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PROJECT MANAGEMENT AND SKILLS ENHANCEMENT IN INFORMAL SETTLEMENT UPGRADING IN DURBAN, SOUTH AFRICA

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INTRODUCTION

In South Africa (SA), around 50% of the population lives in urban centres, where more than 2,700 informal settlements exist. Due to rapid urbanisation and population growth, informal settlements have formed a major challenge of the urban landscape, exacerbating issues related to poverty, inadequate infrastructure, housing and poor living conditions. Reflections on past upgrading efforts in SA suggest that top-down policies have not been successful to date. By contrast, participatory techniques in the design and construction of housing, have been used to enhance community empowerment and a sense of local ownership. However, participation and collaboration can mean various things for informal housing upgrading and often the involvement of local communities is limited to providing feedback in already agreed development decisions from local authorities and construction companies.

This paper explores the concept of ‘self-building’ in the context of community-led upgrading, using experience and lessons learned from two case studies in the Durban metropolitan area, SA. The research seeks to identify critical success factors in managing self-build upgrading projects, discussing the crucial roles of stakeholder management and project governance. It also seeks to understand the balance between formal and informal forms of procurement, uncovering the challenge to acquire ‘the right resources at the right time’, exploring links with local industry and/or construction practice and considering the constraints involved in the process of complying with rigid municipality processes. The findings seek to build capacity for both local communities seeking to improve their quality of life and for local authorities seeking to enhance their upgrading planning programmes, plans and policies.

BACKGROUND CONTEXT

Almost 50% of the South African population lives in urban centres and a quarter of those live in informal settlements.¹ Housing has been a key challenge for the post-apartheid period in SA, with the commitment to provide access to adequate housing for all.² Migration and poverty are major causes of informal settlements, as dwellers cannot afford to build or buy their own houses or to access formal housing schemes.^{3,4} Misselhorn¹ emphasises that “*it is important to analyse why informal settlements exist and what functionality they afford to those who reside in them*”.

According to 2011 Census, 12% of all households in the Durban metropolitan area (eThekweni) live in informal settlements, with 29% renting their dwellings.⁵ eThekweni’s urbanisation has over time incorporated low density urban settlements and adjoining farmlands. This structure has been influenced by an extreme topography; the city centre is fragmented and economic opportunities are

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spatially segregated from formal housing and residential spaces.⁶ Post-Apartheid consequences have therefore led to spatial inequalities, social segregation and various housing typologies.^{7,8} These include high-density residential developments, such as inner-city flats in abandoned buildings, private rental housing schemes in informal settlements and social housing schemes. There are also subsidised houses in urban townships, informal backyard shacks adjacent to formal housing on both public- and privately-owned land, and rural housing dwellings. Some of the negative consequences of spatial fragmentation and low-density include an inefficient public transport system with high transport costs per low-income household, inefficient infrastructure and overall environmental pollution.

Definitions

Informal settlements are defined by physical, social and legal characteristics; hence, it becomes difficult to define the term ‘adequate’ housing in the Durban context.⁵ Many scholars emphasise the dwelling type (shacks with poor performing building materials), whilst others refer to the issue of land tenure.⁹ In SA, a clear departure from the Apartheid terminology included the term ‘slum’ being replaced by ‘informal settlements.’¹⁰ Informal settlements are related mostly to the legal standing of the scheme; namely, settlements that mushroom on vacant land, within and around places of opportunities, without proper planning, building regulations or standard construction methods.¹¹

Informal settlements have been traditionally considered as ‘urban substandard’ offering housing to the urban poor and referring to the poor living conditions, health risks and environmental hazards.¹² However, Roy¹³ suggests a progressive interpretation of informal settlements as spaces of habitation, livelihood, self-organisation and politics. Informal settlements are complex, popular and spontaneous neighbourhoods¹⁰ offering an immediate response to housing and with their location critical for the socio-economic activities of the involved community. This concept moves away from the pathology of informal settlements, envisaging a potential in terms of dynamic places of living.

Upgrading models

Physical upgrading of informal settlements takes two general approaches: demolition and relocation or *in-situ* development.¹⁴ Demolition and relocation is the process of moving inhabitants from their settlements to another ‘greenfield’ site. However, a growing body of literature favours *in-situ* upgrading as this involves the formalisation of informal settlements in their original location.^{14, 15, 16} One of the main critiques of demolition and relocation is the macro-economic target of the government to meet the physical aspects of housing shortage and infrastructure provision and not the improvement of poor living conditions. This has led to conflicts and significant socio-economic disruption with little regard to displacement, poverty, vulnerability and the impact of these actions on social inclusion. *In-situ* upgrading is the process undertaken to improve the conditions of an informal settlement in its current location through the provision of basic services and secure tenure to people. *In-situ* models can be wide-ranging, from simply dealing with land tenure to incremental housing improvement and/or the provision of site-and-services associated with formal settlements.

In SA, the post-apartheid period offered various top-down approaches to low-cost housing provision. Government authorities have been responsible for decision-making on behalf of the local inhabitants. Top-down models have been criticised as unsustainable in the sense that they continue the legacy of segregation in housing delivery, as they have not engaged directly with low-income communities, and have not understood in depth the social capital required and the nature of the vulnerabilities of the affected populations.¹⁰

COMMUNITY PARTICIPATION

Community participation can “*be thought of as an instrument of empowerment*”.¹⁷ There is a growing body of literature which encourages participatory techniques, as a key method to enhance a sense of local ownership within an upgrading project.^{18, 19, 20, 21, 22} Self-reliance is also a relevant term associated with community participation and self-help activities. It refers to communities defining and making their own choices through shared knowledge, skills enhancement and planning activism. However, even though ‘bottom-up’, participatory methods for community upgrading are often discussed theoretically in international development discourses, the tools, methodologies and processes needed to ensure a successful upgrade on the ground have not seen widespread dissemination or uptake, particularly in the Durban metropolitan area.

Self-help housing involves practices in which low-income groups resolve their housing needs mainly through their own resources in terms of labour and finance topping up government subsidies.²³ Self-help activities are interrelated to community self-reliance and are not new to SA, as since the 1950s incremental, step-by-step, self-building approach on serviced sites was considered the cheapest and most efficient solution to slum upgrading.²⁴ Community participation derives from self-help activities and refers to grassroots planning processes where the local populations decide themselves about the future of their own settlement.²⁵ In practice, however, community participation often remains “*formal, legalised and politicised*”.²⁶ In informal settlements, key conceptual and practical challenges hinder active community participation. These include lack of social and physical resources, as well as, conflicting interests in individual and community expectations from the involvement in development projects.²⁷ Muchadenyika²⁸ discusses the problematic relationship between local communities and local authorities and governments, whereby issues of legislation, politics, power and identity play a major role in resource management, distribution and implementation of the upgrading project.

COMMUNITY-LED UPGRADING IN THE DURBAN METROPOLITAN AREA

Fieldwork in two case studies was conducted between February 2017 and May 2017 to assess the level of ‘good available practice’ in community-led upgrading of informal settlements in Durban metropolitan area. Empirical data was gathered by means of focus group discussions in two case study sites complemented with three additional focus groups with external stakeholders from eThekweni municipality and the construction industry in Durban. The objective was to examine community-led approaches in informal settlement upgrading in Durban and understand the benefits and challenges of inclusive participatory approaches to the project management, the design and construction of the houses.

Self-build houses in Namibia Stop 8

The first case study refers to Phase 1 of an informal settlement called Namibia Stop 8 (NS8) based in Inanda, an outskirt of Durban in the KwaZulu-Natal province. Namibia Stop 8 has been a greenfield project, where uTshani Fund, partner of the SA Slum/ Shack Dwellers International (SDI) Alliance and support organisation provided the finance facilities to the Federation of the Urban and Rural Poor (FEDUP), who led the provision of self-build housing.

At a project preparation stage, the community undertook detailed profiling. Three women-led saving groups established an ‘Urban Poor Fund’ to finance the delivery of housing. The project involved 96 houses using the participatory People’s Housing Process model that is predicated on a community-driven participatory approach. FEDUP construction was slower but this collaborative approach

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delivered substantially larger (56m²), better-designed and better-sized houses than those constructed under the government-driven Reconstruction and Development Programme (RDP) model (40m²). In terms of building materials and construction techniques the FEDUP houses demonstrate concrete blocks, wooden roof trussing, tiles, plastering inside and out and floor screeding. For example, FEDUP houses have bigger wooden windows, whilst RDP houses had no plastering and required private waterproof paint on walls and doors for rain protection.



Figure 1. An example of a self-build house (with extensions) in Namibia Stop 8

As a community leader stated “*the majority of people continued to live in the houses after the upgrading, while the comparative figures for the municipality houses are about 50%. This is because paying someone to do it is more expensive than doing it yourself*”. The construction method entails delivery by community contractors and the establishment of construction management teams (CCMTs), supervised by uTshani Fund and approved professional contractors, who ensured technical support. In terms of procurement, CCMTs and uTshani Fund compared three hardware stores and chose a supplier based on a cost-benefit assessment of quality and cost. This means that communities developed an understanding that state procurement is often expensive and of less quality.

However, lessons learned included the lack of wider community trust. Building materials were stolen during the construction process, particularly single units, such as doors and windows. Another key challenge was the issue of access to the main road and lack of spatial integration. Households developed a culture of fencing their yards due to the lack of pathways, thus hindering community development. In terms of construction, technical support would enable a better redesign of the roof and therefore save resources (e.g. timber) that could be used elsewhere. The community emphasised the need for training or hiring skilled workers for future upgrading projects. Lastly, it was noted that the Youth was not engaged in group savings post project completion. This inevitably meant that the knowledge and skills that CCMTs developed was lost.

Project management in Piesang River

Piesang River is a historic informal settlement, similar to Ns8, which pioneered strong elements of community leadership and negotiation with the SA government around housing delivery. In particular, uTshani Fund enabled FEDUP to support housing construction through a process of pre-financing (bridging finance) by making a loan to assist ‘sweat equity’ (time and labour) allowing beneficiaries to repay the loan at a later stage. Thereafter, the community undertook the actual construction of the houses.

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A Steering Committee was established dividing semi-skilled inhabitants into seven groups of four to ten members, each according to their specific skills; namely:

- technical (design and construction): bricklaying, foundation, plumbing.
- management: supporting labour, finance (book keeping), quantity surveying and costing; and
- social facilitation: mobilisation, negotiation and communication around a ‘shared’ vision.



Figure 2. The upgrading process in Piesang River

Piesang River demonstrates also women in project management and the construction of the houses. FEDUP brought skilled builders on-site for assistance and on-site training to the individual groups. This facilitated formal skills transferring to the community. In contrast to NS8, FEDUP members engaged in training youth groups and managed to pass on the culture of savings to the next generation. In terms of the construction method and selection of building materials, houses are quite similar to NS8. FEDUP community leaders commented that criteria for the procurement strategy included quality, durability, cost (affordability), and safety. Piesang River features also double storey buildings even though their construction was not successful. A community member mentioned that accepting customs and culture in the upgrading process is key. “*People prefer to live in their own houses and the double storey construction caused issues with older and disabled people*”. Another challenge was the need of additional reinforcing metal to support the structure, which increased total costs in addition to a suspended concrete floor.

A new approach to informal settlement upgrading

Current estimates in eThekweni municipality indicate that there are about 327,615 households in 476 informal settlements, without any clear plans for upgrading or signs of a participatory process.²⁹ An innovative participatory action planning approach is proposed by the Housing Development Agency and has been endorsed during the focus group discussions with external stakeholders. This is because full upgrading with services and subsidised housing is not a viable option for SA in general, and Durban metropolitan area, in particular. This approach also underpins that the challenge to upgrading is not just housing but a manifestation of structural social change and political endurance. In this context, key principles of the *new approach* to informal settlement upgrading involve ³⁰:

- *city wide*: inclusive of all the informal settlements;
- *incremental*: with a range of different improvement as opposed to the traditional housing delivery;
- *in-situ*: considering relocation as a last resort;
- *partnership-based*: instead of purely state-service oriented);
- *participatory and more community driven*: collaborative informal settlement action, co-management to develop acceptable solutions;
- *programmatic and area-based*: instead of project delivery focused;

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- *context related*: differentiated, situationally responsive (as opposed to the ‘one-size-fits-all’); and
- *statutory and regulatory flexible*: working with and not against informality.

CONCLUDING REMARKS

eThekwini municipality has currently ambitious targets to achieve due an increasing backlog on housing delivery. Focus group participants claimed that there are currently about 535 informal settlements, which translate to 25% of population in the KwaZulu-Natal province. Most informal settlements are upgradeable and are already part of the urban form. The government perspective on informal settlement demographics and policy suggests that conventional upgrading (i.e. state funded housing with a full package of services) with tenure security and formal town planning is an unviable solution due to: the increasing backlog; cost; complex land schemes; higher density; and long-time scales. This is why an incremental, city-wide, partnership-based participatory upgrading approach is proposed with lessons learned from communities that have undertaken (even partially) aspects of community-led upgrading.

Both Namibia Stop 8 and Piesang River pioneered strong elements of community leadership due to a set of participatory methods embedded in project preparation and project implementation. These include: community profiling and enumerations, saving groups, community-driven project management, ‘sweat equity’ (time and labour) of beneficiaries. The above processes created a legacy for the local people in terms of income generation, skills upgrade, and sense of ownership since the early planning stages. A key success factor has to do with skills enhancement and ‘learning by doing’. Continuous improvement enabled community organisations (e.g. FEDUP) to ensure less costs and better quality in the construction of the houses.

Finally, it is important to note that the level of a successful upgrading project is measured differently between local authorities and communities. For eThekwini municipality, it refers mainly to successful delivery of infrastructure and services. Empirical data from the two communities, instead, reveal that a successful project is about full ownership of the upgrading, social cohesion, livelihood development and tenure security (ultimately by obtaining the title deeds). This means that upgrading is not just housing delivery but consideration and development of social fabric, such as access to job opportunities, health facilities, schools, and public transport. eThekwini municipality has practiced limited community led approaches and currently acts as a housing developer. It is therefore essential to build capacity and invest in further training in both communities and local authorities by understanding the minimum preconditions that unlock community participation in an upgrading project.

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REFERENCES

-
- ¹Misselhorn, M. 2008. Position paper on informal settlements upgrading: Part of a strategy for the second economy for the Office of the South African Presidency. Urban LandMark. Available at: <http://www.pptrust.org.za/wp-content/uploads/delightful-downloads/informal-settlement-paper.pdf>
- ²Department of human settlements, National Housing Code Part 3, 2009: 9, available at: <http://www.dhs.gov.za/content/national-housing-code-2009>
- ³Mutisya, E., and Yarime, M. (2011). Understanding the grassroots dynamics of slums in Nairobi: The dilemma of Kibera informal settlements. *International Transaction of Engineering, Management and Applied Science and Technologies*, 2(2), 197–213.
- ⁴Wekesa, B. W., Steyn, G. S., and Otieno, F. A. O. (2011). A review of physical and socioeconomic characteristics and intervention approaches of informal settlements. *Habitat International*, 35, 238–245.
- ⁵The Housing Development Agency (HDA), (2013). KwaZulu-Natal: Informal settlements Status. RESEARCH SERIES PUBLISHED BY THE HOUSING DEVELOPMENT AGENCY
- ⁶Ethekwini Municipality, (2016). *EThekwini Built Environment Performance Plan (BEPP) 2016-2017*.
- ⁷Western, J. (2002). 'A divided city: Cape Town'. *Political Geography*, 21, pp.711-716
- ⁸Williams, J. J. (2000). 'South Africa: Urban transformation'. *Cities*, 17(3), pp.167–183.
- ⁹The Housing Development Agency (HDA), (2015a), Informal Settlement Upgrading: Incrementally upgrading tenure under customary administration
- ¹⁰Huchzermeyer, M., 2011. Cities with 'Slums': From informal settlement eradication to a right to the city in Africa. Claremont: UCT Press.
- ¹¹Khalifa M.A. (2015), 'Evolution of informal settlements upgrading strategies in Egypt: From negligence to participatory development', In: *Ain Shams Engineering Journal*, 6, pp.1151–1159.
- ¹²Sutherland C., Braathen E., Dupont V. and Jordhus-Lier D. (2016). Policies towards substandard settlements. In: Dupont V., Jordhus-Lier D., Sutherland C. and Braathen E. "The politics of slums in the Global South". 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN: Routledge. pp. 48-78.
- ¹³ROY, A. (2011), Slumdog Cities: Rethinking Subaltern Urbanism. *International Journal of Urban and Regional Research*, 35: 223–238. doi: 10.1111/j.1468-2427.2011.01051.x
- ¹⁴Del Mistro, R. and Hensher, D. A. (2009) Upgrading Informal Settlements in South Africa: Policy, Rhetoric and what Residents really Value, *Housing Studies*, 24(3), pp. 333-354.
- ¹⁵Huchzermeyer, M., (2006) The New Instrument for Upgrading Informal Settlements in South Africa: Contributions and Constraints. In Huchzermeyer, M., and Karam, A. (eds) *Informal Settlements: A Perpetual Challenges?* Cape Town: University of Cape Town Press.
- ¹⁶Massey, R. (2014) Exploring counter-conduct in upgraded informal settlements: The case of women residents in Makhaza and New Rest (Cape Town), South Africa, *Habitat International*, 44, pp. 290-296.
- ¹⁷Samuel, P. (1986) "Community Participation in Development Projects: the World Bank Experience", in M. Bamberger (compiler), *Readings in Community Participation*, Vol. 1 (The Economic Development Institute of the World Bank, Washington, DC, 1986)
- ¹⁸Aron, J., Kayser, O., Liautaud, L., Nowlan, A. (2009) Access to energy for the base of the pyramid, Final report HYSTRA & ASHOKA, Paris.
- ¹⁹Botes, L. and Van Rensburg, D. (2000) Community participation in development: Nine plagues and twelve commandments, *Community Development Journal*, 35(1), pp. 41-58.
- ²⁰El-Masri, S. and Kellett, P. (2001) Post War Reconstruction Participatory Approach to Rebuilding Villages of Lebanon: A Case Study of Al-Burjain, *Habitat International*, 25(4), pp. 535-557.
- ²¹Frischmann, B. (2012) *Infrastructure: The social value of shared resources*, Oxford University Press, New York; Oxford.
- ²²Simpson, L., Wood, L., Daws, L. (2003) Community capacity building: Starting with people not projects, *Community Development Journal*, 38(4), pp. 277-286.
- ²³Marais, L., Ntema, J. and Venter, A. (2008) State control in self-help housing: evidence from South Africa. In: *Proceedings of the European International Housing Network Research Conference*, Ireland.
- ²⁴Landman, K. and Napier, M. (2010) Reconsidering state provision, aided and unaided self-help in South Africa, *Habitat international*, 34(3), pp. 299-305.
- ²⁵Lizarralde G. and Massyn, M. (2008) Unexpected negative outcomes of community participation in low-cost housing projects in South, *Habitat International*, 32, pp. 1-14.
- ²⁶Jordhus-Lier, D. and Tsolekile de Wet, P. (2013), *City Approaches to the Upgrading of Informal Settlements*, Chance2Sustain, Policy Brief, p.2 available at: http://www.chance2sustain.eu/fileadmin/Website/Dokumente/Dokumente/Publications/pub_2013/C2S_PB_No10_WP3_City_Approaches_to_the_Upgrading_of_Informal_Settlements.pdf
- ²⁷Emmett, T. (2000) Beyond community participation? Alternative routes to civil engagement and development in South Africa, *Development Southern Africa*, 17(4), pp. 501-518.

Cities, Communities and Homes: Is the Urban Future Livable?

AMPS, Architecture_MPS; University of Derby
22—23 June, 2017

²⁸ Muchadenyika, D. (2015) Slum upgrading and inclusive municipal governance in Harare, Zimbabwe: New perspectives for the urban poor, *Habitat International*, 48, pp. 1-10.

²⁹ eThekweni Integrated Development Plan (IDP) 2015, available at:
http://www.durban.gov.za/City_Government/City_Vision/IDP/Documents/Final%20Adopted%20IDP%2027May2015.pdf

³⁰ The Housing Development Agency (HDA), (2015). Participatory Action Planning for Informal Settlement Upgrading. PUBLISHED BY THE HOUSING DEVELOPMENT AGENCY.