

# Knowledge Week 2010

## South African Human Settlements 2030: Rethinking the spatial development trajectory



**Published by:**

Knowledge Management Integration and Innovation Cluster  
Development Bank of Southern Africa  
Midrand

First edition, first printing 2011  
ISBN: 978-1-920227-10-4

**Intellectual Property and Copyright**

© Development Bank of Southern Africa Limited

This report is part of the knowledge products and services of the Development Bank of Southern Africa Limited and is therefore the intellectual property of the Development Bank of Southern Africa Limited. All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or be transmitted in any form or by any means, whether electronic, mechanical, photocopied, recorded or otherwise, without the prior permission of the Development Bank of Southern Africa.

**Legal disclaimer**

This report summarises and refers to presentations delivered at the Knowledge Week 2010 seminar held at the Vulindlela Academy, DBSA, Midrand, South Africa, on 20-22 October 2010. In the preparation of this document, every effort was made to offer the most current, correct and clearly expressed information possible. Nonetheless, inadvertent errors can occur, and applicable laws, rules and regulations may change. The Development Bank of Southern Africa Limited makes its documentation available without warranty of any kind and accepts no responsibility for its accuracy or for any consequences of its use.

Although commissioned by the DBSA, the views, analyses and policy recommendations expressed in this report do not necessarily reflect the official views of the Bank, its Board, its employees or its sole shareholder, the Government of South Africa.

*This document may be ordered from:*

DBSA Knowledge Centre  
Development Bank of Southern Africa  
PO Box 1234  
HALFWAY HOUSE  
1685  
South Africa

Telephone: +27 11 313 3372  
Telefax: + 27 11 206 3372  
Email: PamelaS@dbsa.org

# What is the Development Bank of Southern Africa about?

The Development Bank of Southern Africa (DBSA) was established in 1983 to perform a broad economic development function within the homeland constitutional dispensation that prevailed at the time. In 1994, the new constitutional and economic dispensation in South Africa led to the transformation of the Bank's role and function.

In 1997, the DBSA was reconstituted in terms of the Development Bank of Southern Africa Act (No. 13 of 1997) as a development finance institution. The constitution and conduct of the DBSA Board of Directors are primarily governed by the DBSA Act and further regulated by the Public Finance Management Act (No. 1 of 1999) and the Companies Act (No. 61 of 1973).

## Mandate

The DBSA's mandate is to provide financial, technical and other assistance to achieve the objects of the Bank as provided for in section 3 of the DBSA Act, with a focus in its investment activities on infrastructure funding broadly defined and with the object of acting as a catalyst to maximise private sector access to opportunities in the provision of public funding.

## Objectives of the Bank

The main objectives of the Bank are the promotion of economic development and growth, human resource development, institutional capacity building, and the support of development projects in the region. The ancillary objectives of the Bank are to assist other international, national, regional and provincial initiatives in order to achieve an integrated finance system for development, and to assist national, international and private sectors bodies with the management of specific funds.

## Vision

A prosperous and integrated region, progressively free of poverty and dependency.

## Mission

To advance development impact in the region by expanding access to development finance and effectively integrating and implementing sustainable development.

## Strategic objectives

- Promote broad-based economic growth, job creation, cooperation, integration and prosperity
- Build human and institutional capacity
- Co-deliver social and economic infrastructure

- Serve as a centre of excellence for development financing, effectiveness and good governance
- Engender sustainability, externally and internally

To support the strategy of the DBSA, investments in infrastructure assets are made within the following three broad segments:

- Social transformation: Support the creation of sustainable living environments and alleviate basic services backlogs
- Economic stimulation: Support the growth of the economic base and employment opportunities
- Capacity development: Support the upliftment of human capital in the areas where growth and development are constrained by lack of education and skills

## Roles

### Financier

- Loans
- Equity investments
- Co-funding
- Grants
- Development expenditure

### Advisor

To build institutional, financial and knowledge capacity for development:

- External training
- Subsidised lending
- Technical assistance grants

### Partner

To leverage private, public and community stakeholders in the development process:

- Co-funding
- Mobilise funding for clients

### Integrator

To mobilise and link stakeholders, resources and initiatives for sustainable development outcomes.

### Implementer

To originate and facilitate key interventions for building capacity and providing development solutions:

- Project implementation in collaboration with clients (Siyenza Manje programme)
- External training

# Acknowledgements

Our sincere appreciation goes to the following individuals:

**Minister of Human Settlements:**

Minister Tokyo Sexwale

**Chief Executive Officer (DBSA):**

Paul Baloyi

**Project Manager:**

Pamela Sekhonyana, DBSA

**Organising team (DBSA):**

Nolwazi Gasa  
Pamela Sekhonyana  
Kate Rivett-Carnac  
Nelly Rampete  
Saphira Patel  
Johanna Chiloane  
Nomagugu Mashinini  
Thenjiwe Mtshali

**Organising team (DHS):**

Anton Arendse  
Luanne Werner  
Thandiwe Maimane

**Presenters:**

Phil Harrison and Khulekani Mathe (The Presidency, NPC)  
Elsona van Huyssteen (CSIR)  
Petra Neumann (IOM)  
Camaren Peter (Research Consultant)  
Mothotho Sigidi (CoGTA)  
Hillary Monare (Municipal Demarcation Board)  
Yusuf Patel (SAPI)  
Celdri de Wet and Greg De Villiers (DBSA)  
Mfanafuthi Gama and Sunday Ogunronbi (DRDLR)  
Michael Aliber (PLAAS)  
Ronald Eglin (Afesis Corplan)  
Mokena Makeka (Makeka Designs)  
Peter Copely (DBSA)  
Catherine Cross (HSRC)  
Tabo Foulo (DBSA)  
Anthea Stephens (SANBI)  
Ingrid Verwey (DBSA)  
Krisno Nimpuno (Wits Office of Disaster Preparedness in Africa)  
Cyprian Marowa (DBSA)  
Luxien Ariyan (NHFC)  
Andre Kruger (Banking Council of South Africa)  
Soula Proxenos (IHS)  
Mark Oranje (University of Pretoria)  
Kailash Bhana (DAG)  
Ahmed Vawda (Performance Monitoring Evaluation, The Presidency)  
Ivan Turok (HSRC)  
Sinazo Sibisi (DBSA)

**Facilitators:**

Sinazo Sibisi (DBSA)  
Stephen Berrisford (Stephen Berrisford Consulting)  
Nelly Rampete (DBSA)  
Luanne Werner (DHS)  
Zakhele Mayisa (DBSA)  
David Jarvis (DBSA)  
Anton Arendse (DHS)  
Richard Dyantyi (DHS)

**Management:**

Ravi Naidoo  
Sinazo Sibisi  
Kate Rivett-Carnac  
Glenn Havemann

**Editorial team:**

Pamela Sekhonyana

**External language editor:**

Aïda Thorne

**DBSA publications team:**

Marié Kirsten  
Lyn Sumners  
Rose Ngwenya

*Appreciation also goes to the following DBSA and DHS Teams: Conference Scribing, Communications, and Security Services*

# Foreword

by the Group Executive (Development Planning, DBSA)

## Ravi Naidoo

The annual Knowledge Week of the Development Bank of Southern Africa (DBSA) presents a platform for knowledge practitioners to explore solutions to topical development challenges in South Africa and in the region. The DBSA hosted the 2010 Knowledge Week in partnership with the Department of Human Settlements (DHS), with the theme "South African Human Settlements 2030: Rethinking the Spatial Development Trajectory".

The theme of the 2010 Knowledge Week was timely, given that it is now broadly recognised that South Africa's human settlement patterns do not adequately address the needs of local communities. These patterns are largely a result of the lack of a common vision and shared view on the development approach to settlements. This is exacerbated by the lack of effective implementation mechanisms.

The current view among development practitioners suggests that in order to improve the quality of life of South Africa's communities, there is a need to move away from one-size-fits-all approaches, to more customised solutions for different settlements, within an integrated framework for national spatial development.

While the DHS has identified key priority areas to meet its Medium-Term Strategic Framework (MTSF) objectives – Outcome 8: "Sustainable human settlements and improved quality of household life" – the Department is also in the process of reviewing its human settlements policy and strategy agenda.

The Minister of Human Settlements, Tokyo Sexwale, has clearly outlined the importance of crafting a long-term vision for the development of sustainable human settlements in South Africa. The vision is about accelerating the development of sustainable settlements and significantly transforming the landscape of the built environment. Creativity and innovation should become critical components of long-term planning, and delivery should target large-scale integrated investments that aim to maximise development impact. The youth, for whom we are in effect planning, should be at the core of these plans.

Achieving a long-term vision for sustainable human settlements will inevitably require the government to crowd-in innovative partnerships with various role players in the sector. These would include policy makers, practitioners, development planners, civil society and non-governmental organisations, academic and research institutions, development finance institutions, private sector funders, and investors in the sector.

In a parallel process, a number of new developments have also prompted a review of the DBSA's current development agenda and modus operandi. These include the need to respond to the government's drive to transform South Africa's growth path structurally. With this end in mind, the finalisation of performance agreements that outline key targets for achieving the MTSF priorities (for the Minister of Finance and other key ministries, including Human Settlements), directly impact on the work and focus of the Bank.

The creation of sustainable human settlements has subsequently been identified as a strategic priority area of investment for the DBSA. The Bank is well positioned to become a centre of excellence in the sector through its five-pronged role of financier, adviser, partner, implementer and integrator. In this context, we not only seek to focus our actions continuously on significantly increasing both disbursements and development impact in the sector, but also aspire to extend our role in the delivery value chain. With a renewed focus on the delivery value chain, there is an opportunity for the DBSA to support the country's 2030 vision for human settlements by contributing to the design and execution of a concrete agenda towards this vision, particularly around the issues of spatial form, sustainable financing of human settlements, and urban development and management.

The 2010 Knowledge Week conference highlighted critical spatial development issues involved in achieving this vision. We trust that the conference outcomes presented in this report will influence numerous processes currently being undertaken at various levels in the government and within the Bank. These include the review of human settlements development and planning in South Africa, which will result in the development of a national Human Settlements Turnaround Strategy (led by the DHS); the work championed by the presidency on national strategic planning and the performance management of Outcome 8; the implementation of the existing Memorandum of Understanding (MOU) between the DHS and the DBSA; and the implementation of the Bank's Human Settlements Investment Strategy.

The DBSA remains cognisant of the need to deepen its understanding of key trends in the sector on a continuous basis. We believe that the presentations and discussions at the 2010 Knowledge Week conference have provided valuable perspectives and lessons on best practice in implementation. These will enable us to contribute constructively towards crafting a long-term vision for the creation of sustainable human settlements in South Africa.

# Table of contents

## DAY ONE: Plenary session

### The political context: Setting the scene

Welcome and context .....	7
Opening address .....	8
Keynote address .....	10

### Rethinking South Africa's human settlements growth path

The NPC's perspective on constructing a spatial vision for South Africa .....	14
Human settlements: Unlocking or blocking potential regional and national growth path initiatives .....	18

### Regional spatial trends and planning responses

Migration trends in southern Africa: Critical management challenges .....	21
Regional planning and sustainability responses .....	23

## DAY TWO: Morning plenary session

### Institutional reconfiguration

What will enable the state to drive and enforce a more integrated and sustainable approach? .....	27
Institutionalisation of spaces: The approach of the Municipal Demarcation Board .....	30
Given the institutional vacuum, what needs to be done? .....	32
Reflections from practice: A town planning and engineering perspective ....	35

### Spatial integration

How do we overcome the urban/rural dichotomy? .....	38
How do we overcome the urban/rural dichotomy? Welcome to the new suburbia .....	41
A pro-poor approach to land access: Incremental settlement development ..	43
Urbanism: The role of architecture in constructing urban spaces .....	45

## DAY TWO: Afternoon parallel session

### Key drivers of sustainable human settlements

What is the future of urban transport in an energy-scarce environment? . . . .	47
A long-term outlook for informal housing in South Africa: An economic analysis . . . . .	49
Reaching further towards sustainable human settlements . . . . .	52

### Environmental and risk reduction considerations

How do we mainstream biodiversity conservation in urban settlement planning? . . . . .	55
Green buildings: Rocket science or not? . . . . .	57
Disaster risk reduction in settlements: A spatial planning context . . . . .	60

## DAY THREE: Plenary session

### Prioritisation and funding of interventions

Infrastructure planning, financing and investment: A DBSA perspective . . . . .	63
The NHFC's perspective . . . . .	65
A banking perspective . . . . .	67
A private sector perspective . . . . .	69

### The politics of space: South African cities in 2030

The role of civil society in managing our cities: Social-cultural dimensions of sustainable human settlements . . . . .	71
Institutional reform: Towards the inclusive South African city . . . . .	73
Financing sustainable human settlements and resilient urban economies . . . .	74

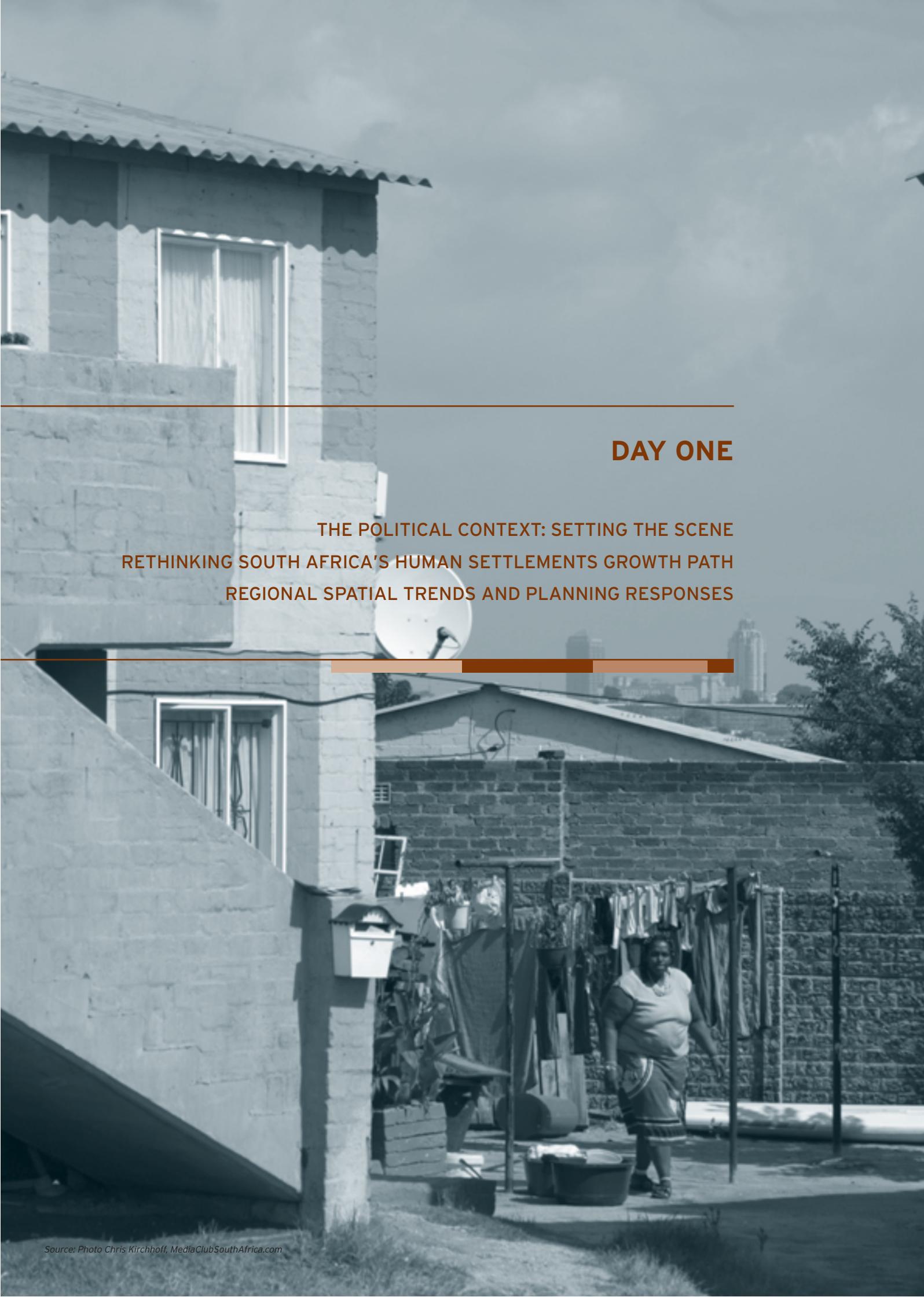
### The way forward

Future prospects for spatial planning in South Africa and key policy discussion points: Trade-offs and decisions required . . . . .	75
--	----

Panel discussions and feedback . . . . .	78
--	----

The way forward: Logic and levers of change . . . . .	90
---	----

List of acronyms . . . . .	Inside Back Cover
----------------------------	-------------------



## DAY ONE

THE POLITICAL CONTEXT: SETTING THE SCENE  
RETHINKING SOUTH AFRICA'S HUMAN SETTLEMENTS GROWTH PATH  
REGIONAL SPATIAL TRENDS AND PLANNING RESPONSES

# DAY ONE morning plenary session

## The political context: Setting the scene

---

Ravi Naidoo, Group Executive, Development Planning, DBSA

### Welcome and context

Each year, the Development Bank of Southern Africa (DBSA) hosts Knowledge Week, a platform for sharing knowledge on a critical development issue that has been identified. Here, common understanding on a collective approach is formed and deepened, and solutions to complex development challenges are sought. Such deliberations aim at accelerating service delivery, improving performance outcomes and creating partnerships that will support sustainable progress.

South Africa is currently in the process of transforming its growth path, and human settlements have been identified as one of the priority sectors. The government has crafted a process focusing on four outcomes, which include human settlements and a delivery agreement on "the creation of sustainable human settlements and improved quality of household life". The policy agenda is being reviewed to achieve these ideals by 2030.

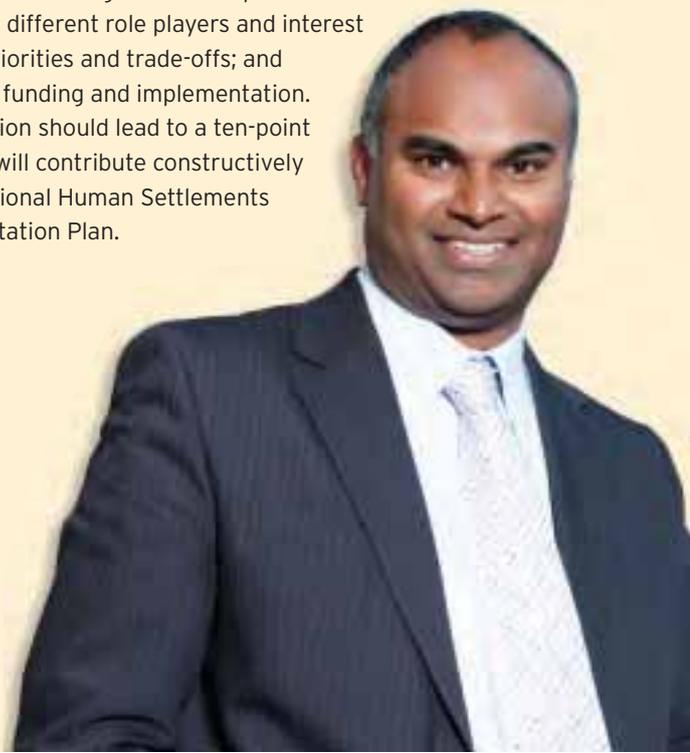
There is, therefore, a need to build a common vision for the long-term trajectory of human settlements in South Africa. At present, urban development continues to reinforce fragmentation and marginalisation through the growth of peripheral formal and informal communities, which are frequently characterised by migration, poor land-use management and lack of income. In addition, many rural settlements still have a scattered, mostly unplanned, population distribution, with limited access to economic opportunities, transport and basic services. The spatial form in South Africa - with its disproportionate rural-urban migration, rising densities in cities, and rural stagnation - is, to some degree, unsustainable.

The current focus on dealing with human settlements holistically and sustainably will be led by the Department of Human Settlements (DHS), and the spatial planning component by the National Planning Commission (NPC). The DBSA, as an infrastructure development finance institution, signed a Memorandum of Understanding (MoU) with the DHS in 2007, and a number of programmes have since been put into operation.

Apart from its role as financier, the DBSA also acts as adviser, partner, integrator and implementer, and for this reason it is interested in the new growth path and spatial vision for South Africa. Infrastructure and other challenges often present longer-term development opportunities, examples of which can be seen in the Southern African Development Community (SADC) and the rest of Africa. The DBSA, therefore, wishes to investigate opportunities for accelerating sustainable human settlements, including housing delivery.

Knowledge Week seeks to strengthen the existing partnership between the DBSA and the DHS. The discussions and outcomes will inform the upcoming National Human Settlements Indaba in November 2010. It is also necessary to begin articulating those critical issues required to enhance the trajectory of human settlements in the short term (Agenda 2014 sector priorities), as well as the medium and long-term issues (the definition and implementation of a concrete agenda towards a suitable vision for 2030).

Important considerations on the agenda include: the growth path and spatial vision; urban and rural spatial integration; regional trends in spatial integration, planning and economy; environmental concerns; institutional reconfiguration and politics of space; the different role players and interest groups; priorities and trade-offs; and decisions, funding and implementation. Prioritisation should lead to a ten-point plan that will contribute constructively to the National Human Settlements Implementation Plan.



### Opening address

Paul Baloyi, Chief Executive, DBSA

For South Africa, and even more so for the Development Bank of Southern Africa (DBSA) as an organisation, the need for a coordinated approach to knowledge sharing is becoming more evident. As a country and as an institution, we are spoilt for choice in terms of knowledge, data, ideas and concepts. The difficulty comes in our ability to make the right choices from the kind of knowledge or expertise that we actually select.

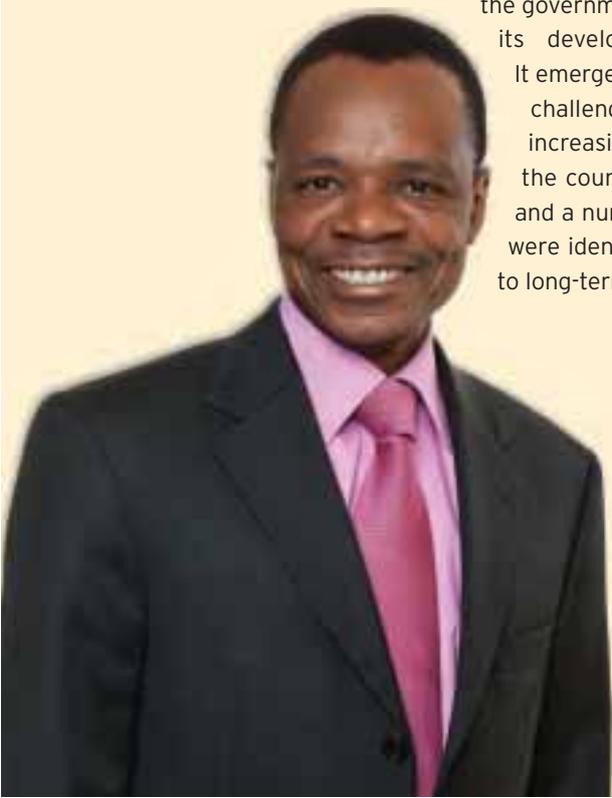
Some of the choices demand that we optimise our utilisation of partners and find new ways of sharing knowledge. We should create a platform where all knowledge centres could work together in a coordinated manner, so as to inform the government as a uniform body and not as individual institutions. The plethora of circulating ideas often creates a great deal of confusion for many departments. We should get to a point where we begin to share information collectively so that we speak the same language, understand the same issues and begin to look at the same priorities through the same eyes.

For the past 18 months, the DBSA has engaged intensively with its partners in the private sector and various shareholders in the government. We have sought to gain insight into how the DBSA's future role as an effective partner should be redefined, and how best to utilise the resources entrusted to us by

the government for achieving its development agenda.

It emerged that the Bank's challenges have become increasingly reflective of the country's challenges, and a number of priorities were identified as medium to long-term goals.

1. **The first priority concerns energy:** The DBSA sits on the Ministerial Committee and has effective partnerships with Eskom, the Department of Public Enterprise (DPE) and the Department of Energy (DoE), with practical agreements for solar parks, solar heaters, and so on. We are ready to roll out certain key programmes with a keen focus on clean energy and sustainability. Part of the challenge is to link our programmes and choice of technology to the National Planning Spatial Development Framework, so that we do not end up having expensive infrastructure located far from where the fundamental mobility of people has taken them.
2. **The second priority we have identified is the health sector:** The DBSA's ten-point plan in this respect has been adopted by the government. We have been asked to start rolling out certain components of the plan, such as hospitals, nationwide. We have begun to scope specific hospitals in the provinces, and will soon be consulting financiers and suppliers to map out the kind of hospitals we would like to have.
3. **The third priority sector is that of water and sanitation:** Fortunately, we are now engaging the government proactively in this regard. The Department of Water Affairs (DWA) is taking its interventions dealing with Green Drop and Blue Drop status seriously. We have to ensure, however, that we begin to map out the supply of water and look at a new regulatory environment that will address the actual disparities in access. Again, the issue of human settlements is at the centre of the discussion.
4. **The fourth priority is housing:** The DBSA, together with Old Mutual and other stakeholders, has created a large fund for the provision of urban housing. However, there is also the problem of mushrooming informal settlements. The DBSA's approach thus far has been relatively fragmented because it has to deal with specific departments and specific initiatives for the provision of housing. Regrettably, this lends itself to the particular problems that we are beginning to see today. We need to consider much more critically what the right framework and the right kind of accommodation will be.
5. **Transport is an equally important sector:** The Minister has challenged the DBSA to change the context from which it approaches such





Source: DBSA

problems. Rather than thinking about the number of roads and railway lines needed, we need to map out a traffic system that is capable of moving goods and people cost effectively. Then we should begin to create the right balance between roads and rail, and to ensure that people have access to centres of economic capital. The dialogue between Transnet, the Department of Transport and other departments will have to be integrated so that we emerge with a holistic view that allows us to engage with the government in an informed manner.

6. **Rural development is another priority:** A section of the population will always be rural and this fact should not be ignored. The choices we make should result in a sustainable solution ensuring that the right balance between rural areas and cities prevails.

These and other programmes involve the complete value chain of the DBSA – not only financing, but also conceptualisation, planning, policy issues, prioritisation, maintenance and, where possible, implementation. This is the expertise that the DBSA has managed to put together over the past five years; this is also why knowledge input is valued so highly.

A further challenge is having limited resources while chasing too many priorities. If we focus on only a few issues at a time, we can accomplish more. A good example is the way in which South Africa hosted the 2010 Soccer World Cup. It is certainly conceivable that we as a nation and the various government departments will be able to rally around the human settlement challenge, thus prioritising correctly and coordinating efforts and resources properly towards achieving our goals.

Our engagement with multinationals, global agencies and other customary funders is beginning to become much more complex. Developed nations

are increasingly looking internally to provide for their own needs. The finance offered to us has changed in nature, pricing and conditions; it has become much tighter. We can presume that the effects of the global financial crisis will not be resolved over the next five years. Some will be inherent in various economies for a long time to come, as countries trim luxuries and return to basics.

Africa and South Africa will have to rely on their own initiatives, capacity and capital to start doing what they can. In this context, therefore, the issue of what we choose to prioritise and deal with becomes crucial. We cannot do everything at the same time, but if the nation, the government, our partners and institutions coordinate correctly and focus on key programmes and those sectors that would have the greatest impact, I think we can again stand as a nation and shine as we did during the 2010 Soccer World Cup.

It is in this context that I welcome your participation. What I am hoping for is to get a sense of, and a plan for, resolving the issues of human settlement. Also, how do we integrate the other key initiatives that are bubbling in all the departments, to ensure that, for the first time as a nation, we depart from this platform and approach our priorities on an integrated basis?

Let me point out the danger. If we ever get it wrong as a nation – if we ever get to a position where our fiscus is drained and in deficit, we are likely, and very quickly so, to find ourselves becoming a banana republic. It is incumbent on each one of us – whether in the government or in the private sector – to recognise the need for having all hands on deck. Hopefully, you will join us in beginning to craft a viable and sustainable solution.

### Keynote address

Tokyo Sexwale, Minister of Human Settlements

The essence of human development is about the realisation of ideas, because ideas by themselves do not have wings; they cannot fly. For this reason, any thought, idea or concept only becomes meaningful when it is concretised in the real world. The challenge of development and forward movement within society lies in providing credible and sustainable solutions to the major problems that confront us, chief of which is the eradication of poverty in all its forms. People require a better life and improved employment opportunities. These are critical – and chronic – problems facing our country.

The challenge of development means looking at our own country. We cannot dream about other countries – China has its own problems, it has defined them; we have to define our own. The objective is to reduce people's dependency on the fiscus. In South Africa, social expenditure is unfortunately rising faster than capital expenditure. All our efforts must be underpinned by the need for the economy to perform at optimum levels. Sustainable, high economic growth rates need to be achieved in order to bolster our gross domestic product, which currently is lacklustre when compared with other economies of South Africa's size.

Our participation as the government in this Knowledge Week is part of our quest for realisable ideas that would aid us in fulfilling our mission

as the Ministry and Department of Human Settlements (DHS).

We have a vision, Human Settlements 2030, which is a new, expanded mandate that goes beyond housing.

I wish to emphasise that we need good ideas that will enhance our implementation of this strategic vision, which has already been defined. I now need to take steps, together with my team, to get us there.

We want people to share their ideas with us and teach us what they know, so that we can succeed.

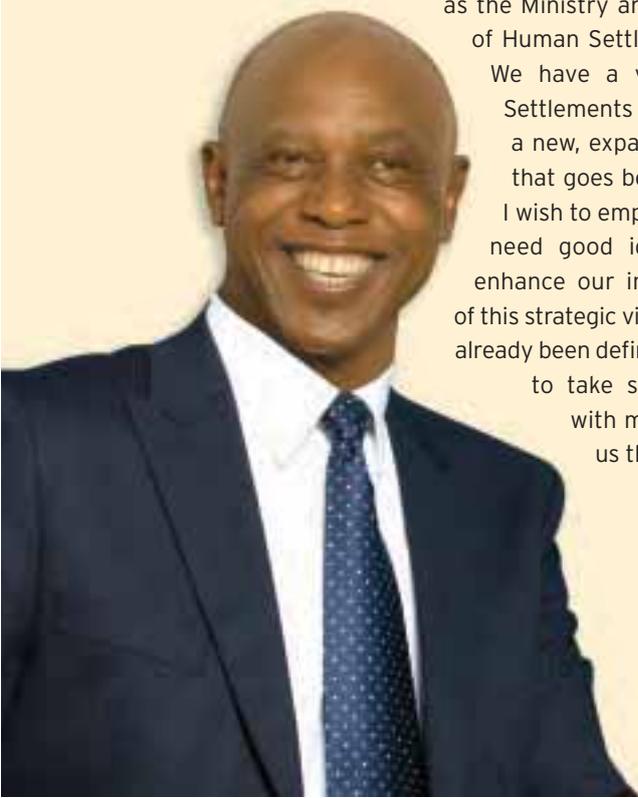
The concept of human settlements was introduced to the nation during the budget vote address in April of this year. At the time, just two months before the opening of the FIFA 2010 World Cup, I stated that the target for human settlements ought to be nothing less than an enhanced vision driven by an energy and passion similar to the commitment we saw around the World Cup.

I said the potential exists for the whole country to be turned into one large construction site as we build sustainable human settlements in various localities. In crafting the Human Settlements 2030 vision, we are mindful that a child born today will be 20 years old in 2030 and will need somewhere to live. We should be planning for the needs of that future adult.

To succeed, Human Settlements 2030 must be for, and by, the youth. It is about their future – their homes, apartments, bachelor flats, and so on. It is about future rural and urban settlements. This will also contribute to economic growth and job creation. Therefore, Human Settlements 2030 should be the campaign for our young people, for their own future. They cannot simply roam the streets; we have to bring them into the loop.

In looking ahead, however, it is important that we are also mindful of our past. We can identify three reference points in this regard:

1. One foundation of our thinking and ideas is the Freedom Charter, drafted in 1955. Among other things it declares the following: *“There shall be houses, security and comfort for all. All people shall have the right to live where they choose, to be decently housed and to bring up their families in comfort and security. Slums shall be demolished and new suburbs built where all shall have transport, roads, lighting, playing fields, crèches and social centres.”* What a vision! They said this must be done. It is now left to this government to take this particular mission forward.
2. Another important reference point is the adoption of the concept of human settlements by the United Nations Habitat Conference held in Vancouver in 1976. Many towns and cities originally developed around a natural resource, such as a river, or as a consequence of economics, politics, war, drought,



and so on. The Vancouver Conference was aimed at creating a global understanding that the location of people cannot simply be left to forces of nature or people's whims; it has to be planned. Likewise, the United Nation's World Summit for Sustainable Development held in South Africa in 2002, emphasised that this concept needed to be accepted worldwide. Strategists and thinkers have come to realise the importance of avoiding the haphazard location of villages, towns and cities, and rather emphasising proper spatial planning.

3. The third important reference point concerning human settlements in South Africa was the proclamation by President Jacob Zuma in his 2009 State of the Nation Address, when he expanded the mandate of human settlements beyond housing. That is why we need your help, as we are now saddled with the responsibility of human settlements as such. It is about the places where we live, learn, spend leisure time and laugh. Where we stay should be where we pray as well; churches - where are they and how far away? It is also about where we can play.

The President has assembled a team called the Presidential Coordinating Council, where Ministers are held accountable. For example, the Minister in charge of education could be asked: education for whom and where, and how far are the schools from our children? To the Minister in charge of energy: where does this energy go? Roads, who are you building roads for? If you keep on asking, you realise that whatever we do must ultimately be for, and about, people. The challenge for our Cabinet colleagues is to come on board and ensure that we are not just building houses. They have to locate all kinds of facilities and amenities within the proximity of these houses.

In so doing, we will fulfil the mandates of 1955 and 1976, and as proclaimed by the President in 2009: *"As part of social infrastructure development we will provide suitably located and affordable housing, and decent human settlements will proceed from the understanding that human settlement is not just about building houses. It is about transforming our cities and towns and building cohesive, sustainable and caring communities with closer access to work and social amenities, including sports and recreational facilities."*

I now want to share with you some of the steps we have taken, so that we can locate this conference and be able to see the gaps:

- We interacted with people in informal settlements to obtain their views on improving their conditions.
- We engaged with key partners in business and civil society in a social contract plenary session held in Boksburg, where a common approach was developed around integrated planning and social cohesion.
- We exchanged ideas with all major banks and other key financial institutions around the financing of human settlements, to ensure that a more effective implementation of the Home Loan and Mortgage Disclosure Act (HLAMDA) is understood and concretised. In accordance with this Act, all banks have to state in their financial reports how much funding they have provided and to whom, for instance to how many single women or in which regional areas. The total amount held in mortgages and loans at banks comes close to a trillion rands. How does that compare with the R18 billion or so of our budget? My intervention as the Minister is therefore very limited. It is the banks that can dictate the pace of development of residential areas and human settlements, and of who goes where. This law now empowers the government to ensure that the right things are done.
- We brought together over 100 innovators, designers, manufacturers and inventors in a very successful exhibition of alternative building technologies. A range of ideas were presented to us that would reduce costs by the introduction of new technologies. I am very excited about utilising engineering and science in the resolution of problems around human settlements. I would like to share those ideas with the DBSA, our partner of choice, but if you do not come on board I will be talking to the private sector instead.
- As part of our inner city development, we interacted with private sector partners where we are jointly funding the reclamation of buildings in town, this time in Johannesburg, where we are bringing the whole question of affordable inner city living to life. You know how we are supposed to find suitable land to build houses for people. We are supposed to be changing the landscape of the country and yet the cities and towns of South Africa have so many buildings that are just calling out, "Take me, Mr Minister." In Johannesburg we now have 80 properties, and we have put R150 million behind the private sector. Soko is one of the companies. Our aim is to buy as many buildings as we can while the prices are low, so that we can transform these beautiful old, solid buildings.

## The political context: setting the scene continued

- In future, we will be engaging with the construction sector. A total of more than 8 700 human settlement projects are under way across the country. No more Reconstruction and Development Programme (RDP) houses for us, no more little pondokkies - not under this Minister. We are changing the course; our people need dignified houses. One of the things we have realised is that having 40 square metres and larger windows can already change the equation.

This is what we have been doing, yet the vision is much bigger. That is why we want you to understand we are reporting on ourselves to you in this conversation so that you can make us better informed citizens for the sake of the people who have to reach certain levels. Also, tell us what your experience is around corruption and how to tackle it.

We have our work cut out for us. How much work can be measured through the delivery agreements signed recently with the President still has to be seen. Outcome 8 says we need to have sustainable human settlements and an improved quality of life. To meet this objective we have prioritised four matters between now and 2014: accelerated delivery of housing opportunities; access to basic services; more efficient land utilisation; and an improved property market. The economy has such a direct impact on what we do every day.

In addition, we are acquiring 6 250 hectares of well-located land for human settlements, and an environment is being created for the provision of 600 000 new loans in the affordable housing sector through the Gap Fund. My Ministry has R18 billion rand or so to provide subsidies for people earning R3 000 and less. The government also does not tax these people. People earning between R3 000 and R7 000 do not qualify for our subsidy, nor can they be helped by the banks. For them, we have put aside a guarantee fund of R1 billion so that they can be credible to the banks. The third group is those people who have their own homes, and we regulate in this area through the HLAMDA.

A further goal is to upgrade 500 000 dwellings located in the 2 700 informal settlements in South Africa. As the housing backlog is huge, we want to provide these dwellings with electricity, water, sanitation, and so on in the meantime. The combined effect is that, by 2014, we would have made significant inroads in our mission of ensuring sustainable human settlements

and an improved quality of household life. As we do so, however, we should not lose sight of the tremendous challenges facing us in the human settlement sector.

The greatest of these challenges is the need for higher gross domestic product (GDP) growth rates if we are to address mass poverty and unacceptably high levels of unemployment meaningfully - the economy needs to grow faster than the population growth rate. We cannot rely on investor money coming into the country, as it can be gone within seconds. It is a very dangerous situation and an economy cannot be developed like this for long - something is bound to give. With the gyrations in the world market, especially the currency wars, we do not know where we are going to end. We need an economic growth rate of 7%, because by the year 2000 we should already have been at 6%.

Another major challenge is the housing backlog. The government's efforts in this regard since 1994 are truly commendable. However, what is frightening is that the backlog seems to be growing exponentially. In 1994, it was 1,4 million and today it is between 2,1 and 2,2 million. Slums and squatter camps are a reflection of the increased demand. At present, we are only able to clear the backlog at a rate of 10% per annum. With the resources at our disposal, and mindful of the continued high population growth rate and the rapid pace of urbanisation, it could take us decades just to break this backlog.

There are many other challenges that face us and which this Knowledge Week cannot afford to ignore. The government needs your ideas, experience and knowledge that can be translated into action. We appointed our own panel of advisers just a month ago. They are smart people like you, and we look forward to your own ideas making their way into our Ministry and Department, whether you are a practitioner, an academic or a scholar. We have a shopping list for you, and the issues that we would want you to think about include:

- There will be more people living in urban areas than in rural areas. But somebody says: "Why don't you urbanise the rural areas?" Maybe you can tell us about that.
- What are your views on how we could utilise suitable land more effectively? South Africa does not have land for everything - we just have to be smart and make the right choices.
- How should we use technologies on land with, for example, dolomite? What do we do and

what technologies are there? For example, the destruction caused by the earthquake in Haiti was a disaster. New Zealand suffered an earthquake about four times stronger than that, but nobody died and only one or two buildings went out of shape. In Haiti, people cut corners although there was suitable land found, as well as suitable technologies and infrastructure. We have our own case here in South Africa where 40 000 houses collapsed and several people died without an earthquake.

- What advice can you give us on the potential pitfalls or shortfalls of densification?
- What lessons are there in terms of the governance of integrated and sustainable human settlements? Governance is the key. If we go wrong, things go wrong, like corruption.
- How can we deracialise South Africa even further by bringing people closer to their places of work? The poor spend a great deal of their income on transport.
- What advice do you have around building new towns? We have a project called Lufereni in the south of Johannesburg, which will consist of 24 000 houses. Kunubia in Durban will have 50 000 houses. We need experts to tell us how this can be done.
- What suggestions do you have for how we can integrate what we have said? For example, we need transport solutions for human settlements located further away. The Gautrain was born from this need. How about having monorails as well?
- What is the role of the government in future human settlement development? Should we continue to

provide free, give-away houses? What ideas are there for redefining the norms and standards, and how do we take on board some of the main innovative ideas that are being presented, particularly around the use of renewable energy?

In conclusion, whichever shape your discussions take on over the next few days, bear two key points in mind consistently. Sometimes we start thinking and get lost in the world of ideas - it is a very nice world, but it is like opium unless you put your ideas into action.

The first is the importance of avoiding a disconnection with those who ultimately stand to benefit from your ideas and knowledge - the people. Remember the phrase: "Nothing about us without us." I did not go to sleep in the informal settlements; we went there to work. The whole night we set up an office there with laptops and everything, in order to understand this problem. That is why we think we have a solution because we were there and listened.

The second is the importance of finding practical solutions to the many challenges that we face. We live in a real world; we need concrete answers and suggestions. There is no time for high-flown ideas. This should be a workshop and not a talkshop.

If you remain true to these two guiding principles, this three-day engagement will have played a significant role in shaping the trajectory towards the Human Settlements 2030 vision. You will have played a meaningful role in shaping non-racialised towns and cities in which our children and our children's children will need to live.

## DAY ONE morning plenary session

### Rethinking South Africa's human settlements growth path

*Chairperson: Sinazo Sibisi, Divisional Executive: Development Planning, DBSA*

#### A possible approach to spatial visioning in South Africa

- Develop a common understanding around the space economy and settlement patterning
- Clarify the spatial dimensions of the development challenges facing South Africa
- Assess the likely spatial outcomes of proposed policies in all sectors
- Anticipate the likely spatial outcome of macro trends in economy, society & environment
- Understand the spatial policies of the provinces and metropolitan cities/ districts
- Develop consensus around a series of spatial norms and principles
- Develop a set of spatial performance indicators related to the norms
- Develop a spatial schematic as an indicative framework for major investments

*Source: NPC presentation*

*A possible approach to spatial visioning in South Africa*

#### The NPC's perspective on constructing a spatial vision for South Africa

*Phil Harrison and Khulekani Mathe, National Planning Commission, The Presidency*

The National Planning Commission (NPC), appointed by the President at the end of April 2010, was mandated in terms of a Green Paper to put together a national vision and a national development plan. In the early deliberations of the NPC it became apparent that a national development plan, whether dealing with an economic, service delivery, environmental or any other component, always has a spatial dimension that cuts across sector-specific concerns.

A development plan cannot only be about what happens and when and how, it must also be about where it happens. Therefore, are the programmes in health, education, human settlements, energy, roads, rail, water, industry, etc. "speaking to each other" spatially - are they coordinated spatially? Are they aligned with the real potentials and needs of each region? Are the environmental policies spatially aligned with the development policies? What about regulation, institutional issues and financial systems? and so on.

This cross-cutting element has to be distilled into a national spatial vision, which has been defined as a strategic, overarching spatial framework to guide major development activities, and to cope with the pervasive force of the changing spatial structure.

Having a national spatial vision will clarify the spatial elements of a national development plan, and help to address current impediments in the country's spatial planning system. It will assist government departments in overcoming silos through coordinated planning and implementation. It will also promote greater policy coherence by synchronising the spatial elements of sectoral policies. For example, there is no point in investing in a railway going to Port X when, in fact, we are investing in Port Y for the next ten years.

A national spatial vision can respond to mega-processes that are continually reshaping our space, such as human migration, macroeconomic policy (e.g. imports and exports), and climate change. For instance, some parts of the country will become

really water stressed, while other parts will have a surplus of water.

Such a national spatial vision will have to mediate between competing spatial demands and interests. So, for example, the Wakkerstroom area is where the Vaal River rises and from which Gauteng receives some of its water. This water resource is critical for the national economy, but it is also an area with considerable minerals resources, especially coal. An enormous conflict exists between water resources and the granting of mineral rights in that area, and two different departments are dealing with the issue. There is a real need for an adjudicating framework or mechanism that will help us to mediate such competing spatial demands and interests.

A national spatial vision will also provide an indicative framework for major infrastructural investment. Where do departments and entities put their money? We cannot afford to waste scarce resources; we need to be very clever in terms of how we coordinate infrastructural investment, using an inclusive framework that has widespread buy-in.

In the past, prior to 1994, South Africa had the Regional Industrial Development Programme (RIDP), the National Physical Development Plan (NPDP) and the Good Hope Plan for Southern Africa. The RIDP diverted some growth to homeland areas, but generally failed to produce self-sustaining momentum. A few outcomes have to some extent been self-sustaining, as in Richards Bay and Saldanha.

The 1990s saw the spatial development initiatives (SDIs), with the Maputo Corridor being a famous outcome. However, the SDIs remained a sectoral concern and did not evolve into an integrated development strategy. There were various attempts to put in place an indicative spatial framework for the country, but they tended to be frustrated. One initiative, for example, attempted to patch together the different provincial frameworks, but the problem lay in the weakness of the frameworks at the time. The National Spatial Development Perspective (NSDP) of 2003 and 2006 was approved by the Cabinet, but did not gain sufficiently widespread political buy-in across all spheres of government. This was due to perceptions that some areas, especially rural areas, would be disadvantaged by its implementation.

We therefore need to ask big questions if we want to produce a sustained spatial vision. Any spatial vision

or plan will have consequences; if not carefully constructed, it will tend to waste resources and provoke political and societal reactions that can undermine its sustainability. So, for example, a spatial agenda focusing on national competitiveness may urge us to concentrate on cities where agglomeration economies will produce benefits. In contrast, a spatial agenda concerned with national cohesion or social equity may have a much stronger focus on rural areas. Either way, if the various interests are not balanced or mediated, we will not produce a vision that will garner the necessary support across the country.

In order to produce a national spatial vision that provides clear direction, but also secures sufficient political and societal support, we can draw on our own experience and we can take guidance from international experience. Internationally, there are two broad traditions in this regard, namely the European tradition of stand-alone spatial planning, and the mainly East/South-East Asian tradition of development planning, which has spatial planning as an addendum to their five-year economic development plans.

Europe is an extremely complex continent, with an economic core and divergent marginal areas, such as Eastern Europe, Portugal, Spain, parts of Italy, and so on. Through a five-year consensus-building process, the European Spatial Development Perspective (ESDP) of 1999 managed to reconcile competing territorial interests between the economic core and the marginal areas, using the concept of polycentricity. It also balanced the development objectives of competitiveness, cohesion and sustainability. It agreed on spatial norms and principles, was supported with structural funds, and so had real teeth. The five-year process really was about building consensus.

The Netherlands has the strongest national spatial tradition, with a focus on spatial quality and polycentric urban development, such as the Randstad, a conurbation consisting of the four largest cities and their surrounding areas. Scotland and Wales use their national spatial visions to represent their territorial distinctiveness and coordinate sectoral development. Ireland's National Spatial Strategy aims at "*developing the full potential of each area to contribute to the optimal performance of the State as a whole*" and thus avoids accusations of regional preference. It does not subordinate one region to another; it recognises that some regions might have greater potential in one area than another. It focuses on making Dublin

## Rethinking South Africa's human settlements growth path continued

as the capital work more efficiently, but also on establishing key gateway centres in order to achieve agglomerations in each region. Hungary also focuses on the unique paths of different regions in order to avoid subordination.

France, however, does not really have a national spatial plan; it focuses on institutional processes of spatial coordination as part of an ongoing process. The Interministerial Agency for Spatial Planning and Competitiveness (DIACT) meets regularly to ensure spatial coordination. They have principles for spatial development, and they also try to balance competitiveness and equity by focusing on 17 winning metropolises and conurbation clusters other than just the Paris region. There is a strong focus on collaboration across municipal boundaries, with institutional mechanisms established for this purpose. Intergovernmental issues are addressed through planning contracts, which all spheres of government and other players sign. These contracts deal with the strategies and strategic priorities for each region and are renegotiated every five years.

Across the world, in the East, China's 11<sup>th</sup> Five-Year Plan takes the green agenda very seriously. A great deal of the growth in China has happened because they focused on ports in the East. This focus has led to huge spatial inequalities that are threatening the cohesion of the country. They are now trying to distribute investment across 28 regional urban systems, while still focusing on the East, Beijing, Shanghai, and so on. They are also developing a network of large, medium and small-sized settlements. Their new focus on domestic demand should spread development more evenly.

In India, where there is great concern with national cohesion, public investment is targeted at lagging regions. Urbanisation is being embraced, but support is also given to smaller cities. Malaysia has a strong focus on national competitiveness, which is balanced with cohesion. Their series of development corridors extend from the economic centre of the country to more peripheral areas, and are aimed at boosting these potentials in other regions. Each corridor has a different theme, for example, a corridor on renewable energy, a corridor on high technology and a corridor on tourism.

Japan has responded to the massive congestion around Tokyo by linking the equity and competitiveness objectives. For each set of development imperatives

there are four national development axes. Each axis has an orientation to a different part of the world: China, Russia, the Pacific, and the South. Brazil also has a very interesting plan, whereas the Americas generally do not have a tradition of spatial planning.

The overriding lesson is that spatial visioning must respond to the complexity of the modern world in which development imperatives and objectives, and also spatial interests, must be balanced against each other. Spatial instruments, such as development axes, urban gateways and polycentric urban systems, have been used to balance these interests. The three key objectives that inform most spatial visions are economic competitiveness, territorial cohesion or equity, and sustainability. The consensus-building process is important.

Almost all countries have avoided the rural-urban binary, emphasising instead the connectivity between rural and urban, and the potential that needs to be unlocked in all regions. Urbanisation is acknowledged as a primary driver of growth, but the focus is generally on urban systems with cities of various sizes, rather than on the primate cities. International experience also shows that the spatial consequences of sectoral policies should be synchronised, intergovernmental dimensions properly addressed (as in France), and infrastructural investment seen as key to framing spatial strategy.

We need to understand the spatial dimension of development challenges in our country. What is happening in our space economy - which areas are growing and which are declining? Some areas are growing but it is a jobless growth, as in parts of the Eastern Cape. We need to understand demographic shifts, such as the dramatic increase in the young population in the cities. The homeland populations are not declining because of natural population growth, but the demographics are changing significantly.

There are also environmental pressures. We need to anticipate the likely spatial outcomes of macro trends. For example, what is climate change really doing to our country? What is migration doing to our country? What are the effects of loss of life, expertise and infrastructure? What are the environmental constraints in terms of the rising sea level, warming of the interior, rainfall intensity, dry spells, impacts on agricultural production, food prices, biodiversity, marine life, disaster threats, etc.?

We need to understand the likely outcomes of proposed policies in all sectors; we cannot have one sector with a specific spatial orientation working against another sector with a very different spatial orientation. What are the big expenditure plans of the different departments? How do they relate to each other? How do they all link up into a national framework? Key sectors with spatial implications include energy, water, housing, the environment, transport and logistics, telecommunications, economic development, and trade and industry.

We need to engage with spatial policies that have been prepared by districts, metros and provinces. At the moment, there is enormous diversity and they are not speaking to each other. It is not simply a case of compiling and putting these policies together; the different players have to talk to each other and take each other seriously, because they represent particular views of space within provinces and districts. We also need a set of guiding norms and principles, a set of performance indicators, so that we can measure our success against the national spatial vision.

It was agreed at the NPC Spatial Seminar that a spatial vision should be rooted in a normative framework with five key elements, namely: spatial justice (for a more equitable framework); spatial resilience (the ability to adapt to major changes); spatial quality (like not addressing backlogs at the expense of quality); spatial sustainability and spatial efficiency. Each of these needs to be elaborated in considerable detail so that it can provide real guidance. Some emergent spatial principles are listed below.

#### **Broad guiding principles**

- The full potential of each region should be developed in order to contribute to the optimal performance of the state as a whole.
- The critical role of urbanisation in national development should be acknowledged, but the focus should be directed towards urban systems, with national government giving special attention to secondary cities.
- Large cities should become far more efficient in terms of their internal structure and resource usage, and should operate as city regions.
- Nationally significant natural resource systems should be protected and proclaimed.
- The role and potential of rural economies (including agriculture) should be fully acknowledged and rural revitalisation should be given special attention.

- Investment should be focused on producing integrated, inclusive, self-sustaining growth, and viability should be a key criterion in all investment decisions.

#### **Special development areas**

- Former homeland areas should be designated as a special development category requiring a systematic and integrated response.
- New areas of rapid growth, such as the Waterberg, should be identified and subjected to careful integrated planning.
- Areas that can support a green economy (e.g. renewable energy), or are critical to other sustainability objectives, should be given special assistance.
- Areas of severe spatial conflict (e.g. water vs mining rights), and/or of economic restructuring, should be identified and provided with supportive policy.

#### **Corridors and gateways**

- Regions and axes critical to national competitiveness should be delineated (e.g. Gauteng-Durban). Development axes with the potential to spread benefits and unlock new potentials should be delineated (e.g. Gauteng-Musina).
- Gateway towns, with distinctive characters, should be identified in each region.
- Transnational development zones should be identified for development support (with an orientation to Africa, Asia and Latin America).

#### **Infrastructural investment**

- Mobility networks should be prioritised in relation to the identified axes.
- Major required investments in water, energy, rail, roads, information and communication technologies (ICTs) and ports should be identified.
- The spatial coordination of sectoral policies should be made explicit.

#### **Additional work in support of a national spatial vision**

- Spatial performance indicators should be developed collaboratively in terms of the spatial norms and a monitoring system should be proposed.
- An institutional mechanism for ongoing spatial coordination within and between spheres of government should be developed (e.g. the French example).
- A national spatial data infrastructure should be proposed and developed. Countries like India,

## Rethinking South Africa's human settlements growth path continued

Malaysia and Brazil have done a great deal of work in terms of coordinating the available information and creating a single gateway to that information.

- Spatial principles should be elaborated for each province and city region, together with the provincial and city authorities.
- Collaborative work on a spatial vision for southern Africa should be proposed.
- Urgent work should be done to resolve regulatory bottlenecks in the spatial planning system, especially the Land Use Management Act.

Action to be taken towards developing the national spatial vision involves holding working sessions on norms, principles and spatial indicators. Provincial

and city/district spatial development frameworks and spatial outcomes of sectoral policy will have to be assessed and a draft spatial schematic drawn up. The initial proposed national spatial vision must be discussed with key groups. The draft must then be revised in line with the draft national development plan and a spatial visioning chapter be incorporated into the draft plan. This will need to be followed by further elaboration of a national spatial vision with a southern African dimension.

### Human settlements: Unlocking or blocking potential regional and national growth path initiatives

*Elsona van Huyssteen, Centre for Scientific and Industrial Research, and Mark Oranje, University of Pretoria*

Over the last decade, South Africa has seen the reawakening of the importance of its space. This is evident in the focus on addressing apartheid spatial legacies, and on sustainable development, regional and rural development, and intergovernmental alignment. Our planning system in the country has been geared to take this into account.

South Africa has a planning system with municipal and provincial integrated plans and spatial frameworks. Much of this was brought about and spearheaded by the National Spatial Development Perspective (NSDP). There is often the belief that better and more data would lead to better plans. This is perhaps a questionable assumption.

These analyses have highlighted the realities of the space economy, such as:

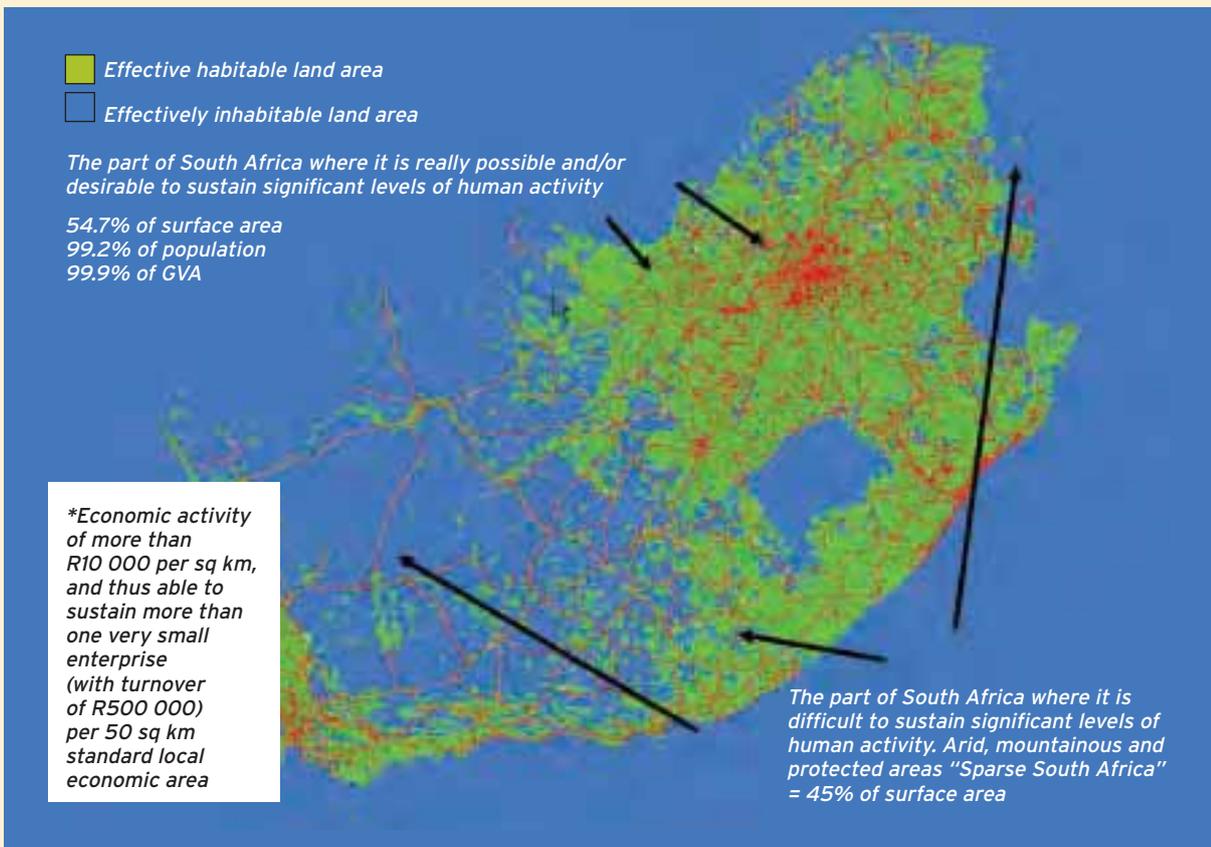
- Large parts of the country (54%) marred by an arid, inhabitable landscape (*as seen in the diagram opposite*)
- Concentrated development patterns, largely as a result of natural resource profiles and colonial and apartheid economic policies
- Huge concentrations of micro-poverty in settlements, and macro-poverty in bantustans (24% of people are still living in the former bantustan areas)
- Concentrated population growth patterns and a variety of micro and macro-migration patterns to, and between, areas of poverty and wealth

- Concentrated patterns of regional economic activity and growth.

More recently, the country has witnessed a move away from only improving people's access to basic services, such as housing, water and electricity, towards developing sustainable human settlements. The second great global recession occurred, with accompanying job losses, misery, anxiety, despair and growing youth unemployment. There has also been a growing realisation of the need not to treat rural South Africa as an amorphous mass, but to recognise its rural diversity and the uniqueness of different rural lives, livelihoods, challenges and possibilities.

The Local Government Turnaround Strategy was implemented to improve the profile, role and importance of local government within the context of the developmental state. The National Planning Commission (NPC) was appointed, re-emphasising national spatial visioning and planning. The importance of a range of national priorities and of setting a series of tangible deliverables to achieve these was recognised.

Places (settlements) are important. In 2007, more than 70% of the population in South Africa were living in metros, cities, large towns, smaller towns and service centres. Currently, six metro areas alone are home to almost 34% of the population in the low-income



*Dealing with geographically uneven development in South Africa*

category and to 68% of the population in the high-income category. This says a lot about the country's tax base. Nearly 70% of South Africa's population is resident in, or in close proximity to, functional urban areas that provide access to high-order government and economic urban functions.

These places - in fact, the people in these places - contribute over 65% of the national economy. As the NSDP argues, it is actually about people, not places. It is indeed about people everywhere, and not only in places without so-called potential, as it is often misinterpreted.

What happens in these places is also important - the socio-economic connections and social cohesion. People create networks, interactions and transactions that vary in the intensity, depth and richness of the connections. It should be borne in mind that places are not stand-alone entries - people live in networks, where they connect.

We often have data for what happens in South Africa, but not really for what happens outside the country. What are those places that actually provide a linkage?

What are those networks that provide linkages and connections between our country and its neighbours? What is the focus of our human movement patterns?

A great deal of evidence suggests people are moving between the metros. There are, for example, strong movement patterns between Ethekwini and Gauteng, the Eastern Cape and Gauteng, Gauteng and the Western Cape, and so on. Also, the transactions and the movement of people and goods between these areas are often very costly due to the manmade and natural patterns in geographic distances.

Different places play different roles socio-economically, culturally, relationally and politically, due to the links and networks between the people who live in them. The places also have different degrees and qualities of access to economic and government services. There are large metropolitan areas with multiple nodes and strong regional, national and international connections; secondary cities with key national and regional functions; capital cities and towns; major regional service centres in areas of economic growth and/or high accessibility areas, which are often linked

## Rethinking South Africa's human settlements growth path continued

to international markets; major regional service centres within highly populated but less accessible areas; regional service centres in sparsely populated areas, often with strong regional connections; niche towns, attracting people with high disposable income; and local service centres that play very specific roles in the local economy in agricultural areas.

There are several implications and challenges when contemplating long-term growth paths. So, for instance, the existing polycentric grid is the cornerstone of not only the economy, but also of the national government's budget through tax income. Even though strong, these networks are sophisticated and fragile, and need to be sustained. They cannot be left to their own devices.

These places attract most local and regional migrants, especially young South Africans with high expectations, energy and mobilising force. We are seeing enormous job losses in the metropolitan areas; there are struggles to retain jobs and also create new jobs, especially for the existing and incoming youth in metropolitan areas.

Due to their depth in institutional densities in the knowledge economy sectors, these are the places where bold new steps in the green economy can be taken. Even though the polycentric grid is the major contributor to South Africa's carbon footprint and pressure on the ecosystem - this is where the challenges can most likely be addressed boldly. These are also the places where apartheid schisms are most clearly pronounced and where far more work is required than has been done to date.

The creation of new local economies in off-the-grid spaces will require far more attention, energy and funding than most municipalities can muster, and will thus necessitate national and provincial involvement. Decentralised planning (integrated development plans,

spatial development frameworks and local economic development) alone cannot create, sustain and deepen a national polycentric grid of settlements.

People make an economy; infrastructure enhances it - this implies an emphasis on investment in people, a more targeted approach to building capacity and taking far more care of the "human dimension". People provide services - they live in places and hence, for successful regional and rural development, linkages to nodes on the grid are required. This again implies much better cross-border regional function-based planning.

The focus on service delivery needs to be seen and pursued within a framework of transformation and transition towards a national, sustainable, long-term growth pattern. Planning for places needs to address current needs, while at the same time enabling future generations to move around in, and use, this network (and other continental and global networks).

Spatial planning is a continuous process; it is not a singular activity of only the state, a municipality or a single profession, nor is it a deliverable or an outcome in itself.

Settlements, meaning the people, institutions, networks and interactions in them, are the lifeblood of South Africa's economy. A polycentric grid of our settlements provides the framework for this life-giving, life-enhancing and livelihood-sustaining function.

Over and above their more generic human settlement responsibilities, the Department of Human Settlements (DHS) and the National Planning Commission (NPC) are ideally positioned to champion - coordinate, integrate and ensure - the creation and maintenance of this polycentric grid (i.e. the places, the people and the connections between them).

# DAY ONE morning plenary session

## Regional spatial trends and planning responses

Chairperson: Stephen Berrisford, Stephen Berrisford Consulting



Source: trsc.wordpress.com

*Migrants lack proper documentation and cross borders irregularly*

### Migration trends in southern Africa: Critical management challenges

*Petra Neumann, International Organisation for Migration*

The challenges for managing irregular migration flows include such critical issues as trafficking and smuggling; border management; lack of reliable migration data and statistics; regional cooperation on migration; combating xenophobia and integrating migrants in South African society; options to return home voluntarily in a humane way; legal channels for labour migration; and migration for development. These challenges are frequently interlinked.

The 2009 study by the International Organisation for Migration (IOM) looked at migration flows as there is a perception that trafficking is the predominant way of migration to South Africa. However, the study found that smuggling is the main way, and that there is a mixed flow of migrants from the horn and east of Africa. Some migrants may have been subjected to persecution in their home countries and thus would fall under the refugee or asylum seeker system. Others may have escaped dire economic circumstances in their home countries to seek for greener pastures elsewhere.

The study also found that there is a lack of information on immigration procedures. Because migrants lack proper documentation, they cross borders irregularly. They often use the services of smugglers, who demand either a large sum of money or other services from the migrants, which may leave them in a vulnerable position. Migrants are often trafficked (illegally traded) for the purpose of sexual exploitation.

Border officials often participate in the system of irregular migration flows, either through corruption or because they are not properly trained and find it difficult to distinguish between an irregular migrant and somebody who has been trafficked. For instance, there are cases where people arrive under the pretext of being a family, but then it is found although there are adults and children, the children have completely different surnames and this may indicate that it is actually a case of smuggling.

A well-functioning, efficient border management system has to ensure that borders are open for the legal movement of persons and goods, but closed to

## Regional spatial trends and planning responses continued

illegal activities. There is a link between migration and transnational crime, including smuggling and trafficking of persons. For example, whereas Johannesburg is a hub for international migration, some migrants come to South Africa, stay for a while and then buy illegal papers and move on to countries in Europe or to the United States.

The movement of people across borders in the region is increasing in magnitude, mainly for economic reasons. However, conflicts and emergency situations have considerably increased migration flows, as with the recent flooding in Mozambique and Zimbabwe.

The IOM also carried out a study on labour migration statistics in South Africa, Zambia and Zimbabwe. It found that there is a general lack of administrative records, and even where data does exist, it is very difficult to compare data between countries. This problem is true for the whole Southern African Development Community (SADC) region.

Moreover, the data is often not collected for the purpose of measuring migration as such, because it is, for instance, drawn from household surveys and the questions may not really link the information to migration. Migration is a complex and multi-sectoral issue, which is rarely assigned to a dedicated ministry or government body. Migration challenges therefore tend to be analysed and addressed in a fragmented manner. Improved communication and cooperation between the different departments and countries concerned is critical for improving these processes. A further problem is incomplete coverage, especially of irregular migration flows. People who cross borders illegally tend not to show up in any type of statistics or data.

There is a need to establish cross-border coordination and synchronised data collection systems between SADC states in order to measure and manage the existing flow of migrants for the benefit of the countries of origin, transit or destination. For example, large cities in South Africa continually receive migrants but do not actually know how many there are, which makes it very difficult in terms of urban planning.

Another study by the IOM found that there is limited knowledge, especially among residents in townships, of the country's immigration laws and policies - for example, that a person who is here legally may actually have the right to pursue a job regularly, or

may be able to acquire permanent residence or citizenship. Other issues identified included the general lack of service delivery in many South African townships, high unemployment rates, and the need for identifying and promoting positive leadership models and leaders committed to tolerance and the rule of law.

Migrants are often intercepted when trying to make their way south and put in detention facilities similar to prisons, with no option of either going further or returning home, due to a lack of proper documentation and funding.

There is a dire need to maintain protection assistance for mobile and vulnerable migrants, especially migrant women, girls and unaccompanied minors, who often become exhausted or fall ill due to the hardships they experience on their journey. These people are particularly vulnerable to exploitation and abuse throughout their migration process. The IOM's sub-office in Musina regularly witnesses the problems existing in the "no man's land" between Zimbabwe and South Africa, where migrants wait to cross the border, often irregularly, and are exploited by smugglers or "militias". When vulnerable migrants arrive in South Africa, they need protection, and assistance in the form of shelter and food. Often they are traumatised and in need of counselling.

Migrants who escape dire economic circumstances find that, when they return home, the situation has not changed and the lack of opportunities in their home countries leads them to migrate again, even though they may have been intercepted and deported. In order to make the return home more sustainable, there is a need to generate economic opportunities and to offer business training in the home countries which, in turn, will contribute to development in those countries.

Options for emigrating legally (e.g. finding asylum) are rare and migrants often use irregular channels to enter countries in their search for labour opportunities. Many end up working in the informal sector.

South Africa does need migrant labour and thus a need exists to view labour migration in a positive way too. Well-managed labour migration flows lead to mutual benefits for both migrant and state, such as the creation of skills and increased investments in the sending countries through diaspora initiatives.

There is also a need to address the labour migration challenges faced by SADC countries in a comprehensive way, and to develop policies that will harness the benefits of labour migration. More alternatives should be created, for example, through circular labour migration schemes where people could work legally in South Africa for, say, six months each year.

Migration for development means that remittances could be used to contribute significantly to national development in the sending countries. Migrants should be encouraged to use these remittances not only for purchasing private household goods, but also for investing in business opportunities in their home countries. This could in turn give rise to policy issues and regulations, such as the lowering of transfer costs.

Policies should also focus on mitigating the impacts of the brain drain, and increasing cooperation between the countries of origin, transit and destination.

The IOM promotes the return of qualified nationals, either temporarily or permanently, to their home countries after they have acquired skills abroad.

Increased cooperation between SADC states and the ratification of the SADC Protocol on the Facilitation of Movement of People will help reduce irregular migration, and benefit both the sending and receiving countries through skills transfer and enhanced remittance flows. This will ultimately lead to increased development in the sending countries. The IOM has created a platform for communication, the Migration Dialogue for Southern Africa (MIDSA), which has been going on for ten years. This year, for the first time, Ministers of Home Affairs from the SADC countries will be invited and it will take place in Namibia in November. MIDSA has been instrumental in creating a platform for informal and non-binding dialogue and response.

## Regional planning and sustainability responses

*Camaren Peter, Research Consultant*

Sustainability generally means social, economic, ecological and even political sustainability. However, when referring specifically to economic sustainability, the term I use is “economic decoupling”.

Economic decoupling is about maintaining growth while decoupling from resource exploitation and environmental impacts. This is a new form of sustainability. It is not the sustainability of old which assumes that where something is green, there is zero growth.

Globally, the key issue is the high rates of change that we have experienced; we are no longer in steady state economies. There are high rates of interconnectivity and urbanisation. More than half the world’s population now lives in cities. We are dealing with changes in the global economy and the effects of climate change, and therefore have to make decisions in less predictable environments.

A further global issue is the predicted oil peak by 2030. In 2008, the Committee of the International Atomic Energy Agency stated that the era of cheap oil is over. We do not know exactly when the peak is coming or whether it has already happened.

The third global concern is the carbon economy, which has huge implications for South Africa. We have not even started to think about how we are going to negotiate this issue, but it will place severe restrictions on the type of growth that we are pursuing.

Fourth, in terms of the green economy, \$100 million of the United States’ recovery packages has gone towards green and renewable investments, and in South Korea, \$36 billion. Of China’s recovery package, 38% has been allocated to green and renewable technology - the next wave of technology innovation is already here.

In the regional context, one of the most severe limitations is water, which could be a key threat to stability in the region. South Africa has energy problems and high rates of urbanisation and migration, just like the rest of the world. However, in South Africa, in particular, the key problem is that our economic growth is mainly driven by the mineral sector. It is carbon and energy intensive, and is financed by high levels of debt finance. There are also very low levels of savings and investment, and lowered trade barriers.

Since we have lowered our trade barriers, cheap imports from Asia have also meant that our

## Regional spatial trends and planning responses continued

manufacturing sectors, even if they are producing more, are contributing less to our gross domestic product (GDP). The same is true of agriculture. We are in reality selling off our natural capital at faster and cheaper rates in order to maintain economic growth. Our economic growth is not being driven by diversification through innovation and investment, as was expected in post-1994 economic policies.

In other words, at present we are being locked into selling off our natural capital cheaper now, rather than preserving its long-term value. It has a long-term value because of its scarcity; we could rather use it to grow sustainably than be locked into selling it off.

Local problems include poverty, inequality, unemployment; and weak basic service delivery. A compounding factor is the interdependencies between sectors, which are escalating prices. Energy, oil and water all have an impact on food prices, for example.

Limits to economic growth in South Africa include the following:

- The growth is too energy and water intensive. For example, for every 1 kg of coal extracted, 1,5 litres of water are used. Our minerals-based economy keeps extracting things from the ground, using water in the process. The reliable water yield in sub-Saharan Africa is expected to decrease to 40% in stream flow by 2030, and prices may increase by up to 40% in the medium to long term.
- In agriculture, sector growth has increased due to very high efficiency rates in a lot of the commercial agriculture, but the sector is contributing less to the GDP.
- The country has low reserves of oil and a high dependency on imports of coal to fuel its technologies. Oil contributes one-fifth of our total energy consumption. The transport sector has the highest consumption and is petroleum intensive.
- Our present fossil fuel and oil-dependent growth path causes a high carbon footprint and high levels of emissions. Opportunities to economise on carbon remain unexploited. We are definitely going to be penalised for it.

Sustainability challenges are no longer not just environmental, but also developmental. They are informed by concerns over socioeconomic inequality and fragmentation, economic and political forces, ecological concerns and the need for infrastructure development.

To achieve a development economy that can be sustainable (i.e. something that can keep on functioning within its limits), large-scale behavioural change is required. Potential stimuli for such change include, firstly, normative change - where society's values, beliefs, norms and behaviour will have to change through mainstreaming environmental policy in practical terms.

Another mechanism is "resource rents". The resource rents of African countries on their national capital are too low, because they are selling off their assets (e.g. water for mines to use) cheaper and at a faster pace. We should, however, manage our resources and natural capital very intelligently to change the structure of the economy.

Further mechanisms for achieving a sustainable development economy are improved mitigation and adaptation; infrastructure leapfrogging; and innovation and diversification (of public and rail transport, decentralised energy production and consumption, and building efficiencies). For example, if we can change the public transport infrastructure successfully just in the city of Johannesburg, we will change behaviours in the city.

There are many "green opportunities" in South Africa, including "green jobs", in energy, water, waste, biodiversity and conservation, innovation and ecotourism, as seen below.

### Energy, oil and carbon:

- There is a high potential for solar power, with about 250 megawatts per square metre of solar radiation (as compared with only 150 in the United States). It is also becoming more economically viable, for example, to put up solar-heated water geysers.
- Decentralising renewable energy production and consumption in the economy will ensure long-term capital benefits. For example, stadiums and large buildings can pump energy back into the grid. We need legislation to enable them to sell energy from their buildings back into the grid.
- There are almost a million generators in the country. This form of decentralised energy production can be a way of creating stability in the grid. Combined with a roll-out of a million solar water heaters and geyser load shedding, it can make a huge difference in the amount of energy available to push into growth.
- Retrofitting (where new technology is added to old systems) of buildings can save up to 85% on

energy. Smart meters and smart grids should be utilised.

- Solar energy, wind energy (especially in coastal areas) and bio-energy are renewable forms of energy that need to be harnessed.
- The transport sector needs to think creatively around public transport, mass transit and freight rail construction, fuel switching, and electric vehicle batteries. Roads and bridges need to be repaired.

#### Water and waste

- Greater efficiencies in the agricultural, mineral and energy sectors are needed.
- Recycling and using grey water should be pursued.
- We need to set up recycling infrastructure for waste, then the industries can boom around it. This includes implementing management systems for source separation.
- Waste and biomass needs to be recycled, and converted into energy or fertiliser.
- Mining waste needs to be managed more effectively. It is currently not classified as waste in South Africa, but as "spoil", meaning that the single largest solid waste stream in the country does not fall under the National Waste Management Act.

#### Innovation and eco-tourism

- There is great potential for bioprospecting (finding useful biological mechanisms) and for biomimicry (imitating elements, systems and processes in nature). Biomimicry is used in a wide range of fields, from architecture to robotics, and we have those kinds of research capacities.
- Low-footprint tourism will require that we revise the system of property rights.

In closing, we cannot just take a blueprint from the United States, China or the European Union and copy what they are doing. We need to find innovative new solutions and a global self-perspective. It is about innovation beyond technology and how we think about policy, legislature, rights and neighbourhoods.



Source: Photo Chris Kirchnoff, MediaClubSouthAfrica.com

*The transport sector needs to think creatively around freight rail construction*

---

## DAY TWO

INSTITUTIONAL RECONFIGURATION  
SPATIAL INTEGRATION  
KEY DRIVERS OF SUSTAINABLE HUMAN SETTLEMENTS  
ENVIRONMENTAL AND RISK REDUCTION CONSIDERATIONS

---

# DAY TWO morning plenary session

## Institutional reconfiguration

Chairperson: Nelly Rampete, Social-Institutional Specialist: Advisory Unit, DBSA



Source: Department of Human Settlements Resource Book on Human Settlements

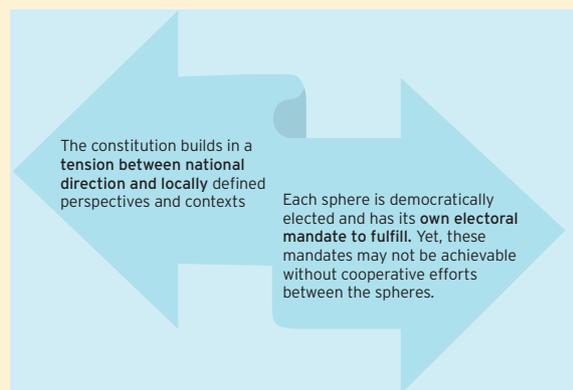
There are a number of role players and institutional arrangements required for the delivery of integrated and sustainable human settlements.

### What will enable the state to drive and enforce a more integrated and sustainable approach?

*Mothotho Sigidi, Deputy Director-General, Department of Cooperative Governance and Traditional Affairs (on behalf of Elroy Africa, Director-General, CoGTA)*

South Africa's system of governance is based on the three distinctive, interrelated and interdependent spheres of government, as articulated in the Constitution. It is of critical importance that our system of cooperative governance should continually operate in ways that result in better coordinated and integrated planning, budgeting and service delivery within and across the spheres of government if we are to promote sustainable community development and help bring about a better life for all our citizens.

Cooperative government is about being able to promote mutual cooperation amid the inherent tensions between the three spheres of government, and within the two-tier system of local government. The Constitution builds in a tension between national direction and locally defined perspectives and contexts. Each sphere is democratically elected and has its own mandate to fulfil. Yet, these mandates may not be achievable without cooperative efforts between the spheres.



We need the intergovernmental and integrated planning tensions within these three spheres to be resolved, especially when looking at issues of human settlement. Municipalities can ultimately be accredited by the province to deliver some of its functions, including delivering housing directly. This would be done according to the municipal accreditation framework and process. The provincial Department of Housing develops and implements provincial housing

## Institutional reconfiguration continued

plans, administers subsidy schemes and builds houses. These functions can also be assigned to municipalities gradually via the accreditation process. The national government sets national housing policy and legislation, as well as standards and targets.

It is, however, a question of whether there is land in order to be able to have a particular settlement. If there is land, what kind of settlement is it, because some areas might not be fit for human settlement? If people are then allowed to settle there, it becomes very difficult to remove them.

There are quite a number of risks if we are not necessarily cooperating. In practice, for example, a system of governance that has tested its effectiveness and prompted calls for institutional, policy and legislative reforms is an inherent risk in itself. Unrests happen in various municipalities and many people will say these are service delivery protests. However, if one looks deeper, they go beyond that and indicate inefficiencies in our system of government. Another risk is the failure to reduce inequality and poverty.

The context in which we should drive the integrated development planning has been informed by the provincial assessment process that was carried out, as well as the overview report, "The State of Local Government in South Africa", which led to the formulation of the Local Government Turnaround Strategy (LGTAS). Added to this is the new approach of the government to looking at particular outcomes.

The proposed reforms are intended to build the state's capability and to support the long-term goals of the LGTAS. The objectives are to define and regulate the role of the provinces; to strengthen monitoring and evaluation and oversight instruments; and to develop improved management systems for the coordination of spheres.

The ruling party's five priority areas in its Manifesto were turned into ten priorities through the Medium-Term Strategic Framework. From these ten priorities came twelve strategic outcomes. There are more than twelve government departments, but there are only twelve outcomes, which suggests that we need to be integrating our work across departments to focus on these twelve outcomes. Based on these outcomes, Ministers are signing performance agreements with the President.

Of the twelve outcomes, Outcome 9 reads: "*Responsive, accountable, effective and efficient local government*

*system.*" The priority outputs of this outcome are to have a differentiated approach; to ensure access to basic services; to foster the Community Work Programme; to offer support to human settlements; to provide a single window of coordination in order to drive and enforce an integrated approach; to handle municipal finance and administration; and to refine a ward committee model. Local governments' activities, therefore, need to be able to support the activities of human settlement.

The Ministers' performance agreements require that they work together in an Implementation Forum where high-level outputs, indicators, targets, activities and responsibilities per outcome are negotiated. A delivery agreement per outcome must be produced as a result. Implementation of the agreements must be coordinated, and they should be monitored and evaluated, and also revised once a year.

Within the Department of Cooperative Governance we are currently developing the Green Paper on Cooperative Governance (hereafter the Green Paper). I am inviting researchers here to participate in that particular process so that when it becomes a White Paper, all the inputs of the various stakeholders will have been looked at.

What has prompted the Green Paper is that there is a great deal of wastage and squandering of valuable public resources in the government. The wastage is caused by a lack of sufficient accountability on the part of individual institutions and organs of state. The Green Paper wishes to radically improve coordination and cooperation within the government, and between the government and civil society, with the aim of enhancing the impact of public spending and mobilising resources and talent.

There are legislative constraints to integrated planning, among other things fragmentation and a lack of common purpose across the government and society. A comprehensive policy framework is also lacking. The current paradigm is still predominantly one of delivery, although one without sufficient responsiveness and accountability. There is poor execution of the vision of community-driven development.

The key outcomes the government would like to see from a functioning cooperative governance system are as follows:

- Communities are sustainable and well governed, and their service delivery is efficient, affordable and accessible to the poor.

- The government has zero tolerance for duplication or wastage of resources.
- Deconcentrated administration in respect of national and provincial functions has been established and the accountability of every organ of state is clear.
- Skills and capacity are used optimally, and support is well coordinated through the single window of coordination.
- The institutional arrangement in government is responsive to the different spatial, settlement and capacity considerations.

To drive this vision for integrated development planning and cooperative governance, we would need to focus on the following six issues:

- Common purpose (a long-term development plan; an institutionalised planning system for intergovernmental relations; improved spatial contextualisation of local conditions; the new outcomes-based government approach; and Vision 2014's proposed single election for national, provincial and local government)
- Policy coherence (a government-wide focus on the national long-term development plan; a protocol and clearing house mechanism for policy development; and monitoring of policy implementation)
- Structure and organisation (improved allocation of powers and functions through a management authority within the government; a single national Act governing powers and functions; a comprehensive framework legislation on provincial government; and having a single tier of local government)
- Coordination (a single window of coordination to improve oversight and support of local government functions; strengthened application of baseline data and information across the government; differentiation in the assignment and coordination of priority functions; and revision of the Intergovernmental Relations Framework Act to remove "voluntarism")
- Human resources (a capacitated public sector with properly skilled individuals imbued with public service ethos and ethics; a public sector development programme to set norms and standards for all public servants; an integrated public service and project management approach; and an intensified fight against corruption, nepotism and maladministration)

As regards human resources, there are many people with capacity in South Africa. However, I find certain things very strange. We know that quite a number of people are leaving government institutions and forming consultancies. Now there is a situation where a person in government failed to deliver on an integrated development plan (IDP), but the next day he or she comes back as a consultant who wants to develop an IDP. Likewise, there is a Chief Financial Officer (CFO) in a municipality who cannot understand the financial position of that institution, yet he or she spends more than the Minister of Finance. Also, candidates who have started working recently want to be capacitated, but in their interview they indicated that they have that particular capacity.

An invitation is extended to all players to drive integrated development planning as follows:

- Employ the new model of cooperative communication at all levels of government.
- Enhance cooperation and the sharing of information between national, provincial and local government by using the e-government programme.
- Facilitate joint work and community access to information and service delivery data.
- Facilitate improved community access to government information services through ward committees and improved municipal communication systems to drive community-driven development.
- Look for smart ways to strengthen institutional mechanisms for knowledge sharing.
- Encourage acceptance of alternative service delivery methods (e.g. in remote rural areas, and green technologies for energy and waste removal).
- Participate in and support the development of the differentiated and simplified IDP project.
- Assist and support the pilot project on spatially designed budgets.

I trust that all of us will participate in, and support, the various legislative developments and the outcome-based approach of government. If we do that and focus on the six issues mentioned earlier, we will be able to assist the state in driving and enforcing a more integrated and sustainable approach.

I also want to repeat my invitation to you to become involved and participate in the Green Paper on Cooperative Governance. It will be looking at a differentiated approach to the various situations in municipalities, but at the same time coordinating all this through a single window.

## Institutional reconfiguration continued

### Institutionalisation of spaces: The approach of the Municipal Demarcation Board

*Hillary Monare, CEO, Municipal Demarcation Board*

In this context, “institutionalisation” refers to the embedding of a concept, value or mode of behaviour in a sociopolitical sense, as it applies to the creation or organisation of governmental institutions or particular bodies. For example, municipalities are responsible for overseeing or implementing policy, and for performing certain functions. Institutionalisation must, of necessity, involve the creation of a spatial definition within which the government, and local government in particular, performs certain functions and implements certain policies.

Demarcation is an instrument that is used to create such a spatial definition. As a result of demarcation, boundaries are created for the operations of levels or spheres of government, such as local or provincial government. For this reason, there is a functional governance component to demarcation.

These governance boundaries may overlap with political boundaries that circumscribe a segment of the electorate. In a democracy, this electorate votes for the level of government that applies to it and can hold that level accountable. Demarcation, therefore, has the power to shape constituencies in order to meet particular political outcomes. This power makes demarcation vulnerable to political manipulation.

The Constitution of 1996 makes provision for an independent authority to demarcate new municipal boundaries. The Local Government Municipal Demarcation Act 27 of 1998, which provides for the establishment of the Municipal Demarcation Board (hereafter the Board), was the first piece of local government legislation enacted after the adoption of the new Constitution.

The Board’s duties also include the delimitation of wards; the assessment of municipalities’ capacity to perform their functions (for which it has prepared a comprehensive database); and preparation for local government elections.

The Board has worked closely with government departments to align service delivery boundaries with “wall-to-wall” municipal boundaries, so that they do not overlap. The whole of South Africa has been covered in this way and every citizen is, therefore, able

to hold a councillor or an institution to account in terms of service delivery.

The demarcation of municipal boundaries is seen as an instrument for setting and maintaining the spatial framework in which other processes of transforming and developing local government can take place. The Board’s approach is premised on Chapter 7 of the Constitution (section 155(3)(b) in particular), as well as the Municipal Demarcation Act 27 of 1998 and the Municipal Structures Act 118 of 1998.

The Board was provided with extensive powers with respect to municipal boundaries. It was also tasked with rationalising the then existing system of local government (transitional metropolitan councils, transitional local councils, regional services councils, etc.) into metropolitan, local and district municipalities. After the initial demarcation process, the Board recognised that it would continue to exist and would continue to refine municipal boundaries so as to ensure efficient, developmental and sustainable local areas in the country. Thus, a fully operational information technology system was considered key to communicating with all stakeholders, including a geographic information system (GIS) to produce maps.

The Municipal Demarcation Act sets out the criteria for demarcation. When the Board determines an outer boundary for a municipality, the boundary and the resulting area should enable the municipality proposed for that area to fulfil its constitutional obligations, namely the provision of democratic and accountable government for local communities; the provision of services to communities in an equitable and sustainable manner; the promotion of social and economic development; and the promotion of a safe and healthy environment.

Before determining a municipal boundary the Board must publish a notice in a newspaper circulating in the relevant areas. The notice must state the Board’s intention and invite the public to submit their views and representations within 21 days. The Board then considers all submissions. If necessary, it may hold a public meeting and/or conduct an investigation. Thereafter the Board publishes its determinations

in the provincial gazettes and allows a period of 30 days for objections. The Board then considers all objections and either confirms, adapts or withdraws its determinations.

The creation of spaces through demarcation is a very contentious issue. When the third Board came into office early in 2009, it decided to have another look at the set criteria and objectives to ensure that they were realistic, and that citizens could be engaged more actively. There has been much debate on how transparent the Board has been in dealing with demarcation, and it is often a very emotional issue for many citizens. Clearly, there can be continued improvement on the process; the basic approach, however, remains.

The Municipal Structures Act expands on the Constitution by defining the three categories of municipalities, the establishment of municipalities, and aspects of municipal councils, such as their composition, membership, operation, dissolution, internal structures, functions and powers.

For example, in terms of Section 2 of the Municipal Structures Act, an area must be a single Category A (metropolitan) municipality if it can reasonably be regarded as a conurbation featuring areas of high population density; an intense movement of people,

goods and services; extensive development; and multiple business districts and industrial areas. It should be a centre of economic activity with a complex and diverse economy; a single area for which integrated development planning is desirable. The area should also have strong interdependent social and economic linkages between its constituent units. The problems surrounding Msunduzi and Mangaung, for example, come to mind. These are the kind of challenges the Board has to deal with in terms of its approach to creating municipal spaces.

The Municipal Structures Act also provides for the Board to delimit qualifying local and metropolitan municipalities into wards, thus creating the spatial environment in which citizens and voters can exercise their basic rights, and can express their opinions on councillors to be elected and on local matters, such as service delivery.

Municipal wards are delimited in preparation for each local government election in the country. The rationale behind having wards in any local or metropolitan municipality is that, at the time of the elections, the number of registered voters should be more or less equal in each ward in a municipality. Of course, people move around and numbers change, but the basis of the exercise remains critical.

**Municipal powers and functions**

Schedule 4, Part B	Schedule 5, Part B
Air pollution	Beaches and amusement facilities
Building regulations	Billboards and the display of advertisements in public places
Childcare facilities	Cemeteries, funeral parlours and crematoria
Electricity and gas reticulation	Cleansing
Firefighting services	Control of public nuisances
Local tourism	Control of undertakings that sell liquor to the public
Municipal airports	Facilities for the accommodation, care and burial of animals
Municipal planning	Fencing and fences
Municipal health services	Licensing of dogs
Municipal public transport	Licensing and control of undertakings that sell food to the public
Municipal public works	Local amenities
Pontoons, ferries, jetties, piers and harbours	Local sport facilities
Storm water management systems in built-up areas	Markets
Trading regulations	Municipal abattoirs
Water and sanitation services	Municipal parks and recreation
	Municipal roads
	Noise pollution
	Pounds
	Public places
	Refuse removal, refuse dumps and solid waste disposal
	Street trading
	Street lighting
	Traffic and parking

## Institutional reconfiguration continued

The Board is charged with advising the provincial cabinet ministers (members of the executive council, or MECs) responsible for local government on how to adjust certain powers and functions between local and district municipalities, so as to enhance service delivery. To this end, the Board carries out municipal capacity assessments to determine the capacity of each district and local municipality to perform the 38 local government functions listed in Schedules 4B and 5B to the Constitution.

The Board aims at empowering MECs to authorise local municipalities to perform certain district functions where there is low capacity; or vice versa, to authorise district municipalities to perform local municipality functions. On the strength of capacity assessments, it advises MECs regarding possible adjustments or readjustments, which they may consider.

However, there are four functions – the so-called Minister’s functions – which the MECs may not authorise. These are water, sanitation, electricity and healthcare, and may only be authorised by the National Minister of Cooperative Governance and Traditional Affairs, who is, among other things, responsible for local government at national level.

In closing, the Board is independent and must perform its functions without fear, favour or prejudice. The demarcation of municipal boundaries is, therefore, not subject to sanction by the government. However, the Board’s approach emphasises the need for consultation with all relevant stakeholders when determining municipal boundaries.

### Given the institutional vacuum, what needs to be done?

*Yusuf Patel, President, South African Planning Institute*

The South African Planning Institute (SAPI) recently held a major international conference. The biennial Planning Africa Conference brings together some of the leading thinkers and practitioners around planning. One of the key issues that emerged from the conference was the importance of spatial planning for the long term. Long-term planning is about planning with a long-term view, but while ensuring that there is a continuum of actions from short, medium to long term within that scope.

South Africa has an engineered spatial economy and we are trying to move towards a democratic, non-racialised and inclusive form of development. The issues of the class structure of our society and economy come into it, and we should consider these. We are also working within a constitutional democracy framework, a democratic dispensation with a Constitution, and a market economy system. Some people like this reality, while others do not. We need to move beyond some of the debates that take us nowhere around these issues and find out how we can start working within this framework in practice in order to make things work for us.

It is going to require more vigilance on our part because, unlike in an undemocratic state, in a democracy people cannot do as they please and get away with things. We need to be much more thorough

in the way we approach issues and not take shortcuts. Processes are important in a democracy; the voices of different sectors, interests, and so on are important. The issue is how we should develop the skill to manage those processes and mediate interests and power imbalances within society, and become good at that, rather than trying to fight it.

We also need effective regulation of the market, especially when it comes to the topic of settlements and spatial planning. Even as we are coming up with new human settlement policies, agreements and delivery agreements, development applications are being approved as we speak and investors are doing things on the ground. Housing projects with 5 000 to 15 000 units constitute small towns!

We need to shift from a reactive to a proactive form of spatial planning at all levels, ensuring that we are shaping things with long-term results and sustainability in mind. We need to start describing, designing and building the kind of cities, towns, villages and rural areas we want to see in the long term. These towns etc. will have to take into account the size of projected populations, as well as the kind of services, infrastructure and carrying capacity required. Different role players at their different levels should understand their own responsibilities in ensuring that the system functions effectively.

It is also about retrofitting and reconstructing existing spaces to make those towns, cities, settlements, etc. look better and different. All such planning will need to be done with a clear understanding of the forces shaping settlements; otherwise we risk planning in a vacuum and developing infrastructure that does not fit into the reality of the settlement, thus embarking on very costly exercises and creating all kinds of problems in the future.

The critical forces that are shaping our settlements include the following:

#### **Economic base**

- Each settlement has been shaped by a particular kind of need and economic activity. We need economic assessments, scenario planning and thinking to identify possible future economic roles that we are anticipating and begin to do settlement planning around that.

#### **Sociocultural dynamics**

- Settlements are not only driven by economic considerations. A great deal might centre around social and cultural issues, for example, people prefer living in a certain kind of context or a particular geographic area for various reasons.

#### **Community and stakeholder activism**

- Local communities and stakeholders have a critical role to play in terms of shaping the nature and form of the settlements they live in. From whichever perspective the activism comes (e.g. environmentalists), we need to harness it to ensure much more mature debates about the kind of towns, cities and settlements we need and want to live in.

#### **National policies and incentives**

- These are absolutely critical. Unfortunately, conditional grants in this country are frequently used as unconditional grants and people end up spending the money any way they want. National grants should actually serve as a trigger and catalyst to ensure that we achieve the kind of strategic outcomes we are looking for as a country.

#### **Local government policies, regulation and management**

- How municipalities actually govern their own spaces becomes critical for human settlements.

#### **Property development and private sector investment**

- Our cities and towns are being shaped by the

whims of private property developers, who buy up land, decide where commercial activity goes and determine the corridors and transportation links. They determine which classes of people stay in which areas and are leading development, whether we like it or not. Spatial planning is, however, a public activity in the public interest. It does not deny private interest, but deliberates how the right kind of environment can be created so that we can mediate the different interests and ensure that development is inclusive and addresses the needs of the country and of particular localities.

We still have a major problem around the most basic services in this country. According to the Universal Household Access to Basic Services (UHABS) index, 90% of households have access to water. However, when taking all four basic services (water, electricity, sanitation and refuse removal) together, only 54% of households in South Africa have access to all four. Only 15% of households in Limpopo have access to all four basic services. We have to factor such data into the whole notion of integrated human settlements.

There is a major bulk infrastructure crisis in the country, which explains why only 54% of households have access to all four basic services - most of the access is actually hindered by the lack of bulk pipelines linking water resources to communities where they are needed. There are major problems with water plants in many areas. Water treatment works are dilapidated and more than 50 years old in some places. This rules out having decent sanitation, flush systems, and so on for new settlements.

The dimensions of sustainable human settlements include economic growth and social development in balance with the carrying capacity of natural systems; reliable infrastructure and basic services; decent shelter; safety and security; democratic local participation (good governance); well-planned and well-managed land utilisation; close proximity to quality amenities and services (e.g. healthcare, education, sports, recreation and libraries); efficient public transportation; and work for the poor.

We need a geographic definition of sustainable human settlements, as we cannot simply equate human settlements with towns or municipalities. We perhaps need to look at defining the settlement pattern within municipalities, settlements going beyond the geographic boundaries of municipalities, functional settlement areas, settlements that are growing or

## Institutional reconfiguration continued

declining, and so on. Then only can we begin to talk about much more nuanced or differentiated interventions, incentives and policy responses.

Important issues are, therefore, the geographic definition of settlements; economic growth and population targets; norms and standards; infrastructure-carrying capacity; funding and delivery capacity; and management and regulatory capacity. The role of local government is critical in respect of strategic spatial planning, infrastructure provision, regulatory direction and local representative democracy.

What is important for people, too, is the definition of a settlement in the sense of their own neighbourhoods and communities. We would have to get right down to ground level to achieve this kind of sense of space. The huge scale of the task will require getting communities critically involved and having partnerships across various sectors. Municipalities will have to get their own systems and delivery models in order.

Constraints to sustainable human settlements involve, firstly, the scale and pace:

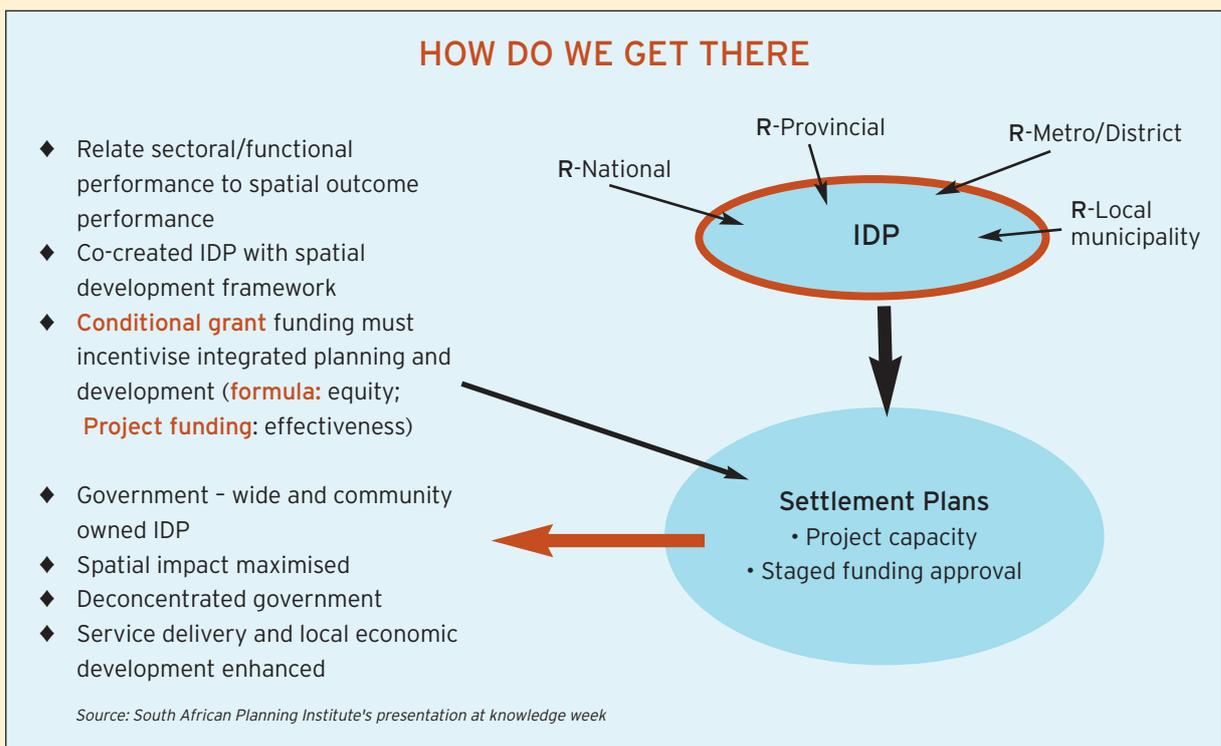
- Delivery capacity constraints (such as construction capacity to deliver at scale; material suppliers and costs; and institutional capacity at both provincial

and municipal level to plan integrated settlements, manage contracts and projects)

- Unresponsive legal frameworks
- A lack of affordable, well-located, suitable land (especially looking at how we can reorganise existing areas and utilise land more efficiently)
- The funding gap to reach targets (understanding the distinction between funding for internal bulk, regional bulk, etc.). We will need to reconfigure our grant system and funding system within a different framework that incentivises integrated planning.

Secondly, constraints centre around quality - various institutional and funding streams (such as the Housing Grant and the Municipal Infrastructure Grant) are aligned in a certain way; the current funding regime entrenches inefficient settlement patterns; built environment powers and functions for metros and secondary cities are undefined and have not devolved.

Currently, the performance of functions by all three spheres of government in a municipal demarcated space is not mediated by a shared spatial development vision of the area. The spatial form and land-use system is inefficient; there is weak direction for integrated infrastructure delivery; as well as weak localisation of national and provincial targets and programmes for economic development.



*Given the current situation, where do we want to be*

The objective is to have a shared vision and joint planning of sustainable human settlements for all municipal regions. The integrated development plans should become the key cooperative instruments for cooperative governance. They need to be government-wide, community-owned plans that maximise spatial impact and enhance service delivery and local economic development.

For this, the balance between formula-based funding and project-based funding should be right. We need formulas for equity purposes, but these should ensure that we know what broad allocations are going to different parts of the country and can, therefore, be mediated through the national spatial vision and framework. Within the formula approach of allocating funds, the actual spending of funds must take place on a project-funded basis.

We need to fund the right things in the right places at the right time. At the moment, our funding goes wholesale, whether a project is still at the conceptualisation stage or the feasibility stage. For example, people want to deliver, so when they need a pipe, they spend the money and put a pipe in the ground. However, there is no water coming into the pipe and there is no house linked to that pipeline.

We have to have stage funding approval; we have to fund good concepts, feasibility studies, project preparation and implementation in the different stages. All of these factors have to cohere around a better collective, co-created understanding of those spaces and of what we want to achieve at a strategic level.

## Reflections from practice: A town planning and engineering perspective

*Celdri de Wet, Town Planning Expert, Development Fund Division, DBSA*

*Greg de Villiers, Civil Engineering Expert, Development Fund Division, DBSA*

When we consider human settlements, often there is a great deal of talking going on, about the perspectives, vision, strategy, approach, trends, and so on. It is easy to sit and talk, and currently many policies are being researched and more data is being gathered, and all this costs money. Although planning and talking are important, how much of our energy is being spent on what is actually happening on the ground?

What we have found from the Siyenza Manje programme is that, in reality, funding is allocated at a national level and some of the policies and visions are also rolled out there. The money is administered provincially, but the responsibility for delivering housing and so on, rests on the shoulders of the municipalities.

In creating human settlements the two sides of the coin are planning and implementation. Broadly speaking, provincial and national governments focus on the former - the policies, human settlement plans, guidelines and housing chapters in the integrated development plans (IDPs). The Independent Human Settlement Plan, which functions like a sector plan within the IDP, has been rolled out in the Western Cape, but not yet in the other provinces.

On the implementation side, the focus is at a municipal level, with the planning of specific housing and human settlement projects, the different forms and levels of subsidies, and construction. On the actual site, infrastructure and roads are built, followed by the top structures.

In theory, funding for human settlements starts at a national level and trickles down to the provinces. Provincial governments are more involved in the guidelines for integrated human settlement planning. Guidelines are drawn up for the funding models - how the applications should be submitted to access the funding; how the projects should be administered; and how the funding should be rolled out. The assumption is that, in the municipalities, plans for new settlements would be formulated according to these strategies.

There would also be cooperation between the planners, engineers, financiers and other players. We would all sit together and consider whether we have the bulk infrastructure, pipelines and funding to plan that human settlement. The Independent Human Settlement Plan, IDP, Services Management Plan, Water Services Management Plan and Integrated Transport Plans would all be aligned. In reality, the national level provides the money for human

## Institutional reconfiguration continued

settlements, but the provincial departments of human settlement offer very little hands-on support due to the lack of appropriate provincial capacity. There are just not enough people.

The projects and situations that we are dealing with are very complex. We need sufficient numbers of skilled people. Often people at provincial level are not suitably qualified to handle the management of multimillion rand projects. We need hundreds of thousands of new structures to form new human settlements, and these have to be managed well. This is hampered by the government's silo approach. In addition, the political expectations created by our politicians are most often not realistic.

Funding is not always sufficient. We can throw money at a problem up to a certain point, but at some stage demand exceeds supply and there is not enough funding to address the big problems. The support given to municipalities where projects are rolled out is uncoordinated. The engineers with Municipal Infrastructure Grant funding do some sort of planning on their own, and the IDP units offer some sort of IDP support, but very little talk takes place between the various human settlement departments.

Through the Siyenza Manje programme we have found four common challenges in municipalities in terms of housing development. First, there are staff shortages, with few qualified people and a high turnover of staff. Engineers and other specialists move on after a project of, say, six months, and so very little institutional memory is being built up and used. Some municipalities are unable to recruit suitable persons because the remuneration is too low. The management and development plans are not utilised. It is a compliance issue - consultants are being paid to draw up good documents, which sit on a shelf somewhere instead of being used as a tool.

Second, political agendas are not always realistic. Politicians, councillors and mayors make promises to people and it is just not possible to deliver on these, which creates a great deal of unhappiness. There is a lack of understanding at the political level of what exactly is involved. What does it mean if we say we need 15 000 top structures in a certain municipality, or 400 000 plus in a province? We have to understand the complexity of the water supply, transport, sewerage, schools, churches and other social facilities that have to support the houses in order to form a human settlement.

There is also political instability. In some municipalities, such as Stellenbosch Municipality, there are highly qualified, capacitated, good-quality officials with lots of experience, but they have a "hung" council. The council does not meet, so they do not get through their council agendas or sign off on a project phase, and payment cannot take place. As a result, the project sits and nothing happens until the next meeting, where one's point on the agenda might or might not come up.

Third, there is a lack of coordination between the different municipal departments. The finance people do not talk to the engineers; the engineers do not talk to the planners; the human resources people do not know the supply chain. Ultimately, this affects the roll-out and delivery that must take place. There is also a lack of proper coordinated forward planning, and of necessity this function is taken over by the implementing agents, consultants and large construction companies. When planning does take place, it is for a project. As town planners, however, we plan a town or a settlement and not a project, because we have to see how it impacts on other facilities, transport links, and so on.

The fourth challenge is funding. On the one hand, funding is insufficient; on the other hand, some municipalities and provincial departments underspend on their budgets. This all has long-term financial and other implications.

The Siyenza Manje programme, which is rolled out by the DBSA, is the brainchild of the National Treasury, Cooperative Governance and Traditional Affairs (CoGTA) and the South African Local Government Association (SALGA). There are about 262 experienced engineering, town planning and finance professionals working with 145 young professionals who have just qualified in these three fields. They are then teamed up with an experienced person and work side by side with them in municipalities all over the country. In the process, skills transfer takes place in those municipalities through various initiatives.

Siyenza Manje sees all four institutional challenges at municipalities. For example, on a housing project in Worcester, a wholly incompetent contractor was appointed and the contract documents were vague. There were no technically qualified officials with the necessary expertise to manage infrastructure projects; they tried unsuccessfully to recruit technical managers. No coordination was found on this project,

and no planning of construction activities. In fact, they started building before any of the drawings had been approved. There were no milestones set. In this particular case, about R300 000 was paid for only six units that were at knee height.

After the Siyenza Manje deployment, these challenges were addressed. A council resolution was acquired to dismiss the existing contractor and appoint a competent person. We worked with the officials and the administration to provide the necessary technical and project management support to implement the project. We established coordination between the technical and housing departments on this particular project, and implemented prudent controls to disburse funding to the contractor.

Two examples for success stories at the provincial level are Nuwe Begin, a 1 900 unit development, and Our Pride, a 1 000 unit development, both in the Western Cape. Both projects resulted in integrated development in accordance with the Breaking New Ground (BNG) policy. They provided subsidy units, Finance Linked Individual Subsidy Programme (FLISP) bonded units and also market-driven opportunities to create an environment that is habitable, affordable and sustainable.

These developments offer institutional community, recreational and commercial facilities. They address the housing needs of income earners up to R14 000, which is the limit of the Financial Services Charter. These projects have provided improved urban renewal, regeneration and socioeconomic development. Land-use management control documents, council policies, statutory planning frameworks, bulk services studies, and traffic and environmental impact studies were used to do good planning.

From Siyenza Manje's deployments at local and provincial level, if we were to be able to change one thing, experience has shown us that selection and recruitment must be free from political interference. This would help us tremendously and, in particular, there should be no political interference in the technical, planning and financial areas of local government. Siyenza Manje means "we are doing it now". I urge the house to do it now, maybe to talk less, and try to do things. Let us change the face of human settlements in South Africa together.



Source: DBSA

*Nuwe Begin: Commercial below multi-storey financed BNG units*

## DAY TWO morning plenary session

### Spatial integration

Chairperson: Luanne Werner, Department of Human Settlements



Source: Forced Migration Unit (Wits University)

*Cities will continue to grow rapidly through natural increase, domestic migration and internal migration*

#### How do we overcome the urban/rural dichotomy?

*Mfanafuthi Gama, Department of Rural Development and Land Reform (DRDLR)  
and Sunday Ogunronbi, Deputy Director-General, DRDLR*

To a certain extent, present-day South Africa comes from a history of pre-apartheid space as a confederation. The old Republic contained large masses of land, very little of which encompassed the former TBVC states. There are major gaps in the concentration of industry and mining, thus alienating what existed in the former bantustans, apart from a few deposits in Gazankulu and Bophuthatswana. The former bantustans also missed out on opportunities, such as the building of airports, oil refineries, food production plants and motor vehicle assembly plants in the Eastern Cape, East London and elsewhere. Some mineral deposits are covered, such as asbestos and a few diamonds in the bantustans.

Currently, 64 municipalities that are in distress fall largely within the former TBVC states. Even the districts that came along with them face are facing a great deal of disparity and depression.

How do we begin to enforce linkages between rural areas? Rural-urban linkages include flows of agricultural

and other commodities from rural-based producers to urban markets, both for local consumers and for forwarding to regional, national and international markets. In the opposite direction, there are flows of manufactured and imported goods from urban centres to rural settlements. Overall, the synergy between agricultural production and urban-based enterprises is often key to the development of more vibrant local economies and, on a wider level, to less unequal and more "pro-poor" regional economic growth.

Rural-urban linkages also include flows of people between rural and urban settlements, either commuting on a regular basis, for occasional visits to urban-based services and administrative centres, or migrating temporarily or permanently. We, therefore, need a different approach to how we control direct urban migration.

Decreasing incomes from farming means that especially small-scale producers are unable to intensify production and switch to higher-value crops due to a lack of land, water or capital. This, in turn,

means that growing numbers of rural residents are engaging in non-farming activities that are often located in urban centres.

As households took over the responsibility for farming, production levels increased and, in high-potential regions, this contributed to a decline in rural poverty and increased demand for non-agricultural goods. At the same time, however, land scarcity gave rise to unprecedented migration to small and large urban centres.

Access to affordable transport expands people's opportunities for finding employment, or for engaging in income-generating activities. When mobility is constrained, as for isolated settlements that are poorly served by road networks and transport facilities, migration is more likely to occur. This may also be true of well-served settlements in economically stagnating areas, thus offering limited income opportunities.

Rural-to-urban migration is fastest where economic growth is highest, as migrants tend to move to places where they are more likely to find employment. In reality, therefore, it is not as problematic as it is made out to be. For example, secondary urban centres, especially in Latin America, have recently attracted new investment and industries that would have previously been directed to large cities. As a consequence, they have also increased their role as migration destinations.

An efficient public transport system for rural transport would provide an intermediate solution by transporting people to the immediate towns, instead of all the way to major cities like Johannesburg, Pretoria or Bloemfontein, if they are looking for amenities.

As soon as these small intermediate towns in between the major centres begin to be revived, people will not have to travel for long distances. However, major investment in terms of local government support would be needed to take care of the demographics, population density, distribution patterns and land issues. For instance, if farming produce does not have to be transported that far away, people would rather create small industries in the revived towns before travelling to larger areas.

Instead of having just urban centres and rural centres, there is a need for such middle-order rural towns and peri-urban towns. Urban cities are urbanised and developed, and tend to have problems of congestion and poverty out in the periphery, although there may

be initiatives to make city living better. Middle-order towns have basic services and connections to tarred roads. Peri-urban towns are mixed holdings, within reasonable distance of an urban node. We are proposing a totally different approach into the revitalisation of rural towns, old mining towns or old agriculture-based towns.

Here is a scenario of what could potentially happen. If we were to start by building a terminal or a bus stop at the crossroad of a major local road, there would almost immediately be a development of retail services, such as a filling station, due to the traffic passing through that intersection. Then would follow accommodation, public service requirements, a crèche or some basic education facility, a community hall, recreation facilities - the area would start to develop because it is a small node.

Looking at 68 GIS-selected towns across South Africa, and using SPOT 5 satellite imagery for 2006, 2008 and 2009, we checked for Reconstruction and Development Programme (RDP) housing developments and informal growth. We found that some towns in the country, such as Albert, Beaufort West, Pofadder and Port Nolloth, have not grown between 2006 and 2009. The question is whether the usage of roads or other regional planning methods could spark some development in those areas? How do we start using such small towns in-between major towns to start small economies that could potentially restrain people from moving into the cities?

Moreover, what are the assumptions underlying some of our current policy or implementation measures (such as facilitating economic growth and job creation by promoting investment in internationally competitive industries)? What are we doing with the relationship between migration and urban space (e.g. urban sprawl, informal settlements, the urban poor, incapacity of the state to meet demands)? Are we guilty of urban bias in our economic, development and planning literature? Do we have specific policies designed to accommodate those kinds of regions that are not concentrated, or similar to our urban spaces? Have we disproportionately funded our urban spaces to the detriment of rural spaces?

At month-end on Fridays, people follow the N1 back home. Where do those people live - are they urban or rural dwellers? The pattern of migration adds a unique dimension to our understanding of the urban/rural space.

## Spatial integration continued

The dynamics of integrating urban and rural spaces include factors such as the limited impact of land reform (tenure, redistribution and restitution) in relation to the liberalisation of land markets; the structure of the South African economy and of growth in the economy; poverty and inequality (e.g. inequality of opportunity, and income equality without social infrastructure); substantial increases in rural infrastructure; unbridled migration; and the carrying capacity of the urban space.

Spatial variation in the distribution of economic activities and levels of socioeconomic development has implications for development planning and policy formulation. The principles for spatial integration are as follows:

- Recognise the great diversity of rural situations; respond to past and future changes in rural areas; and be consistent with poverty reduction and decentralisation policy.
- Make the case for productive sectors in rural development, as a strategy both to maximise growth and to reduce poverty.

- Provide public goods for agriculture and offer better access to developed markets.
- Turn consumption subsidies into production subsidies.
- Boost the non-farming sector.
- Promote democratic deepening in rural areas.
- Find ways to support poor people trapped in conflict and apply new thinking about poverty reduction in rural areas.

To deal with poverty and inequality, the spatial structure of economic growth needs to change. Rates of growth in urban areas should not be extremely faster than in rural areas, while some rural areas continue to decay. The duality of city and homeland is still part of the country, and needs to be resolved. Models of planning should take cognisance of the former bantustans and the incapacity of their municipalities. National fiscal transfers should be made to the municipal sphere. The national choice should be a greater focus on labour-absorbing economic opportunities in rural areas, as opposed to the rate of returns on economic investments.



Source: DBSA

*Rural-urban linkages include flows of agricultural and other commodities from rural-based producers to urban markets*

## How do we overcome the urban/rural dichotomy? Welcome to the new suburbia

Michael Aliber, David Neves and Andries du Toit, Institute for Poverty, Land and Agrarian Studies (PLAAS), University of the Western Cape

I want to suggest that there are many new suburbia and potential suburbia in South Africa. Part of what we need to consider is which kinds we want to encourage and which kinds we want to discourage.

The challenge of rural development in South Africa is largely the result of spatial dislocations and economic inequities created by colonialism and apartheid, namely the creation of the bantustans and agricultural dualism. One interpretation of current policy is to reverse these historical processes; that is, to “rewind” or turn back the clock (e.g. through land restitution). Another is to “rewrite”; that is, to change the script so that we reconfigure reality to the way it should have been in the absence of colonialism and apartheid (e.g. through creating equity in the commercial agricultural sector).

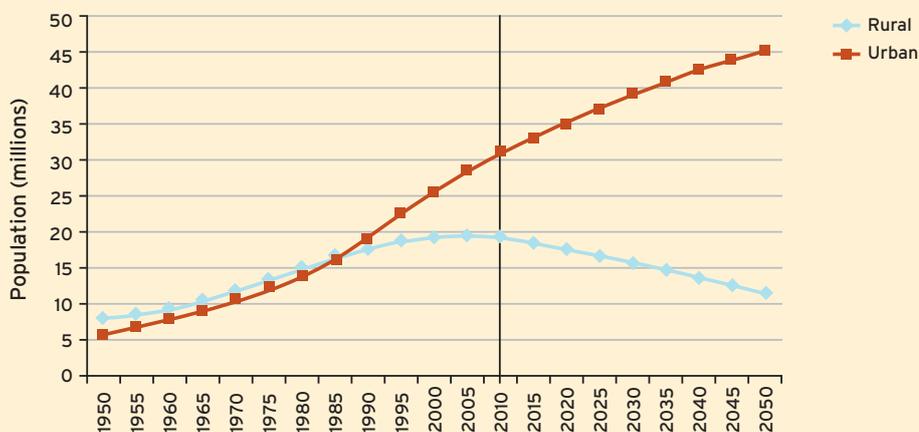
Both are valuable and important ways of thinking about rural development. The suggestion, however, is that maybe the best options available to us do not involve restoring what was lost or merely redistributing what we currently have.

The problem is that preoccupations with rural development policy and urban development policy have little to do with one another. The July 2009 framework document of the Comprehensive Rural

Development Programme (CRDP) speaks primarily of dealing effectively with rural poverty through the optimal use and management of natural resources (largely agriculture); and of improving services in rural areas (e.g. flush toilets and shopping malls). In terms of urban development, it is currently largely about densifying urban settlements in order to reduce transport costs; addressing service delivery backlogs and reviving small towns.

Although these are both valuable aims, they give little indication of integrated thinking. For example, people who qualify as indigent in most of our major municipalities are those living in formal structures who cannot pay for their electricity and water services. However, people living in the informal dwellings are not even on the Indigent Register; in a way they are almost invisible - which is quite ironic, given the way we are going about urban development. The number of informal dwellings is rapidly increasing. Informal settlements are here to stay, not least because of prevailing migration trends.

The major challenge is that if we cannot keep up by providing well-planned Reconstruction and Development Programme (RDP) settlements, how will we accommodate this process? Should we have dense extra-legal squatter settlements on the fringes of



Prevailing migration trends

Source: Institute for Poverty, Land and Agrarian Studies (PLAAS)

## Spatial integration continued

towns and cities? And/or should we have peri-urban settlements that allow for tenure security, multiple-livelihoods and self-provisioning of decent housing? If we are concerned about the quality of the housing we offer, we can increase the amount invested in each individual house, but given the budget constraints, the number of households we are able to assist continues to decline.

A good example is Munzhedzi in Limpopo, a restitution project that went wrong. Some 1 600 hectares of land were claimed by a group of 600 households. An invasion began several years ago and now 1 000 mostly non-claimant households have settled there, mainly from nearby villages but also from further afield. Two reasons they gave us was that the soil is better and the rains more predictable than the places that they left. It is also a better location, with a tarred road offering easy access to Elim or further to Makhado (formerly Louis Trichardt). This alone was worth the trouble of moving there, despite a lack of services and having to build their own homes.

Elim is a growing economic and service hub, with a booming food trade, booming informal sector and rapid population growth. What largely allows for this population growth is the customary tenure system that characterises the area to the east of Elim. The settlement at Munzhedzi, even though it is an unfortunate instance in the sense that it did not conform to what restitution is meant to involve, complements the development of Elim, whereas Elim complements the development of Munzhedzi, together forming a "Greater Elim non-metropolitan area".

Pre-2007 there were a fair number of subsistence farmers in the Elim area, a few hundred small-scale fruit and vegetable vendors, mainly supplied by white commercial farmers. The main product went to exports, then to national markets and what remained went to these local vendors. Much of the population in Elim and surrounds did their shopping in Makhado. In 2007, a mall was built in Elim. Research had shown that there was a market and an investor was convinced. The anchor tenant was Spar, and initially its fruit and vegetable manager procured everything from Spar Central, with stock being brought on trucks via the N1.

After a year or so the manager started buying produce from the local, small-scale black farmers. Their product was fresher; it was at the appropriate scale; and

transport costs were obviously lower. By 2009, 75% of the fruit and vegetables sold by the Spar came from these farmers, providing them with a collective income of roughly R5 million a year. Elim now has a local food economy whereas it did not before.

We should note that the densification of the settlement in and around Elim has made this possible. It has created a market for local black farmers without necessarily trying to get into some distant value chain. It also allows for a better quality of life for households that still regard themselves as rural, but now are living in proximity to all these services. Land reform could, therefore, be used as a way to reconfigure rural space to allow for this sort of synergistic development.

A 2006 study by the Human Sciences Research Council (HSRC) on the under-recognised nature of land demand found that the predominant demand for land came from those who want small amounts of land for food security. This is consistent with the amounts of land that most households said they wanted, which is less than half a hectare for most. It is not the kind of land demand for which land redistribution has been trying to cater to.

According to the study, having land for growing food was the reason given by farm dwellers (58%), commercial persons (69%), formal urban dwellers (51%) and informal urban dwellers (54%), compared with only 17, 12, 14 and 13% respectively who wanted the land to generate an income, or 14, 12, 32 and 32% respectively who wanted a secure place to stay. These people voted with their feet and the findings of the study complement the idea of densifying settlements around cities and dynamic towns.

Perhaps rural-urban migration cannot be stopped, but we can redefine it and distribute it better, using land reform to reconfigure space, as in the example of Munzhedzi. It does not have to happen by accident; it could be deliberate. Competence can be built to support appropriate peri-urban development, including appropriate tenure that allows people to move with relative ease and lack of expense, and includes a focus on dynamic small towns, particularly those in the former bantustans.

## A pro-poor approach to land access: Incremental settlement development

*Ronald Eglin, Afesis Corplan, East London*

Statistics show how the supply of land and housing is not keeping up with the demand. Even if the housing budget were doubled, we would only overcome the backlog by 2030. When people want land or housing, they could, generally speaking, either wait for a Breaking New Ground (BNG) home or a Reconstruction and Development Programme (RDP) home. They could be waiting a very long time to get a house, so that is why we are finding a lot of invasion.

Afesis Corplan and other non-governmental organisations (NGOs) have come up with the concept of LANDFirst, or incremental settlement. The LANDFirst approach follows a number of stages and as the name implies, there would be something second, third, and so on. The starting point is to identify and acquire well-located land; the next step is to allow incremental settlement on that land, or settlement on that land in an incremental manner. Then follows creating and maintaining an affordable, safe and secure environment.

There are two types of LANDFirst solutions: first, people stay where they are and are provided with the basic product (informal settlement upgrading), or the basic product is provided and the people settle on the land (managed land settlement). In the latter, land is identified and supplied with basic services. The people are allowed to start moving onto that land even prior to full services, full tenure and RDP houses being built. Effectively, many people will be building shacks on that land, but at least they will be moving onto a piece of land and can start to build their own houses. The land is then upgraded over time. This approach could provide an intermediate solution, so that while people wait for upgrading and their RDP houses, at least there they have land and the basic services are provided.

One of the important elements of the incremental settlement approach is to start with providing a basic product and basic services, such as communal standpipes and communal ablution facilities. It also goes beyond that to look at basic planning, for example, ensuring through environmental studies that people do not settle on flood plains and identifying at least the outer boundary of where such settlements can be allowed to occur.

There would also be a need for basic organisation, within both the municipality (so that it is able to engage in this incremental process), and the community organisations and structures (so that there is leadership and some form of community organisation). There needs to be ongoing engagement between communities and the municipality.

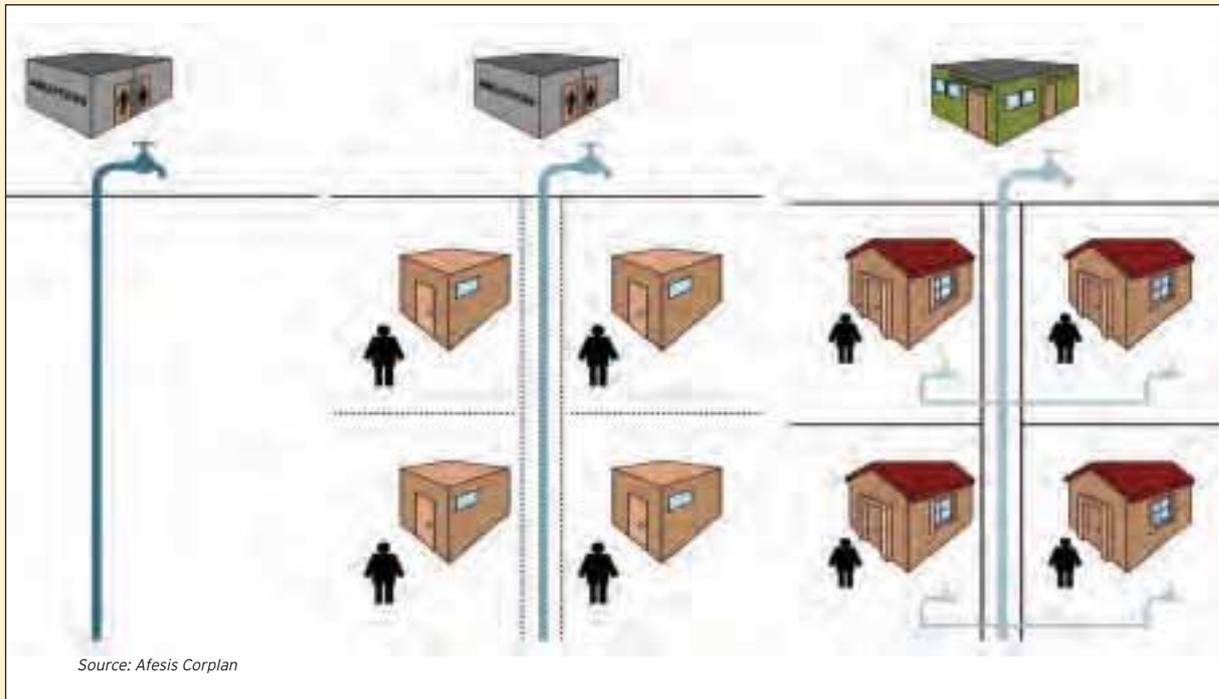
The ideal is to provide a continuum of tenure and we are working with organisations like Urban Landmark, who do quite a lot of work in the idea of interim and basic tenure. The first requirement would be administrative recognition, for example, municipalities having shack registers and painting numbers on the shacks, thereby showing that the municipality recognises that people may stay in those areas. Legal recognition solutions or options also exist, such as the special residential zones in the town planning scheme of the City of Johannesburg, which allows it to make provision for people to build in an incremental way.

Over time, people would look to upgrade their dwellings. Municipalities could then have certain rules and lease agreements with the landowners and residents, dealing with matters such as transferral of ownership when somebody in a household dies. Obviously, the objective in many instances would be to move towards establishing a township, which would require more formal processes of settlement development, such as ordinances and title deeds.

One objection to the incremental settlement approach is that it is simply moving people from one shack to another. There is no guarantee that the area will be upgraded, and it encourages sprawl with a one-plot-one-house type of approach.

There are, however, more positive responses to adopting such an approach. Communities and groups are saying: "Please give us land, we want to start building our own houses. We are tired of waiting for years and years for the government to build us a house; we don't have land, but if we had land we would be able to start using our own resources." The settlement approach starts to recognise people as citizens of that municipality; the recognition of tenure says that they may stay there and will not be forcibly removed. Obviously, it also provides an alternative to invasion.

## Spatial integration continued



*The LANDFirst process: basic - self-build - upgrade*

The first key intervention is to catch up with the need and in the meantime provide basic emergency services to these informal settlements. eThekweni Municipality, for example, is starting to roll out a programme of supplying containers of some sort to provide basic ablution facilities to people living in informal settlements, without the whole question of land ownership being resolved first.

We have worked with other organisations, such as Project Preparation Trust, another NGO based in KwaZulu-Natal, and have been looking at the different subsidy mechanisms that could be made available for such an approach. At this stage there is no ideal mechanism, but some can be used and tweaked, like the Informal Settlement Upgrading (ISU) programme, particularly Phase I and II.

The second intervention would be to get ahead of the need. Here the idea is to acquire and identify land, and to provide it with basic services. Again, the subsidy instrument is perhaps the ISU programme, or even a new Basic Settlement Grant. In Gauteng, there was

previously a programme, Mayibuye, which was linked to the essential services. The people's housing process was very similar to the approach of obtaining land; providing basic services; allowing people to settle; and allowing them to upgrade their dwellings over time. Other municipalities like Nelson Mandela Bay had something called a "four-peg policy".

Interesting work is being done, for example, by the Development Action Group (DAG) and Urban LandMark, looking at how to obtain land in the first instance (e.g. state land, private land and occupied land). Much of what has been said here assumes that the land is there, but the LANDFirst approach implies that people first need to obtain land.

A LANDFirst network has been established and those organisations have signed a charter, which can be found at [www.landfirst.org.za](http://www.landfirst.org.za) (see also [www.afesis.org.za](http://www.afesis.org.za)). The vision is for "dignity through land", where all sectors are working to increase access to secure and well-located land. We call on other role players to support us in promoting this concept.

## Urbanism: The role of architecture in constructing urban spaces

*Mokena Makeka, Makeka Architects, Cape Town*

The realisation of sustainable human settlements is composed not only of housing, but also of a range of other public infrastructure, amenities and space opportunities, which make up a community. Architecture plays a decided role in creating a sustainable environment – technologically, socially, culturally and economically.

In many parts of the country, people are poorly distributed in space and there is insufficient infrastructure. The real challenge is when we begin to imagine what the urban and rural areas will look like in the year 2030, and this requires a serious discussion about the nature of urban form. The whole notion of how to construct an imaginary urban or rural belt in relation to growing population needs becomes quite tricky, particularly when other factors, such as protected areas, the natural environment and the green context, also come into play.

The City of Cape Town has a vision for what it calls the twenty-year integrated settlement concept, which is meant to coincide with the year 2030. In terms of the matrix of movement, opportunity and space, the suggestion is that we should be trying to strengthen the north-south corridors of transport and infrastructure access, and also those in the east-west direction, essentially allowing for goods and energies to become accessible across particular areas of need.

We need to understand the particular spatial context and how it begins to unlock the potential for sustainable human settlements. For example, when planning urban form at the macro scale there are different models, such as: is the planned city a corridor city, a polynodal city or other polynodal urban form?

The core and periphery of an area also determines where and how intervention should take place. For example, Khayelitsha, a major informal settlement, has the highest densities of people in the region, whereas in the central business district (CBD) of Cape Town the numbers are quite low. However, 60% of the economy is based in the CBD, the actual centre of the region, and less than 10% in Khayelitsha. The question that arises is, how do we begin to engage with this dichotomy between where people are, versus where the economic opportunities are?

Public infrastructure has the ability to inform and shape communities. Ordinary things, such as police stations, laundromats, clinics and shopping centres, play a significant role if we begin to factor them in as part of the sustainable human settlement continuum. Far too often, sustainable human settlement planning has been regarded as drawing up an overall grid and layout; then somehow the architecture and urban design happens at the end, with landscaping budgeted for from the crumbs that fall off the table of a development project.

The human interface makes settlements humane and accessible. Ordinary things (police stations, libraries, clinics, etc.) should be part of the strategy for building up sustainable human settlements, which are not only about housing.

As an example, a project of ours dealt with the context of the South African Police Service (SAPS) who had a negative reputation in the community. They were accused of beating up people, which began to impact on the social sustainability of the context. The building we designed would make a transformation in two respects: one, it would not look like a typical police station with small windows and a fortress approach, which made the police officers feel defensive. More importantly, the police officers would be dignified in how they operated in their spaces. We even had a long debate with the SAPS at head office about the type of taps we should use, because the police officers had vandalised their own toilets.

The building won an award. Interestingly, the perception of the community about the SAPS began to change. The police officers themselves, arriving after a hard day's work, actually began to de-stress in the police station before going home. They also have a small, ordinary space as a smokers' corner, which they could use for holding a barbeque. The SAPS wants to replicate this design around the country, but each place has its own context and needs, and it is not actually possible to replicate a design. It is possible, however, to replicate the principle of looking at the context.

It might therefore seem esoteric to be talking about architecture in this forum, but if it is about sustainable

## Spatial integration continued

human settlements that honour the Constitution, our South African-ness and our humanity, we need to emphasise policy as much as we do implementation. Architecture in urban design and the making of urban space is not an afterthought. Every intervention that we make needs to contribute to a sustainable strategy, whether it is a police station, a stadium or a bridge.

Another example concerns the role of stadiums, particularly post-World Cup 2010, and what they have to offer. The design that I created tried to deal with a notion of social and economic sustainability from a different perspective. The stadium would be located in Green Point in a strong informal trading environment. In my submission I argued that the stadium would become an informal market and gathering place where there could be public investment and public funding. I did not win this commission because I was told that the design was too radical, but what I find interesting is that there is now a great deal of discussion in Cape Town about the non-viability of the present stadium and the fact that it might need to be demolished.

If we look at the rights that have gone with that stadium, it is almost impossible to make it work. There are 3 000 parking bays in that facility, which can only be used on match days. Yet there is a parking problem within the city. How sustainable are we if our transport policy and the type of land-use regulations, zoning and other conditions do not support a sustainable framework? We now have this huge structure that is not providing any sort of amenity and is standing completely empty. How can we take this infrastructural opportunity and make something that is special and accessible daily?

A further example is a community centre I have done in Khayelitsha. One of the real challenges had to do with the government's silo approach, in particular with regard to who is in charge of making the building, or of transport, or of sewerage - there was a total lack of integration. There were servitudes cutting across the site and no budget to build a road. Without integration contributing to the broader argument, the result is flawed frameworks and strategies. In the end,

though, this building was also fairly successful, well accepted by the community and even won an award.

I was commissioned by the Passenger Rail Agency of South Africa (PRASA) and Intersite to put together an urban design and planning vision for their 58-hectare property in Cape Town. We went through the whole process of looking at how to make a sustainable human settlement in terms of the type of land-use activities, building up the neighbourhood approach and looking at sustainability.

The result is called a vision for a "Connected Cape Town" - an integrated mixed-use development that seamlessly connects public transport nodes. The service has a full range of low carbon-intensive transport nodes, with a particular emphasis on light, tram and electrical personal transport, tailored towards the needs of the pedestrian.

Neighbourhood D is a health and wellness precinct, with high-density housing, a fitness park, a public swimming pool, and squash and tennis courts. Clinics and healthcare centres are complemented by open spaces and a research centre. Neighbourhood C, a service precinct, offers government services and social services, such as accommodation, day care, kindergartens and recreational spaces. Neighbourhood B is a site of innovative economic and technical advancement, with restaurants, cafés, stores, a food market and various forms of micro-industries, complemented by a fire station and a resource centre. Neighbourhood A, at the heart of the CBD, houses a cultural centre, a museum, an art gallery and a memorial park. The neighbourhood is also home to the Department of Home Affairs, the police, law courts and financial service institutions, as well as high-density urban housing.

The theme is the integration of different precincts underpinned by various and diverse council nodes. It works on the principle that transport corridors can be a way to resolve many issues. It might, therefore, make sense to begin to design lineal or connected cities as a way of allowing access to opportunity and commerce.

## DAY TWO afternoon parallel session

### Key drivers of sustainable human settlements

*Chairperson: Zakhele Mayisa, Unit Manager: Gauteng Business Unit, South Africa Operations Division, DBSA*



Source: Photo Chris Kirchhoff, MediaClubSouthAfrica.com

*Johannesburg: Bus rank at Ghandi Square in the city centre*

#### **What is the future of urban transport in an energy-scarce environment?**

*Peter Copley, Transport Specialist, Advisory Unit, DBSA*

The world's oil as a finite source has passed its peak. The global oil production forecast starting in 1935 peaked in about 2005 and then dropped. The model was developed in Germany, the country which is now leading the way in alternative energy, with 70% of its energy coming from alternative sources. Predictions are that the world is in an "oil crunch" and that, in 2025, the levels of oil pumped will drop to the same levels seen in 1965. This means that the price of crude oil might double or more. As Sasol produces 30% of South Africa's oil requirements, we are marginally protected by Sasol.

The other critically important aspect of this forecast is that most transport subsidy is funded by a levy on fuel. As oil consumption decreases, so the fuel levy will decrease and there will be a shortage of money in the transport sector. When applying this model, South Africa in reality has only about 45 years of easily mineable coal left. When we talk about sustainability, therefore, it is about environmental, economic, technical, social, institutional and financial sustainability.

Transport permits connectivity through networks, and it permits mobility through the ability to use those networks to move freight and people. People need transport in order to interact, communicate and trade with a view to survival, social activity and economic development. This has to take place within a sustainable environment, with transport being the "veins" that make it possible.

There is a great deal of work being done worldwide in respect of the transition that we are heading into. Current seminal pieces of information include "Infrastructure to 2030" by OECD Publishing (2006), "The African Infrastructure Country Diagnostic Study" by the World Bank (2009), annual public transport statistics from the International Road Federation and the Cooperation for Urban Mobility in the Developing World (Codatu), as well as "Heads in the Sand" by Martin Creamer Publications (2009). The main concern is that governments do not pay much attention to the fact that we have hit this crunch time in terms of global oil.

## Key drivers of sustainable human settlements continued

The 2005 National Household Travel Survey by the Department of Transport shows that South Africans' main mode of travelling to work is public transport (40%), cars (32%), walking (23%) and other (5%). Public transport consists of taxis (25%), buses (9%) and trains (6%).

These modes are expected to shift in the following ways in a time of liquid energy scarcity. The number of walkers will essentially remain the same, whereas public transport will increase either marginally or substantially. Vehicles will gradually shift to electricity, with direct current in motor cars and alternating current in trains. (With alternating current, we can generate power back into the system; with direct current we only take it out.) Hence, there will be a greater need for electricity, which is also in short supply. There will also be a shift from trucks, etc. back to rail. In terms of its rail rolling stock, South Africa will need to spend around €2 billion to get its old system up to speed to meet the new commuter needs.

Human activity in our settlements takes place 24/7. We need to spread out our activities in terms of time, and that obviously implies the continued use and development of information and communication technology (ICT). Transport logistics are run on ICT - some 90% of the information being sent around the world is actually data in support of logistics. ICT is the only sector in South Africa in which the backlog has been reduced substantially. Cellphone technology can be used for ticketing, so that commuters can choose to use a taxi, train or bus as it suits them.

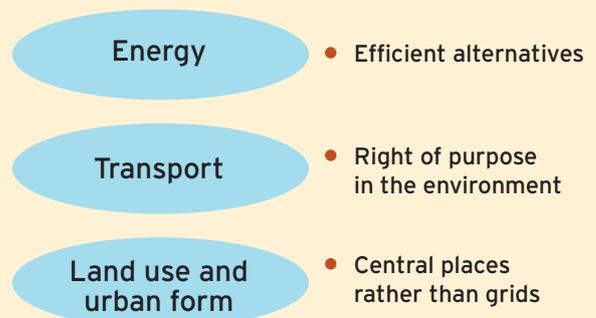
Rea Vaya Bus Rapid Transit (BRT) systems are very expensive to establish and subsidise, and South Africa does not have the same population densities as South America, from whence the idea was taken. Corridors for BRTs will have to be developed. Much more thinking will have to go into network planning and coordination between Metrorail and neighbouring municipalities, and also between municipalities, provinces and national government to arrive at an optimal solution.

Key strategic challenges include the following. As regards intergovernmental relations, there is a need for a clearly defined, accepted locus of control and management. Priorities are not synchronised. Leadership is ill prepared. Human resources are constrained in skills and capacity across all spheres and agencies. Delivery is fragmented, with myriad planning, management and implementation entities.

Funding sources are not coalescing around public transport, which is a new responsibility for cities. Integrated planning exists on paper, but not in practice. There is also a complete lack of current, reliable data, both strategic and operational.

People are urbanising into metropolitan areas, with some families first migrating to B4 municipalities and from there to the metros. The future of B4 municipalities is accordingly uncertain and the focus should be on operations and not necessarily on capital investment.

### Fundamentals of efficient urban transport systems



### Recommendations:

- Get societies to assist in undertaking visual condition classification surveys, with the necessary publicity and ownership.
- Encourage public transport through land-use change and value capture for BRT systems.
- Guide developers gently towards supporting public transport and considering public transport subsidy in their applications for changes to land use.
- Rationalise rural networks through objective river crossings to reduce road network length and reinforce rural urban settlements.
- Continue with road infrastructure pricing, ideally as public-private partnerships, extending into the region.
- Increase fuel levies towards attracting capital for economically justified and ordered public transport and road programmes.
- Consider value capture in the urban environment, especially for BRT infrastructure.
- Recognise that investment is for the long term, in support of freight flows that are growing at the same rate as GDP growth (about 6% per annum) and people flows that are growing at 1,5 times the GDP (9% per annum).

## A long-term outlook for informal housing in South Africa: An economic analysis

Tabo Foulo, Economist, Research Unit, DBSA

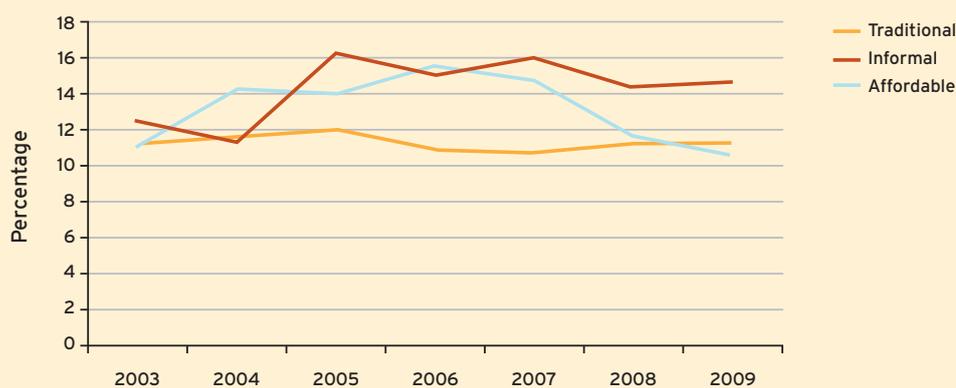
This presentation addresses two questions: What is the likely percentage of households that will be living in informal settlements by the year 2030? What are the key factors that will influence the long-term outlook in this regard?

The provision of adequate housing is an important pillar of the government's development strategy. After 1994, the government set a target of eliminating the housing backlog by 2014. At the end of 2009, an estimated 14,7% of households lived in informal housing, and peaked at 16,1%, according to the latest data from the General Household Survey (GHS).

There are several official sources of housing data in South Africa: census data, community surveys and the annual GHS by Statistics South Africa. There are, however, inconsistencies between some aspects of the official data sources. Commissioned studies include those of the Banking Association of South Africa and Finmark Trust. In many ways, the Financial Sector Charter, for example, forms the basis of our understanding of the affordable housing market.

The GHS has twelve categories for dwelling types. We have reduced these to five broad groups: traditional dwellings or huts; informal dwellings or shacks in squatter settlements or on farms; flats or rooms in a backyard; subsidised formal housing; and non-subsidised formal housing.

Based on 2003-09 GHS data, approximately 223 000 households enter the housing market every year. Of these, about 11% will be housed in traditional homes; 14% in informal houses; 13% in affordable housing; and 62% in formal housing, of which 10% is subsidised. These are the four choices a typical South African household has. We need to understand the factors affecting these choices, and why it is proving difficult to bring down the percentage of households living in informal settlements. Interestingly, the affordable housing segment increased from 2003, peaked around 2006, and is now declining. It is important to keep this trend in mind, as the performance of the affordable housing market segment is an important driving factor in the eventual numbers of people living in informal housing.



Percentage of households living in different types of dwellings

Source: DBSA

There are two main approaches to studies of this kind:

- First, macroeconomic studies look at how factors such as economic growth, financial depth, the debt/GDP ratio, the tax rate governance, infrastructure and armed conflict explain the

prevalence of informal housing in a country. Essentially, these studies consider a country's ability to finance or deliver subsidised housing.

- Second, housing market and migration studies are more microeconomic in nature and tend to focus

## Key drivers of sustainable human settlements continued

more on development within the housing market itself. They view the percentage of households living in informal housing as a function of the rate of migration into the region, population growth, demand and supply for various types of housing, and “shift” variables in the supply of housing.

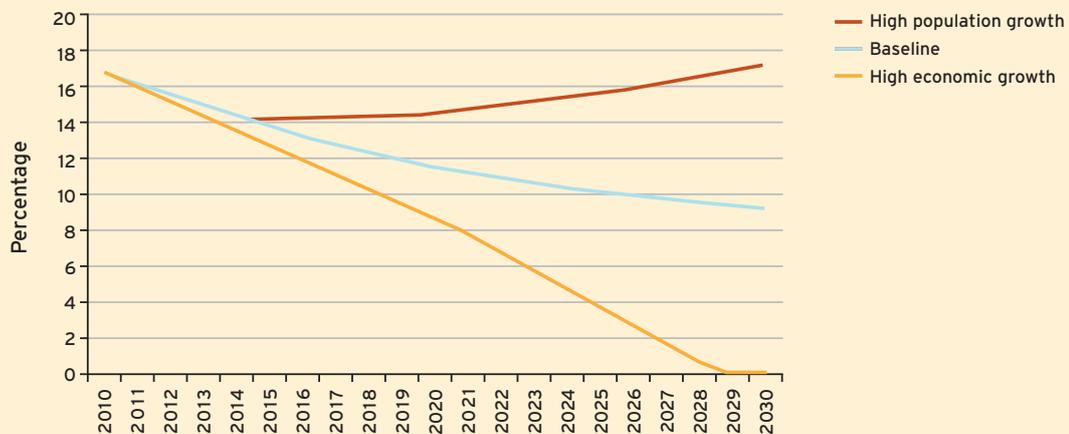
- Informal settlement housing by its nature is very difficult to understand because there is very little data, for example, on the relevant cost structures, income levels, employment rates, etc. However, if there is a relationship between the well-developed or properly functioning housing markets, we can get a good understanding of how the informal housing market segment can be expected to develop. For example, as more people move into the affordable housing market, there will be fewer people moving into the informal housing market.
- With this approach, the estimated number of households that come into the housing market every year (about 200 000) is broken down into the percentages of people expected to move into the other various housing market segments.

The informal housing market is then derived as a residual.

- The equation used in this study tells us the number of houses that people will be willing and able to buy at a given price and at a given income level. Using this equation for all provinces, we are then able to estimate the number of households that will be going to live in informal settlements.

From the results, three scenarios were developed:

- The baseline scenario is that the government will continue to deliver subsidised housing at a rate of 220 000 units per year, which is also the target that the government has set itself, assuming economic growth of 4% and household growth of 1%.
- The high population growth scenario is the same, but assumes 2% household growth.
- The rapid economic growth scenario assumes 1% household growth, with economic growth of 7%, as announced by the President Jacob Zuma while visiting China recently.



Percentage of households living in informal houses: Three scenarios

Source: DBSA

In the baseline scenario, the starting point is around 16% of South African households living in informal housing, with the economy continuing to grow at 4% and households at 1%. If the government continues to provide subsidised housing at a rate of 220 000 units per year, then by 2030 the number of households living in informal housing will be around 9,2%. In the high population growth scenario, this figure will increase to 17,4%. In the rapid economic growth scenario, there will be no households living in informal housing by 2030.

This analysis, however, does not take into account the effects of certain supply-side interventions that are being planned. These include the R1 billion Housing Guarantee Fund; the purchase of 6 000 hectares of land for rental housing units; and the Affordable Rental Housing Programme. They were not factored in to the analysis due to a lack of adequate data on the supply-side impact of similar interventions in South Africa. This would require further research.

*As more people move into the affordable housing market, fewer people will move into the informal housing market*



## Key drivers of sustainable human settlements continued

### Reaching further towards sustainable human settlements

*Catherine Cross, Economic Performance and Development, Human Sciences Research Council*

To overcome exclusionary apartheid spatial planning, the Freedom Charter provides that: "Slums shall be demolished and new suburbs built where all shall have transport". The Presidency has, therefore, placed housing under a new Ministry of Human Settlements, as "housing is not just about building housing. It is also about ... building communities with closer access to work". This wider vision of delivery points to transport, migration and housing as key factors in sustainable human settlements.

Spatial planning of service delivery, together with housing delivery, will be critical to human sustainability. People need decent housing tailored to the needs of the specific population. Settlements should be a good location, with access to places of work, economic opportunities, infrastructure and services, especially transport.

Apart from issues such as settlements' needs for housing, jobs and infrastructure, the matter is compounded by financial constraints. Government spending per person has risen from R6 800 in 1995 to R10 560 in 2007. The social grant system now benefits a quarter of the population, which is over 14 million people. Although the economy is struggling to expand, housing and transport budgets have continued to rise. Government spending must become more effective and cost effective, with closely targeted spending on infrastructure and housing.

The government's strategy has been to provide poor families with free subsidised housing as a platform for self-investment and savings. The national route out of poverty is, therefore, the housing asset core, which allows families to save up further assets to protect them against economic shocks. Within one lifetime they should be able to save enough to get themselves out of poverty, keep their children in school and stay in the job market.

Sustainable settlements therefore require the right kind of housing assets, along with the right kind of services. If not, people will not stay there. They will abandon or sell their dwellings and move on. The ideal is for people to settle down and start with their accumulation profile, instead of moving all over trying to get into a better location. This requires adequate

physical infrastructure and affordable transport that gives people access to the job market (especially the youth) and the wage market.

In spatial planning, housing delivery is the first modality of the government's antipoverty delivery, as service delivery ultimately depends on housing delivery. Given formal housing in a certain place, roads, sanitation, electricity, etc. are delivered at the same time, which is not the case with self-delivered informal housing. Nevertheless, it is not necessarily a good idea to try to eliminate informal housing altogether.

The matter of access to transport is, however, vital. Housing has to be a package that includes transport, especially for the poor population in cities. Taxis may be energy efficient, but they are very expensive, more so for poor commuters. Jobs are the single most important reason for urban access, along with government services, education and healthcare. Transport is the main way to bring together location, job access and area functionality.

To achieve greater control over where shack settlements develop, transport and transport subsidies offer the best planning lever. People tend to settle around train stations, along taxi routes and highways, and at crossroads in rural areas. People will settle wherever they can get transport; it is their priority requirement.

Outcome 8 of the government's delivery agreement is expected to put 400 000 formal units on well-located urban land, together with transport and services. If the planning is not very sensitive to delivery implications, it is likely that the inhabitants will not be the unemployed poor, but rather the working poor and urban elites. Overcoming poverty means helping the unemployed, especially rural migrants coming to cities.

Demographic hot flows are into central business districts (CBDs), metro peri-urban zones, secondary cities and settlements on city fringes. We can expect to see programmes for making urban land available to the in-migrating poor, using state land as close to the city as possible. However, rural migrants crowding into small towns with no employment base will remain



Source: International Labour Office (ILO)

*Transforming shack areas into sustainable human settlements is a national priority*

a problem. Families losing their foothold in the farming sector will continue to move to the nearest small town, whereas others will drift deeper into the urban zone and end up in shack settlements. Although having shack settlements penetrating the metro cities may seem like a bad idea, in a way shack dwellers are better off economically if they are in reach of economic opportunities.

The Integrated Planning Development and Modelling (IPDM) project is working towards developing a new planning aid for integrated development plans. It is based on survey data, using demographics to link migration to community profiles. This offers a new demographic typology of settlement down to the micro local level, and allows planners to read off community needs at a community level. An important finding is that traditional mud and thatch homes are fast disappearing and there is a rapid spread of brick housing across the rural areas.

The largest single settlement type is old townships. These families are generally poor, but 70% or more have a self-built dwelling of a decent quality, which shows that people accumulate assets by using housing as a vehicle for savings. Compared with most other developing countries, South Africa does not have that many slum areas with shacks. Lastly, there are self-development areas, which are new settlements with owner-built, decent-quality housing on informal land. They are frequently on tribal land, but do not have services. Because all these kinds of houses have already been built, local municipalities find it difficult to establish infrastructure in these areas.

The IPDM survey results underline the value of capital formation in informal housing assets. The estimated

total housing value for a single rural community reaches R10 million to R25 million on the informal market. A preliminary estimate for the study area of Gauteng, Sekhukhune and Northern Mpumalanga is R12 billion in the poor communities. Therefore, by combining subsidised housing with informal self-built housing, sites, services and rentals, the government's quest to house the poor can be completed faster. Spatial planning for land release, building subsidies, services and transport delivery can help to build on this trend.

We have to consider that not all households have the same needs, or want the same kinds of destinations, but knowing why households have migrated does tell us what poor people are trying to do there. All settlements have a specific functionality, and for successful delivery, spatial planning would need to match functionality to the constituency. For example, central-zone shacks close to the CBD have a young, male, work-seeking constituency. They live there on a temporary basis in quite harsh conditions, but they expect to endure hardships because it is the cheapest accommodation near the job market. They do not expect to be there forever. In the peripheral shacks just outside metro cities the population is a bit older; it is more stable; there are more women; and it is a more residential constituency in slightly better conditions. Many of these shacks may actually be of a quite good quality.

As regards shack areas in the CBD zone, metro cities want to help the poor but have to neaten the central city for investors. They therefore spend a great deal of money on clearing and upgrading central shacks and moving the population out to the peripheries.

## Key drivers of sustainable human settlements continued

However, these central shacks are absolutely key to employment search for the poor. They do not regard them as poverty traps and have moved there deliberately because they want to be close to the job market and do not want to pay much for their accommodation or transport. They expect to move up to better housing once they capture a reliable income stream.

It becomes evident that the poor living in shacks can be excluded from the economy by removal, and even by upgrading their dwellings before these households are able to sustain formal housing. With upgrading, the value of the housing increases and it becomes attractive to people who are financially better off. They tend to move in and the unemployed poor, who can no longer afford the living costs, move out again and may start over in a new shack area with cheap dwellings.

The core zone shacks are, therefore, not a standard residential area. Formal housing is not actually what these people are looking for, can afford or really need. The central informal settlements provide temporary, inexpensive housing. It is an “escalator” area that people occupy as long they need to, and then move upward out of poverty. These areas have a through-stream, with people coming from a rural area, landing a job, securing their income, and then moving on.

Permanent housing does not actually serve this functionality. People tolerate the conditions because they are young and they are saving money; it is not the same as a lifelong sentence to poverty.

Transforming the shack areas into sustainable human settlements is a national planning priority. We will have to look at resequencing such upgrading initiatives. For upgrading to be successful and for the delivery of better standards of formal housing, it would be critical to identify the right point for permanent housing delivery. When are people ready to take on the costs and responsibilities of permanent formal housing?

According to the IPDM study, the most popular areas for good-quality, self-built housing is at the urban peripheries - the informal suburbs and peripheral shack areas. The accommodation there can be upgraded without any problems. People living in those areas tend to be able to tolerate the expenses of permanent housing. However, for them inexpensive transport into the CBD is critical, as are transport subsidies.

A new spatial framework for planning that engages shack areas might be needed. We might also need to consider that there will always be shack areas because we need them, not because we cannot get people into any other kind of housing.

## DAY TWO afternoon parallel session

### Environmental and risk reduction considerations

Chairperson: David Jarvis, Divisional Executive (Strategic Operations), Development Planning Division, DBSA



Source: South African National Biodiversity Institute (SANBI)

*Biodiversity reduces risk*

#### How do we mainstream biodiversity conservation in urban settlement planning?

*Anthea Stephens, South African National Biodiversity Institute (SANBI)*

The South African National Biodiversity Institute (SANBI) is a public entity under the Department of Environmental Affairs. It was established in 2004 when the Biodiversity Act 10 of 2004 was promulgated and its mandate is to look after South Africa's biodiversity. Biodiversity and planning for biodiversity is important to creating sustainable human settlements. The tools to do so are available and accessible to everyone, particularly those outside the sector.

Biodiversity is essentially about the natural variety of life on earth - the habitats and species and the systems that connect them. South Africa is among the top three countries in the world with its exquisite biodiversity. We really have something unique and important to look after in terms of our biodiversity.

Many of the country's production sectors depend on its biodiversity. There is interaction and interdependence between biodiversity and our economic growth. Biodiversity creates jobs, such as the many "working for" programmes, for example Working for Water, Working for Wetlands, and Working

on Fire. Many of these jobs are about managing the country's biodiversity better, which is a huge aspect of the green economy that is so important to its economic future.

Good use of biodiversity helps reduce the country's reliance on chemical inputs and also reduces the input costs of farming, for example. Farmers are very important stewards of their land, looking after the water resources and actively preventing overgrazing. SANBI's approach to managing biodiversity is to support and encourage it, and not to put it into nature reserves or behind fences. It is about how we manage our production landscapes, such as commercial farms, communal farms, timber plantations and cities, which contain biodiversity.

Biodiversity is critical in delivering water resources, in terms of holding water in the land and then slowly releasing it into rivers and wetlands throughout the year, thus ensuring that the rivers flow in the dry seasons. It is also significant in terms of cleaning the water, as the microorganisms in water corridors play

## Environmental and risk reduction considerations continued

a very important purification role in water resources. Moreover, intact biodiversity (for instance, in coastal buffers) plays a phenomenal role in reducing the country's vulnerability to risks, such as drought, tsunamis and storms.

President Jacob Zuma made these statements on the close dependence between biodiversity and economic growth in his keynote address to the Green Economy Summit in 2010: "... We undertake to pursue and further explore the concept of 'green jobs', including scaling up labour-intensive natural resource management practices that contribute to decent work and livelihood opportunities. We are, in particular, pursuing investments in projects and industries in the fields of marine aquaculture development, wildlife management, waste services and ecosystems rehabilitation programmes... and our renewable energy targets will be enhanced by creating an enabling environment for renewable energy. We also understand a green economy to be even broader than that. It should seek to address the interdependence between economic growth, social protection and the preservation of natural ecosystems. In the midst of the global economic crisis, the United Nations Environment Programme called for a Global Green New Deal. According to this, governments are encouraged to support a greener economy that creates green jobs, promotes sustainable and inclusive growth, and advances the Millennium Development Goals. Today, at this summit, we are responding to that call."

The question is how to factor biodiversity into planning for its persistence; in other words, how to plan for managing biodiversity so that it continues to provide these services. South Africa has some of the most advanced and scientifically grounded approaches to biodiversity planning. It is based on quite simple concepts, like understanding that we do not need to conserve the entire landscape. What we need is a representative sample of species (a "biodiversity pattern"), as well as ecological processes, riverine corridors and habitats. We know how much of something we need to conserve, and the thresholds and targets of efficiency that we need to maintain.

SANBI has approaches for minimising conflict with other land uses. For example, if a piece of land is planned for timber plantation, it is probably not the most important land for biodiversity. We are not into that kind of "land grabbing"; it is about looking how

we can harmonise land uses as far as possible across the landscape.

Moreover, climate change has to be factored in, where planning for climate change adaptation offers very important opportunities for biodiversity management and vice versa. For example, when planning for climate change we look at identifying the cooler southern slopes of mountains where species will have a greater opportunity to adapt to climate change and warmer temperatures. We are looking at riverine corridors where there is an opportunity for better movement of species along the landscape.

All these points are entered into computer programmes that help us to generate maps showing exactly where the important biodiversity is. For example, an early map for Gauteng shows where the irreplaceable, important and currently protected sites are. It looks like a lot of land in this province, but when we start targeting the very critical areas that need to be conserved, it is not that much. However, the ideal is to have contiguous corridors on the landscape, and not a fragmented, patchy approach.

A recent map of Mpumalanga shows pockets of areas that are critical to conserve for biodiversity. Very often they are found on commercial farms. In the interests of maintaining economically productive farmland, it is about working with farmers and their grazing management practices, for example, to ensure that the biodiversity in these pockets continues.

Maps such as these help us to integrate managing for biodiversity with managing other land uses. How are they integrated into development and urban settlement planning? Provincial plans are maps of the critical biodiversity areas. They are translated into either biodiversity sector plans or bioregional plans, which are plans at a district or local municipality level. These plans are then integrated into our integrated development plans (IDPs), spatial development frameworks (SDFs), environmental impact assessments (EIAs), strategic environmental assessments (SEAs), coastal management programmes, the State of the Environment Report, and so on.

These biodiversity sector plans are the tool that local municipalities use when planning and engaging in other processes. The plans show where important biodiversity is located in the landscape and which land-use opportunities will harmonise and align with these critical areas. One of SANBI's focuses is to

work with local municipalities to provide them with the information and know-how to develop these bioregional plans.

The information is available on SANBI's website platform, called Biodiversity GIS. This is, in effect, a land-use decision support tool that is used to a phenomenal extent by consultants, EIA practitioners, planners, and the like. It takes a land parcel, runs it along many different layers of information (species, corridors, geology, etc.) and produces a report which tells you exactly what is happening on that piece of land from a biodiversity and ecosystem services perspective.

An example follows of what happens when biodiversity is not planned for. A settlement in the West Rand District Municipality in Gauteng was built right in the middle of a wetland. Due to the permanent saturation, the residents are unable to utilise their backyards; the children cannot play there; buildings have rising damp; concrete is saturated inside; and there has been a lot of damage. The access roads are permanently saturated, so vehicles have to be parked quite far away from homes, which makes them vulnerable to theft. There are also mosquitoes and other insects that breed in the permanent standing water bodies. On the biodiversity map we see that the wetland is situated on a hillside and it would probably have been difficult for somebody who is not an expert to identify it. Unfortunately, the wetland is not going to go away -

it is fed by groundwater, and the houses will need to be moved.

The next example is of a settlement outside a wetland. There is some rehabilitation work being done in the middle of the wetland just in terms of managing head-cut erosion. Wetlands are very important for managing flood attenuation, particularly in urban settings where there is a huge run-off during storms. They also provide vital corridors that allow for the movement of species in an urban landscape. They help to improve water quality by slowing the water down and filtering it through the wetland. They help to reduce erosion and sedimentation, which would otherwise end up in dams and lakes. They also have useful recreational value.

If such spaces are recognised for their values and managed properly, their benefits can be harnessed to improve residents' quality of life and wellbeing. By mainstreaming biodiversity into urban settlement planning we are looking to create win-win outcomes that reduce the conflicts and trade-offs that are often necessary between biodiversity and development.

Planning upfront with biodiversity in mind and looking to maximise biodiversity will help to reduce costs down the line. Doing such planning upfront facilitates more efficient decision making; helps to unlock development opportunities; saves money; and, ultimately, creates better outcomes for humanity's wellbeing.

## Green buildings: Rocket science or not?

*Ingrid Verwey, Architect and Specialist: Enterprise Development, Advisory Unit, DBSA*

A green building is energy and resource efficient, environmentally responsible and contributes to sustainability. It incorporates design, construction and operational practices that significantly reduce its negative impacts on its environment and occupants. Green buildings create healthier environments to live and work in.

Regeneration is the new buzzword, where we go beyond sustainability to regenerative approaches and systems, and produce rather than simply use. Degenerative systems, such as conventional and even moderately green systems, require more energy - too much is used and too little produced. They decrease resources and are fragmented and self-destructive.

Sustainable systems with the appropriate technologies and techniques are in the middle of the continuum and have a neutral ecological footprint. Moving higher up are restorative systems (whole system thinking); reconciliatory systems (the focus is on the synergism of living systems); and regenerative systems (where humans assist in regenerating systems). In the highest system, humans are no longer dependent on all the damaging things lower down the continuum and they live in complete harmony with the natural environment.

Individuals, companies, corporations, etc. are making a good contribution to being environmentally accountable when they:

## Environmental and risk reduction considerations continued

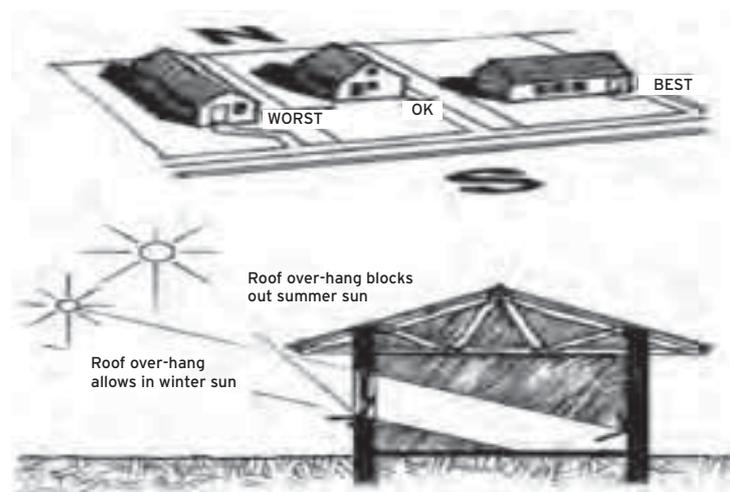
- Are at the forefront of environmental technology knowledge
- Encourage environmental management and apply it in their own infrastructure
- Promote buildings that save energy and proactively prevent peak demand
- Save water
- Save money through reducing operational and recurrent costs
- Prevent the destruction of irreplaceable natural resources
- Promote recycling and waste management
- Contribute to reducing air pollution
- Contribute to enhancing the quality of air in buildings
- Contribute to improved user-friendly buildings that increase productivity
- Provide individuals with control of their indoor environment (e.g. opening windows)
- Raise awareness and serve as educational models

Passive solar design (PSD) for buildings has become very topical. It helps to reduce energy consumption and ensures comfortable accommodation. Climate obviously plays a major role in the design. Local climate conditions, such as the sun's movement, the prevailing wind direction, changing temperatures and humidity, vary and need to be considered. For example, north orientation of a building ensures that as many well-used spaces face north as possible. Suitable roof overhangs let in the low winter sun, but shade the rooms from the high hot summer sun.

Insulation in the roof and walls, which is always a good investment, helps to keep the inside temperature warm in winter and cool in summer. Adequate windows (an average of 30%) let in light and catch the winter sun, but should not be too large so that warm or cool air cannot be retained. The use of airbricks, forced ventilation or simply opening windows allows fresh air and cool breezes to circulate. Natural lighting through windows and light wells reduces the need for artificial lighting. Choosing the right building materials makes a difference. For example, concrete floors and brick or clay walls absorb heat from direct sunlight and release it again at night.

As regards landscaping, evergreen trees or shrubs block strong winds in winter. Deciduous trees provide shade and reduce sunlight reflection in summer, but let sun through during winter, which helps to reduce the need for artificial heating and cooling.

Weather sealing is a further important aspect. A significant amount of energy is lost from homes and buildings if the structure is compromised. Air leakage can result in 40% of the energy being lost. Ensuring that the building's "envelope" is continuous and consistent is fundamental to minimising this loss. Doors and windows are the most significant areas of concern that can be addressed at little cost and without the help of a contractor. Any investment made in weather sealing is recovered within two-and-a-half years through reduced energy bills.



A roof over-hang on the north side of the house should let in winter sun and shade rooms from summer sun

Another instrument is the Builder's Toolkit, award-winning South African computer software developed by the University of Pretoria. It calculates the energy benefits of orientation, ceilings, insulation, shading, wall and roof colour, window size, window type and ventilation on internal building temperatures for specific climatic conditions. It also calculates the energy required to maintain the building's internal temperature at an acceptable level throughout the year.

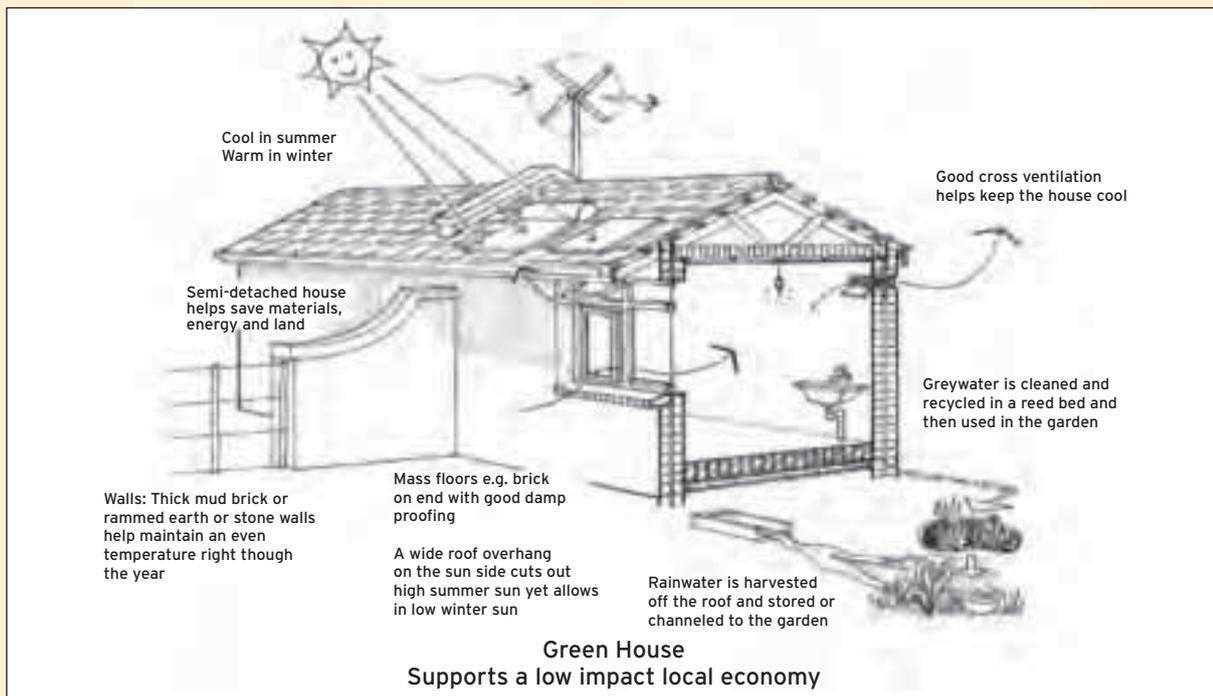
The University of Pretoria, the Green Building Council and the Human Settlements Department conducted experiments where low-cost housing was grouped into three categories. In the first, homes with no-cost interventions used materials like clay or concrete block walls and orientated the building correctly. In the second, immediately beneficial capital cost interventions included ceilings, insulated ceilings and aluminium-foil roofing. The end users of low-cost buildings often cannot afford such interventions, but it would be a good investment by the Department of Human Settlements. The third category consisted of no-value interventions. They found that having cavity walls (two skin walls with an air gap), a tile roof, window shading and an exterior colour did not always have the desired energy-saving effects.

South Africa now has a green building rating system for commercial buildings, called Green Star SA, which was developed by the Green Building Council of South

Africa and is based on the system used in Australia. Its objectives include establishing a common language and standard of measurement, and reducing the environmental impact of development. Nedbank in Rivonia was awarded the Green Star for its new building. Green Star certification can be obtained during planning, implementation and construction, and for operating and maintaining a building.

The South African Bureau of Standards (SABS) has developed SANS 204-1, 204-2 and 204-3 as energy-efficient standards. The aim is to encourage the implementation of passive solar design in the residential and commercial sectors. The DBSA's Welcome Centre is an example of some of the principles discussed here, as is the new Pick 'n Pay in Johannesburg with its natural light, 40% energy saving and use of renewable energy sources to help light, warm and cool the site. A really ambitious and high-performance example is Masdar City in Abu Dhabi, a whole city using green principles and applied technology. It is the world's first carbon-neutral, zero-waste city, which generates 100% of its energy and is performing very well.

Rocket science or not? Yes and no. Simple principles that are implemented can effect huge cost savings. More complex buildings require the same principles, but involve somewhat better thought processes and enhanced technological modelling.



The impact of green housing on the local economy

Source: DBSA

## Environmental and risk reduction considerations continued

### Disaster risk reduction in settlements: A spatial planning context

*Krisno Nimpuno, Disaster Preparedness in Africa Office, University of the Witwatersrand*

From the early 1970s I have been working in various countries in Africa. While I was stationed in Mozambique for the United Nations, different departments within the United Nations Development Programme (UNDP) and other agencies used me in all kinds of emergency situations, such as floods. When I began looking into the mechanics behind disasters, I realised there was a great probability that disasters would become a very big issue. Not intending to make my living on disasters, I continued to work as an architect and teach about housing and settlement issues. However, since I had been exposed to those issues in eastern and northern Africa, I picked up the news about them more and more, and found the confirmation that those trends that I feared earlier on were becoming more visible.

Thinking about it, I could really see a number of those elements that had caused earlier hazards, which people could still manage, becoming very dangerous. One such element is population growth. Combined with excessive and unplanned urbanisation, it creates an environment that is an invitation for disasters to happen due to uncontrolled exploitation of the resources all around us - water, vegetation, stone, sand, etc.

While teaching at the Institute for Housing Studies in Rotterdam and at the Postgraduate Institute in Bangkok, I raised these issues and found that practically everybody I met was in total denial. It was like when Sweden introduced safety belts in cars during my student days. It was a long and difficult process before everybody was willing to buckle up, because they did not believe that they could have an accident.

The International Decade of Natural Disaster Reduction was from 1989 to 1999. When all the different issues were put together, the picture looked rather grim all over the world, but more so in Africa. One of the things that we knew at that time, and later when I was working for the United Nations Centre for Human Settlements in Nairobi, was that within 25 years half the population in Africa would be living in urban settlements and probably more than 70% in unplanned illegal settlements. The question was what that would mean for our collective security.

Everywhere we travelled, we encountered this reluctance to look at disasters. The common response was "we have no disasters", or "we have no earthquakes". I would remind the person that there had been an earthquake years ago and if it happened again, tens of thousands of people could die. Only a few died at the time because there were only a few brick buildings; the rest were huts made of natural and flexible material, so nobody got hurt. But what if it were to take place in a city? The answer would invariably be: "Trust me, it will not happen."

I went to South-East Asia, to my home country in Thailand after the tsunami in 2006, and people asked why so many had died and hundreds of villages and towns had disappeared in the northern part of Indonesia. It was because there had been a civil war in that area for a very long time, which meant that development planning regulations were shelved. If someone wanted to develop a town, or build a clinic or school at the coast, nobody would stop them. Then the tsunami came.

Just after it happened, the Chief Director of the National Disaster Management Centre in Pretoria, whom I knew very well, was being interviewed on the radio. He said, among other things, that it had happened in South-East Asia, and luckily, South Africa had no tsunamis. The next time I met him, I asked whether he had developed a law against tsunamis - all countries with a seaboard are vulnerable to them. Although earthquakes are rare, South Africa is not immune to them and they could happen.

Four or five years ago, there was a considerable earthquake in Mozambique, which is natural because it is the extension of the Rift Valley; that is, the break line where Africa will be split into two parts. The countries around all those lakes, down to the border of South Africa, will drift and join up with the Himalayas in due time. This means that earthquakes will happen in the meantime.

Our greatest enemy is denial. I have been to disaster areas after the event to look at the mechanics and see how the authorities reacted. In Catalina, for instance, there had been a joint exercise of the universities, the province and New Orleans City Council one year

before, where they looked at a worst-case scenario if a cyclone were to hit the area. What they found is exactly what happened one year later. If one reads those reports afterwards and compares them with what really happened, it is astounding. The conclusions from that time were that the area around New Orleans, the low-lying lands where most of the black population lives, were bound to be flooded, and that is exactly what happened.

Fifteen years after Ethiopia had established its National Disaster Centre, South Africa put up a national centre and adapted the relevant law. The problem is that the disasters are still allowed to happen, in the sense that we are surrounded by hazards, such as tsunamis, storms, droughts, floods, earthquakes and wild fires.

One person may die in an earthquake because his house was built with a weak cement mixture and fell down, but his neighbour's house will stand because it was built well. Technically, we know all about the things that constitute a hazard. What causes the disaster is not the hazard; it is the vulnerability, and the vulnerability is what we create, for example by building a house next to a river.

When I lived in The Hague in Holland, my sitting room was dry because there were city fences all around, and there was an arm of government that operated outside of the government and politics, which had to control the groundwater level. This arm was independent; it had its own elections and its own taxation. It was effective and reduced the vulnerability of being below sea level. Vulnerability is the real cause of disasters.

Another vulnerability that we have created is climate change. For example, when driving to Rustenburg there was a haze all around and my car changed colour from silver to yellowish-brown. This is because years ago people cut down the trees for firewood and now the whole area is bare and is slowly turning into a desert. When the drought hits Namibia and Botswana, it will also affect South Africa severely.

Climate change is expected to increase droughts and floods in South Africa. There will be more storms along the coast. The effects of the floods and droughts will be landslides and wild fires, and also an increase in pests.

However, the two biggest dangers that South Africa faces have nothing to do with climate change. One that really worries me is technological disasters, such as things happening in and around the mines, and nobody seems to be taking care of it.

The second is civil strife, and there is not very much needed before this can become a national disaster. It is happening all over the place in our neighbouring countries, and it can develop into something very ugly, like in Luanda, the Congo and elsewhere. A little population movement, plus a country with great contradictions and much internal frustration, can turn so-called minor population shifts into a national disaster.



## DAY THREE

PRIORITISATION AND FUNDING OF INTERVENTIONS  
THE POLITICS OF SPACE: SOUTH AFRICAN CITIES IN 2030

# DAY THREE plenary session

## Prioritisation and funding of interventions

*Chairperson: Anton Arendse, Department of Human Settlements*



Source: DBSA

*In the human settlements value chain, it all starts with available land, followed by bulk infrastructure and property development*

### Infrastructure planning, financing and investment: A DBSA perspective

*Cyprian Marowa, Unit Manager, Business Development and Marketing, Investment Banking Division, DBSA*

In the human settlements value chain, it all starts with available land, followed by bulk infrastructure and property development, and then the unit goes to the beneficiary. There are, therefore, various stakeholders with varying interests and this mix is what challenges the realisation of the human settlement intervention.

As a stakeholder, the Development Bank of Southern Africa (DBSA) deals with several issues that relate to the interactions of the various stakeholders, such as institutional bottlenecks and irregular cash flows. The magnitude of the intervention required means that the Bank spends a great deal of time interacting with different stakeholders to get an in-depth knowledge of the key players, their interests and expectations.

The need, however, is clear. Although more than 2,3 million housing units have been made available for nearly 11 million people, large backlogs still prevail. There is insufficient affordable housing stock for low to middle-income earners. The challenges essentially revolve around the availability of land for providing housing in certain sectors. The predominant challenge, however, relates to fundability, or the availability

of cash flows that eventually come back to repay the funding.

In addition, a severe gap exists within the wholesale generation of stock on the municipal side. It takes municipalities a long time to release land for projects. Wholesale developers are unwilling to take on the risk of bulk developments that are not bankable. Bulk infrastructure financing is difficult in poorer municipalities with minimal economic activity.

Market dynamics play an imperative role. For example, 16% of low-income households do not have adequate housing or access to essential basic services. Government estimates are that over R345 billion is required to meet the demand for housing over the next five years. The government is to spend R16 billion on building new houses and sustainable human settlements for poor South Africans in 2010/11.

The DBSA has a very specific focus in which investment activities take place in sectors that have to do with housing development in metros and second-tier cities; retail and commercial developments in

## Prioritisation and funding of interventions continued

townships; and bulk infrastructure for water, sanitation, storm water drainage and electricity.

The Investment Banking Division has recognised the urgency to facilitate and finance human settlement projects undertaken in partnerships with both the private and public sector. Funding structures in the sector include a combination of senior debt, equity and mezzanine finance secured against future property sales and rental streams. Funding for housing and retail developments goes mainly to experienced developers in the private sector looking to purchase land or existing properties, to secure the rights and to develop or refurbish them.

Property developments cannot be realised without the installation of bulk infrastructure, the easing of institutional bottlenecks and proven environmental

impact assessments. The DBSA requires innovative solutions to play a constructive role in bulk infrastructure development. It takes an integrated approach and a Bank-wide effort to how it looks at projects, and supports the human settlements agenda across a range of areas.

The three kinds of intervention by the DBSA are illustrated below. The first is direct municipal lending, which is the traditional method of lending. Here the responsibility of the municipality is central.

The second kind of intervention is municipal bridging finance, a build-operate-transfer mechanism is introduced. The municipality does not have the balance sheet to provide finance at the scale required to meet the demand in its sectors. We know that it will receive funding from the fiscus over a period of, say,

### DBSA Intervention: Direct municipal lending

<b>Municipal profile:</b>	Creditworthy with credible balance sheet
<b>Stakeholder:</b>	<b>Role:</b>
<b>DBSA</b>	• Arranger and underwriter of senior debt
<b>Municipality</b>	<ul style="list-style-type: none"> <li>• Identify land for development</li> <li>• Arrange balance sheet funding with the DBSA and other potential partners</li> <li>• Appoint contractors and engineering firms to plan and develop land</li> <li>• Sell developed land to property developers</li> <li>• Pay over the bulk service portion to the DBSA as and when recovered through sales, as well as periodic bullet payments from the balance sheet at certain loan tenure milestones</li> <li>• Manage construction risk with counterparties</li> </ul>
<b>Contractors</b>	• Undertake all bulk construction to the site boundary (sanitation, electricity and water)
<b>Engineering</b>	• Perform engineering services (technical layout, etc.)
<b>Property developer</b>	<ul style="list-style-type: none"> <li>• Pay for land and bulk service cost recovery over to the municipality</li> <li>• Develop top structure (property, reticulation, etc.)</li> </ul>

### DBSA Intervention: Municipal bridging finance

<b>Municipal profile:</b>	Credit unworthy, high risk
<b>Stakeholder:</b>	<b>Role:</b>
<b>DBSA</b>	• Underwriter of senior debt
<b>Municipality</b>	<ul style="list-style-type: none"> <li>• Identify land for development</li> <li>• Arrange balance sheet funding with the DBSA and other potential partners</li> <li>• Appoint contractors and engineering firms to plan and develop land</li> <li>• Sell developed land to property developers</li> <li>• Manage construction risk with counterparties</li> </ul>
<b>BOT developer</b>	<ul style="list-style-type: none"> <li>• Appoint contractors and consulting engineers</li> <li>• Pay over recovered monies from Municipal Infrastructure Grant (MIG) allocation directly to the DBSA as per the Medium-Term Expenditure Framework (MTEF) to settle the municipal bridging loan</li> </ul>
<b>Contractors</b>	• Undertake all bulk construction to the site boundary (sanitation, electricity and water)
<b>Engineering</b>	• Perform engineering services (technical layout, etc.)
<b>Property developer</b>	<ul style="list-style-type: none"> <li>• Pay for land and bulk service cost recovery over to the municipality</li> <li>• Develop top structure (property, reticulation, etc.)</li> </ul>

three years and we know those amounts. The DBSA, therefore, provides financing now and bridges the financing requirement now, on the basis of future allocations from the fiscus. The municipality is still playing a central role, but the DBSA is taking a stronger position than the traditional lending method.

With the third kind of intervention, the build-operate special purpose vehicle (SPV) the municipality has no balance sheet or other source of income to speak of. Under these circumstances, the DBSA takes a build-operate approach and an owner approach where an SPV is set up. Development takes place based on a known set of cash flows that are linked to the bulk service contribution. Typically, in a certain area that is to be developed, the bulk services contributions will be

earmarked for repayment and the SPV (whether owned by the municipality or by another party) is ring-fenced. Those cash flows are ring-fenced for the purposes of repaying the DBSA, which funds the activity to be carried out by the SPV with an agreement for bulk installation. Obviously, the municipality has to agree to the ring-fencing of those cash flows towards the repayment of the loan.

All the above interventions depend on very strong partnerships with stakeholders and municipalities. We currently have a case where we are going to try the third method, and such partnerships are really contingent on the relationship that the DBSA creates with the National Treasury, the municipalities and other stakeholders.

**DBSA Intervention: Build operate SPV**

<b>Municipal profile:</b>	Credit unworthy, high risk
<b>Stakeholder:</b>	<b>Role:</b>
<b>DBSA</b>	• Underwriter of debt/equity
<b>BOT developer</b>	• Arranger of debt investments from investors • Scheme necessitates upfront equity • Contract to build certain infrastructure for a municipality
<b>Municipality</b>	• All maintenance is undertaken by the municipality for its own account • All revenue billing and collections are performed by dedicated municipal resources • Sell developed land to property developers • Pay the BOT developer for infrastructure over an agreed period of time from payments by property developers in the demarcated area, as well contributions from the balance sheet
<b>Contractors</b>	• Undertake all bulk construction to the site boundary (sanitation, electricity and water)
<b>Engineering</b>	• Perform engineering services (technical layout, etc.)
<b>Property developer</b>	• Pay for land and bulk service cost recovery over to the municipality • Develop top structure (property, reticulation, etc.)

**The NHFC's perspective**

*Mr Luxien Ariyan, Policy Adviser, National Housing Finance Corporation (NHFC) and Professor, Housing Finance and Law, University of the Witwatersrand*

A paragraph on page 2 in the DBSA's concept document encapsulates much of the thinking that we have been sharing in forums such as these over the years and in decision-making meetings: "South Africa's human settlement patterns still reflect apartheid's spatial planning legacy. Much of urban development today continues to reinforce fragmentation and marginalisation with the growth of peripheral formal and informal settlements driven by migration, poor land-use management and lack of income. Likewise, many rural settlements in South

Africa are still characterised by a scattered, mostly unplanned population distribution, with very limited access to economic opportunities, transport and basic services."

The idea that we continue to exemplify the kinds of engineered space arrangements that apartheid spatial planning left as a legacy, is simplistic. It is quite obviously a simplification of what apartheid really did. The Group Areas Act, for example, caused a real situation where a set of Cape coloured twins had to

## Prioritisation and funding of interventions continued

live in separate provinces because they were classified differently on the basis of race. It was that ridiculous.

An enormous amount of resources were spent on making apartheid work and the bottom line is that apartheid simply could not work. We are trying to undo years of skewed planning and spatial engineering of a racially influenced landscape. Fortunately, there is economic mobility from people moving up career-wise and income-wise. Indians, Africans and coloureds are moving into upper-income areas. There is a racial juxtaposition and mingling in the high-income areas. However, in Soshanguve for example, there were 33 whites in 1996, and 42 in 2006. The same applies to Soweto. The old apartheid townships, therefore, are not seeing reverse mobility and are still racially skewed.

Section 25 of the Constitution talks about land; Section 26 about housing. The White Paper on spatial planning and land-use management by the then Deputy Minister, Professor Du Toit, says: "Land is an asset. Land is scarce. Land is fragile." This should be our point of departure in terms of engineering space. Mark Twain once said: "Buy land. They're not making anymore of it." Over the last few years, we have been obsessed with finding cheap, well-located land for human settlements. It is a myth, simply because in Gauteng, for example, land is retailing at R1 500 a square metre. One cannot buy a tract of land to build a R60 000 Breaking New Ground (BNG) home.

South Africa just has a very limited amount of land. In Gauteng alone, there are about 70 square kilometres of land available and these are dolomite areas - areas that are not going to be inhabited. Although we have not built new cities, we cannot wish away the existing ones. They need to be fixed in terms of the urban regeneration arrangements. Cities work organically. They grow into infancy, youth and adulthood. They age or die and are reborn, like Paris. Johannesburg was a camp of miners that became a village and later a city. Given Pretoria's southward growth and Johannesburg's northward growth, it may be one massive concrete jungle very soon.

If we try to fix the racial dynamics as well, we are trying to fix so many other things, and retrofitting can be prohibitively expensive. It might just make more sense and be more cost effective to look at green field developments on a mega-scale in terms of creating new cities and towns, such as turning small towns into bigger towns or small cities. We need to look at purpose-built settlements, an interesting example

being Abuja, capital of Nigeria. Due to ethnic and religious divisions in the country, Abuja was planned and built in the 1980s to replace the former capital city of Lagos. Brasilia, the capital of Brazil, has a very efficient transport network. People can enter and leave the city very quickly. These are the kind of things we can learn from elsewhere.

The example of Abu Dhabi was given in an earlier presentation. Our constraint is seen to be the lack of capacity in municipalities. However, if we can become less reliant on municipalities, we will not have to worry too much about them. We need to be less reliant on municipalities for electricity, water and waste management. This will also minimise the issue of bulk infrastructure.

We should not plan too far ahead into the future, for instance up to 2050. We should plan the basics for one generation, and the next generation will build on that. Also, we should not overdo the idea of planning being about people. It is actually about people, the planet and profit. It has to be all of those, not one to the exclusion of the other.

Though it is said people must own their problem, there should not be too much emphasis on ownership. For example, the Commission on the Restitution of Land Rights was set up to settle 64 000 claims over five years. After five years, only 16 claims were settled because, in terms of the Restitution of Land Rights Act, everybody had to be consulted to settle a land claim. Even people with peripheral interests wanted to be involved in decision making. There can be a tendency to overconsult and overinvolve, and there sometimes needs to be a pragmatic balance to involvement.

On a typical day on Earth, humans add 15 million tons of carbon to the atmosphere; destroy 185 kilometres of tropical rain forests; create 116 kilometres of desert; and eliminate between 40 to 100 species. We cannot leave things just to drift, there have to be interventions, purpose and direction. When planning new cities, we can purposefully create social inclusion, for example. We need to flip the Pareto principle around and instead develop 80% of housing land for affordable and BNG housing, and 20% for normal housing.

Moreover, we need innovations in housing. Some 75% of drinkable water in households is used in the bathroom. If we can capture rainwater, or design

roofs as a catchment for water, that water can go into a geyser and even a cistern. Also, when we wash our hands; the water goes into the cistern, which releases either three or six litres of water when flushed.

In terms of environmental sustainability, the problem is getting progressively and exponentially worse, with about 30-50 years' supply of oil left, and 100-150 years of coal and uranium. Resources need to be recycled. A typical glass bottle will take one million years to biodegrade. Aluminium can be recycled indefinitely; some 70% of our steel is recycled. Our alternative building systems and methodologies must be geared towards achieving the goal of recycling and a self-reliant electricity supply. Renewable resources are free. South Africa gets 3 000 hours of sunlight a year. We can use

wind turbines, and hydrogen pumped from seawater in a desalination process. Hydrogen cells offer an additional energy supply.

We speak about fixing cities and about creating new cities. In terms of the role of the National Housing Finance Corporation (NHFC), we would like to believe that we have pioneered social housing in this country. When Johannesburg and other cities were dying and banks refused to assist them, it was the NHFC with its small balance sheet that helped start funding in the cities. Social housing has taken off and the banks have now entered the picture. This is typical of the role of a development finance institution - it addresses a problem successfully, brings in other funders, and then leaves.

## A banking perspective

*André Kruger, Banking Council*

There are definite challenges facing our environment. For example, although 10 million citizens have been provided with basic services since 1994, 22% of households still do not have access to them. Municipal service delivery is approaching capacity levels, with significant backlogs in terms of new infrastructure and maintenance. The lack of infrastructure is impeding housing delivery. The supply of water and sanitation has reached a crisis point and electricity distribution challenges abound.

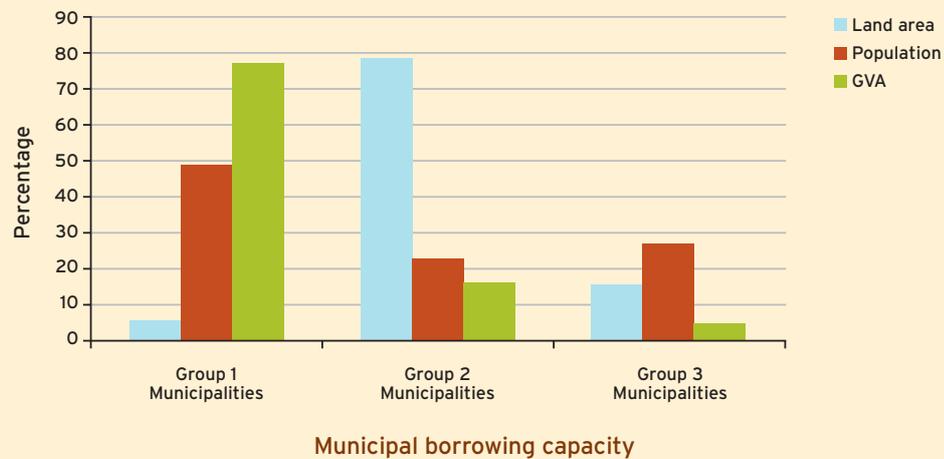
Of all the municipalities, only 27 have borrowing capacity due to their GVA, or income (Group 1); 140 have limited borrowing capacity (Group 2), and 70 have little or no borrowing capacity (Group 3). Few municipalities have a sufficient own revenue base to support sustainable infrastructure. Moreover, municipalities tend to have a high turnover of, and continuous reduction in, technical staff, especially experienced staff. There is a lack of suitably qualified personnel to whom to transfer skills. Apart from financial, staff and systems constraints, municipalities also lack proper asset (land) management and proper land-use planning. It is, therefore, very difficult and cumbersome to implement innovative infrastructure projects leading to housing.

To add to the list of challenges, tender processes are inefficient; contracting with both the public and the private sector is inconsistent or ineffective; and decision making is based on short-term, political considerations instead of capital investment imperatives. Utility and rates management - cost reflection, billing and collection - is poor, and the question can be asked why these functions are not being outsourced over the longer term to sufficiently qualified and experienced companies. Over 50% of municipal services are already being provided by the private sector, but through ineffective and inefficient short-term contracting.

Interpretation of legislation in the municipal field is a further challenge. The French Development Agency has started an initiative where top municipal housing planners and the heads of housing departments meet on a quarterly basis to discuss their challenges and potential solutions in a non-threatening environment. The South African Cities Network will be taking this valuable initiative forward.

Lenders, including the Development Bank of Southern Africa (DBSA), primarily focus on Group 1 municipalities. There is insufficient collaboration between the DBSA and private banks, a situation that will hopefully

## Prioritisation and funding of interventions continued



Source: National Housing Finance Corporation (NHFC)

change in future. There is a huge motivation to have a single subsidy system for dealing with land services and houses.

Funding sources from the banking industry typically include balance sheet-based bank debt made available through private banks and local and international development finance institutions. The European Investment Bank, the French Development Agency and others are already active in this market and they are expected to become much more involved, especially in the energy efficiency market.

A major issue for commercial banks has been liquidity during the recent recession and the current challenges facing the market with regard to long-term loans. Banks typically raise their funding from short-term investments from the market. Conditional grants offer a definite opportunity for municipalities to be able to develop infrastructure more quickly. Capital market municipal bonds is a small market that is developing slowly. Good governance and financial discipline are required here, as well as unconditional reports from the Auditor-General.

Third-party alternative funding arrangements, such as deferred payment-type models, factoring or invoice discounting, are being used but constitute a high risk because the government manages its own cash flow by not paying these parties quickly enough. Other alternatives are project finance, including public-private partnership (PPP) alternatives; supplier/industry equity and take-off agreements; developer contribution alternatives (e.g. for substations); export credit facilities; and private equity. Such project-based options are expected to be used increasingly in future.

For example, in a water project in the Rustenburg area, the mines provided equity, as well as take-off agreements, to provide water services with a view to establishing human settlements.

The government's role is to facilitate economic growth through the creation of sustainable infrastructure. It needs to design and implement capital investment planning strategies. However, proper long-term capital planning and proper asset management and planning are vital before municipalities can move to alternative service delivery mechanisms and contracts. It is also imperative that support- and delivery departments be aligned. There should be stronger collaboration between engineers and financial people in, for example, the matter of lifecycle costing.

Our observations have been as follows:

- Successful projects have been backed by strong political champions across the various spheres of government.
- Traditional infrastructure procurement methodologies, where the government entertains the whole process and keeps all the risk to itself, do not deliver infrastructure as and when required, and bear little evidence of value for money.
- The flow of alternative service delivery deals in South Africa is minimal, while many other countries are moving into a third and fourth generation of alternatives. An Australian study found that, in absolute terms, the cost advantage of PPPs over that of traditionally procured health projects was significant (11,4%).
- To quote an overseas state government: "A better service, not a better asset, is a key indication of successful asset management."

Suggestions from a Banking Council perspective are that the DBSA and the National Housing Finance Corporation (NHFC) have an important role to play in enforcing good practice in government through proper capital investment planning. There is a big scope for private banks working with the DBSA, and the DBSA assisting with risk mitigation resources and products in public infrastructure projects. This is already happening, but must be expanded quite drastically.

As mentioned, there should also be a single, simplified subsidy for land, services and houses, to enable the development of integrated human settlements.

Lastly, the interpretation of complex pieces of legislation - such as the Public Finance Management Act and the Municipal Finance Management Act - requires suitably qualified and experienced technical officials.



Source: DBSA

*The DBSA has an important role to play in enforcing good practice in government through proper capital investment planning*

## A private sector perspective

*Soula Proxenos, Managing Director, International Housing Solutions (IHS)*

By way of introduction, I really do believe that the development finance institutions (DFIs) are not coming to South Africa. I have had the opportunity to spend a great deal of time talking with them. The DFIs feel that South Africa is advanced and developed, and thus does not need them. They are under an enormous amount of pressure from their boards to move further north of the border. We will have to find our own solutions.

International Housing Solutions (IHS) launched the South African Workforce Housing Fund, a private equity fund of about R1,9 billion, in 2008. It invests in low and moderate-income housing in South Africa with private sector money for profit. The fund provides equity for affordable housing for rent and for sale in South Africa and beyond. The investors in the fund are mostly North American, and also include the

Development Bank of Southern Africa (DBSA), the Public Investment Corporation (PIC) and Citi SA. It is a ten-year fund and the first close was in 2008. We expect to finance about 50 000 units and about a third of the funds are already committed. Old Mutual launched an almost similar fund a few years later.

The IHS acts as a general partner to source, negotiate, close and manage projects. We work with developers and financial institutions, such as Absa, Nedbank, Standard Bank and the DBSA, to fund projects and work through developing projects, both for sale and for rental. Our thirteen committed projects to date will provide 23 000 units for families, for sale and for rental, and 82% of these units are compliant with the Financial Sector Charter (FSC), although we are not required to be FSC compliant.

Home ownership is a good thing, as it helps people build capital and create a stable society. People also take much better care of an asset if it is their own. There are times, however, when it is inappropriate to have home ownership and when rental would be better. For example, a family with roots in a rural area and the breadwinner working in the central business district (CBD) will not need to buy a house in the city, but would rather need to rent an apartment. Demand outstrips supply in the low and moderate income sector.

The IHS always works with a developer, as we are just financiers. One of our projects is Fleurhof, on the edge of Roodepoort and Soweto. The total cost is R1,5 billion and our fund equity contribution is R80 million. We unlock projects because we are willing to put down the equity. This is the first-risk position where most senior debt lenders will not lend because they are not equity players, but debt players. They require the security and a sensible loan-to-value ratio.

Fleurhof has around 9 500 units and is a full-scale Reconstruction and Development Programme (RDP) social housing project. It is a totally new community, with a large range of different houses. The developer spent a great deal of time planning a good layout of the land for future integrated development, such as crèches, schools and parks. On this project, the municipality actually asked if the developer could make the spacious layout "more dense". However, we believe thinking right about the community means that we make money, and therefore it is good business. We sold out on Phase 1 within the first few weeks of launching.

Another project is Jabulani in Soweto, with around 4 100 sectional title units. The project costs R1 billion and our fund equity is R35 million. It is extremely well located from a transport point of view, and is situated near a hospital, an auditorium, shops, a train station and schools. In return for releasing the land, the local government asked the developer consortium to build a R17 million theatre complex on that land and to give the theatre complex back. The units are very affordable and Phase 1 has sold out.

An example beyond Gauteng is a project in Eersterivier with 441 three-storey walk-ups and 31 retail spaces. Again, we have made sure it will be well located in terms of transport, and near shops, schools and places of worship.

Affordability is key. People are finding it difficult to secure end-user finance and that is driving prices down. A bank will withhold mortgages, either because people are overextended and indebted, or for its own interests. Rental is also a critical tenure option. In the CBD of Johannesburg, we converted the old Greatermans building and the old Stuttafords head office into affordable housing units. A further 1 000 units in several Aengus buildings were refurbished, primarily for students' housing. We also have a two-storey integrated living project in Protea Glen in Soweto, with 176 units for rental. This is a successful project in an area known for people defaulting on their mortgages.



*Jabulani integrated housing project in Soweto*

Source: International Housing Solutions (IHS)

## DAY THREE plenary session

### The politics of space: South African cities in 2030

Chairperson: Richard Dyantyi, Ministerial Advisor, Human Settlements



Source: Development Action Group (DAG)

*Juxtaposition of smoke and mirror - the co-existence of extreme wealth alongside abject poverty in urban centres*

#### The role of civil society in managing our cities: Social-cultural dimensions of sustainable human settlements

*Kailash Bhana, Development Action Group (DAG)*

In discussing the politics of space, it is critical to discuss the space of politics and the quality of engagement between the state and its citizens. In South Africa, the problem is not so much housing, but land and how it is used, which includes recognising the social value of land above its private consumption and commercial value. Land is a scarce resource. There is a real need to look at how civil society is able to engage in transparent land-use planning.

South Africa's urban population outstrips its rural population, as cities represent magnets of hope for a better life. There is pressure on cities to provide for the needs of growing urban populations. Urban centres have rapidly become the sites of contestation for resources, and poverty increasingly has an urban face, despite the vast concentration of resources in the cities. Daily, the struggles and dissatisfaction of the poor and marginalised are growing in prominence. Vast disparities in income and enduring poverty hold increased potential for social and, ultimately, political tension in the cities. The demands by the poor are a claim to their rights as enshrined in the Constitution,

and a call on the government for transparent and accountable governance that serves the majority of the people who happen to be poor.

South African cities are far from offering equal conditions and opportunities to their residents. A society cannot claim to be harmonious or united if large numbers of people cannot meet their basic needs while others accumulate resources and opportunities. While income inequalities are a major divisive factor, the spatial inequalities visible in so many cities are a product of both social and economic disparities. Yet cities have an immense potential to be vehicles for social change, forging a different growth paradigm and encompassing the social and economic benefits of greater equality, thus promoting positive outcomes for all citizens.

Since the early 1990s, the Development Action Group (DAG) has built a considerable track record in the development of community centre settlements through self-help housing delivery. Its work is preventive in nature and aims to reduce exclusion and

## The politics of space: South African cities in 2030 continued

increase social cohesion and inclusiveness. Central to this is the question of urban land, its ownership and use. For the poor, being close to employment opportunities facilitates improved livelihoods, and access to a range of services and networks contributes to the alleviation of poverty and inequality.

In South Africa, however, most low-cost housing is located on the fringes of cities where land is cheaper. Very often, this marginalises poor communities from city resources and opportunities. The value of prime central land on the open market has increased exponentially in recent years, making well-located land unaffordable for the state. It is forcing low-income housing developments to the periphery. Practices such as speculation in land and property markets also impact on the price of serviced land.

Markets for land are very skewed in favour of the private interest and frequently these powerful role-players are able to capture land and provide infrastructure, manipulating land-use patterns in favour of the gentrification of entire cities. In the process, the poor and their livelihoods are casualties of luxury developments and high-end users like shopping malls. The cumulative result is a city that remains highly segregated and sprawling, with an enormous financial burden to provide services and new infrastructure to the periphery.

DAG understands democratic urban governance to be an approach that facilitates social inclusion and greater equity among citizens through maintaining social control over state policies and spending. It considers this approach appropriate for tackling the complex and mounting challenges faced by South African cities. Over the last two decades, the limitations of government-led urban development approaches have been accepted, and the focus has shifted from the traditional urban management approach towards one of participatory and democratic urban governance.

Proponents of democratic urban governance argue that democracy is becoming increasingly ritualistic, with a series of electoral procedures having no substantive impact on the economy, and with everything bending to the logic of the market. They argue for new institutional arrangements for urban governance that would secure the political inclusion of the citizenry in debating and crafting the policies that govern urban spaces, and in determining the methods for managing urban development processes and holding officials and political representatives accountable.

Globally, there are over one billion slum dwellers. The vast majority of urban growth in sub-Saharan Africa is taking place in slums. Land and housing reforms are the key levers of change for alleviating urban poverty and informality and, arguably, the best slum prevention policy is a cogent land-access strategy for the poor.

DAG has very deliberately considered five “lenses” through which we can look at managing urban cities differently with democratic urban management:

### Land value capture

- We advocate for bold intervention in land and housing markets and the use of value capture instruments to direct land use and regulate land prices, so that housing and land become accessible to the poor. It is about low-income housing – not social housing, because in our country social housing is for the gap market, not the very poor.

### Citizenship and the democratic management of cities

- We support the active participation of citizen groups in political and civic life on issues related to urban governance and poverty.

### Municipal-wide planning

- We support participatory, long-term integrated approaches to municipal wide-planning. The project-by-project approach offers solutions to only a limited number of people.

### Medium-density housing

- We advocate for the development of sustainable medium-density, mixed-income housing on well-located land, while achieving quality urban form and citizen participation in the process.

### Community-driven housing

- We call for the incremental upgrading of informal settlements and people’s housing process (PHP) schemes, using a sustainable and people-centred approach.

Bringing about such change requires having bold vision, taking some risks and having political leadership that is unafraid to tackle hard issues. Democratic urban governance enhances political inclusion. It fosters transparency and accountability by bringing all stakeholders, especially the marginalised and the poor, into the decision-making processes. It is a way of achieving the social contract between state and citizen.

It is time collectively to re-imagine our cities and their future growth, leaving behind the growth-at-all-costs approach that characterised the development of the industrialised world. Rather, let us harness the

opportunity to chart a new course and build our cities as spaces of hope, equity, energy and social justice, where the aspirations, freedoms and rights of all citizens are integrated.

## Institutional reform: Towards the inclusive South African city

*Mark Oranje, University of Pretoria*

Over the years, many of us have been involved in trying to re-engineer, restructure and reformulate the relationships between and within different spheres of government. Although we have tried different kinds of planning models, we have come to a place where we are still not making it. Things will not correct themselves automatically; change has to happen. There has been much legal action and policy action at the top, but not much change at the base. For many of us, talking about poverty gives us a job and sustains us as an elite. However, it does not change the world out there.

South Africa's institutional framework cannot really engage people. It was essentially meant to sustain and to continue, and to bring on board a few more people on board, but not to change the nature of the economy fundamentally. The framework lacks the ethos; it is built on greed, individualisation and privatisation. It maintains what we had before - the relationships between ourselves, the state, the way the state governs us, and the way we hope we can assist the government in governing us. Even the provinces we have were the development regions of the previous regime.

South Africa's present institutional framework was born in the 1990-94 phase. It is a result of unique historical conditions (such as the fall of the Berlin Wall and socialism), expedience, compromise and even naiveté. It was not geared to the pursuit of a new country, society or economy. It was not developed with decades of serious transformation in mind.

Our institutional framework took the margins as the areas of focus for action and intervention. It did not really challenge the real spheres of power. For instance, we find ourselves trapped in talking about the 2-3% of the gross domestic product (GDP); that is, the agricultural section. What about the other 98-97%

of the economy? There is very little discussion about who functions in that economy, who has access to it, and who can grow through that economy.

It has contributed to a mind-numbing set of institutions, public discourses and political engagements, with little effect on the material conditions of the majority. We are struggling to have progressive change in state structures appropriately articulated, planned and executed. State failure is increasing.

The population has also grown tired. Newspapers are full of stories about corruption, abuse of state funding, and lack of delivery. In many ways, their lives have changed very little. Numerous highly talented people are spending their days on trivialities and are not occupying their time with what they should be doing, which is about care and compassion in development.

We need to reopen the public debate on the future and the country we want to live in, as well as the nature and form of our space economy, cities, towns and villages and the linkages between them. This debate has never really taken place. The practicalities will entail a great deal of discussion, research and work. We have to map out ways of getting there, individually, communally and collectively. We need to find out where we agree on things and find out what works, and strengthen these commonalities, while also working through the differences.

The institutional framework has to be remodelled to enable and sustain this process, while at the same time providing for ongoing institutional change. Suggestions for change on a massive national scale should not be used as a cop-out to postpone or frustrate progressive change. The magnitude of the change and the possibilities it holds should excite us and not preclude us from the immediate care, compassion, vigour and energy we can bring to our work, starting on Monday.

## The politics of space: South African cities in 2030 continued

### Financing sustainable human settlements and resilient urban economies

*Ahmed Vawda, Performance Monitoring Evaluation, The Presidency*

A major issue in some of the current housing literature is path dependency – why we are stuck on a path and why we cannot get off that path. We have moved from a first-generation housing delivery approach, such as at Botshabelo, to second-generation policy and programmes, like the Breaking New Ground (BNG) bridging framework.

For the first time, social housing clearly inscribes a different set of performance conditions by its own set of Acts and goes beyond the Housing Act 107 of 1997. Its key grant is a restructuring grant, and therefore its performances are inscribed as planning decisions prior to the release of the money. This is the beginning of re-inscribing different performances in the housing framework, but still within a spatial planning framework.

The BNG provides a wider scope for providing housing in many ways and more than the Reconstruction and Development Programme (RDP) instrument allows. As a result of this wider scope, private finance people have begun considering seriously how to finance housing at the lower end of the market. Every major bank has created an affordable housing division. Whether or not it will work, remains to be seen.

The institutional capacities have also broadened. There are 24 chief directors in the Department of Human Settlements to manage programmes. The private sector is doing much work in this arena as well. There has also been a revision of legislative instruments and the financial architecture is more complex in that more questions are asked and more complex financial institutional arrangements and performance are required. The new instruments are focused programmatically on integrated development settlement.

There is a slow uneven turnaround in the human settlement form. We reproduce a part dependency on private property, but often the property does not perform for those who get it. This is where the spatial question comes in. The landscape is polycentric and evolving complexly. For example, fifteen years ago, Diepsloot was on the “wrong” end of town; it is on the right end now, so too are Alexandria and Ivory Park. In fact, South Africa is not still 60% rural, as

one of the earlier presenters said. It is 57% urban and projected to be 70% urban by 2030.

A classic part dependency problem is that cities are dependent on the people who run them. They want redistribution, but are unwilling to change the part dependency on the value of the rates base, because it will reduce the rates base, and the finance houses are dependent on good property values. Academics like to show how the RDP housing policy has failed the space economy, whereas it is actually the space economy that inscribes the performance of the housing policy.

The rental market is undeveloped, but significant, at about 25%. We have a property market that performs exceptionally well, but in which only 15% trade. Exclusions from the property market is the key issue. The subsidy instrument should become a means to redistribute values in the property market on a more equitable, sufficient and sustainable basis. The contrasting imperatives of affordability, scale, pace and financial sustainability need to be considered.

There needs to be more effective targeting of scaled-up programme interventions, with agencies working in concert with the government. They should have clear portfolios of projects that sequence public resources for efficient outcomes. Currently, one of the few instruments to renegotiate the space economy is social housing, because the Social Housing Act 16 of 2008 inscribes spatial performances before the subsidy may be given.

Lessons from social housing include, among other things, building robust frameworks that bind the three spheres of government; reworking the instruments of change in the space economy; having good income targeting; setting excellent socio-spatial economic targeting; and building benchmarks.

The three social housing entities in inner city Johannesburg are remapping the value redistribution in the area and are then protecting it from downward raiding. This is the kind of thing that we are beginning to see happen, and it is only achieved through real concerted effort.

# DAY THREE plenary session

## The way forward

Chairperson: Richard Dyantyi, Ministerial Advisor, Human Settlements



Source: Rodger Bosch, MediaClubSouthAfrica.com and Makeka Architects

*Advocating for participatory, long term integrated approaches to municipal-wide planning*

### Future prospects for spatial planning in South Africa and key policy discussion points: Trade-offs and decisions required

*Ivan Turok, Human Sciences Research Council (HSRC)*

South Africa faces fundamental challenges, the first of which is the level of inequality and poverty in society. It has a very skewed economy, where incomes are highly unequal. The spatial dimension of inequality is partly a reflection of fundamental economic and social inequalities, but it also reinforces those inequalities. The geography of inequality is not just a reflection or outcome of the labour market, housing market, and so on, but itself reinforces and exacerbates the problem.

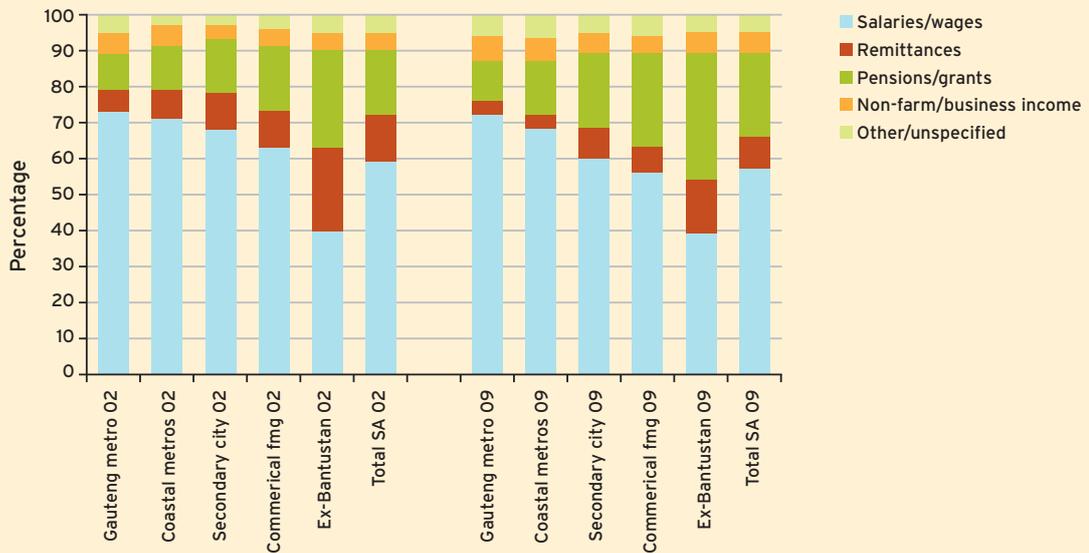
People's life chances and the opportunity structures that determine where they end up in their lives are determined not just by their skills, social class and parental backgrounds, but also by where they live. Looking just at the former bantustans, according to the General Household Survey (GHS), 40% of households in 2002 earned their income from the labour market, and 39% in 2009. For 23% of the households in the former bantustans, cash transfers or remittances from relatives working elsewhere were their main source of income in 2002, dropping to 15% in 2009. State pensions and social grants, however, rose from 27 to 35%. This is, in effect,

a transfer from the urban areas to the rural areas. These inequalities are also reflected in the income of the municipalities and provinces, whose average incomes and resource base are lower in these areas.

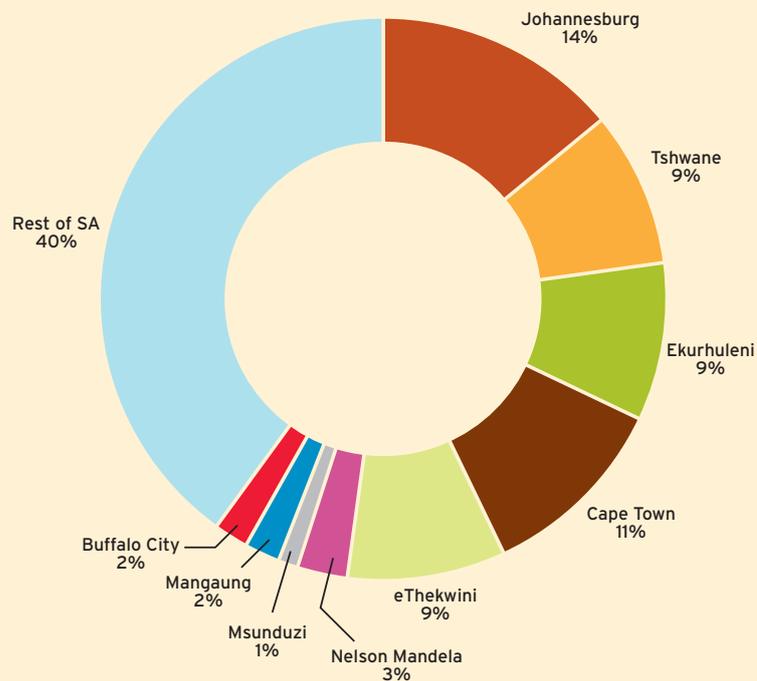
There have also been changes in employment. The employment rate has risen in the metros, particularly Gauteng and Ethekeini. In the former bantustans, however, the figure for employed 15- to 64-year-olds has remained the same at 29%, despite migration to the metros. The graph overleaf shows where the gross value added (GVA), or the formal economy, is distributed across the country. This reflects the spatial issue at the regional or provincial level, and the differences are striking.

Within cities themselves there are inequalities, for example, with regard to population density (population per square kilometre). The average population density of cities is very low, especially when compared with countries such as India and China. Population density is very uneven across the cities. In most countries, the density declines with distance from

## The way forward continued



Main source of household income



Share of total GVA in South Africa, 2009

Source: DBSSA

the core of the city, because people who live on the periphery are usually higher-income people who can afford more space and who can afford to travel to work. Densities are higher where there is competition to live close to places of employment.

Employment opportunities within a city are also unequally distributed. Some employers have to spend considerable amounts of money to run a transport service for their employees, because the work is not near where they live.

In response to this very unequal geography, the poor try to move closer to economic opportunities. They want to improve their livelihoods and life chances, and the informal housing sector is a reflection of this strategy. This interaction between people and place, between how people navigate different parts of the cities and urban areas, is critically important. The poor actively attempt to navigate their way through the system, and often the middle and higher-income groups try to resist their progress.

The private sector is also trying to navigate its way through this very unequal and uneven geography. Private investors, developers and employers may proceed cautiously, minimising their risk and costs, and using space in a way to protect their position and so avoid competition. Because employers pursue this strategy of separation and sprawl, middle and upper-level households are also pursuing it. This creates large and complicated functional areas, which we call labour and housing markets, with complex issues of transport, bulk infrastructure, waste, and so on. All these services are less efficient in a fragmented, sprawling city and impose huge demands on planners.

The dilemma is that the pressure is on municipalities to raise rates and incomes, attract investment and create jobs, as against the longer-term challenges of turning around the spatial economy. The rhetoric of transformation is very powerful, but a lot of it is just rhetoric. There is a rationality of market efficiency and vested interests, and of protecting these interests. Gauteng, for example, is South Africa's economic engine and vital to the national tax base. All kinds of growth pressures result from this, including congestion, capacity constraints and housing constraints. If we accommodate such pressures in the

interest of service delivery protests and also to protect this economic "golden egg", we may actually make it more difficult to rebalance the spatial economy. This is because we are reducing the pressures that through market forces would lead to the dispersion of the activities through market forces.

The following seven principles would make the notion of sustainable human settlements more concrete:

- Understanding the link between jobs, livelihoods, incomes and housing
- Improving the relationship between transport and land use
- Avoiding mono-functional segregated communities
- Increasing population and economic densities in certain areas
- Improving people's sense of a place, public spaces and the quality of the environment
- Involving communities in the process
- Creating value and viability

The future of spatial planning revolves around vision, procedure and land. We need to have ambition and a vision of the kinds of settlements we are creating. We have to become better at collaboration and get the buy-in from other key role-players. Planners on their own will make mistakes; they need to see the bigger picture. There is a need for a more coherent land policy, for instance, simpler systems of transacting, titling and registration and better regulation, and more effective use of the public sector's own strategic land parcels for development. In other parts of the world, using public sector land that is outside the space economy is a very powerful instrument for well-located urban development.



Source: DBSA

---

## **PANEL DISCUSSIONS AND FEEDBACK**

ON RETHINKING SOUTH AFRICA'S HUMAN SETTLEMENTS GROWTH PATH

ON REGIONAL SPATIAL TRENDS AND PLANNING RESPONSES

ON INSTITUTIONAL RECONFIGURATION

ON SPATIAL INTEGRATION

ON KEY DRIVERS OF SUSTAINABLE HUMAN SETTLEMENTS

ON ENVIRONMENTAL AND RISK REDUCTION CONSIDERATIONS

ON PRIORITISATION AND FUNDING OF INTERVENTIONS

ON THE POLITICS OF SPACE: SOUTH AFRICAN CITIES IN 2030

---



## Panel discussions and feedback

### On rethinking South Africa's human settlements growth path

A summary is given of the salient views expressed and additional points raised by attendees and participants during the question-and-answer sessions following the presentations on the various themes.

- We cannot first sort out the basics of problematic issues, such as the looming carbon crisis, and then only do spatial planning. We need to deal with these things in parallel. The work done in terms of international experiences helps us to do better; we also need to look at existing domestic examples, even in the absence of a coordinated spatial vision. We might otherwise find ourselves reinventing the wheel, or not picking up on very good practices.
- Rural development has to feature strongly in the spatial vision due to the importance of national cohesion and social equity, and also for economic reasons. It is about strong institutions, capacity building, skills development, selected infrastructural development, and getting ICTs into the rural areas. We have to find ways to unlock their potential, rather than saying some areas of the country have potential, whereas others do not. Our settlements are, in fact, assets. However, it is true that some areas have been abused to such an extent that it might take many years to restore them. Moreover, some are being depopulated, while the need for infrastructure in others is growing. We should avoid an approach of inviting competition between spaces to be prioritised, and be mindful of the interconnectivity between them.
- Local young people, such as those involved in existing research and projects in the country, should be engaged in the spatial initiative. In international experience, countries have adopted methods that draw the youth into the planning processes and get them to plan; these produce some of the most innovative and creative plans.
- Many informal settlements are there by default and out of desperation, and therefore they are not always on suitable areas of land. What we need to do differently is not to follow them and put bulk infrastructure in place there, but to identify strategically located pieces of land and develop those.
- Interventions at different scales are needed, from small community-targeted programmes at the microlevel, to macrolevel approaches to dealing with massive unemployment and marginalisation. As the public spend is a huge contributor to the local economy, one solution for job creation would be to decentralise more, and to place public servants in nodes and centres on the grid. This would attract entrepreneurs and income earners, which in turn, creates more jobs.
- Whole communities should be involved in upgrading initiatives, such as building homes. The poor should be allowed to own their problem. A culture of savings is important in “owning” one’s life; without it, people will always be wanting to ask others for assistance. Sometimes a lot of money is circulating and changing hands in settlements; these resources could be harnessed for their benefit.
- Apart from the focus on the poorest of the poor, attention needs to be given to the low and middle-income earners, who often cannot afford housing due to house prices rising faster than their salaries increase. There is also a great deal of corruption around ownership of Reconstruction and Development Programme (RDP) houses.
- Low-cost housing should be in sustainable developments that do not operate in a vacuum, for instance, far from economic opportunities or health and education facilities; otherwise people end up selling or renting out their houses as a means to sustain themselves. In effect, another social problem within that particular community will have been created. The provision of housing must also be linked closely with the provision of bulk infrastructure and services, as well as social amenities.
- There is an encouraging trend at the highest levels, where ministers, Cooperative Governance and Traditional Affairs (CoGTA), and so on are meeting to coordinate planning and address conflicting areas of interest. The French example of achieving coordination through focusing on collaboration and planning contracts across municipal boundaries, is an interesting one which we should study.
- As regards apartheid, there should be a cut-off date to say who was affected by it. A five-year-old child today cannot expect the state to provide a house for him when he has reached the age of independence. We cannot continue to create a state

## Panel discussions and feedback continued

of dependency; people will not have a sense of savings or of taking responsibility. There must be a political will guide such a cut-off date.

- Apartheid was a spatial planning activity at a monumental scale, with the government prepared to put a lot behind it to produce the results that it did. To change the apartheid geography we would need almost the same level of commitment as a country and as political leaders.

- The high-level discussion about spatial development at this seminar has to be translated into the type of conversation we can have with people on the streets. Unless there is pressure on the government from informed citizens, this type of work is usually not sustained.

### On regional spatial trends and planning responses

- Finding more innovative ways of managing the flows of people, materials and resources requires a fundamental rethinking of our legal and constitutional frameworks.
- South Africa clearly is a hub for both skilled and unskilled economic migrants. Many “refugees” come from countries that are not experiencing civil war. The presence of migrants is not officially recorded and they may move from place to place across the country in search of work. Their large numbers may affect our own development challenges. So, for example, 53% of the population in central Johannesburg is foreign born. Other migrants, especially those from Asia, may settle in South Africa for a few years and then move on to the United States or Europe.
- There are also immense problems with human smuggling and trafficking. A study found that about 20 000 men from the horn and east of Africa alone were trafficked to South Africa in that year.
- Apart from reasons such as trafficking or job hunting, another factor causing migration to urban areas is environmental degradation, especially in rural areas. This relatively unexplored aspect merits further study.
- Although local unrests are currently being reduced to reasons of service delivery, there are other factors at work as well, such as having to share limited resources and job opportunities with non-citizens. Many migrants work as labourers in the farming industry or as workers, street vendors and shop owners in the informal sector.
- Ultimately, there are migrants who should be regularised in the interests of our own economy, such as seasonal labourers. Others really cannot stay and it should be possible to track them and

deport them. There is a need to update existing bilateral labour agreements and memoranda of agreement, and to enter into new ones with countries in the region. Loops or gaps in the relevant systems should be addressed.

- Controlled economic immigration involves inviting people with the needed skills and knowhow to help make a difference in the host country. Australia and New Zealand are examples of countries that actively encourage the influx of qualified and experienced employees and employers. They have strict immigration laws, as well as detention centres for migrants who do not fall under the refugees scheme, or who are not considered regular migrants.
- Host countries in other parts of the world may offer business training for cyclical or seasonal workers with a view to facilitating development, such as small business, in their countries of origin.
- A migration profile and set of indicators for each country in the Southern African Development Community (SADC) is needed, so that data can be compared meaningfully and migration flows in the region understood. The capacity of government officials who work with such data should be built, and the data should be updated and maintained. With such information, we would be able to see the numbers involved, how long the migrants stay, what skills they have, how these could be used to the country’s benefit, and whether these people should rather return home.
- Another factor causing migration to urban areas, and which merits further study, is environmental degradation, especially in rural areas.

## On institutional reconfiguration

- Apart from being driven by economic activity, most developments are driven by a specific mandate, particularly a political mandate. We need to look at a more comprehensive picture and find long-term ways of doing development that will actually benefit communities. Unfortunately, some planners are simply operationally minded and do not consider the bigger picture or the long-term future of a certain space. They are simply planning a particular project for a particular settlement. Thinking only on a project basis can actually perpetuate unsustainable human settlements.
- Having said that, there is also a tendency to plan at a national or provincial level without having a differentiated approach to matters that affect different municipalities. Planners should zoom in on a particular municipality or city at a time, and plan purposefully for that space. All the role players working together around that space should collectively come up with a joint action plan. If not, they might end up dealing with issues that concern, for example, the City of Cape Town, but are irrelevant for the City of Tshwane.
- Similarly, we cannot generalise the release of land. It might create a situation where plans are made for people to move from, say, Soshanguve to the city, although they want to be settled where they are currently settled. If we generalise, land is then released that may not be relevant to the people.
- What is seen to be a coordination problem, could be more a problem of skewed power relations. For example, where certain interests are more vocal, or lobby different sectors, those interests shape what really happens in the different areas. There is a need for a system to adjudicate conflicting interests. A template for getting these different interests to work within a certain set of criteria will lead to decision-making systems that are balanced, fair and transparent.
- Coordination has to be centred around a broad, commonly agreed plan. It should at least take the national space economy, the economic trajectories, the spatial geography and the major pressure points in the country into account. By giving certain guidelines, norms and standards, it should be a global guide for how we direct our resources and who needs to be doing what towards creating the kind of settlement we want in a district. If more time is spent on constructive discussion and debate to sort out the issue and arrive at a commonly agreed plan, then implementation will be much easier. Within that district, then, the municipality should work with all the role-players to draw up other commonly agreed plans at different scales for different parts of the district.
- It would be expedient to have greater insight into the sort of budgets the various planning institutions have, as well as the time frames they are looking at in terms of their work. We need balance in trying to match concrete implementation plans with the expected costs involved. We would then still need to go through the feasibility studies for all these areas and come up with what is really needed; also, with what is available in terms of national grants, municipal own funding, borrowing, contributions by the community, and so on. It is prudent, though, to bear in mind that the fiscus is not going to take us there - the fiscus has to be the catalyst; it will not solve the problem on its own.
- The special purpose vehicle should be used as part of an intervention where a municipality is experiencing definite failure in terms of implementation. This should be done with the long-term objective of building a responsive, sustainable local government that can deliver services to its people. Siyenza Manje, therefore, should be geared towards long-term capacity building in local government, not just interim support. In the Northern Cape, for example, there are about thirty municipalities. Only two of them have town planners, but these persons are not being used for strategic and integrated planning; they process land-use applications.
- The demarcation criteria are currently being reviewed to develop quantifiable indicators, benchmarks and thresholds, as well as recommendations on data requirements, skills sets, etc. The capacity assessment model of the Municipal Demarcation Board is also being reviewed to make it more comprehensive and useful to stakeholders.

## Panel discussions and feedback continued

- Another study is looking at the issue of efficient municipal size. We should, perhaps, also reflect on whether it is practical to have as many municipalities as we do, many of whom will never have the requisite capacity or the ability to attract the necessary skilled persons to carry out the core functions.
- The state has the power to regulate the market in a smart way to achieve maximum benefits. In Mauritius, for example, land-swap agreements are entered into with developers wanting to acquire land on the coastline. To be able to develop there, they have to pay an externality fee ensuring that indigenous communities are resettled on some of the sugarcane fields that are no longer in use.

They pay a particular premium for that development, so that basic services are delivered to the communities.

- We need to think innovatively. Municipalities are often reluctant to accept new policies, especially if they are suggested by an unknown developer. We should, however, be open minded and consider innovative and new ideas for impacting our human settlements. There are excellent examples in the Western Cape and all over the country people are experimenting. We should create a framework for such experimentation and derive learning processes from that, so that these experiences become useful on a wider scale.

### On spatial integration

- South Africa needs to look at what has been achieved in other countries, in order to avoid reinventing the wheel and repeating the mistakes made by countries such as Kenya, Senegal and Tanzania. These countries are much poorer than South Africa, but their populations are better educated, and have more skills and many more development perspectives. It is useful to learn from Africa.
- The current spatial development frameworks (SDFs) indeed articulate vision, but are difficult to enforce due to having different authorities involved, as well as a lack of institutional mechanisms and dedicated funding. CoGTA is currently putting together a range of comprehensive guidelines for SDF constructs and for monitoring their impact. At this stage, however, we should guard against overregulating the local government sphere in terms of such guidelines.
- Opportunities in existing and mature informal settlements should be enhanced. Interestingly, in two other workshops, the rural community indicated that they wanted development but not urbanisation in their rural area. At least a minimum level of the constitutionally guaranteed provision of basic services, such as public goods and infrastructure, should exist in rural areas to make them habitable and support good living. People who choose to live in rural areas should not be

unduly disfavoured by the implementation of our programmes. We should not lose people by trying to impose a certain level of development on them, and any intervention should always acknowledge people's dignity.

- Bringing about sustainable human settlements should not be for scorecards or votes, or to make shopping malls work. It should be about wanting to create humane and dignified environments. This fundamental issue is often forgotten in the race of trying to catch up with numbers and budgets. A sustainable environment is also about the context in which a house is located, such as having a sidewalk and a tree, or a library for children who do not have books at home, or a safe park where an elderly person can relax. Sustainable spaces in rural developments are what backyards are to people living in suburbs, who can distance themselves from society within the confines of their own homes. A good test is whether planners themselves would like to live in the spaces they create.
- There is a continuum between rural and urban spaces, so that we do not wish to continue to deepen the sense of urban/rural distinctions. There should be enough choices in both areas to allow the inhabitants access to business opportunities and a whole range of other amenities. For example, transport is no longer a

single activity on its own, in order to move from A to B, but fits within a larger strategy. A rural area might not always stay rural in future, because it fits into a broader economic landscape.

- It should be noted that the rural/urban drift is a normal phenomenon, but that the effects of migration still need to be mitigated. The agricultural sector, for example, has the capacity to employ more people. The unemployment market largely consists of people with no formal skills. They could, however, be employed in agriculture or in environmental developments in rural areas. This option should be explored. Compared with economies of comparable size, such as Brazil, the number of people employed in the agricultural sector in South Africa is very low.
- The land issue, however, is getting confused. The Department of Rural Development and Land Reform, which used to be Land Affairs, now perhaps has more of a rural focus when it comes to land. The Department of Human Settlements, which was more involved with housing projects as such, now has the Housing Development Agency, which is looking at making state-owned land available for settlement development. We cannot have departments working in isolation of each other, and then somehow expect an integrated strategy at the end.
- Land reform is not just about redress, but also about supporting a large number of small farmers and smallholders moving up the productive value chain and integrating them into monopoly value chains. Land reform is linked to agrarian reform.

## On key drivers of sustainable human settlements

- The spatial development framework is greatly affected by the number of people entering our country and living here. Most of these people are not catered for by normal housing trends. In the mining sector, for example, they are actually given subsidies or living allowances. Many then choose not to live in the areas provided for by the mines, but form a squatter settlement with shacks. As a result, local people living in the area are being pushed out further and further. In places like Olievenhoutbosch, for example, around 80% of the RDP houses have three or four shacks in their yard, and the majority of the people living in the shacks are from Zimbabwe.
- In some cases, local people take a conscious decision to bring their wife and children to a certain area, and commute to work from there on a weekly basis. This creates an artificial need for a transport subsidy. Although transport subsidies are determined by the efficiency of the mode, they have always been politically inspired. Transport is approached either from a free market point of view, or from a state-controlled interventionist point of view. The ideal is to deregulate completely. However, if the market is left to operate of its own accord, not all the needs will be met. The market tends to meet the needs of those who can afford it.
- Transport is available in rural areas, but it is generally considered too expensive and therefore many rural people no longer commute back and forth to cities all that often. They tend to stay in the rural areas, commute to a local town when necessary, and do not prefer long migrant labour cycles. We might, therefore, see more people moving to town permanently in future. The children born in the town will visit their rural relatives, but will generally not choose to live there. Although they will not lose their rural connections, it will not be their identity. Such a situation will slowly consolidate the transport needs more and more into the city. As a result, the rural sector will have to bear the expensive transport costs and it will not be viable in the long term.
- Three to four decades ago, 70% of the intercity traffic used the South African national road network, which was a larger network than today. Currently, 90% of traffic uses the national road network, which means there has been a consolidation overall in terms of efficiency. The dilemma we have with Bus Rapid Transit (BRT) systems, and our cities in general, is obviously due to segregation, political interference and other natural causes over many years. In South America, BRTs work because they were never segregated and the system has evolved naturally. In South Africa, it may require a great deal of national intervention to unwind that over a long period of time.

## Panel discussions and feedback continued

- As regards housing, the level for rental stock per capita income is R1 300–R1 400 per person, and for shack areas it is around R450–R480 per person. People who occupy private rental housing in the cities have good jobs and tend to be young and highly educated. Other people may have their own homes elsewhere, and need to rent because they work in the area. Very poor people cannot afford the high rent of rooms, flats and apartments, but might be able to rent shacks. There are about 40 minor settlement types, including backyard shacks that tend to attract older women with children.
- Under the 2002/08 Financial Charter, banks committed to lending R42 billion to help people acquire homes, but ended up lending R10 billion more. Studies found that a great deal of that money went into refurbishing existing homes, because of shortages in the delivery of land and other constraints. The amount of money pumped into a system therefore does not always necessarily translate into new homes.
- In African society, a private house is not necessarily owned by just one person. The whole family may lay claim to it and, after some years, inheritance claims can become very complicated. RDP housing is private housing and should descend the same way as any other piece of private property. There may be a perception of social stigma attached to owning an RDP house, and people may prefer building their own homes so that they are not looked down upon by others. People generally cannot afford formal housing, which is exorbitantly priced due to debt or greed by developers and property agents.
- There are also several “transit zones” in the country, which have existed for many years, such as Khayelitsha and Orange Farm. Most of the people in Khayelitsha are not there to stay, but there is a strong political push to provide housing, services, etc., without really understanding the specificities of the transit zone.
- The country needs to look into establishing manufacturing in rural areas, with a view to keeping people in these areas. High economic growth that is unevenly distributed can attract people to an area, but ultimately it will depend on how well regulated the land markets are. The whole supply chain is currently not managed properly, with imports, such as clothing, stealing away potential labour from local workers.
- The Central Strategy Unit of the City of Johannesburg has created a sustainable human settlements index, with a range of variables, such as access to transport and social amenities. The index can be used as a tool to filter through development applications. This will aid our understanding of creating sustainable human settlements in practice.

### On environmental and risk reduction considerations

- Most municipalities have huge problems with resources, funding and skills. Many of the biodiversity and environmental issues that come to the fore are, for them, cost-added issues and low on their priority list. Municipalities are under pressure to provide houses, and may do so even on unsuitable land, such as wetlands. The problems and resultant costs will, however, reveal themselves down the line. However, when planning with biodiversity in mind, huge costs can be saved. Costs can also be reduced by purposefully planning to harness the ecological and green infrastructure in the landscape.
- The South African National Biodiversity Institute (SANBI) is tackling the massive challenge of providing access and support to municipalities in developing such planning tools and biodiversity sector plans. These tools will assist them in planning ahead and so avoid the heavy costs of later having to move people out of their homes again and build new ones. It is a sad fact that much of the expertise around choosing suitable land for building (e.g. to identify wetlands) has moved out of the state system and has been replaced by consultants, whose services come at a high cost to municipalities.
- Indigenous knowledge systems (IKSs) of preserving the land, including wetlands, should be recorded and harnessed. Indigenous people have certain methods for managing and preserving these lands. If these methods are integrated into our modern system, we can encourage people to understand

the idea of preservation even better, while also improving our own systems. The Construction Education Training Association, for example, has begun documenting indigenous knowledge around green building.

- SANBI integrates IKs into its work. It has nine botanical gardens across the country where fauna and flora are showcased, particularly those used for cultural purposes. In terms of managing biodiversity, SANBI recognises the livelihoods and cultural practices that depend on biodiversity. Often, the cultural attributes attached to a place have kept it in good condition and well managed over the years.
- SANBI a number of initiatives where it is working with land claimants who have acquired land, to assist them in managing their land better with a view to preserving the biodiversity. It has entered into a partnership with the Department of Rural Development and Land Reform and is trying to integrate these initiatives and incentives, not just into urban settlement planning, but also into the land reform processes.
- Many people were removed from ancestral lands to make way for protected areas. Some consequently have a negative opinion of conservation, preservation and biodiversity. A survey done among ward councillors in the Eastern Cape revealed a very negative and hostile understanding of the word “biodiversity”.
- Educational programmes on biodiversity should be extended, especially to the periphery. Communities should be part and parcel of impact studies, which need not be very technical. The important approach is that biodiversity is not in nature reserves, but also on farms, in communities, etc. Very simple principles should be transferred in community awareness programmes. Levels of awareness are low, but there is a thirst for knowledge.
- The ideal is to roll out education on the environment, preservation, green building, etc. through the municipalities, but also through universities and learning centres. The right learning and principles should be instilled in students and future architects and planners. The officials in the departments and various agencies should all have the necessary skills, or at least be able to get people in to advise them.
- A few knowledgeable students, lecturers and officials can visit settlements and observe their practices, make recommendations and demonstrate good practice. For example, a group of students

went to Soshanguve and put in ceilings in normal tin shacks, using inexpensive natural materials, such as cardboard. Green building also involves sealing the “envelope” that we are living in.

- Green building is a small building block in the overall theme of sustainable settlements. There is little use in having a small intervention in one place, which is not echoed in the surrounding environment. People should start following the principles in a small way and link to their environment. For example, even with low-cost housing that is right onto the pavement, a tree can be planted on the pavement.
- Developers and agencies should, as part of every development, be encouraged to plant trees and give something green back. Quite a lot can be done even on a small patch. They should allow people to have ground around their house for a patch of lawn, a vegetable garden, a tree for fruit and shade, and space for their pets or domestic animals.
- Some people are keen to forge networks to find out more about sustainable practices and risk-reducing practices in human settlements, and how they can engage municipalities and developers in building capacity around these areas. They realise that protecting biodiversity and the environment and building green are not merely “nice to haves”, but a necessity that enhances the living space, reduces costs and reduces risks.
- Although South Africa has a National Disaster Centre, not much seems to be done about prevention. In the example of the Dutch dykes, it was not the government that took preventive steps if the water should rise, it was the communities who first built small hills where they could survive. Individuals and communities should not wait for the government, but learn what the dangers for them are and how they can protect themselves by reducing their vulnerability.
- The lessening of vulnerability is the element in disaster management that is missing in many countries. When municipalities and agencies meet to discuss disasters, they only talk about emergencies in terms of fire trucks and ambulances. Nobody thinks of keeping the fire or water away in the first place, of planting trees, etc.
- In Cape Verde, for example, the community took the initiative to build terraces on the hills, which they filled with sediment. This prevents the soil from being blown away and allows them to grow things. Bangladesh has reduced the fatalities due to floods and cyclones by building cyclone shelters based on

## Panel discussions and feedback continued

community efforts. Ethiopia has reduced the impact of droughts phenomenally.

- We have all the knowledge, but many times we refuse to believe that a disaster will strike, or will strike again. Disaster prevention is possible. A country such as South Africa has enough human

resources. If people have a reasonable chance that a drought or a flood will hit them, they can either sit and wait until it does, or they can band together with their neighbours and start doing the work. It is possible and it is being done in many countries.

### On prioritisation and funding of interventions

- Knowledge management is important. Where certain projects or programmes have been handled really well, the lessons learnt should be captured as case studies, etc. and be disseminated.
- The DBSA, for example, is a learning organisation that actively draws on past successes and failures when planning subsequent moves, such as its Build-Operate-Transfer model (BOT) model. This model has been built around the experiences the DBSA has had, and the lessons it has learnt, in terms of the limitations in providing bulk infrastructure. Even if land is available, there will not be development if there is no bulk infrastructure. In order to provide infrastructure, this funding model looks not to the municipal balance sheet funds, but to a small cash flow related to the development of that land.
- In addition, existing subsidies are appreciated and the DBSA is currently working with a number of government departments in this respect. The Bank tries to accommodate the provision of these subsidies in its structures for funding. However, mindsets will have to change. We cannot afford to put everybody who cannot afford to pay for housing in 40 square metre serviced houses. Some developers have had to put in their own water systems, for example, because the bulk supply was not there.
- From a private financier's point of view, developing integrated infrastructure housing projects from a project feasibility basis is very tough. There are currently about ten such projects in the country. Some South African banks have created their own internal service delivery mechanisms in the form of development companies. What banks have found is that the cost of bulk infrastructure is prohibitive. When land is available, such as farmland, full services now have to be provided on that land. The cost of bulk infrastructure can be 30 times that of the actual housing development. Banks do make use of private equity funds and have worked with companies like International Housing Solutions. More such cooperation is needed.
- There is also an institutional challenge. The internal governance in a municipality can be such that it takes three to five years to get through the procurement process, from submitting a tender and getting a definitive answer, up to financial closure on the project. The holding costs of a five-year project are enormous, and this is where much of the total cost comes in. There are also several government departments involved in an integrated housing project, which complicates matters further. However, collaborative relationships between the role players, such as public sector partners, the DBSA, the National Housing Finance Corporation (NHFC) and commercial banks, are bearing fruit.
- The single largest problem in housing delivery is affordability. On the one hand, the salaries of, for example, middle and lower-income public officials are not keeping track with price escalation. On the other hand, the cost of construction has to be reduced - an aspect that does not enjoy sufficient attention. For example, if the government sets up a cement factory, the cost of cement should be dropped. Alternative, less expensive building systems need to be explored. Then there is also the matter of interest rates, and of prices and costs escalating due to malpractices or greed. Compare, for example, a 50 square metre dwelling that is owner built for R56 000, whereas a similar unit is formally offered for sale at R339 000. We should not lose sight of ordinary people, who have taken their children through school by selling food or cigarettes.
- There are different models for providing housing, including the option where employers become involved in developing housing for their employees.

Impala Platinum, for example, is a private sector company in Rustenburg that has bought expensive land, put services on it at its own cost and thereafter partnered with the NHFC and the government to help finance the building of houses. Employees were given an interest-free loan, plus a state subsidy, and the NHFC gave the difference in the form of a loan. The mine's living-out allowance more than covers their monthly instalment. Different situations would, however, require different models. Rentals are another viable option.

- Inclusionary housing, though, will not give us the critical mass. This is where 20% of the gated communities, housing estates and new developments in and around cities may be allocated to social housing or affordable housing. Some see this as a new move towards achieving an integrated sustainable human settlement with diverse households and housing types. The difficulty with the new thinking is that a person in an affordable housing unit within a gated community or other high-income locality might be earning a mediocre income. He cannot afford to send his child to the private school on that estate, or to shop at its boutiques. He has to take two buses across town to do shopping. Inclusionary housing will not deliver on the total quality of affordable households.
- Looking at the private sector, a good example of infrastructure being developed and made available to the government is found in the electricity distribution industry. A small number of substations are being built by the private sector and the balance of the electricity not needed for a specific

project is sold back to the municipality. In principle, private sector banks would like to develop this market further in other subsectors as well, and with longer-term contracts in place.

- For government projects to be financed, private banks look at the quality of governance in the entity that is applying for a loan. They will not respond even to good balance sheet-based requests if governance is perceived to be poor. They also look at the feasibility of projects, and require feasibility and pre-feasibility studies done by specialists in the market. Banks work with the NHFC and DBSA in assisting the government institution to go through a procurement process for appointing the necessary consultants to help it put together a feasibility study.
- End-user bonds are important to banks, as a significant proportion of bank finance is based on financing residential mortgages. However, there is not enough stock to house all the people that apply. The government's requirement that banks lend responsibly has also played a big role. People who deposit in a bank expect the institution to deal with their money responsibly. The bank uses this money in investments, wholesale projects and retail commercial bonds, and therefore wants to make loans available. Unlike businesspeople in the private sector, however, banks are not fly-by-night players and have to govern their finances circumspectly. Interestingly, a significant number of households are finding other solutions, such as personal loans and pension back-lending.

## On the politics of space: South African cities in 2030

- The successes and failures of current governance structures, such as ward committees, community development forums and RDP forums, need to be scrutinised closely for lessons to be learnt and possible changes to be made. Sometimes the bureaucracy itself produces really creative projects, as do non-governmental organisations and community-based organisations. If we capture those, they can become models around which future performances are inscribed.
- The notion of equity and equality is still not clearly understood, and people have different perspectives

on these terms. This affects what we want an "equal city" or "equal spaces" to look like. To give an example, equality is when one person has five bananas and another has five apples. Both have five fruit and can trade these with each other, if necessary. Equity, however, is lacking when a person has three fruits and another has only one. It is about putting in place mechanisms for dealing with an unequal set of circumstances. Over time, equity (fairness) measures should finally lead to equality (sameness).

## Panel discussions and feedback continued

- Making available well-located land that is protected for the interests of the poor, because they would otherwise have to compete with powerful role players (such as developers) on an unequal basis, is an equity measure that is hoped will produce equality over time. It will not happen automatically.
- Trying to re-engineer our space through infrastructure investments is good. We should also bear in mind that communities are the market. They need to be engaged and empowered, because it is the money in their pockets that will determine how they actually change the spatial forms. On the other hand, poor communities might not be in a position to make long-term and almost selfless decisions, as opposed to the pressing things required for today and tomorrow. Vulnerable communities are not only vulnerable spatially and economically; they are also vulnerable to the politics of promises.
- Governance at the local level is very politically charged. For instance, there is a great deal of patronage involved in the election of ward committees and the sectors they represent. Councillors are frequently only responsible to their political parties and their accountability mechanisms rarely go down to the level of the very communities that they serve. However, where there is a close association between ward councillor and community, they can approach him or her to fight for a housing issue. Engagement and meaningful participation are vital.
- A plethora of legislation governs how the state should be interacting with civil society in terms of representative democracy. Where civil society is not sufficiently organised to articulate needs and look at constructive ways of making its demands, it can lead to a whole number of processes that are very detrimental to society.
- Ordinary citizens usually have very little access to organs of state, unless they have an interlocutor, such as a non-governmental organisation, which makes the representations to make their voices heard. If institutional mechanisms are not working, they are not giving people a voice in decision making, which is then largely still delegated to bureaucracies and bureaucrats.
- Good bureaucracies are important in leveraging significant change. (In the absence of good bureaucracies, then the cities are important.) Instead of rejecting an institutional framework as it is, we should appreciate the factors that led to its adoption in the first place and then consider how to change favourably, without simply perpetuating part dependencies. Processes that are not working should be cut short.
- The need for public participation should not be overemphasised, however, at the expense of both political and technical leadership. Technical experts should, for example, provide the kind of leadership they ought to without any fear. There should be realistic conversations about the capacities and capabilities of local governments in the country, and what they are expected to do in terms of creating sustainable human settlements and spaces. For example, we can hardly be talking human settlements to a municipality that cannot even manage its own sewerage farm.
- There are a set of immediate, practical things that need to happen, for example, looking at the housing waiting list and considering how the housing process can be scaled up and informal settlements can be upgraded to make living conditions better. At the same time, development agencies could look at infrastructure, but tied to the long-term perspective and the kind of country we ultimately want to live in.
- Social housing is one component for addressing a very specific market, the gap market. Some 70% of the population earns R3 500 or less. The majority of state expenditure on housing, urban development and land will still need to be spent on the majority of its citizens.
- The politics of space and democracy in part reproduces the spatial economy, but the power to shape cities around space economy is driven by particular part dependencies, one of which is that money drives ownership of property. Social housing is the beginnings of breaking the part dependency, in order to allow moderate and low-income people access to better parts of a town or city.
- Social housing addresses a full residential market for people who are perhaps unable to acquire credit from banks. It will, however, not be the panacea for problems around housing. There will still be a very determined need for state intervention in the land and housing market, to be able to reverse the kind of exclusionary planning and cities that we have at the moment. In a comment on the World Development Report of 2009, the sobering observation was made that, despite powerful intervention by the United States through housing, it took six generations to get 75% of Americans well housed at the level of the middle class.

- Ultimately, it is about income poverty. Communities frequently cannot get out of poverty even when their asset bases, such as housing, are good. Housing and shelter are indeed enablers that contribute to alleviating poverty, but the issue is what kinds of conditions will produce capable citizens who can leverage themselves out of poverty. Skills development and employment are key. Unemployed people could be trained as artisans or engineers in public works projects that build houses, hospitals and schools.
- A success story followed when a certain community could not get access to resources. The women started and managed a savings programme.

To date, they have built 1 128 houses. Every owner knows how many blocks, asbestos sheets and bags of cement were used for their house, because they participated in the entire process. A total of 20 000 houses have been built in this way, in projects managed by women in informal settlements. Communities have pulled out developers' pegs and redesigned areas themselves as a community. There are similar best practices in hundreds of communities, and these should be disseminated.

## The way forward: Logic and levers of change

*Sinazo Sibisi, Divisional Executive, Development Planning Division, DBSA*



Source: Guy Stubbs Photographer (Pty) Ltd

*Self-employment requires a specific set of innate skills and a particular mindset*

What has become very clear from this seminar other than the fact that human settlements is not just about housing, is that the development of sustainable human settlements needs to be driven by five clear logics: a development logic, an economic logic, a connective logic, a scale and impact logic, and also institutional logic. The key question is what the levers of change are to ensure that will ensure have these logics in place.

The first consideration is a clear development logic. We tend to have a multiplicity of priorities without really being clear about how they sequence, and how they come together to produce certain outcomes. The objective is to create a better life for people, move them out of poverty and increase their social mobility. Traditionally, physical asset accumulation, land and housing tenure were seen as being the primary solutions to getting people out of poverty traps. However, the ability of the poor to translate these physical assets into productive assets is dependent on other types of assets as well, such as income.

Whether one looks at the depression of the housing market in terms of Reconstruction and Development Programme (RDP) houses, or the land transfer programme, it is essentially about what the driving logic behind it is, and how that logic has actually not proved effective in practice. Poorly planned

formulations fail to take into account the livelihood structures of the poor. Income and large-scale job creation need to be prioritised, especially in labour-absorbing sectors. Whilst the support and development of small and medium enterprises (SMEs) and smallholders are important, they will have a limited impact due to the monopolistic structure of the economy. Value chain intermediation is desirable but our current co-optive economy creates significant barriers to change in terms of producing new types of elites that have vested interests in the status quo.

The poor are frequently unable to work themselves out of poverty. Self-employment requires a specific set of innate skills and a particular mindset. We, therefore, have to prioritise education and human capital development, both public and private, and also in the workplace in terms of increasing choice and mobility, supported by ongoing improvements in living conditions. Here the focus is on building core assets, as well as productive assets.

Secondly, a clear economic logic is needed. In part, this has to do with a lack of inter-disciplinary approaches in terms of how settlements are actually planned. We need to understand the forces that drive settlement formation; the regional natural resource endowments; the forces of agglomeration (such as

transport, connectivity and socially imbedded networks) and what drives people's migration choices. In addition, we need to understand the potential of different settlements to revitalise the old and create the new. This entails moving from a static discourse of redress to renewal and opportunity.

It also means being clear about the economics of settlement design; that is, how do cross-subsidisation (in terms of rich and poor, or economic and social infrastructure), land and housing markets, and promoting the financial sustainability of settlements all fit together? We tend to theorise about how we can establish the poor on well-located land. However, we cannot simply assume that a city whose revenue base is driven by 90% of a population - who cannot afford to pay for services or the maintenance of various properties - will be viable in the long term.

Another key issue is maximising sustainable solutions to decrease costs and increase affordability through sustainable solutions in terms of transport, housing and service delivery. Development finance institutions have a large role to play in rolling out environmentally sustainable solutions at scale. We should be bold when redesigning cities, for example, by knocking down some badly located buildings to make a transport route more efficient.

We need to understand the logics of different migrants and their settlement choices, for example, the demographics of the urban core are essentially driven by people's desire to get closer to economic opportunities, whereas for the urban periphery and rural settlements it is access to services. The cost of formalisation is important, and also who is benefiting from it. There should not be a disconnection between targeted and actual beneficiaries. Different needs will require different instruments, and we should be clear as to how these different instruments articulate in different spaces. For instance, for the unemployed poor, an incremental approach or informalisation might be the best option in the short term, rather than ownership. We should plan around opportunities and not short-term pressures.

Thirdly, we need a clear connective logic. The development of space is fundamentally about increasing connectivity. We need to move from a narrow spatial targeting paradigm to focus on spatial growth and integration. The whole notion of an urban/rural dichotomy is actually a false dichotomy, because a network of different settlement types

exists, and we need to understand the relationship between them, as well as the specificities of different settlements and their needs.

Transit-led growth should be promoted, thus decreasing costs and distance, while increasing access to economic opportunities and services. Transport is a critical economic stimulus, not just in integrating the centre with the periphery in terms of linking rural development with peri-urban and urban development, but also in terms of the densification of cities. Information and communication technologies (ICTs) promote social networks, offer access to information and decrease business costs.

As regards social capital formation, the nature of and relationship between different social institutions, as well as the quality of local leaderships and networks, are key factors in determining whether an area is able to realise its potential. We tend to forget that, at any level or scale, it is the people who make development. We need to build on successes to increase community agency at scale. The successes that have been achieved in South Africa to date have been built around organic networks. Development management should be people driven. In the matter of informalisation and incrementalism, reimagining dignity and empowerment is about putting power back into the hands of the people, and not assuming that it is up to the state to give them dignity by providing them with houses or access to basic services.

Fourthly, we need a clear understanding of a scale and impact logic. The creation of sustainable human settlements requires interventions at different scales and high levels of financial investment from both private and public sources. At a national level, there will be joint macro-level spatial planning and capital investment processes. Prioritisation is crucial, and we cannot prioritise unless we have a far more collective view of how to make these investments happen.

Norms and standards, as well as subsidy regimes, should facilitate a better settlement logic that drives socioeconomic imperatives, managing the articulation between different service delivery standards. Currently, for instance, the basic service delivery standards for sanitation are not aligned with the basic service delivery standards for water. Neither does a basic level of service delivery promote economic development in a particular space.

At a sub-national level, it is important to understand economic footprints. We are now contemplating

## The way forward: Logic and levers of change continued

interventions at a scale that move beyond established jurisdictional boundaries. At a local level, the need is to build collaborative networks and energies that make development happen; regulate land and housing markets; and understand integrated services and infrastructure investment planning, with full-cost accounting and asset management being key. At a community level, we need interventions that build on the sustainable livelihood strategies of the poor.

Fifthly, a clear institutional logic is needed. Governance is the key to integrated delivery and sustainable human settlements. The South African state has seen high and increasing levels of institutional failure, which is in part a supply-side problem. Whilst we need skills, we need to get the right people with the right skills in place. Even when academic institutions produce people with these formal qualifications, they do not yet have the experience on the ground. A multidisciplinary capability is required to make human settlements work.

In our context of social transition and political economy, the state is the main platform of capital accumulation for the new elites. This drives particular tendencies in terms of who gets access to economic opportunities, and so on. Whilst we may therefore talk about getting the right skills in the right place, the reality is that it will not change soon. The plethora of institutions also makes it more difficult to address institutional failure. It mitigates against accountability and weakens people's ability to mediate different interests. We need to find a way of streamlining government institutions, which means reviewing their power and functions; looking at their symmetry; and creating a greater centralisation of spatial planning and investment.

Governance has to be delinked from delivery mechanisms. We often assume that the platforms for voice and accountability must be the same as the platforms for delivery, which is not necessarily the case. We also need to increase opportunities for private and community delivery options.

What are the key levers for change? Accountability mechanisms have to be increased. This implies policy coherence and delivery coherence, as well as ensuring that the new processes and agreements are on track.

A number of financial instruments are available, such as intergovernmental transfers. We need to ensure that our conditional grants are actually conditional, not just conditional in terms of how the money is spent, but also where it is spent in order to promote spatial integration. They should act as an effective set of incentives and disincentives. A more flexible and articulate subsidy regime supports incremental settlement options and improves articulation between the transport, housing and services subsidies. Other instruments include more effective bridging mechanisms for mortgage finance; and innovative infrastructure funding instruments for debt and equity products and bulk infrastructure.

Lastly, visualisation - a "visual vision" - can have a huge impact in terms of helping us see alternatives, and also helping us realise where we are likely to end up if we do not act soon.

## List of acronyms

<b>BNG</b>	Breaking New Ground	<b>NGO</b>	non-governmental organisation
<b>BRT</b>	Bus Rapid Transit	<b>NHFC</b>	National Housing Finance Corporation
<b>CBD</b>	central business district	<b>NPC</b>	National Planning Commission
<b>CFO</b>	Chief Financial Officer	<b>NPDP</b>	National Physical Development Plan
<b>Codatu</b>	Cooperation for Urban Mobility in the Developing World	<b>NSDP</b>	National Spatial Development Perspective
<b>CoGTA</b>	Cooperative Governance and Traditional Affairs	<b>PHP</b>	people's housing process
<b>CRDP</b>	Comprehensive Rural Development Programme	<b>PIC</b>	Public Investment Corporation
<b>DAG</b>	Development Action Group	<b>PPP</b>	public-private partnership
<b>DBSA</b>	Development Bank of Southern Africa	<b>PSD</b>	passive solar design
<b>DHS</b>	Department of Human Settlements	<b>PLAAS</b>	Institute for Poverty, Land and Agrarian Studies
<b>DIACT</b>	Interministerial Agency for Spatial Planning and Competitiveness	<b>PRASA</b>	Passenger Rail Agency of South Africa
<b>DoE</b>	Department of Energy	<b>RIDP</b>	Regional Industrial Development Programme
<b>DPE</b>	Department of Public Enterprise	<b>SABS</b>	South African Bureau of Standards
<b>DRDLR</b>	Department of Rural Development and Land Reform	<b>SADC</b>	Southern African Development Community
<b>DWA</b>	Department of Water Affairs	<b>SALGA</b>	South African Local Government Association
<b>EIA</b>	environmental impact assessment	<b>SANBI</b>	South African National Biodiversity Institute
<b>ESDP</b>	European Spatial Development Perspective	<b>SAPI</b>	South African Planning Institute
<b>FLISP</b>	Finance Linked Individual Subsidy Programme	<b>SAPS</b>	South African Police Service
<b>FSC</b>	Financial Sector Charter	<b>SDF</b>	spatial development frameworks
<b>GDP</b>	gross domestic product	<b>SDI</b>	spatial development initiative
<b>GHS</b>	General Household Survey	<b>SEA</b>	strategic environmental assessment
<b>GIS</b>	geographic information system	<b>SME</b>	small and medium enterprise
<b>GVA</b>	gross value added	<b>SPV</b>	special purpose vehicle
<b>HLAMDA</b>	Home Loan and Mortgage Disclosure Act	<b>UHABS</b>	Universal Household Access to Basic Services
<b>HSRC</b>	Human Sciences Research Council	<b>UNDP</b>	United Nations Development Programme
<b>ICT</b>	information and communication technology		
<b>IDP</b>	integrated development plan		
<b>IHS</b>	International Housing Solutions		
<b>IOM</b>	International Organisation for Migration		
<b>IPDM</b>	Integrated Planning Development and Modelling		
<b>ISU</b>	Informal Settlement Upgrading		
<b>LGTAS</b>	Local Government Turnaround Strategy		
<b>MEC</b>	Member of the Executive Council		
<b>MIDSA</b>	Migration Dialogue for Southern Africa		
<b>MIG</b>	Municipal Infrastructure Grant		
<b>MoU</b>	Memorandum of Understanding		
<b>MTEF</b>	Medium-Term Expenditure Framework		



Headway Hill, 1258 Lever Road, Midrand, South Africa. PO Box 1234, Halfway House 1685, South Africa  
Telephone: +27 11 313 3911. Fax: +27 11 313 3086. Home page: [www.dbsa.org](http://www.dbsa.org)