

# Residential dynamics: the co-existence of formal and informal systems in Khartoum, Sudan

## Abstract

This paper looks at the residential dynamics in Khartoum, Sudan. Some patterns demonstrate that formal and informal systems co-exist and are mutually supportive. There are also particular spatial manifestations that have resulted from a unique socio-political situation.

It is believed that informality is a legitimate energy within cities and for professionals of the built environment to make meaningful interventions; solutions need to emerge from the everyday realities of a specific context – thus avoiding blanket solutions. Many agents act on an environment at any given time and decision makers need to engage with that complexity.

Enterprises emerging from informal settlements or through informal processes may be better suited to low-income groups, thus support of the informal sector might better address urgent need for poverty eradication.

We are challenged as professionals to investigate beauty and efficiency in informality as an antithesis to a middle-class interpretation of how life should be lived.

These issues are elaborated through the discussion of the situation in the city with an analysis of the various types of housing being produced centrally and in the peripheries.

**Keywords:** South Africa, Khartoum, Informality, Housing, Urban Environments

## 1. Introduction

It is generally assumed that formal and informal processes are strictly separated spatially. In Khartoum, Sudan the boundaries are less distinct. However, political unrest over many years has led to the sprawl of the city with informal areas now surrounding the city and changing the social dynamics in the peripheries.

Peripheral areas becoming highly disputed areas as the city expands and higher income groups move out of the centre thus displacing the poorer communities that have set up their settlements on the outskirts of the city.

## 2. Approach to informality

When urbanized poor people need homes they either acquire them through land invasions or they wait for government provided housing. Alternative solutions involve capacity building, saving schemes and job provision in a holistic approach which needs collaboration between diverse government agencies and more participation by various stakeholders. This would generate a complexity that needs alternative systems of governance.

Formalising housing and markets does not necessarily guarantee poverty alleviation and neglects the skills and knowledge that the poor may contribute to development. The reality is that informality appears to be faster and more efficient when it comes to providing for the needs of the poor. Formal mechanisms of housing delivery are too slow and unaffordable. Professional architects and housing practitioners need to position themselves in terms of various interpretations of development—this is critical in order to guarantee their effectiveness.

Because there is no security of tenure, people in informal settlements are reluctant to invest substantially to convert an informal dwelling into something more permanent. This often results in people living in structurally compromised buildings for years. This volatile nature of squatter settlements inhibits long-term development, thus professional interventions are essential.

While recognising some of the negative impacts of slums on cities and their inhabitants, for example the health and safety problems they may create, a pro-removal approach to slums neglects the fact that every informal structure, whatever its form, is in reality a home. Squatter settlements are not undifferentiated areas of squalor but dynamic environments with unique characteristics that need to be properly researched before any intervention is made. Slum upgrades are complex processes requiring the combined efforts of a number of disciplines.

While the relationship between the state, market and community is complex – how that relationship is conceived and managed is incredibly important to the progress of housing policy and practice. This relationship is crucial to the success of initiatives in housing and determines the degree of participation and accessibility to housing. The building of networks should be socially inclusive and adopt a long term business plan rather than rely on short term project funding (Hamdi 2004: 108). The role of government should allow for innovation when the boundaries between public and private or formal and informal are blurred. This needs strong governance structures.

Huchzermeyer (2006: 21) summarizes state-society relations as being:

- oppositional (hostile, repressive or exploitative)
- indifferent (neglecting, tolerating or ignoring)
- cooperative (co-opting or integrating)

Hamdi envisions a re-imagined role for a state that regulates without interference (2004: 108). Cross (in Huchzermeyer and Karam 2006: 261) defines ‘communal governance’ as an informal, grassroots-based system built on face-to-face relationships and individual patronage. It is facilitated by a rural principal that land and building rights are allocated within the community, by the community, using social criteria in an adaptable and accessible basis. It competes directly with formal systems and is essentially an anti-bureaucratic system. She further explains how these forms of governance kick in and become active to replace failed formal systems – failure which at times would trigger violence and protest.

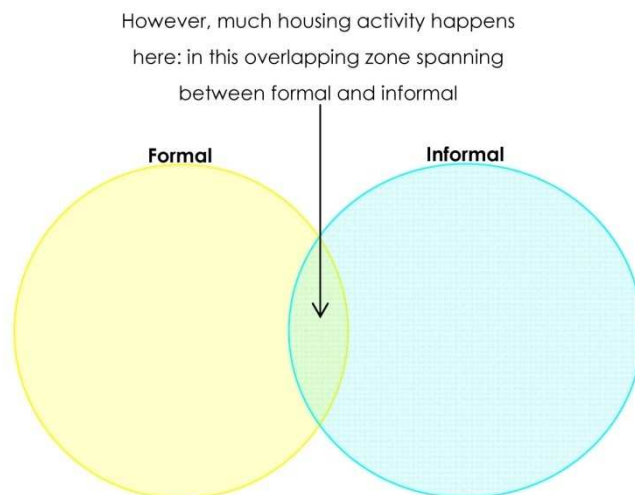
Hamdi (2004: 25) views this dynamic, an important resource for the poor, as being positive: “When agents like these, operating as they do, individually and informally coalesce and through their network act as a larger and single organization, when they are able to wield power and influence and become sophisticated, they emerge and become developmental.” The same author states: “We have begun to invent novel forms of civic engagement where government cooperates with, rather than serves, its citizens moving from provider to enabler, much as it has learnt to do with the market. New forms of mutual engagement are emerging everywhere; based on participation and social entrepreneurship which is finding its way into the body politic of governance. Turnbull calls this ‘Network Governance’; an inside out structure of social organizations and enterprises held together by well-

connected and well-networked systems rather than command and control hierarchies or [the power elite]...” (ibid: 107).

He further explains how Turnbull debates the question “Who governs the city?” and how elusive the answer may be. The relationship between the state, market and communities has been viewed simplistically in the past; however communities are not a cohesive and integrated unit but are fragmented. A simplistic interpretation of markets and housing activity views two worlds that co-exist separately from each other when in reality the formal and informal feed into each other and overlap.

People living in informal settlement may be employed in the formal sector – while people living in formal dwellings may be very active in the informal sector. Physically, many types of informal dwellings are built on formal plots and as extensions and additions to formal structures.

Jenkins (in Huchzermeyer and Karam 2006: 87) elaborates on the nature of informality to include the physical (“land and house construction/redevelopment”), the social (“household structures”) and the economic (“informal access to resources”). Formal or informal activity may be a representation of survival strategies where poor households have multiple livelihood strategies (Smit in Huchzermeyer and Karam 2006: 104). Smit further explains that this diversity and complexity in livelihood strategies is reflected as family structures, built form and a determinant of decision making regarding day to day activity, including housing options.



**DIAGRAM 1 HOUSING ACTIVITY HAPPENING AT THE INTERFACE BETWEEN FORMALITY AND INFORMALITY**

Trying to control and regulate these processes is a futile attempt. Even developed contexts have a degree of informal processes and activity; in some cases policy and practice is trying to accommodate for that rather attempting to stamp it out. Jenkins (in Huchzermeyer and Karam 2006: 85) argues that the concept of informality itself is “...rooted in an approach that is state dominated.” He views informal settlements (or informal responses and activity in general) as “...a socially legitimate response to real needs” representing some positive characteristics.

Development and participation, despite good intentions, are being conceived in the minds of the few, defying the very meaning of the terms. The solutions actually lie “out there” – and that is where research needs to be operating.

### 3. Approach to informality

Royston questions whether bridging the formal and informal is possible or even desirable, as he explains, while acknowledging that the poor are disadvantaged by informality, that formal systems may not work for the poor (Royston in Huchzermeyer and Karam 2006: 167).

Patterns of emergent systems in cities are indicators of real need and the imposition of pre-determined plans should be avoided as professionals become more sensitive to context. Hamdi (2004) explains how 'small' interventions grow and guide development and how the role of the professional becomes one of creating conditions for emergence and in this respect searching for catalysts. These catalysts then generate a process of 'negotiated reactions' (Dewar & Uitenbogaardt, 1991), whereby continuous transformation is achieved within a stable environment. The built environment is not static: it is a complex relationship between stability and transformation (Habraken, 1998).

In squatter settlements transformations happen at an enormous rate compared to formal (more static) designed environments. Furthermore, the relationship between structural supports and detachable units is unclear. There is a degree of permanency in a squatter settlement—such as the layout of the site, but the overall set up is experienced as short term. Any design intervention will need to support a process in which speed of construction, changeability, affordability and transportability are important characteristics. Transformations will not only apply to structural elements but also to location and function.

Hamdi (2004: xviii) expresses the difficulty to determine the level of intervention to be implemented; he states that too much formal structure may inhibit personal freedom, limit progress, destroy the system it was built to serve, and only serve itself. He also explains how small initiatives which may "...lack a global perspective..." but are however important as their "...collective actions become 'a natural part of the effort at social reconstruction' and an effective way of managing cities."

Harber (2006)<sup>1</sup> explains how a squatter settlement develops in a process that is the exact opposite of a formal settlement: the land is occupied, buildings put up and services finally installed. He believes this usually generates an environment that is layered, develops gradually and is less disruptive to the existing site. This gradual, organic process is perceived as a common characteristic of successful urban places and is a quality found in vernacular settings.

A heightened sensitivity to various forces of urbanisation needs to be developed among practitioners and policy makers in order to strike a balance between stability and transformation: multiple levels of the environment where multiple agents may intervene in transforming their areas of control through complex decision-making, modification, adaptation and appropriation. This will contribute towards the generation of a layered and complex environment which fosters a sense of belonging, ownership and pride. This is direct opposition to conventional approaches to decision-making in the built environment which is a top-down process, strictly planned and rigid. This strict planning results in monotonous, fragmented, mono-functional environments and disempowers people (professionals and communities alike).

Within urban structures, the house is seen as a flexible/adaptable product rather than a fixed final product. Urban design as an inseparable component of housing acknowledges the various levels of the environment differing in the degree of permanence and changeability thus allowing for more involvement and affordability. This challenges our understanding of informal economies, settlements

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<sup>1</sup> Rodney Harber: personal communication.

and structures and our role as professionals in interacting with these alternative systems and “ways of doing/living”.

Current debates regarding development, in general, and housing, in particular, attempt to position the issues in the broader perspective of the ‘south’, the African continent and new policy directions in South Africa. This would mean that an approach to informality needs to be appropriate to context and cannot follow the attitude of the developed world to informal systems where there is a high degree of government regulation.

## 4. Khartoum housing

The table below shows a portrayal of the various types of housing and housing processes in Khartoum, Sudan. In the last two decades Khartoum City has expanded considerably. With recent oil wealth becoming apparent, real-estate is booming with exorbitant prices. Due to the congestion of the older neighbourhoods of Khartoum, wealthier people are seeking refuge outside of the old city boundaries, competing with informal settlements, many of them inhabited by internally displaced people due to the political problems in other parts of the country.

Informality is very evident even in formal neighbourhoods with one dynamic being very unique to Khartoum: the many Sudanese working abroad send money to incrementally build homes in the capital city resulting in many building sites with buildings at various stages of completion being inhabited by guards and builders. This creates an interesting situation with people from different social classes living next to each other for many years.

The city also is changing character as a result of the influx of foreigners into the country after opportunities opening up with the oil industry. These, as well as tribalism issues among internally displaced people from areas of political conflicts, that now inhabit the peripheries are all opportunities for further research that have not been thoroughly investigated. There are also problems with social stigma arising from an inherited system of classifying residential areas as first, second, third or fourth class. However one positive aspect is that improvements in financial status usually imply developments within the same site irrespective of the classified class system. This happens informally in many cases and has led to shifting dynamics in many Khartoum neighbourhoods. This creates a different scenario when compared to people move from one area of the city to another which is perceived to be higher class. The latter creates greater divisions in society while the former creates more integration.

		Description/examples of residential area	Building materials + descriptions	Additional notes	Research opportunities
1	First Class	Site and service government schemes for certain professional categories. Private sector built, self funded (Sariya). Illegal on agricultural land (Fardos) – referred to as luxurious informality Al ‘Ashwaii al Fakhir.	Predominantly reinforced concrete frames with infill brick panels. This defines the aesthetic of many neighbourhoods in Khartoum.	1st-3rd class funded through Al Bank Al ‘Agari or other banks; conditions minimum 3000 salary, guarantees as land. Gated communities as a new phenomenon.	Social dynamics created by incomplete homes. <sup>2</sup> To what extent is there interaction between the permanent residents and the temporary residents (guards and builders) of first class areas?

<sup>2</sup> Builders and guards creating different levels of income within the same area, informality in areas classified as first class. Lijaan shabiya issues certificate of residence to the guards to enable them to access schools and facilities.

2	Second Class	Site and service schemes (1960-2000). Sometimes employer-assisted (Ayoob Al Ansari as an example), government built sakan shaabi. <sup>3</sup>	Reinforced concrete and brick construction. Sakan shaabi: semi-detached house 1 room+ kitchen+ Bathroom/toilet), 200-300m <sup>2</sup> repaid over a long period of time.	Site and service schemes have stopped since 2000. This has led to difficult access to land.	Reselling making land unaffordable. Current densifying is unplanned thus leading to problems of services not being upgraded accordingly. Sprawl is creating displacement of poorer segments of societies.  Different classes having to co-exist causing social tension.
3	Third Class	Site and service schemes. Site only, services added through community initiative and funding. Government funded Sakan Igtisadi or Economic Housing.	Reinforced concrete or load bearing brick construction.	Current government supported programme: extra room added to existing house to the value of 10, 000.	Social stigma associated with areas classified as third class. Home improvements: mix of income levels in the same area. Multi-storey buildings impacting on the use of open spaces.
Traditional	Traditional occupation of land later upgraded	Salha (Omdurman), Faki Hashim, Allzbaa (Bahri), Laoota, Soba El Hila (Khartoum)	Load bearing structures, reinforced structures, 3-D panels		Community initiated processes such as the establishment of informal suqs: Laoota as an example. Servicing systems for upgrading.
Informal	Initially informal occupation later upgraded and legalised,	Mayo	Mud blocks strengthened by straw or manure. Plastered by zibala <sup>4</sup> for water proofing. <sup>5</sup> Damuriya <sup>6</sup> as ceilings	Rent-a-bed (usually to immigrants from other African countries).	Social dynamics between locals and foreigners. Installation of services. Alternative infrastructure.
Informal	Illegal occupation and building: not upgraded	Mandela, Angola	Unstable construction of tree branches, cardboard, <sup>7</sup> metal sheets and fabrics.		Community dynamics. Tribalism issues.

DIAGRAM 2 A PORTRAYAL OF THE HOUSING ECO-SYSTEM IN KHARTOUM, SUDAN WITH INFORMAL SYSTEMS EXISTING ACROSS ALL LEVELS<sup>8</sup>



IMAGES 1 AND 2 TYPICAL "ISHASH" OR SHANTY TOWNS ON THE PERIPHERIES OF KHARTOUM – CONSTRUCTION USING POLES, MUD, FABRICS, TINS OR ANY FOUND MATERIALS

<sup>3</sup> Peoples' Housing

<sup>4</sup> Zibala is a mix of manure, adobe and straw.

<sup>5</sup> These materials vary between areas; sometimes wire mesh is used on the external surfaces, then plastered, internal plastering sand with gum Arabic,

<sup>6</sup> Damuriya is rough handwoven cotton traditional to the northern areas of the Sudan.

<sup>7</sup> Referred to as "carton", thus the name attributed to some of these areas.

<sup>8</sup> This table is not all inclusive and is merely based on a brain storming exercise and impressions of a group of lecturers from Sudan University, December 2008. It will have to be revised with available statistics and other studies done on housing and urbanism in Khartoum.



IMAGES 3 AND 4 MORE IMAGES OF "ISHASH" THAT ARE LITERARY ON THE DOORSTEPS ON HIGH INCOME RESIDENTIAL DEVELOPMENTS ON THE PERIPHERIES OF KHARTOUM.



IMAGES 5 AND 6 SHOWING THE TYPOLOGY THAT IS QUICKLY DEVELOPING IN THE PERIPHERIES AND CAUSING DISRUPTIONS TO EXISTING SQUATTER COMMUNITIES IN THE SAME AREA OR THE VICINITY.



IMAGES 7 AND 8 – COMPETITION FOR LAND AND THE POTENTIAL FOR CONFLICTS IS RIFE IN THESE AREAS WHERE THE CITY IS BECOMING OVERCROWDED AND THUS EXPANDING FURTHER DISPLACING POORER GROUPS THAT CURRENTLY INHABIT THESE AREAS.

## 5. Conclusions

This theoretical background and these comparisons are the initiation of an academic exploration being embarked on by the Housing and Urban Environments (H-UE),<sup>9</sup> Department of Architecture, University of Pretoria which acknowledges informality as a legitimate energy within cities. It is believed that for designers of the built environment to be able to intervene in the development of cities in any meaningful way, they must arrive at solutions through the understanding of the unique

<sup>9</sup> [www.h-ue.co.za](http://www.h-ue.co.za)

everyday realities of a specific context – thus avoiding blanket solutions and by acknowledging the many agents acting on an environment at any given time.

It is believed that enterprises emerging from informal settlements are more suitable for low-income groups and that support of the informal sector better addresses the urgent need for poverty eradication. We are challenged as professionals to investigate beauty and efficiency in informality as an antithesis to a middle-class interpretation of how life should be lived.

These concepts have not been explored enough in this particular context of Khartoum. This offers immense opportunities for research and creates a platform for debate and perhaps helps towards the creation of a vision for the city that accommodates the rich and the poor equally and advantages both.

This study is on-going.

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