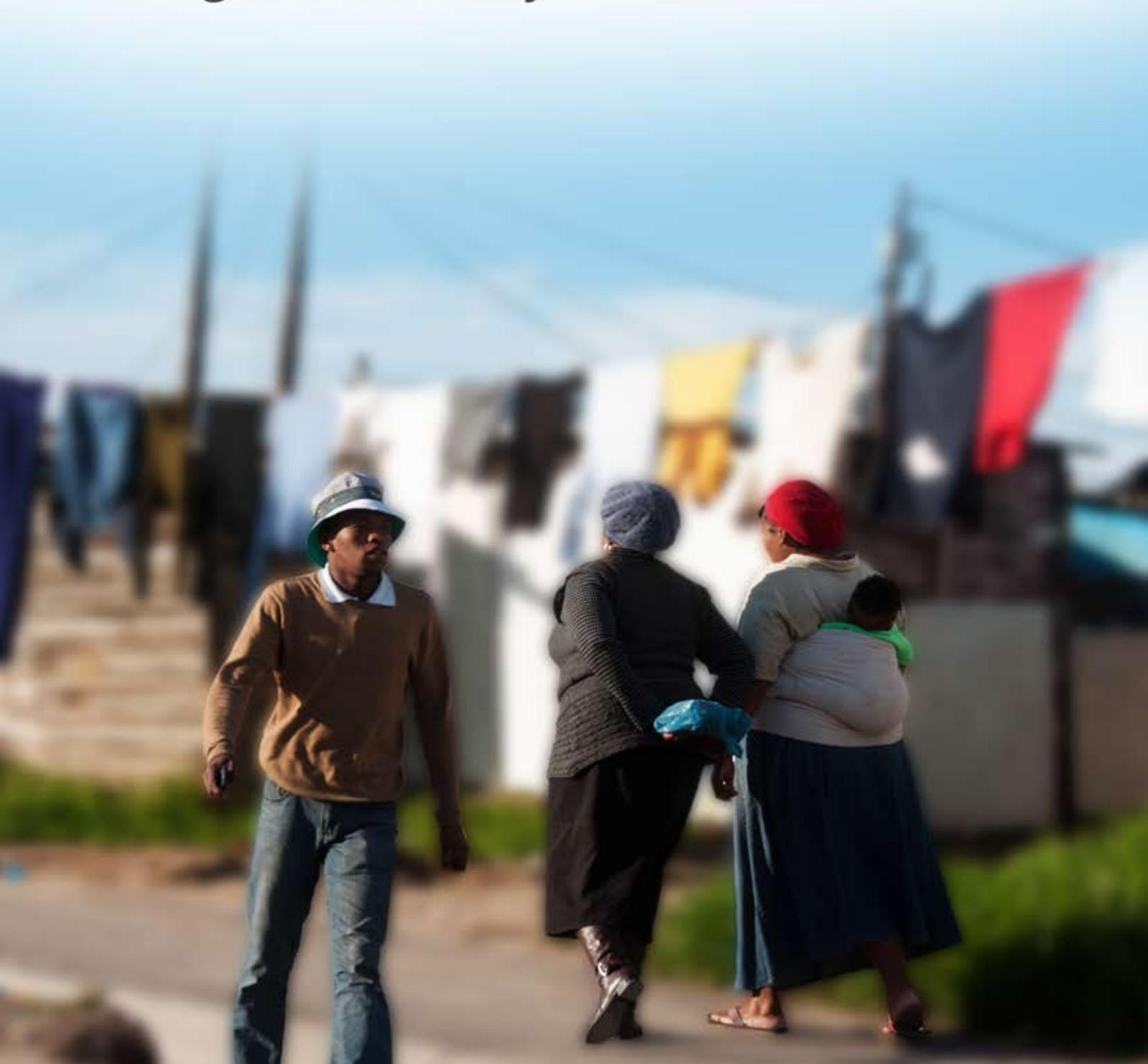




PARTICIPANTS

Section 9

Building Incrementally



SECTION 9: BUILDING HOUSES INCREMENTALLY

Summary

Incremental housing

Incremental housing is a step-by-step process of building and upgrading a house. It is also referred to as housing consolidation, and it goes by other, different names, such as starter housing, phased-development housing or owner-driven housing. Basically, incremental housing is a process whereby households build and extend their houses on an ad hoc basis in response to their needs and the availability of resources. Generally it is an approach used by households with low or irregular incomes, and limited or no access to credit and loans, who start by building a small affordable dwelling. Over time they expand and improve the house based on their needs and resources. This process of extension and modification can take decades. The essential element of incremental housing is that it enables households to respond to their own priorities and needs, and to have a greater level of authority over their own housing solutions.

For more details see
Section 9, item 1.1

South Africa's national programme for helping poor households to access housing is based on the premise that the government must build a house for each household. However in South Africa, and all over the world, poor people are building their own houses. The number of informal settlements around the country has grown from approximately 300 in 1994 to an estimated 2 600 in 2014. As shown in Census 2011, approximately 1.25 million households live in informal settlements, 700 000 households are in backyards of existing formal houses and 1.1 million are in traditional dwellings. While these structures are informal, they provide shelter and represent a significant personal investment.

For more details see
Section 9, item 1.2

The advantages of incremental housing are that it enables households to invest constantly in improving their living conditions, as and when they are able to afford it. Further households are improving their housing circumstances rather than waiting in poor conditions until a house is delivered by government. It enables government to use its funds to improve services, incorporating informal settlement into the municipal management system. Government can invest in social and community facilities, rather than in building houses for individuals. It is needs-oriented, being specific to the site and user. The house is built over time, within a period that is specific to the household's available resources and affordability. The house can be designed for flexibility. No mortgage or formal credit is usually involved or required. Having a regular wage income is not a requirement to build a house incrementally.

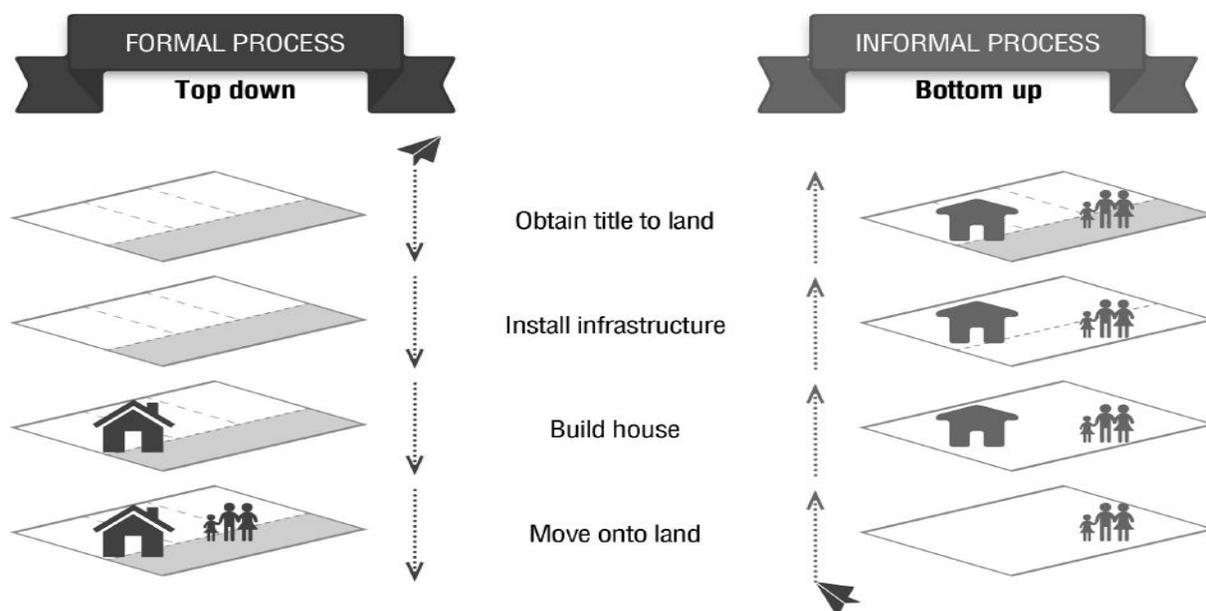
There is increasing recognition amongst housing practitioners and the government of the growing pressure on the funds available for human settlement. Many factors, including a slow economic growth rate and competing demands for the available money, continue to put pressure on the delivery of housing. There is increasing emphasis on informal settlement upgrading, and the need to develop mechanisms and approaches for the building or consolidation of houses within informal settlement upgrading projects. One of the benefits of an incremental approach is that upgrading then becomes a shared responsibility and does not rest solely on government.

For more details see Section 9, item 1.3

The formal approach to housing is top-down delivery. This comprises a process whereby title to the land is provided, the infrastructure is installed, the house is built and new owners then move into the house, i.e. onto the land. The incremental or informal process can be described as the reverse of the formal process. In an informal process people move onto the land and build their houses first, and then the delivery of infrastructure and title to the land follows.

For more details see Section 9, item 1.4

INCREMENTAL HOUSING PROCESS

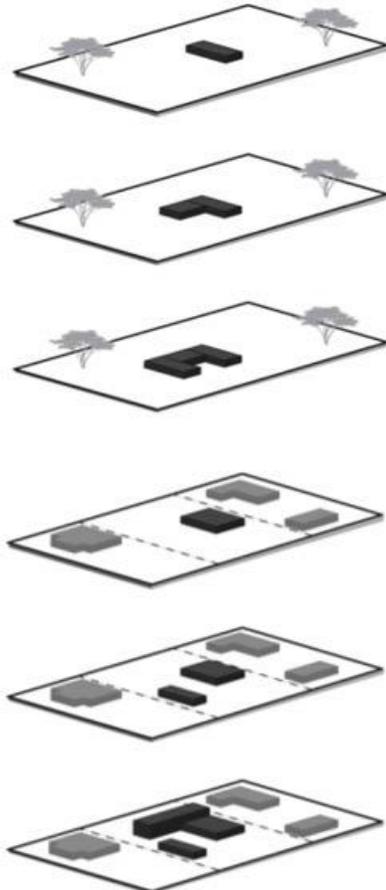


The ways in which households build incrementally include:

- **Self-build:** The households build the house themselves, often with the help of family members in a process called sweat equity (which refers to the householders making their own contributions).
- **Local contractors:** The household accumulates materials and contracts a local builder, generally on a labour only basis, in stages, as resources allow.

- Community build: This is a process where the community as a group access materials and build the houses. This is called the Enhanced People's Housing Process and enables access to a certain level of government subsidy.

Examples of Incremental building



What factors affect a household's ability to consolidate their house?

The most important element that influences housing consolidation is the households' need or desire to improve their own housing conditions. Their ability to afford house improvement is the second most important factor. Affordability can be facilitated by availability of a subsidy, savings, disposable income, credit availability and household and community contributions.

For more details see
Section 9, item 2

Even with the desire to improve their housing and the ability to afford to do so, households are unable to improve their housing unless they can find access to management skills, technical support, building materials and contractors.

The following people or groups play important roles in the process of building houses incrementally in informal settlement upgrading projects:

- **Households:** The whole process must revolve around the households either individually or in groups.
- **Government:** The first role of government is to provide the public environment (parks, roads), tenure and basic services. Thereafter, government should play a role in supporting and/or funding and/or facilitating the incremental house consolidation process.
- **Professional service organisations:** This comprises project managers who are appointed to implement an informal settlement upgrading project.
- **Community organisations:** Play a role in representing the needs of the whole community.
- **Non-profit/community resource organisations (NPOs and CROs):** These organisations can play an essential role in helping communities, and facilitating the development processes.
- **Private Sector:** Private sector organisations can provide money loans to households and supply building materials.

Municipalities or authorities are often uncomfortable with an incremental approach to housing development because it is generally unregulated and during the incremental process is considered untidy. Further, there are some disadvantages or risks to an incremental self-build approach. Often, particularly where the incremental housing process is not accompanied by support, it results in compromised designs with poor orientation, safety and health issues and poor quality materials. Without support, households are often unrealistic with their plans. They may start with too big a structure and then do not have the resources to finish it. They end up with a large unfinished shell that deteriorates over time.

The municipality can work to mitigate these disadvantages and support households to build for themselves. With support households can build a completed small structure, which they can then add to over time as and when they have the funds.

For more details see
Section 9, item 3.1

Supporting housing consolidation

There are three ways in which a municipality can support housing consolidation:

- Municipal provision of housing, i.e. using a housing contractor to provide a subsidised (BNG) house through the IRDP Subsidy Programme;
- A community/NGO-partnership working with local small builders or groups of households through the Enhanced People's Housing Process Subsidy Programme;

- Supporting the owner-builder-based approach, to assist households to upgrade their houses using an incremental approach and using their own resources.

Researchers Clive Forster and David Gardner in the report *'Financing Housing Consolidation in In Situ Informal Settlement Upgrading Programmes in South Africa'* identify the following categories of support that municipalities could provide in informal settlement upgrading projects in order to enable incremental housing consolidation:

For more details see
Section 9, item 3.2

- **Urban planning and management fundamentals:** Municipalities can stimulate housing investment through land tenure security, town planning layouts and house design, the settlement plan, site size and assistance to secure building plan approval. Also setting up a planning and urban management forum that will assist with incremental house building.
- **Facilitating household investment in housing:** Facilitating private or household investment in their own housing development process.
- **Supporting access to the private finance market for households:** Implementing approaches to extend the access to appropriate financial services that are suited to incremental house building processes.
- **House subsidy assistance:** Providing subsidy support to households, which is sufficient for safe and healthy incremental house consolidation. This would enable appropriate housing design for each upgrading context.
- **Home building technical support:** Providing support to households to help them to understand the home building process and to manage risks.
- **Construction sector capacity development:** Facilitating the development and availability of suitably skilled, efficient and cost-competitive contractors and building materials suppliers.

It is fundamental to the process that a deep participative model is followed. This means that all the parties to the process reach agreement on what, how, and when actions are implemented. It is also important to note the following factors that should be considered given that this approach is a shift away from how delivery is currently occurring:

- **Political support:** Does the political leadership understand the rationale for adopting this approach? And do they understand what it implies? Will they be able to sell and defend the approach to their constituencies? Are they able to live with informality?
- **Community expectations and buy-in:** Is the target community already investing in their houses in the settlement? Does the target community understand why this approach is necessary? Will they be able to work within this approach? Can the community be mobilised to make the requisite private inputs or will they passively wait for their BNG unit?

- **Regulatory system viability:** Will the institutional/regulatory systems and institutions allow you to develop and apply zoning and building regulations which offer *guidance, rather than prescription to incremental housing building activities?*
- **Social feasibility:** Will there be groups in the target community who will be excluded from this incremental consolidation approach? If so, who? And what can be done about this?

The national building regulations require specific design and construction standards, which are unlikely to be met in an incremental house building process. As a rule incremental builders do not have formal building plans, approved or otherwise, and do not adopt national building regulation specifications. Notwithstanding the houses built incrementally, particularly where there is support and advice, represent a significant improvement in a households living conditions. The critical issue is how municipalities accommodate incremental housing processes within the context of the national building regulations.

The Housing Code indicates specifications in respect of subsidised BNG houses, but notes that these do not have to apply in informal settlements. With respect to the Enhanced People's Housing Process (EPHP) compliance with building regulations is addressed through ensuring that participating households have technical support (for more details see below). Notwithstanding the above, currently there are no appropriate regulations in place to effectively enable incremental housing processes. Municipalities need to find innovative approaches that can overcome this obstacle. Some of these approaches include innovative zoning approaches, primary building rights, town planning, building standards and controls and structured programme approaches.

There are a number of things that a municipality can do to support and encourage households to invest in their houses including show political and community support for incremental self-build, protect prior investment in housing, develop knowledge and capacity, arrange homebuilding programmes, support livelihoods and income generation and support access to private finance. In respect of the latter i.e. supporting access to private finance, finance for housing consolidation can come from: borrowing from family; revolving credit stokvel finance; materials supplier credit; informal money lenders; small loans/credit and employer loans.

In respect of providing households with technical support the most important forms of facilitation are:

- Information-sharing regarding building norms and standards and approval processes;
- Potential innovative building options to assist consolidation such as shared walls;
- Advice on house placement on sites;
- Determining boundaries and dispute resolution support;

- House design and costing including the provision of standardized, possibly pre-approved, house plans, maybe including basic bills of quantities and indicative costs and the provision of limited design and structural engineering input
- Negotiating party walls or town planning concessions between neighbours and between households and municipalities can also assist to stimulate house development.
- Household construction management support including lists of local contractors and artisans; basic legal or paralegal support providing contracting assistance and milestone-based inspections coupled with technical advice.
- Training and assistance for self-build processes.
- Building materials access.

Enhanced People's Housing Process (EPHP)

The incremental approach to housing delivery is supported in the Housing Code through the Enhanced People's Housing Process (EPHP). EPHP is based on the principles of community decision-making/choice; community contribution and partnerships and leveraging additional resources. In this instance, community is defined by location, for example those living in a particular area, or by common interest, for example a household who wants a house and will participate in the community housing process in order to get it.

For more details see
Section 9, item 3.3

EPHP can only be applied when there are approved community resource organisations (CROs). CROs can be NGOs, community-based organisations (CBOs) or a specifically created development consortium. If necessary, the National Department of Human Settlements will provide the skills needed for a CRO to work with a community in implementing an EPHP project.

EPHP will only be applied where communities are prepared to make minimum community contributions (see below). The EPHP is made up of four different forms of funding:

1. **Capital funding:** The standard housing subsidy amount for the top-structure is provided. If the municipality is not able to cover land and infrastructure costs then the full capital housing subsidy will apply.
2. **Capacity building fund:** This is funding to facilitate the EPHP processes of community engagement. This capacity building funding relates to different aspects of the housing process.
3. **Community contributions/equity:** For the project to qualify for the EPHP programme at least four or more of the following community contributions need to be incorporated into the projects:
 - Time/leadership/participation/ownership of the project by the community, created by participating in community meetings and setting up a project steering committee. **This is a compulsory contribution.**

- Agreement on, and selection of, an accredited CRO. **This is a compulsory contribution.**
 - Land.
 - Savings contributions, managed and used in accordance with decisions taken by the community.
 - Top-up funding through various partnerships forged by the community with other stakeholders.
 - Demonstrated knowledge/skills/expertise.
 - Labour, not necessarily free (payment would be decided on a project basis).
 - Materials contributions, by setting up of brick-making yards, using recycled materials, or through donations from suppliers, for example.
 - Special community initiatives related and connected to the housing project/area such as community food gardens or community care.
 - Bringing in community volunteers or employers.
4. **Bridging finance:** Bridging finance may be necessary to ensure that the programme can carry on and to reduce the risks for CROs.

A component of the subsidy is used to establish support centres from which the managing entities (which are community-based) undertake the daily project management of the project. In addition the Housing Code stipulates that housing support centres will provide technical advice and develop co-operative arrangements to purchase materials, as well as assisting in the local manufacture of materials.

For references and resources click here

Content

1. Incremental housing

1.1 What is incremental housing?

Incremental housing is a step-by-step process of building and upgrading a house. We also refer to it as housing consolidation, and it goes by other, different names, such as starter housing, phased-development housing or owner-driven housing. Basically, incremental housing is a process whereby households build and extend their houses on an ad hoc basis in response to their needs and the availability of resources. Generally it is an approach used by households with low or irregular incomes, and limited or no access to credit and loans, who start by building a small affordable dwelling. Over time they expand and improve the house based on their needs and resources. This process of extension and modification can take decades.

The essential element of incremental housing is that it enables households to respond to their own priorities and needs, and to have a greater level of authority over their own housing solutions.

1.2 People are doing it for themselves

South Africa's national programme for helping poor households to access housing is based on the premise that the government must build a house for each household. However in South Africa, and all over the world, poor people are building their own houses. As shown in the 2011 Census there were 1.25 million households in informal settlements and a further 700 000 in backyards.

While these structures are informal, they provide shelter and represent a significant personal investment. In addition, as discussed in Section 7, once households feel that their tenure is more secure, they start to improve their informal dwellings into more permanent structures.

Generally, when people start to improve their dwellings they manage the improvements themselves, and they do the upgrades incrementally.

Advantages of incremental housing

- It enables households to invest constantly in improving their living conditions, as and when they are able to afford it.
- Households are improving their housing circumstances rather than waiting in poor conditions until a house is delivered by government.
- It enables government to use its funds to improve services, incorporating informal settlement into the municipal management system.
- Government can invest in social and community facilities, rather than in building houses for individuals.
- Households can build quicker initially, as they are building less to start with.
- It is needs-oriented, being specific to the site and user.
- The house is built over time, within a period that is specific to the household's available resources and affordability.
- The house can be designed for flexibility.
- No mortgage or formal credit is usually involved or required.
- Having a regular wage income is not a requirement to build a house incrementally.

1.3 Will incremental housing become more significant?

The number of informal settlements around the country has grown from approximately 300 in 1994 to an estimated 2 600 in 2014. Most of these settlements are located in large metropolitan and urban centres¹. The 2011 South African census showed that there are a total of 3.05 million households living in incrementally developed/developing houses in South Africa, made up as follows:

- Approximately 1.25 million households are in informal settlements;
- 700 000 households are in backyards of existing formal houses;

¹ NUSP and the case for informal settlement upgrading, Western Cape Workshop, 14-15 November 2013

- 1.1 million are traditional dwellings.

This indicates that a significant number of households in the country are currently building their houses incrementally.

Research shows that at present the most common form of government housing delivery is still a serviced site plus a top-structure, as a part of Phase 4 of the UISP, or through relocation and greenfield development. However, because of existing resource constraints delivery of the serviced site and the house don't happen at the same time. This leaves a growing number of households with perhaps one, two or three elements of an upgrading programme (such as tenure and/or sanitation and/or water reticulation and/or electrification and/or shelter) but in most cases not all of these simultaneously.

There is increasing recognition amongst housing practitioners and the government of the growing pressure on the funds available for human settlement. Many factors, including a slow economic growth rate and competing demands for the available money, continue to put pressure on the delivery of housing.

In addition, indications are that South Africa's backlog remains at roughly the same level as it was in 1994 and that many people continue to wait for housing after 20 years of democracy. As a result there is now increasing emphasis on informal settlement upgrading, and the need to develop mechanisms and approaches for the building or consolidation of houses within informal settlement upgrading projects. One of the benefits of an incremental approach is that upgrading then becomes a shared responsibility and does not rest solely on government.

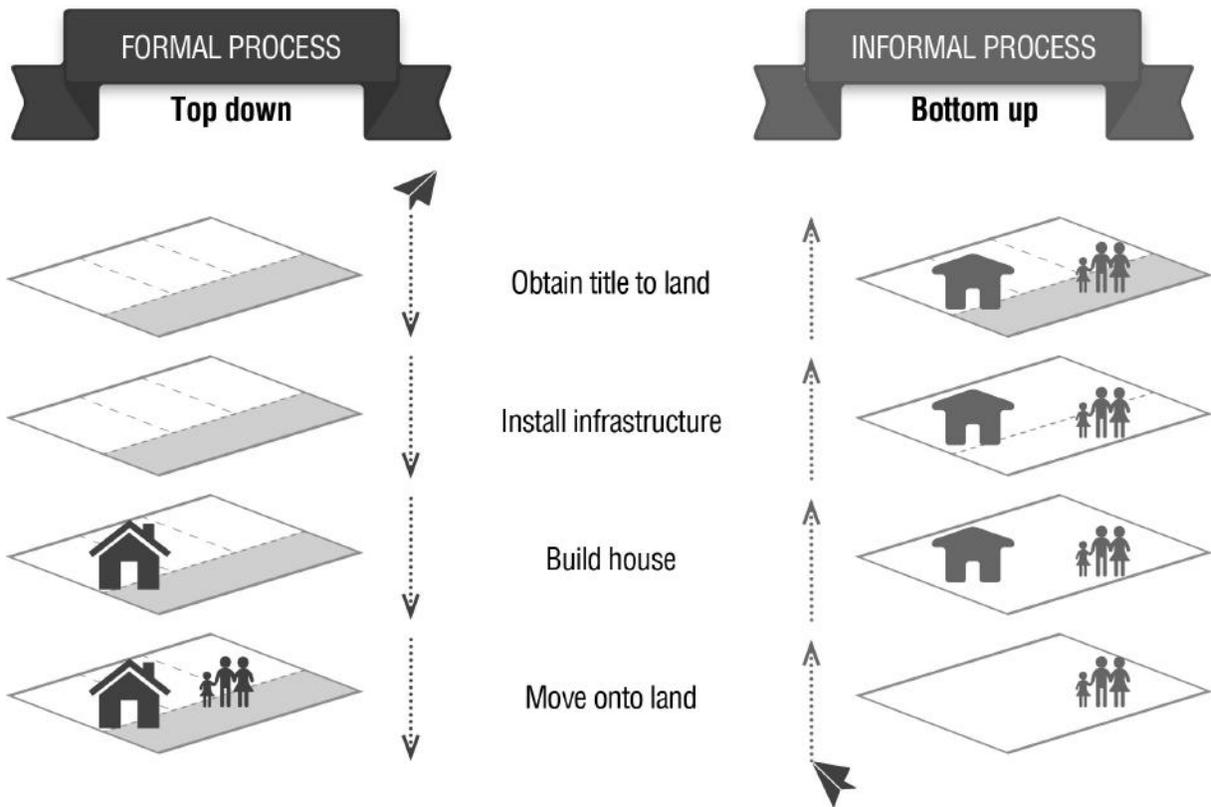
Incremental housing approaches are further supported by the National Development Plan which indicates the following:

Large amounts of money have been spent on the housing sector, but major problems remain. The system of state-provided housing has benefited many poor households, but may have undermined the incentive for people to upgrade their own housing circumstances and may have increased a dependency on the state for the supply of private goods. A national discussion is required on the future funding of housing in South Africa, and on the respective roles of the state, the private sector and individual households in providing housing and creating integrated and sustainable human settlements. (NDP p 270)

1.4 How do people build incrementally?

The formal approach to housing is top-down delivery. This comprises a process whereby title to the land is provided, the infrastructure is installed, the house is built and new owners then move into the house, i.e. onto the land. The incremental or informal process can be described as the reverse of the formal process. In an informal process people move onto the land and build their houses first, and then the delivery of infrastructure and title to the land follows.

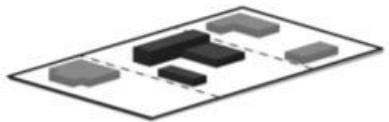
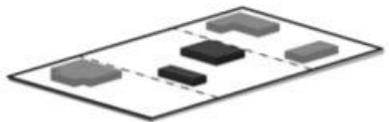
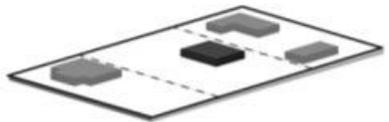
INCREMENTAL HOUSING PROCESS

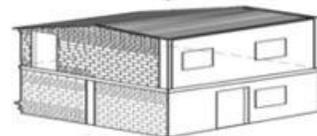
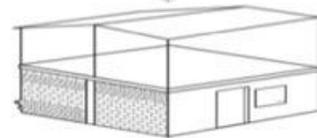
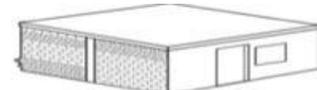
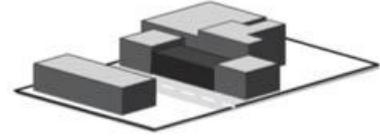
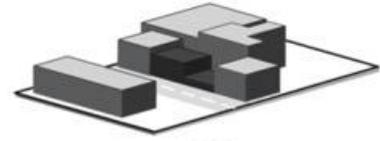
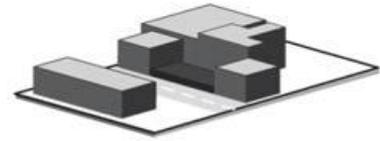
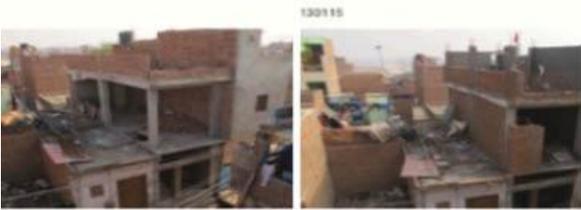


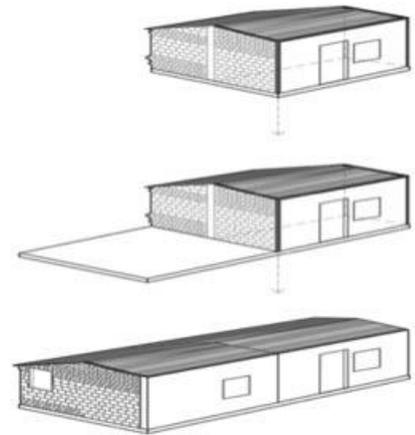
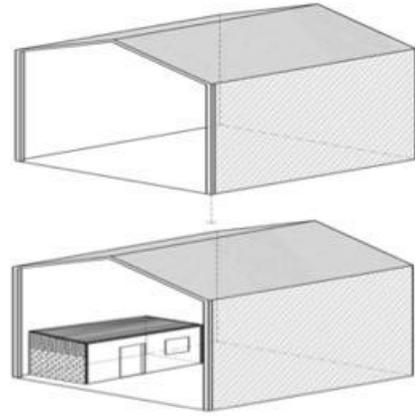
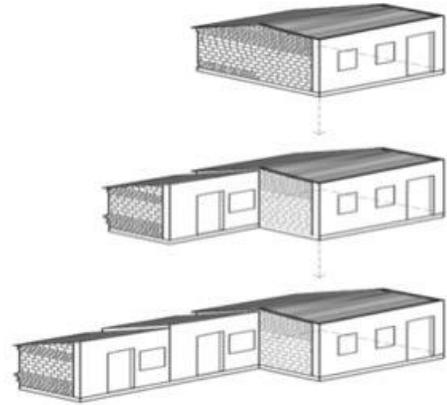
The ways in which households build incrementally include:

- **Self-build:** The households build the house themselves, often with the help of family members in a process called sweat equity (which refers to the householders making their own contributions).
- **Local contractors:** The household accumulates materials and contracts a local builder, generally on a labour only basis, in stages, as resources allow.
- **Community build:** This is a process where the community as a group access materials and build the houses. This is called the People's Housing Process and enables access to a certain level of government subsidy.

Examples of Incremental building







2. What factors affect a household's ability to consolidate their house?²

Desire to consolidate housing

The most important element that influences housing consolidation is the households' need or desire to improve their own housing conditions. The main factors contributing to this are:

- The extent to which the household needs a **house** as opposed to **temporary shelter**.
- A fundamental condition that must be present before people are prepared to improve their houses is **tenure security**. There is evidence that shows that from the moment an informal settlement is formally recognised, households are more willing to invest in their accommodation, as the fear of losing this investment diminishes.
- **A lack of knowledge of housing processes** is a major obstacle to being able to mobilise resources and undertake home consolidation.
- Households will **weigh up the different alternatives** available to them. The most important consideration is the extent to which they think there is the potential of securing alternative housing, particularly a fully subsidised house.
- The home building process is complex and is influenced by a range of **town planning and building regulations and constraints**. The extent to which these may be overcome or simplified affects households' willingness to improve their houses.
- The extent to which there is **government investment in the area** can also influence households' decisions to invest. As a settlement becomes more welcoming and progressively becomes home rather than shelter, households generally become more willing to invest.

Tenure security is discussed in Section 7.

Affordability of housing improvements

While it is firstly important, or even critical, that households are willing to invest in house consolidation, their ability to afford house improvement is the second most important factor. Affordability can be facilitated by the following:

- **Availability of a subsidy:** The availability of any government subsidy for top-structure development would help households afford improvements. The subsidy may be applied to the full structure (BNG housing approach) or a starter element (such as a foundation slab).

² This section is adapted from Financing Housing Consolidation in In Situ Informal Settlement Upgrading Programmes in South Africa, Clive Forster and David Gardner, prepared for the World Bank and NUSP, 17 July 2014

- **Savings:** Money saved, or building materials the households have been able to collect, can provide a base for new house development.
- **Disposable income:** The money the household can invest in housing and the possible credit they may be able to get for housing consolidation, is determined by the amount of money left over after all other household expenses (food, transport, education) have been covered. Given that most households in informal settlement upgrading schemes have low income levels, this is a major obstacle to households being able to afford improvements or to raise credit for house construction. However, where a settlement is well located, savings in transport costs, for example, may free some money to invest in housing.
- **Credit availability:** The ability of households to raise credit for house construction or improvement is a key factor in affordability. Credit may be obtained from one or more of the following: building materials credit, loans from family and friends, revolving credit schemes, unsecured small loans, pension-backed loans, and/or mortgage finance.
- **Household and community contributions:** The labour (or sweat equity) that households are willing to contribute to meet their housing needs strongly influences the percentage of their resources that they allocate to housing consolidation.

Access to support for incremental house building

Even with the desire to improve their housing and the ability to afford to do so, households are unable to improve their housing unless they can find access to:

- **Management skills:** The extent to which households can manage the process of house upgrading is uneven, but nevertheless determines how successful home construction may be. Assisting households to develop management skills, or to find someone else who already has such skills, can positively affect the pace and success of construction.
- **Technical support:** Households may not be skilled at home construction. As a result, there are a range of technical support activities that can help, including building plan development, plan costing, contracting support and access to credit.
- **Accessing building materials:** Initiatives aimed at improving access to affordable, appropriate building materials, close to informal settlement upgrading areas, can substantially assist house upgrading. In addition there may be opportunities for using building materials development technologies (e.g. brick making and truss manufacture) locally, which will help this process.
- **Contractor development:** While most communities have contractors who can assist with house development, the contractors' skills can be very uneven. This provides an opportunity for development activities aimed at improving small contractor skills and professionalism. The result will be ensuring that the accommodation meets statutory norms and standards.

Actors (and roles) in incremental home building

The following people or groups play important roles in the process of building houses incrementally in informal settlement upgrading projects:

- **Households:** The most important people involved in incremental house building are the households who are living in informal settlements. The whole process must revolve around the households either individually or in groups.
- **Government:** The first role of government is to provide the public environment (parks, roads), tenure and basic services. Thereafter, government should play a role in supporting and/or funding and/or facilitating the incremental house consolidation process.
- **Professional service organisations:** This comprises project managers who are appointed to implement an informal settlement upgrading project. Project managers can play a key role in making incremental house consolidation possible.
- **Community organisations:** Play a role in representing the needs of the whole community. They can liaise with the various agents and officials, and potentially assist in managing community facilities, resources and programmes aimed to assist with incremental house consolidation.
- **Non-profit/community resource organisations (NPOs and CROs):** These organisations can play an essential role in helping communities, and facilitating the development processes. They can also help to access private and government resources, and may be able to serve as project managers. Specialist NPOs may also offer more specific assistance in the incremental house consolidation processes. This may include: design, building industry development, contracting and development support during house construction.
- **Private Sector:** Private sector organisations can provide some of the important elements required for incremental house consolidation. In particular they can provide money loans to households and supply building materials.

3. Supporting housing consolidation

3.1 Options for the municipality

Phase 4 of the UISP

Below is an extract from the Housing Code, Volume 4, Incremental Intervention, Upgrading Informal Settlements regarding Phase 4 of the UISP, Housing Consolidation, p 45.

Upon completion of the first three phases, the final phase of township establishment finalisation, ownership registration (where appropriate), and house construction will commence. Any outstanding social amenities will also be constructed during the final phase.

The final phase assistance will be administered in terms of the provisions of the relevant National Housing Programme opted for. For example, beneficiaries of IRDP projects will receive a subsidy amount equal to the residual of the subsidy amount (but not less than the applicable Consolidation Subsidy amount) after the deduction of any costs incurred during Phases 1 to 3 that contributed towards the permanent development of the property, excluding funds expended for land acquisition, community participation facilitation, social amenities, relocation assistance cost, etc.

A variety of options will be available for the implementation of Phase 4. These will include People's Housing Projects, individual ownership options, contractor-built houses, rental accommodation and medium density options that may include rental and individual ownership options.

During these phases, qualifying residents will be encouraged to develop housing proposals in accordance with their individual and communal needs, affordability and aspirations.

There are three ways in which a municipality can support housing consolidation:

- Municipal provision of housing, i.e. using a housing contractor to provide a subsidised (BNG) house through the IRDP Subsidy Programme;
- A community/NGO-partnership working with local small builders or groups of households through the Enhanced People's Housing Process Subsidy Programme;
- Supporting the owner-builder-based approach, to assist households to upgrade their houses using an incremental approach and using their own resources.

Risks of the self-build approach to incremental housing

Earlier we discussed the advantages to an incremental self-build approach to improving dwellings, as well as the reasons why incremental housing will become more significant. We also discussed the factors that limit households from upgrading their houses. In addition, there

are some disadvantages or risks to an incremental self-build approach. The municipality can work to mitigate these disadvantages and support households to build for themselves.

Often, particularly where the incremental housing process is not accompanied by support, it results in compromised designs with poor orientation, safety and health issues and poor quality materials. The provision of support can limit this disadvantage. The key elements that are critical to good house design and which are often compromised in an incremental housing process include:

- **Orientation:** The house is not oriented on the site to maximise sunlight and allow future expansion;
- **Fire safety:** The house is built with flammable materials or too close to other structures;
- **Floor to ceiling heights:** These are too low which negatively affects comfort and ventilation;
- **Ventilation:** Windows and doors are not located so as to ensure proper ventilation of the dwelling;
- **Durability:** The house is built with materials that do not last;

Municipalities or authorities are often uncomfortable with an incremental approach to housing development because it is generally unregulated and during the incremental process is considered untidy. This is discussed in more detail in section 3.

Without support, households are often unrealistic with their plans. They may start with too big a structure and then do not have the resources to finish it. They end up with a large unfinished shell that deteriorates over time. With support households can build a completed small structure, which they can then add to over time as and when they have the funds.

One of the roles of the municipality is to support households to avoid these disadvantages and overcome the factors that limit households from upgrading their homes.

3.2 How municipalities can support incremental housing

Researchers Clive Forster and David Gardner³ identify the following categories of support that municipalities could provide in informal settlement upgrading projects in order to enable incremental housing consolidation:

- **Urban planning and management fundamentals:** Setting up a planning and urban management forum that will assist with incremental house building.
- **Facilitating household investment in housing:** Facilitating private or household investment in their own housing development process.

³ Financing Housing Consolidation in In Situ Informal Settlement Upgrading Programmes in South Africa, Clive Forster and David Gardner, prepared for the World Bank and NUSP, 17 July 2014

- **Supporting access to the private finance market for households:** Implementing approaches to extend the access to appropriate financial services that are suited to incremental house building processes.
- **House subsidy assistance:** Providing subsidy support to households, which is sufficient for safe and healthy incremental house consolidation. This would enable appropriate housing design for each upgrading context.
- **Home building technical support:** Providing support to households to help them to understand the home building process and to manage risks.
- **Construction sector capacity development:** Facilitating the development and availability of suitably skilled, efficient and cost-competitive contractors and building materials suppliers.

It is fundamental to the process that a deep participative model is followed. This means that all the parties to the process reach agreement on what, how, and when actions are implemented.

This is discussed in
Section 4.

It is also important to note the following factors that should be considered given that this approach is a shift away from how delivery is currently occurring:

- **Political support:** Does the political leadership understand the rationale for adopting this approach? And do they understand what it implies? Will they be able to sell and defend the approach to their constituencies? Are they able to live with informality?
- **Community expectations and buy-in:** Is the target community already investing in their houses in the settlement? Does the target community understand why this approach is necessary? Will they be able to work within this approach? Can the community be mobilised to make the requisite private inputs or will they passively wait for their BNG unit?
- **Regulatory system viability:** Will the institutional/regulatory systems and institutions allow you to develop and apply zoning and building regulations which offer *guidance, rather than prescription to incremental housing building activities?*
- **Social feasibility:** Will there be groups in the target community who will be excluded from this incremental consolidation approach? If so, who? And what can be done about this?

Urban planning and management to stimulate housing investment

Municipalities can stimulate housing investment through:

- **Land tenure security:** Secure tenure is a major incentive to households to invest in improving their housing.
- **Town planning layouts and house design:** The layout and size of sites in an informal settlement influence what can be built.

- **Settlement plan:** The site layout approved for an informal settlement will fundamentally determine where, whether and how house construction and consolidation will occur. Whether sites are evenly spaced or irregular in layout, also affects how households may extend and improve their dwellings.
- **Site size:** Sites should be big enough to provide for the types of incremental house consolidation activities envisaged in the area.
- **The type of design** to be adopted is also critical. Very dense settlements will need substantial relocation of households to make space for the remaining residents to build houses. Alternatively a medium-density option can be adopted. This has major implications for how house construction occurs. Additional structural framework or slabs may be required to enable vertical development to second storeys.
- **Municipal assistance:** For low-income households securing building plan approval can be a major stumbling block to their legally pursuing incremental house consolidation. Municipalities should assist residents, therefore, to access and obtain information, support and approval for house plans and the acceptance of any specific materials being used. This can substantially reduce uncertainty and transaction costs in the building process.

Dealing with building regulations

The national building regulations require specific design and construction standards, which are unlikely to be met in an incremental house building process. As a rule incremental builders do not have formal building plans, approved or otherwise, and do not adopt national building regulation specifications. Notwithstanding the houses built incrementally, particularly where there is support and advice, represent a significant improvement in a households living conditions. The critical issue is how municipalities accommodate incremental housing processes within the context of the national building regulations.

The Housing Code indicates specifications in respect of subsidised BNG houses, but notes that these do not have to apply in informal settlements. The Housing Code also deals specifically with compliance with the National Home Builders Registration Council, with respect to the Enhanced People’s Housing Process (EHP), as follows:

The programme recognises the risk of no involvement by the National Home Builders Registration Council (NHBRC) for government, but also needs to allow for community initiative and participation in the process. EHP therefore requires project enrolment with the NHBRC through the province to foundation and slab level, but will not require individual house enrolment. In addition the NHBRC will be required to participate as a partner in the programme to build the capacity of the community in which the project is being initiated.

Essentially the EHP addresses compliance with building regulations through ensuring that participating households have technical support.

Notwithstanding the above, currently there are no appropriate regulations in place to effectively enable incremental housing processes. Municipalities need to find innovative approaches that can overcome this obstacle. Some of these approaches include:

- **Innovative zoning approaches:** Consideration should be given to implementing new zones in which reduced building regulations would apply. These would be more appropriate to incremental housing processes. Examples of this are the Single Residential Zone introduced by the City of Cape Town and the City of Johannesburg Transitional Residential Settlement Areas. 
- **Primary building rights:** Where possible, primary house construction rights, including standardized approved house designs, can ease the administrative burdens of building control and approvals. This can also substantially reduce official transaction costs for households.
- **Town planning, building standards and controls:** The Housing Consumer Measures Act provides opportunity for exemption of owner-builders from NHBRC regulations.
- **Structured programme approaches:** Evidence suggests that incremental development may be positively influenced by structured programmes with balanced controls and enforcement. For example in Cosmo City the developer, in liaison with the municipality, undertook a development control function to ensure that only formal secondary (backyard) structures were constructed, and that these adhered to basic construction norms.

Facilitating household investment in housing

There are a number of things that a municipality can do to support and encourage households to invest in their houses.

- **Show political and community support for incremental self-build:** Send a clear and consistent message from political office bearers, provincial and municipal officials and community representatives that the incremental approach is the approach that will be followed.
- **Protect prior investment in housing:** A critical incentive to home building is to find ways of encouraging using, or re-using, investments already made by households in house construction.
- **Develop knowledge and capacity:** Most households do not have skills and knowledge in planning, designing, costing, financing, contracting and implementing home building. These are all complicated processes that households may not be adequately equipped to personally handle.

Therefore, supporting communities and households by providing them with relevant knowledge and tools is an important starting point in promoting house consolidation.

- **Arrange homebuilding programmes:** A tried and tested method of assisting households to construct their own dwellings is through co-ordinated homebuilding programmes, either on an individual (self-build) or group (mutual build) basis. This method is used by international organisations such as Slum Dwellers International and Habitat for Humanity to assist groups of households to build their own houses.
- **Support livelihoods and income generation:** Low incomes are the largest impediments to house consolidation. Any mechanisms that improve income generation within the target community will increase disposable income available for house development.
- **Support access to private finance** (see below).

Supporting private finance market access

Finance for housing consolidation can come from:

- Borrowing from family;
- Revolving credit stokvel finance;
- Materials supplier credit, which is credit provided on building materials purchases;
- Informal money lenders;
- Small loans/credit;
- Employer loans.

The primary way to assist households to obtain finance is to facilitate connections between the households and reputable financial institutions. The following types of arrangements are suggested:

- Household/consumer financial education programmes;
- Housing affordability assessments;
- Indebtedness counselling;
- Recommending reputable finance suppliers;
- Facilitating savings groups or 'housing clubs';
- Introducing or offering office space to reputable finance institutions within community resource centres.

Household technical support

The most important forms of facilitation are:

- Information-sharing regarding building norms and standards and approval processes;
- Potential innovative building options to assist consolidation such as shared walls;
- Advice on house placement on sites;
- Determining boundaries and dispute resolution support;

- House design and costing:
 - Provision of standardized, possibly pre-approved, **house plans**. These should be developed in a way that clearly supports an incremental construction process;
 - Maybe include **basic bills of quantities and indicative costs** to assist households with planning affordability and phasing of consolidation;
 - Where standardised plans are not provided, or households wish to build larger or more complicated structures, limited **design and structural engineering** input early on in the process will set a solid base for long-term house consolidation;
 - In more dense settlements, **structural design requirements** with constructing pillar and slab arrangements that provide for two-storey construction are also critical;
- **Negotiating party walls or town planning concessions** between neighbours and between households and municipalities can also assist to stimulate house development.
- Household construction management support, including:
 - **Lists of local contractors and artisans** can assist households to source service providers;
 - Basic legal or paralegal support providing **contracting assistance** is a critical intervention. While most construction activity occurs without formal contracts, educating households regarding the importance of having a basic construction contract in place, and assisting with simple, standardized contract documents is an important input;
 - **Milestone-based inspections** coupled with technical advice. Inspection points should be at critical stages such as site layout, foundation completion, wall-plate and roof to ensure risk management and to avoid wasted costs.
- Training and assistance for self-build processes is critical;
- Building materials access:
 - Local **building materials distribution points** for formal and informal materials suppliers;
 - Support for materials recycling and re-application to consolidated houses.

3.3 The Enhanced People's Housing Process (EHP)

The incremental approach to housing delivery is supported in the Housing Code through the Enhanced People's Housing Process (EHP). EHP is based on the principles of:

- Community decision-making/choice;
- Community contribution;
- Partnerships and leveraging additional resources.

In this instance, community is defined by location, for example those living in a particular area, or by common interest, for example a household who wants a house and will participate in the community housing process in order to get it.

Practically EPHP projects can be applied to:

- Projects where ownership (individual or group) is the tenure form or in rural areas where permission to occupy (PTO) letters have been provided;
- A range of different building projects including new build, hostel refurbishment, informal settlement upgrade;
- Different housing contexts such as informal settlements, rural settlements, greenfield developments;
- Projects where different densities are introduced;
- Projects where different products and processes are encouraged.

EPHP can only be applied when there are approved community resource organisations (CROs). CROs can be NGOs, community-based organisations (CBOs) or a specifically created development consortium. If necessary, the National Department of Human Settlements will provide the skills needed for a CRO to work with a community in implementing an EPHP project. Before being placed on an approved list, which will be issued to provinces, the CROs are screened to ensure that they have all the skills required. However, it is for the community to select which CRO they want to work with.



Diepsloot NDOHS website



Entshongweni | Durban KwaZulu-Natal, NDOHS website

EPHP will only be applied where communities are prepared to make minimum community contributions (see below). The EPHP is made up of four different forms of funding:

5. **Capital funding:** The standard housing subsidy amount for the top-structure is provided. If the municipality is not able to cover land and infrastructure costs then the full capital housing subsidy will apply.
6. **Capacity building fund:** This is funding to facilitate the EPHP processes of community engagement. This capacity building funding relates to different aspects of the housing process including:
 - Pre-project consumer education funding;

- Project-specific capacity building and facilitation funding which is provided throughout the project period;
 - Funding for building the physical structure, to be used through establishing a housing support centre.
7. **Community contributions/equity:** For the project to qualify for the EPHP programme at least four or more of the following community contributions need to be incorporated into the projects:
- Time/leadership/participation/ownership of the project by the community, created by participating in community meetings and setting up a project steering committee. **This is a compulsory contribution.**
 - Agreement on, and selection of, an accredited CRO. Alternatively agreeing to have a screened CRO work with the community to achieve the desired outcomes. **This is a compulsory contribution.**
 - Land.
 - Savings contributions, managed and used in accordance with decisions taken by the community.
 - Top-up funding through various partnerships forged by the community with other stakeholders.
 - Demonstrated knowledge/skills/expertise.
 - Labour, not necessarily free (payment would be decided on a project basis).
 - Materials contributions, by setting up of brick-making yards, using recycled materials, or through donations from suppliers, for example.
 - Special community initiatives related and connected to the housing project/area such as community food gardens or community care.
 - Bringing in community volunteers or employers.
8. **Bridging finance:** Bridging finance may be necessary to ensure that the programme can carry on and to reduce the risks for CROs.

If a community/NGO or owner-builder-based approach is used it will need a co-ordinated, incremental intervention that involves several different people to stimulate the process of private housing development.

The EPHP promotes the use of housing support centres as part of providing household technical support.

Housing support centres

One of the key tasks of housing support centres is to promote autonomous people-driven housing delivery through a self-help mechanism. A component of the subsidy is used to establish support centres from which the managing entities (which are community-based)

undertake the daily project management of the project. In addition the Housing Code stipulates that housing support centres will provide technical advice and develop co-operative arrangements to purchase materials, as well as assisting in the local manufacture of materials. Furthermore, housing support centres are also responsible for:

- Selecting and supporting housing beneficiaries;
- Supporting emerging local contractors;
- Providing information on building regulations, methods and materials;
- Providing meeting and training venues;
- Promoting ecological approaches.

Examples: Skills mobilization — three settlements in Khayelitsha

Scale: Over 500 households

Date/time period: 1997-2002

Background: The case study reviews the transfer and mobilization of skills within a People's Housing Process (PHP) project that took place in three settlements in Khayelitsha in the Western Cape. The projects were led by residents who came together to form the Masithembane People's Housing Association, Homeless and Squatters Housing Project (HOSHOP) and Sinako Ukuzenzele with the intention of helping themselves and others to acquire adequate housing. The settlements at the time had very high densities and Masithembane Site B alone consisted of 9 000 serviced sites with over 50 000 people living in shack structures. The communities contacted the Development Action Group (DAG) to assist with the PHP process. Collectively it was decided that the partnership had two key goals:

- Improving housing conditions, and
- The capacitation of the local communities.

Project intervention: Apart from assistance with a savings scheme, which was to be used in addition to the state subsidy to increase the size and quality of the units, DAG offered consistent advice and information and support in engaging with contractors, and also focused much of its support and attention on the capacitation of the local community.

The intention was to skill members in a number of areas, including house building, but also in training community members who could become permanent resources in the housing support centres that they also wanted to establish within the areas.

DAG offered the follow types of skills mobilisation:

- Assistance in materials development, in which a block yard was started in HOSHOP with funds from the Provincial Department of Social Services to develop skills, create jobs and save money by supplying blocks at reduced prices to beneficiaries in the project.
- DAG through their Housing Leadership Course, Community Housing Development Management, trained HOSHOP community members around materials mobilisation, in particular the ordering of materials and monitoring construction, and then supervised the first six months of the implementation phase in the HOSHOP project to assist in embedding these skills.
- Workshops and training sessions were provided for community members on technical issues such as the housing delivery cycle, government subsidies and house design.

This case study is used as an example only to highlight a specific aspect or issue.

See video 'Moving from shacks to houses'.

Local construction sector capacity development

The most important forms of facilitation are:

- **Training and development of local house building capacity.** In many cases the required mix of home building and extension contractors will be present in the settlement or its neighbourhood. In some cases, however, particularly where higher density housing solutions or complex foundation technologies are required, there is a need for programmes designed to improve or provide the skills of local contractors. It is often also the case that while building skills may exist, small home building contractors lack skills relating to materials estimating and management, and basic business management.
- **Materials manufacture/assembly and supply.** Research has found that organised access to construction materials has proved to be an effective method of supporting incremental builders. Options range from the establishment of building materials banks, managed by programme promoters, to agreements with local retailers to monitor the prices and quality of the materials acquired by the beneficiaries. The development of the construction materials industry is a vital area of public policy to satisfy the needs of self-help builders and improve incremental construction.

Toolkit

You will find the following resources on the Toolkit CD:

- National Housing Code, Volume 4, Incremental Interventions: Upgrading Informal Settlements
- National Housing Code, Volume 4, Incremental Interventions: Expanded People's Housing Process
- Video: Moving From Shacks to Real Houses (FedUp)

References and Resources

References

- Financing Housing Consolidation in In Situ Informal Settlement Upgrading Programmes in South Africa, Clive Forster and David Gardner, prepared for the World Bank and NUSP, 17 July 2014
- Design for the Real World – Victor Papanek
- Housing by People – John Turner
- Housing without Houses – Nabeel Hamdi
- Cityscapes Journal – edited by Sean O'Toole, Tau Tavenga and Edgar Pieterse
- A Place Maker's Guide – Nabeel Hamdi
- Small Change – Hamdi
- Spatial Agency – Schneider, Till, et al

Links

- <http://www.spatialagency.net>
- <http://www.informalstudio.co.za>
- <http://www.sdinet.org/>
- <http://www.sasdialliance.org.za/>
- <http://www.gcro.ac.za/>
- <http://www.oppinstitutions.org/>
- <http://www.codi.or.th/housing/fronpage.html>
- <http://www.achr.net/>
- <http://web.mit.edu/urbanupgrading/upgrading/resources/useful-downloads/WallChart.pdf>
- <http://www.africancentreforcities.net/>
- <http://www.pptrust.org.za/>
- <http://www.dhs.gov.za/content/peoples-housing-process>
- <http://www.vpuu.org.za/>