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A co-production model for the South African housing sector

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Background: The public housing delivery practices in South Africa are fragmented, resulting in various outcomes concerning housing delivery. There is a pressing need to overhaul public housing delivery that puts citizens at the core of the delivery process.

Aim: The current state-led model of delivering housing is not effective and by design, the model for housing delivery should include the participation of beneficiaries. The aim was to develop a co-production model for housing delivery.

Setting: The article focused on the housing sector in South Africa.

Methods: A qualitative research approach and grounded theory as research design was used. Instruments were document analysis and semi-structured interviews with participants who are stakeholders in housing co-production. Data collected was analysed through inductive thematic analysis.

Results: The results suggested a self-reliant approach to housing delivery, which is demand driven with the state as a facilitator and not the provider of housing. The model for housing should have a component that does not perpetuate a culture of dependency and entitlement but promotes the concept of co-production.

Conclusion: The article explored the possibility of introducing a co-production model for housing delivery model in South Africa. It was established that the role of government must shift to that of an enabler and facilitator instead of a provider of housing.

Contribution: This proposed model contributes towards the body of knowledge in terms of promoting public service delivery and performance (in this instance in the housing sector) in South Africa as a country situated in Africa.

Keywords: co-production; collaboration; public participation; public housing delivery; human settlements delivery.

Introduction

Access to adequate housing is a fundamental human right, essential to human dignity. In South Africa, the right to access adequate housing is enshrined in section 26 of the *Constitution of the Republic of South Africa*, 1996. The country faces a growing challenge to provide suitable and adequate housing for all citizens (Marutlulle 2021). Globally, this right is a core objective of the United Nations Sustainable Development Goals, particularly Goal 11, which calls on governments to 'implement inclusive, resilient and sustainable urban development policies and practices that prioritize access to basic services, affordable housing, efficient transportation and green spaces for all' (United Nations Sustainable Development Goals Report 2023).

> [G]lobally, the housing need is most acute in Africa, where the population will more than double by 2050, predicted to increase from 1.2 billion in 2015 to 2.5 billion by 2050. (Tusting et al. 2019:391)

Veras (2018) argues that African cities are among the world's poorest. The sluggish economic growth in African cities indicates a challenge regarding their resource base and ability to build and maintain adequate infrastructure and public services for their growing populations.

Like many countries, South Africa is increasingly facing financial difficulties and because of financial constraints cannot afford to continue providing free houses (Amoah 2023:218). Amoah (2023:218) argues that many African nations have low-income levels; therefore the majority of the population cannot access finances privately to buy homes and must rely on the national

government for housing. At the same time, other pressing social needs, such as health and education, strain the already overstretched fiscus (Gumbo & Onatu 2015:6).

According to Sobantu, Zulu and Maphosa (2019):

> [*I*]t is highly unlikely that many low-income South Africans will realise their dreams of owning their own houses with over 13.4% of the population still locked in informal settlements, post democracy. (p. 6)

Jacobs, David and Stiglingh-VanWyk (2023:8) state that housing shortages in South Africa have led to land grabbing and the building of shacks. In the Gauteng province alone, Jacobs et al. (2023:8) estimate that 300 000 people, including students coming to attend tertiary institutions, are migrating annually to the province, adding to the housing crisis. Consequently, there are 1.2 million people who could not be accommodated on the housing budget allocated.

The emphasis for co-production in Africa, according to Shand (2018), is:

> [*N*]ecessitated by the current increase in urban development, where the magnitude and complexity of poverty far outweigh the financial and human resources of governments to meet the housing needs of its people. (p. 519)

There is a need for public sector improvement and innovation in how the state delivers housing because of the shrinking fiscal space and the growth in housing demand.

Part 1, section 2 of the *Housing Act of* 1997 (Act 107 of 1997), outlines the general principles applicable to housing development. Principle 1(b) calls for the meaningful participation of individuals and communities affected by housing development, while principle 1(l) calls for facilitating active participation by all relevant stakeholders in housing delivery.

Housing delivery has not been successful because the needs and priorities of those who should receive housing have not been considered in developing housing programmes and projects. The quality of houses provided, poor or limited supervision, and inappropriate construction project management techniques have also been a challenge (Amoah 2023:217).

The public housing delivery practices and philosophies are fragmented, resulting in different outcomes. The South African public housing delivery is performed through various programmes; some are contractor-driven, some with beneficiary involvement and some private sector driven (Millstein 2020:291). All of these programmes have different outcomes where effectiveness and efficiency are concerned. Thus, there is a need for a complete rethinking of the public housing delivery orientation that puts citizens at the core of the delivery process.

How officials of the state facilitate their relationship with citizens leaves much to be desired, often leading to service delivery protests. The protests often reflect community frustration and are a way of getting attention from officials responsible for service delivery, pointing to the lack of meaningful consultation and communication where service delivery is concerned.

Literature review on co-production

The concept of co-production, according to Brandsen, Steen and Verschuere (2018:4), was started by Elinor Ostrom in the 1970s. Boyle and Harris (2009:11) have defined co-production as the delivering of public services in an equal and reciprocal relationship between the service providers and the users of the services. In expanding on the work performed by Elinor Ostrom, Alford (2014:301) studied the multiple facets of co-production and argued that in the 'co-' side, co-production focuses on who the co-producers are beyond consumers and what induces them to co-produce, whereas in the 'production' side, co-production examines the extent to which any given type of value created by co-production is collective or mutually beneficial.

Collaborative housing and co-production

According to Van Gestel, Kuiper and Hendrikx (2019:3), it is becoming more widely accepted in literature and practise that society's complex, 'wicked' problems require more intensive service delivery, not just from management and professionals but also from the citizens. In housing, very few people might argue that it would not be ideal for citizens to be actively involved in their living environment.

Collaborative housing, community-led, resident-led, participative-housing or co-housing, are interrelated terms to refer to collective self-organised housing, according to Niva et al. (2022:971). Ledent (2022:889) mentions that Western Europe has recently experienced a resurgence in interest in collaborative housing because of its bottom-up participation processes that result in demand-driven housing, a contrast from the traditional housing developers top-down, supply-driven housing that hardly ever fulfils the needs of citizens or customers. Equally, in the Global South, co-production has begun to acquire traction, following several well-known urban planning concepts such as participatory planning or self-help housing (Galuszka 2019:143).

In the Global South, Niva et al. (2022:973) provide the example of Thailand and argues that the role of government in Thailand has significantly changed from that of a provider of housing, to a facilitator of locally driven housing co-production. This is performed through the Community Organisations Development Institute (CODI): a low-income housing loan provider in the metropolitan areas. At its core tenet, the CODI's belief is that communities should identify their own needs and drive the development processes.

In Kenya, the grassroots movement Muungano wa Wanavijiji (MWW) (Swahili for united slum dwellers), a federation of slum dwellers, was established in 1996 by more than 60 000

households in over 400 informal settlements as an effort by the underprivileged urban populations to fight forceful evictions from the Kenyan government (Ettyang 2011:148). Similar to co-production, the MWW's approach, according to Ettyang (2011:148), is centred on harnessing the communities' resources and utilising the pool of resources to leverage for partnerships and additional resources from government and community-based organisations.

According to Ettyang (2011:149), the work that the MWW is doing with communities is a clear indication that people are not helpless and that given an opportunity, communities can offer solutions that foster inclusivity and co-ownership of outcomes. The process of inclusive development has significantly reduced costs because of the inclusion of sweat equity, the use of replicable building materials, the use of low-cost building technologies and incremental housing methodology.

This article is focused on exploring the concept of co-production in housing to increase user involvement and improve public housing delivery outcomes in South Africa. However, the introduction of co-production as part of delivering human settlements may require re-evaluating and repositioning the government's current approach towards public housing delivery. This could involve changes to existing administrative, structural or even political processes within the Department of Human Settlements in South Africa to enable effective co-production of housing with citizens.

What causes citizens to co-produce?

According to Brandsen and Helderman (2012:1141), what causes citizens to co-produce and make citizens interested in actively participating in their living environment remains an area of ongoing research. According to Alford (2009:28), from the volunteer perspective, there are different motives for people to engage in co-production, and they are intrinsic, social and normative, along with material rewards. Alford (2009:28) cautions that while different motives exist for co-production in different contexts, the heightened public value consumed by clients adds complexity to these motives.

Pestoff (2012) argues that when exploring the issue of citizen participation, two issues are paramount: ease of involvement and motivation for involvement. The inclusion of ease of involvement is an important consideration because, according to Pestoff (2012), the more complex or greater the effort required to participate in co-production, the less likely an individual may be to participate, depending on the issue's salience.

Ease of involvement includes issues such as the distance between the individual wanting to co-produce and the service provider and access to information. The less a person knows about a project, the less likely they are to participate. Pestoff (2012) states that before an individual participates in co-production, they first calculate the transaction cost of participating. The service provider should thus ensure that they reduce this cost in terms of time and effort required to participate to see an increase in the involvement of service users.

According to Van Eijk and Steen (2016:30), one of the first steps in the individual's consideration of whether to participate depends on the issue's salience. Salience refers to 'citizens perceiving a topic as important enough to consider active engagement and weighing the investment of effort' (Van Eijk & Steen 2016:30). Pestoff (2012) argues that salience is distinguished between personal salience and societal salience, wherein the former refers to the consideration by an individual of how the issue affects him or her personally and how they stand to benefit from it. The latter refers to consideration by an individual of how the issue affects the community.

Forms of co-production

The forms of co-production are differentiated based on the benefits they provide, as well as the overlap between the activities performed by the producers and the consumers of a service. According to Brudney and England (1983:63–64), there are individual, group and collective forms of co-production. At an individual level, co-production happens through activities undertaken by individuals for their own benefit. Group co-production involves voluntary, active participation by several citizens and may require formal coordination mechanisms between service agents and citizen groups.

Collective co-production, also known as public co-production, rejects the traditional view of the service delivery process in which the government (the server) delivers services to a largely inert populace (the served) (Brudney & England 1983:63–64). Collective co-production emphasises direct citizen involvement in public service delivery processes. Activities under collective co-production can be undertaken individually or in groups, but the result in benefits is enjoyed by the whole community (Alford 2014; Pestoff 2014).

Assumptions about co-production

Some of the assumptions related to co-production and its effects as defined by Vanleene, Verschuere and Voets (2015:13) are based on an analysis of 20 out of 87 articles on co-production that were reviewed between the year 2000 and 2015. Based on the assessment, Vanleene et al. (2015:13) subdivided the assumptions on co-production into three clusters, namely better services; better relationships between citizen/client and professional organisations and better democratic quality (in a public sector context). However, Brix, Krogstrup and Mortensen (2020:170) argue that because co-production is a complex social phenomenon. To assess the causal relationship between co-production and the effects thereof, one must use a generic programme theory to guide the evaluation of co-production as an intervention.

The generic programme theory for co-production

To provide an analytical framework that can be used to create, implement and assess local co-production efforts, a generic co-production programme theory can enable the translation from current research to local contexts (Brix et al. 2020). A generic programme theory is often context dependent when being operationalised locally. Brix et al. (2020:174) developed a generic programme theory template of co-production, and this can be as illustrated as follows:

The context variables, as outlined in Figure 1 serve as evidence that there could be so many things that set each project apart from another, and all of these are critical in evaluating an intervention. Co-production as a collaborative housing delivery approach is considered a complex problem because the formula has limited application. While experience with one project may give experience, it does not guarantee success with another. Success cannot be guaranteed because every person and community are unique; therefore, interventions always have an uncertain outcome (Brix et al. 2020:174).

Rogers (2008:30) contends that responses to complex issues, such as meeting housing needs, require thoughtful and holistic approaches. The study undertaken by Czischke (2018) on collaborative housing, indicated that collaborative housing provision approaches rely on stakeholder participation with clear roles and responsibilities and users playing a central role. The challenges identified by Czischke (2018:77), which may lead to the non-achievement of intended outcomes, are the inability of professionals to engage constructively with service users and work around their capabilities with respect to knowledge and skills.

According to Van Gestel et al. (2019:2), co-production does not always result in the anticipated improvements and, if improperly managed, can even have the opposite effect. According to Tuurnas (2015), one of the causes for co-production to have the opposite effect is the inability of professionals to initiate and participate in co-production processes where they must accept and utilise resources such as non-professionals experiential knowledge.

Research methods and design

This study draws on the qualitative grounded theory and key informant interviews to solicit information purposively from 24 participants who are stakeholders in housing delivery. The grounded theory was used to explain and understand social phenomena based on people's life experiences towards the generation of a theory (Zhang et al. 2020:92). The participants comprised nine members of the Human Settlements Technical MinMEC referred to as MinTech 1-9 and 15 representatives of non-governmental organisations (NGOs) and institutions working on human rights issues and housing and human settlements.

The Human Settlements Technical MinMEC comprises the South African Local Government Association, the Director-General for the National Department of Human Settlements, as well as the Provincial Heads of Department or their nominated representatives from the provincial Departments of Human Settlements. This article excluded input from the Eastern Cape Provincial Department of Human Settlements as well as the Free State Department of Human Settlements. The Technical MinMEC was selected because it is the highest structure responsible for submitting policy proposals on housing and human settlements and the NGOs were selected to represent the voice of the people in
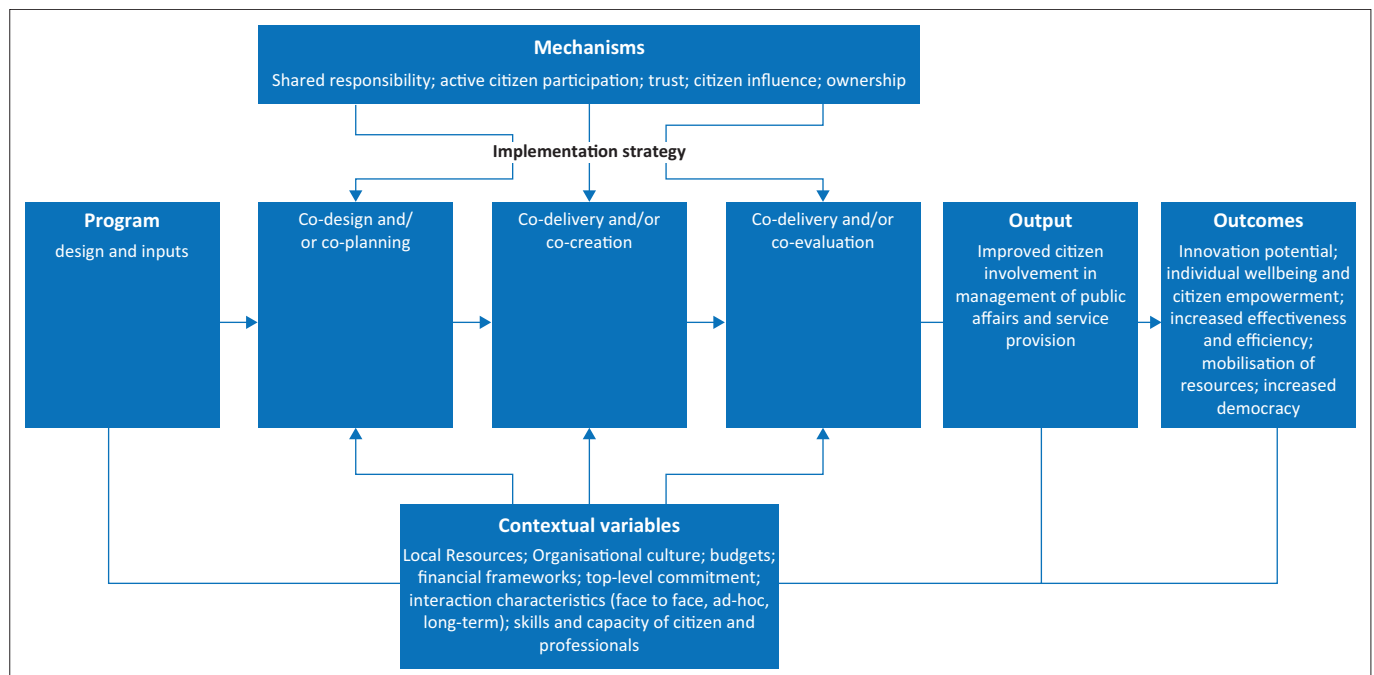
Source: Brix, J., Krogstrup, H.K. & Mortensen, N.M., 2020, 'Evaluating the outcomes of co-production in local government', *Local Government Studies* 46(2), 175

FIGURE 1: Generic programme theory for co-production.

need of adequate housing. The Institutional Review Board at a large Gauteng public university approved the research.

Data collected were analysed through inductive thematic analysis following the six-step thematic analysis by Braun and Clarke (2006:87) outlined in Table 1.

As indicated in Table 1, the analysis began with the familiarisation with the data. The familiarisation happened through the collection of data through interviews and the transcription of the interviews. In this first step, the data were put into an organised format by searching for and identifying patterns and meanings within the data (Braun & Clarke 2006:88). In the second step, following the compilation and organisation of data, the data were separated into meaningful groupings. This process is referred to as coding. Within this step, initial codes were generated in a meaningful and systematic manner (Braun & Clarke 2006:88). As a result of the substantial amount of textual data, the software programme used was ATLAS.ti v22: a qualitative data analysis software program. The ATLAS.ti v22 software allowed the authors to manage the data as well as develop initial codes and to merge certain codes.

As a third step, in the searching of the themes step, the codes or categories to which each concept is mapped were put into context with each other to create themes as suggested by Braun and Clarke (2006:89). Themes demonstrated important aspects of the data in relation to the research aims and objectives, as defined by Braun and Clarke (2006:89). According to Braun and Clarke (2006:91), coding is an ongoing organic process; therefore, in the fourth step the authors reread the entire data set for two purposes: firstly, to ascertain whether the themes 'worked' in relation to the data set, and secondly, to code any additional data within themes that had been missed in earlier coding stages.

As a fifth step, each theme identified was defined and thus distinguished the essence of what each theme is about (Braun & Clarke 2006:92). As the last sixth step, the report was generated from the data collected. The report is categorised into three themes, which contain extracts generated from the

TABLE 1: Steps of thematic analysis.

Step	Description of the process
Familiarising yourself with the data	Transcribing data (if necessary), reading and re-reading the data and noting down initial ideas.
Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set and collating data relevant to each code.
Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
Reviewing the themes	Checking if the themes work in relation to the coded extracts (level 1) and the entire data set (level 2) and generating a thematic 'map' of the analysis.
Defining and naming the themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, and then generating clear definitions and names for each theme.
Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, thereby producing a scholarly report of the analysis.

Source: Braun, V. & Clarke, V., 2006, 'Using thematic analysis in psychology', *Qualitative Research in Psychology* 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

interviews to demonstrate the prevalence of the theme and serve as evidence of the theme.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of Pretoria Faculty of Economic and Management Sciences Research Ethics Committee (No. EMS035/22).

Results

This findings section discusses the study's key findings. It contains categories that relate to how the selected population sample defines co-production and human settlement delivery, their perceptions regarding the sustainability of the current model of delivering human settlements, as well as their perception on imperatives for a successful co-production model for human settlements in South Africa.

Perceptions regarding the sustainability of the current human settlement's delivery model

The perception from the respondents suggests that people do not have an equal opportunity to gain access to housing because of the interference with and manipulation of the 'waiting list'. The waiting list is a database wherein people register their housing need. The waiting list is, however, viewed as a 'cruel myth designed to pacify the homeless' (Kumar 2022). This is largely because the housing demand continues to increase while delivery is decreasing. In the Gauteng Province, the housing waiting list has increased to 1.2 million according to Sobuwa (2022). This is an indication that many people will continue to be on the waiting list for decades. The City of Cape Town projects that it will take 70 years to eradicate the housing backlog and some people will likely pass away without being allocated a house (Kumar 2022). This was in contrast with the first principle on equality with respect to sustainable development by Surya et al. (2021:7). The principle of equality refers to all people having the same opportunity to gain access to housing, infrastructure and resources. Concerning the sustainable development principles outlined here, the respondents understood the concept of sustainability differently and focused on different elements that constitute the concept. However, what was evident is that all the respondents representing the NGOs believed that the current approach to delivering housing and creating human settlements was not sustainable: a sentiment shared by most respondents from the Human Settlements Technical MinMEC. Their inputs will be discussed next.

Concerning the equality aspect of sustainable development, NGO-5 indicated that the approach does not give equal access to housing, infrastructure and resources to all because of the length of time it takes for poor people to receive assistance, as provided in the following quotation:

> 'It is obviously not sustainable if it takes people living in informal settlements 20 years at best before they can actually see a significant improvement, not just in terms of basic services, but in terms of living in neighbourhoods that are functional, fully developed, with quality housing and so forth.' (NGO-5)

In addition to the time it takes to receive basic services or a house from the government, NGO-10 believed another challenge is the uncertainty of when one can expect assistance following their registration on the housing needs register or the so-called 'waiting list'. This uncertainty has emanated from housing provision to young people, who registered their housing needs in the late 2000s, while there are old people on the waiting list since 1996 who have not yet received housing. Therefore, it is believed that there are no equal opportunities to access housing:

'The other problem that comes about in this approach is also related to the beneficiaries themselves and how people attain that house eventually. There is also I think a lot of confusion about the existence of a list in sort of like a chronological order where I would be placed on number 15 on that list, and then so when the state has 20 houses available, then I should definitely get that house. But then we find that there is not necessarily such a chronological list or numbered list where people actually know what number they are.' (NGO-10)

The second principle is that sustainable development must advocate for the needs of the poor. The NGOs believe that the current approach to delivering housing and creating sustainable human settlements is not pro-poor and likened it to forced removals during the apartheid regime:

'[I]f you are talking about creating sustainable communities, you need to involve people through the process, the kind of contractor-driven approach where people are called from the waiting list and told 'your house has been constructed come and fetch your key' is akin for me very much to what we saw previously in forced removals. The approach essentially tells somebody: 'here is a house if you do not take it now, chances are you are never going to get an opportunity again'. So, you might live 30 kilometres away, 45 kilometres from the current housing development and all your social networks, all your children's schooling and your connections will be very far. We often see that and so people take those opportunities because they know they will not get the house again. But it does not mean they will necessarily thrive in that settlement. They are essentially forcibly removed from where they are staying into a new community without a capacity building or a social development component that is entrenched in the process.' (NGO-7)

The contractor-driven approach to housing delivery without the involvement of beneficiaries therefore appears not to contribute towards creating sustainable communities.

The opinion of NGO-7 is critical because as a result of the lack of consultation and the consideration of people's socio-economic conditions, it is found that the people who have been allocated a government-subsidised house are not the ones who live in those houses. In many instances, the beneficiaries vacate their houses for various reasons, such as the school that their kids are enrolled in is far from the area or the houses are far from their places of work or they use the houses to generate income. This has also led to unintended consequences regarding the issuing of title deeds, where the government is struggling to find beneficiaries, as the houses are now 'owned' by either foreign nationals or South Africans who did not meet the criteria for housing subsidy allocation. This will be unpacked in the discussion about the financial

and economic aspects of the unsustainability of the current approach to delivering housing.

This is supported by the following statement:

'[N]ormally when I attend all the housing conferences, I remind them they have created a challenge for the Department by creating this dependency. Almost 70% of the houses provided by the government do not belong to the owners per se. Some have rented them out; some have sold them and went to squat again. Some have turned them into business areas so you can imagine many people are not even improving them when the windowpane breaks down, they will go back to the municipality and say I need a windowpane. This means that those houses do not belong to the beneficiaries, they belong to the government because they cannot take care of them.' (NGO-11)

The current approach to delivering housing and creating sustainable human settlements was further criticised for the lack of addressing the needs of those who fell below the poverty line, by sticking to an outdated criterion and not factoring inflation into its financial exclusion:

'[I]f we were to focus on one programme (FLIPS) which is breaking new ground, but it is unsustainable. So, we are only providing for a certain portion of South Africans who are earning less than R3500.00, but I doubt in terms of the other programmes, it has done much in responding to the needs that are sitting there. Also, when we look at when the threshold of R3500.00 was set out, many years ago, a lot of people today have entered the poverty bracket instead of moving away from poverty brackets. So, you have more people that are economically disadvantaged.' (NGO-10)

The impression from NGO-10's opinion is that the narrow focus on one group of beneficiaries when the housing needs are vast is limiting and self-defeating. NGO-10 refers to the Finance Linked Subsidy Programme (FLISP), which is a finance-linked subsidy that is meant to offer support to those citizens who not only earn too little to qualify for bank-financed mortgages but also earn too much to qualify for government housing subsidies. According to NGO-10, the FLISP Programme, now known as the First Home Finance (FHF) Programme, is not receiving the attention it deserves, while many people are falling within the gap market who require housing.

The NGO sector further believed that the current housing delivery approach and delivery of sustainable human settlements falls short in attaining social-, economic- and environmental goals:

'[T]he current human settlements delivery approach is unsustainable due to population growth and rapid urbanisation. Population growth and urbanisation has led to an increase in the demand for affordable housing, while there is a waiting list stretching for decades". NGO-1 also cited "the damage caused by the COVID-19 pandemic and the subsequent impact it had on the reprioritisation of the budget which was meant for housing, was devastating." NGO-1 believed "that the whole delivery approach is not informed by the needs of the intended beneficiaries, citing a mismatch between the product the government is bringing and what people need. The Jika Joe Project is a case in point, where the

government has built community residential units [*CRUs*] without proper consultation and participation of the people in the informal settlement. Many of the people in the Jika Joe Settlement did not meet the criteria to be in a CRU, which led to tension between the government and the residents of the informal settlement. As a result, "the flats were sitting there like a white elephant."' (NGO-1)

According to NGO-1, the Jika Joe Settlement should teach government officials that excluding the citizens, community and intended beneficiaries in any development because of the 'we know best approach' does not lead to desirable outcomes. Considering the shrinking budget for housing and the increase in demand for housing, careful thought must be given to where the limited government resources are spent. Government officials must be certain that every expenditure of taxpayers' money is incurred to meet the basic needs of the citizens of South Africa. The needs must be prioritised from the communities themselves and not from the government officials because while the CRUs might be a national priority programme, they must be delivered in areas with a demand for them:

> '[*T*]here are no adequate resources in terms of demand and supply, the demand is extremely high, and the supply is very low as the national government always provides the budget and then distributes it into the country, through provinces and then to local municipalities. Therefore, the width and depth are big, and the government stretches itself out so far, but it cannot meet or reach the demand.' (NGO-8)

The inability to meet the demand, according to NGO-9, requires the government to reprioritise and focus more attention on its informal settlements upgrading programme rather than the delivery of 'free housing', because it is becoming more unsustainable to do so. NGO-3 concurred that even a 'rental assisted' type of housing is also unsustainable for two reasons:

> 'One is that the Department of Human Settlements tells you who should move in there, how much rent should be charged and many other aspects you must comply with. Secondly, when your tenants refuse to pay rent, you cannot evict them. If you want to evict them, you are on your own in terms of carrying the cost. Based on these reasons, a lot of investors pulled out and said social housing is not for them because you do not see profits, yet the risk is way too much to comprehend.' (NGO-3)

NGO-10 argued that the strategies and policies are still lagging in terms of moving with the modern approaches to housing delivery. The bigger problem that stands in the way of sustainable approaches is the government's approach to housing intervention; about its ability to empower the beneficiaries with skills that will enable them to build their communities and uplift their own livelihoods. The current approach was heavily criticised by NGOs-1, 3, 4, 7 and 11. The current approach was criticised for its tendency to create dependency on the state and not to promote active citizenry as outlined in the National Development Plan:

> '[*M*]any South Africans would tell you that we have never asked for housing, we have never demanded the housing that we were

promised; it was imposed on us and when we began to kind of own this dependency that has gotten into us and to a point that we are now demanding. That dependency was created. Unfortunately, the government would have to find ways to undo that thinking.' (NGO-4)

This is an important point to consider and closer attention must be paid to who are the real beneficiaries of the government housing programme, whether it is the poor households or the private businesses who get given tenders for the construction of government-funded housing units. Further questions must be probed as to why there was a decision to provide housing when people were not proven incapable of building their own houses.

During the apartheid regime, literature states that many poor families were displaced and forcefully removed from towns and cities to live in rural homelands (Strauss 2019:150). Therefore, the immediate programme following the attainment of democracy should have focused on land restitution and not the RDP housing programme.

The third principle is sustainability, which according to Surya et al. (2021:7), means achieving social, economic and environmental goals, and the fourth principle is empowerment, which is community involvement throughout the processes.

The perceptions of the Human Settlements Technical MinMEC members regarding the sustainability of the human settlements' delivery approach were not too far from those shared by the NGOs:

> '[*T*]he crux of the matter is that the product that we deliver which is a house in the main, even though it falls within the whole concept of creation of human settlements, there is only going to be less and less as we advance and possibly, we will get to a point where it is just impossible to deliver even 20 000 housing opportunities. Possibly in the future, our target would be 5000 and that is just because of the constraints.' (MinTech-9)

The constraints listed by MinTech-9 are that the government has been putting too much focus on Breaking New Ground (BNG) subsidised housing and other programmes such as rental housing have not received much attention. MinTech-9 indicated that when taking into consideration that:

> '[*T*]he country has not been doing well in terms of its GDP growth over the years and we can trace that the housing allocation I think across the provinces has just declined consistently over a period of over 10 years. Construction costs have escalated, the housing need or demand has increased, the waiting list is a moving target because of population growth and more people entering the poverty bracket due to high levels of unemployment. Government is chasing a moving target and will not be able to meet this demand with its current model and prioritisation of "free housing" versus other programmes.' (MinTech-9)

To avert the constraints listed by MinMEC-9, the Technical MinMEC members referred to a decision taken by the

MinMEC to prioritise designated groups and no longer give houses to anyone who meets the criteria:

'[W]e recently at MinMEC decided to say how we are delivering on our mandate is not fiscally sustainable, and for that reason, a decision has been taken that in the delivery of top structures, priority should be given to the elderly, child-headed households, people with disabilities and military veterans, and then allow the others that fall outside of that designated group to build houses for themselves. So, I can say that the way we have been delivering human settlements in the past periods, has not been fiscally sustainable, hence the decision to you know rather to prioritise those designated groups.' (MinTech-6)

MinTech-7 also agreed that the government cannot afford to build everyone a house because of the fiscus that is under severe pressure and further stated that:

'[T]hose ones that can afford to, must build their own houses and we should avail sites that are serviced at a cost also not just free of charge, because there must be revenue that municipalities must also generate in that regard.' (MinTech-7)

The proposal to provide serviced sites at a cost is an interesting dimension to developing a sustainable model for delivering human settlements. This proposal is worthy of further interrogation and exploration.

Several recommendations for strategies towards a sustainable approach to delivering housing and creating sustainable human settlements were suggested by members of the Human Settlements Technical MinMEC and they are as follows:

MinTech-6 indicated that the mushrooming of informal settlements in urban areas is telling that more people are now going to the cities in search of work opportunities; therefore new innovative ways must be introduced to meet the demand for affordable housing:

'[W]hat will lead to the sustainable creation of human settlements is declaring priority development areas where different sectors come in within a particular area and then invest in that settlement, similar to the District Development Model (DDM) approach.' (MinTech-6)

The DDM approach requires close collaboration between the spheres of government so that the communities are empowered economically by different government sectors through the crowding of investment. This will create economic opportunities that will make the settlements sustainable. Still, it requires the involvement of all the role players, not only the government but also the private sector, to ensure the beneficiaries that the delivery of housing of human settlements is sustainable, vibrant and that the issue of resilience is there.

According to MinTech-8, the government should only provide subsidised houses to elderly people who are 60 and above who need housing. The government must prioritise child-headed households and people with disabilities. There are not too many of these designated groups; therefore the

current housing backlog can be cleared. The bigger part of the human settlements development grant, according to MinTech-8, must be used to catalyse the private sector. As an example, MinTech-8 indicated that 60% of the human settlements grant could be invested in the provision and installation of bulk infrastructure and then get the private sector to build houses. The whole of Durban North, according to MinTech-8, 'has been transformed beyond recognition through the adaptation of this model, adapted from Colombia, precisely because the government focused on what they needed to focus on'.

Min-Tech-1 argued that only two things could promote sustainability in the human settlements sector: firstly, securing land and empowering communities to build on their own, which could help reduce the backlog. Secondly, the spatial targeting through the Priority Housing and Human Settlements Development Areas (PHHDAs) could also lead to a bit of efficiency and therefore making our citizens' town slightly more manageable from a financing point of view, from a governing point of view and just from the amount of time that people spend financially and time wise trying to commute to places of opportunity.

Perceptions on long-term outcomes if co-production is used as a housing delivery model

Bovaird (2007) states that one of the benefits of co-production is that co-production allows for the transfer of some power from state actors to lay actors, and therefore it is expected of all parties involved to have a legitimate voice.

The NGOs anticipated positive benefits if co-production was to be used as a model for the delivery of housing and development of human settlements:

'[T]here would be greater acceptability of the process by the community, there would be better use of existing skills and resources within the community, and better trust and confidence between all the parties that are involved. The relationship between the communities and the government officials would be improved and there would be more of a sense of belonging like a sense of ownership of the whole process.' (NGO-1. 1, 5, 7, 8, 9, 10 and 11)

It is anticipated that communities would take ownership of the housing asset and take care of it because they were involved in the construction and in the decision-making.

NGO-2 concurred that the outcomes would be positive, and citizens would not be viewed as just passive recipients of this public good, but that there would be a creation of shared value and shared ownership. NGO-3 anticipated that there would be less public service delivery protests related to housing, because a co-production model is anchored around user participation. According to NGO-7, the government would not need to spend millions of rands on hiring security for the projects, because the communities would look after their own infrastructure and would protect their land from invasion, because they understand that

there is going to be development of which they stand to be beneficiaries.

The anticipated outcomes of co-production were also viewed positively by members of the Human Settlements Technical MinMEC. MinTech-1, 9 and 10 anticipated that through meaningful engagement with communities, public officials would impart some skills such as planning and the appreciation of what needs to be done in building and managing a settlement in a sustainable manner. There would be more pride and more ownership; there would be much better housing products that are much more sustainable; there would be less conflict certainly between the communities and the state itself and between the communities themselves:

> '[T]here is no better sector where you can demonstrate sustainability, where you can demonstrate participation, where you can demonstrate a better utilisation of the budget than human settlements. Communities may struggle to do complicated underground sewer systems, underground water, and reticulation systems, but if there is one thing that communities are not struggling with, it is to do everything above the ground.' (MinTech-8)

Perceptions of key elements for a co-production model in housing delivery

According to Steiner, McMillan and O'Connor (2022:4–5), a conducive environment for co-production is enabled when 'shared decision-making is in place, with no single group able to dominate proceedings or direct outcomes'. The reality is that within communities, there are sub-groups with different perceptions, interests, resources, amounts of influence and unequal capacities to act. If power is not equitably distributed between the actors and not enough attention is given to the competing interests, co-production can fail.

According to NGO-1, the NGOs indicated that a conducive environment for co-production within human settlements in South Africa must include capacity building for both government officials and the community. For the government officials, capacity building is required for them to understand the participatory methodology, and the communities require capacity building to understand the housing process, the housing policies and everything that is involved in housing delivery. NGO-10 added that willingness of public officials to do things differently and community education programmes that detail how the communities can be active participants will be essential, because if they do not know how to participate meaningfully, then it will not help the process either.

According to NGO-5, 7 and 11, the first thing that the government must realise is that it cannot build houses for everyone and should therefore invest in incremental typologies and self-help methodologies. NGO-6 and 9 maintain that the government must invest more in the employment of community facilitators to be able to do proper community participation and facilitation. In addition,

NGO-6 suggests that there needs to be improvement in spatial development framework plans and housing layout plans as well as precinct layout plans. These plans and the local area development plans must have a strong element of community participation.

The perspective from NGO-7 was that what is required is the buy-in from public officials into the idea of co-production, that there is value in the knowledge and in the expertise of residents. Government would have to invest in more partnerships with community-based organisations and grassroots movements to drive engagement with communities and strengthen the capacity of the state. There is also a need for the development of multipurpose centres and the realisation that people must be at the centre of the development.

The members of the Human Settlements Technical MinMEC were of the view that what is required for the human settlements environment to be conducive for co-production is appropriate leadership. MinTech-1 indicated that appropriate leadership:

> '[I]is not limited to the Director-General or the Minister of Human Settlements, but leaders across the board including public officials; leaders who can then bring the different co-producers around the table and create a sense of welcomeness for everybody to feel that they are a part of the equation, equal partners in the creation of the solution, more importantly to put a shoulder to the wheel and navigate the complexity.' (MinTech-1)

According to MinTech-4, a shift in the mindset of communities will go a long way in ensuring a conducive environment for co-production in human settlements. A shift from the belief that the government owes them to say, 'how can I contribute to make sure that the government assists me with a house'. MinTech-4 further indicated that the elimination of local power plays must be dealt with in a co-productive delivery model.

Discussion

In this section, the findings are discussed using three themes: firstly, the perceptions of the Human Settlements Technical MinMEC members and NGO participants on the sustainability of the current contractor-driven method of delivering housing; secondly their perceptions on anticipated benefits if co-production was to be used as a delivery model for housing delivery and thirdly, their perceptions on key elements for a co-production model in housing delivery.

The results indicate that the current contractor-driven and supply-driven model of delivering housing is not sustainable as the demand for housing keeps on growing and funding gets limited. The results suggest that the government must have a process of educating people on how to be self-reliant, self-build and develop a strategy of how to meet people halfway when it comes to self-building, to reduce incidences of poor workmanship that may result in fatalities.

The findings further suggest that delivery of housing must be demand driven and the state must be a facilitator and not the provider of housing.

The model for housing, as informed by the findings, must have a component where people feel this is something that they have worked for and not perpetuate a culture of dependency and entitlement. As one of the approaches to eliminate the feeling of entitlement and ensure that beneficiaries take ownership, the results suggest that the government's model must ensure that people are an integral part of their development. According to NGO-3 (2022), 'ownership can only be achieved if the people have contributed towards building their own houses'.

With regard to the long-term benefits of co-production as a housing delivery model, the study found that there could be greater acceptability of the housing delivery process by the community as there would be better use of existing skills and resources within the community, there would be more transparency and trust between all of the parties that are involved. It was established that communities would take ownership and take better care of their houses and their neighbourhood because they were involved in the construction and in the decision-making.

It was found that if co-production was to be used as a public housing delivery model, it would be successful, on condition that certain improvements are made to enable co-production. Firstly, there must be a shared goal between the government and the citizens, there must be trust between the public officials and communities, and both the public officials and communities must have clear roles and responsibilities when collaborating, so that they can hold each other accountable.

The findings are significant in the sense that they highlight the importance of providing citizens with a choice and that citizens ought to participate in either the decision-making process, the design and/or the construction of their homes. The study emphasises the significance of relationships between professionals and the people whom they serve to deliver public services more effectively.

The study further enhances research in the field of co-production and supports the existing theory on conditions for successful co-production in addition to those identified by Brandsen and Helderman (2012) on German housing cooperatives, namely clear definition of boundaries; using collective choice mechanisms; giving the actors involved in the collective housing stock an opportunity to participate in decision-making in some way – whether directly or through representation; ensuring continuous monitoring in a way that is transparent and accountable to the actors involved and putting social infrastructure in place for the resolution of any conflicts that arise between the actors involved.

It is beyond the scope of the article to generalise the findings, but future studies should consider a quantitative or mixed method research approach, which will include the direct participation and insights of the human settlements' beneficiaries. It is further recommended that future research investigates the prevalence of the housing problem in urban areas and tests the attitude and willingness of informal settlement residents to co-produce housing with the government.

Recommendations

A co-production model for human settlements in South Africa will succeed under several conditions outlined next (Figure 2). According to Steiner et al. (2022:4–5), a conducive environment for co-production is enabled when 'shared decision-making is in place, with no single group able to dominate proceedings or direct outcomes'. The reality is that within communities, there are sub-groups with different perceptions, interests, resources, amounts of influence and unequal capacities to act, and if power is not equitably distributed between the actors and not enough attention is given to the competing interests, co-production can fail.

This model indicates that if a co-production policy can be developed, it would require coordination and collaboration between the Department of Human Settlements and key stakeholders such as community organisations, NGOs, traditional authorities, metropolitan municipalities (cities) and communities. From the key stakeholders, it is expected that they have a good understanding of the legislation, possess sufficient capacity and resources to engage in co-production, shift their mindset and be willing to co-produce with the government and ensure that there is continuity of actors when engaging in co-production. The continuity of actors is essential to ensure the continuity of the projects and eliminate interruption caused by new members who must be brought up to speed with details about where the project started and the resultant status quo.

Concerning the Department of Human Settlements, there would have to be appropriate leadership, not just with the Executive Authority (Minister) and the Accounting Officer (Director-General), but with the officials. They must be patriotic and uphold the democratic values and the Batho Pele principles. The Department should implement inclusion strategies for multiple forms of knowledge and expertise and establish horizontal relationships with citizens.

Establishing horizontal relationships is very important because it eliminates the bureaucratic top-down approach to consultations with communities and levels the space of engagement, and all actors are treated as equal partners. The department would have to support and promote co-production and create a sense of welcomeness for everyone who wishes to engage in co-production, devolve
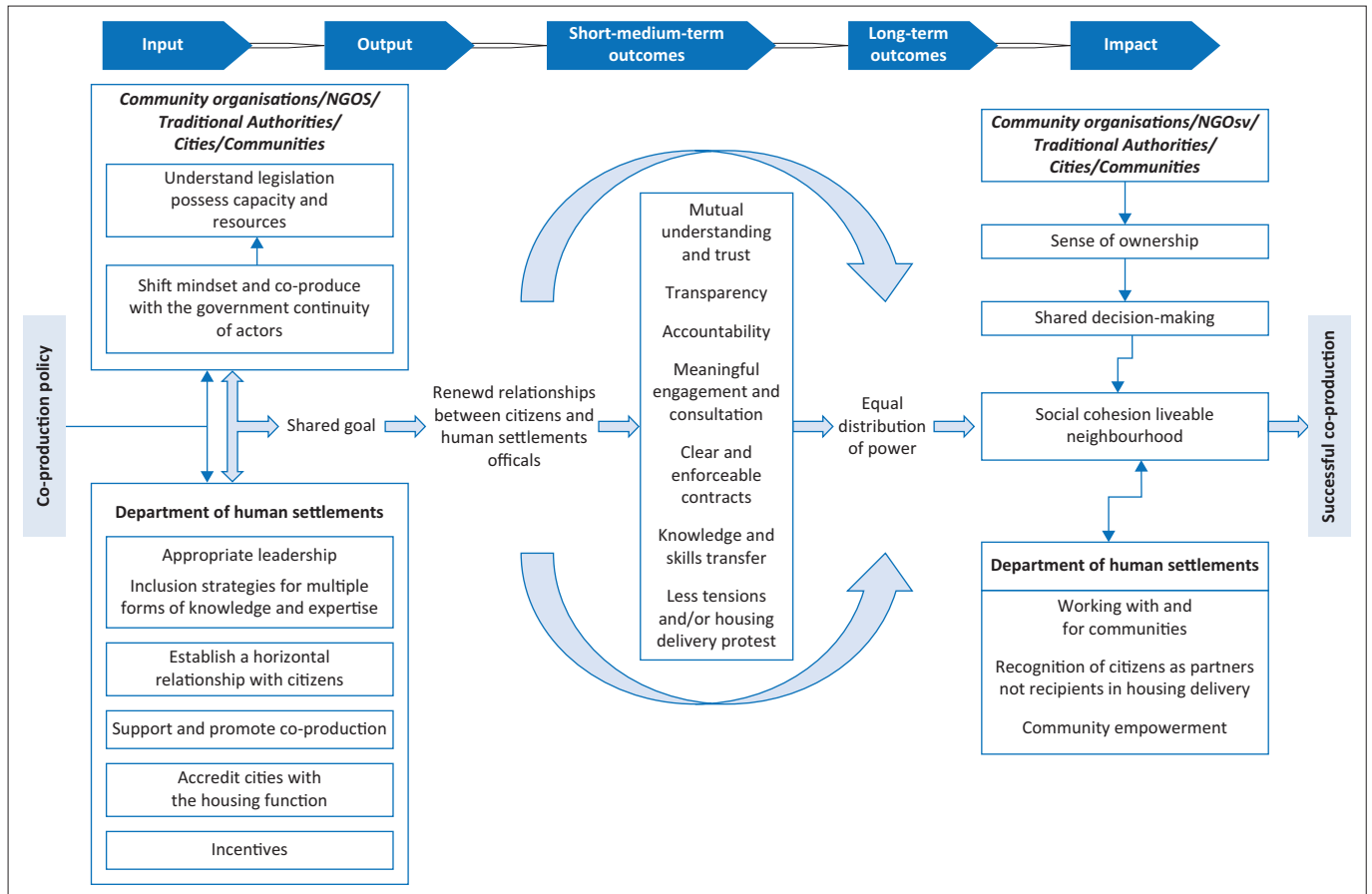
FIGURE 2: Co-production model for human settlements.

the housing function to metropolitan municipalities through a process of accreditation and provide incentives to encourage citizens to co-produce with the government.

The model indicates that in the short-medium term, it is expected that there would be renewed relationships between citizens and the human settlement officials, there would be mutual understanding and trust, there would be transparency, accountability, meaningful engagement and consultation, unambiguous and enforceable contracts, knowledge and skills transfer, shared value and ownership, fewer tensions between citizens and the government because of a decline in housing delivery protests, and there would be equal distribution of power.

In the long term, it is envisaged that there would be a sense of ownership with the key stakeholders, shared decision-making, social cohesion and liveable neighbourhoods. As communities participate in decision-making, they take ownership of the process and protect the neighbourhood to the best of their ability as they have a vested interest. It is further expected that as the Department of Human Settlements would be working with and for communities, the department would recognise citizens not only as recipients of government services but also as partners and overall, there would also be community empowerment. All these factors are expected to result in a successful co-production model for human settlements in South Africa.

Conclusion

The article explored the possibility of introducing a co-production model for housing delivery model in South Africa and found that because of fiscal constraints, the government cannot continue to provide 'free' housing to low-income citizens. It was established that the role of government must shift to that of an enabler and facilitator instead of a provider of housing.

For co-production to work as a public housing delivery model, it was found that there must be a shared goal between communities and the government, there must be trust, clear roles and responsibilities between officials and communities. Capacity building is necessary for both parties, and officials must be willing to work differently. The study further makes a recommendation for the housing function to be devolved to municipalities and for the government to invest in Community Support Centres to assist communities with building plan approval, provide a list of accredited builders and offer financial subsidies.

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Authors' contributions

L.P.M., H.P.M., and A.M. contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

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Data availability

The data that support the findings of this study are available from the corresponding author, L.P.M., upon reasonable request.

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