



The Role of Alternative Service Delivery Models in Improving Access to Health Care, Education, and Water Services in the South African Public Service

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Abstract

This study examined the role of alternative service delivery models (ASDM) in improving the availability and quality of health care, education, and water services in the public service of South Africa. The research used secondary data sources to assess the impact of various ASDMs on important public services such as healthcare, education, and water and provided a comprehensive evaluation of the effectiveness of these models in meeting the vital needs of South African communities. The study found that the adoption of ASDMs in South Africa has contributed in part to improving access to basic services such as health care, education, and water, but there are still minor difficulties in ensuring the full effectiveness of ASDMs. These challenges include a lack of knowledge of the way to innovate, resistance to innovation, cases of health negligence, and issues related to public and private partnerships (PPPs). The study suggested that in order to further optimise the impact of ASDMs, South Africa's Government should invest more in information and communications technology (ICT), implement training and awareness programs on ASDMs' role, and regularly monitor PPP projects.

Keywords: *Alternative Service Delivery Models; Healthcare; Education; Water*

Introduction

The Sustainable Development Goals (SDGs) are a series of 17 interconnected international objectives adopted by all United Nations Member States in the year 2015. The aim of establishing the SDGs was to address, economic, and environmental issues faced by the world (Omisore, 2018). Healthcare, education, and water services are part of the SDGs, healthcare is under Goal 3 (Good health and well-being), education is under Goal 4 (Quality education), and Goal 6 (Clean water and sanitation) (Sachs, 2012). The SDGs are the product of the Millennium Development Goals (MDGs), which were

developed to end hunger and poverty, promote universal primary health care and education, and promote gender equality and empowerment of women (Sachs, 2012). The failure of the MDGs to achieve its objectives has led to the creation of the SDGs, which have led to African countries, including South Africa, adopting the objectives. In the past three decades, alternative service delivery has emerged as a way to attain the SDGs and eradicate poor service delivery in the public service of South Africa.

According to the Bill of Rights in the Chapter 2 of the Constitution of the Republic of South Africa (1996), all residents are offered an opportunity to have access to basic services such as healthcare, education, and water (RSA, 1996). However, political instability in South Africa, such as social unrest related to health, water, and education, has shown that the necessities of residents are not yet adequately met (Hart, 2014). It remains imperative to take note that if the needs of the residents are not adequately met, this implies that the residents are being denied full access to their rights as envisaged in the constitution. The significance of healthcare, education, and water services is not only acknowledged by the constitution but also by the National Development Plan (NDP), which emphasizes quality healthcare for all, enhancing the quality of education, training, and innovation, as well as improving infrastructure by 2030 (RSA, 2011).

South Africa's public service sector has long struggled with disparities in service provision, particularly in rural and underserved urban areas (Coovadia, Jewkes, Barron, Sanders & McIntyre, 2009). In terms of healthcare, issues such as outdated facilities, and limited access to essential medicines have hindered effective service delivery (Maphumulo & Bhengu, 2019; De Villiers, Cerbone & Van Zijl, 2020). Other scholars have identified the shortages of medical staff as a serious problem that harms the supply of health services (Malakoane, Heunis, Chikobvu, Kigozi & Kruger, 2020; Mbunge, 2020; Thusi & Chauke, 2023). Similarly, the education sector faces challenges including overcrowded classrooms, a lack of qualified teachers, and inadequate learning materials (Meier & West, 2020; Du Plessis & Mestry, 2019; Heller & Callender, 2016). On the other hand, water services, crucial for both health and economic development, are often unreliable, with many communities lacking access to clean and safe drinkable water (Majuru, Suhrcke & Hunter, 2016; Makhubela, 2022). To overcome these problems, alternative delivery models for services have emerged as viable solutions. These models include public-private partnerships (PPPs), community-based initiatives, and technology-based approaches.

For example, in the field of health care, mobile clinics and telemedicine have been introduced to extend health services to remote areas. In the field of education, e-learning platforms and community-led schools aim to bridge the gap between educational resources and infrastructure. Furthermore, water services are implemented through centralized water management systems and innovative water purification technologies to ensure reliable and equitable access to clean water. However, the effectiveness of ASDM in enhancing the accessibility of healthcare, education, and water services in South African public service remains unknown. In light of the above, the paper will examine the several ASDMs executed in South Africa and assess their effectiveness and impact on improving health care, education, and water services. Through case studies and evidence-based analyses, this model will provide an overview of the potential for transforming public service delivery in South Africa and strategies that South African public service can adopt to improve the delivery of services.

Theoretical Framework

New Public Management (NPM)

New Public Management (NPM) theory provides a relevant framework for grasping the role of ASDMs in enhancing access to health, education, and water in South Africa's public services. The NPM emerged at the end of the 20th century in response to the perceived inefficiency and bureaucratic rigidity

of traditional public administration (Islam, 2015). Furthermore, NPM advocates the adoption of private-sector administration practices in the public sector with the aim of enhancing efficiency, effectiveness, as well as responsiveness. Yusuph and Guohua (2017) claim that the theory fosters the decentralization of administrative functions, enabling greater flexibility and local autonomy. This principle supports the utilization of community-based initiatives and localized services management, which can respond more effectively to the specific needs of different areas. The NPM emphasizes results rather than processes and fosters performance measurement and administration in order to ensure accountability and continuous ameliorations.

ASDMs often incorporate performance metrics to assess their impact and fruitfulness in supplying healthcare, education, and water services. NPM encourages the inauguration of market tools such as competition, outsourcing, and PPPs to drive efficiency as well as innovation. It is worth noting that these tools can lead to more cost-effective and quality delivery of services by utilizing the private sector's expertise and resources. NPM shifts the focus towards treating citizens as customers, prioritizing their needs and satisfaction (Lapunte & Van de Walle, 2020). This customer-oriented approach is essential for the design of user-friendly, accessible, and tailored ASDMs to the specific needs of the communities it serves. In South Africa, the NPM theory provides a valuable lens for analysing and evaluating the effectiveness of ASDM in the delivery of public services.

For example, the decentralisation of health services through mobile clinics and telemedicine aligns with NPM's emphasis on local autonomy and flexibility. These models enable healthcare providers to reach rural areas that are not fully served and improve access to basic medical services. Similarly, the introduction of electronic learning platforms and community-led schools in the education sector reflects the principles of performance management and customer orientation of NPM. These ASDMs focus on providing a high-quality education tailored to students' needs, particularly in areas where traditional school infrastructure is lacking. Water services include decentralized water management systems and innovative treatment technologies, which illustrate the market mechanisms and customer-centric approach of the NPM. These models provide more reliable and sustainable access to clean water by involving partners of the private sector and local communities and address the needs of both efficiency and equity.

Empirical Review

ASDM has emerged as a viable strategy to accomplish the SDGs as it introduces creative and effective methods for providing public services. In South Africa, public service sectors such as health care, education, and water face persistent conundrums that impede the provision of quality services to society (Beyers, 2016; Lieketseng, Cloete & Mji, 2017; Herrera, 2019). Traditional service delivery models have failed to meet these essential services' growing demands and complexity, resulting in inefficiency, inequalities, and inadequate results (Alam Siddiquee, 2008). In terms of the health sector, it is faced with a number of challenges, including resource constraints, a shortage of labour, and inequalities in access to health care (Behera, Prasad & Behera, 2022). It is worthy to note that the implementation of Public-Private Partnerships (PPPs) as ASDMs in the health division is to improve healthcare services, but inequality remains because of the accessibility of the health services. This is proven by the National Department of Health 2022/2023 Annual Report illustrating that inequality is threatening the sustainability of healthcare for every resident in the nation. Furthermore, spending continues to increase relentlessly in the private sector, while in the public sector, spending reduces. ASDMs serve as an imperative solution to these problems to ensure accessibility and quality of these services. But there is little existing literature that proves that ASDMs have enhanced the accessibility and supply of health services. Similarly, the education system is plagued by overcrowded classrooms, inadequate resources, lack of infrastructure to accommodate online learning and educational quality gaps in different regions.

The online method of teaching and learning has been adopted in both higher education and basic education in South Africa, particularly during Corona-Virus to enhance the quality and accessibility of education (Mhlanga & Moloi, 2020). E-governance has been recognized as an ASDM to assist in achieving better service delivery, especially in the education sector through e-learning. According to Malomane (2021), e-governance is the facilitation of Simple, Moral, Accountable, and Transparent (SMART) governance through the utilization of Information and Communication Technology (ICT) in the government processes. Despite the presence of ASDMs in education, the Department of Education's (DBE) Annual Performance Plan (APP) 2024/25 proves that during the era of Covid-19, remote and digital learning was not able to effectively replace face-to-face learning (DBE 2024/2025). Furthermore, there were some learners who were not able to access education due to coming from poor families, meaning that they were not able to afford to afford mobile data and smartphones.

Some were not able to access education due to the inability to adjust to the e-learning system (DBE 2024/2025). These challenges raise a red flag (a potential problem that requires attention) in the local government. The "Fees Must Fall" movement that was established in 2015 with advocacy for free education, lowering student fees, and increased funding for poorer students, at some point highlighted the inability of the NDP 2030 to achieve its "quality education for all" objective. On the other hand, the water sector is facing also critical problems such as supply reliability, infrastructure degradation, and bad management that affect both urban and rural communities (Adom & Simatele, 2021). These issues affect the accessibility and quality of water. This is portrayed by a report generated by the GAESC which indicates that as of 2022, 2.2 billion residents were without access to safely administered drinking water and while 3.5 billion lacked access to safely managed sanitation (GAESC, 2024). Thus, this slow pace of ASDMs implementation raises questions about whether it is being done effectively and its ability to enhance the accessibility and quality of water services.

Thus, inequality persists. According to the Water Services Act (108 of 1997), "everyone has the right of access to basic water supply and basic sanitation." However, due to challenges including severe drought, the supply of water remains inadequate (Department of Water and Sanitation 2022/2023). Therefore, regardless of the PPPs, the local government still encounters challenges in supplying quality and reliable water in small towns and rural areas (DWS 2022/2023). Due to the limitations of traditional delivery methods, alternative models must be investigated to improve the effectiveness and scope of public services. Innovative approaches, such as public-private partnerships, decentralized service delivery, and community-based management, have shown potential to tackle these challenges. However, the urgent need for a systematically evaluated and implemented alternative model is to ensure that they can effectively improve the quality, accessibility, and sustainability of services. The aim of this study is to explore the role of alternative service delivery models in public services in South Africa, focusing on their potential to overcome existing barriers and achieve better results in health, education, and water services.

Methodology

The study used qualitative research methods based mainly on secondary data to explore the impact of alternative service delivery models on the improvement of health, education, and water services in South Africa's public service. The secondary data was derived from various reliable and relevant sources, including government reports, academic journals, policy documents, and international organizations' evaluations. These included publications by the Department of Health of South Africa, the Department of Basic and Higher Education, and the Department of Water and Sanitation. In addition, academic databases such as PubMed, JSTOR, and Google Scholar have also been used to access peer-reviewed articles describing the effectiveness of these models in various contexts. Comparison approaches have been used to evaluate the results of different service delivery models in the health, education, and water services sectors. The effectiveness of these models was assessed based on various

criteria such as accessibility, quality of services, and sustainability. Subsequently, it was necessary to compare case studies in different regions of South Africa in order to identify best practices and lessons learned. In some instances, the comparison was also extended to relevant international case studies to draw parallels and highlight possible strategies for adapting to the context of South Africa.

Findings and Discussions

Healthcare

As a way for South African public service to ensure accessibility, and quality healthcare in South Africa, it has introduced alternative modes of healthcare service provision including community health workers (CHW) programs, home-based care (HBC), public-private partnerships (PPPs), national health insurance (NHI), and telemedicine models. According to Murphy et al. (2020), CHWs form a bridge between communities and healthcare service provision within health facilities and act as the cornerstone of South Africa's ward-based primary healthcare outreach teams. This suggests that CHWs serve as a direct link between the healthcare systems and the communities with the aim of ensuring that people receive adequate access to healthcare. These CHWs collaborate closely with healthcare professionals within healthcare facilities including clinics, hospitals, and other healthcare settings. Furthermore, CHWs are better positioned to improve family planning and increase breastfeeding and vaccines for children under five years of age, especially in rural and under-served areas.

Although, the above ASDMs have been put in place within the South African health, the high rate of teenage pregnancies and the increased population in South Africa (Barron, Subedar, Letsoko, Makua & Pillay, 2022). This is due to not adequately educating teenagers on how to protect themselves from unwanted and unplanned pregnancies, particularly in rural areas. Furthermore, in most rural or underserved areas, most children that are below five years still suffer from childhood diseases including measles, mumps, and Influenza due to not having access to immunizations from the early stages of birth. This is proven by the Department of Health National Expanded Program on Immunization survey report (2020), which illustrated that the most common reason for missing doses in all vaccines was that the vaccine was out of stock. This kind of setback subsequently puts the lives of children at a great risk of premature death. Furthermore, the health sector contributed towards improving the healthcare service by designating home-based carers (HBCs).

Initially, HBCs have long been known to care for and support families living with HIV and AIDS disease (Mamare, Bopape, Tebogo & Bastiaens, 2019). However, a paradigm change has taken place in the way that HBCs also take care of people with chronic diseases, including diabetes. This indicates that HBCs have made progress since they have been expanded. This progress demonstrates the widening access to healthcare services. Chowdhury and Ravi (2022) proved that home-based carers in developing countries have significantly improved the accessibility of health services, particularly for vulnerable and underserved populations. It should be noted that HBCs are non-clinical practitioners, which emphasizes the possibility of the wrong medication being given to the wrong patients because they do not have complete information about specific diseases. The repercussions of the HBCs providing the wrong medicines to residents are that these residents may pass away, and the health institution may face medical negligence cases.

It must be taken into consideration that this creates a situation whereby health institution spends more funds on medical negligence cases rather than spending the funds on increasing the number of health workers. To support the above-mentioned statement, the Eastern Cape Department of Health (ECDoH) in the year 2021 had an excessive number of health negligence cases, with a potential total cost of R4 billion (Cronje, 2023). However, the health sector in South Africa is failing to source health workers due to budget constraints (MacGregor, Ross & Zihindulai, 2018; Gumede, Taylor & Kvalsvig,

2020). Chowdhury and Ravi (2022) emphasize that South Africa's failure to source health workers affects mostly the society that resides in rural areas. The International Labour Organization on the other hand also indicates that 7 million of the 10.3 million health workers in rural areas need to work in rural areas. The shortage of health workers in rural areas hinders access to health care by limiting the provision of available services. In light of the aforementioned challenges South Africa needs to invest more in securing more healthcare workers in the nation. This suggests that public funds are incorrectly utilized in health negligence cases instead of acquiring more health workers to enhance the supply of health services to the nation of South Africa.

Therefore, it is imperative for HBCs to avoid health negligence cases that negatively hurt society in terms of hindering the ability of the health sector to offer services as well as to source more health workers because the funds are spent more on cases rather than recruiting health workers. Another alternative method that was employed to enhance the delivery of health services is the NHI which was signed off at the beginning of the year 2024. According to the South African Government News Agency (2023), the NHI was introduced with the intention of ensuring health care services that are of the best quality and widening the accessibility of health services to all residents of South Africa regardless of their affordability. The NHI ensures that all residents have full access to their preferred public and private clinics registered with the NHI without incurring any costs (SAGNA 2023). This highlights the role of NHI in terms of improving accessibility, affordability, and quality healthcare in the public service. Yet, the NHI was designed to assist with improving the accessibility of health services and do away with the shortages of health workers. Business Tech (2024) indicated since the government of South Africa signed the NHI bill into law that health workers are seeking employment in other nations. Additionally, the implementation of NHI will yet put a toll on South African medical workers as the funding for NHI will be generated from taxes. This will lead to health workers feeling demotivated due to working hard and earning less, particularly in the private sector. It is imperative to note that, private hospitals cannot realistically perform thousands of operations at no cost to people.

In the end, this will also put a burden on the Government. The repercussions of these will be immigration and high levels of turnover of health workers, resulting in a poor supply of health services. In South Africa, partnerships between the public and the private sector have long been acknowledged as the policy objective in health (Kula & Fryatt, 2013). This suggests that the South African government has recognized the potential of PPPs in the health sector, and how they can transform the healthcare system. It is further revealed by Kuna and Fryatt (2013) that one of the collaborations made between the public and private sectors in health includes the National Department of Health and private practitioners providing sexually transmitted disease (STD) care. The objective of the partnership was to boost the standards and outcomes of STD care in health services (Kuna & Fryatt, 2013). As a result, the South African healthcare system receives recognition. However, it is noteworthy to acknowledge the fact that the private health sector operates independently from the public sector. As a result, there are chances that the partnership between the two sectors can collapse due to each sector being differently opinionated.

Furthermore, the private health sector prioritizes services that generate profit. As a result, if it happens that the public sector fails to provide adequate funding to support the partnership, the private health sector may abandon or limit its participation in the partnership. Consequently, vulnerable populations will be negatively affected by the decline of access to healthcare services, exacerbating health disparities, and undermining the overall healthcare system. South Africa implemented telemedicine as a strategy with the hope of improving the accessibility, and quality of healthcare services. According to Townsend, Mars, and Scott (2020), telemedicine is the utilization of information and communication technology (ICT) to furnish healthcare and health information electronically. This demonstrates the suspension of the physical interaction between the doctor and the patient. According to Cilliers (2019), the ECDoH introduced different telemedicine projects, which resulted in the success of the teleradiology programme.

Moreover, twenty-three urban and rural hospitals trialed teleradiology by sending x-ray photos remotely to private radiologists living in areas across South Africa. Fortunately, the process was quicker than expected, which was convenient for patients. Patients were at an advantage of receiving results in the comfort of their own homes, compared to traveling a long distance to nearby hospitals. Therefore, the report showed that 75% of redundant radiology referrals were avoided. However, it is important to bear in mind that not every citizen has knowledge of how technology works, particularly in rural areas. Some people have not yet adapted to the world of the 4th industrial revolution (4IR). Thus, the use of telemedicine discriminates against them. Furthermore, people living with a disability such as blindness, are also at a disadvantage of not accessing health care services, especially if they are living by themselves in their homes. These highlight the limitations of the use of telemedicine. Chowdhury and Ravi (2022) concluded that although the use of telemedicine in developing countries has managed to partially improve access to healthcare services, but its effectiveness is limited by the shortfalls of infrastructure. This then suggests that the Government of South Africa must invest more funds in the procurement of the infrastructure that can ensure that all members of the society have access to health services.

Education

In the educational sector, the South African public service designated alternative methods including online learning platforms in higher institutions and public schools, and also feeding schemes to improve the South African educational system. Msiza, Malatji, and Mphahlele (2020) define electronic learning as the use of digital technology to render different kinds of education services. The purpose of the application of e-learning technologies in higher education, is to enhance educational outcomes and achievements anywhere or anytime, without facing geographical constraints (Maphalala & Adigun, 2021). Since the coronavirus pandemic, most of the South African universities have adopted an alternative way of learning which is digital learning. Online learning is considered to be a new way of learning even after the pandemic, this is because several institutions of higher education have adopted the multimodal method of teaching (Nyathikazi, 2022). The transition to online learning caused disruptions to traditional face-to-face teaching and learning activities which led to the adoption of digital learning (Mhlanga & Moloi, 2020). This is because connectivity plays a crucial role in ensuring the success of e-learning. Therefore, the implementation of Wi-Fi devices is necessary for students to access the internet anywhere around the campus, which allows the accessibility of learning materials for students to further their studies.

Evidence from a study undertaken by Ngqulu and Nomnga (2023) illustrated that universities made progress in providing students with mobile data to ensure that students access learning materials. This demonstrates that the higher education sector took a step to ensure that students are still able to access quality education regardless COVID-19 crisis. On the other hand, the basic education sector provided learners with tablets to foster accessibility of education. However, it is crucial to bear in mind that not all schools and universities are advantaged enough to access e-learning systems, particularly those from rural areas. Some learners & students are still without access to mobile phones and laptops to access academic materials. This may be caused by coming from socioeconomically poor families, lack of funding, and having zero knowledge of how technology works. This raises a question as to whether e-learning is accommodative to all students or not.

The South African government introduced the White Paper on e-learning with the intention to modify learning through the use of information communication technology (ICT), as well as ensuring that each learning is able to use technology (Greunen, Kativu, Veldsman, & Botha 2021). Msiza, Malatji, and Mphahlele (2020) state that the Gauteng Department of Education (GDE) designated an amount of R724 million towards the support of the e-learning system in the 2017/2018 financial year. This demonstrated the willingness and eagerness of the government to achieve the goal set in the White Paper on e-learning.

As a result, it was revealed tablets and smartboards were given to learners, and they were also shown on shown how to access e-books (Msiza, Malatji, & Mphahlele, 2020).

Furthermore, one of the interviewees in the study conducted by Msiza, Malatji, and Mphahlele (2020) on the Tshwane South District towards paperless classrooms in secondary schools revealed that “Learners were ready to integrate e-Learning in the teaching and learning because we were looking forward for this, since they have been telling us for a long time that we will no longer be using books and chalkboard”. Reflecting on the above-mentioned statement, it is argued that learners are willing to be exposed to the digital world and learn more about technology. However, it was revealed that there was no fair distribution of devices, which led to other schools waiting longer than expected to receive the devices (Msiza, Malatji, and Mphahlele 2020). Consequently, the implementation of the e-learning project was affected. Furthermore, it is noteworthy that South African teachers are not used to the face-to-face method of teaching and learning, however, it was discovered that teachers were not given sufficient technology training in order for them to realize the potential of technology (Chomunorwa & Mugobo, 2023).

This portrays a demand to train teachers to be able to use technology and feel comfortable delivering education through technology to ensure accessibility and continuous quality of education. This highlights the need for the government to realize the sustained investment in teacher professional development in technology. The inclusion of the usage of technology in education curriculum can also be considered for South African teaching qualifications such as a Bachelor of Education Degree, Postgraduate Certificate in Education, Advanced Diploma in Technical and Vocational Teaching, and Postgraduate Diploma in Higher Education. This will familiarize teachers and lecturers in the higher education division to be familiar with the advantages of using technology. Post-apartheid, the South African government has been working towards enhancing the quality, accessibility, and improvement of learners’ productivity through policies and programs including the National School Nutrition Programme (Munje & Jita, 2019). The National School Nutrition Programme (NSNP) is described by Nhlapo, Lues, Kativu, and Groenewald (2015) as the school feeding scheme (SFS) which gives learners access to nutritious food, promotes overall health, and assists with improving performance at school.

Typically, food can improve the performance of a human being. Hence, one of the objectives of the NSNP “is to improve class attendance and participation among learners by alleviating short-term hunger” (Nhlapo, Lues, Kativu & Groenewald, 2015). It was revealed by Mostert (2021) that the school feeding scheme is displaying a positive impact on the performance of learners at school. It is argued that learners in schools with breakfast feeding programme were more likely to have zero absences, compared to their peers in schools without the programme. This demonstrates how the school feeding programme influences learners to attend school and be on time for the breakfast meal. However, it is uncommon to find “Food Safety Monitors” or “Food Inspectors” who regularly visit schools to review how the food is cooked and served. Consequently, this poses a significant challenge to learners who heavily rely on feeding schemes, as they may be served undercooked or unsafe food, subsequently putting their health at risk. Therefore, such challenges can hinder the academic progress of learners. Similarly, in South Africa, universities have adopted providing food packages to students as a means of addressing food insecurity, which is an important issue that affects the academic performance of many students (Mabharwana, 2021).

Water Services

Clean water remains one of the biggest residents’ basic demands in South Africa. The South African public service introduced alternative ways to improve the accessibility, and quality including Rain Water Harvesting (RWH) and PPPs, to improve the accessibility and affordability of water services. According to Lebek and Krueger (2023), the South African public sector, along with non-governmental organisations (NGOs), have been advocating for the adoption of RWH. This is supported by the financial relief that was designated to socioeconomically poor households towards the costs of the RWH

implementation system and tanks by the Department of Water Affairs (DWA) in previous years (Lebek & Krueger, 2023). Rainwater harvesting (RWH) has been recognized as a crucial alternative for municipal water supply during the summer rainfall seasons, particularly in areas that are underserved (Matimolane, Strydom, Mathivha & Chikoore, 2023). This demonstrates that underserved areas are faced with water crises to the point of resorting to RWH as an alternative source of water supply.

It was revealed by the Institute of Natural Resource (2019) that municipalities including eThekweni municipality in South Africa deployed RWH utilizing tanks to harvest rainwater for domestic use from areas such as rooftops. Furthermore, the effectiveness of RWH was tested by the eThekweni municipality RWH in 500 low-income households across Inanda, Ntuzuma, and Kwamashu, resulting in 10% saved water (RWHSFSA, 2019). This demonstrates that RWH can bring better outcomes if implemented effectively. It is further argued that RWH systems that are well-designed and maintained can provide safe water containing physiochemical quality, thereby addressing the primary concern of contamination through effective design and regular cleaning protocols (Matimolane, Strydom, Mathivha, & Chikoore, 2023). As a result, people will gain access to quality and affordable water. However, relying on RWH can pose a risk to the lives of citizens, due to low or no rainfall most times in South Africa. According to Mahlalela, Blamey, Hart & Reason, (2020), drought has been a problem in some parts of the Eastern Cape province in South Africa since 2015. This shows that people can experience water scarcity if they rely on RWH. Consequently, people will be in danger of severe dehydration, decreased quality of life, poor hygiene, and sanitation. Furthermore, the South African government implemented PPPs as an alternative method to improve the accessibility and quality of water services. Over the last decade, South Africa has built a strong track record of successful PPPs (National Treasury Budget Review, 2019).

Conclusion and Recommendations

Although adopting ASDMs in South Africa has the potential to aid in enhancing access to basic services such as health care, education, and water, there are still minor difficulties hindering the full effectiveness of the ASDMs. In order to further optimize the impact of ASDMs, the study proposes a few recommendations, with the adoption of these recommendations, South Africa can continue to enhance access to vital public services and foster social and economic development:

Investment in Information Communication Technology (ICT)

Since the ASDMs hold the promise to improve the public service in South Africa, the government should invest more funds in ICT to ensure the accessibility of all public services that are delivered using technology. The government should ensure that the society is able to access healthcare services digitally by ensuring that all members of the society are offered monthly data in an attempt to foster the accessibility of these services. People with disabilities must also be catered for to avoid fostering inequality.

Training Programmes

The study discovered that the effectiveness of ASDMs in enhancing service delivery is limited lack of knowledge of the innovative ways of delivering healthcare, education, and water. In terms of education, there must be frequent training to educate students, teachers, and lecturers about the benefits of utilizing technology to enhance the accessibility of education. Furthermore, in terms of healthcare, the HBCs must be frequently trained and monitored to avoid cases such as medical negligence which has been demonstrated to be the largest contributor to the failure of the government in increasing the number of medical workers. Lastly, the government of South Africa must establish frequent training and knowledge-sharing sessions with all members of the public and public servants to raise awareness and share knowledge concerning the role of ASDMs in the South African public service.

Public Private Partnerships

Although PPPs are efficient and effective in the provision of public service, the government must ensure that when duties are transferred to the private sector, proper monitoring and evaluation are done frequently to ensure a successful distribution of public services as envisaged by Chapter 2 of the South African Constitution.

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