



Examining the Covid-19 Coping Strategies Employed by Residents in Selected South Africa’s Rural Areas

Andrew E. Okem ^a, Betty C. Mubangizi ^b, Niyi Adekanla ^c, Sokfa F. John ^d

^a University of KwaZulu-Natal, South Africa / International Water Management Institute, Accra, Ghana,

^b NRF/SARChI in Sustainable Rural Livelihoods, School of Management, IT and Governance, University of KwaZulu-Natal, Durban, South Africa

^c AIDLINE Research Consult, Lagos, Nigeria

^d Centre for Mediation in Africa, University of Pretoria, South Africa

ARTICLE DETAILS

History:

Accepted 25 April 2023

Available Online June 2023

Keywords:

COVID-19, Rurality, Coping, Food Security, Vulnerability

JEL Classification:

H75, Q01

DOI: 10.47067/reads.v9i2.483

ABSTRACT

Rural communities are vulnerable to shocks associated with the COVID-19 pandemic. The resilience of these communities depends on their ability to cope with the impacts of such shocks. This study examines the COVID-19 coping strategies of residents of Matatiele and Winnie Madikizela Mandela local municipalities in South Africa. We collected primary data through 11 FGDs and 13 individual interviews. Of the six coping strategies identified, the most cited was resorting to alternative food sources to address food insecurity. Other coping strategies include alternative sources of income; reducing remittance and expenditure; shifting to new activities; and introducing emotional support. The findings reveal that coping strategies entail changes around basic needs such as food and income. To protect these communities against future shocks, strong local institutions working in collaboration will be invaluable in empowering communities to identify and implement alternative livelihoods while building supportive infrastructure.

© 2023 The authors. Published by SPCRD Global Publishing. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0

Corresponding author’s email address: Mubangizib@ukzn.ac.za

1. Introduction

This study was implemented in Winnie Madikizela Mandela (WMM) (formerly Mbizana Local Municipality) and Matatiele local municipalities (LMs), situated within Alfred Nzo district municipality in the northern Eastern Cape province of South Africa. Matatiele has an average household size of 3.9, accounting for 41% of the district’s population (Matatiele Local Municipality). It occupies 63% of the district, with a landmass of 4352km² (Matatiele Local Municipality, n.d). Matatiele LM has 26 wards, only three of which are towns, with most of the population living in rural areas. Most of the inhabitants is African (98.4%). WMM has a landmass of 2806 km² and a population of 319 943 (Mbizana Local Municipality, n.d). Nearly all (98%) of the population of WMMLM live in rural villages (Mbizana Local Municipality, n.d). The municipality has 31 wards, and only 1 is a town. About half (47%) of the population is below 35 (Mbizana Local Municipality, n.d). Alfred Nzo district has the least level of

education in the Eastern Cape. Only 13% of people aged 20 years older have grade 12, demonstrating a low level of education in the province. Approximately 5% of the population in Matatiele and WMM has higher education qualifications (Cronje, 2014).

With a poverty rate of 79%, Alfred Nzo is the poorest of all district municipalities in South Africa, while Matatiele and WMMs are among the poorest municipalities in South Africa (98% and 80% poverty rates, respectively) (Cronje, 2014). Unemployment is also high at 38.7% and 44% for Matatiele and WMM local municipalities, respectively. Youth unemployment is at 47.2% for Matatiele and 52.4% for WMM. More than half (55%) of the employed in WMM work in government and domestic services (Mbizana Local Municipality, n.d). Matatiele and WMM have some of the highest Gini indexes in the country. WMM, for example, scores 0.77 (David et al. 2018). Additionally, 16% of the total population of both municipalities earns no income at all, while 48% earns between R1 and R1600 per month (Cronje 2014). Many of these depend on child support grants (25%) and old age pensions (7%).

Although agriculture, mining and tourism are considered important economic drivers by the municipalities, these are largely underdeveloped and employ a very small number of people. Agricultural activities such as crop production, livestock, and fodder grazing are the main livelihood activities of the rural areas of WMM and Matatiele LMs. About 58% of mostly female-headed households in Matatiele are involved in agricultural activities (Morokong and Bignaut, 2019). Prolonged droughts, winter, and other adverse effects of climate change increasingly challenge agricultural activities. According to Morokong and Bignaut (2019), Matatiele is also characterised by overgrazing, erosion, salinisation of its catchment and a high rate of alien plant species infestation, which stifle agricultural productivity.

Poor delivery of basic services (e.g., water, sanitation, electricity, primary healthcare) is a major challenge in these municipalities that further undermines the livelihood capabilities of communities. Out of a total possible score of 10 for service delivery, Matatiele scored 3.11 and WMM, 2.73 (Cronje, 2014). About 90% of households in these LMs do not have safe and clean toilet facilities, and while there have been notable improvements in the past few years, access to clean water, sanitation and electricity backlogs are still very low (Matatiele Local Municipality, 2020; Mbizana Local Municipality, 2020). These local municipalities also struggle with a limited revenue generation base and rely on grant funding. 80% of Mbizana's funding, for example, comes from grants and only 20% from its sources (Mbizana Local Municipality, n.d.). Several other challenges, such as poor roads and transport, communication infrastructure and minimal internet access, impact livelihoods in these municipalities (Matatiele Local Municipality, n.d; Mbizana Local Municipality, n.d).

The socioeconomic situation portrayed above has its roots in colonialism, apartheid, and the homeland system. Both WMM and Matatiele LM in the former Transkei Homeland of South Africa, and just like other homelands, these areas were starved of investment, growth and development under apartheid (Porter and Phillips-Howard, 1997). With few local employment opportunities, labour migration to the mines and other enterprises in white areas of South Africa was the norm. Labour migration remains the norm, with several able-bodied men and women migrating to urban centres for jobs, mainly in the informal sector. Using the 2011 Census data, Kleinhans and Yu (2020) found that more than half (53.64%) of migrants into the Western Cape are from the Eastern Cape. The link between rural and urban areas of South Africa remains exploitative in that there remains little to show since the start of labour migration to the Rand mines, encouraged by several factors, including the Rinderpest epidemic of 1897 (Porter and Phillips-Howard, 1997).

There have been notable developments since the dawn of democracy in South Africa. With the dawn came a wall-to-wall local government system which has seen municipalities like Matatiele and WMMLM fully operational in all areas of the country. With funds transferred from the country's central coffers, various grants have enabled municipalities like WMM and Matatiele LM to provide water, electricity, and basic sanitation. However, the funds are far too limited to address the needs of communities. As Mubangizi (2019) notes, there is significant pressure on municipalities to raise their revenue and become self-sufficient. Herein lies the challenge for most rural-based municipalities such as WMM and Matatiele because the grant-dependent households in these municipalities do not contribute to the municipality's revenue base. Thus, while rural communities may have developed systems, including social networks, to cope with shocks, we argue that the pandemic has overstretched the limits of pre-existing coping strategies. Essentially, COVID-19 interacts with these pre-existing rural vulnerabilities that could lead to significantly higher negative outcomes compared to those in the urban areas. Against the backdrop of a rurality characterised by poor education outcomes, high levels of poverty, inequality, unemployment and infrastructure deficit, this study examines how community members in these two municipalities cope with the impacts of the COVID-19 pandemic.

2. Methodology

The study seeks to provide insight into the coping strategies employed in the face of the shock from exposure to the COVID-19 pandemic in rural communities. The study adopts a mixed-method approach to collect and analyse statistical and narrative data to arrive at a nuanced understanding of the research objective (Meixner and O'Donoghue, 2013). This study adopted a convergent design approach using content analysis and descriptive statistics to explain the phenomenon under consideration (Levitt, 2020). The approach, which stems from constructivism and positivism paradigms, adopted the interpretive method, which aims at drawing substantive inferences from the responses of respondents and a descriptive approach to the study.

The study population comprises all rural dwellers classified based on socio-cultural (gender, cultural and institutional affiliation) and socioeconomic (employment and income status) dichotomies in the two selected Municipalities. Stratified proportional sampling (followed by a purposive sampling technique) was adopted in selecting the study participants. Any adult (above 18 years belonging to any of the classes mentioned above) in the two Municipalities qualifies to be included in the study. Given insufficient data on some specific population attributes in the study area, a sample of 1065 (in the minimum) was drawn using sampling from an unknown population method (Teddlie and Tashakkori, 2009).

The study entailed two intersecting phases of data collection and analysis. Phase 1 of the study involved a survey guided by a structured questionnaire. Survey data were collected digitally using [KoboToolbox](#), which allows for creating of complex research instruments and efficient management of research data. The instrument comprises primarily quantitative questions and embedded open-ended response items. The data collection and treatment process led to 89% usable data giving 952 responses. After a preliminary analysis of the phase 1 data, the second phase involved 11 focus group discussions (FGDs) guided by a semi-structured interview schedule and 13 individual interviews with purposively selected participants. Participants in the FGD include government, traditional institutions, and civil society organisations. The questions were designed to support the quantitative instrument and add depth to the analysts' understanding of the research phenomenon (Meixner and O'Donoghue, 2013). Using surveys and in-depth interviews as data collection approaches helps the study understand the intricacies surrounding the coping strategies adopted by the respondents in the two rural municipalities

in South Africa more holistically.

The quantitative data from this study was analysed using descriptive statistics (percentages and means presented in tables and graphs). While Stata 17 was used as the software package for the analysis. Meanwhile, the qualitative data was analysed using content analysis. The content analysis entailed coding the bunch of text obtained from the field and creating themes as they emerge in the coding process thematic classification of coded texts, integration, refining and writing up of theoretical outcomes. The essence of coding is to move methodologically to a higher conceptual level (Levitt, 2020). The respondents' responses were (classified based on gender, socio-cultural and economic backgrounds) on the coping strategies employed in the face of the shock from exposure to the COVID-19 pandemic. Following the multi-rater coding of the qualitative data and refined analysis of the survey data, the team concurrently interpreted data from both phases of the data collection. NVivo was used to code and develop themes from the data. The study protocol was approved by the Human and Social Sciences Ethics Committee of the University of KwaZulu Natal (HSSREC/00002780/2021).

3. Findings and Discussions

3.1 Demographic profile of the study participants

The data from the two Municipalities were aggregated due to the homogeneity assumption in their characteristics. Both Municipalities are categorised as rural areas. Table 1 shows the respondents' demographic information as a representative of each surveyed household. More than half (55%) of the respondents were female, while 41% were male. This is consistent with the IDP report of Matatiele Local Municipality (n.d.), which noted that females constituted 54% of the total population in both municipalities. Meanwhile, the age distribution shows that a quarter of the respondents were in the 30-39 years age bracket. This is followed by those between 40-49 years (22%), 20-29 (16%) and 50-59 years (14%). This implies that the largest percentage of the respondents were in their prime age. Three out of every five respondents reported that they were not working. This is consistent with Cronje (2014), who found high unemployment rates for both Matatiele (38.7%) and Mbizana (44%). 28.69% of respondents reported that they were into farming, including subsistence, commercial crop, and livestock farming. According to Morokong and Blignaut (2019), agriculture constitutes an important livelihood activity in both municipalities, with primary activities comprising livestock production, poultry, and fodder grazing. Up to 7% worked with the government /private sector, while about 4.12% worked in other sectors. Respondents were also asked about the state of their income during the lockdown. About half (48%) reported their income decreased, while 41% claimed theirs remained unaffected. However, regardless of the impact of the pandemic, one in ten respondents (10%) revealed their income changed positively.

Table 1: The Demographic Information of Respondents

DemographicVariables	Freq.	Percent
Gender		
Female	528	55.81
Male	389	41.12
Others	5	0.53
Choose not to answer	30[AO1]	2.55

Age of respondents		
Less than 20	24	2.55
20-29	159	16.91
30-39	238	25.32
40-49	209	22.23
50-59	134	14.26
60-69	126	13.40
over 70 years	50[AO2]	5.32
Missing	12	0.01
Occupation		
Formal Trading	32	3.43
Farming	226	23.78
Government/Private sect	81	8.58
No occupation	572	60.09
Others	39	4.12
Income status		
Decreased	409	48.12
Increased	87	10.24
Unchanged	354	41.65
Missing	102	10

Source: Compiled by the Authors (2022)

Table 2 shows that the mean household size was five while the average number of children under child support grant was approximately 2 per household. This is followed by approximately 1 household member under old age or pension grant while at least one household member was also on a disability grant. According to Cronje (2014), most people in both municipalities depend on state grants as the primary source of income. This affects the ability of the municipalities to generate income through levies and taxes and thus rely on national transfers to fund development projects.

Table 2: Summary Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
Household Size	932	5.222	2.615	1	17
Children on child support grant	942	1.78	1.655	0	10
Old age/pension grant	918	.531	.798	0	6
Household member on disability grant	911	.074	.281	0	2

Source: Compiled by the Authors (2022)

3.2 Coping strategies

The impact of COVID-19 around the globe led governments and local communities to employ different coping approaches. In addition to the usual challenges that households and communities in remote rural areas face, they had to find ways to cope with the unique challenges brought by the pandemic.

The main coping strategies employed include accessing reliance on natural and physical resources and producing own food. Gardening was reported as a COVID-19 coping strategy in Toraja, Indonesia (Paganini et al., 2020). Almost all the individuals at the household level who were interviewed indicated that they were involved in subsistence farming during the pandemic. Those who started gardening before COVID-19 donated vegetables to poor community members. One of the interest groups interviewed indicated that *"The pandemic has both highlighted and increased the need for more staff. There is now more home-based food production because people couldn't go to town to buy things, more and more people are producing their own food"* (local NG). Although COVID-19 has severely impacted households, it also reminded people to utilise their gardens to plough their vegetables instead of buying from retail stores with their limited income. In other words, community members had to rely on their natural and physical resources to support themselves and their families during the pandemic.

Gardening, as a coping strategy, was boosted by support provided by local civil society organisations and institutions. For example, a local education institution responded to the food insecurity experienced in the Matatiele local community by starting an initiative to distribute seedlings. This organisation ensured that community members had adequate supplies during the lockdown. A participant from the FGD with SaveAct reported that the organisation *"partnered with them [a local education institution] doing a few field activities in training farmers through their social responsibility component.* Other organisations involved in supporting this initiative include local NGOs.

Linked to the preceding is capacitating farmers to become self-reliant. The approach used by certain interest groups, such as SaveAct within these communities, assisted the farmers in being self-sufficient and managing their members and groups. Through the training of such organisations, the farmers continued their activities without depending on those supporting institutions during the pandemic. When providing support to the community, it becomes crucial that the government also empowers community members so that they can continue their own without much dependence on the

government.

The results of this study reveal that government departments, interest groups supported communities to cope with the impacts of the pandemic by providing food parcels, distribution of seedlings; provision of airtime to those who were working directly with communities; emotional wellbeing programmes for the employees; providing health and hygiene training; and online courses. However, their capacity to respond was constrained by various factors, including the lack of resources. A traditional leader in the FGD with traditional leaders at the WMMLM, for instance, noted, *"I want to make it clear that we are on our own, we do not get resources from anywhere"*. When resources are provided, these are often insufficient as was reported by another traditional leader *"Chiefs were provided with some sanitiser and masks for the community. These were not nearly enough for the number of people in the many villages under each chief"* (FGD, Traditional leaders, Matatiele). In addition to the lack of resources is infrastructure deficit. In this regard, a participant in the FGD with the Disaster Management Unit noted that *"road infrastructure has always been an issue even before COVID-19"* (FGD, Disaster Management Unit of WMMLM).

In a review of rural vulnerability and institutional dynamics in the context of COVID-19, John et al. (2022), found the lack of savings as a pre-existing vulnerability factor that increases the impact of the pandemic. In the context of this study, participants had limited saving, affecting their capacity to respond to the impacts of the pandemic. In the absence of savings, the coping strategies employed include reduced remittances, expenditure, searching for secondary employment, borrowing and begging. Interviewee 4 noted that *"my problems began when the lockdown regulations were implemented. We were retrenched from work and were left with nothing. So even now am still hunting for a job"*. Similarly, interviewee 11 reported encountering *"financial strains due to lower income"*. Others who continued working also experienced reduced income because of lowered working time, as noted by participant 8, who reported *"working for only 4 hours and 2 days per week"* instead of working full-time. The loss of employment by household members implied that most households had to depend on lower income from social support grants and on those who continued working during the pandemic. The loss of job or salary cuts did not only affect those working individuals, but the whole household dependent on them. Their return home without jobs also created additional stress on their households.

Reduction in remittance was reported by participant 9, who noted that *"Life has been rough. There are times when I did not receive any financial assistance from my sister who used to be my main provider. This is because some factories and companies had to close their door due to covid-19. Before covid-19, I was receiving money from my older sister"* (participant 9). A participant in the FGD with Traditional Leaders in Matatiele further emphasised this point noting *"income is mainly derived from relatives who have employment in the towns and other parts of the country. A lot of these providers had to come back home and are adding to the burden of the families having to provide for more people"*. This finding is consistent with John et al., (2022:8), who argue that poor people in rural communities "in middle-income and low-income countries are particularly at risk because of the depth of their poverty, high population density, reduced remittances and the limited capacity of the state to respond.

About one in five respondents (28.67%) reported that their family member(s) left home searching for work. For some respondents, this was a search for additional employment to cover the gap resulting from reduced working hours. This was revealed by participant 3, who noted that *"During the lockdown, I had to look for another job because my employer reduced our days and working hours. So, I had to look for a second job that was going to help me substitute my income"*.

One in five (22.58%) borrowed money, while 13.05% purchased food on credit. Some (8.07%) even went as far as begging, while very few (4.12%, 2.23% and 2.23%) reduced their expenditure, and sold household assets and herbs, respectively. A study in rural Bangladesh revealed that reduced expenditure coupled with accessing loan facilities were some of the coping strategies employed by rural communities (Hamadani, 2020). However, the loss of livelihood opportunities and slowed economic activities could erode the communities' ability to repay the loans, thus pushing them further into poverty.

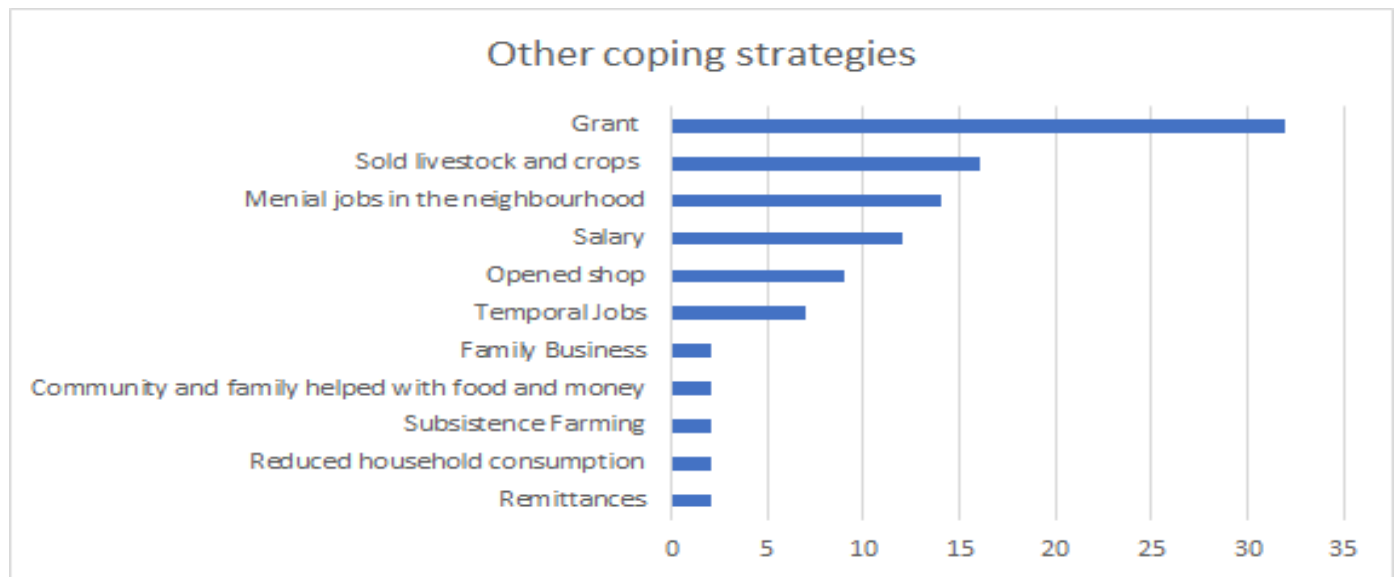
Table 3: Coping Strategies

Coping Strategies	Frequency	Percentage
Spent savings	438	46.01
Family member/members left home in search of work	272	28.67
Borrowed money	214	22.58
Purchased food on credit	124	13.05
Begged	83	8.76
Reduced health expenditure	39	4.12
Sold herbs	20	2.23
Sold household assets/goods	20	2.23
Reduced expenditure on civic responsibilities [Local government levies	16	1.72
Others	94	9.96

Source: Compiled by the Authors (2022)

Other coping strategies mentioned include access to government grants, as mentioned by 32% of the respondents (see figure 1). The government grants accessed by the respondents included the child support grant and the state old age pension. 16% also resorted to selling their livestock and crops, while very few (2%) that could not sell their farm produce had to eat it to survive the lockdown. Some (14%) picked up menial jobs like working on farms, washing, cleaning, and selling alcohol. Up to 12% lived on their salary, while 9% opened small shops, with 7% doing temporary jobs like working on construction sites. Very few (2%) received remittances, reduced household consumption, got help from their community, family and friends and falling back to their family business.

Figure 1: Other coping strategies



The COVID-19 pandemic seriously impacted all aspects of social and economic life. Participants in this study revealed that community members experienced fear, anxiety and depression when the restrictions were imposed. Uncertainty about employment and finances, feelings of vulnerability to the infection and fears of the safety and wellbeing of loved ones increased during this period. Certain organisations created wellness programmes for their employees to ensure they cope with the psychological impacts of the pandemic. Other interest groups operating in these areas offered motivation to the members of the communities. A participant in the FGD with a local NGO made the following point:

"First and foremost, what the organisation has done that I personally appreciate which was not there before, it was the introduction of the emotional wellness programme because, as we have said there was a serious burnout and I was the number one victim. We were burned out, and we were just going because we had to go. So, the emotional wellbeing sessions from different stakeholders that deal with emotional programmes have been helpful even though they are not very consistent, and I think they came at a time when we were already out. But that has kept some of us where we are. That's one of the things" (FGD with SaveAct).

4. Conclusions

The study aimed to examine the coping strategies employed by rural communities in responding to the impacts of the COVID-19 pandemic. We used Matatiele and Winnie Madikizela Mandela Local Municipalities as our case studies. The case studies were chosen because both municipalities are largely rural and are in one of the poorest provinces of South Africa. Our findings reveal that although the communities have experienced several negative impacts of the pandemic, they have displayed agency in responding to these impacts. The coping strategies employed by the communities include reduced household expenditures (e.g., health and civic responsibilities expenditure), taking out loans, spending savings, purchasing food on credit, begging, selling household assets and resorting to other livelihood opportunities such as selling herbs, and gardening/subsistence farming. Local civil society organisations, traditional leaders and local government institutions played important roles in assisting the communities to cope with the impacts of the pandemic, thus revealing the valuable roles of institutions in rural communities' response to the disaster. However, the role of the local institutions is

hamstrung by a lack of human and financial resources, which reduces their inability to provide impactful support in times of disaster. This research shows that the contribution of local government to infrastructure development would significantly cushion communities from the effects of pandemics. Funding models that enable rural local governments to build financial reserves to build and maintain infrastructure such as roads, water and communication networks would go a long way to cushion communities from the effects of pandemics and other related disasters. The findings also reveal that while community members have deployed several coping strategies in response to the pandemic, most of these are short-term coping options that could potentially push them further into poverty in the absence of long-term safety nets or strong local institutions with the capacity to sustainably provide resources and infrastructure needed to build long term resilience.

Acknowledgements: The Authors wish to acknowledge the contribution of Jabulani Nyawo and Londeka Ngubane to the execution of the research project on which this paper is based.

Funding information: This work was carried out under the COVID-19 Africa Rapid Grant Fund, supported under the auspices of the Science Granting Councils Initiative in sub-Saharan Africa (SGCI) and administered by South Africa's National Research Foundation (NRF) in collaboration with Canada's International Development Research Centre (IDRC), the Swedish International Development Cooperation Agency (Sida), South Africa's Department of Science and Innovation (DSI), the Fonds de Recherche du Québec (FRQ), the United Kingdom's Department of International Development (DFID), United Kingdom Research and Innovation (UKRI) through the Newton Fund, and the SGCI participating councils across 15 countries in sub-Saharan Africa (grant number: 129206).

Disclosure statement. The authors report that there are no competing interests to declare.

Data availability statement. There are no relevant additional data associated with this paper.

References

- Auditor General of South Africa (2020). Consolidated General Report on Local Government audit Outcomes. MFA 2018-2019. <https://www.agsa.co.za/Reporting/MFMAReports/MFMA2018-2019.aspx>. Accessed 09/01/2022
- Amaechi, K. E., Thobejane, T. D., & Rasalokwane, R. (2021). Feminist reflections on the impact of the South African national COVID-19 lockdown on the upsurge of gender based violence in Mahwelereng Township of Limpopo Province, South Africa. *Gender and behaviour*, 19(1), 17186-17203.
- Bang, H. N. (2013). Governance of disaster risk reduction in Cameroon: The need to empower local government. *Jàmbá: Journal of Disaster Risk Studies*, 5(2), 1-10. <https://hdl.handle.net/10520/EJC131496>
- Department of Cooperative Governance and Traditional Affairs. Declaration of a National State of Disaster. https://www.gov.za/sites/default/files/gcis_document/202003/43096gon313.pdf
- Department of Trade, Industry and Competition (2020). Trade, Industry and Competition on Impact of Coronavirus COVID-19 on Economy. Available online: <https://www.gov.za/speeches/trade-industry-andcompetition-impacce-coronavirus-covid-19-economy-12-may-2020-0000>. [Accessed on: 09/09/2022].
- Cattivelli, V. & Rusciano, V., 2020, 'Social innovation and food provisioning during COVID-19: The case of urban-rural initiatives in the Province of Naples', *Sustainability*, 12(11), 1-15. <https://doi.org/10.3390/su12114444>

- Dlamini, N. J. (2021). Gender-based violence, twin pandemic to COVID-19. *Critical Sociology*, 47(4-5), 583-590.
- Haider N, Osman AY, Gadzekpo A, et al. (2020). Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. *BMJ Global Health*;5:e003319. doi:10.1136/bmjgh-2020-003319
- Hamadziripi, F., & Chitimira, H. (2021). The Socioeconomic Effects of the COVID-19 National Lockdown on South Africa and its Response to the COVID-19 Pandemic. *Acta Universitatis Danubius. Juridica.*, 24. Retrieved from <https://dj.univ-danubius.ro/index.php/AUDJ/article/view/777>.
- Hamadani, J.D. et al., (2020), 'Immediate impact of stay-at-home orders to control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: An interrupted time series', *The Lancet Global Health* 8(11), e1380–e1389. [https://doi.org/10.1016/S2214-109X\(20\)30366-1](https://doi.org/10.1016/S2214-109X(20)30366-1)
- Hou, M., Zeng, Z., Hu, X., & Hu, J. (2022). Investigating the impact of the COVID-19 pandemic on crime incidents number in different cities. *Journal of Safety Science and Resilience*, 3(4), 340–352. <https://doi.org/10.1016/J.JNLSSR.2021.10.008>
- John, S. F., Okem, A. E., Mubangizi, B. C., Adekanla, N., Ngubane, L. P., & Barry, I. (2022). Rural vulnerability and institutional dynamics in the context of COVID-19: A scoping review. *Jàmbá: Journal of Disaster Risk Studies*, 14(1). <https://doi.org/10.4102/jamba.v14i1.1227>
- Kim, D.-Y., & Phillips, S. W. (2021). When COVID-19 and guns meet: A rise in shootings. *Journal of Criminal Justice*, 73. Retrieved from <https://doi.org/10.1016/j.jcrimjus.2021.101783>
- Matatiele Local Municipality (n.d.). Adopted Integrated Development Plan (IDP): 2022-2027. Retrieved from https://www.cogta.gov.za/cgta_2016/wp-content/uploads/2021/02/MBIZANA-LOCAL-M-2020-2021.pdf
- Mbizana Local Municipality (n.d.) Integrated Development Plan 2020/2021. Retrieved from https://www.cogta.gov.za/cgta_2016/wp-content/uploads/2021/02/MBIZANA-LOCAL-M-2020-2021.pdf
- National Treasury Republic of South Africa (2020a). Adjusted Estimates of National Expenditure 2020. Retrieved from <https://www.treasury.gov.za/documents/mtbps/2020/aene/FullAENE.pdf>.
- National Treasury Republic of South Africa. (2020b). Special Adjustment Budget Guidelines 2020. Retrieved from <https://www.treasury.gov.za/publications/guidelines/2020%20Special%20Adjustment%20Budget%20Guidelines%20May%202020.pdf>.
- Measures in Response: The Covid-19 Epidemic. Retrieved from <http://www.dirco.gov.za/docs/speeches/2020/cramo421.pdf>.
- Kepe, T. 1999. The problem of defining 'community': Challenges for the land reform programme in rural South Africa. *Development Southern Africa*, 16 (3) (1999), pp. 415-433. <https://doi.org/10.1080/03768359908440089>
- Koma, S.B., 2010, The State of Local Government in South Africa: Issues, trends and options, *Journal of Public Administration*, 45(1.1), 111–120. <https://hdl.handle.net/10520/EJC51773>
- Kusumasari, B., Alam, Q., & Siddiqui, K. (2010). Resource capability for local government in managing disaster. *Disaster Prevention and Management*, 19(4), pp. 438-451. <https://doi.org/10.1108/09653561011070367>
- Mamdani, M, 1996. *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. David Philip: Cape Town.
- Manda, M. Z. (2014). Where there is no local government: addressing disaster risk reduction in a small town in Malawi. *Environment and Urbanisation*, 26(2), 586-599.
- May, J. (2000). The structure and composition of rural poverty and livelihoods in South Africa. In *At the crossroads: land and agrarian reform in South Africa into the 21st century*. Papers from a conference held at Alpha Training Centre, Broederstroom, Pretoria, South Africa, 26-28 July

- 1999 (pp. 21-34). Programme for Land and Agrarian Studies (PLAAS).
- Mubangizi, B. C. (2019). Monitoring and Evaluation Processes Critical to Service Provision in South Africa's Rural-Based Municipalities. *Journal of Reviews on Global Economics*, 8, 555-565.
- Mubangizi, B.C. (2020). Saving Livelihoods While Saving Lives: Rural Livelihoods Following Shock Events. Retrieved from <https://clms.ukzn.ac.za/saving-livelihoodswhile-saving-lives-rural-livelihoods-postcovid-19/>.
- Ngoasheng, Asanda. "Thembakazi 'Roundy' Peter—South African COVID Hero." *Gender & Development* 30(1-2), 373-379.
- Ntsebeza, L. (2004). Democratic decentralisation and traditional authority: Dilemmas of land administration in rural South Africa. *The European Journal of Development Research*, 16(1), 71-89.
- Odeku, K. O. (2021). Exponential increase in endemic Gender-Based Violence during COVID-19 lockdown in South Africa. *Gender and Behaviour*, 19(2), 17918-17926.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Pieterse, E., Parnell, S., Swilling, M., & Van Donk, M. (eds) (2008). *Consolidating developmental local government. Consolidating developmental local government: lessons from the South African experience*. Cape Town: Isandla Institute and University of Cape Town Press.
- Reddy, P. S. (2016). Localising the sustainable development goals (SDGs): the role of local government in context. *African Journal of Public Affairs*. 9(2), 1-15.
- Reddy, P. S., Nemec, J., & de Vries, M. S. (2015). The state of local government. *Public Policy and Administration*. 14(3), 160-176.
- Republic of South Africa (1996). *Constitution of the Republic of South Africa*. Retrieved from <https://www.gov.za/documents/constitution-republic-south-africa-1996>.
- Sambala, E. Z., Kanyenda, T., Iwu, C. J., Iwu, C. D., Jaca, A., & Wiysonge, C. S. (2018). Pandemic influenza preparedness in the WHO African region: are we ready yet? *BMC infectious diseases*, 18(1), 567.
- Statistics South Africa. *General household survey. 2019*. Retrieved from <https://www.statssa.gov.za/publications/Po318/Po3182019.pdf>
- Statistics South Africa. (2020). Social impact of COVID-19 (Wave 3): Mobility, Migration, and Education in South Africa. Retrieved from www.statssa.gov.za.
- Soudien, C, Reddy, V, & Harvey, J. 2022. *The Impact of COVID-19 on a Fragile Education System: The Case of South Africa*. In: Reimers, F.M. Primary and Secondary Education During COVID-19: Disruptions to Educational Opportunity During a Pandemic. Cham: Springer.
- The Presidency of the Republic of South Africa (2020). *Statement by President Cyril Ramaphosa on Further Economic and Social*. Retrieved from <https://www.thepresidency.gov.za/speeches/statement-president-cyril-ramaphosa-further-economic-and-social-measures-response-covid-19#:~:text=Our%20new%20economy%20must%20be,the%20people%20of%20this%20country>.
- Tselios, V., & Tompkins, E. (2017). Local government, political decentralisation and resilience to natural hazard-associated disasters. *Environmental Hazards*, 16(3), 228-252.
- Westaway, A. (2012). Rural poverty in the Eastern Cape Province: Legacy of apartheid or consequence of contemporary segregationism? *Development Southern Africa*, 29(1), 115-125.
- Yesufu, S. (2021). The socioeconomic impact of the COVID-19: a South African perspective on its impact on the socioeconomic, inequality, security, and food systems. *ScienceRise*, (4), 68-79.