

Challenges faced by a selected construction company collaborating with the Department of Human Settlements in delivering low-cost housing in South Africa

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ABSTRACT

Access to decent housing is a fundamental human right and a critical component of the South African government's commitment to poverty alleviation and improving people's well-being. There is a need for a deeper exploration of the challenges encountered during the development of low-cost housing, as these have an impact on the delivery of the final product, and on the beneficiaries of the houses. This research investigated the challenges faced by a construction company working with the Department of Human Settlements in delivering low-cost housing in South Africa. The study adopted qualitative research approach in order to provide in-depth insights into the study and adopted semi-structured interviews to collect data. The study targeted a population of 37 project managers working at various company sites, from which 20 were selected using a purposive sampling procedure. The study revealed several significant challenges, including bureaucratic processes, financial constraints, limited access to resources, and inadequate infrastructure. Bureaucratic processes involved complex and time-consuming procedures, leading to project delays. The study also identified effects of these challenges, including delays in project completion, compromised quality of construction and final products, and the creation of unsustainable housing solutions. It emerged that key recommendations as stipulated by participants involves promoting active engagement between the client (government) and the contractor (the construction companies), to improve low-cost housing development processes. Based on the findings, the study recommends capacity-building programmes for construction companies, ensuring adequate funding for low-cost housing projects and prioritise timely disbursement of payments to construction companies.

Keywords: Low-cost housing, Construction Industry, Housing Projects, Housing Solutions, RDP Houses, Poor-Quality Housing.

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1. Introduction

Low-cost housing development in developing countries is becoming the panacea for the housing shortages coupled with shrinking income of people (Marutlulle, 2021). To meet the demand for these houses, the government collaborates with the private sector company in order to deliver the needs of dwellers. One of the private sector companies that works directly with the Department of Human Settlement (DHS) towards the construction of low-cost housing operates in two provinces in South Africa. Amoah et al. (2019) mention that low-cost houses otherwise known as RDP houses in South Africa are often synonymous with poor quality, structural defects, and dissatisfied recipients. The issues result from insufficient project management, intermittent donor funding and weak project management applications by private sector companies (Wilcox, Mota, Haffner and Elsinga, 2024). It can be deduced that some of the challenges private construction companies encounter have particularly been a result of their partnership with the DHS.

The provision of low-cost housing is a critical concern for governments worldwide, particularly in developing countries where housing shortage is

rampant (Alfahad, Alabdullah and Ahmad, 2022). In the South African context, the national government is the principal client or contractor for public sector housing initiatives, with the vast bulk of funds coming from various government financing programmes (Nyakala, Ramoroka, and Ramdass, 2021). Such government-funded housing programmes are frequently designed and monitored in South Africa by either private or state advisors who aid with contract preparation, surveillance, and analysis (Adeniran, et al., 2021). The DHS is also responsible for the appointment of private construction companies and it has been working with various construction companies to deliver affordable housing units (Adeniran et al., 2021).

Alaloul et al. (2021) assert that the housing for low-income groups is a global challenge that many developing countries' governments are grappling with. These scholars further point out that there appears to be a lack of an explicit theoretical grounding in this area of study, consequently generalising this area of research to different contexts across social, scientific, economic and often political studies. Furthermore, Daud et al. (2022) argue that there is a dearth of more current and newer research that investigates the

challenges that hamper the provision of low-cost housing arguing for a need to identify and explore these as they hinder quality and efficient provision of low-cost homes despite the rising need for the houses. This study departs from these areas of theoretical weakness within the field of study of low-cost housing.

In South Africa, evidence points to public sector efforts in the provision of housing falling short against the overall demand (Nyakala et al., 2021). Previous studies have attempted to answer questions about the causes of housing shortages which include rapid population growth, increased urbanisation, displacement of people by natural disasters, politics and conflict as well as limited technical resources (Okoro et al., 2023). This study attempts to establish whether these issues still exist and goes further to proffer recommendations to address them.

The study's findings may potentially have practical implications for the delivery of low-cost housing in South Africa. By examining the extent of the challenges faced by the private sector company in the delivery of low-cost housing units, the study provides insights into the factors that hinder the successful delivery of these units. This knowledge is useful for

policymakers, government agencies, and construction companies, as it may assist to develop strategies to improve the delivery of low-cost housing units and reduce the shortages. Further, the study's recommendations may potentially contribute to the development of more effective and efficient low-cost housing delivery models.

The aim of this study is to investigate the challenges faced by construction companies working with the DHS in providing low-cost housing, with a specific focus on a company that operates in the Western Cape and Kwa-Zulu Natal Provinces in South Africa.

The paper is guided by the following key objectives:

- To identify the challenges encountered by construction companies working with the Human Settlements Department in provision of the low-cost houses.
- To offer recommendations on how to overcome the challenges faced by the company during the low-cost houses construction contracts with the Human Settlements Department.

2. Literature Review

2.1 Introduction

The construction industry is a driver of socio-economic development and a key employment multiplier, contributing 5.3% and 7.8% of South Africa's formal and informal sector employment respectively (Department of Trade, Industry and Competition, 2024). The Department further observes that considering this role and position within the economy, the sector's underperformance is screaming at those with economic ears, begging the questions of what could have gone wrong in this high linkage sector and what focal areas need to be a point of departure in the diagnosis (Fayomi, Onyari & Mini, 2024).

It is of the view that the struggles of the construction sector in South Africa cannot and should not be downplayed because it does not only provide houses but also serves as employment engine due to its high labour intensity. Even the advent of the Fourth Industrial Revolution, as disruptive as it can be, has not been able to wipe this sectoral uniqueness from the construction space. According to StatSA (2022) from 2018, the number of people employed in the industry entered a downward spiral mode, declining by 2.9% in 2018, before further tumbling by 16.1% in 2019 and 18.5% in 2020. Although 2021 saw an improvement,

as reflected by the employment loss rate of 2.2%, employment numbers have not been able to reverse or halt the trajectory.

2.2 Challenges confronting the construction industry in South Africa

Construction companies experience numerous hurdles when collaborating with the South African DHS on low-cost housing projects (Fayomi, et al., 2024). These include procurement and contracting issues as reports show that DHS tendering processes are lengthy, bureaucratic and lack transparency (Marutlulle, 2019). This scholar adds that unclear roles and responsibilities also cause confusion. Eberhardt, Birkved and Birgisdottir (2022) state that there exists vast statutes and regulations, which can either propel or thwart the level of construction activity in any country at any given time.

Nyakala et al. (2021) maintain that South African Government has passed many pieces of legislation, which have in turn spawned numerous regulations, giving the impression of over-regulation. These legislations have affected tender and procurement procedures, employment and labour practices, planning permissions and controls, skills development and training

and business practices (Eberhardt et al., 2022). As a result, the development approvals and zoning processes of local authorities are slow and lead to unnecessary holding costs for developers (Ngumbela, Mahlala, Tafeni and Khonjelwayo, 2024).

Access to land is also a challenge as securing suitable, serviced land from DHS continues to delay projects, as administrative hold-ups are prevalent (Adeniran et al., 2021). Marutlulle (2021) further argue that titling issues and environmental approvals further complicate transfers. In addition, Adeniran et al. (2021) uphold that policy and regulatory compliance challenges are experienced where frequent policy shifts and unclear regulations from DHS strain builders' abilities to comply cost-effectively. Overly prescriptive building standards increase costs (Mandiriza, 2021; Ibrahimu and Nwobodo-Anyadiiegwu, 2019).

Further to the issues around land and regulatory compliance concerns, Khowa-Qhoai and Tyali (2024) underscore human settlements require infrastructure to sustain them. In other Words, an area cannot be developed without infrastructure such as electricity, pipe-borne water, roads, streetlights, and sewage disposal systems. According to Mandiriza (2021), the

government of South Africa spends a considerable amount of money on improving its old and depreciated urban and rural infrastructure. Additionally, for smooth progress of the work on site, infrastructure facilities are required and in cases where these facilities are unavailable, a contractor must make provisions for them (Ibrahimu and Nwobodo-Anyadiiegwu, 2019). Ngumbela et al. (2024) lament that this constraint creates a burden for small contractors with limited project resources and capacity.

Adeniran et al. (2021) remark that complying with local municipal laws pushes up pre-construction expenses and prolongs project timelines. Nena, Musonda and Okoro (2021) nonetheless argue that complex and time-consuming regulatory requirements do not pose as much challenges as the shortage of skilled municipal staff to approve the applications.

One of the main consequences of these regulatory compliance challenges is the increased administrative burden and time required to navigate through the regulatory framework (Nena et al., 2021). Ngumbela et al. (2024) explain the process of understanding and meeting these requirements can be arduous, involving extensive documentation, inspections and coordination with fragmented government

agencies. This diversion of time and resources toward regulatory compliance can lead to project delays and increased costs (Migozzi, 2019).

According to Nyakala et al. (2021), financing constraints are also a challenge as DHS disbursement delays releasing subsidies and grants therefore negatively impacting builders' cash flows and ability to pay suppliers/subcontractors on time. In other words, the Housing Development Fund allocated by the DHS to subsidise construction costs has been inadequate given the large housing backlog. These scholars also show that budgets remain constrained despite growing need, leading to housing targets regularly not met. The insufficient funding for low-cost housing projects can be attributed to several factors, including the limited allocation of funds by the government, the high cost of construction materials and labour, and the lack of private sector investment in low-cost housing (Migozzi, 2019). Alabi and Fapohunda (2021) concur with the scholars and further state that insufficient funding by the government has a far-reaching implication including increased cost overruns leading to delays and poor workmanship.

Moreover, the lack of private sector investment in low-cost housing is a

significant challenge faced by construction companies (Ganiyu, Fapohunda and Haldenwang, 2017). A study has found that private sector investment in low-cost housing is limited due to the perceived risks associated with this type of investment, including the risk of low returns and the lack of security of tenure (Okoro, et al., 2023). A study by Durdyev and Hosseini (2018) found that delays in the completion of low-cost housing projects were a major cause of project delays in the construction industry.

Furthermore, the insufficient funding for low-cost housing projects can also affect the quality of the housing units delivered (Ganiyu et al., 2017). Alabi and Fapohunda (2021) argue that the lack of funding for low-cost housing projects often results in the use of inferior building materials and workmanship, leading to poor quality housing units. Amoah et al. (2020) assert that critical to these issues is the failure of construction firms to apply project management principles with the meagre resources available to enhance quality outputs.

Inadequate community participation in the process of low-cost housing has been identified as one factor that is derailing the process (Ganiyu et al., 2017). Concurring with this assertion, Amoah et al. (2019) and

Ibrahimu and Nwobodo-Anyadiegwu (2019) argue that community involvement is a challenge as navigating community expectations, local politics and avoidance of blockades from intended beneficiaries surrounding projects adds to this complexity

Studies show that inadequate coordination and information sharing between government departments, builders, beneficiaries, and municipalities lead to misaligned efforts (Reid, 2023). The author further argue that top-down approaches have resulted in inadequate community buy-in and social compact building. Similarly, Lukhele et al. (2020) opine that differences in priorities between national housing objectives and localised needs sometimes cause tension including violent protest, which can cause irreversible damage to existing infrastructure.

Project risks are increased by constraints faced by new contractors, which presents a barrier to the projects' accomplishment (Fayomi et al., 2024). The failure of emerging contractors to succeed, according to Ncube (2019) is caused by the following issues: financial issues; skill issues; payment delays; lack of access to credit amenities; technical and managerial skills; effective management during the early stages; proper training; entrepreneurial

skills; and resources. The author confidently argue that between 70 and 80 percent of small enterprises fail during the first five years of operation in South Africa. Consequently, construction companies in the housing sector are unable to execute different project management strategies because they lack the essential management capabilities (Amoah et al., 2020).

Moreover, the absence of preparation, oversight, and scheduling of construction projects is determined to be the cause of poor delivery in South Africa (Ncube, 2019). Sachs et al. (2021) however believe the pressures construction firms face in meeting funding, compliance and stakeholder demands significantly influence housing quality. Likewise, a study by Patel (2020) find that funding constraints force cutbacks on materials and design features to reduce unit costs, compromising durability. Khowa-Qhoai, et al. (2024) point out that fast-tracking a project to meet deadlines results in deficiencies as quality assurance suffers.

Noncompliance with technical standards due to regulatory complexity sometimes yields substandard structures vulnerable to weathering (Marais and Ntema, 2018). Subsequently, Migozzi, (2019) notes that unskilled labour is hired to contain costs, increasing defects risk during construction.

Further, the author maintains that there is limited repairs post-handover as developers focus on completing new subsidised units. As a result, research observes rising structural, electrical and plumbing faults within 5 years of completion, which undercuts the goal of lasting low-income housing (Sachs et al., 2021).

Mbande (2020) observes that there is a shortage of skills within the South African skills sector and in state-owned enterprises. According to South Africa's Construction Industry Development Board (CIDB, 2018), public sector capacity is a key constraint on infrastructure delivery and sustainable growth in the South African construction industry. One can draw the conclusion that the lack of public sector capacity has led to an inefficient and cumbersome process of funding construction projects by the government and in some cases, backlogs of more than six months in payments to contractors.

Mandiriza et al. (2021) notes the inability of the South African government to spend allocations received and its inability to evaluate public-private partnership schemes submitted to it for much-needed infrastructure. The number, types, experience and expertise of the available personnel within the client organisation might limit the range of projects undertaken

by a client. According to CIDB (2018), specific issues of concern are the quality of tender documents and specifications and the management of change orders. The CIDB report notes that these factors reflect the procurement capability of clients and their agents.

The employment of new contractors, who are most likely unskilled in the building of low-cost housing, is one of the numerous reasons leading to the poor quality of the final product (Mathebula, 2024). Despite government's well-articulated rising contractor development objectives, Fayomi et al. (2024) affirm that these contractors continue to face significant challenges from project management to quality management. The government often opts for the emerging construction companies mainly because the more experienced ones that have been in operation for long are unwilling to offer their services, citing poor remuneration and delayed payments (Windapo and Emuze, 2022). The constraints encountered by developing contractors impose risks on the projects and offer a barrier to the successful conclusion of the projects. The lack of growth of new contractors has culminated in substandard artisanship and low-cost dwelling quality (Ibrahimu & Nwobodo-Anyadiiegwu, 2019).

3. Research design and methodology

This study adopted qualitative case study approach. Qualitative research refers to the use of descriptions and other verbal cues in collecting data used to explain certain phenomena (Creswell, 2018). According to this scholar, qualitative data is represented either in a verbal or narrative format.

3.1 Research approach and study design

The study adopted qualitative research approach in order to provide in-depth insight into the study. It was also used due to its ability to focus on participants, making the research report valuable and participant-centred and to capture non-verbal data (Braun and Clarke, 2019).

The study used exploratory research design to achieve deep insight into the topic. Casula et al. (2020) mention that one major merit of using this design is its flexibility and adaptability. In other words, this design made it possible to adjust the topic from time to time until objectives of the study were met. Olawale et al. (2023) agree that exploratory study provides rich, detailed and concise report about a phenomenon.

3.2 Study population and sampling strategy

The target population for this study was the employees (project managers) of a construction company based in South

Africa that provides low-cost housing in partnership with the DHS. The study constituted project managers site staff who had the requisite knowledge about the topic in discussion. The target population was 37 in total.

The sampling technique used in this study was non-probability sampling technique, specifically purposive sampling strategy was used. Mweshi and Sakyi (2020) argue that purposive sampling relies on the researcher's judgment in selecting participants who are most likely to provide rich and relevant information aligned with the objectives of the study. In this study, project managers were purposively selected as participants based on their relevance to the research questions and alignment with the study's criteria.

Purposive sampling allowed for selecting participants who possess the necessary expertise, and experience related to the research topic. By including project managers, with direct involvement in low-cost housing projects, the study accessed in-depth knowledge and perspectives. The qualitative sample consisted of 20 project managers from various company sites, all of whom had direct experience collaborating with the DHS.

3.3 Data collection instrument

The study employed one-on-one semi-structured interviews to collect data, a technique widely used in the social sciences to explore how individuals interpret and make sense of phenomena in their contexts (Lobe et al., 2020). According to these scholars, semi-structured interviews provide participants with an opportunity to express their opinions, biases, and attitudes within organisational contexts. In this study, the interviews were conducted with project managers based at different company sites. The study followed a rigorous process and relied on in-person interviews to clarify predetermined queries. This approach enabled in-depth probing and the collection of rich, comprehensive information. The flexible probing style allowed the interviewer to clarify questions and interpret responses when participants' answers were ambiguous, ensuring greater accuracy and depth of understanding.

3.4 Data analysis

Data were analysed using qualitative thematic analysis, in which the information was systematically organised into key themes. This structured approach enhances consistency and rigor in the interpretation of qualitative data (Lester et al., 2020). The use of qualitative thematic analysis allowed the study to identify patterns and organise

them into meaningful categories. This process facilitated the summarisation of key attributes, enabled comparison of participants' perspectives, and revealed unexpected insights.

3.5 Ethical considerations

The study was only initiated upon obtaining approval from the ethics committee of Regent Business School. The study adopted principles and codes of conduct that uphold the ethical standards of voluntary and informed participation, prevention of harm, right to privacy, and compliance with all institutions involved in the study. Participants received a participant information sheet detailing study aims, procedures and risks/benefits prior to consent. Informed consent forms outlining the voluntary nature of participation were signed by all participants. Participants had the right to refuse answering any question and withdraw at any time with no reprisal. To ensure anonymity, pseudonyms were used throughout the study. Lastly, approval was received from the institution's ethics review board prior to commencement of contact with all participants. Written permission to conduct the study was obtained from senior management of the company and signed collaboration

agreements ensured organisation's requirements were followed.

4. Research findings and discussion

Data was presented in themes and sub-themes to address the objectives of this study in relation to the study participants' responses. This section answers the research objective on the challenges faced by construction companies working with the DHS in providing low-cost housing. Based on the findings, two themes were identified together with their five subthemes, which are presented in the following discussions.

4.1. Theme 1: Lack of clear guidelines and procedures for contractors

The study established that contractors were not provided with clear guidelines, procedures and timeframes to guide their projects. Three sub-themes were derived from this theme, which are presented below.

Sub-theme 1.1: Lack of communication and understanding

The study found that the importance of guidelines on construction projects is crucial as it tells the service provider (*i.e. the contractor*) what the expectations by the client (The Department of human settlement) are. The participants indicated that the existing guidelines are somewhat

unclear which makes it difficult to know how the projects should be executed towards the construction of the low-cost houses, to meet client expectations. Asserted participant 1 said:

"We often struggle to get clear and timely information from the DHS. There is a lack of communication channels, and it becomes frustrating when we need answers or guidance"

"Coordination among different government departments involved in low-cost housing projects is poor. It leads to delays, confusion, and sometimes contradictory instructions" participant 16 stated.

This finding highlights the importance of effective communication between the DHS and construction companies. It implies that there may be room for improvement in terms of the department's ability to convey their guidelines and procedures to stakeholders. This finding is in congruence with assertions by other scholars such as Marutlulle (2021) who highlight that administrative issues like effective communication with contractors are to blame for the housing shortages in the country. The findings nonetheless differ from that of Mbandlwa (2021), who argue that issues like constrained budgets, land

reform, and weak organisational structures have hampered coordination and oversight capabilities for low-cost housing construction in South Africa.

This finding also is supported by scholars such as Abubakar (2021:2) who highlights that in the worst case scenarios, the frustration of poor communication and guidelines from the state can cause contractors to shy away from the low-income market altogether. Private contractors seem to prefer projects in the middle- and high-income housing markets, which they complete on time (Ganiyu, et al., 2017).

Sub-theme 1.2: Delays in obtaining necessary approvals

This study found that construction companies experience many delays in the hands of DHS officials from all sections or levels of the department. To begin with, the tender processes take very long to get to appointment of contractor stage. It can take as long as 6 months for the appointment to be announced. Thereafter when the contractor is appointed, there is an agreement contract that must be signed at different levels of the department before it even gets to the appointed contractor.

Participant 4 stated: *"The process of obtaining permits and approvals from the DHS is extremely time-consuming. We*

often find ourselves waiting for months, which delays our projects and increases costs."

Participant 3 stated: *"The time-consuming nature of these processes, bureaucratic red tape, and the delays they experienced, which can significantly impact project timelines and increase costs."*

Similarly, Sekhampu (2020) argue that the lengthy processes in central government processes on housing have been on a consistent increase, directly affecting the provision of services. Sekhampu (2020) and Ramovha (2022) assert that there exist many bureaucratic inefficiencies at state level, which slow down or even hinder the onset and progress of the construction of low-cost housing. This study found that the divisions that must sign off the project can range from the procurement section, various heads of department, finance officers, and the legal department. More so, these divisions can be in different regions/cities making logistics difficult and then this process can then take another six additional months at the very earliest. The study found that a whole year lapses with no physical work having begun on site.

This suggests that the approval process is lengthy and highly bureaucratic as stated earlier, resulting in delays for construction companies. Consequently, Mathebula

(2024) undertakes that these delays have a negative impact on project timelines and lead to increased costs and difficulties in meeting project deadlines.

According to Sebitlo et al. (2022) regarding housing in developing countries, government involvement in the shelter sector ranges from the provision of completed housing units to several forms of supportive measures. In some cases, projects between government and private sector companies end abruptly due to long and complicated bureaucratic procedures and costs. These housing process in legislation, planning, design, financing, construction, and maintenance is unnecessarily too lengthy, complicated and has many unnecessary bureaucratic bottlenecks (Adeniran et al., 2021).

The shortcomings described by these results can also be linked to those of Marutlulle (2021) who mirrors the sentiments of Marutlulle (2019) that declining project completion rates are caused by the government departments' seeming lack of commitment to playing their intermediary role between grassroots housing needs and industry delivery systems hence subsidised housing delivery is always likely to stall.

The participants regarded delays as being key among the challenges faced since they

directly affect timely delivery of projects. The findings cement the notion that while projects are delayed, the social issues around housing balloon. For instance, while a project to deliver houses in an already existing urban residential area, the same area's population continues to receive a population influx through rural-urban migration and migrants from other countries (Fayomi, et al., 2024). At this rate, the entire housing delivery system becomes further constrained.

Sub-theme 1.3: Sourcing quality construction materials for low-cost housing projects

Participants were questioned regarding the procurement processes of materials for building materials. The study found that the lack of clear guidelines by the state towards projects also directly creates a challenge in procurement of good materials. The procurement processes always depend on the amount of money disbursed to contractors, which, in turn, affects procurement. The miniscule amount allocated by the DHS to the contractor per house causes major problems when the contractor must purchase building materials because they must be mindful of what they spend so that they can still make a profit. This results in the contractor purchasing some sub-standard materials to minimise

costs which tends to affect the quality of the end products. Clear guidelines would make it easy to know which supplier to go to who fits the state budget per house. Community leaders at times force the contractor to buy materials from local suppliers citing the importance of local empowerment yet sometimes these local suppliers supply sub-standard materials. These local suppliers also then tend to refuse to address these issues of low-quality products such as blocks and sand.

During interviews, some participants said the following:

Participant 6 said: "The contractor is being forced to use local suppliers who has huge delays to pride blocks and when they are received the quality is not good so we don't use them but contractor can be forced to pay for them."

This does not only affect the progress of project but also the cost of the project.

Participant 18 commented: "The area we are working on is very far from a lot of suppliers so the contractor ends up paying a lot of money just on delivery which may tempt them to buy cheaper materials to cover transport cost. This will then mean the cheaper item might not be of good what quality, but the contractor has no choice because the department of Human

settlement provides limited funds per low-cost house."

Provision of houses to the poor has been one of the major preoccupations of development practitioners across the world especially in developing countries with an aim to ensure economic sustainability and social justice (Nyakala et al., 2021). However, these scholars also note that the poor quality of the materials which have been used to construct houses in housing projects inevitably raise questions concerning sustainability since the houses require constant repair and maintenance (Nyakala et al., 2021).

4.2 Theme 2: Multifaceted bureaucratic inefficiencies

The study uncovered that multiple administrative inefficiencies on the side of DHS is one key factor stalling housing projects. Two subthemes were derived from this theme. The following sections delves into the subthemes.

Sub-theme 2.1: Delays increased costs and reduced housing quality

"A project is viewed as successful in the event that it is finished on time, inside budget and to the predefined quality measures" (Malinga, 2016:25). From the interviews, 70% participants indicated that most delays are caused by reworks that

occur when the inspectors from the DHS take long to certify the work and or instruct the construction company to rework some of the sections. 20% of the participants partly blamed the reworks as the reason for delays.

Specifically, participants had this to say:

Participant 10 retorted: "The construction company is basically funding the DHS from their own pocket to provide the low-cost house to the beneficiary. There are no payments made upfront so that means the appointed construction company is the funder and the department pays back via the invoice claimed which leads to us abandoning work for good or for extended periods".

Participant 11 responded: "From the time the project is announced, or contractor is appointed to the time the physical work on site begins and to completion, material and labour costs go high. So, the quantum amount (price per house) given at appointed should be reviewed yearly to cover the escalation costs, but the department only considers escalations probably every 3 years and this is not working in favour of the construction company."

Participant 14 said: "When the real construction work begins, we need inspectors who must come on site to certify

work so that invoices can be prepared and submitted. Some inspectors have no or little experience and have ridiculous and unrealistic expectations."

The bureaucratic inefficiencies experienced by construction companies often result in increased costs for low-cost housing projects (Amoah, et al., 2020). Likewise, Migozzi (2019) articulates that delays, rework and the need to rectify quality issues adds to the overall project expenses, making it even more challenging to provide affordable housing solutions within the allocated budgets. Similarly, one of the most common delays mentioned in the literature review is that once invoices have been submitted, they must move between departments to be certified and approved before payment is done (Abubakar, 2021:35).

Ngumbela et al. (2024) point out that at times the delays are genuine due to clarity but other times it is just officials not doing their work on time. Based on the finding, we can argue that these delays all have a negative impact on progress on site and therefore affect the time the project will be completed. Thus, Mhlongo et al. (2022) report that there is a decline in low-cost housing project completion rates, there are often cost overruns, leading to substandard

structures and strained developer partnerships.

Sub-theme 2.2: Sourcing of poor-quality materials

Financial constraints and difficulties in sourcing quality construction materials had a direct impact on the quality of low-cost housing units. Participants mentioned that they were sometimes forced to use substandard materials or compromise on construction standards due to limited resources, negatively affecting the durability and safety of the housing units. One can argue that this ultimately contradicts the concept of what a low-cost housing should be as it should not be a low-quality house but rather a decent house that is strong, safe, and secure despite having been built using cheaper means or government subsidies (Ghani and Suleiman, 2016).

Similarly, scholars define low-cost housing as “a new concept which deals with effective budgeting and following of techniques which help reducing construction cost through the use of locally available materials along with improved skills and technologies without sacrificing the strength, performance and life of the structure” (Barot, 2021: 12).

Furthermore, the South African government itself defines a low-cost house, as a home that the government provides to people with low incomes through various housing subsidies with the understanding that such homes should not represent subpar performance (Department of Housing Settlements, 2014/15). However, one can argue that this definition contradicts the poor-quality of houses which are being produced because of bureaucratic inefficiencies and financial constraints experienced by construction companies in the South African context as evidenced by this study.

Succinctly, participants had this to say:

Participants 9 and 11 said: *“We are sometimes forced to use substandard materials or compromise on construction standards due to limited resources, negatively affecting the durability and safety of the housing units.”*

Manomano and Tanga (2018) assert that the delivery of low-cost housing is often hampered by various challenges, including inadequate funding, limited resources and cumbersome regulatory requirements. Moreover, the quality of low-cost housing is often compromised due to the use of inferior building materials and inadequate workmanship (Migozzi, 2019).

5. Recommendations and Conclusion

5.1 Recommendations

Based on the findings, this study recommends the following practices:

- The DHS should invest in capacity building programmes for construction companies, providing training and skills development opportunities to enhance their ability to deliver high-quality low-cost housing projects.
- The DHS should ensure adequate funding for low-cost housing projects and prioritize timely disbursement of payments to construction companies. Timely disbursements of finances to construction companies will help to procure building materials in time and complete projects in time. This would benefit the government by helping them saving money that is always spent in renovating faulty houses.
- The DHS should explore innovative financing mechanisms, such as public-private partnerships and access to low-interest loans, to attract investment and support sustainable housing initiatives. Initiatives like the private public

partnerships are always favourable as the public get better and more effective services whilst the private sector gets new business opportunities. In this instance, the private sector will help finance the construction of houses by getting loans (debt) or attract investors and private sector's skills can supplement government institutions' existing in house skills.

- The DHS should allow easy access to resources. Efforts should be made to improve the availability and accessibility of construction resources necessary for low-cost housing projects. The DHS should explore partnerships with suppliers to ensure a reliable supply chain of quality construction materials at affordable prices. Providing incentives, such as tax breaks or subsidies, can also incentivise construction companies to adopt environmentally friendly and cost-effective construction methods.

5.2 Conclusion

In conclusion, this research highlights the critical issues faced by construction companies working with the DHS in providing low-cost housing. The findings emphasise the need for comprehensive strategies and interventions to address the challenges and improve the efficiency and effectiveness of low-cost housing projects. The recommended measures aim to enhance coordination, resource availability, and sustainability in the provision of affordable housing. The conclusions drawn from this study contribute to the body of knowledge surrounding the challenges

faced by construction companies in collaboration with government departments in addressing housing needs.

Overall, this research study provides valuable insights that can inform policymakers, construction companies, and the DHS in developing strategies and implementing measures to overcome challenges and improve the provision of low-cost housing. By addressing these challenges, efforts can be directed towards ensuring that affordable and sustainable housing is accessible to all, ultimately improving the lives and well-being of marginalised communities.

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