



Conference on Innovation for Poverty Alleviation

Side Event to the 2012
South African – European Union
Summit

18 September 2012



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Science and Technology
REPUBLIC OF SOUTH AFRICA

Presentation outline

- The South African context
- The DST approach
- Key initiatives
- Experiences and Lessons



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A brief context

- Three spheres – National, provincial and local
- Delivery responsibility
- Multiple challenges, particularly at local government level
- Race, gender, and spatial dimensions of poverty
- Systems of innovation approach
- The business dimension
- The government cluster system





White Paper on Science & Technology

Preparing for the 21st Century

Department of Arts, Culture,
Science And Technology
4 September 1996

- Impacts – wealth creation and quality of life
- Priorities - ‘meeting basic needs at community level’, ‘reducing the total costs of infrastructure provision’ and ‘environmental sustainability’
- ‘urban and rural communities need to be assisted and encouraged to adopt social and technological innovations to assist them in decision-making and to enhance their ability to make informed choices’
- Strong focus on the social dynamics of innovation
- Inclusion of a Poverty Reduction mission - ‘demonstration and diffusion of technologies to impact quality of life and enhanced service delivery’



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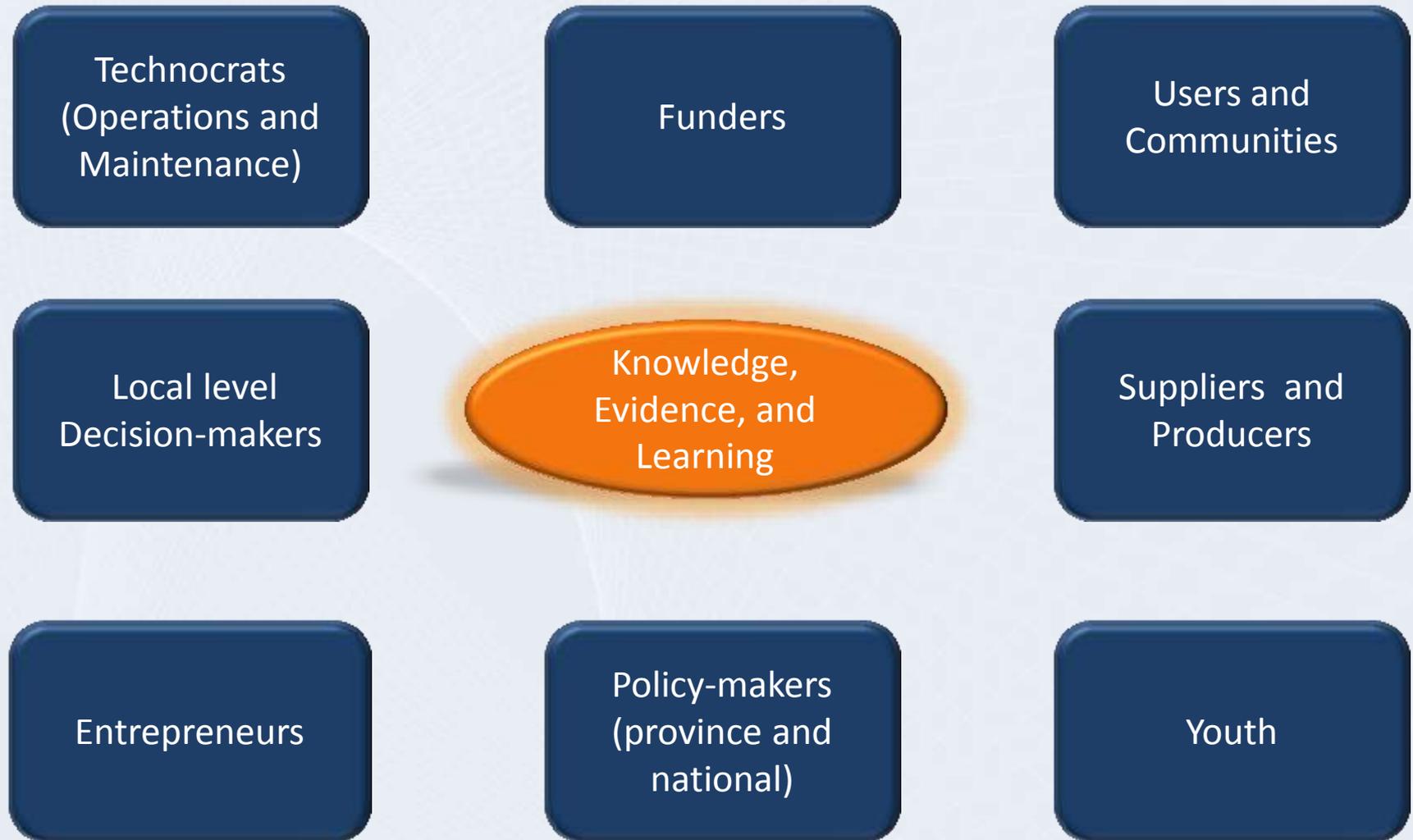
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Translating intention

- After the adoption of the R&D strategy in 2002, focus on testing and demonstrating opportunities for sustainable livelihoods and sustainable livelihoods
- Planning tools for planning and decision-making
- Institutional interventions
- Grappled with issues of sustainability, replication and diffusion, and scaling-up successes
- Experimentation with policy dialogues and influence

Year	Strategic Objective	Indicators
Pre-2012	<p>To demonstrate strategic technology-based interventions for poverty reduction in order to support the creation of sustainable job and wealth opportunities and contribute to sustainable human settlements and enhanced service delivery in areas of deprivation.</p>	<ul style="list-style-type: none"> • Number of Jobs created • Number of household beneficiaries
2012	<p>To inform and influence technology choices and how alternative technologies can be used to transform rural and social economic development, government planning and service delivery and the building of sustainable human settlements.</p>	<ul style="list-style-type: none"> • Number of sustainable livelihoods created, maintained or improved • Number of policy briefs
2013-2015	<p>Through knowledge, evidence and learning, to inform and influence technology choices and how alternative technologies are used to transform rural and social economic development, government planning and service delivery and the building of sustainable human settlements.</p>	<ul style="list-style-type: none"> • Number of sustainable livelihoods created, maintained or improved • Number of policy briefs • Number of decision-support interventions introduced or improved

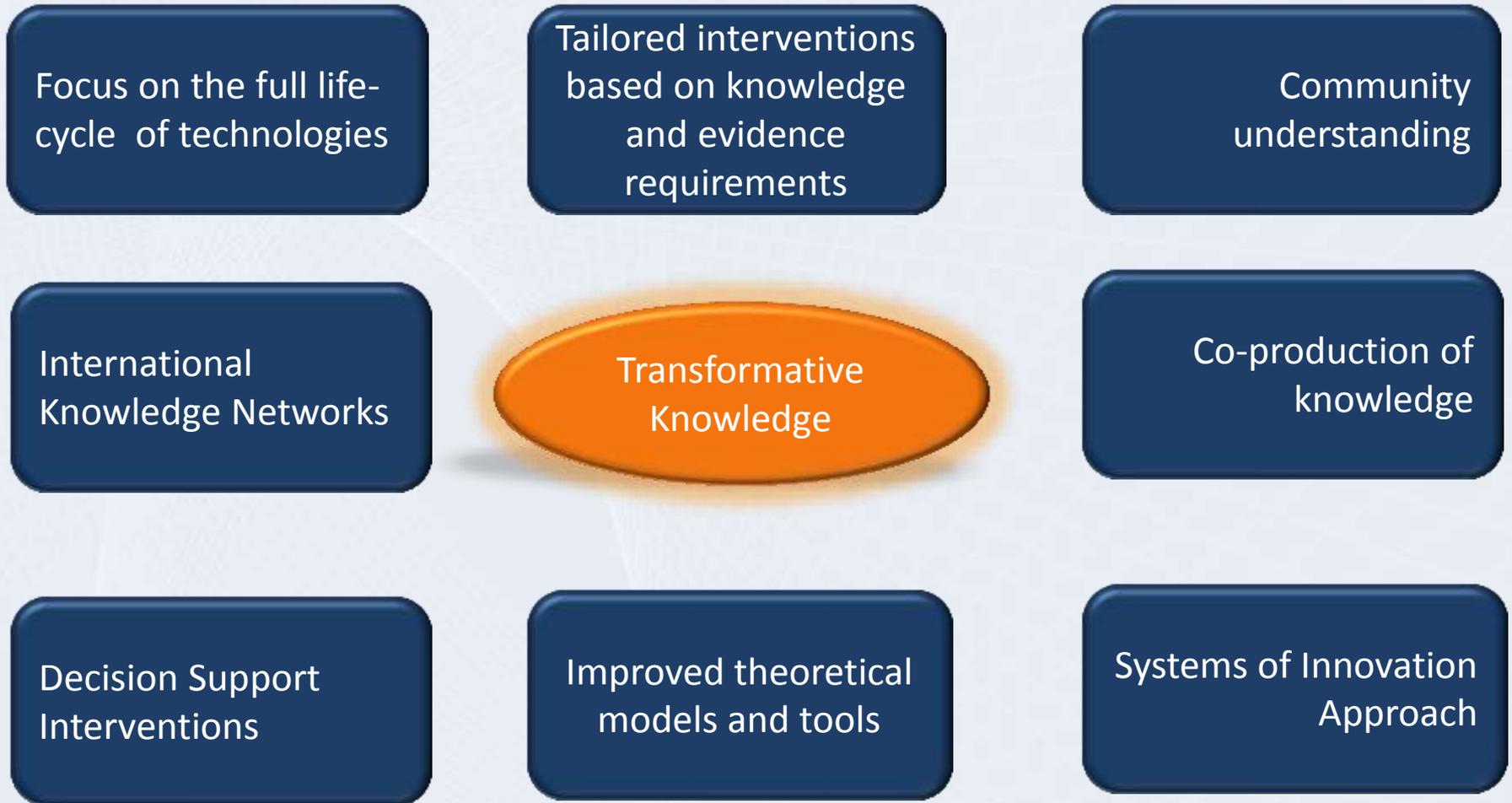
Mapping the requirements



Illustrating the Evolution - Kleinmond

Pre-2012	To demonstrate	Successfully delivered 411 low-cost housing units using innovative building technologies developed by the Council for Scientific and Industrial Research.
2012	To inform and influence	<u>Development of a Policy Brief/ Case Study</u> <ul style="list-style-type: none">• The need for long-term monitoring and evaluation (> 3 years)• Needed to understand and investigate the delivery of housing including issues of technology lock-in, and policy requirements (for example, affordability)• Other equally successful developments using Alternative Building Technologies (ABT's)• Standards and accreditation
2013-2015	Through knowledge, evidence and learning , to inform and influence	<u>Effective scaling-up strategy</u> <ul style="list-style-type: none">• M&E of Kleinmond and other demonstrators• Introduce Decision-Support interventions for Alternative Building Technologies (ABT)

Knowledge that transforms



Through knowledge, evidence and learning, to inform and influence technology choices and how alternative technologies are used to transform rural and social economic development, government planning and service delivery, and the building of sustainable human settlements

Sustainable Livelihoods	Innovation Partnership for Rural Development	Cofimvaba Education Initiative	Accelerated Sustainable Water Service Delivery	Urban Sustainable Human Settlements	Sustainable Energy (household and community)	Planning and decision-support
2004 -	2012 - 2014	2012 - 2016	2008 -	2008 -	2004 -	2009 -
Creation of jobs and sustainable livelihoods	Rural Development (Infrastructure and food security)	Rural Education Delivery	Water and Sanitation Delivery	Urban human settlement development	Energy Access and Alternative Energy Solutions	StepSA R&V Atlas Agric-ICT

Gender, youth, and environmental sustainability

Community-based S&T Journalist Programme

ICT for Development

Policy Dialogues and Learning

Development of Long-term Research Databases (Data collection and curation)

Accelerated Sustainable Water Service Delivery

- South Africa's gains in the provision of reliable water service since 1994 well-known
- Backlog - Between 7-10% of South Africans
- Interim water services in three project sites – Eastern Cape, Limpopo, and Mpumalanga
- Community involvement and Mobilisation
- Integrated solution - Operations and Maintenance – Reparability
- Institutional Issues



Piped Solutions: A Pipe Dream?

The Efficacy of Point of Use Water Systems

Policy dialogue hosted by the Department of Science and Technology and the European Union in collaboration with the Water Research Commission



Date: 2 October 2012
Time : 09:00 - 16:00
Venue: CSIR Knowledge Commons

Keynote Speakers: Mr Derek Hanekom, Deputy Minister,
Department of Science and Technology
Mr Roeland van de Geer, Head of EU Delegation



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CSIR
The South African Research Organisation



HSRC
Human Sciences
Research Council

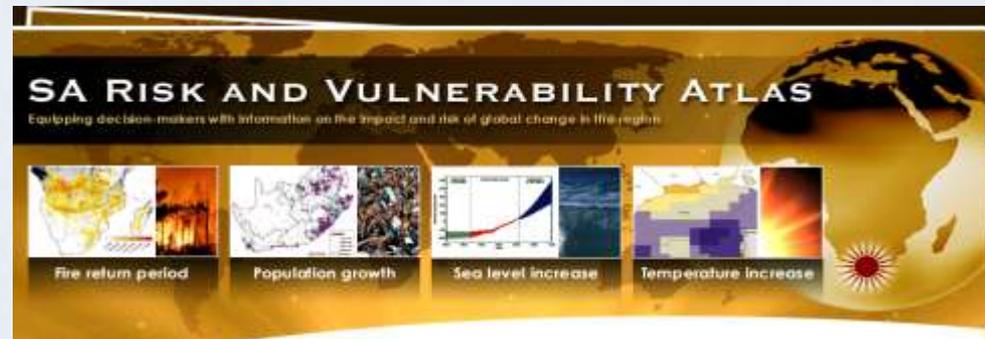


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Risk and Vulnerability Atlas

- Climate and environmental change important contributor to poverty
- Initiated in 2008 as a legacy initiative of the Global Change grand challenge
- Risk and Vulnerability Science Centres
- Key design innovations –
 - risk-based approach
 - Geographic integration



Integrated Planning tools

- Settlement patterns remain a key determinant in poverty patterns – transport and housing

The screenshot displays the homepage of the stepSA website. At the top left is the stepSA logo, which consists of the letters 'step' in a blue font and 'SA' in a larger, bold blue font, with a stylized map of South Africa to the right. Below the logo is the text 'spatial temporal evidence for planning. SOUTH AFRICA'. To the right of the logo is a navigation menu with links for 'about', 'regional spatial profiles', 'urban spatial simulations', 'housing and transport demand profiles', 'technology transfer', and 'contacts'. Further right is a search bar with the text 'Search Site' and a 'Search' button. Below the navigation menu is a breadcrumb trail: 'You are here: Home - Demonstrator Toolkit for Integrated Planning'. The main content area is divided into two columns. The left column is titled 'Spatial Temporal Evidence for Planning' and contains a sub-header 'An initiative in support of integrated development planning across sectors and scales, funded by the Department of Science and technology'. Below this are three circular icons: 'REGIONAL SPATIAL PROFILES', 'URBAN SPATIAL SIMULATIONS', and 'HOUSING & TRANSPORT DEMAND PROFILES'. Each icon has a 'more...' link below it. The right column is titled 'Newsfeed:' and contains three placeholder text blocks: 'Header off newsfeed item to be inserted here', 'A short abstract of the article to be inserted here which also acts as the link.', and 'Header off newsfeed item to be inserted here'. Below the main content area is a section titled 'What is the Toolkit for Integrated Planning?' with a paragraph of text. At the bottom of the page are four columns of links: 'Knowledge base' (Web Based Help, Technical Articles, GIS Dictionary, White Papers, Product Life Cycles, Product Documentation), 'Downloads' (ArcScripts, Galleries, Patches and Service Packs, Data Models, Geoprocessing, Samples and Utilities), 'User Forums' (Previous Forums, Current Forums), and 'Software' (Current and Mature Products). The footer contains logos for CSIR, DST (Department of Science and Technology), and HSRC (Human Sciences Research Council), along with the iRDM logo and a navigation menu for 'About | Help | Contact Us | Feedback'.

Community-University Partnership Programme

- Initiated in 2009 → first phase under review
- Piloted at four rural-based universities, namely: Fort Hare, Limpopo, Venda, and Zululand.
- 104 Honours bursaries awarded to students to become ‘change agents’ in their communities.
- Responding to poverty challenges
 - UNIZUL Intuthuko project - student’s research problems are identified by communities (University of Wageningen’s “Science Shops)
 - University of Fort Hare initiative integrated into Alice Regeneration Project (Fort Hare).
 - Establishment of rural community decision-making platforms for collective action against poverty and underdevelopment (UNIVEN)



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Rural Innovation Assessment Tool

- Initiated in 2011
- Twin motivations – understanding of the dynamics of rural innovation systems and an opportunity for self-reflection and problem solving by local level decision-makers
- To be piloted in 2 priority districts, thereafter to be rolled-out to remaining 21 districts

Innovation Partnership for Rural Development

- R144 million General Budget Support over the next three years
- System-level intervention
- In line with the revised strategic objective, a new approach to demonstrators (selection, design, management) → also, not limited to DST-funded demonstrators
- Programme-level indicators will include system-level and impact indicators (innovation capacity-building, technology management, etc.)

