



# **KZN Housing**

---

**uMnyango:  
wezeZindlu**

**ISIFUNDAZWE SAKWAZULU-NATALI**

**uMnyango wezeZindlu / Departement van Behuising**

**KWAZULU-NATAL DEPARTMENT OF HOUSING**

**REPORT ON PORJECT VISITS ZANEMVULA &  
SAKHASONKE HOUSNG PROJECTS, EASTERN CAPE  
PROVINCE**

## TABLE OF CONTENTS

Executive Summary .....	1
1. PURPOSE.....	3
2. BACKGROUND .....	3
3. SAKHASONKE .....	3
4. ZANEMVULA .....	9
5. RECOMMENDATION.....	13

### ANNEXURES

*1 -GM Motors Newsletter*

*2 - Sakhasonke presentation*

*3 - Zanemvulo presentation*

## EXECUTIVE SUMMARY

This report shares findings on a visit to Port Elizabeth (Sakhasonke, Nsingisi and Zanemvula projects). The visit was a request from the Head of Department for the Product Development component to investigate the possibility of increasing the quality of the finishes on houses (tiled roofs, fascia boards, etc). The visit was conducted on 5 and 6 February 2009. The team interacted with the project management teams responsible for the projects.

**Finding :** In most instances, and especially the projects visited, the finishes are of a much higher standard than currently in KwaZulu-Natal. This is mainly due to the Southern Cape Coastal Condensation Allowance (SCCCA) which is applicable in the area. The instrument allows for at least R12 000 extra to cater for the enhancements (tiled roof, fascias, meranti frames and doors; and ceilings).

**The following recommendations are drawn from the observations and lessons learnt:**

- The Department needs to further explore the possibility of applying the Southern Cape Coastal Condensation allowance to enhance the product, especially in areas of high rainfall.
- The Department is to take a firmer position in driving housing projects by reverting to becoming the developer. This would enable it to appoint service providers upfront to undertake risk elements independently, thus enhancing the quality of the assessment. (Environmental, geotechnical, townplanning and preliminary design) It will also provide more control over contracts and enable better planning.
- An alternative strategy needs to be considered to invite contractors to tender for projects, and using the subsidy as a guideline to assess proposals, rather than the current situation whereby implementing agents provide the absolute minimum within the subsidy quantum, to maximize profit. Such competition would drive down prices.
- be achieved through more responsible planning, together with ensuring the Department as a coordinator with other departments to be involved.
- The NHBRC should be approached to assist in the development of a standard minimum specification for KwaZulu-Natal, taking cognisance of the subsidy limitations, and need to encourage indigenous and traditional technology, where possible.
- The feasibility of shared services in the context of densification and cost reduction of service levels such as waterborne sewer where needed, require further investigation.
- Designs should look at other forms of cost reduction.
- Innovative building design proposals for double storeys should consider alternatives, (e.g. include fold up staircases, hoisting systems, external stairs with awnings, etc to reduce to dangers associated with steep stairs).
- Developers need to be encouraged to allow different facades (at least 3) and orientation of buildings as it contributes to a greater sense of belonging, whilst also being more appealing.
- The revision of the current preparation funding policy is required to assist in independent appointments of service providers to undertake environmental, geotechnical and town planning and preliminary design work. This will ensure independent assessments, whilst also reducing loading of prices by implementing agents/external project managers.

- Care should be taken in the application of the locational allowance for area price increases as there is no equitable means of determining the application thereof.
- The Department to explore the possibility of partnership with GM/Delta, especially in the context of capacity building programmes.
- Initiatives with tertiary institutions should be piloted. This would capacitate students, encourage innovation, contribute towards EPWP, and the involvement of youth in housing projects. It could include scholarships and internship programmes, e.g. commit to a number of houses or years housing service.
- Sustainable human settlement developments need to consider exit strategies in its design to reduce dependency of beneficiaries, thus creating self-reliance and a sense of belonging.
- A more concerted effort needs to be made to integrate development.

## REPORT ON PROJECT VISITS ZANEMVULA & SAKHASONKE HOUSING PROJECTS, EASTERN CAPE PROVINCE

### 1. PURPOSE

The purpose of this document is to report on findings of the research visit to the Zanemvula and Sakhasonke Housing Projects in Port Elizabeth, in the Eastern Cape Province on the 5<sup>th</sup> and 6<sup>th</sup> February 2009.

### 2. BACKGROUND

2.1 The Product Development Directorate was instructed by the Head of Department to send a team to visit the Zanemvula Housing Project in Port Elizabeth by the first HEAC meeting in 2009. This project has enhanced the product with tiled roofs, etc through economies of scale using the subsidy amount. The Directorate has been requested to investigate these structures so as to improve the product delivered locally.

2.2 The Sakhasonke Village Project also in Port Elizabeth is an innovative example of urban integration and densification and has been used to inform the proposed Cornubia Development in KwaZulu-Natal. The latter is anticipated to be a pilot for inclusionary housing in the province. In an effort to learn from their experiences and derive the maximum benefit from the visit, the Product Development Directorate would like to include a visit to this project while in Port Elizabeth.

2.3 The purpose of these meetings were to learn from the experiences in the above projects by establishing: (i) background (who identified the projects, who was the developer, target market and project details; (b) challenges, advantages and disadvantages; and (c) lessons learnt.

### 3. SAKHASONKE

A meeting was held with Mr Roger Matlock : General Manager : GM Foundation South Africa (Co-sponsor of the project), and Mr Lance Del Monte : Metroplan – Sakhasonke Project Manager.

#### 3.1 GM Motors

3.1.1 An extract of the GM newsletter is attached as Annexure 1.

3.1.2 General Motors has a budget of around R5,7 million for corporate social action. The organisation is independent and seeks partnerships, especially with government. It has experience in mentorship programmes and courses aimed at management. He gave a number of examples relating to education initiatives.

3.1.3 It facilitated the Sakhasonke project through standing surety to cover the land costs, and facilitating business models in the management of the project.

### 3.2 Sakhasonke project

The project was managed by MetroPlan. A copy of the presentation is attached as Annexure 2.

### 3.3 Observations/Lessons learnt

- 3.3.1 In this case the municipality was not the developer, but a joint venture between GM, professionals, the community, National and Eastern Cape Housing. It is an example of partnership between private-, public-, and civil society.
- 3.3.2 Skills can be transferred by not using developers in the traditional sense, but rather establish organisations with the community that employ the required services and contractors (e.g. the Community Residential Organisations proposed in the Enhanced PHP).
- 3.3.3 An exit strategy is required to reduce dependency on developers, implementing agents and/or project managers. This can be achieved by ensuring skills transfer and involvement of communities in the delivery process to capacitate them in solving some of their challenges, e.g. by providing skills that would enable them to undertake maintenance programmes, etc. This could result in self reliance, a sense of belonging and realization of a lifetime asset, whilst also creating opportunities for maintenance.
- 3.3.4 Roads typically consume 60% of the service cost. Savings was achieved by creating communal parking, and paved footpaths (Figure 1 below) of 1,2m on 3m wide gravel between buildings. The savings was used to provide waterborne sanitation.



**Figure 1 : Sakhasonke.**

*Note : (1) paved footpaths; and (2) different orientation*

- 3.3.5 Service costs were further reduced by collecting sanitation from 2 units into one shared drainage point (figure 2, below).



**Figure 2 : Sakhasonke.**

Note : (1) two units with common wall; and (2) shared service (sanitation outlet)

- 3.3.6 Pipes are laid underground, under paved footpaths, thus protecting the infrastructure whilst also allowing easy access for maintenance.
- 3.3.7 71% of the subsidy went into topstructure. Buildings are double storey. The second storey floor comprises of 19mm “shutterply” on 450mm timber beams with conventional wall brackets (Figure 3). The structure is also supported by creating the equivalent of a ring beam from u-blocks with structural steel, filled with concrete. This appears to be a robust system (buildings are more than 5 years old and there has been no deterioration of the floor).



**Figure3 : Sakhasonke.**

*Note : (1) steep staircase to second floor; (2) beams supported by brackets; and (3) shutterply for ceiling and second floor)*

- 3.3.8 Internal wooden stairs are used, but these are very steep (Figure 4). This is likely to be problematic for people who are frail.



**Figure 4 : Sakhasonke.**

*Note : (1) steep staircase to second floor; (2) internal wooden wall (self-improvement by beneficiary)*

- 3.3.9 The use of the Southern Cape Condensation allowance (SCCCA) enabled improvements such as ceilings, aerolite and plastering.

- 3.3.10 Paying attention to varying the orientation of buildings on the site further complimented the pedestrian nature, thereby reducing the need for roads. (Figure 5).



**Figure 5 : Sakhasonke.** *Note different orientation of buildings*



3.3.11 Use of courtyards also make the project more aesthetically pleasing (Figure 6).



**Figure 6 : Sakhasonke.**

*Note : (1) court yard area; (2) innovative use of cement pipes for benches and plant pots; and (3) variation in orientation*

3.3.12 The project was enhanced through creating a communal vegetable garden, however, on visiting the site it appeared that this was under-utilised (Figure 7). Potential could exist within KZN to engage with the Department of Agriculture in terms of its seeding programme.



**Figure 7 : Sakhasonke. (1) Unused communal garden**

- 3.3.13 Quick payment turnaround times (10 days) facilitated cash-flow, thus there was no need for an overdraft. Savings was also incurred in terms of interest.
- 3.3.14 Profit derived from the sale of business sites and rental such as community facilities (and/or other non-residential sites) are paid into a community fund which pays for garden services and maintenance of the area).
- 3.3.15 The University of PE Building and Technology unit was used to assist with contractor management. This took the form of a senior lecturer, with the necessary professional qualification, leading a team of post graduate/4<sup>th</sup> year students. This provided students with practical training and work experience whilst reducing contractor management costs. The University was paid an amount of R250 per site from the subsidy for this service.
- 3.3.16 The design of the buildings and orientation allow for extensions (Figure 8)



**Figure 8 : Sakhasonke.** Extension to building

- 3.3.17 Existing buildings (ablution block) was upgraded to provide social amenities (Creche and community hall)



**Figure 9 : Sakhasonke.** Extension to building

4. ZANEMVULA

**4.1 Presentation by Thubelisha Homes**

A copy of the presentation is attached as Annexure 3. The presentation included background information and a brief progress report.

**4.2 Engagement with parties** (Thubelisha, Eastern Cape Housing and Nelson Mandela Metro)

4.2.1 The project is a National Minister priority, hence is closely monitored. Quality control is ensured through the use of the NHBRC, involvement of the Metro, and presence of the Provincial department's clerk of works. Regular fortnightly meetings are held to discuss site issues, operations, etc. On-site quality control is primarily the responsibility of the contractor.

4.2.2 A major challenge was dealing with emerging contractors and delays associated therewith. The contract strategy was then changed to a development contract strategy. This has improved efficiency by having direct control over appointments, and ensuring partnering with emerging contractors.

4.2.3 The project is approved as one large initiative, with several phases, that are developed in parallel.

4.2.4 The provisions of the Revised Chapter 3 of the Housing Code are adhered to strictly in the appointments of service providers, and manner in which risk assessment is undertaken. The short bid route is followed only in emergencies, and awards are then made from a pre-approved internal database.

4.2.5 Specific service providers are appointed to undertake professional work (Environmental, geotechnical, and town planning related). Preparation funding is provided for this (R780 per site as a portion from the preplanning allowance of the subsidy). The amount of the subsidy is not made known. Contractors are requested to tender against the specification. This reduces the loading of prices

4.2.6 Densification allows for greater economies of scale (as per Sakhasonke).

4.2.7 Turnaround times for payment is quick (7 to 10 days) thus enabling a smoother cash flow. Such quick timeframe is facilitated through continued close monitoring.

4.2.8 Different typologies are used, thus affording beneficiaries choice. This includes 4 different house designs, and also different facades and orientation on site.

4.2.9 Relocation funding is used where relocations are required.

- 4.2.10 Demolition of existing structures (informal and formal) is done in terms of the Informal Settlement Upgrade policy (around R2000 per site).
- 4.2.11 A locational allowance is paid, but for distance to be travelled for delivery of materials only. 3 major centres are used : Port Elizabeth, East London and Port Shepstone. The provision for adjustment based on price is not applied.
- 4.2.12 A higher level of specification is achieved through the application of the Southern Cape Coastal Condensation allowance (Figures 10 and 11).



*Figure 10 : Nsingisi. Housing product*



*Figure 11 :Zanemvula. Finishing*

- 4.2.13 Projects are approved within 2 weeks. This is achieved by conducting all the required detailed risk assessments upfront, before granting feasibility approvals, as work is paid for from the preparation funding. Project

applications are submitted to the regional office. These are pre-screened by a senior administrator and then submitted to the General Manager. Only the recommendation is submitted as a resolution signed by the MEC.

4.2.14 Unoccupied units are used temporarily as crèches, community facilities, etc. Although the MEC is not supportive, it does assist with the prevention of illegal invasions and damage to the structures.

4.2.15 Thubelisha (Eastern Cape) had an integrated planning unit. This unit assisted with the housing sector and IDP process but also coordinated involvement from other departments (health, education, SAPS, etc) to ensure integrated development.

### 4.3 Observations/Lessons learnt

4.3.1 Intense management is key to ensuring a successful project.

4.3.2 High profile projects should include high level buy-in from supporting departments, through discussions at cabinet level.

4.3.3 The use of different facades and orientation on the site make the project more “homely” and breaks away from the stereotype “township” one design mass delivery look currently found in most areas in KZN. This is achieved by, for example, alternating the positioning of the house to the front and the back of the property. Mention was made of a project (Delft) where the houses were orientated form a diamond shape, overlooking a common area thereby increasing security.

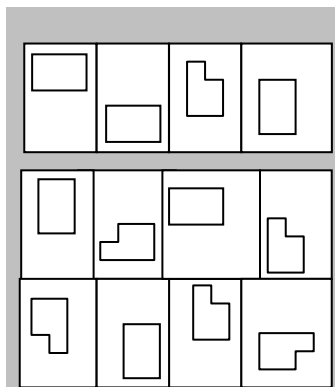


Figure 12a : Alternating orientation

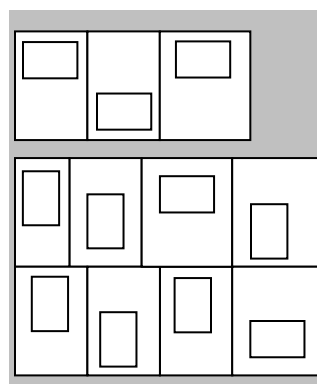


Figure 12b : Facades and alternating orientation

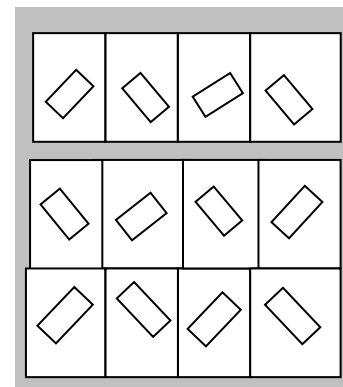
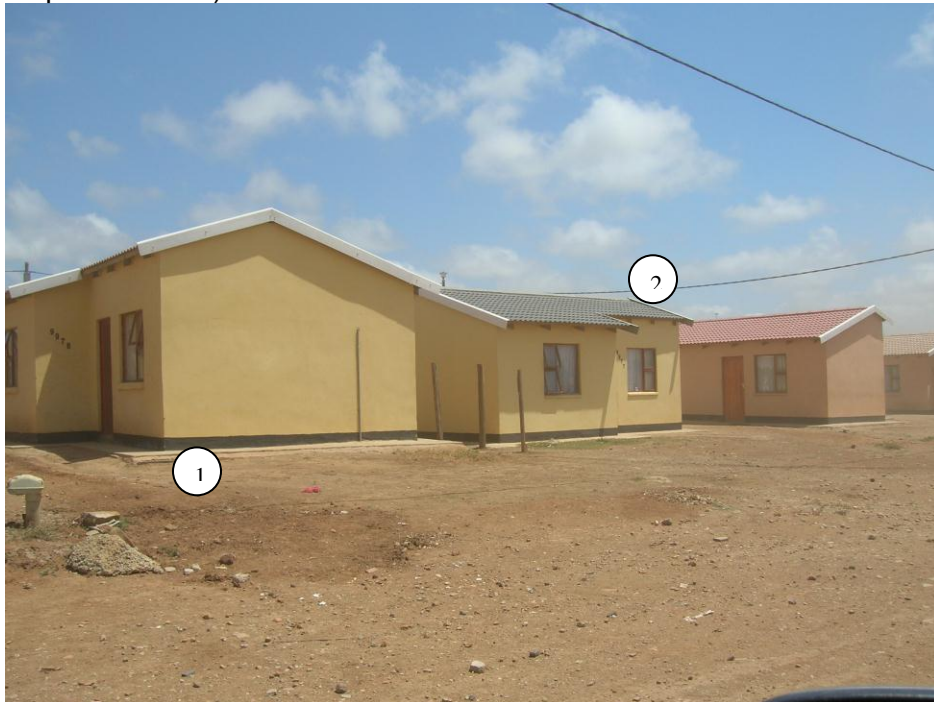


Figure 12c : Delft orientation



*Figure 13 :Zanemvula. : Orientation and facades*

- 4.3.4 Preparation funding assists in project packaging and is a means of ensuring quality risk assessment is undertaken prior to final approval.
- 4.3.5 The application of the Southern Cape Coastal Condensation Area (SCCCA) allowance enables a better product. The project manager (consultant to Province) advised that there is a revised map that may assist which is obtainable from the NHBRC offices. He further suggested that KZN should consider a motivation based on areas with high rainfall as the same bacteria that causes problems in the SCCCA, is prevalent in areas with high rainfall. The team noted on site that there were many structures built prior to the provision and these appeared to still be of sound quality.
- 4.3.6 Concrete aprons around the top structure, as per NHBRC requirements are used to prevent undermining the structure (e.g. water penetration and subsequent erosion).



*Figure 13 :Zanemvula. : (1) concrete apron; and(2) orientation variation*

4.3.7 The locational allowance assists with compensating areas in which considerable distances are to be traveled for delivery of material.

4.3.8 There is a greater role for the Departmental (KZN) Planning Unit than just putting together housing sector plans.

## 5. RECOMMENDATION

5.1 The Department needs to further explore the possibility of applying the Southern Cape Coastal Condensation allowance to enhance the product, especially in areas of high rainfall.

5.2 The feasibility of shared services in the context of densification and cost reduction of service levels such as waterborne sewer where needed, require further investigation.

5.3 Designs should look at other forms of cost reduction, but within acceptable limits.

5.4 Innovative building design proposals for double storeys should consider alternatives, (e.g. include fold up staircases, hoisting systems, external stairs with awnings, etc to reduce the dangers associated with steep stairs).

5.5 Developers need to be encouraged to allow different facades (at least 3) and orientation of buildings as it contributes to a greater sense of belonging, whilst also being more appealing.

5.6 The revision of the current preparation funding policy is required to assist in independent appointments of service providers to undertake environmental, geotechnical and town planning and preliminary design work. This will ensure independent assessments, whilst also reducing loading of prices by implementing agents/external project managers.

5.7 Care should be taken in the application of the locational allowance for area price increases as there is no equitable means of determining the application thereof.

5.8 The Department is to take a firmer position in driving housing projects by reverting to becoming the developer. This would enable it to appoint service providers upfront to undertake risk elements independently, thus enhancing the quality of the assessment. (Environmental, geotechnical, town planning and preliminary design) It will also provide more control over contracts and enable better planning.

5.9 A more concerted effort needs to be made to integrate development. This can be achieved through more responsible planning, together with ensuring the Department as a coordinator with other departments to be involved.

- 5.10 The NHBRC should be approached to assist in the development of a standard minimum specification for KwaZulu-Natal, taking cognisance of the subsidy limitations, and need to encourage indigenous and traditional technology, where possible.
- 5.11 The Department to explore the possibility of partnership with GM/Delta, especially in the context of capacity building programmes.
- 5.12 Initiatives with tertiary institutions should be piloted. This would capacitate students, encourage innovation, contribute towards EPWP, and the involvement of youth in housing projects. It could include scholarships and internship programmes, e.g. commit to a number of houses or years housing service.
- 5.13 Sustainable human settlement developments need to consider exit strategies in its design to reduce dependency of beneficiaries, thus creating self-reliance and a sense of belonging.