lockdown. Some of the remarks gathered in the study include the following:

- a) The provision of learnerships, internships and short courses for youth farm workers to reduce unemployment would be appreciated.
- b) “I just want to appreciate our extension officers for providing us with interns to assist us in farming.”
- c) “The state does not support small emerging farmers. Extension officers only prioritise the popular ones. There should be fair distribution of support across all farmers.”
- d) Some participants felt that the current government policy of focusing support on women farmers and the youth, as opposed to elderly, male and white farmers, is letting the farming sector down. Rather, support should be given based on the passion of the farmer; since success in farming is driven by passion.
- e) There were also expressions of hope, optimism and resilience such as, “Covid or no Covid, we will continue farming, observing the Covid-19 protocols”.

4. POLICY AND MANAGERIAL IMPLICATIONS

- a) *Identification of beneficiaries* for government support grants in times of crisis should be done through the involvement of the local extension officers, because they know who true farmers are and who have a genuine need to inject capital into their farming. This will help to avoid applications from people who are not farmers, but just want to get a grant and then use it for something different. One key informant estimated that 30% of the R50 000 vouchers intended for farmers’ support were misused, as some youth beneficiaries were selling the vouchers and pocketing the money.
- b) *Monitor suppliers.* When giving grants to farmers, the Department of Agriculture, Land Reform and Rural Development should monitor service providers (organisations selected to provide inputs to the farmers) to make sure they supply the right quality chicks, feed, etc. For instance, one farmer who received a grant in the form of 1000 chicks, lost over 400 of these chicks because they were defective and not prime quality.
- c) *Government policy should reconsider support for elderly and male farmers.* Currently, women, the youth and the physically challenged persons are given preference over male and elderly farmers. The study revealed some sentiments that this bias against male farmers has detrimental impacts on farming, because it fails to support people who have a passion for farming and who have been supporting

farming over the years. Some interview participants felt that some women and youth join farming due to the incentives being given to them, but when they get an opportunity to pursue a job/career of their choice, they are likely to leave farming.

5. CONCLUSION AND RECOMMENDATIONS

- a) The Covid-19 pandemic had adverse impacts on farmers, be they backyard, large or small scale, livestock, poultry or vegetable, woody plants or other crop producers. While all farmers were adversely affected in one way or the other, the severity of the impact tended to vary among different farming operations and among different farmers. Notably, crop farmers were more vulnerable and suffered relatively greater losses compared to livestock farmers. Poultry farmers were more vulnerable and suffered relatively more losses compared to livestock farmers.
- b) With regards to government intervention or support, there were mixed experiences. While some farmers appreciated the support from extension services, there was a general dissatisfaction among participants regarding the current frequency of visits by extension officers. Some extension officers who were interviewed confirmed that they were only able to make limited visits to farmers, because of budget constraints and limited mileage that they were allowed to travel. Regarding the financial support from the government, the sentiments generally indicated that a better model needs to be adopted to ensure the cash and material grants are received by people who deserve to benefit, given their needs and their commitment to farming, to avoid misuse of the funds.

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CHAPTER 3: SOCIAL SECTOR

CHAPTER 3.1 CIVIL SOCIETY ORGANISATIONS

Authors: Dr D Musetsho, Ms J Mokobi, Ms MJ Mokgokong and Ms LG

Mokgalabone

1. INTRODUCTION

The Covid-19 pandemic has brought unprecedented changes and disruptions to societies across the world (Charities Aid Foundation, 2021), and the impacts have affected individuals, families, businesses and governments in various ways. Civil Society Organisations (CSOs) have also been affected by the pandemic, as they play critical roles in promoting democracy, human rights, social justice and sustainable development (UNDP & Southern Voice, 2022). Various organisations may have been affected differently by the pandemic, how they recovered could be different or there could be similarities in their resilience mechanisms to deal with the pandemic. This sub-theme explored the impact of the Covid-19 pandemic on CSOs, and discusses the measures and strategies CSOs have adopted to respond to the pandemic. It also highlights the opportunities and challenges for CSOs in the post-pandemic recovery phase.

CSOs encompass a wide range of organisations, including non-profit organisations, non-governmental organisations, community-based organisations and faith-based organisations. Additionally, CSOs are key actors in development and humanitarian work, often complementing and supplementing the efforts of governments and international organisations. CSOs play a vital role in assisting communities at the grassroots level. It is critical to analyse the impacts of Covid-19 on these CSOs, so that policy directives and alignment with other CSOs can be achieved. Some of the notable civil society organisations that were the subject of this research included Ngwana Ledwaba Foundation, St Luka Day Care, Phomolong Drop-In Centre and Re a Kgona Mankweng Drop-In Centre.

The Covid-19 pandemic has had a significant impact on civil society organisations (CSOs) in South Africa. According to a report by the Charities Aid Foundation Southern Africa (2021) approximately 75% of the country's CSOs have been affected

by the pandemic. The report highlights several challenges faced by CSOs in South Africa, including a decline in funding, a decrease in volunteerism and disruptions to service delivery.

2. METHODOLOGY

The study adopted a multi-method approach, where a multipurpose tool was used to collect data. The researchers used questionnaire surveys, guided interviews, key informant interviews, secondary and archival data, and field observations to gather data. Surveys questionnaires were administered, where 120 questionnaires were sent out, of which 102 were completed (85%) and 18 were dropped (15%).

The survey questionnaires were distributed and returned in November 2022. Checking websites and using purposive sampling to identify CSOs formed a major component of the methodology, which also included a literature review. Seventeen (17) interviews were conducted with key informants and/or stakeholders believed to be better placed to understand the inner workings of the CSOs. These interviews took place in person, telephonically, and were recorded. The interviews were conducted in languages the participants were most comfortable with and then transcribed into English. These interviews took place from November 2022 to March 2023.

Data analysis was done on the online QuestionPro systems, importing raw data into Excel or SPSS as appropriate, and generic frameworks for analysing interviews and other qualitative data. The QuestionPro and other statistical packages were used to generate descriptive statistics, plot graphs and charts, and generate tables. Findings from interviews were used to generate emerging themes with detailed descriptions. The study specifically focused on the Capricorn District in Limpopo Province and the two local municipalities of Polokwane and Molemole were purposely selected.

3. FINDINGS AND DISCUSSIONS

This section will concentrate on presenting the findings of the study under the sub-theme of the impact of Covid-19 on Civil Society Organisations (CSOs).

3.1 General and demographic information

Sixty-six percent (66%) of the respondents are permanently employed by the CSOs they represented in responding to the questionnaire. These respondents are well vested

with the inner workings of the entities they represent and all of them were part of the organisations before, during and after the pandemic. All the CSOs that participated in the study are based in the Capricorn District Municipality, particularly, Polokwane and Molemole local municipalities.

About 68% of the organisations sampled are community-based non-governmental organisations, with offices and/or centres based within the community they serve. Eleven percent (11%) are local non-governmental, whereas 7% are regional non-governmental organisations. Only 2% indicated that they were international non-governmental organisations, as reflected in Figure 1 below.

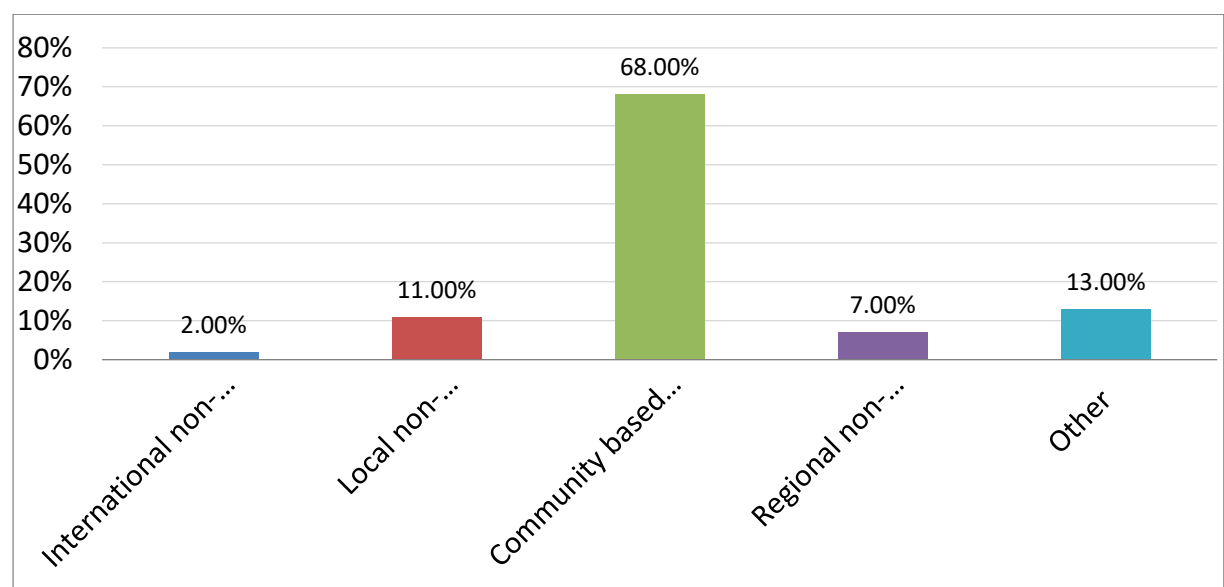


Figure 1: Type of CSOs in Limpopo Province

Most of the CSOs operate within the education sector (19%), followed by those in the community safety space (12%), and around orphans and vulnerable children (9%). Those dealing with youth empowerment constitute 9%, whereas those in food security and healthcare constitute 8% each. The services are, thus, wide-ranging across the Capricorn District of the Limpopo Province.

The majority of the CSOs are reliant on the government sector as the major source of funding for their operations, so for the engaged entities, they indicated the government

(34%), individual donors (14%) and the private sector (11%) as their source of funding. Funding is critical to the operations of CSOs and the Covid-19 pandemic has significantly impacted CSOs' financial sustainability. Many CSOs rely on donor funding, which has been affected by the pandemic, as donors' priorities have shifted towards emergency response and pandemic-related activities. Moreover, many CSOs have had to cancel fundraising events and their income-generating activities have been disrupted. This financial insecurity has made it challenging for CSOs to sustain their operations and retain staff.

3.2 The impacts of Covid-19 on CSOs

The CSOs operating in the Capricorn District of the Limpopo Province have not been spared the impacts that the Covid-19 pandemic had on society, just as the Charities Aid Foundation Southern Africa (CAFSA, 2020) highlighted in their report that approximately 75% of the country's CSOs have been affected by the pandemic. The same outcomes were reported by Proulx, Lenzi-Weisbecker, Hatch, Hackett, Omoeva, Cavallera, Daelmans & Dua (2021) in their study on the implications of Covid-19 on family lives.

The majority of organisations saw employment numbers decreasing (50%) to below pre-pandemic levels, with 25% remaining the same. Twenty percent (20%) of the entities saw an increase in employment numbers post the pandemic; this is reflected in Figure 2 below.

Another challenge that the CSOs are facing is the decline in volunteerism. In the Capricorn District in Limpopo Province, many CSOs rely heavily on volunteers to carry out their work. However, due to the pandemic, many people are hesitant to volunteer their time as they fear contracting the virus.

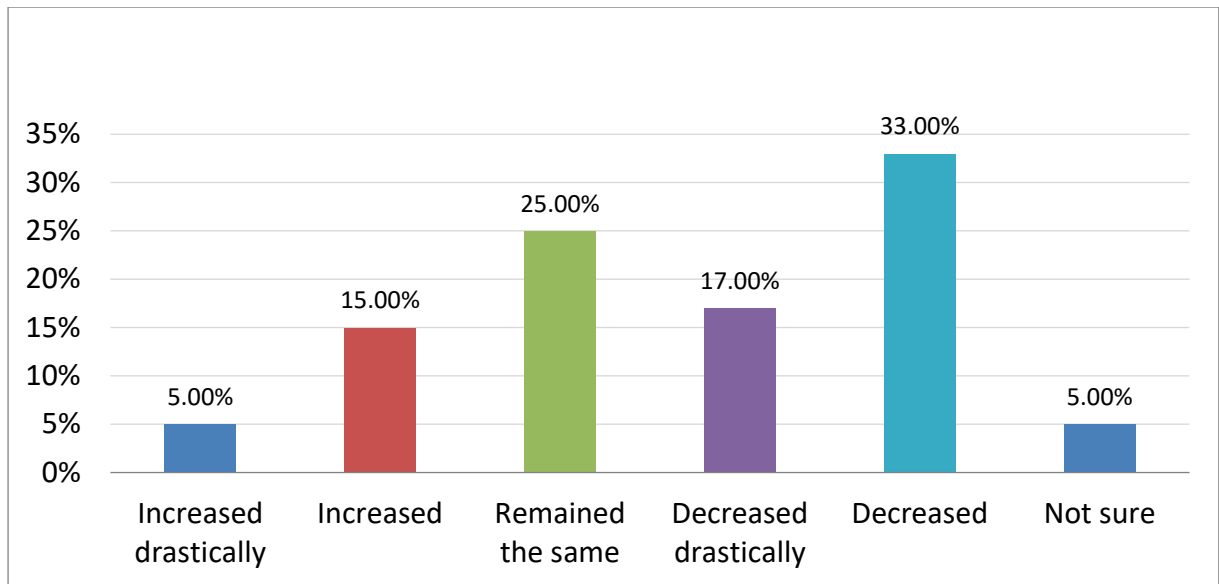


Figure 2: Impacts of Covid-19 on employment numbers

The Covid-19 pandemic has disrupted the operations of CSOs in various ways. Many CSOs have had to adapt to new working conditions, including remote working, virtual meetings and limited physical interactions. This change has brought about several operational challenges such as reduced productivity, burnout, and difficulty in maintaining effective communication and collaboration among team members. Additionally, many CSOs have been forced to suspend or cancel their activities, such as training programmes, advocacy campaigns and community outreach.

Loss of funding was the major outcome of the Covid-19 pandemic, at 17%. CSOs have now reduced face-to-face activities (13%).

Since some of the CSOs were affected, they could no longer provide their normal activities and, as a result, some of the children that depended on the CSOs resorted to drug usage and pregnancy rates increased. Others had to close completely and employees resigned in large numbers. The various implications of Covid-19 on CSOs are summarised in Figure 3:

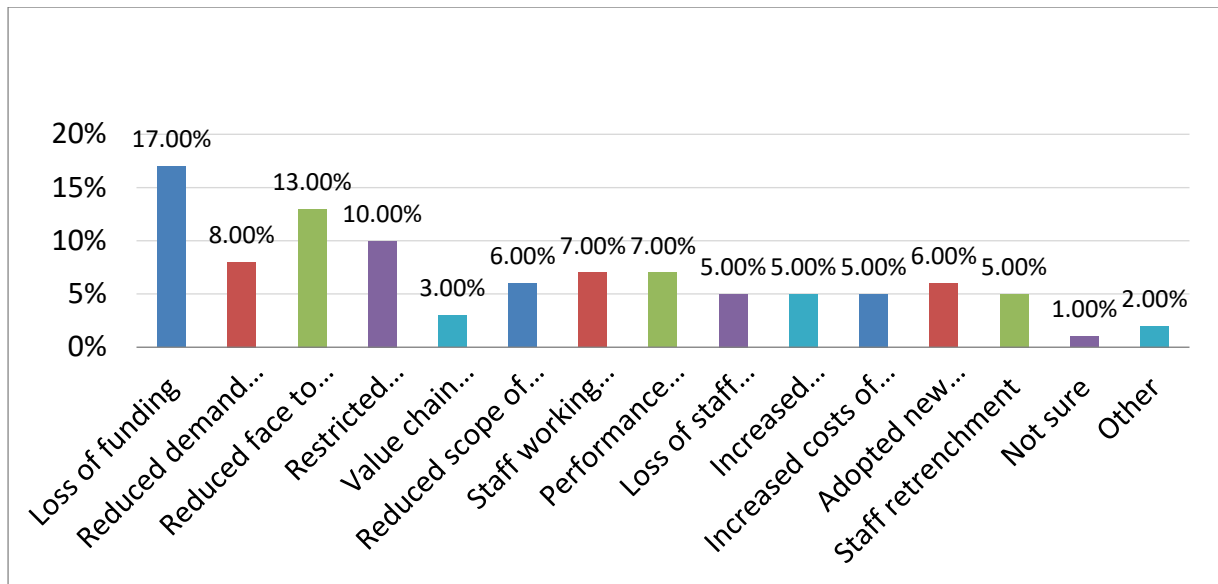


Figure 3: Impact of Covid-19 on CSOs operations

The Covid-19 pandemic created serious changes to the way CSOs operated, at a strategic level. The critical ingredient to the operation of the CSOs is funding, without which many of these entities would not survive. About 17% of the entities pointed out that sources of funding changed after the pandemic, without specifically stating whether such increased or declined. Thirteen percent (13%) of the entities indicated that the changes that took place were of no significant strategic influence. Fourteen percent (14%) indicated that sources of funding had decreased. Due to all the changes, 10% of the entities have now adopted a more collaborative approach to pursuing funding.

Certain CSOs did not implement any strategies to bail themselves out of the challenges experienced, as they relied heavily on the government for support. At a very minimal level, they tried virtual platforms to keep in touch with the targeted beneficiaries. Many parents could not participate because of their levels of education, and not having access to data and computers. Some CSOs had to embark on extended negotiations for rental contracts to be lowered/suspended during the pandemic.

The critical operations/activities of the CSOs were affected, with 44% of the entities indicating that they were affected. The market/community outreach programmes were also affected (29%). With these two major value chain components affected, these

CSOs could not operate optimally as a result of Covid-19. Government supplies were stopped. Funding from the government declined by almost 50% for some.

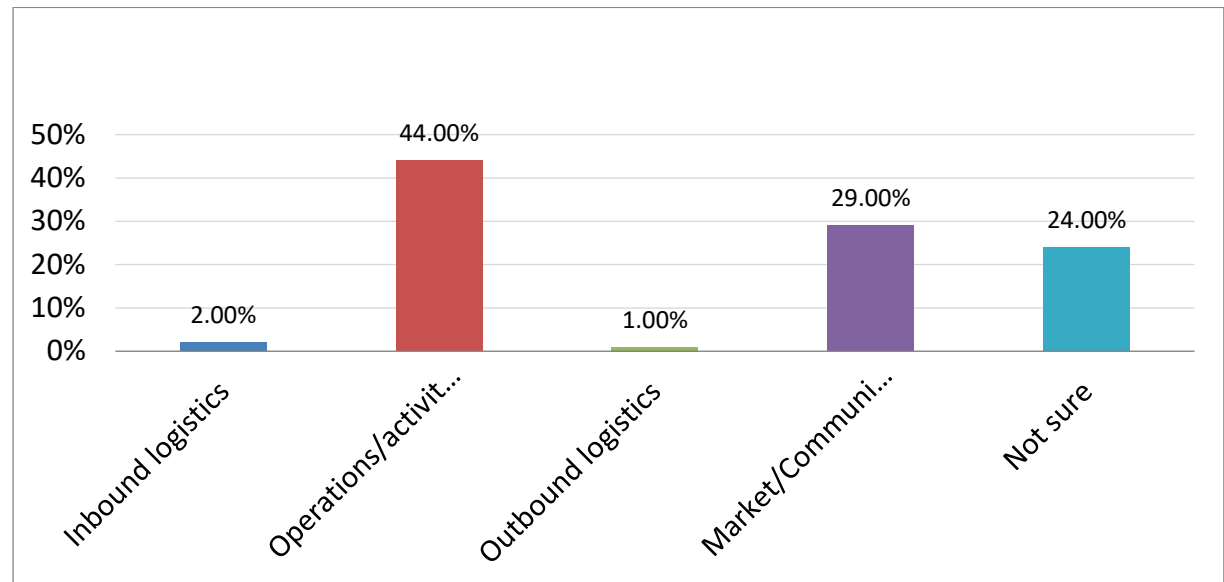


Figure 4: Impact of Covid-19 on CSOs' value chain

The majority of the CSOs were affected financially, where funding either completely dried out (40%) or funding partially dried out but they are still able to operate (33%), as reflected in Figure 5. A study conducted by Bortner and Hwang (2020) at the International Centre for Not-for-Profit Law & European Centre for Not-for-Profit Law, through a survey across 154 countries, provides a global overview of the impact of Covid-19 on CSOs, with its major finding being that funding for CSOs declined drastically as a result of the pandemic.

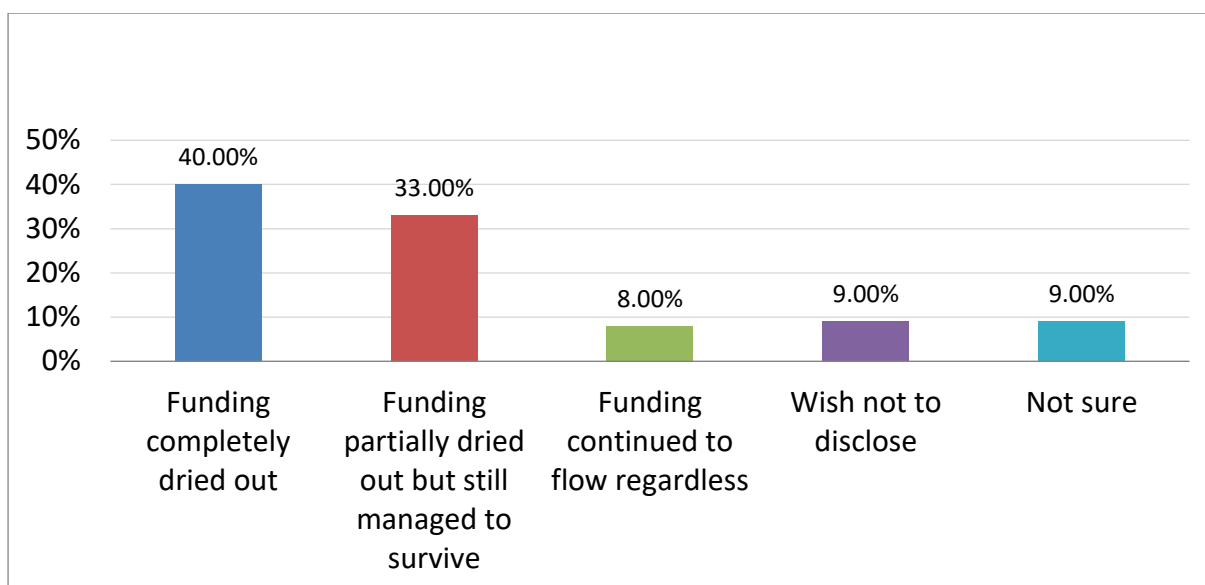


Figure 5: Financial standing for CSOs post Covid-19

Covid-19 affected the CSOs in different ways when it comes to their capacity to deliver their services. Thirty percent (30%) of the CSOs managed to go back to pre-Covid-19 levels, 25% are operating at 50%, 23% operating at about 25%, whilst 22% are operating at 75% capacity, as reflected in Figure 6.

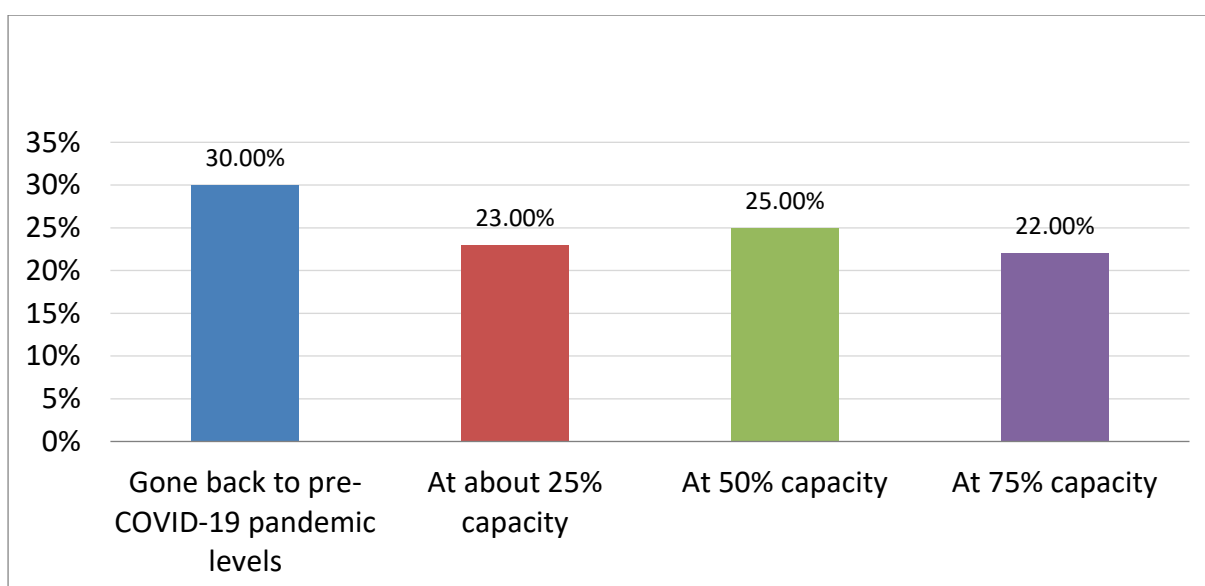


Figure 6: Capacity of the CSOs to deliver services post Covid-19

CSOs came up with various strategies to keep working, even at the height of the pandemic, mainly by allowing employees to work from home. A lot of challenges also came up, because employees pointed out serious shortcomings: lack of internet (21%),

lack of computers (21%) and a home environment that is not conducive for most employees (16%). Some abatement measures that were put in place to deal with the pandemic did not have the intended outcomes. Lockdown (25%) and social distancing (17%), travel restrictions (15%) and mask-wearing (13%) had unfavourable outcomes, as summarised in Figures 7 and 8.

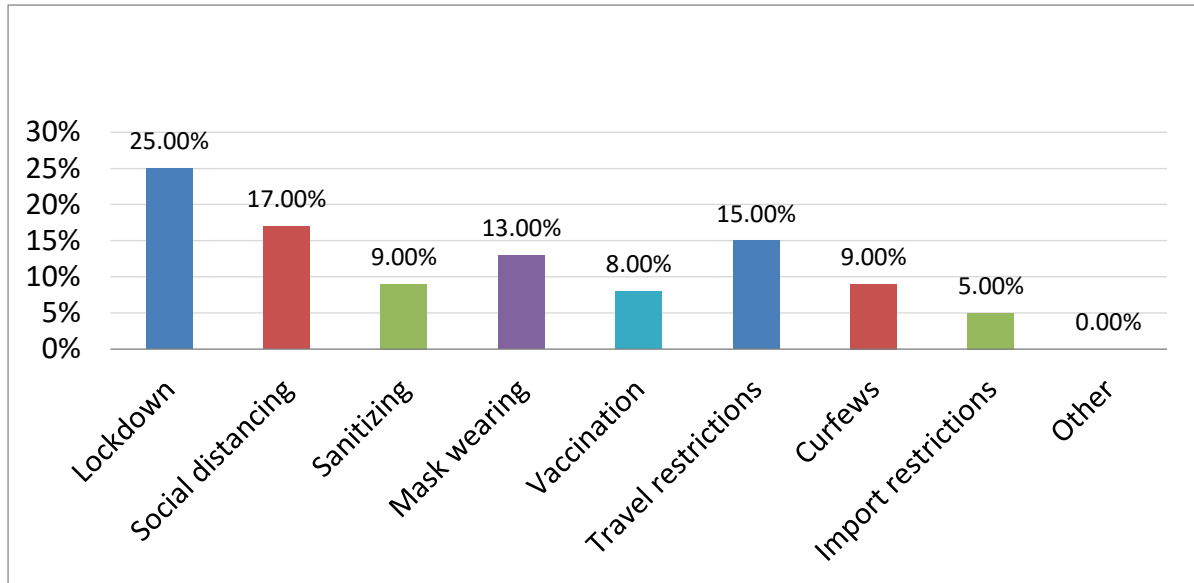


Figure 7: Measures put in place but with unfavourable outcomes

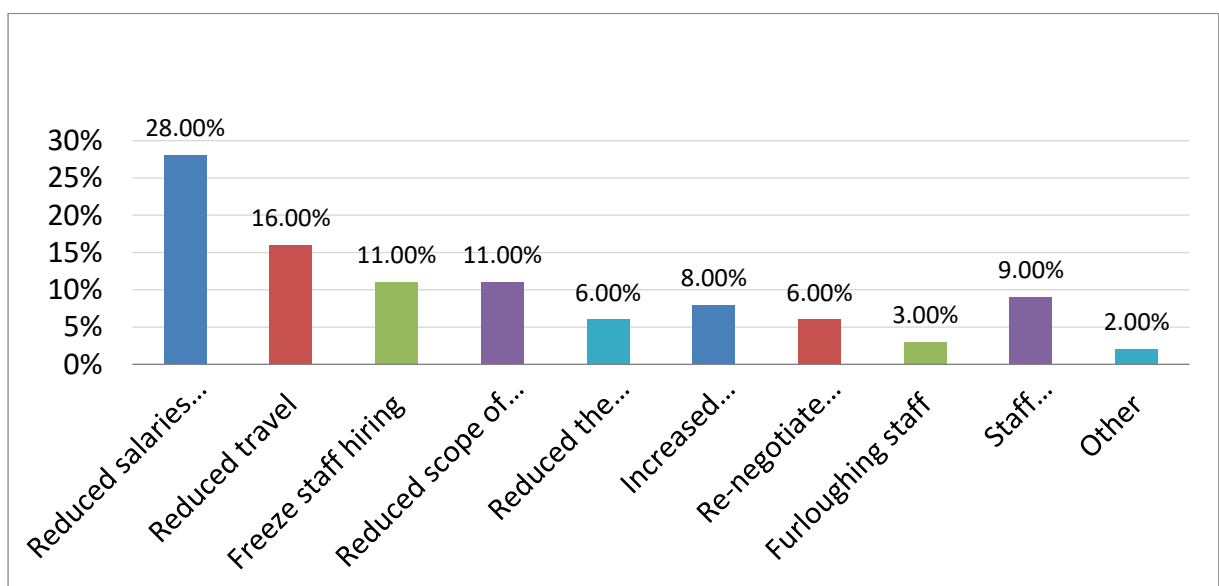


Figure 8: CSOs' adjustments to multi-faceted impacts of Covid-19

The Covid-19 pandemic has affected the activities of CSOs, particularly those working on humanitarian and development issues. Many CSOs have had to reprioritise their activities to include pandemic response efforts, such as distributing personal protective equipment, supporting healthcare workers and providing food aid to vulnerable populations. The pandemic has also highlighted existing inequalities and vulnerabilities, such as gender disparities, economic inequalities and environmental degradation, which CSOs were already addressing. Twenty-eight percent (28%) reduced salaries and working hours. Sixteen percent (16%) reduced travel and 11% had to freeze staff hiring.

Despite the challenges posed by the pandemic, CSOs have adopted various measures and strategies to continue their operations and activities. These measures include new modes of operation, alternative sources of funding and innovative programming.

4. EFFECTIVENESS OF COVID-19 INSTITUTIONAL INTERVENTION MEASURES

The response to Covid-19 has been unprecedented worldwide, although to many in developing countries, such response and interventions have been slow (Harrison & Kristensen, 2021; Maruru & Barnard, 2021). In the case of the Capricorn District and, in particular, when it comes to CSOs, the majority of the stakeholders point out that a lot could have been achieved, raising the need for more collaborations in dealing with both the Covid-19 and future pandemics. For the most vulnerable, lockdowns impose extreme hardships. It will take the collective action of citizens, civil society and governments to respond and recover from this pandemic. However, to be fair and effective, that response and recovery must be open and inclusive (Zellmann, 2021).

4.1 Impacts on employees

The general productivity at the CSOs was badly affected, with 70% of the respondents intimating that they believe that Covid-19 affected their productivity at work, whilst

14% indicated they were not sure if their productivity was affected, as summarised in Figure 9.

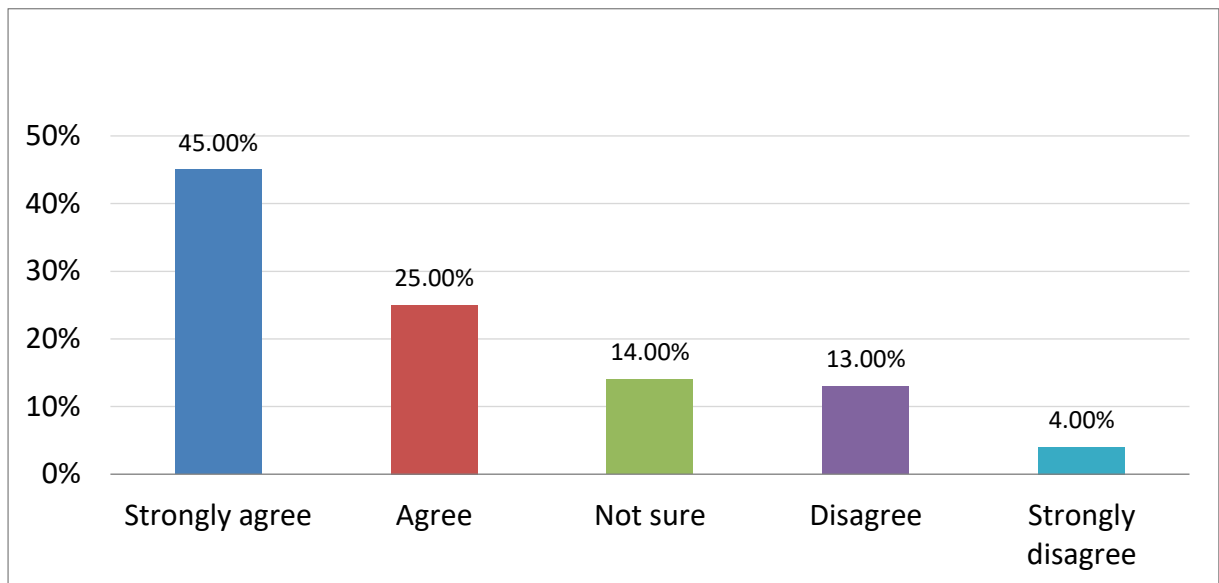


Figure 9: Impacts on worker's productivity

About 70% of the employees believe that their state of mind was negatively affected by Covid-19.

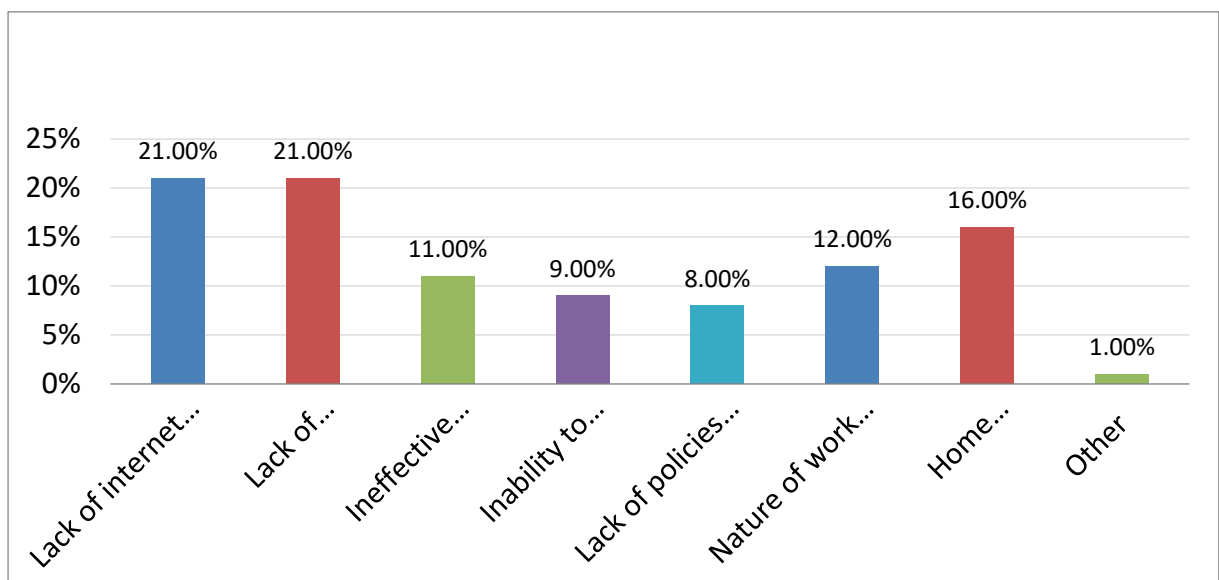


Figure 10: Working from home

Fifty-eight percent (58%) of the employees indicated that they were allowed, at some point during the height of the Covid-19 pandemic, to work from home.

5. COVID-19 IMPACTS ON CSOs' CONTRIBUTIONS TO THE SOUTH AFRICAN NATIONAL DEVELOPMENT PLAN (NDP) VISION 2030 AND THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) 2030

The survey asked the respondents to rate how Covid-19 has impacted their contribution to the South African National Development Plan (NDP) Vision 2030 and the United Nations Sustainable Development Goals (SDGs) 2030. The respondents perceived the pandemic to have impacted their contributions to quality education (SDG 4), initiatives to reduce poverty (SDG 1), and the creation of decent work and economic growth (SDG 8) (Figure 11). Respondents perceived their contribution towards the implementation of environmental goals (SDG 6, 13 and 15) to have not been severely impacted.

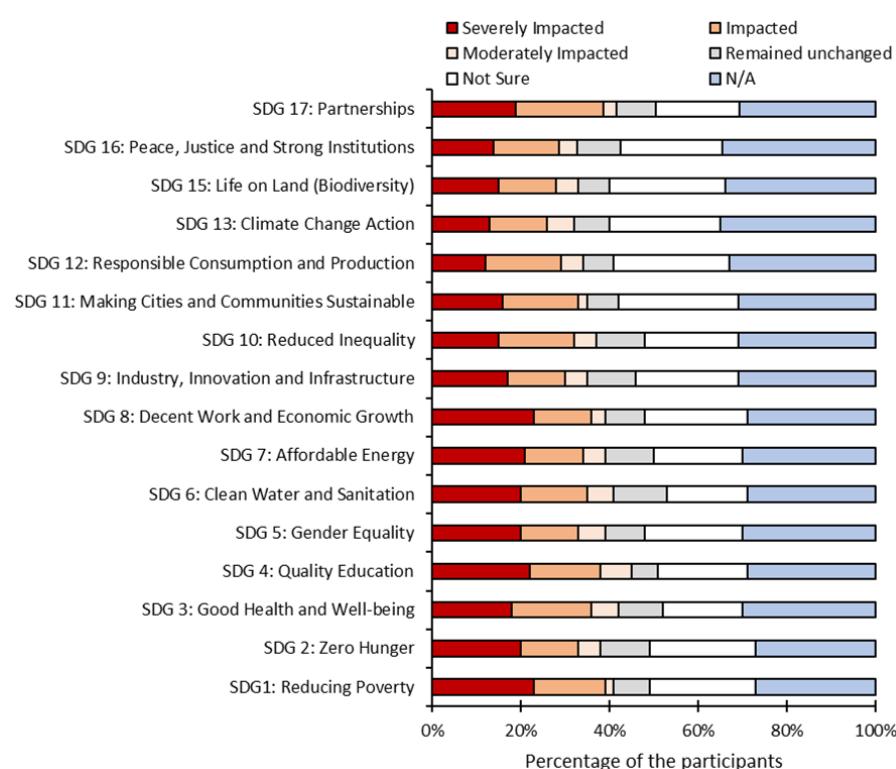


Figure 11: Impacts of Covid-19 on CSOs' contributions to the South African National Development Plan (NDP) Vision 2030 and the United Nations Sustainable Development Goals (SDGs) 2030

Respondents were further asked how worried they are/were about various environmental issues and were given a three-point scale ranging from “not concerned” to “extremely concerned”. The results are shown in Figure 12. The majority of the respondents indicated that since the Covid-19 outbreak, they are still extremely worried about the infectious disease and air pollution, compared to other environmental issues such as climate change, biodiversity loss, etc. (Figure 12).

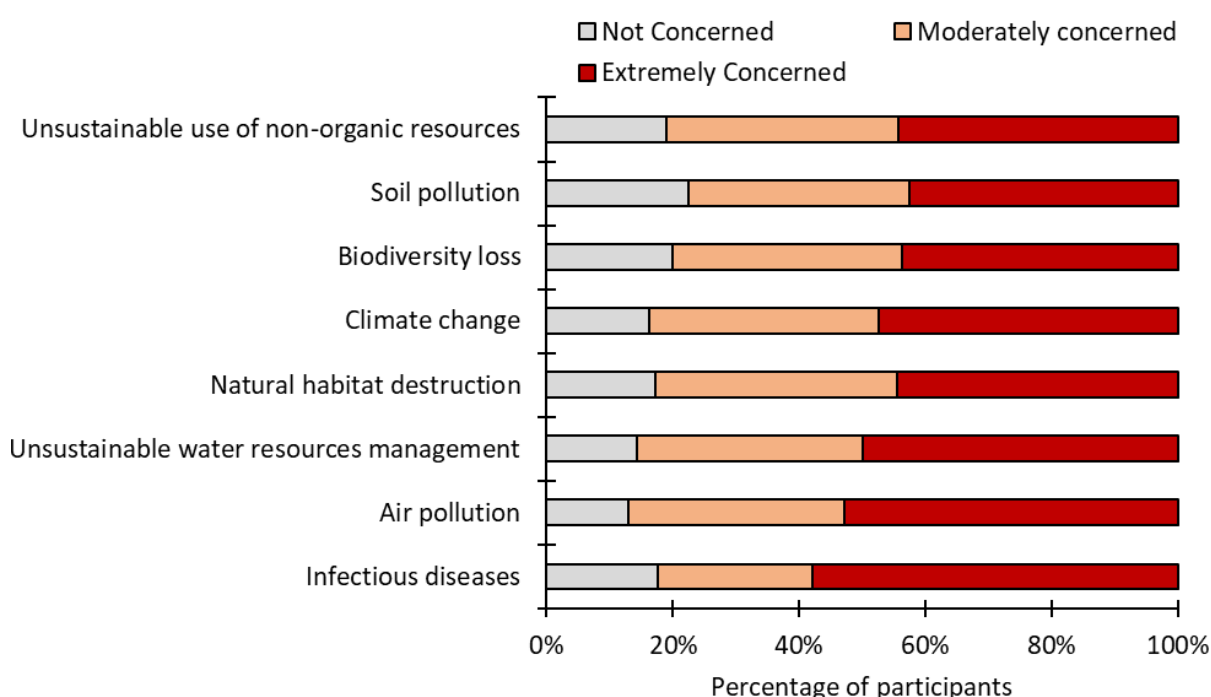


Figure 12: Level of concern about various environmental issues

Guided by analysis of the survey results, the Covid-19 pandemic has had a large impact on individuals’ views on environmental issues and their contributions to the South African National Development Plan (NDP) Vision 2030 and the United Nations Sustainable Development Goals (SDGs) 2030. The respondents believed that Covid-19 severely impacted their contributions to quality education (SDG 4), and the creation of decent work and economic growth (SDG 8). It is also worth noting that a significant number of respondents had chosen “Not sure” and “Not applicable” answers, due to a lack of knowledge of what the SDGs and NDP are. The findings further indicated that, since the Covid-19 outbreak, the infectious disease had been an issue causing the greatest concern, followed by climate change and air pollution.

6. RESPONSE OF CSOs TO COVID-19

Many CSOs have adapted to the new realities brought about by the pandemic, including remote working, virtual meetings and digital collaboration. Similarly, many CSOs have shifted their activities to online platforms, such as webinars, social media and e-learning. This shift has enabled CSOs to continue their activities while adhering to social distancing guidelines and minimising physical interactions.

To address funding challenges, many CSOs have explored alternative funding sources, such as corporate social responsibility initiatives, private sector partnerships and crowd funding. These initiatives have enabled CSOs to diversify their funding sources, reduce their dependence on donor funding and retain their staff.

CSOs have also innovated their programming to meet the needs and challenges brought about by the pandemic. This includes repurposing existing programmes to address pandemic-related issues, such as providing education and awareness-raising campaigns on Covid-19 prevention measures and supporting community-based health initiatives. Additionally, many CSOs have collaborated with other organisations to develop joint programmes that address multiple challenges, such as the intersection of Covid-19 and climate change. Figure 13 summarises the level of involvement of CSOs in the national response to the pandemic. About 47% of the CSOs were involved in one way or the other, although some could not due to limited budgets, legal requirements and not wanting to deviate from their mandates. Those that were involved, they contributed by being part of the vaccination programme, advocacy work, distribution of PPE/sanitiser, emergency response, research and stakeholder engagement.

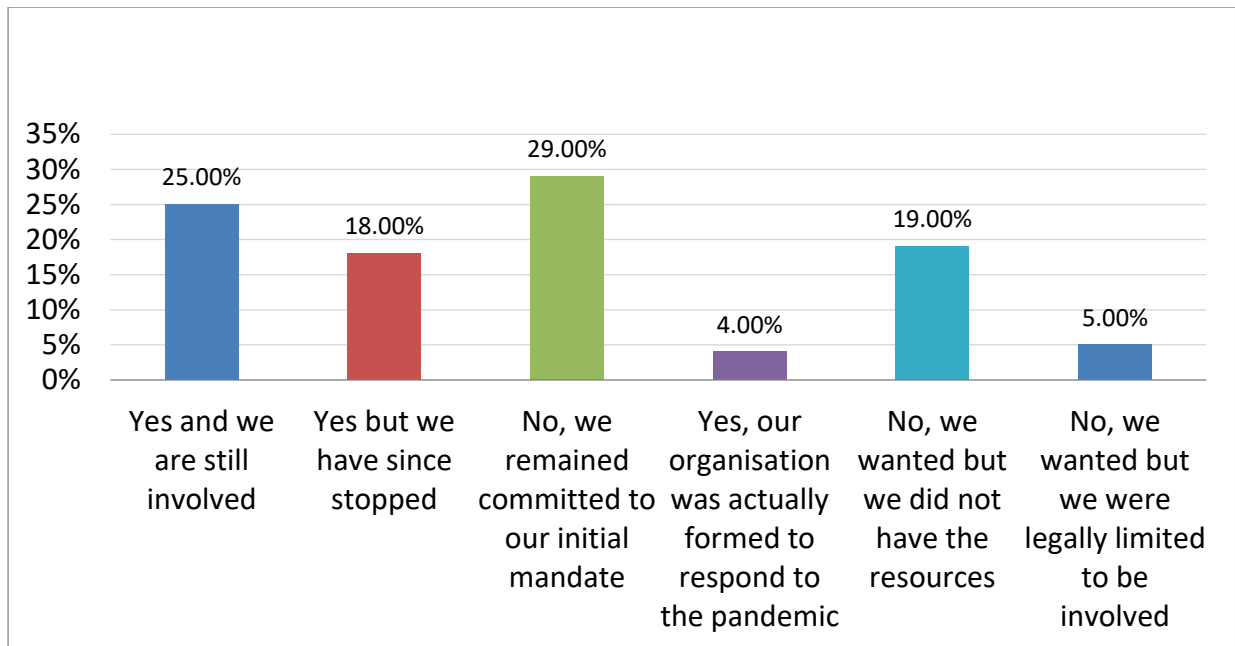


Figure 13: The involvement of CSOs in the national Covid-19 response

6.1 Emerging themes from the interviews

The various stakeholders interviewed provided a wide range of issues around Covid-19 and how it affected their operations. Certain themes emerged from the discussions and these are summarised in Table 1.

Table 1: Themes emerging from interviews

THEME	DESCRIPTION
Financial stability	Covid-19 has significantly affected the financial stability of civil society organisations (CSOs) in the Limpopo Province. Many of these entities rely on donor funding, which has decreased due to the global economic downturn caused by the pandemic. Most organisations are still struggling to raise funds from the business sector, due to the economic crisis that most companies are facing. Moreover, the government does not provide funding for most of these CSOs. One respondent who is a founder of an organisation that assists homeless people and people who indulge in substance abuse is quoted as saying:

	<p><i>“Before Covid-19, it was easier to walk into a business and request financial assistance but since Covid-19, things have changed and it has become very difficult to source funding”.</i></p> <p>Another response from a drop-in centre has indicated the severity of the lack of funding and its repercussions. The respondent is quoted verbatim: <i>“Due to lack of funds and the unavailability to access donations staff members had to use own resources to fund the centre and ensure the smooth running of it. However, this was not sustainable. During the pandemic, the centre was worst affected as no funding was received. Government is not assisting at all”.</i></p>
Service delivery	<p>CSOs play a critical role in delivering social services such as healthcare, education and food aid. However, the pandemic has limited their ability to provide these services as resources have been diverted to tackle the pandemic. The repercussions of Covid-19 have resulted in most CSOs across the Capricorn District Municipality struggling to deliver the services to the targeted beneficiaries. As already indicated in the preceding theme, due to the lack of funding, donors have not managed to provide donations and this lack of funding has negatively affected service delivery. This quote from the interview provided perspective by saying: <i>“The centre operates on a door-to-door policy to collect children from the houses to the centre. It assists children with homework, food parcels, sanitary pads, clothing, provision of food for children, and school uniforms. When funds were available, the children were fed twice i.e., breakfast and lunch but because the centre operates on donations received and when there are no donations the kids are only fed lunch”.</i></p> <p>Due to lockdown restrictions, the daily operations of CSOs were highly affected; an agricultural cooperative member explains how this affected their operations: <i>“Before Covid-19 the team used to sell fresh produce from door to door, so due</i></p>

	<p><i>to restrictions, we had to stop selling door-to-door. For a whole month, the team could not sell and operate at the farm. However, after a month into lockdown, the Department of Agriculture later provided us with a permit to operate then we resumed with door-to-door selling”.</i></p>
Digital divide	<p>The pandemic has highlighted the digital divide that exists in the Limpopo Province. Many organisations are struggling to adapt to remote work due to a lack of resources, infrastructure and training. In response to this theme, one of the respondents said: <i>“There were attempts to perform online but due to lack of knowledge, resources, and information about how automation or digital performances work, the attempts did not yield good or positive results. But in the future, the choir will use digital platforms for album release and sales”.</i> Additionally, some are unable to adopt the technology due to the type of services offered by their CSOs, for instance, organisations that work with homeless people and people abusing substances/drugs cannot necessarily fully operate virtually, as the type of service they are offering largely relies on face-to-face interactions. In some ECDs, it was highlighted that digitalising their services was impossible due to financial challenges. The principal of one of the ECD respondents said: <i>“No we did not use digital platforms, this would have required finance and since the ECD is not being funded it would have been a challenge to adopt the automation or digital strategies”.</i> Another ECD indicated that only the administrators used to do some of the operations online, but teaching and learning could not be digitalised due to a lack of resources and infrastructure. The manager of the ECD said: <i>“For administrators, yes, they used to work online but for</i></p>

	<i>teaching and other operations, it was not possible to automate and digitalise due to lack of resources and infrastructure”.</i>
Adaptability	<p>Some CSOs have responded to the pandemic by adapting their services to meet the demands caused by the pandemic. They have shifted their focus to providing Covid-19-related services, such as community awareness campaigns and support for vulnerable groups. Due to the effects of Covid-19 on the cash flow, some of the CSOs had to apply for more donations to adapt to the disruption caused by Covid-19. Some of the organisations had to attend workshops on how to adapt to Covid-19 and they had to apply the skills learned in workshops at their various centres. One manager of the organisation was quoted saying this: <i>“We attended workshops on how to adapt to Covid-19. After workshops, as teachers, we would then apply what we have learned from the workshops at the centre and make sure kids are also taught about the pandemic and hygiene”</i>. Additionally, other organisations had to start using their finances as an adaptation strategy, especially because the donors were no longer assisting. A member of an agricultural cooperative said that <i>“the team had to contribute financially and buy new seedlings after coming back from lockdown”</i>. Some of the ECDs resorted to adopting remote learning for children, for instance, they would make study material files for children and request the parents to assist. However, this was very challenging, especially for kids who are staying with parents: <i>“There were cases where the centre made files for kids so that parents could assist with doing school work at home. However, this strategy did not work well because other kids stay with grandparents who are not able to comprehend the assessment instructions and, this affected teaching and learning”</i>.</p>

Collaboration	The pandemic has forced CSOs to work together, more closely than ever before and also to collaborate further with ward representatives at a local level. Collaboration has been key to providing effective responses to the pandemic and ensuring that services continue to be delivered to those in need. This area still needs further refinement as some of the CSOs are still adapting to the idea of collaborating with others.
Staffing challenges	The pandemic has also created staffing challenges for CSOs. Many organisations have faced staff shortages due to illness and, in some instances, due to deaths, the need for social distancing and a lack of resources. Most of the staff members are volunteers and with dwindling resources, many of them had to drop out. One respondent indicated <i>“the staff is not getting paid. Some of the staff members left the organisation. The staff was initially 20 in number, about 13 people left and now only 7 are remaining”</i> .
Advocacy	The pandemic has brought attention to the critical role that CSOs play in advocating for social justice and equality. Their advocacy efforts have been crucial in ensuring that the most vulnerable populations are not left behind in the government’s response to the pandemic.
Mental health	The pandemic has had a significant impact on the mental health of CSOs’ staff and the populations they serve. Many organisations have had to upscale their mental health services to cater to increasing needs. Most organisations’ staff suffered mentally and a manager from one of the CSOs indicated that <i>“some people lost weight, others are depressed and suffer from other mental illnesses, and two other people committed suicide. Some staff members were depressed and did not return to work due to the fear of being infected by the virus”</i> .

	Children from most organisations were physically, emotionally and sexually abused. Some of the children engaged in drug abuse and others in sexual activities, raising the rate of teenage pregnancy in their communities. A few respondents from drop-in centres indicated that <i>“there were some behavioural changes because staff members and kids were scared to even remove masks when restrictions were relaxed”</i> .
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One of the most significant challenges facing CSOs in the Capricorn District of Limpopo Province, just like across South Africa and the world over, is the decline in funding. Many of these organisations rely on donations from individuals, businesses and international aid. However, due to the economic impact of Covid-19; many donors have diverted their resources to address pandemic-related issues like healthcare and emergency relief. As a result, many CSOs have had to scale back their operations or close down completely.

The pandemic has also disrupted service delivery by CSOs. Restrictions on movement and gatherings have made it difficult for these organisations to provide essential services like food and shelter to those in need. Additionally, many CSOs have had to adjust their operations to meet the new health and safety regulations, which has impacted the efficiency of their service delivery.

7. POLICY AND MANAGERIAL IMPLICATIONS

The Covid-19 pandemic has presented both opportunities and challenges for CSOs in the post-pandemic recovery phase (UNDP & Southern Voice, 2022). Some of the opportunities include strengthening their advocacy efforts, working with communities and governments to address existing inequalities, and building resilience to future crises (Maruru & Barnard, 2021). However, the pandemic also highlights several challenges, such as the continued risk of virus transmission, reduced funding opportunities and the

need to adapt to the evolving needs and priorities of beneficiaries (Alves & da Costa, 2020; Harrison & Kristensen, 2021).

Here are some general suggestions that could be useful, which policymakers and experts could look at going forward, as suggested by engaged stakeholders across the province:

- (a) Develop adaptable fundraising strategies: Civil society organisations should consider new ways to generate funding, such as crowd funding, online donations and grant applications from international organisations, and not only focus on the South African government alone. Stakeholders should look into partnerships with private companies or government institutions, as well as leverage their networks and platforms to maximise fundraising opportunities.
- (b) Redesign activities and programmes: Civil society organisations may need to reconsider their activities and programmes to align with physical distancing and other Covid-19 safety protocols. This may include introducing virtual or remote liaisons, offering online learning sessions or health campaigns, or amending entertainment activities to meet safety requirements.
- (c) Invest in technology: Civil society organisations should consider investing in technology infrastructure like video conferencing, cloud storage capacity, software for remote group work, or online project management systems that can support their staff and volunteers for the virtual delivery of services.
- (d) Provide employees and volunteers with support: Civil society organisations have to ensure their employees and volunteers are coping with the pandemic stress. They should provide resources such as mental health support and access to healthcare services.
- (e) Monitor and respond to emerging issues: Organisational leaders should follow public health guidelines and consider modifications to operations as new Covid-19 developments occur. There should be outcome indicators used to evaluate their programmes, and track issues and trends.
- (f) Create activities to build capacity and educate people about the SDGs, as the majority of respondents are unaware of what they are.
- (g) Encourage dialogues and learning about how the SDGs can be used and promoted as a system for Covid-19 recovery efforts, and identify actions that all stakeholders can take to communicate systemic linkages to the SDGs.

- (h) Government support: The government sector should provide more financial and in-kind support to the CSOs. It has become very evident that most CSOs are struggling to get support from the government. It was already difficult to obtain support before Covid-19, but it became extremely difficult to get support during and post the pandemic. The policy landscape seems to be unfavourable for most CSOs to get access to funding opportunities from the government. There are very strict measures that are making it difficult for emerging CSOs to access support from the government. The government should consider making the policy landscape less rigid, to allow CSOs to access support.

One participant responded when asked for their opinion on dealing with the pandemic, by saying, *“people from overseas should be screened more when coming to South Africa, the same way that South Africans are screened when they visit other countries”*. There must be general inclusion of entities and the general public (Zellmann, 2021), because inclusion should be at the heart of any open response and recovery from this pandemic, if society has to succeed, in both the current and future pandemics.

8. CONCLUSION AND RECOMMENDATIONS

In conclusion, Covid-19 has significantly impacted CSOs, presenting various operational, funding and activity challenges. The decline in funding, decrease in volunteerism and disruptions to service delivery are some of the challenges facing these organisations. Despite this, CSOs have adopted various strategies to continue their operations and activities, including new modes of operation, alternative funding sources and innovative programming. CSOs also face opportunities and challenges in the post-pandemic recovery phase. However, their resilience and ability to adapt to the new realities brought by the pandemic will be critical in rebuilding better for the future, and addressing Limpopo’s development and humanitarian challenges. It is, therefore, crucial that stakeholders work together to support these CSOs, to ensure their survival during these challenging times.

A review of NPO funding models is critical. NPOs themselves should be consulted during the development/review of the funding models. Capacitate the people running NPOs, as many of them cannot do so. Government should be central to the capacity development process.

During the study, names of other CSOs operating in the Limpopo Province emerged, some of which are well established and could provide valuable input towards a more effective readiness around future pandemics, and provide best practices for the small scale and emerging CSOs. These include:

(a) Treatment Action Campaign (TAC) Limpopo

The Treatment Action Campaign (TAC) is a non-profit civil society organisation that advocates for the rights and interests of people living with HIV and Aids. It aims to increase access to HIV and TB treatment, prevent new HIV infections and promote health justice in the province. It has been actively involved in advocacy, education and campaigns to improve the health sector, and ensure that all people living with HIV receive the necessary treatment and care (<https://tac.org.za/tac-limpopo/>).

(b) Action Aid South Africa (AASA)

Action Aid South Africa is an international civil society organisation that works to promote social justice, gender equality and women's rights. It also focuses on issues related to land and environmental rights, women's economic empowerment and education.

All of its various campaigns and programmes are aimed at empowering local communities, promoting gender equality and advancing social justice (<https://www.actionaid.org.za/limpopo>).

(c) Limpopo Legal Advice Centre (LIMLAC)

This is also a non-governmental organisation that provides legal advice and assistance to vulnerable and disadvantaged communities. Its mission is to promote access to justice and human rights for marginalised communities through legal assistance, education and advocacy. The organisation has been involved in various initiatives aimed at addressing issues related to gender-based violence, land rights, environmental justice and access to social services (<https://limlac.org.za/>).

(d) Vhembe Civil Society Network (VCSN)

This entity is a coalition of civil society organisations operating in the Vhembe District of Limpopo Province. The network aims to promote social justice,

human rights and community development in the region, through collaborative work and advocacy. Their activities and initiatives are aimed at addressing issues related to land rights, environmental justice, education, health and gender equality (<https://www.vhembe.org.za/portfolio/vhembe-civil-society-network/>).

(e) Mukondeni Development Centre (MDC)

This entity is a non-profit organisation based in Thohoyandou, Limpopo, which aims to promote community development through education, health and socio-economic empowerment programmes. MDC's initiatives are aimed at addressing issues related to poverty, unemployment and inequality. These aims are achieved through skills development and women's economic empowerment (<https://www.mukondeni.org/>).

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CHAPTER 3.2 HEALTH SECTOR

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1. RESEARCH OBJECTIVES

The objective of the study was to assess the impacts of COVID-19 on the health programmes in Capricorn District Municipality, particularly, Polokwane and Molemole local municipalities, through:

- 1.1 The assessment of the availability of all health programmes during Covid-19.
- 1.2 The assessment of the accessibility to all health programmes during Covid-19.
- 1.3 The assessment of the adverse health outcomes on patients, staff, etc. for all health programmes during Covid-19.
- 1.4 The assessment of the awareness of promotion and prevention interventions of outbreaks that achieve good health outcomes.
- 1.5 The conduct of situational analysis regarding the preparedness of the district health in responding to Covid-19 and preventing future outbreaks.

2. MATERIALS AND METHODS

A cross-sectional survey was employed in this project. The rationale for using a cross-sectional survey is that it allows quantitative, qualitative and medical records review (Relevant Checklists). To answer the study's research questions, the team collected primary data about the following:

- i availability and accessibility of all health programmes in Capricorn District municipalities
- ii awareness of promotion and prevention interventions to achieve good health outcomes
- iii conduct situational analysis on the effectiveness and efficiency of the preparedness of the district health in responding to Covid-19 and in preventing future outbreaks.

3. ETHICAL CONSIDERATIONS

The proposal was submitted to the Limpopo Provincial Research Committee (LPRC) for methodological soundness and Limpopo Provincial Research Ethics Committee (LPREC) for ethical soundness, and to review and issue the ethical clearance certificate. Potential participants were approached and briefed about the project to request their consent to participate in the study. They signed an informed consent form. The study participants were given a participant ID code to maintain confidentiality. Permission to use public facilities was obtained from the Department of Health research ethics committee. The Head of Department (HoD) issued a permission letter to use the facilities of the Department of Health. In the community survey, relevant stakeholders, such as the Capricorn District Municipality, Polokwane Local Municipality, Molemole Local Municipality, Magoshi and tribal councils, were consulted and permission was granted.

4. JUSTIFICATION OF THE STUDY AREA

Capricorn District Municipality was purposively or conveniently sampled. This was because of the highest infection rate, proximity to the Provincial Government Departments, and meagre financial and other resources. For the community survey, the sampled local municipalities were Polokwane and Molemole local municipalities. Polokwane Local Municipality was purposive/convenient sampled: it has the element of urbanity, it houses Limpopo Provincial Government and Administration (LPGA), it has the highest infection rate and it has the highest population according to the 2016 demographic information. Molemole Local Municipality was purposively/conveniently sampled: it is predominantly rural, it houses several farming and agricultural communities, it has the least infection rate and a smaller population in terms of the 2016 demographic information.

5. SAMPLING AND POPULATION

In terms of the community survey, the sampled wards were wards **02, 13, 17, 20, 21, 25, 38 and 44** in Polokwane Local Municipality and wards **01, 08, 10 and 16** in Molemole Local Municipality.

The study was further conducted within healthcare facilities and health governance offices. Healthcare facilities in Capricorn District include clinics and hospitals. The nine hospitals from the districts are Seshego, Botlokwa, WF Knobel, Zebediela, Helen Franz, Thabamopo, Lebowakgomo, Mankweng and Pietersburg. The Capricorn District in Polokwane Municipality has 36 249 Covid-19 statistics as of 09 May 2022. Polokwane Municipality has the highest number of 797 127 people in the province. The pre-test was conducted at Molemole Local Municipality with a population of 125 327 and 1 542 people infected by Covid-19, recorded on 09 May 2022.

6. DATA COLLECTION

The primary data was collected through interviews and survey instruments with selected healthcare facilities, healthcare service administrators (from provincial offices and healthcare facilities), SMMEs, agricultural cooperatives, households and organised stakeholders such as trade unions, traditional healers and churches. Data collected included demographic, professional data and health-related data. Documentary analysis of health policy documents, CDC governs the healthcare designed for managing patients with Covid-19, including clinical guidance, home and hospital care, care for special populations and disease severity. The checklist was completed by a team consisting of clinical nurses, a pharmacist, a research officer, public health specialist and a biostatistician. These documents were retrieved and reviewed for adequacy, and assessed on how they promote and prevent Covid-19, and future pandemics.

7. DATA ANALYSIS

The data was coded using the inductive coding method. The codes were derived from the participants' original narratives and ideas. This is because we wanted to see how effective and efficient the district health department's readiness was in responding to Covid-19 and preventing future outbreaks. The coding frame was created through an iterative process involving multiple discussions among the authors, focusing on similarities and differences. The community survey data was captured on QuestionPro data analysis tool. Various statistical analyses were applied to the data, including descriptive and inferential statistical analyses. To ensure validity, data was rechecked for duplication and errors.

8. DISCUSSION OF THE COLLECTED DATA

8.1 Data resulting from community survey

About 5 222 people (representing the households) responded to the questionnaires. The questions varied from health behaviour (mask-wearing, sanitiser, social distancing) to health symptoms and interventions, as well as the household positivity rate for Covid-19 and Covid-19 related deaths in the household.

In terms of health behaviour, 44% of the respondents strongly agreed that the masks were available, while 49% agreed; indicating that only 6% of the respondents did not have access to masks. About 18% indicated that members of their households ignored the masks. Of all the households, 98% (47% strongly and 51% agree) of the respondents indicated that they adhered to the regulations on funeral gatherings. Similar numbers were obtained for church gatherings. For social distancing, 94% of the respondents indicated that they implemented it at home. Of these, 40% strongly agreed. Figure 1 below shows the perception of the respondents in relation to the different health regulations recommended by the government.

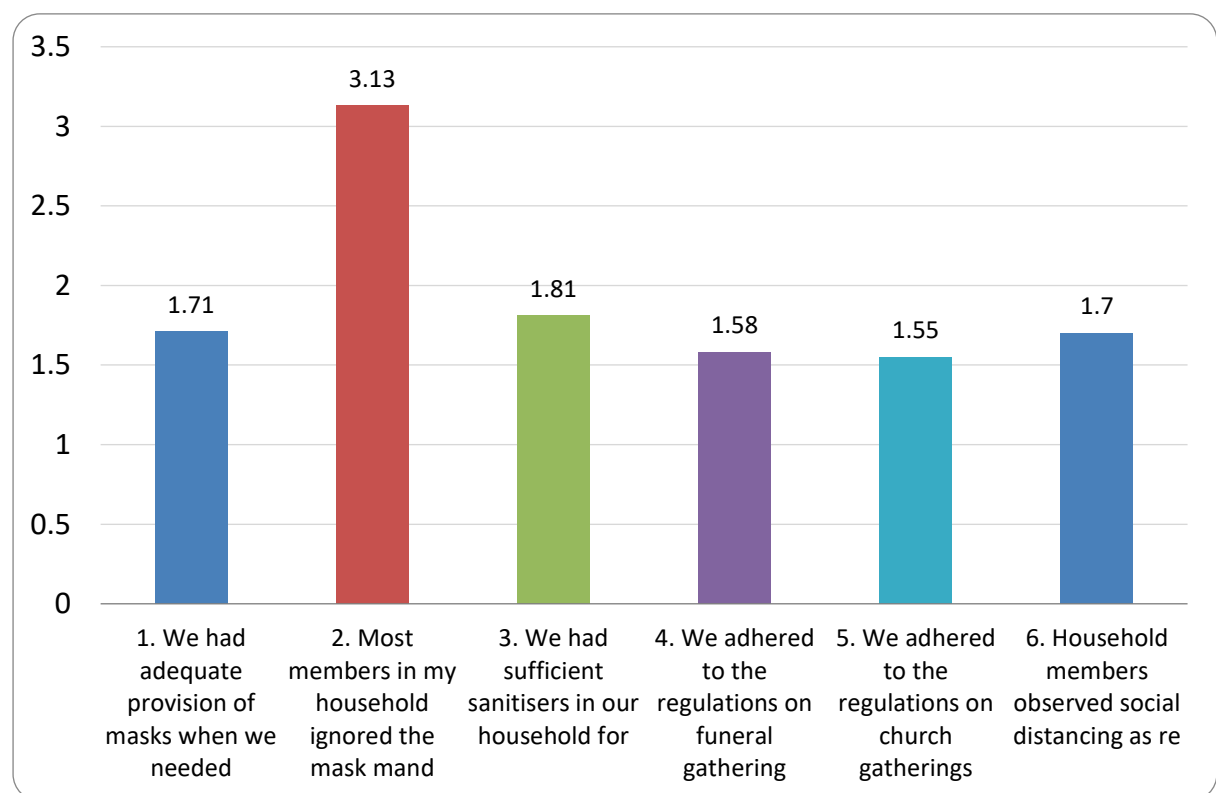


Figure 1: Respondents' perception of the access and respect of regulations recommended by the government

Of all the respondents, only 8% of the respondents indicated that they had medical aid to cover their health issues. The group with the highest medical aid cover was that of individuals with a head who had tertiary education, with 24% of the households having medical aid, while those with no formal education had only 1.7% medical aid cover.

The household members with comorbidities: of 4 679 participants, 35% (1 661) of those had members with comorbidities, while the majority of 62% (2 918) had no family members with comorbidities. The age group of 50 years plus had higher percentages of comorbidities, dominated by 60–69 years with 47.3% and 70 years plus with 48.9%.

Of the respondents, only 20% indicated that they were never vaccinated, while 52% had full vaccination for Covid-19 and 21% had full vaccination and a booster. Figure 2 below shows the level of vaccine coverage, according to the study participants.

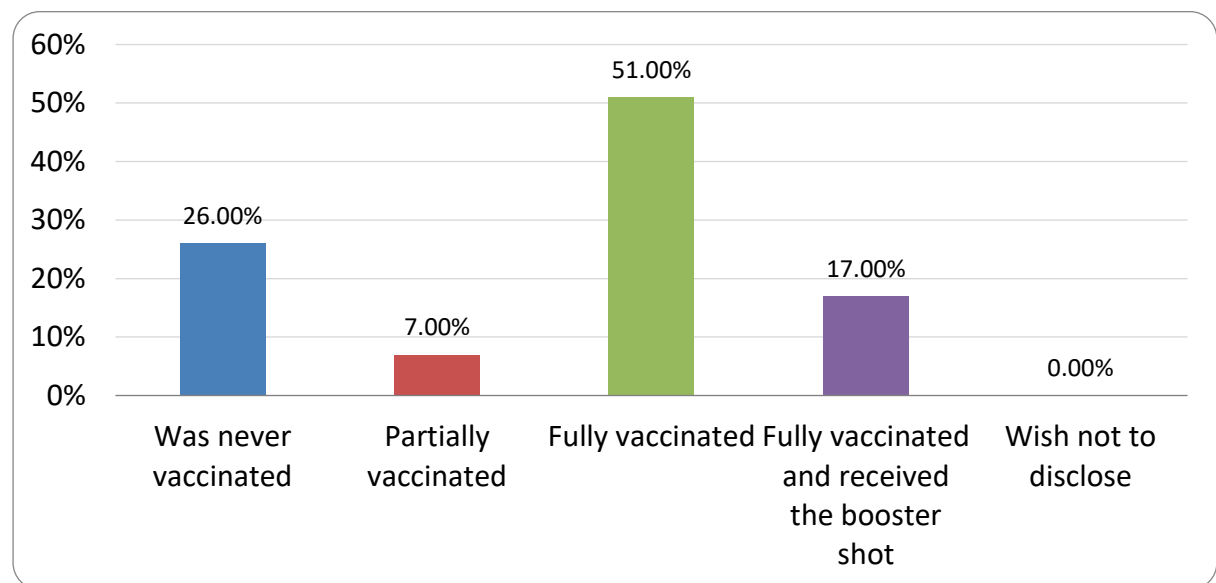


Figure 2: Vaccine coverage in the Limpopo Province according to the household survey on Covid-19

The uptake of the Covid-19 notification app was quite low among the respondents and their family members. About 49% of the respondents indicated that none of those with cellphones accessed the app, while 23% were not sure.

8.1.1 Non-pharmaceutical interventions

Several non-pharmaceutical interventions were identified and the impressions of the participants on the effectiveness of these interventions were sought. Between 90 and 98% of the respondents indicated that these measures were effectively implemented.

Of all the interventions, hard lockdown, followed by reduced gatherings, wearing of PPE, hand washing and sanitising were deemed to have been very effectively implemented, according to the respondents.

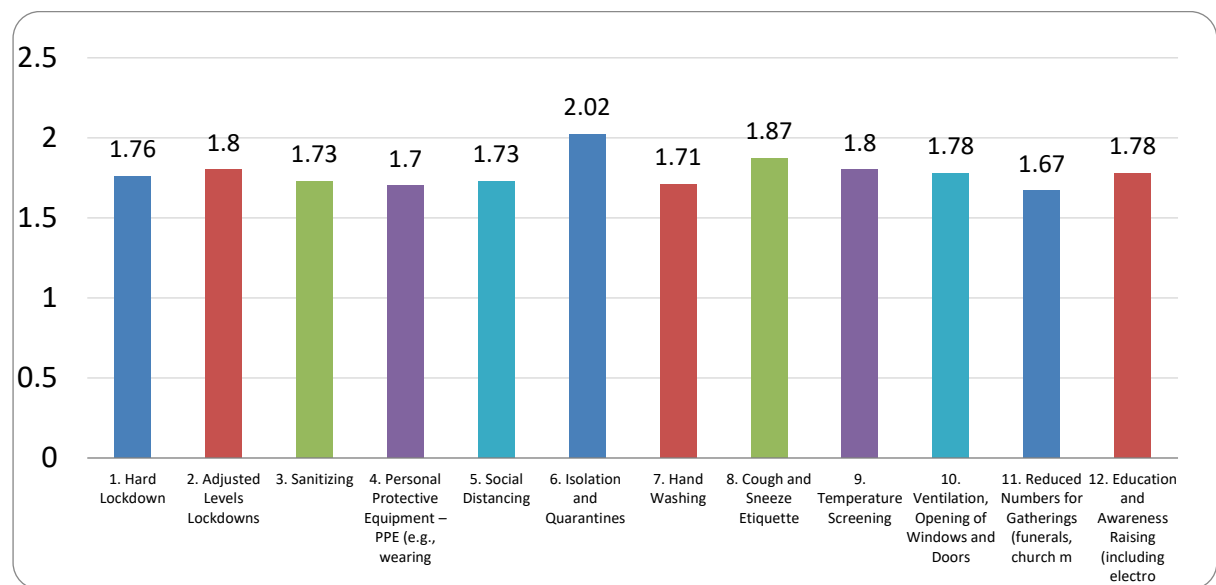


Figure 3: Impression of the respondents on the effectiveness of the measures recommended by the government

8.1.2 Usage of the supporting systems in the management of Covid-19

The study participants were asked about their perception on the usage of a certain number of interventions. Concerning the use of ventilators in hospitals, out of 4 682 participants, 4% (216) of members of the households highly used ventilators. A low number of households of 3% (149) used ventilators as a tool to treat Covid-19. However, the majority of the members of households of 90% (4 227), of the total number of 4 682 participants, never used ventilators. Only 2% (90) were not sure if members of their households used ventilators.

About the use of vitamin C tablets by household members, out of 4 677 participants, 24% (1119) of members indicated that their household members used vitamin C for the treatment of Covid-19. Household members of 6% (209) sometimes used vitamin C tablets. The majority of the household members of 68% (3 183) never used vitamin C tablets to treat Covid-19. Only 2% (85) were not sure.

With regards to general hospitalisation of their household members, out of 4 681 participants, 10% (451) agreed that members of their households were hospitalised, while 5% (232) reported their household members were sometimes hospitalised. The majority of the household members of 84% (3 935) were not hospitalised. About 1% of the participants were not sure if some of their household members were hospitalised due to Covid-19 infection.

Concerning the vaccination of their household members, out of 4 678 participants, the majority of their household members of 49% (2863) were vaccinated, while 11% (506) might have been vaccinated. Only 27% (1256) were not vaccinated and 1% (53) of the participants were not sure if their household members were vaccinated.

When asked about the use of zinc tablets by the members of their households, out of 4 680 participants, 13% (615) of members of households used zinc tablets for the treatment of Covid-19. Only 6% (270) of members of households might have used zinc tablets. The majority of 79% of the households' members never used zinc tablets for the treatment of Covid-19. Only 2% (92) were not sure if their household members used zinc tablets for the treatment of Covid-19.

About the general steaming and/or with eucalyptus oil by the members of the household, out of 4 680 participants, the majority of the household members of 75% (3 473) used steaming and eucalyptus oil to treat Covid-19, while 5% (214) of the household members of the participants might have used steaming and eucalyptus oil. Only 21% (979) of the participants confirmed that their household members never used steaming and eucalyptus oil. Only 1% (33) were not sure if their family members used steaming and eucalyptus oil to treat Covid-19.

About the use of traditional medicine by the members of households, out of 4 682 participants, the majority of 50% (2 335) of the participants' household members used traditional medicine to treat Covid-19, while 5% (235) of the participants' households might have used traditional medicine. Only 44% (2 076) of their household members never used traditional medicine for the treatment of Covid-19. From the participants, only 1% (36) were not sure if the members of their households used traditional medicine for the treatment of Covid-19.

With regards to the use of malaria tablets by the members of the households, out of 4 679 participants, very few members of the households from the participants of 2% (101) used malaria tablets for the treatment of Covid-19. Of all the participants, only 3% (142) of their family members might have used malaria tablets. The majority of the members from the participants' households of 93% (4 363) never used malaria tablets for the treatment of Covid-19. Only 2% (73) of the participants were not sure if members of their households used malaria tablets for the treatment of Covid-19.

About the use of over-the-counter medicine for cold and flu by the members of the households, out of 4 670 participants, the majority of 50% (2 346) of members' of their households used over-the-counter medication for the treatment of Covid-19. Only 9% (414) of the members' household participants might have used over-the-counter medicine. Members from 40% (1862) of the participants never used over-the-counter medication. Of all the participants, only 1% (48) were not sure if members of their households used over-the-counter medication.

Regarding the use of general home remedies, such as the use of lemon, rooibos tea, etc. by the members of the households, out of 4 675 participants, the overwhelming majority of the members from the households of the participants of 80% (3 718) used general home remedies. Members from 5% (226) of the participants might have used general home remedies. Only 15% (704) of the members the participants never used general home remedies. Of all the participants, only 1% (27) were not sure if the members from their households used general home medication for the treatment of Covid-19.

Regarding the use of Ivermectin tablets by the members of the households to treat Covid-19, out of 4 673 participants, very few members from the households of the participants of 5% (229) used Ivermectin tablets to treat Covid-19. Again, 5% (233) of the members from the participants' households might have used Ivermectin tablets for the treatment of Covid-19. The majority of their household members of 87% (4071) of participants never used Ivermectin tablets. Of all the participants, 3% (140) were not sure if members from their households used Ivermectin for the treatment of Covid-19.

Regarding the breathing and/or sleeping posture of the members of households, out of 4 653 participants, only 8% (355) of the participants used breathing and sleeping posture as a remedy to treat Covid-19. About 10% (452) of the participants might have used breathing and sleeping posture as a remedy for Covid-19. Of all the participants, the majority of 77% (3 566) was sure that the members of their families never used such a method. Only 6% (280) of the participants were not sure if members of their family used breathing and/or sleeping posture for the treatment of Covid-19. Figure 4 shows the distribution of all the responses concerning the usage of the different interventions used during the Covid-19 pandemic.

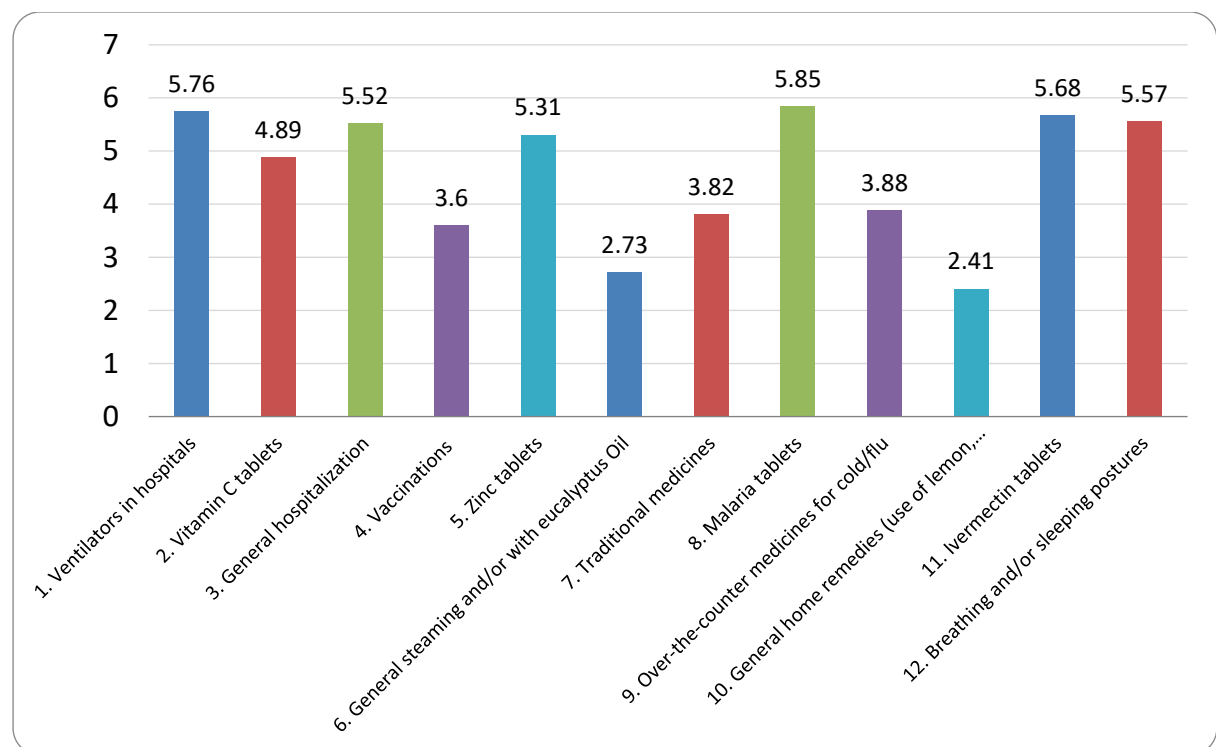


Figure 4: Perception of the community members on the usage of different interventions recommended during the Covid-19 pandemic

8.1.3 Covid-19 infection and Covid-19 related deaths in households

In terms of infection with Covid-19, 87% of the respondents indicated that they had no infection in their household, while at least one person was infected in 13% of the households visited. About 3% of the households reported having lost a member due to Covid-19.

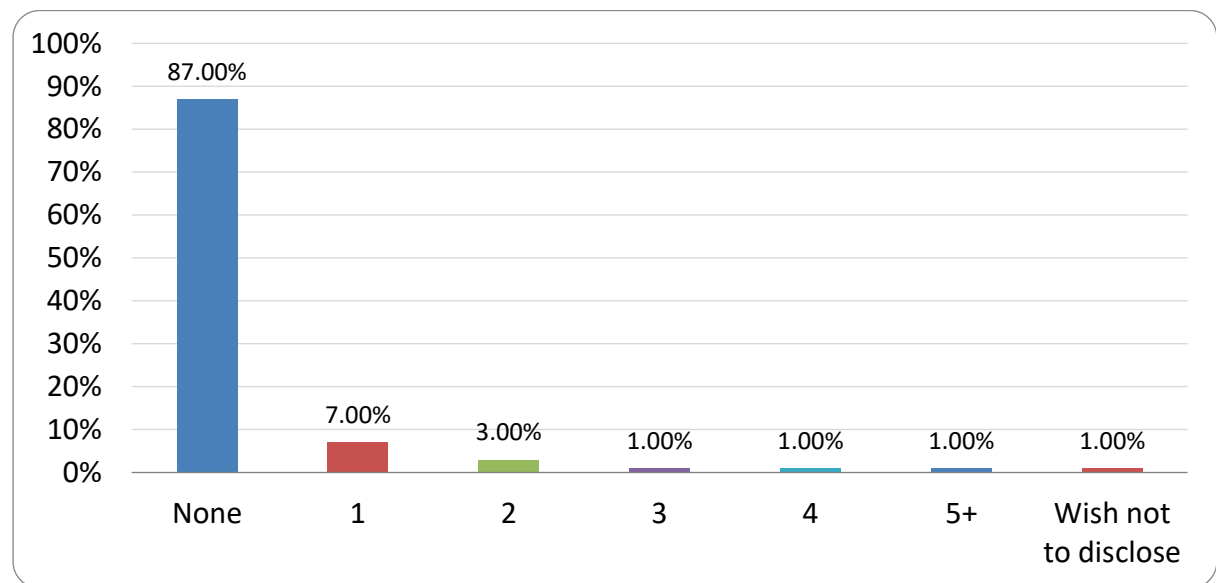


Figure 5: Covid-19 positivity rate in the households in Limpopo Province

The numbers indicate the number of people who tested positive for Covid-19 in the household.

In the study, we evaluated the distribution of Covid-19 positivity among different population characteristics.

Covid-19 positivity was higher among the child-headed households compared to other households (12.6% compared to 8.7%). Similarly, death due to Covid-19 was higher in child-headed households (8.2% compared to 2.4%). This is an indication that Covid-19 affected child-headed households more. Therefore, there is a need to identify such households and provide them with further support, particularly during the times of pandemic.

There was no difference between female-headed households and male-headed households in terms of Covid-19 positivity and death. However, there was a variation in the Covid-19 positivity based on the average age of the household head. The highest positivity rate of Covid-19 was found in the household in which the head was aged between 40 to 49 years, while the lowest positivity rate was found in households where the head was 70 years and above. However, in terms of death, there was no difference among the different age groups.

The level of education also had an impact on the Covid-19 household infection rate. Those households that had a head with tertiary education reported the highest Covid-19 infection rate (20%), as well as the highest Covid-19 death rate (5%). Households with a head that had no formal education reported the least infection, although the least death rate was reported by households with a head that had primary school education. This could be because most people with higher education could have been working and had more chances of being exposed to the virus than those who did not have the same opportunity. The same was observed with employment status, where those with full-time employment also reported more Covid-19 infections, as well as the highest Covid-19 deaths. Those whose household head was unable to work, reported a death rate of 7.5%.

There was a variation in terms of Covid-19 positivity by households about marital status. Households with the head that indicated they are divorced, reported more Covid-19 infections (13%), while those led by widows had 9%. The household with a head that was married reported 10.3% and households led by a head that was single reported 9.5% Covid-19 positivity. In terms of Covid-19 death, households with a head that was divorced also reported higher death rates (4%), while households with a married head reported 2.6% Covid-19 death rates.

With regards to the vaccine status in child-headed households, the vast majority of the members of 57.2% were fully vaccinated and 8.2% received a booster shot.

In households where a member tested positive for Covid-19, the death rate was 17.6% compared to the households where a member tested negative, the death rate was 1.1%. In the community where the households' members were vaccinated, there was no death

to over 97% and only a 3% death rate was recorded. About the vaccination status and Covid-19 positivity in the households, over 88% tested negative, while 12% tested positive.

Positivity in the households in relation to access to the workplace was higher at 36.9%, and lower at churches and schools at 20% within all spheres of governance. Regarding the household members' deaths in relation to the accessibility in different spheres of government, the highest number of deaths at 3.75% was at the workplace than schools and churches, which were at 3.3% and 3.05% respectively.

Positivity about the perception of the community members regarding the measures implemented during the height of the pandemic, such as hard lockdown, adjusted levels, sanitising, PPEs, social distancing, hand washing, cough and sneeze etiquette, temperature screening, the ventilation of rooms and opening of windows, reduced number of gatherings and awareness education, was enquired. In those households where the head believed that these measures are effective, the household positivity rate was lower (9.5%) compared to the households where the head did not believe these measures are effective (16% on average). Among the measures, coughing and sneezing etiquette (31.8%) followed by social distancing (27%), temperature screening (24.5%) and education (20.5%) appeared to be more efficient in reducing the Covid-19 positivity rate.

With regards to Covid-19 death and measures recommended by the government during the height of the pandemic, such as hard lockdown, adjusted levels, sanitising, PPEs, social distancing, hand washing, cough and sneeze etiquette, temperature screening, the ventilation or rooms and opening of windows, reduced number of gatherings and awareness education, the death rate was at an average of 2.8% for those who perceived them as effective. However, for those who didn't perceive them as effective, the death rate was higher in those households, varying from 7% for sanitising, ventilation (4.8%), and isolation and quarantine (5%).

Positivity about the perceived usage of alternative measures to combat the infection of Covid-19 reflected in the perceived usage corresponding with the level of household positivity rate. Those who used it indeed had higher positivity rates. The following

interventions seem to have reduced the level of infection in the households: the use of traditional medicine (11.7%), steaming (11.6%), the use of general home remedies (11.2) and vaccination (11.1%).

About Covid-19, death about the usage of health support systems or medication, high usage of this support correlated with a high death rate. However it can be noticed in vaccination (3%), general steaming and/or with eucalyptus oil (3.4%), the use of traditional medicine (3.1%), over-the-counter medicine for flu and colds (3.5%). The use of general home medicine, such as lemon and Rooibos tea, etc. (3.3%), was very low.

9. CONCLUSIONS

The present study showed that there is an association between Covid-19 and a higher mortality rate in the community. This was shown by the fact that households with Covid-19 cases had a mortality rate of 17% compared to only 1% in the homes that did not have any Covid-19 cases.

The occurrence of child-headed households undermines the government as well as other non-government organisations' efforts to promote child education and well-being. There is a clear need to address the issues of child-headed households. It is important to remind the readers that these households are very vulnerable, since, in the present study, they had higher cases of Covid-19 infections and related death.

Traditional medicine and the use of locally available plants and practices, such as steaming, should not be discouraged, as these contributed significantly to reducing the Covid-19 burden and deaths in the communities studied.

Only the highly educated and those who are working have medical aid. However, Covid-19 cases and deaths were also mostly reported from these households. This could be because of higher activities by attending workplaces, which, in this study, appeared to play a significant role in the transmission of Covid-19.

The population should be encouraged to practice the non-pharmaceutical measures, since these were instrumental in reducing Covid-19 infections in the households, as well as cases of death.

10. RECOMMENDATIONS

- a) Covid-19 appeared to be an important factor in high mortality at the community level. Therefore, measures implemented during the height of the pandemic were welcome and should be considered in future pandemic situations.
- b) Child-headed households continue to be a significant problem in communities in Limpopo Province, especially in Capricorn District Municipality and extra efforts should be taken to reduce such situations occurring in the communities. Community leaders should be involved to assist such households, particularly during pandemic situations.
- c) There is a need to encourage the public to make use of the available measures such as wearing masks, social distancing and other non-pharmaceutical measures to protect themselves in pandemic situations.
- d) Hospitalisation appeared to be associated with negative outcomes during the pandemic. Consequently, some people lost trust in the institution. Therefore, there is a need to extract the fear from the public that once an individual has been hospitalised, the chances of survival are very slim. This is because those who were hospitalised for Covid-19 viewed and associated ventilators with death.
- e) The general public should be encouraged to vaccinate against Covid-19 and any other unforeseen pandemic that may arise.
- f) Workplaces should encourage working at home during the pandemic. This is because these environments appeared to contribute to most cases of Covid-19, as well as associated deaths in the communities, according to the surveys conducted.
- g) The usage of steaming as well as local medicinal plants appeared to significantly reduce Covid-19 cases, as well as Covid-19 associated deaths. Therefore, community members should not be discouraged from using such measures to protect themselves during pandemic situations. Most of these medicines are often used in the communities to fight other symptoms like flu or even malaria.

Therefore, there is a need for integrating traditional indigenous medicine and healing into the mainstream biomedical health system.

- h) Majority of the people used over-the-counter medication for the treatment of flu and colds, and in this study, they appeared to reduce the Covid-19 positivity rate as well as Covid-19 associated deaths. Therefore, such health-seeking behaviours should not be discouraged, although the population needs to be educated on the potential merit and demerit of such activities.
- i) There is a need for further investigation if breathing and sleeping posture can alleviate Covid-19 symptoms.
- j) When comparing the workplace, schools, churches and other religious facilities, most people were infected by Covid-19 in their working environment. It is, therefore, proposed that remote working should be encouraged, where possible.

CHAPTER 3.3 SOCIAL AND COMMUNITY DEVELOPMENT

Authors: WMM Kwakwa & P Mafa

1. INTRODUCTION AND BACKGROUND

People all over the world have been affected by the Covid-19 pandemic. The impact on society can be seen in all aspects of existence. Covid-19 has negative health, economic and societal consequences that affect people across the world. The repercussions have been felt by people in all dimensions since the outbreak. The effects are intertwined because the health consequences have spilt over into the social and economic spectrums. People are social beings and their well-being depends on their ability to develop socially. To achieve the Sustainable Development Goals, social development must be considered and this includes poverty reduction. The team's goal is to describe and explain the effects of Covid-19 on the province of Limpopo's socio-economic development. The study will be conducted in the Capricorn and Mopani districts. Social development, when combined with community development, is critical for improving the lives of the public.

The social policy ensures that the advantages of economic development and technical innovation are evenly distributed and that it addresses the needs of all social groups, including those who are disadvantaged in some way, regardless of where they live (Millard, 2020). To attain primary healthcare and promote people-centred services, community engagement is critical. It can help with health intervention buy-in and sustainability, health advocacy, increased service quality and satisfaction, and health system responsiveness and strengthening (Zahnow, Wickes, Taylor & Corcoran, 2019).

Individuals, groups and structures inside a community's social boundary or catchment area are involved and participate in decision-making, planning, design, governance and service delivery through community engagement. It is used as a parent concept with terms like communication, social mobilisation, community involvement, community action and empowerment, emphasising the agency of community people or groups as active rather than passive participants. Many health programmes, such as

communicable disease, maternity and child health projects, believe community engagement to be vital and it has lately been viewed as a critical component during outbreaks, most notably during the 2014–2015 Ebola epidemic in West Africa (Gilmore et al., 2020).

Natural disasters, financial crises, pandemics and military conflicts all have long-term social, political and economic consequences for communities and their health (Gallego, Nishiura, Sah & Rodriguez-Morales, 2020). Social cohesion is a crucial component of the pre-disaster, acute, post-disaster and recovery phases of disaster recovery planning. Different sorts of shock events occur throughout the world, and the repercussions and subsequent recovery possibilities are inequitably distributed among communities. Both social cohesiveness and community resilience provide chances to detect and resolve inequities before, during and after a disaster, and they are critical for inclusive recovery methods that meet the needs of everyone in the community (Gallego et al., 2020).

The high number of Covid-19 infections and deaths, as well as economic hardships, worry about the future and the techniques needed to restrict the virus' spread, all play significant roles in the Covid-19 pandemic's short and long-term social and psychological impacts. Inequities in infection and death rates, as well as the steps required to recover, are influenced by race and socio-economic conditions. Family members who are unable to be with loved ones who are seriously ill from the virus, as well as older persons living at home, in nursing homes or in retirement communities, add to the stress (Osofsky et al., 2020).

South Africa responded to the Covid-19 outbreak by combining existing social protection programmes, unemployment insurance and extra steps to assist those who were most affected. Unemployment payments for formal sector workers and cash transfers to needy individuals, informal labourers and recipients of existing subsidies were the government's two-pronged, mostly cash-based approach. Top-up payments for existing grants were smoothly implemented; the new Special Relief of Distress (SRD) grant presented some obstacles, but it eventually reached nearly six million individuals. It may become a permanent part of South Africa's social security system.

2. METHODOLOGY

To answer the study's research questions, the team collected primary data from various sources guided by the objectives and questions of the study. This primary data was gathered through in-depth interviews and survey instruments with members of the community, social workers and community development workers in the Limpopo province's Capricorn and Mopane districts, from the qualitative-exploratory design. Qualitative research aims to comprehend the attitudes and behaviours of actors within their natural environment, unlike in artificial laboratory settings applicable to quantitative studies (Babbie & Mouton, 2010).

2.1 Sampling procedure

The qualitative section of the study adopted the purposive convenience sampling technique, therefore, sampling size could not be determined beforehand. The study relied on saturation of data and that guided the sampling size. Practising social workers and community development practitioners within the Department of Social Development (DSD) were purposely selected and contacted. Only those who were willing and available, at the time of data collection, were interviewed. Eleven interviews were conducted with social workers in various DSD settings, including one focus group session and two focus group sessions with community development practitioners in both Capricorn and Molemole districts in Limpopo. O'Leary (2014) refers to this sampling method as non-random, where participants are hand-picked according to their suitability to meet a particular criterion, such as typicality, expertise or wide variance.

2.2 Data collection methods

The researchers used two techniques to collect data, which is the face-to-face personal interviews and focus groups. Using open-ended and flexible questions assisted in participants providing rich detailed information that enabled the well-structured and standardised themes (Flick, 2014). A semi-structured interview guide with flexibly structured questions was used to guide the interviews.

2.3 Data analysis

Data was analysed using thematic content analysis. Braun and Clarke (2006), recommend the accompanying six stages to analyse data, which were adopted.

Stage one: Familiarising oneself with the data. The researchers began by gathering information; from there on, familiarised themselves by reading it.

Stage two: Generating initial codes. After the researchers acquainted themselves with the raw data, they then generated codes for the data.

Stage three: Searching for themes. This stage was achieved after coding was done.

Stage four: Reviewing themes. Themes were then refined to remain with the most striking ones.

Stage five: Defining and naming themes. Having refined and reviewed the themes, the researchers then named the developing themes.

Stage six: Producing the report. The researcher made the last analysis and produced a report to present the study findings as themes.

3. KEY FINDINGS AND DISCUSSIONS

3.1 Sub-theme 1: Assistance provided to the people by social workers and community development practitioners

People received donations in the form of food parcels from different stakeholders. Face-to-face interaction was a challenge and difficult, especially in developing the register for those in need. Workers encouraged communities to wear masks, use sanitisers, and not share equipment and other goods to keep up with the Covid-19 hygiene protocols. Further assistance provided included trauma counselling, because Covid-19 was a new pandemic and most people did not know how to react to it. The reason for social workers assisting communities with trauma counselling was because everyone was indoors, most were not working and people started having mental challenges, such as stress and depression.

The social service workers also assisted with food parcels from local municipalities and DSD. The role that was played by social workers, specifically, was in the selection of those who qualified for social assistance – criteria used by the social workers from their caseloads. Ward councillors and ward committees assisted in identifying additional needy people.

CDPs were also responsible for identifying those in need of assistance, such as those who needed food parcels from the communities. This information was then relayed to DSD and other donors to ensure that enough food parcels were provided and distributed. CDPs assisted in distributing food parcels and identifying the needy in the communities, because they work with these communities on different projects. It was, therefore, possible for them to profile those who qualified for the needed support and food parcels within households, and drop-in centres within these communities. However, the social workers were not coping due to a lack of resources; some social workers were not even at work, because they did not opt to work during the pandemic. Those who were selected to perform the CDPs role were the social workers who were working in active areas such as townships and urban areas like Seshego; unlike in rural areas where few social workers were deployed, because rural areas are perceived to be less busy.

3.2 Sub-theme 2: Involvement of the public in strategies for dealing with the Covid-19 pandemic

Communities were not involved in any strategy development. It was mainly a top-down approach and people relied mostly on media information, rather than getting information from government and local authorities.

In the beginning, the communities were not involved due to the shock of not knowing what the pandemic is all about; only counsellors were involved. However, the communities were conscious of what Covid-19 was and they practised the regulations such as social distancing and not allowing people in their households. They even suggested collecting food parcels themselves from counsellor's offices, rather than allowing the social workers within their proximity. Information was mainly from the

media. However, the social workers had to put the communities at ease and assured them that the necessary regulations would be adhered to when delivering food parcels.

3.3 Sub-theme 3: The impact of Covid-19 on the quality of life (education, health, social and economic aspects)

Social aspects: Social ills, such as GBV, increased because people were always indoors, rape statistics increased because children were always at home – they got raped by relatives and neighbours as these males were also at home, due to loss of jobs and lockdown rules. People’s stress levels increased and teenage pregnancy also escalated, because some parents returned to work during levels 3-4, depending on the sector, and the adolescents remained unsupervised at home. Substance abuse was also on the increase. Parental supervision was very low in some households. Due to lack of affordability, some youth resorted to finding the “blessers”, especially during level 4 when restrictions were eased and people were sort of out of confinement and suffocation.

The social workers also noted that children who were being abused could not report sexual abuse offences because of the restrictions. Some victims only reported offences when restrictions were relaxed, which means they could not benefit from crisis intervention, while others did not report any offences – it became their everyday life of abuse, because they rely on the perpetrators for sustenance and groceries; in the process, others fell pregnant. The divorce rate also went up and children were psychologically affected by this. Additionally, Covid-19 resulted in a spike in child-headed households.

Health aspects: Those who lost loved ones did not have closure because they could not view the bodies of their loved ones. This created a challenge and some developed mental illnesses, such as depression. Others could not even visit their relatives in hospitals, because of the restrictions. Those with chronic illnesses would collect medication from retail stores such as Clicks and postal offices. In general, people were scared to visit health centres because they feared that they would be infected by the virus. Almost all deaths were perceived to be Covid-19 related. People were also affected mentally and the rate of drug abuse increased as a coping mechanism to deal with the pandemic.

Educational aspects: Learners performance deteriorated, especially Grade 12, due to their inability to access e-learning and not being able to attend normal classes. Most of the families lost jobs, children were forced to leave private schools and were downgraded to public schools.

Economic aspects: The general population was adversely affected due to the loss of jobs and, subsequently, the economic circumstances of most people were negatively affected. The state of poverty increased, thus the number of people dependent on social grants increased as well. More people relied on food parcels.

3.4 Sub-theme 4: How has the pandemic affected people's access to services?

People were affected in terms of not receiving services due to lockdown restrictions. People were not allowed to directly collect medication from clinics. Hospitals concentrated mostly on those infected by the virus and the health status of most people with chronic illnesses deteriorated. Issues of GBV also increased as people did not have direct access to ward committee members to report their challenges and problems. During level 5 (hard lockdown), CDPs stopped working. When the levels were eased, they managed to distribute food parcels. Normal work was severely affected. No meetings or workshops were held. Almost everyone stopped working for about three weeks and started working again only during level 4.

3.5 Sub-theme 5: How small businesses were affected by the pandemic

Most, if not all, small businesses collapsed and they found it difficult to recover due to the unavailability of support from the government. Normal life was severely affected. Their savings were exhausted and there was no other income available. Others opted for loans so that they could resuscitate their businesses. People are stressed because there is no recovery plan available.

Most small businesses such as spaza shops were closed down. Hawkers have also been affected, as most are no longer operating. This has resulted in high levels of unemployment.

4. DISCUSSION

The priority was to save a life. The top-down approach was the appropriate approach at the time, because no one had an idea of what to do during a state of disaster. Management relied more on phone calls than face-to-face meetings. The ideal strategy would have been the bottom-up approach, where the social service sector contributions were sought using online communication platforms such as Google Meet, Microsoft Teams and Zoom meetings.

To assist people in dealing with the effects of the pandemic, the government implemented the R350 Social Relief of Distress Grant. Despite this effort, social services providers are of the view that the money was not adequate to address the needs of their clients. Some of the relief that was provided was through the distribution of food parcels, which was done in collaboration with DSD, ward committee members and other stakeholders.

Social services providers feared for their lives as they felt unsafe, even though they were wearing masks. They even lost colleagues. Social workers in the healthcare environments were not provided with full PPEs, except for face masks. Social services providers generally received little support from the employer; they indicated that they had to rely on media statements to be kept up to date. They felt like they were not psychologically prepared to address issues related to the Covid-19 pandemic.

5. POLICY OR MANAGERIAL IMPLICATIONS

- a) Management in the social service cluster must recognise the significance of a participatory approach to the planning and delivery of social services even in emergencies, including consideration of the bottom-up approach.
- b) Special danger allowance should be provided to social workers and community development workers who provide services during states of emergency and disasters, so that not all workers become involved during these periods.
- c) The DSD management should take care of the bio-psycho-social needs of their employees during stressful conditions under which they carry out their duties, like during the Covid-19 pandemic.

- d) In terms of support for small businesses, government support is only available on media such as TV and radio, but in reality and, on the ground, the support is not available or does not reach the intended recipients.

6. CONCLUSION AND RECOMMENDATIONS

DSD does not take care of the well-being of its employees, as there was no debriefing for workers who were on the front line during the hard lockdown. These workers received no form of acknowledgement from the employer. They even had to use their vehicles to transport food parcels and purchase extra PPE.

Social workers were not treated the same as other essential workers, as if other workers were the only ones at the forefront. Contributions made by social workers and community development workers were not acknowledged. Government processes for the application of financial assistance for the indigent are too long and need to be reviewed.

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CHAPTER 3.4 EDUCATION SECTOR

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1. EXECUTIVE SUMMARY

Soon after detecting the first Coronavirus case on 05 March 2020, South Africa adopted and implemented various response mechanisms to control the virus' spread. These response mechanisms, however, placed many learners at greater risk of dropping out of school, lagging and losing learning. For most of 2020 and part of 2021, many learners experienced either partial or complete school closures across the country. One of the disrupted provinces was the Limpopo Province.

The current report presents data on the impacts that Covid-19 created on the education sector in the Limpopo Province, South Africa. The report catalogues significant effects, highlights challenges and presents an innovation for engagement. It draws on survey answers from 265 respondents across the two Capricorn District local municipalities: Polokwane Municipality and Molemole Local Municipality. The respondents were educators directly engaged in the teaching of learners. These respondents comprised deputy principals (1%), departmental heads (7%), teachers (88%), teaching assistants (2%) and other staff within schools (2%). Focus was on primary and secondary schools. A total of 52% of the schools were primary schools, 39% were secondary schools and 9% of the schools were combined schools. All these schools were public schools.

The survey was conducted between January and April 2023, when most Covid-19 restrictions were lifted and the alert level system was discontinued in South Africa. The research site was purposively sampled after considering the available funds, and the need for a predominantly urban and predominantly rural local municipality. It is hoped that the study's findings and recommendations will assist the province in conceptualising a provincial-wide interventionist approach towards recovering the province's education sector from the repercussions of the Covid-19 pandemic. The study findings and recommendations could also provide the Limpopo Government with long-term partnerships, capacity enhancement and rapid response teams for similar future pandemics and other future disasters. However, since this survey did not cover all the districts in the province, the report does not claim to reflect the state of public opinion in the province.

The report offers analysis, reflection and recommendations across a range of themes clustered around the following observations:

- (i) There were widespread school closures across the province. About 46% of the schools had wholly closed down at the height of the pandemic, 32% of the schools were only moderately closed, 14% of the schools were minimally closed and 2% of the schools were not sure, while only 8% of the schools continued business-as-usual.
- (ii) Inadequate access to technology was the major challenge, mainly because most of the schools were either rural (73%) or peri-urban (12%), while only 13% were predominantly urban.
- (iii) The findings also show that online learning technologies were not widely utilised in the participant schools, due to teachers' and learners' lack of access to or an inability to utilise these technologies. Online teaching and learning technologies had not been used in 63% of the schools during the national lockdown, 19% of the schools seldom used online technologies, 13% regularly used online technologies and only 3% made intense use of these technologies.
- (iv) The survey results show that the majority of respondents (teachers) were not satisfied with the kind of teaching and learning support they received from various stakeholders, including the Limpopo Province government (40%), district municipality (11%), local municipality (8%) and non-government organisations (8%). A total of 33% reported having resorted to using personal intervention mechanisms in the absence of adequate support. However, 60% of the teachers firmly acknowledged the provision of personal protective equipment provided by the government. This was supported by 33% of the participants, who also agreed, although not strongly. Only 3% of the participants did not agree that the intervention of the government in terms of PPE was noteworthy.
- (v) In suggesting further interventions, respondents revealed that the advent of the Covid-19 pandemic had triggered the need for widespread investment in technology in education for the future. However, they also noted that this would lead to significant challenges for the most marginalised learners. The difficulties in technology access and utilisation may also increase inequality.

2. INTRODUCTION AND BACKGROUND

Coronavirus disease (Covid-19) is caused by a severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) (Elham, 2020). The symptoms of infection include dry cough, fever, tiredness, shortness of breath, headache and general body weakness (Zhong et al., 2020). The virus was first detected in the Chinese city of Wuhan, in late December 2019. Within a short time, the virus spread to several countries across the world (Soudien et al., 2022). On January 30, 2020, the World Health Organization (WHO) declared the virus a public health emergency of global concern. By that time, over 80 000 confirmed cases had been reported worldwide (Mangal & Gupta, 2022). Twelve countries: United States of America, India, Brazil, the Russian Federation, France, Spain, the United Kingdom, Italy, Argentina, Columbia, Mexico and Germany accounted for over 66% of the total confirmed cases globally (Iftimie et al., 2021). The WHO declared the virus a global pandemic on March 11, 2020.

The virus reached South African soil on March 05, 2020 (Republic of South Africa, 2020). Within ten days, the number of infected people had risen to 51. No deaths had been recorded yet. On March 15, 2020, President Cyril Ramaphosa declared a national state of disaster in terms of the Disaster Management Act (Republic of South Africa, 2020a). On March 23, 2020, the President declared a complete national lockdown for 21 days. The lockdown would begin on the 26th of March 2020. The lockdown would see school closures, travel bans and restrictions on public gatherings, enforced by peace and security forces.

Movement outside homes was only permitted to acquire basic necessities such as food and medication. About 927 cases had already been confirmed by the time the lockdown commenced. The lockdown was extended by two weeks to April 30 and the alert level system was introduced. The government also established two critical structures to manage the Covid-19 disaster, a National Command Council (NCC), which consisted of key cabinet ministers led by the national President and a Ministerial Advisory Committee (MAC) under the Ministry of Health. The first was to make decisions concerning the pandemic itself – the measures to be instituted to manage the pandemic and the country's response to it. The function of the MAC was to advise on the multiple dimensions and issues relating to the pandemic. From March 05, 2020, to March 27,

2021, a total of Covid-19 cases and 227 932 Covid-19 hospital admissions were reported in South Africa (Jassat et al., 2021).

The imposed restrictions did not spare the education sector. The Department of Basic Education (DBE) (2020a), responsible for the administration of all public schools, announced at the beginning of the national lockdown that:

In accordance with the pronouncement by the President on 15 March 2020, schools will be closed from 18 March and will reopen on 14 April 2020. This decision has been informed by the warnings provided by the National Institute of Communicable Diseases and World Health Organization who have highlighted the alarming increase of infections within the country over three days... Provincial Education Departments, districts and schools are advised to take advantage of this time and are encouraged to utilise the time effectively by ensuring that learners participate in established stimulating programmes such as the Read to Lead programme, maths buddies, constructive holiday assignments, etc. through the supervision and guidance of parents, and the broader community whilst learners are at home. This will be supported through the provisioning of workbooks, worksheets, readers, etc.

The purpose of restrictions was to try and flatten the Covid-19 infection curve to contain the spread of the virus. The lockdown, however, while effectively curbing the spread of the virus, had an enormous impact on all sectors, including the education system (Ndhlovu & Mhlanga, 2023). During the national lockdown, all educational institutions in the country were temporarily shut down. The Covid-19 pandemic, as well as the response mechanisms associated with it, therefore, spewed huge socio-economic issues for all sectors of human existence, including the education sector. It also aggravated socio-economic inequalities. While learners from privileged households could circumvent school closures to alternative learning opportunities, those from disadvantaged households often remained shut out when schools shut down (Soudien et al., 2022). The Covid-19 pandemic also exposed the numerous inadequacies and inequities in the province's education system – from access to the broadband and computers required for online education and the supportive environments necessary to focus on learning, to the misalignment between resources and needs.

The lockdown disrupted conventional modes of teaching and learning. In mid-April 2020, the DBE implemented a Covid-19 response programme with the support of the National Education Collaboration Trust (NECT), a multi-party civil society stakeholder. Among other things, the NECT initiated and developed a multi-media learner support programme in conjunction with the national radio and television broadcaster, the South African Broadcasting Corporation, under the banner: Covid-19 Learner Support. Lessons began to be broadcasted through three public televisions, 12 national and eight regional radio stations. The DBE also upgraded its website and uploaded study material for all grades (www.education.gov.za).

Tips were provided to parents to help their children to learn. Multimedia material supported by mobile applications was made available on the DBE website. The DBE also worked together with other private partners, such as Africa Teen Geeks and Sasol Foundation, among others, in partnership with local networks providers, such as Vodacom, MTN, Telkom and Cell C to maintain learning continuity through mobile applications at the height of the crisis (Mhlanga & Moloi, 2020). E-mail and WhatsApp feeds were sent to teachers responsible for teaching, reading and the management of their schools, with advice on how to manage their children's learning activities. Thus, learners have had to depend on learning remotely through the internet, television, radio or other digital platforms. Teachers also had to adjust to new instructive concepts and modes of delivery of teaching, for which they may not have been trained. In particular, learners in rural areas, those who belonged to the most marginalised groups and those who lacked adequate access to digital learning resources, as well as the capacity to learn on their own, were at risk of falling behind. In addition, poor network connectivity worsened the exclusion of children from accessing education through digital platforms (ITWeb, 2020).

South African schools closed their doors for the traditional face-to-face teaching and learning mode on 14 March 2020. They only resumed, in a staggered manner, from 8 June 2020. Grade 12 and 7 learners were the first to return to class, with Grades 5 and 8 being the last to return after a total of 81 days away from school (Mohohlwane, Taylor & Shepherd, 2020). The rest of the grades also followed on a phased-in basis, with strict social distancing and safety protocols being observed, and sometimes on a rotational basis, especially in the first days. Gustafsson (2020) estimated that when differentiated by socio-economic status, learners from low socio-economic statuses could have lost

over 65% of their learning time, due to Covid-19. The loss of contact learning time necessitated the re-organisation of the curriculum for learners returning to school in 2020 (Soudien et al., 2022).

While the Limpopo Province was among the least affected in the country, in terms of confirmed cases and fatalities, its education sector was not exempted from the consequences of the pandemic. This is possibly due to the largely rural nature of the province, since about 90% of the population in this province lives in rural areas (Tshitangano et al., 2022). However, given the concerns around water access in the province and the importance of the Covid-19 hygiene protocols, the province also focused on getting water to school. Overall, the provincial government provided water, soap, sanitisers and face masks to almost 85% of its population in rural areas (Ngeleza et al., 2021). Notwithstanding these impressive efforts, a comprehensive description of the impact of the pandemic on the province must be developed to guide policy and also to provide practical direction in recovering and rebuilding education in particular, and society broadly.

The majority of existing studies were written at the height of the pandemic and primarily relied on speculation to make conclusions, due to limited empirical data. To estimate the total impact of the pandemic, such studies rely on “suggestive extrapolations” from past studies (Maldonado & De Witte, 2020). The learning losses, in such studies, are predicted in terms of loss of a share of a year of schooling (Azevedo et al., 2020), reduction in learning gains expressed as percentage loss (Kuhfeld et al., 2020), loss of future earnings (Psacharopoulos et al., 2020) or loss of years of learning (Kaffenberger, 2020). The current report draws from empirical evidence collected in the Limpopo Province long after the removal of all the Covid-19-related restrictions that had disrupted traditional methods of data collection.

The Limpopo Province is situated in the north of the country. It ranks fifth in South Africa in terms of both surface area and population, covering an area of 125 754 km² and being home to a population of 5 926 724 (National Institute of Communicable Diseases (NICD), 2020). The province comprises 2.6% white and 97.4% black (inclusive of 52.9% Northern Sotho-speaking, 17% Tsonga-speaking and 16.7% Tshivenda-speaking) people (Tshitangano et al., 2022). The province comprises five districts: Vhembe, Mopani, Capricorn, Waterberg and Sekhukhune. The current study was conducted in the Capricorn District. The study could benefit the planning activities

of the province on how the province recovers from the devastation caused by the pandemic and plan better, going forward. The study could also help the government in preparing for future disasters and how the education sector can improve.

3. PURPOSE OF THE REPORT

The impact of the Covid-19 pandemic on education is widely reported in South Africa and beyond. The impacts include (i) learning losses due to school closures, (ii) widening of pre-existing education disparities and (iii) learning gains made over time would be wiped out (Azevedo et al., 2020; DBE, 2020b; Gustafsson, 2020; Hanushek & Woessmann, 2020; Kaffenberger, 2021; Spaul & Van der Berg, 2020; United Nations, 2020). It is against the background of the advent of the Covid-19 pandemic, its devastating impacts on education and initiatives for re-igniting sustained recovery that this research is being undertaken.

The purpose of the study was to assess the impact of Covid-19 on education in the Limpopo Province, and to propose interventions to achieve sustained recovery and build future resilience.

4. FOCUS OF THE REPORT

The study examined the impact of the Covid-19 pandemic on education in Limpopo Province, South Africa. The following thematic areas are used to interpret the data that was collected through a survey in the province:

- (i) Impact of Covid-19 on teaching;
- (ii) Impact of Covid-19 on learning;
- (iii) Impact of Covid-19 on other school-related activities; and
- (iv) Intervention mechanisms.

5. THEORETICAL CONTEXT AND LITERATURE

The literature on the impact of the Covid-19 pandemic on teaching and learning abounds (DBE, 2020b; Gustafsson, 2020; Hanushek & Woessmann, 2020; Kaffenberger, 2021; Spaul & Van der Berg, 2020). However, what emerges clearly from the studies is that the pandemic has had substantial negative implications for the education sector. The pandemic disrupted the conventional modes of teaching and learning, while the sudden emergence of the disease did not allow any preparation for

any other possible mode. The crisis exposed the numerous inadequacies and inequities in education systems worldwide – from access to the broadband and computers required for online education and the supportive environments needed to focus on learning, up to the misalignment between resources and needs (Schleicher, 2020).

Under the level 5 lockdown in South Africa, as everywhere else, only two default possible ways to continue with learning activities remained: online learning or self-learning with parental and well-wisher support (Soudien et al., 2022). Tshitangano et al. (2022) observed that even for advantaged schools and learners that could easily switch to virtual models of teaching and learning, several issues emerged that had major bearings on the effectiveness of online learning. For instance, Doukakis and Alexopoulos (2020) found that educators and learners alike were thrust, almost overnight, into an education model with which few had experience. This is supported by Tshitangano et al. (2022), who note that the urgency of responding to the Covid-19 pandemic did not allow for the development of an execution plan or a system of educator and learner support. As a result, while some schools and some learners in metropole provinces, somehow, fared slightly better, those located in rural areas tended to face insurmountable challenges keeping track (Soudien et al., 2022). In South Africa, Cristobal-Fransi et al. (2020) found that rural areas typically lacked the economic and social viability needed to sustain digitalisation and technology usage. During the Covid-19 national lockdown, inadequate technology access presented a huge challenge for the DBE and other concerned stakeholders in relation to supplying quality education services in rural areas, which, in turn, further affected the quality of teaching and learning using these platforms (Dube, 2020). Omodan (2020) found that rural learners were affected by the lockdown compared to urban students. Mhlanga and Moloi (2020) found that most rural learners were more affected as they could not use computers, did not have sufficient skills and other facilitators could not make use of the remote learning tools of the trade.

Available literature also indicates that under the Covid-19 school closures, more advantaged schools and households were better able to sustain learning using online learning strategies (Mhlanga & Moloi, 2020; Ngeleza et al., 2021), although this required effort and presented challenges for both teachers and parents (Schleicher, 2020). For advantaged learners, schooling continued through online lessons, either through live online teaching or uploaded recorded lessons.

Spaull (2020) found that in South Africa, although online teaching and learning have received sustained scholarly and policy attention, many disadvantaged schools did not have the means to engage in satisfactory online learning. In most poor households, children did not have a quiet workspace, desk, computer or internet connectivity, or parents who had the time or capacity to take on the role of home teachers (Parker et al., 2020). Prior to the advent of the pandemic, Statistics South Africa had revealed that only 22% of households in South Africa had access to a computer, with only 10% having internet access. Spaull and Van der Berg (2020) also conducted a survey in which they found that although 90% of South African households had access to a mobile phone, only 60% had access to the internet via their devices. The South African Democratic Teachers Union (SADTU) (2021) also found that two-thirds of learners from poorer households in the country had almost no communication from their teachers during school closures. With most parents very occupied with household livelihood activities, Spaull and Van der Berg (2020) estimated that about 18% of learners were in households that had no adult caregiver during the day.

The disparities in social capital resources accessed by learners also meant a differentiated set of learning experiences within households. Although all learners suffered learning losses during this time (ITWeb, 2020), almost no learning occurred for many children from poor backgrounds (Parker et al., 2020). Soudien et al. (2022) note that while the loss of contact learning time at schools can be estimated and quantified, it is not easy to quantify the actual learning loss. What is certain, however, is that a break from school routines eventually results in learning losses due to memory decay and limited learning opportunities during school breaks. Hanushek and Woessmann (2020) estimated that learning losses might not be uniform, with disadvantaged learners experiencing higher learning losses.

To estimate the learning losses in South Africa, due to the Covid-19 pandemic, Soudien et al. (2022) examined the school disruptions in 2020 and speculated what possible learning scenarios could look like. They found that the loss in learning was higher in no-fee schools than in fee-paying schools. Pillay (2021) posits that under the Covid-19 lockdown in South Africa, historically, white and private schools took teaching and learning to an online platform, whereby learners used smartphones, tablets and computers connected to the internet as a learning platform. It was easy for these schools and learners to simply integrate technology into learning, since they had access to this

technology, and the funds to acquire and use them. It is in this view that Mdepa (2020) avers that only the privileged few benefited from using technology to facilitate home-schooling during the lockdown in South Africa. This was indeed not the case for the millions of learners in disadvantaged rural communities and townships that could barely afford to educate their children in physical schools, and do not have the access or funds to facilitate virtual learning (Pillay, 2021). The response strategies of the education sector to Covid-19 in South Africa, therefore, while they could have worked for some sections of the population, they did not work for most of the learners. This was particularly the case for previously disadvantaged learners in rural areas. If anything, the impact of Covid-19 on learning and the inaccessibility to online learning by poor and rural children have simply reinforced the disparities between the haves and the have-nots in society.

The closures of schools in response to Covid-19 did not only affect teaching and learning, but also the food security and nutritional status of learners. Over nine million learners get two meals per day in South African schools, through the National School Nutrition Programme. The interruption of this programme during the Covid-19 lockdown placed these learners at risk of being underfed (Parker et al., 2020). This indicates that the pandemic generated a huge spectrum of challenges, beyond teaching and learning, within the education sector.

6. RESEARCH METHODOLOGY

The data for the study was collected between January and April 2023, through a survey in which 265 respondents participated. The survey was conducted across the two Capricorn District local municipalities: Polokwane Municipality and Molemole Local Municipality. The respondents were educators directly engaged in the teaching of learners. These respondents comprised deputy principals (1%), departmental heads (7%), teachers (88%), teaching assistants (2%) and other staff within schools (2%). Focus was on primary and secondary schools. A total of 52% of the schools were primary schools, 39% were secondary schools and 9% of the schools were combined schools. All these schools were public schools.

Ethical clearance was obtained from the Limpopo Provincial Research Ethics Committee (LPREC). Similarly, permission to conduct the study was sought from the head of departments and accounting officers of the relevant organisations being studied,

and community leaders in villages and urban areas. Consent was also sought from each prospective participant. Prospective participants were provided with an electronic information leaflet, which gave a brief background of the study, so that they could have an understanding of what the investigation entailed. Additionally, participants were notified that their participation was voluntary and they were at liberty to withdraw their participation should they feel the need to do so. An online survey questionnaire was used to collect the data.

All the collected data is kept safe in the lead researcher's computer, is only accessible through password credentials and only accessed by the research team members. The research team also uses codes to identify every respondent. This code of identity is only known by the researchers that constituted the team of the study. In addition, because an online survey was used, it was not possible to determine who gave the responses that were recorded.

7. KEY FINDINGS

This section outlines the key observations of the study with a focus on the impact of Covid-19 on teaching, learning and other school-related activities.

7.1 Covid-19 impacts on teaching and learning

Covid-19 and the associated response mechanisms adopted by the South African government affected teaching and learning in the Limpopo Province, through school closures and other forms of disruption.

7.1.1 Impact on school operations

In response to the declarations made by the national government, schools closed their doors altogether, although some could still interact with learners remotely using various platforms. Figure 1 shows that 46% of the schools closed completely, with no form of interaction between the school and the learners. About 31% of the schools closed moderately and 14% closed only minimally. Only 8% of the schools managed to sustain operations, while 2% were not sure. Considering the rural nature of the province, the complete or moderate closure of many schools was expected, due to a lack of adequate access to digital learning resources as well as the lack of capacity to learn using electronic devices by most rural learners. Poor network connectivity and power

shortages could also have worsened the exclusion of rural children from accessing education through digital platforms (ITWeb, 2020).

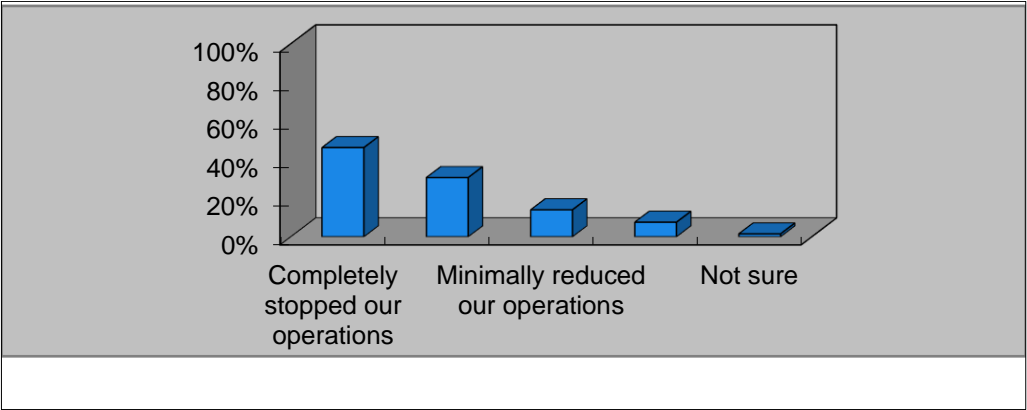


Figure 1: Level of school closures

7.1.2 Impact on teaching

Teaching was severely impacted under the Covid-19 lockdown in the province, with 70% of the schools reporting having been severely impacted, 17% were just impacted and 10% were somehow impacted, while only 2% reported having not been impacted (see Figure 2). This shows that the majority of teachers and other school personnel were not able to carry out their activities during the lockdown.

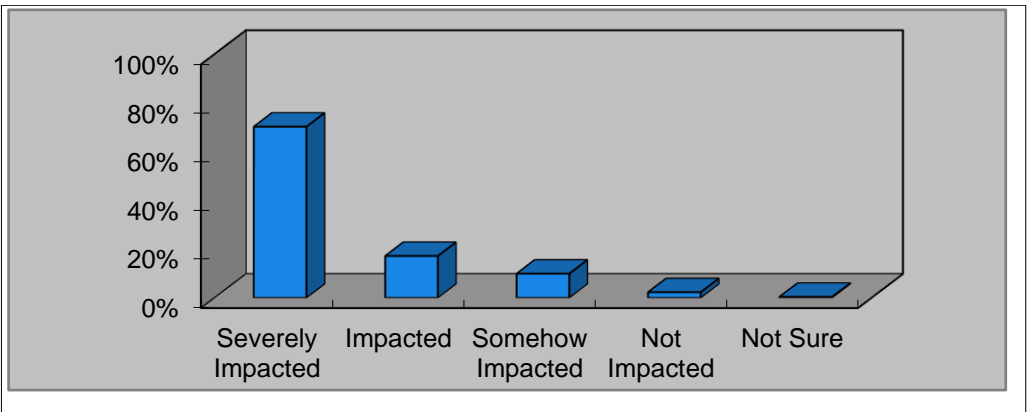


Figure 2: Level of impact on teaching

7.1.3 Impact on learning

With the majority of teachers and other types of school staff unable to carry out operations in schools due to school closures, likewise, learning was impacted, although to various degrees, across learners. The study found that about 68% of the learners were severely impacted by the pandemic. The results of this study confirm the observations by Spaul (2020) that Covid-19 aggravated inequalities in society. In this study, while 2% of the learners, possibly from privileged households, could circumvent school closures to alternative access to study material, the majority from disadvantaged households often remained shut out when schools shut down.

Although online teaching and learning through platforms such as Blackboard, MS Teams and Zoom assisted in resuming the process of online student learning, participants in the study revealed that in most schools in the province, online teaching and learning remained underutilised as an academic platform. Only 3% of participant schools used online/e-teaching and learning platforms. A total of 13% used the platforms regularly, 63% did not use these platforms at all and the rest of the schools seldom used them.

7.1.4 Adapted physical teaching and learning arrangements

From 8 June 2020, when lockdown restrictions continued to be eased, school doors opened again for physical teaching. Grade 12 and 7 learners were the first to return, with Grades 5 and 8 being the last to return (Mohohlwane et al., 2020). The rest of the grades also followed on a phased-in basis, with strict social distancing and safety protocols being observed. Several methods to ensure the health of learners and teachers were put in place. These included hot sitting/platooning, a rotational system, and a hybrid model of teaching and learning. It was, however, found that only 7% of the schools made intense use of the hot sitting alternative, 13% used it regularly, 6% seldom used it and 5% were not sure. A total of 69% did not use it at all.

With regards to the rotational system, slightly over half of the schools (54%) practised it, 35% regularly used it and 5% seldom used it, while only a total of 6% were not sure. The hybrid teaching and learning model was also not very much in use. Only a total of 7% of the schools used the model, 15% regularly used it, 12% seldom used it and 4% were not sure. A total of 62% reported not having used it. Participants also revealed various levels of innovation to ensure that teaching and learning continued in schools.

A total of 16% reported having been intensely innovative and 18% indicated regular. However, 18% reported seldom innovation, 40% had no innovation at all and 8% were not sure.

7.1.5 Absenteeism and dropouts

The level of absenteeism for both learners and teachers, as well as the dropout of learners, was widely reported by participants. School dropouts were very high in 9% of the schools, high in 20% of the schools, low in 42% of them and very low in 20% of the schools, while 8% of the participants were not sure. Absenteeism was very high in 27% of the schools, high in 38% of them, low in 27% and very low in 9% of the schools. Absenteeism was also reported for educators, with 8% of the schools reporting very high absenteeism, high absenteeism of 20%, 36% low absenteeism and 31% very low, while only 4% were not sure. Overall, both dropouts and absenteeism were high during the lockdown.

7.1.6 Learner pregnancies

With learners away from school for extended periods, issues of learner pregnancy soon emerged. A total of 8% of the participants reported learner pregnancy as very high during the lockdown and another 30% reported it as high.

7.1.7 Matric results

After spending months without going to school, matric candidates finally sat for their National Senior Certificate Examinations, the terminal examination for the schooling system. At the announcement of the results, the national pass rate had declined by 5.1 percentage points, from 81.3% in 2019 to 76.2% in 2020 (Motshekga, 2021). While the results may be debated, the fact is that the results declined possibly due to Covid-19. Participants in this study also confirmed the impact of the pandemic on the matric results. A total of 12% of the participants mentioned that the impact of the pandemic on the results was very high and 37% indicated that the impact was high. A total of 30% reported the pandemic's impact on the results as being low and another 13% reported the impact as very low, while 8% were not sure. In her address, Motshekga (2021) explained away the decline in performance to the poor performance of progressed learners, a group of candidates who were repeating their examinations. It is unrealistic, however, to conclude from this that the pandemic did not affect teaching and learning.

7.1.8 Impact on behaviour

The pandemic and its associated lockdowns also negatively impacted on the discipline and behaviour of learners. With regards to ill-discipline, 15% of the participants mentioned it as a very high problem ever since learners returned to class after the lockdown. An additional 31% mentioned it as a high problem, 32% reported it as low and 17% reported it as very low. Only 6% of the participants were not sure. Substance abuse was reported having increased also. A total of 15% of the participants reported substance abuse as very high, 37% reported it being high and 26% reported it as being low. A total of 13% reported it as low, while 10% were not sure. Overall, substance abuse was reported as high by participants.

7.2 Covid-19 impact on other school activities

Covid-19 also impacted a range of other critical school activities that included the feeding scheme, school transport and sports activities, thereby generating nutritional, livelihood and social challenges.

7.2.1 Feeding scheme

Many schools provide meals as part of feeding schemes. With school closures, the feeding scheme could no longer happen. The abrupt halting of the school feeding programme had been counterproductive. The province made some initiatives to support vulnerable people, including learners, during the lockdown by providing vouchers, food parcels and supplements. However, the rural nature and vastness of the province meant that the delivery of food parcels to individual beneficiaries proved ineffective in some areas. Threats and crime also affected delivery. A target that needed particular attention was feeding children. This study found that the feeding schemes of 34% of the schools were severely impacted, 25% were impacted, 17% were somehow impacted and 2% were not sure. Only 21% of the schools were not impacted. The disruption of food access could have eventually impacted the capacity of children to grow intellectually, hence the quality of results announced in 2020. The World Bank (2018) notes that the lack of nutritional food precipitates hormonal responses in learners, which negatively impacts neurocognitive development, potential educational achievements and, ultimately, upward societal mobility.

7.3 Covid-19-related fatalities

The participant schools recorded fatalities for both learners and teachers. A total of 1% of the participants reported learner deaths being very high and 5% reported it as high. A total of 37%, however, reported it as low, 31% as very low and 25% were not sure. With regard to teachers, 1% of the participants indicated their schools have been affected at a very high rate, 18% reported being highly affected, 33% being low and another 35% reported very low reports. Besides the death of teachers and learners, 27% of the participants reported the existence of deaths within schools. This could have been the deaths of other categories of staff who were not teachers. A total of 71% reported no other deaths besides those of teachers and learners, while 2% preferred not to mention any details. These results are consistent with the low overall fatalities of the province as a whole. A total of 58% of the participants were, however, fully vaccinated, 19% had been fully vaccinated and also received a booster, while 12% were partially vaccinated. Only a total of 4% were not sure or did not wish to disclose their status.

However, while the fatality levels were low within schools, participants reported the number of orphans increased when learners returned to school. In 9% of the schools, the increase of orphans was very high and only high in 30% of the schools. The increase in orphans, although it does not affect teaching activities, it does affect the learning capacity of the affected learners and, eventually, has a bearing on the overall results of the school.

7.4 Covid-19 interventions in schools

The province of Limpopo also introduced some school-specific interventions in response to the disruptions caused by the pandemic. These included the use of teachers and general assistants.

7.4.1 Teaching assistants

The need for teaching assistants as a response mechanism to Covid-19 in schools was conceived by the national government. This was meant to support school teachers in dealing with the multiple classes that had been caused by social distancing in classrooms. A total of 67% of the participants confirmed intense social distancing in the classroom, 24% reported regular conformation and only 8% seldom practised social

distancing. Thus, teaching assistants would help in carrying the heavy load. About 61% of the schools made intensive use of teacher assistants, 32% regularly used them, 5% seldom used teacher assistants and 3% did not use them. Overall, the use of teaching assistants became very popular with the pandemic.

7.4.2 General assistants

After consultation with parent organisations, medical specialists (such as paediatricians), teacher unions and other stakeholders, the DBE announced that schools would reopen. On 19 May 2020, the Minister of Basic Education announced, during a press briefing, that all schools would be provided with Covid-19 “essentials”, which included hand and surface alcohol-based sanitisers, masks, water, sanitation and specialised cleaning equipment before being opened (DBE, 2020c). General assistants would also be hired to help with cleaning within schools. They would also disinfect schools before the return of learners and also assist with the general observation of Covid-19 safety protocols by learners. A total of 68% of the participants reported that their respective schools engaged the services of general assistants, while an additional 30% regularly made use of general assistants. Only 2% reported having seldom used general assistants during the pandemic.

7.4.3 Personal protective equipment (PPE)

The school management also played an active role in providing schools with PPE. A total of 60% of participants strongly agreed that their schools provided PPE. A total of 34% of the participants, however, mentioned the provincial government as the greatest contributor to their PPE. A total of 11% mentioned the district municipality and 8% mentioned the local municipality.

In making the above interventions, the province relied on its strategising and planning capacity. The Office of the Premier set up a task team, which comprised government departments and higher education institutions to identify ways of responding to the pandemic. The team identified health, social, governance and economics as drivers to develop their strategies to be implemented in various sectors, including in schools (Ngeleza et al., 2021).

7.5 Observation of Covid-19 safety protocols

The observed Covid-19 safety protocols reported by participants included sanitising, wearing masks, and social distancing in and outside the class. Consistent with the national declaration on the wearing of masks, 75% of the participants reported schools having intensively used face masks with another 23% indicating regular use. Only 1% reported having seldom used masks. The mandatory use of face masks was finally removed in June 2022. A total of 74% had also intensively used sanitisers and 22% regularly used sanitisers. Only 2% seldom used sanitisers, 1% was not sure and another 1% did not use sanitisers at all. Social distancing was, however, strictly observed in class. A total of 67% intensively observed social distancing, 24 regularly observed it and only 8% seldom used it. No school did not observe social distancing completely. Social distance was, however, difficult to observe outside class and during feeding schemes.

7.6 Proposed further interventions

With prolonged school closures under the lockdown, there were reports in many schools across the province. As part of additional interventions, participants recommended the repair of schools, toilet facilities, construction of extra classroom blocks and installation of water tanks. Some participants also highlighted the importance of resuming feeding schemes, improvement of digital and internet infrastructure, and health centres in the proximity of schools. Some of the intervention strategies proposed by participants tied into the province's overall effort to fight the pandemic, by improving health facilities and operations. During the pandemic, the province invested in medical equipment, ventilators and high-flow nasal oxygen units, and reallocated equipment from small district hospitals to larger ones, to timely and effectively respond to infections more systematically. The number of permanent and contractual medical staff also increased (Ngeleza et al., 2021). The province also dealt with the issues of dire water shortages and other sanitation-related issues in communities and schools.

7.7 Recommendations

Several policy recommendations about the recovery and resilience of the Limpopo education sector emerge as conclusions from this study. Taken together, the recommendations point to several opportunities that can help the sector to sustain

recovery and resilience in the post Covid-19 environment. The following recommendations are put forward:

- i. The evidence from the survey confirms the fragile state of the education system that is the result of Covid-19 impacts and exacerbated by government lockdown regulations, such as school closures and travel bans. There has, however, been some differentiated impact on the different categories of schools in terms of responses and resilience. The results from the survey findings point to the recommendation that the Limpopo Province needs to adopt context-specific interventions to ensure that inequalities do not widen, as some schools are better placed to continue teaching and learning outside conventional contexts, while others are not.
- ii. The survey results show a general lack of technology access and utilisation in the province, with only a total of 63% of the schools having not used online learning technologies at all during the national lockdown and only 3% making intense use of these technologies. It is recommended that the provincial department roll out technology infrastructure to enable more schools to access and utilise digital technology. With 73% of the participant schools located in rural areas, it is recommended the rolling out of infrastructure be targeted in rural areas to reduce the digital divide.
- iii. The findings also show that some of the challenges experienced by schools are context-specific and are different from one school to another. It is, therefore, recommended that intervention strategies be implemented at various levels of governance. While the national government may be responsible for conceiving the broader approach to responding to emergencies, the provincial and local governments should be on the ground to design and implement strategies that speak to their conditions. In this view, the national government should provide enough space for the provincial and local governments to context-specifically deal with emergencies, while the national government only assumes a monitoring role.
- iv. Digitalisation and technological integration are rapidly becoming important methods of learning in the contemporary era. The survey, however, shows that teachers did not intensively use digital platforms to engage learners during the lockdown. While this was linked to a lack of devices and digital infrastructure,

the incapacity of teachers to use digital platforms also emerged. It is recommended that workshops be rolled out, in which teachers are taught how to use these platforms. Teachers and learners will also need assistance in the acquisition of devices.

- v. The study revealed the immediate threat of the potential loss of an educated workforce in the post-pandemic in South Africa. It is recommended that the DBE in the province of Limpopo launch an investigation into the impacts of school closures on the future workforce and corporate needs.
- vi. Finally, the survey revealed evidence of a disconnect between the majority of schools and the DBE, in part, because of a lack of clear communication from the government with the sector. The result is a lack of trust, which is reinforced by a perceived lack of personal engagement with the sector. In moving forward, it is recommended that the DBE improve its communications, and institute closer engagements and sharing of information with local municipalities and with schools, in particular, to rebuild trust in the sector as a whole.

8. LIMITATIONS

One limitation of the study was methodological monism – the belief that a single methodology (quantitative approach) could produce comprehensive scientific results. This was a result of the short time frame for this investigation and the challenges of pursuing interview research in the context of a very limited budget. The sample was deliberately constructed with the view to obtain as wide a spectrum of detail, as possible, from teachers. The direction and depth of the research could be deepened either by exploring specific issues and challenges on the impact of the pandemic by engaging, not only teachers, but also other categories of staff within the DBE or by a more extended survey of different municipalities. The confined of the survey to Molemole and Polokwane municipalities represents a particular limitation. The use of a mixed methodology approach could yield more concrete results.

9. CONCLUSION

The Covid-19 pandemic has reshaped the education sector. It has fostered a heightened level of awareness of how important teaching and learning are for learners and broader communities. In addition, the pandemic continues to exert drastic impacts on the education sector and is projected to have significant potential to reform future modes

of teaching and learning. This study shows considerable evidence of shifts towards digitalisation and technology integration in teaching and learning. Although it is impossible to state categorically the extent of learning losses due to the pandemic, it is possible to speculate broadly that there has been much disruption in teaching and learning. This survey also indicates the impact that has been placed on the results.

The survey also revealed that learning loss was experienced disproportionately by those who were vulnerable, and were less able to access and draw on the resources of the system. Privileged learners and schools were able to substitute for school closures and are likely to return to their academic trajectory with relative ease. It is concluded that the pandemic exposed both the inequalities in provisions needed to continue learning from home – such as funds, digital devices and data, and ample nutrition – as well as the disparity in how well teachers and learners have been equipped to do so. Efforts need to be made to train teachers on digital technologies. This can be done by organising workshops and any other platforms that may be necessary and effective.

GENERAL CONCLUSION

It is evident that all the sectors, as reflected in the report, were significantly affected by Covid-19 and that they were inadequately prepared to deal with the pandemic. However, there are some lessons learnt that can be used to deal with unforeseen or future pandemics. Despite this, policy implications have been identified to assist Limpopo Provincial Government to develop strategies/policies in mitigating the identified challenges.

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