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Challenges and solutions for the eradication of sanitation backlogs in the policy context of Free Basic Sanitation

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ABSTRACT

Despite the constitutional obligation for municipalities to provide Free Basic Sanitation (FBSan) services to all, many people living in informal settlements in South Africa are still lacking access to adequate sanitation facilities. This study used qualitative methods to examine challenges and identify solutions for the eradication of sanitation backlogs in informal settlement of South Africa in the policy context of the FBSan. Findings suggest that the disconnection between the policy and its application in practice has created a deep divide between the service providers and consumers as recipients of the services. Consumers' perceptions and expectations are a major barrier to the acceptance of the sanitation services provided by municipalities, often resulting in violent protests. Service providers face challenges when addressing the disjuncture between what people aspire to and what is possible in providing sanitation services. These findings infer that consumers' needs, sanitation practices and settlement conditions should be thoroughly examined prior to the selection and deployment of sanitation facilities in informal settlements. Consumers should be engaged and involved in the choice of sanitation technologies and facilities. Such engagement should evolve around various sanitation technologies and facilities applicable to the nature and context of informal settlements, so as to address negative perceptions, attitudes and behavior concerning services provided by municipalities. Addressing challenges related to the eradication of the sanitation backlogs in the policy context of FBSan services needs to be grounded in the clarification of sanitation policy, a deep understanding of consumers' needs, challenges and practices as well as settlements conditions, coupled with meaningful consumers' participation at various stages of the decision-making process and coordination amongst institutions involved. Municipalities need to engage all stakeholders (mainly consumers) in order to ensure that the selected infrastructure and service level deployed are consensual. Unless subjective clauses of the FBSan policy are clarified, monitoring, enforcement and accountability mechanisms established and implemented and, consumers are engaged in the decision making processes, the eradication of sanitation backlogs in informal settlements as currently planned may not materialize.

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Keywords: Backlog, challenges, consumers, free basic sanitation, informal settlement, policy.

INTRODUCTION

Access to basic sanitation services is a human right, which is implicitly enshrined in the Constitution of South Africa and is explicit in Section 3 of the Water Services Act, 108 of 1997 (RSA, 1997). The provision of sanitation in South Africa is guided and regulated by three policy documents which are the White Paper on Water Supply and Sanitation (DWA, 1994), the National Sanitation Policy (DWA, 1996) and the White Paper on Basic Household Sanitation (DWA, 2001) which focused on the provision of basic sanitation services in areas with the greatest need, including informal settlements. According to the 1997 Water Services Act (RSA (1997), basic sanitation is 'the prescribed minimum standards of services necessary for the safe, hygienic and adequate collection, removal, disposal or purification of human excreta, domestic waste water and sewage from households, including informal households'. Due to various discrepancies (mainly related to rural and informal settlements) observed in these regulations, a National Sanitation Strategy (DWA, 2004) in which the FBSan services are set to include basic sanitation infrastructure, health and hygiene promotion and support for operation and maintenance, and guidance for the provision of facilities to informal settlements was published. Due to persisting implementation challenges, the FBSan Implementation Strategy (DWA, 2009) which prescribes the right of access to a basic level of sanitation services for poor households was published. However, these changes did not have sufficient impact on increasing implementation challenges (Dugard, 2016; SAHRC, 2018), thus leading to the review of the 1996 sanitation policy and subsequent publication of 2016 sanitation policy (DWA, 2016) in which discrepancies from the previous policies and regulations were clarified. Despite these amendments, Dugard (2016) and SAHRC (2018) identified several challenges that is believed to hinder the implementation of the policy.

Undoubtedly, the South African government has made great advances in addressing sanitation backlogs since 1994 by

extending basic sanitation services to poor households. This has resulted in reducing sanitation backlogs from 52% in 1994 to 21% in 2010, thus achieving the 2015 Millennium Development Goal for halving the proportion of population without sustainable access to basic sanitation in 2008 (DWA, DWA and DHS, 2012). However, the advances made in the provision of adequate sanitation services, addressing outstanding backlogs and sustaining access have been delayed by various challenges. There are still significant backlogs in basic sanitation service delivery (Overy, 2013), with 11% of households lacking sanitation services and 26% at risk of service failure and/or are experiencing service delivery breakdowns (DWA, DWA and DHS, 2012).

Challenges to implementing the sanitation policy have been viewed from perspectives including institutional (in terms of institutions involved and their roles), spatial (in relation to the density of the settlements), economic (in reference to the cost of interventions), social (in terms of consumers' participation), political (in reference to the roles of politicians) and informational (in terms of knowledge of consumers and their needs (Sinharoy et al., 2019). For example, implementation challenges have been attributed to the lack of clarity of the policy (Mjoli et al., 2009) that has led to diverging interpretation on a number of its clauses (Mjoli and Bhagwan, 2008), thus leaving a gap between what consumers want and what municipality proposes (SAHRC, 2018). The policy lacks clarity in terms of service level and standards, guidance because of maximum discretion to municipalities to decide on how and whether to implement the strategy as well as its inability to provide very little in the way of concrete recommendations, and not addressing the issues of appropriate forms of basic sanitation for informal settlements (Dugard, 2016). Furthermore, it remains vague on who qualify for FBSan services (Mjoli and Bhagwan, 2008; Tissington, 2011). There is also a lack of or inadequate institutional arrangements (Mjoli et al., 2009;

SAHRC, 2018) where the responsibility of sanitation service provision is confusingly shared by a number of different players at the national, provincial, and local government levels (Dugard, 2016). These concerns have been compounded by the lack of functional coherence within institutions of policy oversight and delivery, along with serious governance and management-related deficits and the chronic capacity/skills and personnel shortages at all functional levels (Managa, 2012). There is serious lack of capacity related to effective planning, implementation and management of infrastructure (DPME, DWA and DHS, 2012). The challenges have been further attributed to the adoption of top-down supply-driven and target driven approach (Mjoli et al., 2009) to achieve coverage with insufficient or no community participation (SAHRC, 2018). This approach has been criticised for its lack of accountability, inefficiency and, non-responsiveness to demands of poor households and deployment of environmentally unsustainable infrastructure (Mjoli, 2010), and has led to low acceptance and high failure rate of sanitation services provided by municipalities (DPME, DWA and DHS, 2012). Political interference (McGranahan, 2015), difficult settlements conditions characterised by high density, population growth and the influx of foreign nationals (Overy, 2013; Pan et al., 2015) have further deterred the implementation of the policy. Collectively, all these challenges significantly undermine the implementation of the FBSan policy and jeopardise the eradication of sanitation backlogs. Thus prompting scholars to label the FBSan policy as controversial (Dugard, 2016) and failing to achieve expected outcomes (Mjoli et al., 2009) in view the number of people lacking access to sanitation facilities.

While most studies have discussed individual challenges associated with the implementation of the FBSan policy, a few studies have focused on identifying the key challenges, their root causes and concrete solutions to address them. For example, a study by Mjoli and Bhagwan (2008) suggest

the review and clarification of certain clauses of the policy and development of guidelines for identification of poor households and national standards for minimum acceptable level of a basic sanitation service. The Overseas Development Institute (2017) and Mjoli (2010) suggest compliance with consumers' participation, effective/good governance, addressing resources and skills shortages, while McGranahan (2015) suggests community participation and Chaplin (2011) the involvement of civic organizations.

The challenges and subsequent solutions suggested by scholars have led to the review of the initial FBSan policy. However, findings by Dugard (2016) and SAHRC (2018) reveal that the 2016 version is still lacking substances and has many gaps. This study aims at addressing these gaps by identifying and understanding of challenges associated with the implementation of the FBSan policy and possible interventions to contribute to the eradication of the persisting sanitation backlogs in informal settlements of South Africa. Although this study focused in the Western Cape, the findings are likely to be relevant to informal settlements beyond the Western Cape and South Africa where similar policies, developing country contexts and general sanitation concerns apply.

MATERIALS AND METHODS

Qualitative methods including documentary review, interviews and focus group discussions were conducted with representatives from organizations involved in providing water, sanitation and/or hygiene services and representatives of residents or beneficiaries of these services in three municipal jurisdictions in the Western Cape, South Africa. The sample size of interviews was not intended to be representative. Respondents were identified through the authors' engagement with local leaders in informal settlements. Purposive sampling method was used to select interviewees based on certain criteria including knowledge of informal settlements, involvement in service provision and willingness to participate in the research. The final sample size was achieved

once ‘saturation’ occurred and no further new information was revealed during subsequent interviews (Charmaz 2006).

The resulting 26 interviews included representatives from municipalities (3), national (1) and provincial (1) Water and Sanitation Departments, civic organizations (5), community leaders (5), advocacy groups (5), researchers (3) and entrepreneurs (3). As this research was seeking input on challenges and solutions related to the eradication of sanitation backlogs, resident lobby groups were interviewed. The project aims and core questions were reviewed for cultural and other sensitivities by researchers with extensive experience in informal settlement and service provision research. The project received ethical clearance from the Cape Peninsula University of Technology’s Faculty of Engineering and the Built Environment Ethics Committee (reference dated 2017-10-03). Each interview lasted approximately 40 minutes while the focus group lasted 60 minutes. The interviews were transcribed, and analyzed using content analysis methods. Researchers analyzed the transcripts to identify emerging themes, which were validated by the research team. Quotes from the interviewees are provided in the results section to illustrate the key themes raised. Due to the small sample, interview transcripts were analyzed as a whole, rather than per sector or organization type, which may introduce a limitation to this study. The quotes are attributed using an identity code to avoid identification of specific individuals and organizations.

RESULTS AND DISCUSSION

This section presents and discuss the findings of this study. The interviewees reflected their understanding of the FBSan policy in terms of its impacts on the provision of sanitation services and eradication of the sanitation backlogs. Interviewees are of the view that the FBSan policy has increased the provision of sanitation services and reduced significantly the backlogs since its implementation. *“Since the implementation of the FBS policy, many of our people*

have regained dignity by accessing to at least adequate facilities” (Community leader #4). However, these achievements have been viewed by many in terms sanitation coverage which does not necessarily reflect on access. Similar to Dugard (2016) and SAHRC (2018), all interviewees concurred that there are still challenges to implement the FBSan policy and eradicate the sanitation backlogs.

Challenges associated with the provision of sanitation services

The interpretation of the FBSan policy has been identified as one of the challenges affecting the provision of services (Dugard, 2016; Mjoli and Bhagwan, 2018; SAHRC, 2018). In this study, interviewees confirmed these findings by pointing out several subjective clauses of the policy that are read and interpreted differently. For instance, consumers often understood the FBSan policy in terms of the free nature of the service which covers everything from supply, operation and maintenance and even basic issues such as cleaning. This interpretation has developed an entitlement mentality (Pan et al., 2015) where consumers expect nothing else than what they have in their mind. The interviewees reflected their perceptions of the FBSan policy in addressing sanitation backlogs as: *“Although through the number of people lacking access to sanitation has been reduced, the FBSan policy lacks clarity in many aspects including sanitation choice, decision making process and governance arrangements...”* (Researcher # 3).

Interviewees pointed out the disconnection between the policy and its application in practice based on their own experience: *“The policy suggests a cost comparison of various sanitation options and select only option that is accepted by consumers and their willingness to pay...however, choices are made on undisclosed basis without considering this clause of the policy”* (Organisation #2). This disconnection has been previously addressed by Pan et al. (2015). In this study, found that the FBSan policy did not yet develop specific norms and standards related to the types of

facilities, the context of their deployment, and the selection of the recipients of the FBSan services. *“There is no mechanisms to distinguish between recipients and non-recipients of the FBSan service as everyone thinks they are eligible to free services”* (Advocacy group #1).

Interviewees indicated that the compliance with the norms (if developed) can be challenging given the lack of coordination amongst various stakeholders involved in the FBSan service provision. Such lack of coordination has been previously found by Managa (2012) to be a hindrance to the implementation of sanitation policy.

Another challenge was related to consumers' perceptions and expectations and the disjuncture between what people believe and aspire to, and what is possible in providing sanitation services. While Mjoli and Bhagwan (2008) pointed out the lack of standards for the level of service, in this study, interviewees indicated that *“Consumers expect high level of service to equate those living in formal settlements and are reluctant to accept any other solution than what is in their mind”* (Researcher#1). Such expectations (if not met) can cause tension, disregard and misuse of facilities provided by municipalities.

The political marketing and interference were mentioned because of the tendency of politicians to promise services that are or may not be feasible in the context of informal settlements. *“Election promises by politicians always do not translate into reality, hence creating friction between municipalities and residents”* (Organisation #5). While McGranahan, (2015) asserts that political interventions can accelerate the provision of infrastructure, this study has found that such interference has exacerbated consumers' perceptions and expectations, and has led to violent public protests mainly when political promises cannot be translated into practices.

Institutional arrangements were identified as a stumbling block for the failure to implement the FBSan policy. Similar to Mjoli et al. (2009), Dugard (2016) and

SAHRC (2018) interviewees demonstrated their view by pointing out the lack of distinction of the roles and responsibilities and collaboration between institutions involved in the FBSan services provision: *“The provision of services is fragmented across the sanitation service unit, solid waste, road and stormwater and, environmental health services...We need to bring all these services together to ensure coordination, but this is not possible because of their conflicting mandate”* (Department #1).

Despite the separation of responsibilities stipulated in the policies, interviewees considered that other stakeholders (mainly consumers, NGOs, CSOs, CBOs) have minimal or no power of decision in the selection and deployment of sanitation services: *“The FBSan gave power to municipality to decide on provision of services with the participation of other stakeholders, but in practice this never happens. There is lack of clear guidance on how other stakeholders should be involved...”* (Organisation #4).

The interviewees described the lack of enforcement mechanisms on the participation of consumers in the sanitation project and decision making process as a shortfall of the FBSan policy. While this challenge has been reported by Mjoli (2010), Pan et al. (2015) and SAHRC (2018), this study confirms that the latest FBSan policy does not uphold the principles of consultation, service standards, access, courtesy, information, openness and transparency as claimed. *“Since there are no enforcement and accountability measures in place, municipalities do not consider any inputs from other stakeholders”* (Leader #5).

These findings concur with SAHRC (2018) and infers that policy cannot be successfully implemented without the participation of consumers and civic organizations. The latitude given to municipalities to regulate sanitation services, choose technology, service level and type of facilities (without pre-defined criteria) creates discontent amongst consumers. Sanitation technologies and facility types differ from one settlement to another, thus prompting

recipients to question the motive behind this difference. *“The minimum acceptable basic level of sanitation as currently stated is subjective and has not often been guaranteed when services are deployed ...Informal settlements located in the same municipality are being provided with different sanitation technologies”* (Leader #2).

This subjectivity has been attributed to the top-down supply-driven approach (UN-Habitat, 2015) which in many instances target coverage with least or no considerations for the needs of consumers and quality of services. The lack of skills, competencies and knowledge amongst those responsible for the service provision were exposed. Similar to Managa (2012), this study found that skills shortage and political appointments hinder the implementation of the FBSan provision. *“Those responsible for the provision of services do not know and understand the dynamic of informal settlements and lack technical and managerial knowledge which are necessary for successful FBSan implementation”* (Entrepreneur #1).

These findings suggest that there are political appointments that take precedence over skills and experience, the likelihood of policy failure is high. Thus appointment should be made based on skills, experience and knowledge of the subject at hand. Internal tension and conflict between the community and their elected leaders emerged as a hindrance for the deployment of services. *“Disagreement between community leaders and residents around the service level and many other issues has delayed the provision of FBSan services in many settlements”* (Municipality #1).

The findings of this study concur with Overy (2013) and Pan et al. (2015) who claim that challenging settlement conditions and patterns and status of the land affect the ability of municipalities to implement sanitation policy by extending services. *“Some of these settlements are located in wetlands or road reserves, far from any existing services, the only option is to give temporary mobile*

facilities which are often rejected by residents” (Municipal #1).

Where such services may be deployed, their sustainability remains doubtful due the cost endured by municipalities for their deployment, operation and maintenance. These findings infer that the implementation of the FBSan policy may not be possible when the settlements conditions are not permitting. The difficult settlement conditions and the free nature of the services may prompt municipalities to provide services that do not respond to consumers' needs and settlements' conditions, thus not be sustainable.

Despite the publication of a revised sanitation policy, little has changed in terms of addressing the implementation challenges. The policy has several discrepancies (Dugard, 2016) which according to our findings have led to the continuous implementation challenges. Our findings add to those of previous studies (Pan et al., 2015; Dugard, 2016; SAHRC, 2018) by claiming that the FBSan policy, as currently formulated, is leading to confusion and friction between municipalities and consumers, creating expectations and enabling a persistent entitlement mentality.

Suggested solutions for addressed sanitation backlogs

Drawing from the above, interviewees were of the opinion that the revised sanitation policy has not been adequately formulated nor implemented, thus not conducive to the eradication of sanitation backlogs. Its promulgation and subsequent implementation did not bring about the much needed change. There are gaps within each of its seven pillars (as described in the 2016 sanitation policy) which need to be addressed to make the eradication of sanitation backlogs in informal settlements a reality. Suggestions to address these gaps (Table 1) have emerged from our analysis of inputs from interviewees, previous studies and experience.

While some studies (UN-Habitat, 2015) claim that upgrading policies for informal settlements should include their

regularisation and provision of services, this study suggests that success implementation of the FBSan policy relies on the clarification of certain of its clauses, existence of a capable policy championing, good governance and,

development of mechanisms for improved collaboration and coordination across institutions, capacity building for those involved in the FBSan provision as well as the meaningful engagement of consumers.

Table 1 Stakeholders' suggestions for addressing sanitation backlogs.

Challenges associated with FBSan policies	Proposed solutions
Interpretation of the policies	<ul style="list-style-type: none"> ☐ Identification and clarification of sections of the policy (addendums) ☐ Propagation of the policy across communities ☐ Training of community leaders and influential individuals
Disconnection between the policy and its application in practice	<ul style="list-style-type: none"> ☐ Development of sanitation delivery monitoring team ☐ Development of policy implementation's evaluation criteria ☐ Verification and compliance monitoring of the implementation process
Lack of norms and standards to determine service levels, facility types and beneficiaries	<ul style="list-style-type: none"> ☐ Develop service level norms and standards ☐ Develop norms and standards to distinguish genuine beneficiaries ☐ Disseminate norms and standards to stakeholders and beneficiaries
Consumers' perceptions and expectations	<ul style="list-style-type: none"> ☐ Dissemination of the sanitation policy ☐ Develop compendium of available solutions and their context of application and dissemination of information prior to deployment of services ☐ Develop interaction mechanisms to liaise with consumers
Political marketing and interference	<ul style="list-style-type: none"> ☐ Depoliticise the sanitation service provision ☐ Decision to deploy services to be made by technocrats ☐ Politicians to be briefed about sanitation services and solutions
Ineffective institutional arrangements	<ul style="list-style-type: none"> ☐ Identification of institutions involved ☐ Development /assignment of roles and responsibilities ☐ Development of monitoring and performance criteria ☐ Develop and implement accountability mechanisms
Latitude given to municipalities to decide on several aspects of sanitation provision	<ul style="list-style-type: none"> ☐ Enforce the requirements for involving other institutions and consumers ☐ Develop a stakeholders' concertation mechanism for decision making ☐ Implement accountability measures and system
Lack of skills, competencies and knowledge	<ul style="list-style-type: none"> ☐ Skills and experience appointments process to be implemented (banish political appointments) ☐ Training of sanitation implementing agents ☐ Regular training, skills audit and performance appraisal to be implemented

Lack of enforcement and accountability mechanisms	<ul style="list-style-type: none"> □ Develop enforcement and accountability measures □ Monitoring of the enforcement and accountability measures □ Develop measures and actions to address non-compliance
Internal tension and conflict between the community and their elected leaders	<ul style="list-style-type: none"> □ Develop mediation mechanisms to ease tension □ NGOs/CSOs/CBOs to play facilitator and mediation roles □ Implementation of regular community forums and dialogue
Challenging settlement conditions and patterns, status of the land	<ul style="list-style-type: none"> □ Development of a compendium of informal settlement types and conditions – and applicable services to the context □ The compendium to be disseminated by municipal facilitators and civic organisations □ Develop alternative solutions for unsuitable or difficult settlements
Sustainability of sanitation services	<ul style="list-style-type: none"> □ Develop a compendium of sustainable sanitation solutions □ Disseminate information about sustainable sanitation solutions □ Conduct awareness with regard to cost of FBSan facilities

Conclusion

Although the FBSan policy has been recognised as a progressive policy aimed at addressing the serious sanitation backlog, increasing sanitation backlogs in informal settlements reflect gaps between the progressive policy and practical application on the ground. The disconnection between the policy and its implementation in practice has created a deep divide between municipalities and consumers. Translating the FBSan policy into action remains a subject of contention as many municipalities are failing to ensure that consumers are provided with decent basic sanitation facilities. Several challenges including lack of clarity of the policy, lack of coordination amongst institutions, consumers' expectation, lack of standards and skills shortages have impacted the implementation of the FBSan policy. Municipalities are facing challenges to address the disjuncture between what people believe and aspire to, and what is possible in providing FBSan services. Addressing challenges related to the eradication of the sanitation backlogs in the policy context of FBSan services needs to be grounded in the clarification of sanitation policy, a deep understanding of consumers' needs, challenges and practices as well as settlements conditions, coupled with meaningful consumers' participation at various stages of the decision-making process and coordination amongst institutions involved. Unless

subjective clauses of the FBSan policy are clarified, monitoring, enforcement and accountability mechanisms established and implemented and, consumers are engaged in the decision making processes, the eradication of sanitation backlogs in informal settlements as currently planned may not materialize.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

All authors participated in the project design, data collection and data analysis. They produced and approved the final submitted manuscript.

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