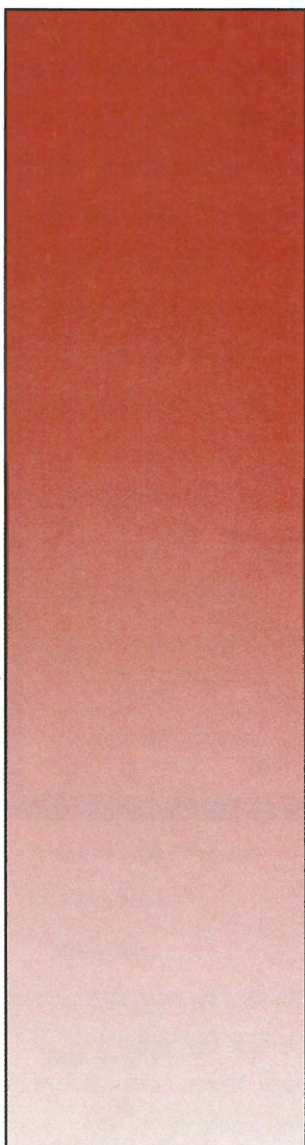


DIVISION OF  
BUILDING  
TECHNOLOGY



**CSIR**



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# CORE HOUSING AND INCREMENTAL GROWTH - IS THE VISION BEING REALISED?

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by  
**Mark Napier and Cathy Meiklejohn**

**Key Findings and Policy Implications  
from "The Incremental Growth of Housing:  
a post-occupancy investigation of core housing  
in Khayelitsha and Inanda"**

BOU/E9709, CSIR, Pretoria

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REPORT  
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# INTRODUCTION

## CSIR STUDY ON INCREMENTAL GROWTH OF HOUSING

One of the pillars of current housing policy is the concept of the incremental growth of housing. The core housing approach is often adopted as an effective way of promoting incremental growth. This assumes that residents will be able and willing to gradually expand initially basic dwellings into more adequate homes which satisfy their needs (see inserts below and on next page). The CSIR's Division of Building Technology has undertaken a detailed study to examine the actual outcomes of this housing approach. It addresses the question: ***Does core housing lead, in time, to adequate living environments and acceptable quality of life for the residents? Does this type of housing suit the needs and aspirations of the people who are living there?*** The study was motivated by the need to assess whether the current government policies which are leading inevitably to small core houses have a chance of creating living environments of reasonable quality.

The CSIR study included:

- a background literature and policy study;
- physical site surveys of houses and their surrounds;
- extensive and in-depth household interviews in the settlements of Inanda Newtown in Durban and Khayelitsha in Cape Town. (see Research Methodology on next page).

The research project was initiated mid-1995, and the household data collected at the beginning of 1996.

Although there are other housing delivery options available, since delivery at scale is a priority, much of what is produced in South Africa over the next few years is likely to be contractor-built mass housing. In this context it is important to continually re-evaluate the effect of various housing strategies on households and whether they are achieving their stated or commonly accepted goals. This CSIR work is a contribution to such an evaluation process. It is a retrospective study of large-scale core housing schemes, Inanda Newtown and Khayelitsha, where residents have had over a decade to consolidate. Although some policy factors have changed since the initiation of these projects, many factors remain unchanged. These include personal financial constraints, limited access to building skills and spatial dislocation, as well as national resource constraints for housing and infrastructure. These case studies can be viewed as broad scenarios of how core housing is likely to develop even in the present policy context.

### WHAT IS CORE HOUSING?

The core housing approach involves a basic structure being built with the intention that it be brought to a further level of completion at a later stage, usually by the inhabitants or their direct agents. It is usually a house which is minimal in its level of services, finishes and/or size, but specifically provides for the upgrading of these aspects. The process usually starts with a contractor building starter units. The residents then occupy the houses and build on extensions as their needs change and finance becomes available. However, residents can also be involved in the building of basic houses from the outset.

There are three main categories of core house:

- **Habitable core houses**, which include all the main built components and are thus habitable from the outset. They can take the form of a shell house, a small core house or a multistorey core house.
- **Non-habitable core houses**, which have one or more of the major built components missing and therefore require some input from residents before becoming habitable. Examples include floor houses (a slab only) and roof houses (normally a frame and roof).
- **Service cores**, either built as free-standing elements or attached to core houses. They may include the provision of water and sanitation and other services. Sometimes services are provided at a utility wall or simply at a point on a site.

Many combinations of these house types exist, such as a core house which incorporates both a habitable room and an adjacent roofed area for a future room. A variety of building materials and construction methods are used in core housing.



## WHAT IS "CONSOLIDATION"?

For the purposes of this study, "consolidation" describes the way in which houses are improved by the residents or their direct agents after occupation. It can involve extending the houses, improving finishes (interior or exterior) or improving the level of servicing.

## RESEARCH METHODOLOGY

1. An aerial photography survey of all houses in both settlements
2. Classification of houses according to types of extension
3. Stratification of the frame and selection of a random sample
4. The composition of a questionnaire addressed to residents in the settlement
5. The formulation of a physical site survey of the house and surrounds
6. The implementation of the household and physical surveys for a 5% sample
7. Interviewing of key actors, including original project agents and contemporary community leaders
8. The capture of survey data
9. The statistical analysis of the collected data
10. The interpretation of the data and report on key findings

## SUMMARY POLICY DOCUMENT

This summary policy document attempts to make the detailed research work undertaken in the CSIR research project accessible to policy-makers and communities by addressing three key questions:

- **What are the key findings of the research?**  
*What have residents done since occupation of their core houses? Is there overcrowding in core houses?*  
*What are residents' attitudes towards incremental growth of houses?*
- **Is core housing an enabling strategy?**  
*Are the needs and aspirations of residents being met?*  
*What quality of life do residents experience?*

- **What does this mean for housing policy in South Africa?**  
*Is it a strategy which authorities can use to provide adequate housing?*  
*Is the incremental growth of housing policy measuring up to its intended aims?*

A number of enlightening findings will be highlighted in this document and their policy implications will be explored. The full research report, **The incremental growth of housing: a post-occupancy investigation of core housing in Khayelitsha and Inanda**, (Napier, 1997) is available for detailed consideration. Before proceeding with a discussion of the research results it is important to examine the housing policy context within which new core housing schemes are being developed.

## HOUSING POLICY CONTEXT

The South African government took note of "progressive" housing strategies which were emerging internationally in the late 1970s and early 1980s (see Ward, 1982, and Payne, 1984). Even before the change in government certain types of self-help had been attempted. The three typical formats that this took were site-and-service schemes, core housing schemes and informal settlement upgrading. During this period existing South African laws were softened and special dispensations established to allow these types of project to take place (such as the classification of residential areas as "less formal").

From 1994, as a way to address the huge housing needs exacerbated by the previous regime, the new government embraced an enabling approach to allow beneficiaries of subsidies to gradually realise their need for "adequate" housing. A fixed housing subsidy was made available by government to South African adults qualifying in terms of income and a number of other factors. It was designed to be sufficient to purchase serviced land and a basic house structure of some kind.

The housing policy contained in the White Paper released by the Department of Housing, as well as the Draft Housing Bill, is



permeated by a notion of “progressive” delivery of housing (see insert below). In this current policy, housing is viewed holistically as “a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities”.

- (a) a permanent residential structure with secure tenure, ensuring privacy and providing adequate protection against the elements; and
- (b) potable water, adequate sanitary facilities, waste disposal and domestic electricity supply (Department of Housing, 1994).

The “minimum complete house” to which all South Africans should ultimately have access is described as having:

However, it is stressed that access can be on a “progressive” basis and that, in the process which leads to the acquisition of this type

## **KEY ASPECTS OF CURRENT SOUTH AFRICAN HOUSING POLICY: WHAT DOES THE WHITE PAPER SAY?**

In order to solve South Africa's housing dilemma a diversity of resources and the initiative of individuals, communities, the state and the broader private (non-state) sector need to be mobilised. Partnerships between various spheres of government, the private sector and the communities are envisaged. A multi-faceted approach is vital.

### **Vision**

Housing – a variety of processes through which habitable, stable and sustainable public and private residential environments are created for viable households and communities.

### **Goal**

Increase housing's share in the total state budget and increase housing delivery on a sustainable basis.

### **Points of departure**

Housing is a basic human right; there is a need for people-centred development; freedom of choice and non-discrimination; the state has a role to play in the housing market.

### **Housing as a process**

- Households access housing which they can afford and thereafter strive to improve their circumstances. The state has a responsibility to assist where households have a limited ability to house themselves.
- Communities, supported by the state, participate in satisfying their own housing needs.
- The housing process must be economically, fiscally, socially, financially and politically sustainable in the long term. This implies balancing end-user affordability, the standard of housing, the number of housing units required and the fiscal allocations for housing.
- There is a need to mobilise maximum possible sustained investment from the state, private sector and individuals.

“Assisted through state subsidies and appropriate technical and institutional support, a process of consolidation and upgrading must form an integral part of subsidised housing projects in order to ensure that the housing situation of all, but especially the poor, continuously improves.” (Department of Housing, White Paper, 1994).

### **Seven key strategies**

- Stabilise the housing environment.
- Establish housing support mechanisms to enable communities to continually improve their housing circumstances.
- Mobilise private savings and housing credit.
- Provide subsidy assistance to the disadvantaged.
- Create a rationalised, sustainable long-term housing institutional framework.
- Facilitate speedy release and servicing of land.
- Coordinate and integrate public sector investment and intervention.



of housing, a series of other goals should be achieved. These goals include:

- favouring small- and medium-sized businesses;
- labour-intensive building methods;
- promoting participation of communities;
- maximising job creation;
- improving economic linkages;
- promoting skills transfer;
- promoting capacity building;
- promoting upward mobility;
- stimulating entrepreneurial development, especially disadvantaged entrepreneurs;
- supporting the role of women; and
- creating and supporting viable communities.

In order to attain this vision, roles for individuals, communities, the state and the private sector are suggested. The government undertakes to "establish a sustainable housing process which will

eventually enable all South Africa's people to secure housing (Department of Housing, 1994).

While not promising to *provide* housing, the government does take the responsibility to "ensure conditions conducive to the delivery of housing". It therefore sees its role as supporting housing "to enable communities to, on a continuous basis, improve their housing circumstances" (Department of Housing, 1994).

In practice, the policy described above has led to a situation in which rising service costs and a virtually static subsidy amount leave smaller and smaller amounts over for developers or residents to use in the building of a house. The response is for developers to offer residents shrinking core houses or roof structures as the "top structure" affordable within the subsidy framework (see insert below).

The future of low cost housing seems bleak if reduced to pure square-metre calculations, without reference to the way in which

## RISING COSTS - SHRINKING CORE HOUSES

Former Housing Minister, the late Joe Slovo, embraced an incrementalist approach to the housing problem. He argued strongly for the provision of starter homes which could subsequently be improved by the occupants' own "sweat equity", using government-supported building centres and self-help measures.

Because there was not enough money, this approach has translated into the provision of serviced sites with rudimentary (one-room) structures as a starting point. Serviced sites typically cost around R7 500, rising to R11 000 in places with difficult topography like KwaZulu-Natal.

Builders say that, for R15 000, after varying site servicing costs, they can provide only a single-room house using conventional methods.

Murray & Roberts says its unit would be up to 10m<sup>2</sup> in size; Grinaker provides three options – a 40m<sup>2</sup> roof structure with an enclosed toilet, a 20m<sup>2</sup> room with an outside toilet, or a 20m<sup>2</sup> room with an enclosed toilet on the newer schemes.

Stocks & Stocks offers a range of three units from 20m<sup>2</sup> to 25m<sup>2</sup> and 30m<sup>2</sup> single-room houses – all providing a WC cubicle in a corner of the room and a sink.

Newhco, like M&R, can offer only serviced sites in some places, a 17m<sup>2</sup> one-and-a-half-room structure in others or an enclosed toilet in a larger roof/slab structure.

The SA Housing Trust says it can produce one-room products in the region of 19m<sup>2</sup> – 25m<sup>2</sup>; and LTA, though not producing for the R15 000 market now, says it could produce a 40m<sup>2</sup> roof with an enclosed 4m<sup>2</sup> – 12m<sup>2</sup> shower/toilet cubicle.

*Financial Mail, February 09, 1996*



choice would be granted to residents or to the support processes available for the further improvement of housing, and coupled with the possibility that the mass production of housing may be promoted as a method of ensuring delivery at scale.

There are, however, several important points that have emerged from recent public debate.

- All housing should be upgradeable and extendable, whether it starts off as core housing or not. This ensures flexibility and heightens the likelihood of being able to match household needs with housing products.
- Approaches in which open, serviced land is supplied may be more constructive than those trying to provide unacceptable rudimentary core housing (however, location, land cost and a number of other factors impact on whether this approach is appropriate). People can then choose to use the amount remaining from the subsidy more constructively in building what they want.
- Now that local authorities have been given the go-ahead to supplement the basic subsidy from other funding sources, residents' chances of accessing better housing are increased.
- More positive types of incremental housing such as reasonably sized shell houses with minimal finishes (such as in the Inanda Newtown case study) are becoming acceptable as a starter option in cases where this is chosen by people, rather than their having it forced upon them.
- People's organisations such as the South African Homeless Peoples' Federation have demonstrated that a self-help process of production and delivery can lead to larger houses for the subsidy amount.

For the present, then, housing policy explicitly supports the concept of incremental housing even though the political and social viability of the strategy at regional and local levels is still being tested. In essence, people are being called upon to make an active

contribution, or to help themselves, by growing their own housing incrementally towards an ultimate goal with assistance from the government in the form of an initial subsidy and ongoing support. As will become clear from discussion of the research it is this aspect of the actual provision of ongoing support in the incremental housing process that appears to be a weakness in the current housing policy approach. One way in which ongoing support has been provided in the Chilean case (see next page) is through the use of a second consolidation subsidy. Some form of appropriate finance could be considered as a means of bolstering the efforts of residents in improving their homes in the South African situation. This will be discussed in more detail in the Policy Recommendations section.

## RESEARCH BACKGROUND AND FINDINGS

### BACKGROUND

The CSIR research project aimed to see whether the vision of incremental housing policy was actually being realised. It was designed specifically to ascertain residents' experiences of core housing and to assess what people had managed to do to their homes over a decade. To this end, a key aspect of the research involved four hundred and fifty household interviews (a 5% sample) and the collection of accompanying physical household data in both Khayelitsha, (Cape Town) and Inanda Newtown (Durban) (see page 9 for maps). Interviews were also conducted with original project developers and contemporary community leaders (for an outline of the methodology adopted see insert on "Research methodology").

Both Inanda Newtown (4 000 sites) and Khayelitsha (5 000 sites) were good examples of large-scale core housing schemes in which residents have had over a decade to consolidate their houses. A brief settlement history of each development is provided here, as well as a few personal case studies representing some of the successes and failures of incremental growth of housing within these communities. It is hoped that this will provide a sense of the broad structural factors affecting the consolidation of core housing



## CHILEAN INCREMENTAL HOUSING

Chile has a long and varied history of state intervention in social housing. Since the 1950s, central government has emphasised the need for involvement in housing provision. "The variety of political complexions of successive governments has produced a variety of policies and approaches which in turn have been translated into a very wide range of housing types, designs and methods of subsidy" (Kellett et al, 1993).

There was increasing state involvement, which climaxed with the socialist government of Allende, which saw housing as an inalienable right for all, irrespective of income. It saw it as the state's responsibility to provide housing. Building programmes increased during this regime to a rate of 52 000 dwellings per year. The authoritarian military government reversed this approach and adopted more of a free-market approach, in which housing was seen more as a commodity to be acquired by effort and savings. After some time this dictatorship introduced a system of subsidies to encourage private-sector involvement in housing and to widen access to housing projects.

The democratic government which came to power in 1990 inherited a large housing deficit. Almost 40% of the population were not adequately housed. It was estimated in 1990 that 300 000 households were in substandard dwellings and 800 000 families shared accommodation with other households, resulting in overcrowded situations with overstretched services. **Allegados** (sharers) were a politically sensitive issue; they created a threat of large-scale land invasions unless rapid housing delivery could occur. The scale of housing needs and political pressures to meet these needs created a difficult housing policy environment. Units required increased faster than resources, resulting in decreasing size and quality of dwellings. Some new approaches such as upgrading and sites and services have been adopted but the main thrust of policy has been the provision of subsidies for completed basic units as the first stage of the social housing solution.

The new government's housing policy (1990-1994) included a programme of **vivienda progresiva** (progressive or incremental housing). This approach which included many self-help and self-build options is not new to Chile. It was basically a two-stage programme. First a serviced site and small core unit were supplied. Two years later a second subsidy could be applied for, to complete the dwelling. It emphasised the involvement of residents in the housing process (Kellett et al, 1993).

There are some striking similarities between challenges facing policy-makers in Chile and in South Africa. However, the use of a second consolidation subsidy in the Chilean case, which is provided two years after the provision of a serviced site and small core unit, bears consideration in the South African context (see page 26 for section Financing Mechanisms).

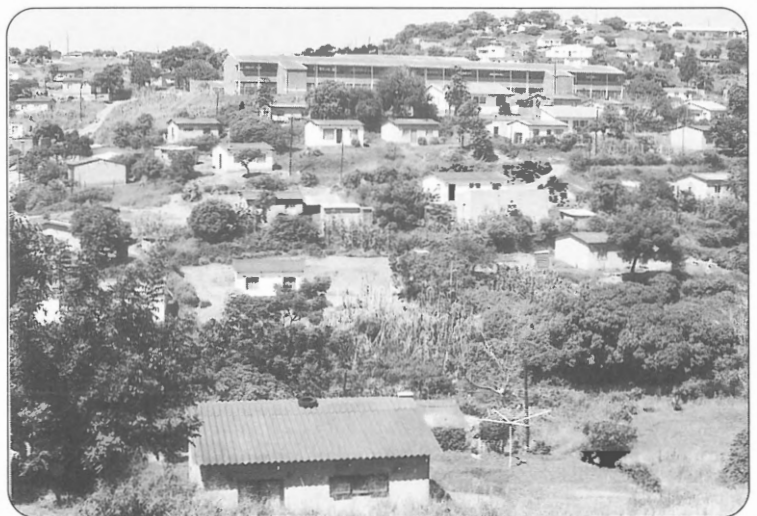
as well as give a flavour of the different ways in which individual households respond to their housing needs in the core housing context.

Two sets of choices were offered to households:

The first concerned the size and type of house (see page 10):

### INANDA NEWTOWN

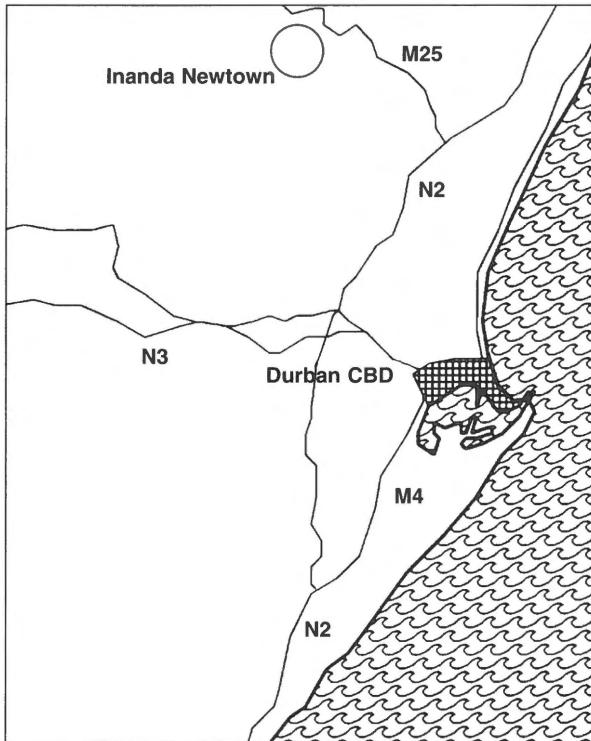
This "assisted incremental housing project" of 4 000 sites was undertaken by a national non-governmental organisation, the Urban Foundation (UF). It is located beyond the traditional township area of KwaMashu. The first houses were built in 1981 by small contractors trained by the UF. An advice office was run by the UF, providing advice as well as building materials and it remained involved in the project for a period of seven years.



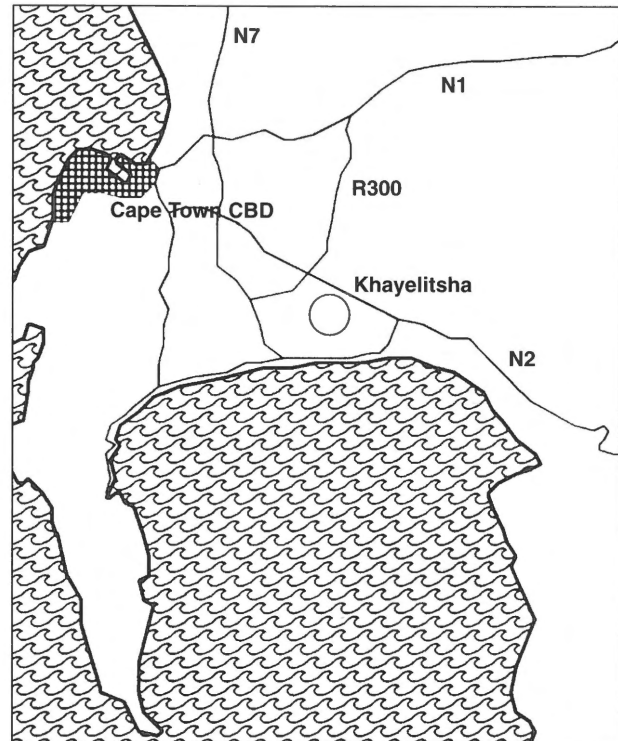
*Inanda Newtown*



## LOCATION OF INANDA NEWTOWN



## LOCATION OF KHAYELITSHA



- two-room core house (29m<sup>2</sup>) <1% chose this option
- four-room shell house (47m<sup>2</sup>) 71% chose this option
- a completed four-room house (47m<sup>2</sup>) 16% chose this option
- six-room house (68m<sup>2</sup>) 6% chose this option

It can be seen that residents tended to prioritise space in their choice.

Secondly, there were various builder options:

- build for yourself 23% took self-build option
- nominate your own contractor 77% used a project-based or independent builder
- employ local project-based contractor

A large majority (two-thirds) of households chose to use builders rather than build themselves.

Steep gradients in the Inanda Newtown area meant that building platforms were often small, which constrained extension in many cases. Sites ranged in size from 180m<sup>2</sup> to 350m<sup>2</sup>. Only basic

service levels were provided: shared standpipes, on-site pit latrines, untarred access roads, surfaced bus routes. Full title was given to residents after a five-year period during which the sale of the house was restricted. No other restrictions were placed on residents and in effect they had full title from the outset. Households with low incomes were granted loans. Interest on the loans was subsidised.

## KHAYELITSHA

This was a mass housing scheme of 5 000 sites initiated by central government in 1983. It is situated 35km from the Cape Town city centre. The area is flat and the sites were on average 160m<sup>2</sup>. Houses were small, ranging in size from 26m<sup>2</sup> to 32m<sup>2</sup>. Three large contractors were involved in the construction (see page 11).

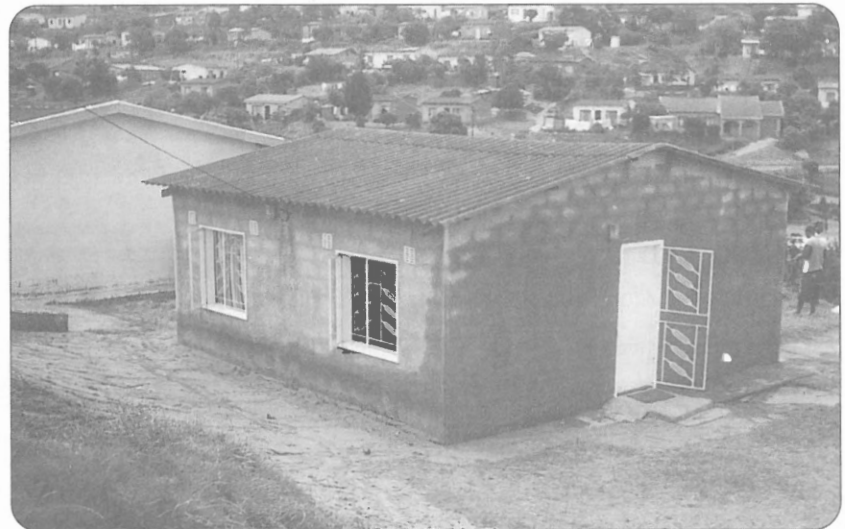
Service levels were relatively high: tarred roads, water and sewerage connections to each house. Houses were only available for rent. This insecurity of tenure has persisted for many households who, despite the fact that houses have been offered for



## INANDA NEWTOWN-CORE HOUSE ALTERNATIVES



*Inanda Newtown: two-room core house*



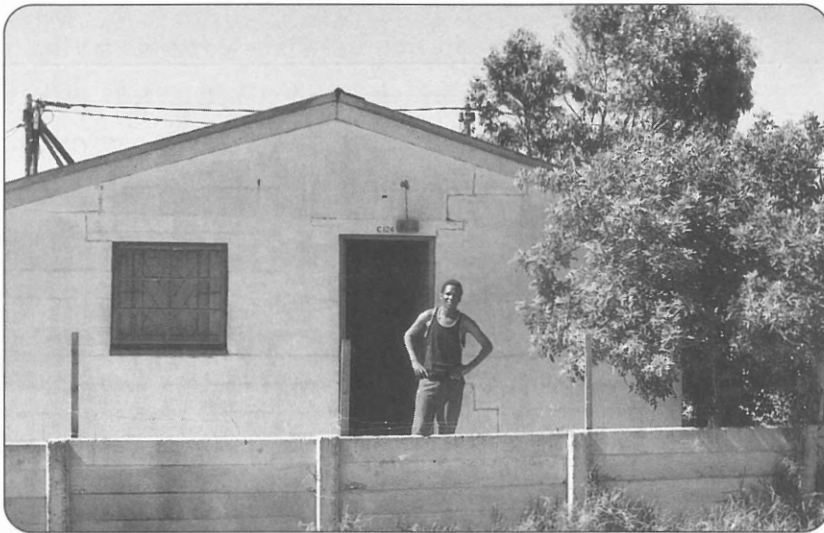
*Inanda Newtown: four-room shell house*



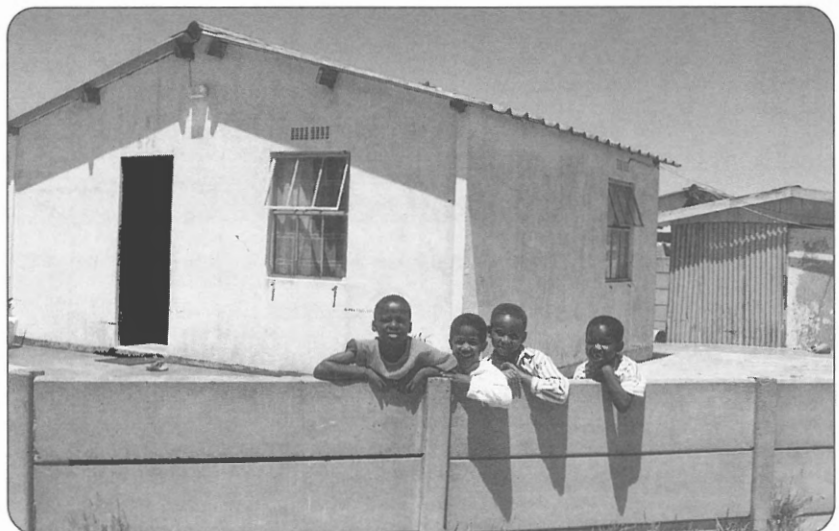
*Inanda Newtown: six-room shell house*



## KHAYELITSHA CONTRACTOR-BUILT CORE HOUSES



*Khayelitsha Besterecta concrete block core house*



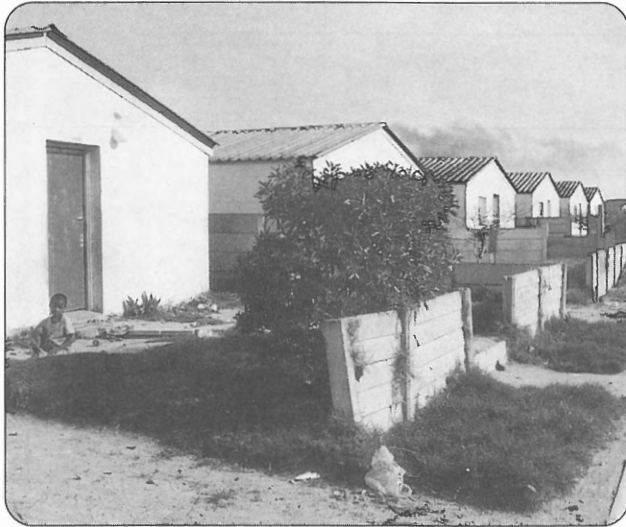
*Khayelitsha M&R concrete panel core house*



*Khayelitsha Wimpey L-shaped core house*



sale, have chosen not to buy (82% of the *original* occupants still rent their houses and 48% of the more recent settlers rent from the municipality while 12% rent from absent owners). Rental and rate charges have been maintained at a flat rate and the project planners have acknowledged that there has been no real cost recovery.



**Khayelitsha mass-built core houses**

Residents had no choice of the type of house or its location. The housing support initiative planned as part of the development was never implemented. The differences between the developments in **Khayelitsha** and **Inanda Newtown** are highlighted below.

### SUMMARY OF CASE STUDIES

	<b>Inanda Newtown</b>	<b>Khayelitsha</b>
<b>Occupied:</b>	October 1981	October 1985
<b>Developer:</b>	Urban Foundation	Private consultants
<b>Tenure:</b>	Deed of grant	Rental
<b>Sites:</b>	4 000 sites	5 000 sites
<b>Delivery:</b>	Sites and services followed by small contractors or self-help building	Mass-built standard core houses
<b>House size:</b>	29-47m <sup>2</sup>	26-32m <sup>2</sup>
<b>Plot size:</b>	180-350m <sup>2</sup>	144-160m <sup>2</sup>
<b>Services:</b>	Tarred bus routes, pit latrines, standpipes	Fully tarred roads, flush toilets, water to houses

## RESEARCH FINDINGS

### Types of extension

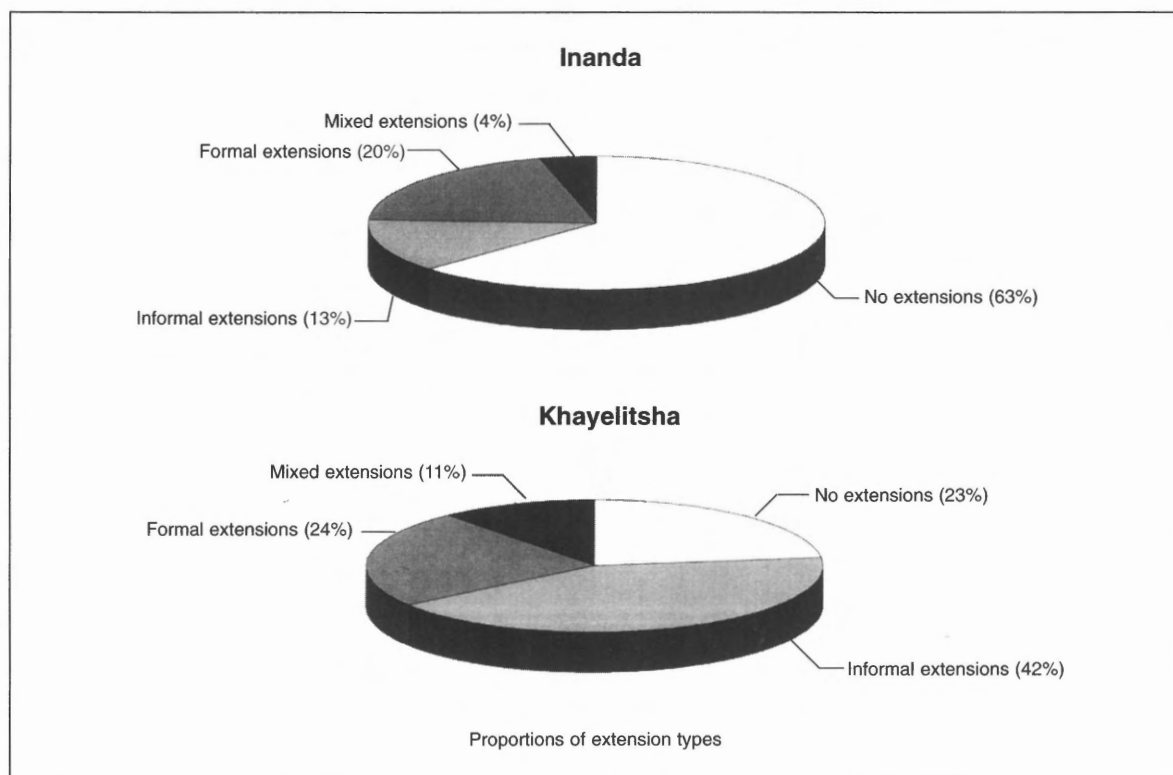
From the research undertaken in these two settlements it became clear that there had been a variety of responses by households to their core housing living environments. Individual examples are given later. In terms of a statistical analysis of these household responses, they can be classified into four categories: those with formal extensions using brick or concrete blocks; those with informal extensions such as timber, corrugated iron or earth structures; those with mixed extensions using a combination of materials; and those that have not been extended.

In **Inanda Newtown**, where there has been some household participation, secure tenure, and direct support from project agents, 20% of residents have added formal extensions, 13% have added informal extensions and 4% have added mixed extensions. Of all households, 63% have not extended beyond the perimeter of the original house (see insert on opposite page). Although the proportion of houses without extensions is large, most people in this category have internally sub-divided their shell houses and upgraded finishes. The fact that many of the houses in Inanda Newtown were relatively large to start with (87% being four-room shell houses or completed houses) also obviously affects the amount of extension activity occurring in Inanda Newtown.

In **Khayelitsha**, with the limited choice, space constraints, a lack of direct support for consolidation and continued insecurity of tenure, the response of residents has been surprisingly positive. In fact, overall there has been more extension activity than in Inanda Newtown. The size of the original core houses in Khayelitsha, many of them as small as 26m<sup>2</sup>, has made it a necessity for more extension activity to occur. However, most of this is informal in nature and many of the informal extensions are quite large in an attempt to overcome the space constraints of the small original core houses. Almost a quarter of the residents (24%) have added permanent extensions, 42% have added informal extensions, and 11% have added mixed extensions. The remaining 23% have not added space to their core houses (see insert on opposite page).



## WHAT HAVE PEOPLE DONE TO THEIR HOMES IN A DECADE?



### Size of extension

People have expanded their original houses considerably. In **Inanda**, those people who extended their houses increased the space by 58% on average. Their houses were thus almost two-thirds bigger than the original core house. The small number of people with informal extensions increased their space by 36% by adding an average of 1,6 rooms to their houses. People with formal extensions added 63% to the original house, and on average 2,4 rooms.

In **Khayelitsha**, those who added on expanded the area of their houses by an average of 115%. This represents a doubling of the space available to extenders in Khayelitsha. Informal extensions have an average of 1,7 new rooms with an increase in area of 71%. Formal extensions have an extra 3,8 new rooms which have increased the house size by 137%. Mixed extensions have four new rooms and houses are 167% larger.

### Factors affecting consolidation

After all of the research findings had been examined, it emerged

that the factors affecting the consolidation of core houses in **Inanda Newtown** included:

- varying levels of building skills within households;
- generally low levels of consultation with experts for advice and know-how;
- high costs of formal *and* informal building by builders;
- very low utility of end-user finance;
- varying household income;
- larger core houses, reducing the need to extend immediately;
- differing age structures of households; and
- physical constraints, such as the space available on the site and the topography.

Factors affecting the consolidation of core houses in **Khayelitsha**:

- varying household income from employment (formal and informal);
- a general lack of building skills within households;
- good access to cheap building materials, leading to low-cost informal extensions;
- relatively high cost of formally built extensions;



- better use of formal finance for extensions;
- lack of access to advice and support from authorities;
- an absence of choice for, and participation by, residents; and
- size of core houses as motivator to extend in some way.

A buffet of research findings is presented below for the reader's consumption, but the key research findings are summarised on page 16.

## A BUFFET OF RESEARCH FINDINGS: THE LINK BETWEEN CONSOLIDATION AND HOUSEHOLDS

When looking for explanations of why households had improved their houses in different ways, a number of interesting trends emerged from the research. There were noticeable differences between **Inanda Newtown** and **Khayelitsha** in both the causes and the effects of extension.

### A. Factors influencing extension

#### *Employment, household income and consolidation*

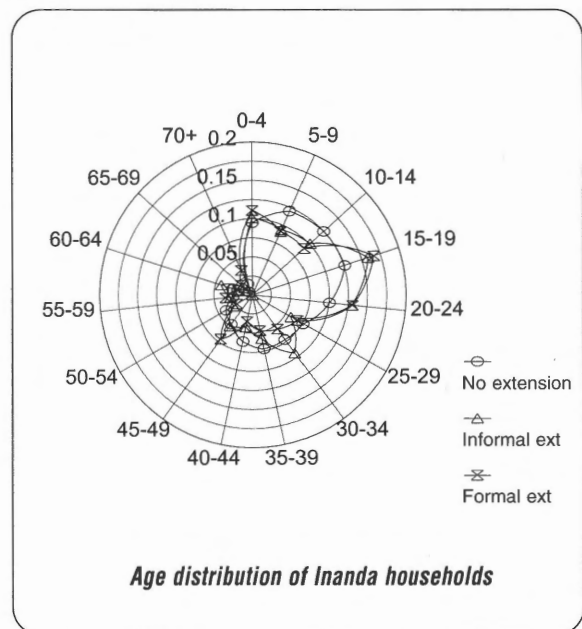
- Unemployment in households in **Khayelitsha** with no extensions is the highest, at 31%, whereas it is 25% for people with informal extensions, and only 16% for those with formal extensions. In **Inanda** there was no clear correlation between unemployment and types of extension.
- The following table shows that, in **Khayelitsha**, as in the case of unemployment, there is a clear link between household income and ability to extend. In **Inanda** the monthly income of people with different types of extensions is very much the same, except that people with informal extensions are slightly poorer than others. Income and unemployment clearly affect extension in Khayelitsha, but other factors must be affecting Inanda families.

	No extensions	Informal extensions	Formal extensions
Inanda	R 1,830	R 1,661	R 1,859
Khayelitsha	R 1,312	R 1,524	R 2,114

- Woman-headed households in **Inanda Newtown** earn on average 40% less than households headed by males. Despite this, more woman-headed households have added extensions. In **Khayelitsha** woman-headed households earn 28% less than man-headed households, and this has had a detrimental effect on extension activity, with 31% of woman-headed households having no extensions, but only 16% of man-headed households having no added space.

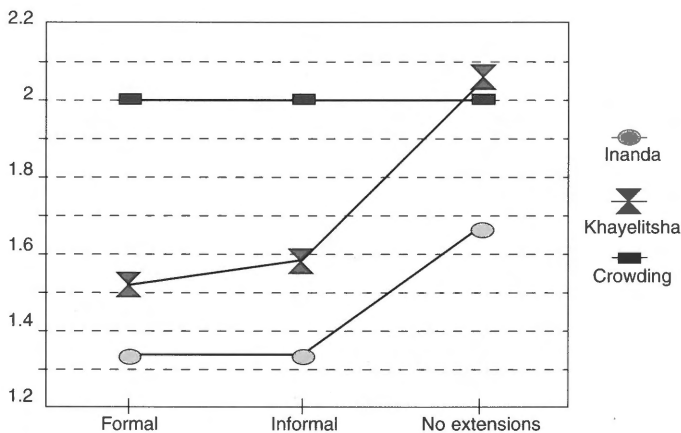
#### *Household ages and consolidation*

- In **Inanda Newtown**, the size and age of families has more effect than household income on whether people extend their houses or not. Families with more young adults in the 15 to 24 age group have made more extensions than those with younger children (see figure alongside). Because the core houses are larger in Inanda Newtown, people can choose to postpone the building of further extensions until the family grows older. In **Khayelitsha** there are no clear links between the ages of family members and consolidation. Income seems to be the main constraint there.



### Building skills and consolidation

- Where incomes are low, a cheaper way to build is to build for oneself. In **Khayelitsha** it is clear that income has been a main constraint to extension. The one-quarter of **Khayelitsha** households with no extensions, in addition to having lower incomes, also had lower levels of building skills within the household. Of these households 93% had no building skills directly available to them. The large number of households who had added informal extensions had better access to building skills, with 20% of respondent households having skills within the household. People with formal extensions also had less access to skills (88% had no building skills – similar to those without extensions) but they had sufficient income to pay someone else to build for them.



**Graph Showing Mean Numbers of People per Habitable Room in both Settlements**

### B. The effects of not being able to extend

#### Household size and crowding

- Households with no extensions in **Inanda** have had to cope with a 37% growth in household size of over the past 14 years. The household growth rate of unextended houses in **Khayelitsha** is 42%, which raises a concern that conditions of overcrowding are likely to develop if space is not added to these houses.
- There are indications that people who extend are effectively reducing overcrowding. In **Inanda Newtown** houses that have been formally or informally extended there are 1,33 people per habitable room whereas in houses with no extensions there are 1,67 people per habitable room. The number of people per habitable room in houses with no extensions exceeds two in **Khayelitsha**; according to most standards, this verges on overcrowding.

- Given that for **Khayelitsha** households without extensions are also the poorest, with the least access to employment and skills, the effects of living in overcrowded conditions must exacerbate an already difficult situation. A reasonable amount of space in **Inanda** core houses has meant that even the poorer families have not been faced with such dire consequences.

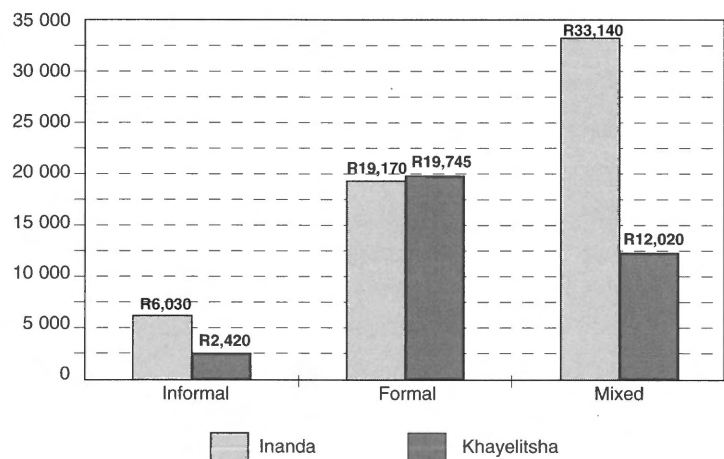
### C. Understanding the extension process

#### Building extensions

- In both **Khayelitsha** and **Inanda Newtown** less than a quarter of added rooms were built by residents themselves and more than three-quarters by local builders.
- Those with informal extensions have significantly more building skills within the household and therefore more households were directly involved in the building process (one-third of households built their own informal extensions).
- The vast majority of formal extensions are built by builders in both **Inanda Newtown** (77%) and **Khayelitsha** (81%).

#### Costs and financing of extensions

- In **Inanda Newtown** the average cost of informal extensions is R6 030 and of formal extensions it is R19 170. In **Khayelitsha** the average cost of informal extensions is R2 420 and that of formal extensions



**Graph showing average costs of extensions**



R19 745. Mixed extensions in **Khayelitsha** are much cheaper on average than those in **Inanda Newtown** (R12 020 compared to R33 140).

- Informal extensions in **Inanda Newtown** cost on average 2,5 times those in **Khayelitsha** due in part to a poorly developed building materials supply market.
- Personal savings are the most common method of financing extensions: 87% in **Khayelitsha** and 94% in **Inanda Newtown** were financed in this way.

#### *Use of informal extensions*

- It was expected that many backyard rooms would be used to gain extra income by renting them out. This was not found to be the case, with only 4% to 5% of houses in both settlements having lodgers.
- The proportion of houses with businesses operating from the house, although significant, was also low. In all, 5% of households in **Inanda Newtown** and 4% of **Khayelitsha** households said that they had extended their houses to accommodate home businesses.

#### **D. Opinions about living in core housing**

- 35% of **Khayelitsha's** residents still feel that it is the government or the private contractor's responsibility to improve their houses. In **Inanda Newtown** this figure was lower, with only 25% expecting the government to intervene to assist them.
- A large proportion of original residents in **Khayelitsha** (65%) and **Inanda Newtown** (55%) felt that their house needed to be extended when they first moved in.
- Negative views about living in core housing differed: in **Inanda Newtown** they revolved chiefly around the lack of services and in **Khayelitsha** they had to do with the size of the houses.

## SUMMARY OF KEY FINDINGS

Local factors play a major role in determining levels of investment in housing. The following are examples:

- degree of participation (choice of original site and core house type, etc.) by residents;
- involvement in decision-making and attitudes towards participation in the housing process;
- income and employment levels;
- local markets in building materials;
- access to building skills;
- access to housing support and advice;
- security of tenure; and
- access to formal and informal financing mechanisms.

The **good news** from these research results is that:

- the mobilisation of personal finance and other resources is possible in this development framework, as revealed by the considerable levels of investment by those who undertook formal and informal extensions;
- formal and informal sectors can be combined to maximum effect in the production of predominantly sound, informal

rooms for habitation (e.g. in **Khayelitsha**); and

- a history of direct involvement in the establishment of one's own housing (as would be the case with informal settlers) may well aid the household in establishing itself in core housing.

The **bad news** revealed by the research is that significant numbers of households get "left behind". They are unable to add space of adequate quality due to:

- the lack of personal participation from an early enough stage;
- the absence of advice and skills training for residents;
- little or no institutional support; and
- the absence of appropriate financing mechanisms.

There are still too many households for whom the core housing approach is not an enabling one.

It is striking that so few households in both case studies have extended their housing formally. Thus there is evidence from these case studies that the aim of achieving the incremental growth of initially small houses into larger, permanent structures – which is assumed in current housing policy – is often not being achieved.



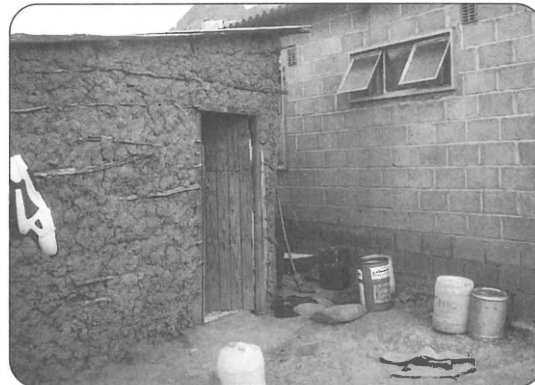


## INDIVIDUAL RESPONSES TO CORE HOUSING

It is important to recognise that, although general trends emerge regarding consolidation of core housing, individual households have very different aspirations and respond very differently to their own housing needs. The individual case studies provided here also serve to illustrate the potentials and the limitations of individual responses to core housing and how these impact on the policy context within which incremental housing operates. They reveal a “complex interrelationship between the dweller and the dwelling [which] is dynamic, organic and continuous... it is a two-way process of change” (Kellett et al, 1993). In this process both dwelling and dweller change. Individuals, families and households experience cycles of change. Buildings deteriorate, are maintained and modified by their occupants. There are conscious or unconscious attempts by dwellers to make the dwelling respond more closely to a range of requirements (Kellett et al, 1993). From all the household situations revealed by the research, selected stories are told here. An extreme example of the remodelling of core housing is Zodwa’s ten-room double-storey house in **Khayelitsha** (see below). Many others have

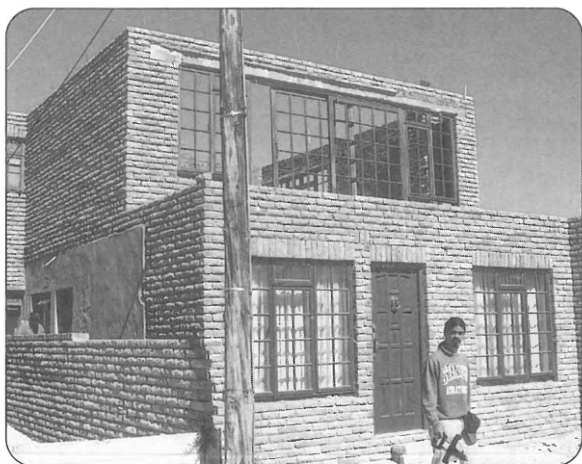
### NOMAKHOSI, INANDA NEWTOWN-INFORMAL EXTENSION CREATING HABITABLE SPACE

Nomakhosi (26) lives with her parents (54 and 55) and their three grandchildren (7, 13, 14) in what was a four-room shell house. They came from a rural area 12 years ago, where they had lived in a shack. The joint monthly income of Nomakhosi’s parents is reasonably good (over R1 000 per month). In 1992 they employed a builder to build them an earth outbuilding for R4 000. With the extension, they now have 52,5m<sup>2</sup> of space,



with an average of 1,2 people per habitable room. The building of this extension, which was more reasonably priced than many informal extensions in **Inanda Newtown** (average expenditure R6 030), thus minimised the overcrowding problem for this household and probably enabled the teenagers in the family to have more privacy. Members of this household claim that they were not informed that they would have to improve their house themselves when they became participants in this scheme. However, they had recognised the need to create more habitable space and have opted to create an informal extension (in the form of a gumpole frame and earth infill outbuilding) to their original core house.

undertaken formal or informal extensions to their core houses. See for example, Nomakhosi in **Inanda Newtown** (above) and Nozuko in



### ZODWA, KHAYELITSHA – GRAND-SCALE RECONSTRUCTION ON LIMITED RESOURCES

Zodwa lives with her two children in a unique, still-to-be completed, ten-room double-storey house in **Khayelitsha**. Initially she almost completely demolished her core house and built a five-room house. In 1995, she added three more rooms at a cost of R25 000. The upstairs rooms are not complete because Zodwa is self-employed with low monthly earnings, which are not dependable. She has relied on personal savings to undertake the extensions so far but is now seeking formal employment so that she can complete the house.

This is an example of remodelling which goes beyond what the original core house designers envisaged, and to an extent which would not have been expected at this income level. The importance of personal savings in the consolidation process is also highlighted.



**Khayelitsha** (right) who have both extended informally, and Sipiwe who undertook formal extensions in **Inanda Newtown** (see below).

However, the case studies also illustrate a trap in which many occupants of core houses find themselves: either they would like to extend their housing but cannot afford it because of their often meagre household incomes, or financial constraints force them into having unsound informal extensions. See, for example, Samuel and Thandi's situation in **Khayelitsha** and Nonhlanhla's in **Inanda Newtown** (see next page).

## NOZUKO, KHAYELITSHA – TIMBER-PANEL ROOM RESULTS IN IMPROVED QUALITY OF LIFE

As Nozuko's two children grew up she felt there was a need for another bedroom. She purchased prefabricated timber-framed panels for R1 700, which are readily available from outlets in the informal settlements that surround the formal part of **Khayelitsha**. These panels were assembled by a builder into a 13m<sup>2</sup> room. This was placed away from the house and has resulted in



a marked improvement in quality of life for the family, because of both the extra space and the greater levels of privacy it affords the family. It is an example of an informal extension that creates adequate housing, as do 83% of the informal extensions undertaken in **Khayelitsha**.

General research has been undertaken regarding the inter-relationship between dweller and dwelling and what causes households to change or adapt their dwellings (see insert on page 20). Many of these factors are evident in this research and were operative in **Khayelitsha** and **Inanda Newtown**. These factors should be borne in mind when developing policy around core housing, as well as in actually building core housing. If policy-

makers and housing practitioners are aware of them it will be easier to facilitate the process of consolidation.

## RESEARCH CONCLUSIONS

Core housing in the right context, with other enabling factors in

place, has the potential to be a successful housing delivery option. It is evident, after one has looked at both settlements, that a majority of people, by initiating an incremental growth process, have produced what can be described as adequate housing. One can reasonably expect the housing being produced under the present policy framework to develop in similar ways.

There are still too many households, however, for whom the core housing approach is not an enabling one in the South African context many fail to achieve

## SIPHIWE, INANDA NEWTOWN – REGULAR INCOME ALLOWS HIGH QUALITY EXTENSIONS



Sipiwe bought a four room house in Inanda Newtown in 1988. Both he and his wife are formally employed and they live in the house with their five children. In 1995 he used personal savings to employ a builder to add two rooms and a verandah at a cost of R8 000. His only complaint about the house is that he feels that the pit toilet is not hygienic.



## SAMUEL AND THANDI, KHAYELITSHA – OVERCROWDING, DESPITE INFORMAL EXTENSION



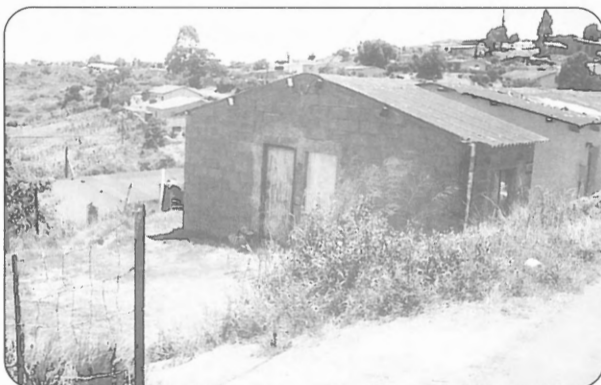
Samuel and Thandi live in a house in **Khayelitsha** with their three adult children and two grandchildren. Their two pensions are the only household income. They cannot afford any formal extensions to their three-room house and live in very cramped conditions. They have encountered many problems with the core house, including sand and rain coming in under the doors and fungus growing on the walls. In 1995 they built a plywood and cardboard-covered timber-frame extension, at a cost of R600. Samuel had expected help from the government in improving the house but none was forthcoming. Their extension is of an unusually temporary nature and can hardly be considered an improvement to the core house. Rather, it is a desperate measure to deal with overcrowding which has led to a structurally unsound and inadequate dwelling. Such structurally unsound extensions were found in 17% of households with informal extensions.

adequate housing within a reasonable time span. The following groups of people require attention:

- those who have not managed to add anything (a significant number in the **Khayelitsha** case – 23% of the total sample); and
- those who have structurally unsound extensions (17% of those with informal extensions).

If it is the aim and expectation of the protagonists of core housing that residents will increase core houses into larger, permanent structures (and certainly South African housing policy assumes this), then the evidence from a decade of development within these case studies suggests that this expectation is not an easily achievable one. Whether a more positive social and political context will stimulate a better response from residents in the new South African milieu remains to be seen. However, as argued above, economic and locational “conditions of existence” (Stea & Turan, 1990) in new core housing settlements have seen little improvement, and so these limitations on extension activity remain unaltered. It is thus possible that core housing schemes being built at present, on even more limited resources, with even less institutional and financial support, are less likely to be successful. Hence the need for a

## NONHLANHLA, INANDA NEWTOWN – NO EXTENSION TO TWO-ROOM CORE HOUSE



Nonhlanhla is a single mother who, with her sister and their two children (aged 12 and 8), lives in a two-room unplastered and unpainted house in Unit A of **Inanda Newtown**. Nonhlanhla is only occasionally employed and her sister is seeking work. They have a low and unpredictable household income. She moved out of a township house in KwaMashu to gain her independence.

She is not happy with the house in which she has lived for seven years and intends to move out to another in the area. Her present house is badly maintained and obviously too small. Despite indicating that she would like to move to another house, she also says she intends to add another two rooms by 1998. She has not yet done so because of financial problems. Nonhlanhla

says that it is her responsibility to extend the house, but that she would appreciate some government assistance, even if she had to supplement what is granted from her own pocket. She feels worse off than people in township houses because of the number of rooms she has, and because she has to cook in one of the bedrooms. The family has access to a standpipe in the street. There is electricity and a phone in the house. Despite unhappiness with the house itself, she is happy with the social facilities in the area.



## FACTORS AFFECTING CHANGES TO THE DWELLING

Why do people make changes?

- Dwelling incomplete, deficient or inadequate particularly in spatial terms
- Dwelling inappropriate for context
- Change in the requirements of dwellers and family circles
- Aspirations and expectations of occupants change
- Efforts to personalise dwelling
- Attempt to generate income by creating economically productive space

Here is a list of some of the factors which affect the way in which households change or adapt their dwellings:

### Dweller factors

- Security of tenure
- Resources available
- Characteristics of the dweller

### Dwelling factors

- Type of dwelling
- Technology
- Immediate surroundings, plot size, orientation, position, gradient

### Context factors

- Geographic context, (e.g. climate)
- Economic situation
- Housing situation, housing backlog, overcrowding
- Laws and regulations
- Attitudes, general climate of acceptability

*After Kellett, Toro and Haramoto (1993)*

number of policy measures to be put in place to ensure that this widely adopted housing strategy does not have dire consequences for physical and social conditions in South African residential areas.

## HOUSING POLICY AND PROJECT DESIGN ISSUES

In addressing the question of whether core housing can become "adequate" housing, a number of issues relevant to the current housing policy debate emerge. Government housing policy and "housing assistance measures" (e.g. the subsidy system) already address many of these issues. It is often the prioritisation and implementation which fall short of these ideals. To summarise, the

issues that require attention if incremental growth is to be stimulated include:

- the participation of residents from an early stage in the project, aiding an understanding of the intended development principles;
- access to appropriate end-user finance both for initial core houses and to build extensions;
- secure tenure;
- choice for residents of delivery routes and housing products;
- transfer of building skills direct to residents if requested;
- an institutional framework which provides advice and support to residents for as long a period as possible;
- transfer of organisational skills to communities so that when project agents leave communities can continue the



- consolidation process themselves;
- the creation of as much habitable space as possible within core houses; and
- adequate and acceptable levels of municipal services, a decision on which residents should ideally have direct input if they are to be satisfied with what is supplied.

### THREE QUESTIONS POLICY MAKERS SHOULD ASK

- What mechanisms should be put in place to facilitate a variety of housing processes for different contexts i.e. to broaden the options and to ensure that the core housing approach is not simply adopted even where inappropriate because there are limited other options?
- Can core housing eventually become “adequate” housing in a particular context?
- What policy issues require attention if incremental growth is to be stimulated? (See section on Housing policy and project design issues, page 20)

Emphasis on these policy issues should increase the chances of success of the incremental delivery of adequate housing for all. A lack of commitment to the principles of a supported housing process is likely to give rise to long-term problems in many spheres of South African society (see “Three questions policy makers should ask” above).

A worst-case scenario in which large numbers of small core houses are mass-built, with no resident participation or ongoing support for consolidation, would leave the country with potentially explosive social and political problems, and a housing stock that would be difficult to maintain. A more favourable scenario in which residents choose the type of housing products and processes they want, and are supported in building incrementally towards adequate housing, has the potential to create the “habitable, stable and sustainable public and private residential environments for viable households and communities” envisaged in policy (Department of Housing, 1996).

The policy and project design issues mentioned above can be broadly clustered into three key areas which have an impact on the effective consolidation of core housing:

- the financing of core houses and the consolidation process;
- the decision-making process, institutional support and the involvement of key role-players in the housing process;
- project design and implementation issues: size and type of core house, levels of servicing.

Some key considerations within each of these will be unpacked briefly here.

#### (A) THE FINANCING OF CORE HOUSES AND THE CONSOLIDATION PROCESS

The vision set out in the Department of Housing’s White Paper regarding financing of the housing process is that:

“Credit supplemented with savings can enable a large proportion of people in need of housing and eligible for State housing subsidies, to acquire access to formal starter housing under a range of tenure options. This will ensure progressive consolidation and integration of initially less formal areas into the formal urban environment” (Department of Housing, 1994).

It is imperative that elements of this vision are explored to see whether they are in fact being implemented.

The government’s capital subsidy scheme targets those at the lower end of the housing market. It is a subsidy approach which, understandably, in a context of massive housing backlogs and financial constraints, favours “width over depth in the provision of financial assistance” (Department of Housing, 1994). A small subsidy has the advantage of being fiscally viable, and allowing delivery to the many needy households in South Africa. But in practice this policy has led to a situation in which rising building and infrastructure costs leave smaller and smaller amounts over for developers or residents to use in the building of a house (see insert on page 6). The response by developers is to offer shrinking core houses, or even incomplete structures (e.g. roof structures) to residents within this subsidy framework. Many core houses being offered by contractors are as small as 10m<sup>2</sup>. Although the White



Paper on Housing asserts that subsidy policy should be as flexible as possible in order to accommodate a wide range of tenure and delivery options, in effect it has often been and will be reduced to individual ownership subsidies for mass-built core houses. People moving into small houses are likely to be faced with problems around consolidation similar to those faced by the residents of **Khayelitsha** and **Inanda Newtown**. Without long-term support and financial assistance it is likely that a group of people in each community will not manage to consolidate their housing.

There are currently government initiatives to support people in building their own houses. Grant funding for “people’s housing support initiatives” is for a limited period of one to two years (see insert below). Initiatives such as the “people’s housing process” has the potential to be used also as support after the departure of contractors in cases where extension is essential because of very small core houses. At present, however, there is no longer-term support of extension activity nor is there support available where there is direct involvement by formal building contractors. These housing support initiatives, if run according to government guidelines (Department of Housing, 1995), do have the potential to leave building and organisational skills in communities, but this is only in cases where people build their own houses right from the beginning.

Other government initiatives to mobilise housing credit include:

- the **Mortgage Indemnity Scheme**, whereby government indemnifies financial institutions for losses in certain mortgage loan situations for a three-year period;
- the **Home Builder Warranty Fund**, which serves to protect housing consumers from defective workmanship by building contractors. This warranty is a self-regulatory mechanism within the building industry. There are also efforts to ensure the quality of what contractors build through the registration of all builders with the **National Home Builders Registration Council**;
- the **National Housing Financing Corporation**, a focused agency tasked with mobilising housing credit at scale.

The existence of and effectiveness of these measures needs to be examined and constantly evaluated. Are they playing any role in facilitating the process of consolidation of core housing?

There is, for a variety of reasons, a general decline in the trend of personal savings and investment in housing in South Africa. What was striking, however, in this study was the amount of consolidation that had been funded by personal savings (87% of extensions in **Khayelitsha** and 94% in **Inanda Newtown** were financed in this way). This trend should be encouraged and the

## WHAT IS THE “PEOPLE’S HOUSING PROCESS”?

The government has recognised the need to support people’s own efforts in house building. The official housing programme with its individual housing subsidies has not been able to meet the needs of many poor, unhoused people. There has thus been additional facilitation and start-up grant funding put aside for “people’s housing processes”, which typically involve communities taking the initiative to organise, design and build their own homes.

One of the main thrusts of this process is the initiation of Housing Support Centres. The functions of these centres could include technical and general advice and support in planning and funding new housing developments; help and advice in accessing building materials; training in building skills; administration of subsidies and other community services. Start-up funds for such centres are provided by the Department of Housing through the Provincial Housing Boards.

These “people’s housing processes”, with their emphasis on a broad spectrum of housing support and community involvement and initiative, tend to produce more spacious houses and to stimulate more positive involvement by residents. A case in point is the Victoria Mxenge project, a South African Homeless People’s Federation project, run mainly by women on Landsdowne Road in Cape Town. The savings club, which forms the core organising group for this project, has played a direct part in the layout of the settlement, the levels and installation of services, the design and construction of houses, and the channelling of subsidies and management of the area as a whole. The strength of this approach is that the organising and building skills remain in the community after initial construction, and a momentum of involvement is built up, improving the chances of success of future initiatives.



importance of the use of personal savings as leverage for accessing credit recognised. This emphasis on personal savings obviously has its limitations due to the high levels of unemployment and low income levels within these communities. The White Paper proposes the implementation of a savings-linked credit scheme (SCS) in collaboration with accredited mortgage lenders. This scheme aims to enable individuals to secure credit using personal savings as a tool for the leverage of credit. Admittedly, this is envisaged as a long-term strategy, but the question can be posed as to whether this scheme is operational yet and whether there has been any assessment made of its potential or actual impact on facilitating the process of consolidation.

Alternatives to personal savings as a means of financing consolidation must also be explored and encouraged in policy terms. These include:

- the granting of micro-loans, especially in cases of small adaptations or extensions being made to core housing (bodies such as the National Housing Finance Corporation could perform this function);
- savings clubs or other communal/collective savings efforts which can also unlock credit (the South African Homeless People's Federation) has demonstrated the effectiveness of savings clubs. See, for example, the significant role that the savings club played in the Victoria Mxenge project, Cape Town (see insert on page 22);
- the possibility of some form of state support being provided for consolidation after occupation as was given in the Chilean case, (see page 8).

## **(B) THE DECISION-MAKING PROCESS, INSTITUTIONAL SUPPORT AND THE INVOLVEMENT OF KEY ROLEPLAYERS IN THE HOUSING PROCESS**

Residents need to be involved in the decision-making process from the very early phases if they are not to be trapped in a situation where they have very a small core house which is incapable of meeting their needs until it is expanded, and they do not necessarily have the inclination, ability or means to expand. The importance of

fostering a momentum of participation in the housing process is illustrated by the fact that a history of involvement in the establishment of one's own housing (as would, for example, be the case with informal settlers) seems to be a significant factor in encouraging consolidation. For example, in **Khayelitsha** people who moved from a township were less likely to extend their core house than people who had their origins in informal settlements (24% of ex-township families did not extend, while only 12% of ex-informal settlers did not). Security of tenure is another factor which tends to encourage involvement in the consolidation process and a preparedness on the part of residents to make ongoing investments of time and money in the housing process. This has been demonstrated in many projects around the world.

A momentum of personal participation needs to be encouraged, where involvement of residents at all stages builds up the skills and knowledge to take the process forward. This involves:

- at least some choice of size and location of the core house;
- community decision-making regarding levels of service provision;
- provision of building skills training; and
- training around organisational skills, which fosters effective participation in the decision-making process.

This type of involvement characterises some of the "people's housing process" projects (see page 22).

The difficulty is that private contractors developing core housing schemes within the constraints of subsidy financing often do not have the resources or the inclination to encourage, or be actively involved in, a participatory bottom-up process. Neither do they have the expertise to provide training for residents to acquire building skills or organisational skills. In greenfields developments the "community" is inevitably not even present while building is going on, unless it participates in the building process. Advice and housing support are thus also not available after the contractor has moved out on completion of the core housing project.

There is a vacuum of institutional support for the consolidation of core housing, which is unlikely to be filled unless concrete policy



measures are put in place to address it. The role of other interest groups such as community-based organisations or non-government organisations can be significant in this regard and should be encouraged. The government also seriously needs to consider widening its definition of support to include people who do not go the pure self-help route but are nevertheless directly involved in the housing process, even if only after they occupy a contractor-built house. This is particularly important if one considers the evidence from this study which has revealed, particularly in the **Inanda Newtown** case, that – if given the option – households often elect to use a small local contractor to build the initial house and extensions. It would make sense for the kind of emphasis on ongoing housing support which is evident in the “people’s housing process” scheme to be applied also in core housing which is intended to grow incrementally.

In such cases where there is an absence of institutional support it could be argued – and the evidence here suggests – that rather than trying to combine top-down and bottom-up approaches, it may be better to offer residents a real choice between:

- adequate mass housing (particularly in terms of **space**) delivered at scale, **or**
- truly people-driven processes for those who wish to participate fully.

See insert discussing government policy on People’s Housing, which contrasts with the core housing approach (page 22).

Tension around the issue of the role of various spheres of government in housing has been a major stumbling block in the implementation of housing policy and in housing delivery. This issue is addressed in the Draft Housing Bill of 1996 which aims to clarify the respective roles of national, provincial and local government. It seems that an important principle is that local government should be actively involved in housing-related issues. It is this sphere of government which operates at the local level closest to where projects are being implemented and it can therefore maintain long-term contact with these housing projects. The present trend of provincial government undertaking developments and then handing them over to local government to administer, although there may be

capacity reasons for this strategy, is worrying. This approach does not facilitate continuity of involvement and will hinder ongoing institutional support of the consolidation process.

### (c) PROJECT DESIGN AND IMPLEMENTATION

Rather than revealing preferred project design criteria, this research reinforces the need for flexibility in the policy framework regarding project design and implementation issues. Project design and implementation issues tend to revolve around four key debates:

- **Is mass-built of housing better than local contractor-built housing?**

Some of the disadvantages of mass building that were evident in **Khayelitsha** include lower levels of resident participation and hence resident satisfaction regarding houses, and an absence of skills transfer to residents. In **Inanda Newtown** the use of local contractors tended to result in higher levels of satisfaction and more community “ownership” of the project. Another important option is the self-build option. This was not adopted by many residents in the consolidation process often due to a lack of building skills and a lack of initial involvement in building the core houses. It can be concluded that, if a match between needs and what is delivered is to be attained, giving residents a choice among a range of delivery options is more important than pushing one particular option.

- **Are larger houses better than high levels of services?**

Ideally, both space and adequate servicing are essential. However, in a context of resource constraints, it is apparent from this research that as much habitable space as possible should be provided in core houses. If core houses are too small, the people unable to consolidate are likely to suffer a rapid decrease in quality of life as crowding increases. In the absence of ongoing support mechanisms for extension, the proportion of people in this situation will be significant. Obviously, if service levels are kept low in order to finance larger core houses (as was the case in **Inanda Newtown**), longer-term plans will need to be made by the local authority





for the upgrading of services. Community input at an early stage of the project regarding the apportioning of project resources between services and houses is vital. A policy implication of ensuring sufficient space is that a certain amount of money within the subsidy should be dedicated specifically to the top structure, so that land and infrastructure costs do not consume the whole subsidy amount, as is often the case. A separation of subsidies into distinct serviced land and housing components might resolve this conflict.

- **Is a professional project team as implementor better than a non-government organisation (NGO) or a local authority?**

A locally based non-governmental organisation as the main implementor has numerous advantages in that it is focused at a project level and can offer long-term support. This is illustrated by the role that the Urban Foundation played in **Inanda Newtown**. Although local authorities maintain a presence in the town or city where they implement projects, it is rare for them to maintain a direct presence in a specific project. However, they are well placed to administer and regulate residential areas and certain types of support (for example, plans for extensions may be made available by them). Professional project teams often only exist for the duration of the initial construction phase of the project. This leaves a vacuum in terms of consolidation support and advice as was the case in **Khayelitsha**. Obviously, the ideal is to build capacity to support and organise housing consolidation within the community itself. This still requires that some role-player take responsibility for the capacity-building process, whether it be the project implementor or some other non-governmental or community organisation.

- **“Top down” or “bottom up”?**

Generally, by its very nature, mass housing adopts a “top down” approach. However, for there to be a sense of ownership of the project and for consolidation to occur it is important that residents are offered choice and are allowed to participate from an early stage in such projects. It is being argued here that initial delivery of a core house can be done in any number of ways, from “top down” mass delivery to

“bottom up” community-organised self-building. The first important issue is that community members be offered a choice of the type of housing projects they wish to be involved in. Secondly, if a mass housing approach with little community participation is adopted, the house sizes must be adequate and should not be premised on the fact that consolidation will need to occur before the housing becomes “adequate”.

The wide variety of local conditions throughout the country makes it impossible to recommend one ideal delivery option and project implementation for all situations. However, broad principles have been identified and attention to these can increase the prospects for success of incremental housing for residents and project developers. See also “Questions housing practitioners should ask” on next page.

## CONCLUSIONS

### MONITORING OF POLICY AND IMPLEMENTATION

There is a need to monitor the outcomes of various housing policies (sites and services provision, core housing schemes, *in situ* upgrading, etc.) in various areas (metropolitan areas, cities, small towns, rural areas) adopted by various development agencies (private sector, public sector, popular sector). Findings from this monitoring process need to be fed back directly into the project cycle and the policy revision process. Of particular relevance here is monitoring the consolidation of core housing. Policy and its implementation should meet the needs of communities and households and housing assistance measures should be constantly adapted to meet these needs.

This would involve the development of a set of common monitoring indicators, which could be collected on a regular basis for a sample of houses in each settlement type. The results of this monitoring could feed into the comprehensive Housing and Services Information System (referred to in the Housing White Paper (Department of Housing, 1994) and in the Draft Housing Bill



## QUESTIONS HOUSING PRACTITIONERS SHOULD ASK

- What housing approach is appropriate for the particular context?
- Will core housing be consolidated to meet households' needs?
  - Is there a momentum of involvement in the housing process built up from an early stage?
  - Are there building skills within the community?
  - Is there a building supplies market operating in the area?
  - Do households have access to finance schemes such as savings clubs, micro-loans or personal savings?
- Is mass-built of housing better than local contractor-built housing?
- Are larger houses better than high levels of service?
- Is a professional project team as implementor better than a non-government organisation (NGO) or local authority? Are there creative ways of drawing on the strengths of each?
- Top down or bottom up? Can attempts to combine these two approaches be successful? Or is it better to offer adequate mass housing delivered at scale and truly people-driven processes for those who want to participate fully?
- What role should the community play and from what stage should it be involved?
- How can long-term accords between the community and other stakeholders be achieved?
- Is a range of options being offered to prospective residents?
- Is rental better than a "soft" loan or subsidisation? The question of end-user finance needs attention.

(Department of Housing, 1996)) which is up and running but often lacks reference to the actual type of house which was delivered.

## FINANCING MECHANISMS INCLUDING A "COMPLETION" LOAN

The viability of introducing a completion loan (similar to the consolidation subsidy in Chile, referred to on page 8) should be constantly re-examined. There is a consolidation subsidy which is aimed at Independent Development Trust site-and-service schemes,

implemented before the new dispensation. This does not, however, address the need for financial support as a follow-up to the present ownership subsidy scheme. This could involve the granting of a loan at a certain period, say two years, after the granting of the initial housing subsidy. Such a completion loan would support the consolidation process and enable residents to extend or modify their core houses to meet their needs.

Obviously, resource constraints and the massive backlogs of basic shelter provision do not necessarily make this a priority in the South African context at present, but it could prove to be a useful mechanism for the provision of adequate housing in future policy development and would certainly stimulate extension activity. Even if a such a finance scheme is not instituted, serious consideration should be given to a range of creative end user financing options such as micro-loans and roof loans<sup>1</sup>. Such financial support is lacking at present, as is witnessed by the very low usage of formal finance by people consolidating their houses. At present this is a significant limiting factor for households striving to create adequate housing.

## HOUSING SUPPORT

The state and other roleplayers should address as a matter of urgency the need for post-occupancy support in contractor-built core housing. Perhaps developers need to be offered some incentives to remain involved in ongoing support for consolidation of core houses if they are equipped to supply such support. Otherwise other existing institutions (such as local authorities and NGO's) need to make this their priority. Institutional frameworks at a project level which lead to long-term commitment are vital and housing policy needs to address this more vigorously. If the right kind of institutional frameworks based on partnerships could be promoted, this would allow progressive development agencies to build long-term post-occupancy support amongst residents.

1. A "roof" loan involves the residents building their own walls and the local authority providing a soft loan for the roof structure, which is the most expensive part of the construction of a house.



Housing support bodies should continue to promote the:

- initiation of training;
- investigation of building supplies provision mechanisms;
- publication of simple information brochures about various housing options;
- provision of technical support in the areas of:
  - materials;
  - design of extensions;
  - organising building;
  - skills acquisition;
  - accessing finance;
  - accessing small builders;
  - and legal support.

However, the findings from this research strongly suggest that existing Housing Support Task Teams should broaden their scope by supporting combinations of self-build and formal contractor inputs with particular attention to the post-occupancy period.

Failure to do this will mean that for many beneficiaries the hope of adequate housing will never be realised.

The government's current housing policy lays an important foundation for the attainment of adequate housing for all. It clearly contains a vision of incremental growth of housing and provides the basis from which many of the abovementioned policy recommendations can be implemented. It is vital that research such as this undertaken by the CSIR feeds into the assessment of the effectiveness of policy implementation and the prioritising of policy issues for particular attention. What is clear from the research is that this vision of core housing leading, in time, to adequate living environments and acceptable quality of life for the residents is not always being realised. Recommendations as to how policy can be strengthened in addressing approaches to core housing have been made. It is hoped that this document has assisted in highlighting important issues for policy makers' and housing practitioners' consideration and action.

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**Guidelines for the Provision of Engineering Services and Amenities in Residential Township Development, BOU/E9401.**

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**For more information, please contact**  
The Division of Building Technology, CSIR  
PO Box 395  
Pretoria 0001

Tel: (012) 841-3871/4550

Fax: (012) 841-4680

