



The District Development Model as a Platform for Innovation for Inclusive Development

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M *Making* *sure* *it's possible*



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

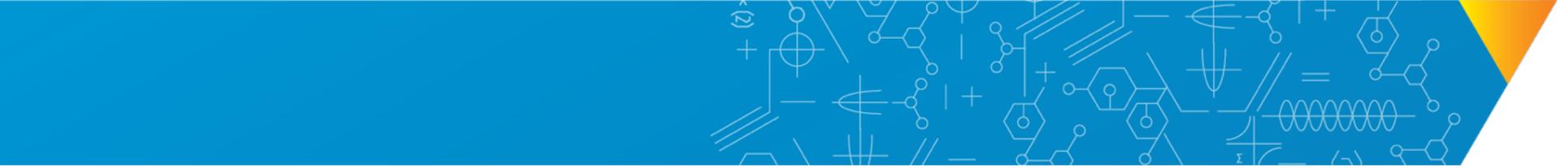


Purpose of the Presentation

- Share the DSI approach, rationale to the District Development Model and a portfolio of selected projects to support district municipalities.
- Present a case for positioning the DDM as a Platform for Innovation for Inclusive Development.

Content Outline

1. Interpretation and Internalized the DDM as the DSI
2. DSI DDM Approach Principles;
3. Three Pronged Approach to the DDM;
4. DDM Process 1: Selection of 125 most responsive and high impact projects (list submitted to DCOG and project examples);
5. DDM Process 2: Innovation and technologies to support the delivery of basic services to 35 municipalities;
6. DDM Process 3: DDM as a platform for inclusive innovation and the implementation of the Decadal Plan
7. Conclusion;



Interpretation of the DDM by the DSI

District Development Model – as a platform for Inclusive Innovation to address poverty, unemployment and inequality?

- The District Development Model **provides an opportunity** where national, provincial and local government can play a role to create conditions and a conducive environment for an **entrepreneurial and innovative districts through inclusive innovation programmes,**
- The DDM **provides a space where innovation could drive economic inclusion** and innovation based district regeneration through inclusive policy framework and where the discourse, the state and the district development programmes are inclusive and innovation driven.
- The District Development Model **provides a space for the implementation of the Decadal Plan to support economic construction and recovery** through:
 - Creating an enabling environment for innovation for inclusive development;
 - Creating an enabling environment for **using innovation to support existing sectors** (tourism, agriculture, mining and manufacturing) of the economy;
 - Creating an enabling environment for **supporting new sources** of growth i.e. circular economy;
 - **Procurement of locally developed technologies;**
 - Commercialisation of publicly funded IP

DSI's Understanding and Interpretation - District Development Model

- The model provides for an approach where national, provincial departments have to allocate **budgets that are georeferenced** in the District Municipalities;
- This will provide a baseline of the current investments in the District Municipalities;
- A “gap analysis” to understand the how “various government programmes” (national and provincial) **respond to the “development challenges (Govt, municipalities, SOE’s, Pvt Sector)** and material conditions” on the ground by juxtaposing these initiatives against the DDM “development profiles”;
- The DDM should produce **“One plan” by the whole of government to respond to the developmental needs** in a particular geographic space;
- DDM is about national, provincial and local government planning together, implementing together!

NB: **Innovation in the DDM** is about ensuring that **citizens are better served**, help **communities** become part of **solving their own challenges**, **basic services** are delivered, **capacity of people is enhanced**, **local systems of production** are supported – **Innovation is about public good**. Municipalities should be **enablers of innovation** through the DDM

DSI's Understanding and Interpretation – District Development Development Model

- **Solve the Silos at a horizontal and vertical level;**
- **Narrow the distance between the people, government and the movement by strengthening the coordination role and capacities at the District and City levels as the penultimate sphere closer to the people after ward and local;**
- Deliver Integrated Services whilst strengthening Monitoring and Evaluation and impact at district and local levels, as well as within the movement;
- Ensuring inclusive and gender mainstreamed budgets; Transformation for peoples lives;
- **Maximising impact and aligning interdepartmental resources on similar or related projects and avoid duplication;**
- Changing the face of our rural and urban landscapes by ensuring complementarity between urban and rural development, with a **deliberate emphasis on Innovation for Local Economic Development in district municipalities;**
- **Ensure inclusive growth** whilst accelerating initiatives to promote **poverty eradication, employment and equality (district development profile).**

District Development Model Principles and Objectives

Principles Underpinning the Model

- a. **Existing Constitutional Framework Remains as is**, whilst strengthening the regulatory framework for Cooperative Governance
- b. Reinforce Local Government and its Proximity to Communities
- c. Distinction Between Long-term and Medium-term **Strategic Planning/Implementation Mechanisms**
- d. **Build on Lessons** from implementing previous similar and Existing Good Practices – Current MTSF Alignment (DPME) and Operation Sukuma Sakhe (OSS) and other emerging best practice
- e. Focusing effort in a **geographic location – spatial management** of interventions
- f. Linkages, synergies, maximize impact across govt. programmes in a District.
NB: What is the total impact of government interventions in a District Municipalities?

Main Objectives of the Model

- a. Managing rural/urban migration, as well as sustainable growth and development;
- b. **Determining and/or supporting local economic drivers;**
- c. Determining and managing spatial form, land release and land development;
- d. **Determining infrastructure investment requirements** and ensure long-term infrastructure adequacy to support integrated human settlements, economic activity and **provision of basic services, community and social services through geographic crowding;**
- e. **Institutionalize long term planning whilst addressing ‘burning’ short term issues**

KPI - One Plans

- The **One Plan** is a **long terms plan** that will respond to burning issues, it will express the NDP at local spaces;
- It will demonstrate how in a **geographic space is government making an impact**;
- The One plan should demonstrate how is a **collective of government interventions** are making an **impact in a geographic location**;
- The success on One Plans should demonstrate how district municipalities could use **INNOVATION** to **respond** to the **material conditions** on the **ground and to improve people's lives**; improve the **performance of municipalities** and increase **access to quality basic services** by citizens, **stimulate inclusive district economies**.
- The **One plan** will inform **reprioritization that all government departments** must do;
- The **One plan** should inform departmental **App's** as well as **municipal budgets**;
- The One plan is a base for “ **all of government approach**”

Pillars of the One Plan



Demographics and District profiles

(Multi-dimensional Poverty Index, Hunger; Skills audit in the district; Land use and Audit of the district; Social Capital Index; Health Index; Inequality; Service Delivery Index and Stakeholder Analysis)

Infrastructure Engineering

(the process by which infrastructure planning and investment especially bulk infrastructure, roads, transport, water sanitation, electricity, energy, solid waste, integrated human settlements in a sustainable way over the long-term.

Alternative forms of labour intensive infrastructure projects such as the paving of access, ring and local roads)

Spatial Restructuring

(Transformed and efficient spatial development pattern and form in order to support a competitive local economy and integrated sustainable human settlements.

Spatial restructuring informs infrastructure investment in terms of quantum and as well as location and layout of infrastructure networks.

Harmonization of Spatial Development Plans at the District and provincial levels, for national support At least 1 SDZ in each District and/or City)

Governance and Management

(Coordination, accountability and management structures at national, provincial, district, local and ward level championship. Technical support capacity with cooperative, civil society and spheres reach leadership and management, in particular with regards to planning, budgeting, financial and performance management takes place in an effective, efficient, accountable and transparent manner. It also includes spatial governance, that is, the process by which the spatial transformation goals are achieved through assessing and directing land development and undertaking land use management and land release of municipal/public land. Monitoring and evaluation starting at a ward level coordinated at the district

Economic Positioning

(Economic Development Opportunities Mapping; the process by which a competitive edge is created that enables domestic and foreign investment attraction and job creation. The economic positioning informs the spatial restructuring that is required. Unemployment/Employment; Local Economic Development (LED) supported by cooperatives, township and rural economies; Economic anchors in the areas)

Integrated Service Provisioning

(Deliver integrated human settlement, municipal and community services in partnership with communities so as to transform spatial patterns and development for planned integrated sustainable human settlements with an integrated infrastructure network. Holistic household level service delivery in the context of a social wage and improved jobs and livelihoods

District Profiles: Development Challenges

Ekurhuleni DM Profile:

- The population of the City of Ekurhuleni is 3 774 638, having grown from 3 698 772 in 2018, the growth rate has been declining from 2,8% in 2011 to the current 2,1%.
- The unemployment rate in Ekurhuleni is 31,8%. The unemployment rate in the city has always been far above the Gauteng and country average. Poverty remains stubbornly high in the CoE with over 34% of the population living in poverty.
- The City of Ekurhuleni has 4% of people without any education. In total, the number of people with primary and secondary education is 43%, while 41% of people in the City have matric. Only 4% of people in the City of Ekurhuleni have an undergraduate qualification.

Ugu DM Profile:

- The total population of the Ugu District municipal area is 754 954 with a growth rate of 1.1% in 2019, up from 0.6% in 2009.
- Among those aged 20 years and older, a quarter (25%) have completed only primary school or lower. A third (33%) have completed some secondary school (without matric).
- Almost three-quarters (71.5%) of the households have access to piped water; 85.2% have access to electricity and 71% have access to sanitation. • Only 14.7% of the households are indigent households.
- The predominantly rural municipalities are plagued with the highest poverty rates. The Umzambe municipality has the highest poverty levels with Ray Nkonyeni municipality enduring the lowest at 19% and 11% respectively.

Zululand DM Profile:

Population contributes to 22% of KZN population. Population growth is at 1.4% and 1.6% * about 868 031 population in 2019; 51% of population younger than 18; In 2019, 722 000 (83%) people were living below the upper bound poverty line of R1227 per person per month poverty line.

The biggest employer is the community services sector which employed 27% of the employed, the trade sector employed 20,5%, electricity sector employed 0,4% and mining sector employed 0,6%

Most of the learners in the rural areas of the district travel long distances to access educational facilities. Lack of educational facilities, but also shortages of teachers, limited career guidance, and/or poor quality of facilities; 14.8% of the population had no access to electricity.

Age

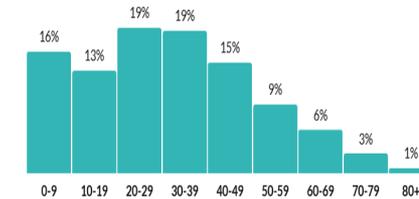
30

Median age

a little higher than the figure in Gauteng: 29

about 20 percent higher than the figure in South Africa: 25

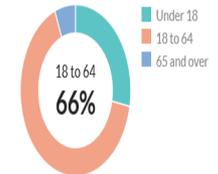
Population by age range



Source: Community Survey 2016

Chart Options

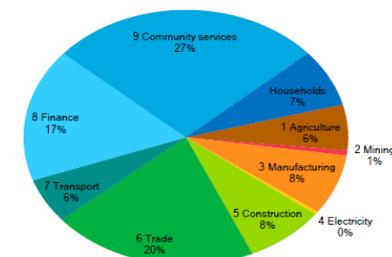
Population by age category



Source: Community Survey 2016

Population Profile		Socio-Economic Profile	
Total Population	754 954	Total Number of Households	175 146
Young (0-14)	286 823	Average Household Size	4 (Persons/HH)
Area in KM ²	4 908	Access to Piped Water	125 305 (71.5%)
Population Density	153.49	Access to Electricity	149 224 (85.2%)
Population Growth Rate	1.1%	Access to Sanitation	124 354 (71.0%)
Sex Ration (Male/100 Females)	92	Indigent Households	25 750 (14.7%)

Total Employment Composition
Zululand, 2019



Source: IHS Markit Regional eXplorer version 1946



DSI DDM Approach Principles

Principles Guiding the DSI's Approach to the DDM

- DSI's approach to the DDM should not be about listing projects being implemented at a district;
- The DSI's approach to the DDM should be based on a model that can package DSI's interventions for impact;
- DSI may also need to engage with DDM municipalities on the proposed innovation and interventions and projects. The approach to select the final innovation projects for the districts should be a bottom up approach;
- Data and information intelligence is needed about projects that the DSI has successfully deployed before and where DSI can deploy again;
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- Systems such as data analytics, GIS should also be used to derive intelligence on projects and mapping such projects against the development needs on the ground;
- The DSI should not only focus on the 3 districts where the Minister and the DM are deployed as political champions for the DDM, but DSI should support all 52 districts.

Principles Guiding the DSI's Approach to the DDM

- DDM innovation projects should also demonstrate regional focus and inter-linkages between rural and urban communities and development challenges;
- DSI should explore how the DSI DDM projects could be institutionalized at the district level;
- DSI should also explore how it could leverage international innovation donor funding to support the district development model ;
- The DSI's approach to the DDM should not be about offering individual interventions and projects, but to achieve this through a systems thinking approach;
- DSI will have to do a macro-analysis of current DSI 's projects in districts and evaluate their impact;
- Modelling of impact of DSI initiatives on poverty, unemployment and income at a district level, through DSI's projects multiplication formula and packaging scenarios i.e. What total impact would a combination of Technology Stations, Community Wireless Networks such as Zenzeleni and Research Chairs Programme could make in a district?
- Identify projects whose value add that is a quantum higher!



DSI's 3 Pronged Approach to the DDM

DSI has a 3 Pronged Approach to the DDM

- **DDM Process 1: Selection of Current, High Impact and Responsive Initiatives to the District Profiles (DSI and DSI Entities Database of DDM Projects officially submitted to DCOG):**

Profiling of Current Projects (Contribution to DSI outcomes, White Paper, SDG's, Responsive to the Poverty, Unemployment and Exclusion etc),

DDM Projects Selection Criteria (Projects that are responsive to skills, employment, entrepreneurship, economic opportunities, basic service delivery, local economic development, local supplier chains, circular economy, women, youth, unemployed) ,

4 Impact Extents- (high, medium, moderate, low);

Impact Areas – (Life changing opportunities, Economic competitiveness and recovery, Access to Basic Services and Societal problems, challenges and decision support tools)

- **DDM Process 2: SBS Innovations for Service Delivery (VVISDP)- (Bottom up approach where municipalities registered their service delivery challenges that require technology and innovation)**

Municipal Applications Summary	
Total Applications	108
Total Recommended	78
Total Rejected	30
Recommended for Project 1	27
Recommended for Project 2	29
Recommended for Project 3	8
Recommended for Project 4	7
Recommended for Project 5	7

- **DDM Process 3: DDM as a Platform for Inclusive Innovation and Implementation of the Decadal Plan Initiatives**

Focus areas of the Decadal Plan that should be implemented in the DDM

Proposed Decadal Plan Initiatives (Using the packaging model for DDM interventions)

Institutional Arrangements for Implementing the Decadal Plan at a District Level:

Inter-Premier /Mayor Committee on Innovation

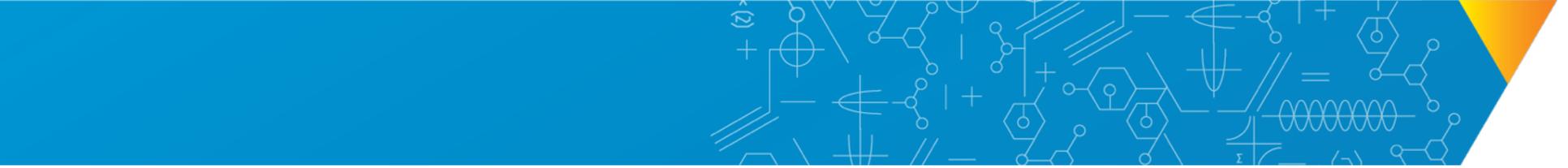
DDM Innovation Compact

DDM Innovation Strategic Management Model

DDM Innovation Fund

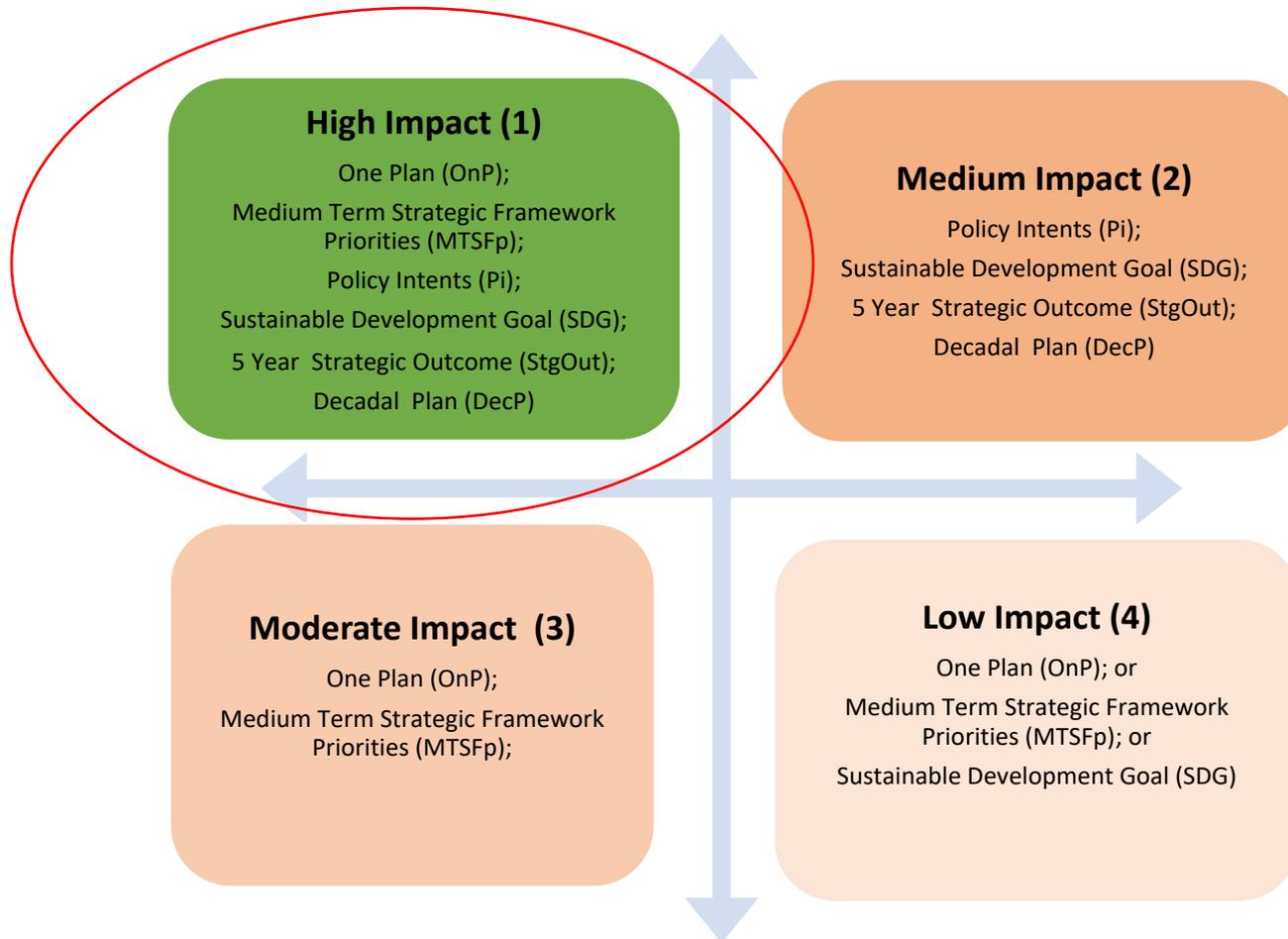
DDM Innovation Action Plan

DDM Inclusive Innovation Programme

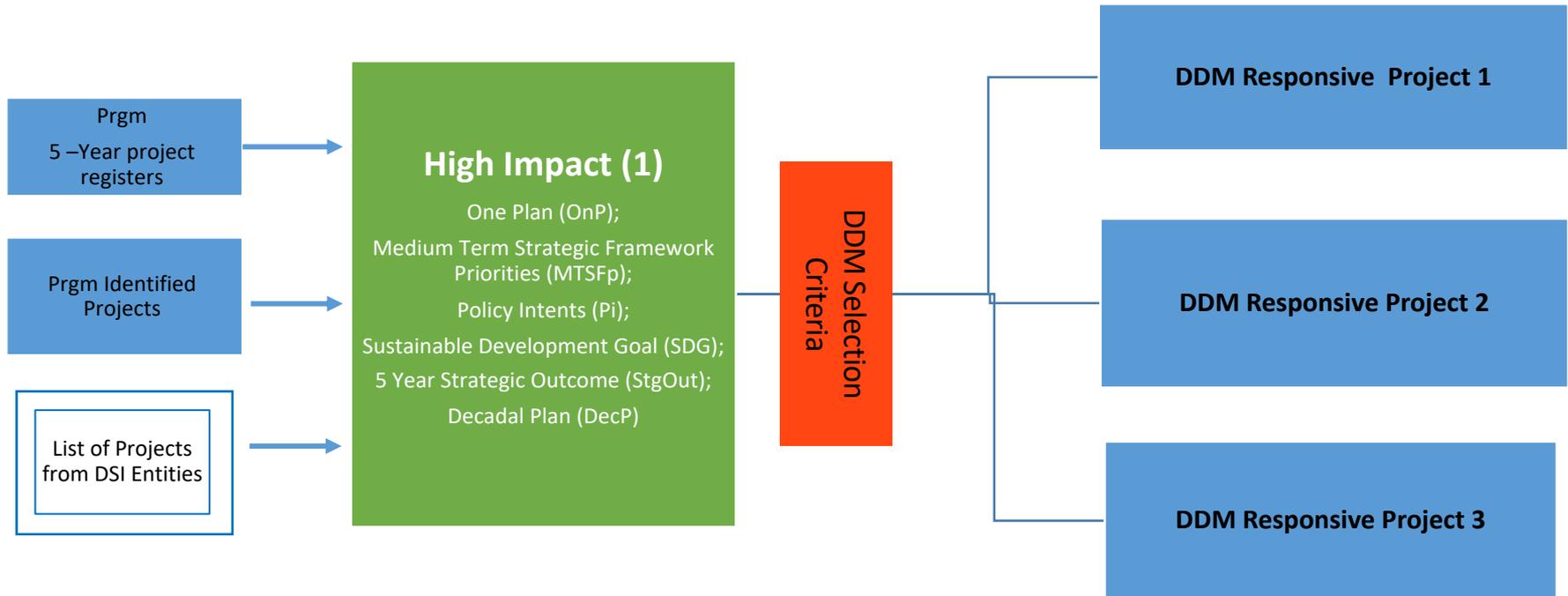


DDM Process 1: Selection of Current, High Impact and Responsive Initiatives to the District Challenges

DSI DDM Project Impact Extents



High Impact and Responsive Project - Selection Process



DDM Projects Selection Criteria

- Initiatives which catalyzes and advance **economic inclusion of youth through support to youth-owned enterprises** and innovations, **develop skills for employability, entrepreneurship** and enhance the engagement of youth as **active citizens**;
- Projects that are directly responsive to **SOCIETAL challenges such as crime, drugs, health, drought, climate change, including risk and vulnerability profiles**;
- Projects that respond or promotes the roll-out of **innovative solutions to deliver basic services in municipalities such as water, sanitation, energy, education and connectivity** ;
- Projects that support **local systems of production, circular economy and innovation for local economic development.**
- **Infrastructure**
- **Women, youth, disabled people and directly impacting on the community;**
- **Local industry and supplier vale chain**
- **Benefit to SMME's and Cooperatives**

NB: Projects that has direct beneficiaries as youth, community members, the municipalities, SMME's, businesses and can address basic services and unemployment.

DSI DDM: Impact Areas

Impact Area (1)

Life Changing Opportunities

- skills development;
- training, innovation leadership skills;
- entrepreneurship support;
- digital skills;
- incentives and support for tech start ups, innovation SMME's, cooperatives;
- support for unemployed youth, women
- youth innovation incentive schemes

Impact Area (2)

Economic Competitiveness and Recovery

- local systems of innovation and production;
- circular economy;
- innovation for local economic development;
- innovation support for existing economic sectors such as mining, agriculture, tourism and manufacturing;
- support for new sources of growth;

Impact Area (3)

Access to Basic Services and Infrastructure

- basic service delivery such as water, energy, human settlements, education, waste management, health and sanitation;
- innovation infrastructure;
- community innovation, science support centres;
- community broadband connectivity;
- Research infrastructure;
- support for new sources of growth;
- smart cities, smart settlements and neighbourhoods

Impact Area (4)

Societal Problems, Challenges and Decision Support

- youth in drugs;
- environmental pollution and degradation;
- climate change and drought;
- safer cities and communities;
- social development;
- decision support tools;
- policy research

DDM Projects Information Viewer – Dashboard

Here are the links to the VVISDP and DDM viewers

VVISDP-

<https://insights.arcgis.com/#/view/9ce2337798254025b0547668fafa0a71>

DDM -

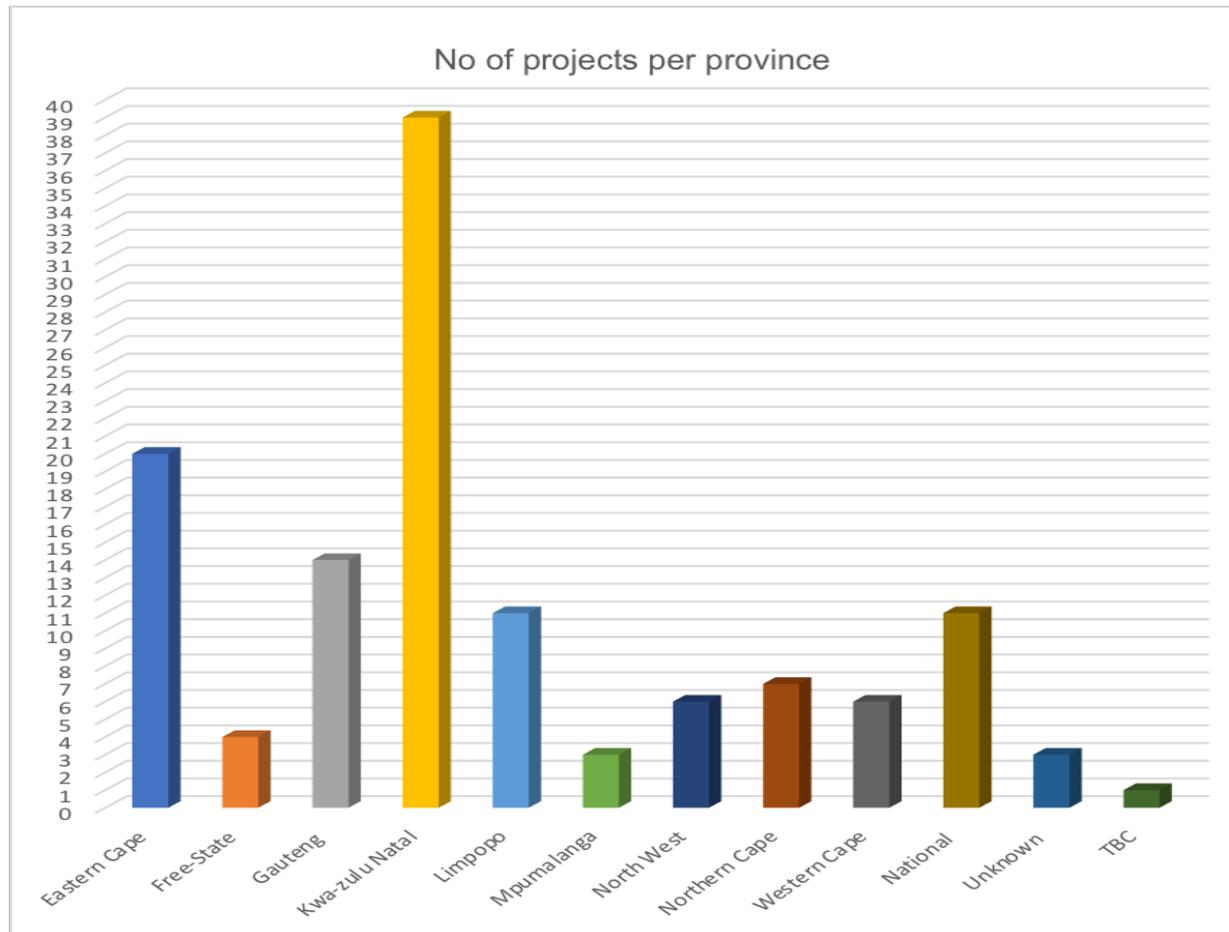
<https://insights.arcgis.com/#/view/f8d109d8697740ee9347cf4eb66d74f>

DDM Process 1: Database of DDM Projects by Province and District Municipalities of existing and current projects

DDM INITIATIVES FOR THE DDM															SDG DDM Intervention Profile												
Province	District Municipality	Project Name	Project Objective	Coordinates (Latitude, Longitude)	Anticipated Project Impact	Estimated Number of beneficiaries	Sector	District Municipality	Project Duration - FY (Start-End)	Project Status (Proposed, Active, Closed)	Total Project Cost (As per contract)	Actual Budget Expenditure (Amount to date)	Partners	Implementing Agency	Contact Person/ Project Manager	One-Plan Pillar Addressed	Project Impact/ Effect	DDM Section/ Criteria (Y/N)	SDG DDM Impact Area	Responsible Programme	White Paper Policy Intent	SDG 17 Outcomes	SDG	MTFF Priority	Decadal Plan	Project Budget (Y/N)	Funding Request
National	National	Schools ICT Maturity Assessment Tool	The project entails using the same page-based ICT Maturity Assessment Tool with innovation to assess ICT education and infrastructure. Each of the selected schools will comply with the prescribed selection criteria and each school will engage from a Quarter 1 to a Quarter 5 School. The schools are situated in rural, rural and urban areas. The tool assesses ICT competence and infrastructure.		A well developed, tested and improved ICT School Maturity Assessment Tool	1000 Schools	Education	National	April 2019 to June 2021	Active	R 532 127.88		Department of Basic Education and eGangweni, Zululand	Technology Innovation Agency	Ms Ahsan Rezaque	Integrated Service Provisioning	Projects that are directly responsive to the challenges such as crime, drugs, health, drought, climate change, including risk and vulnerability profiles.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Innovation to revitalize existing sectors	Outcome 1.1. A. Increased income, responsive and efficient national system of innovation	Goal 8: Build resilient infrastructure, inclusive and sustainable industrialization and foster innovation	Education, Skills and Youth Development (Priority 3)	Yes	Yes		
National	National	Coastal Innovation Programme	Innovation is further developed to support market entry; however participation in the knowledge infrastructure and provide support to at least 100 grassroots innovators in two years across 8 provinces. Focus on the revitalization and provide support that creates tangible economic benefits such as assisting grassroots innovators to become income generators, have access to markets and become profitable businesses. Collaborate and cooperate with at least 20 stakeholders of the innovation system and innovation entrepreneur support organizations and similar initiatives in the private sector by engaging early on. Co-located interventions such as enterprise development models, basic education training for the innovators etc. Create business opportunities and enable projects to innovators applying for participation in the grassroots innovation support activities and support packages. Create infrastructure (i.e. website, database and marketing programme) based and to communicate, pilot and evaluate the viability and quality of technologies and innovations that can improve the delivery of basic services, improve performance and functioning of municipalities		To achieve an inclusive system of innovation that is able to respond and support all kinds of innovation	25 Innovators benefited from the Coasts Innovation Programme	Skills Training	National	June 2017 to Current	Active	R 800 000.00			IA	Ms Ahsan Rezaque	Economic Positioning	Projects that are directly responsive to the challenges such as crime, drugs, health, drought, climate change, including risk and vulnerability profiles.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Strengthen skills in the economy	Outcome 1.1. A. Increased income, responsive and efficient national system of innovation	Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Yes	Yes			
National	National	Innovation for Service Delivery	Enhance vital services (i.e. website, database and marketing programme) based and to communicate, pilot and evaluate the viability and quality of technologies and innovations that can improve the delivery of basic services, improve performance and functioning of municipalities		Increased inclusive participation of relevant partners in the RSI (Stimulated use of innovative capabilities will demonstrate/clarify potential to cross sectors to assist relevant stakeholders to have services or products in rural and under-served municipalities. Developed models for commercialisation and absorption of technologies arising from cooperation/workshops in Research, Development and Innovation		Municipalities (Local District and Communes) Rural and under-served municipalities	Human Settlements	April 2019- March 2021	Active	R10 300 000.00	R10 300 000.00	COGTA, SALGA, NTL, TLA	DSB	Ms Tshepo Ngweni	Spatial Restructuring	Projects that are directly responsive to the challenges such as crime, drugs, health, drought, climate change, including risk and vulnerability profiles.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Improve inclusion and build new bridges across the RSI	Outcome 6: Improve all aspects of innovation and development state	Goal 9: Innovate to enhance productivity, innovation and sustainable development	Coastal, Ethical and Developmental (State Priority 6)	Yes	Yes		
National	National	Eastern Cape Centre Research Project	To drive sector wide adoption and implementation plan, source up and facilitate sector wide adoption and to facilitate sector wide implementation and source up for long term implementation based on ICT Training		Widespread adoption of the VME decision Support Tool by Metropolitan, District and Local Municipalities, National and Provincial Government Departments, Private Sector and Science Councils	48 Municipalities (District and Local)	Innovation Decision Support System	November 2018- November 2021	Active	R0 317 200.00	R0 302 260.00	HSRC, SALGA & UKZN	Dr Sibembo Mpeya	Integrated Service Provisioning	Projects that respond to priorities the rest of innovation solutions to deliver basic services in municipalities such as water, sanitation, energy, education and connectivity.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Strengthen government's role as an enabler for innovation	Outcome 5: Knowledge infrastructure, promote inclusive and sustainable industrialization and foster innovation	Goal 9: Build resilient infrastructure, inclusive and sustainable industrialization and foster innovation	Coastal, Ethical and Developmental (State Priority 6)	Yes	Yes				
National	National	DDM Innovation Fund	The project will organize and mobilize various public and private sector funding to support the DDM economic recovery by combining investment directed towards a DDM Innovation Fund. The fund will be supported through investment management and portfolio management services from existing grant funding from provincial and national government departments. The project will lobby National Departments to set aside innovation funding dedicated to support DDM initiative addressing employment, entrepreneurship and local economic development in new sources of growth, social economy, digital economy and redefining existing economic sectors or providing advantages already existing or bring economic activity in the selected DDM areas. Such funding will be brought through grant funding and will be available for initiatives		DDM Research Institute together with the industry partners will identify potential DDM projects to fund the project that will be in specific coordinates to identify	TBC	All	National	Proposed				DDM Municipalities		Economic Positioning	Projects that respond to priorities the rest of innovation solutions to deliver basic services in municipalities such as water, sanitation, energy, education and connectivity.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Strengthen the governance of public RSI initiatives	Outcome 4: Knowledge infrastructure for economic development, job creation, inclusive and sustainable economic growth, full and productive employment and decent work for all	Economic Transformation and Social Development (Priority 3)	Yes	Yes				
National	National	Innovate Entrepreneurs	Initiation programme for job wanting to start environmental businesses		Increased number of SMEs in the biodiversity, water and seeds sectors	50-100	Environmental	National	Not a project but a programme started in 2015	Active	R3m		ICM, GreenWater, SA Young Water Professionals, Innovation Hub, WRC	GreenWater	Ms Janine Steyn	Economic Positioning	Initiatives which catalyze and advance economic inclusion of youth through support to youth-owned enterprises and promoting, developing skills for employability, entrepreneurship and enhance the engagement of youth as active citizens.	Low Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	3	Exploit new sources of growth	Outcome 2: Human capital, skills and jobs for the economy and for development	Goal 5: Achieve gender equality and empower all women and girls	Economic Transformation and Social Development (Priority 1)	Yes	Yes		
National	National	Regional Innovation Support Programme	Support the development and establishment of innovation enabling ecosystems within jurisdictional boundaries that include build multi-faceted partnerships. Developable clusters that meaningfully participate in innovation support services and activities		Increase spatial targeting of innovation empowered clusters able to meaningfully participate in knowledge-based economy	about 940 to date	not applicable	National	2016 to present (currently 19 contracted interventions nationally)	Active	R41 889 018.00	R29 958 000.00	multiple provincial and local government, NGOs, science, youth, development agencies etc.	RSP PMU at Durban Kater (PMU), Cape (Mabonisa)	Spatial Restructuring	Projects that support local systems of production, circular economy and innovation for local economic development.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	2	Increase support for and collaboration with the business sector	Outcome 1.1. A. Increased income, responsive and efficient national system of innovation	Goal 8: Promote inclusive, sustainable economic growth, full and productive employment and decent work for all	Spatial Development, Human Settlements and Local Government (Priority 4)	Yes	Yes			
National	National	Converging Technologies Platform	To provide a platform for harnessing 4D-wide initiative (competences, capabilities and technologies) to address socio-economic innovation challenges (Pillar implementation)		Demonstration of integration of technologies to address particular challenges	N/A	Economic	National	2012/22-2022/24	Proposed	R0 941 804 (Pilot phase)	R	Impact Catalyst	COIR National Head Programme	Technical (Tshabalala, DSB), Business Model (CSIR)	Integrated Service Provisioning	Infrastructure	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	2	Improve inclusion and build new bridges across the RSI	Outcome 3: Increased knowledge generation and innovation output	Goal 9: Build resilient infrastructure, inclusive and sustainable industrialization and foster innovation	Economic Transformation and Social Development (Priority 1)	Yes	Yes		
National	National	Office of Technology Transfer (OTT) Support Fund	To establish OTTs within public bodies/ R&D institutions who will be responsible to ensure that IP within those institutions is protected and commercialised		IPB projects supported/ OTTs. The report could be an increase in commercialised IP, feasibility to job creation and economic expansion and as well as improving the quality of life among sector officials.	31 institutions benefited so far, with 169 individuals placed within the various offices	The OTTs interact with various sectors as they are based at research institutions	National	There is no end date, however our agreements are typically between 1-3 years. Continuation of the project is subject to budget availability	Active	R4M million	R65 million	CIPC, WPC, TLA	Largest Kater or Tshepo Jase	Economic Positioning	Benefit SMEs and Cooperatives	Low Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG)	2	Support commercialisation of publicly funded intellectual property	Outcome 3: Increased knowledge generation and innovation output	Goal 9: Build resilient infrastructure, inclusive and sustainable industrialization and foster innovation	Economic Transformation and Social Development (Priority 1)	No	Yes			
National	National	Mapping Informal Settlements in South Africa	Understanding informal settlements in South Africa for service delivery		Provide advice to DHS/ DSD to urban & spatial planning to deliver services	TBC	Human Settlements/EO	National	Ongoing	Active			NDVH, W&W	SANGA	Nobesani Mkhize (SANGA)	Demographic and District Profile	Projects that respond to priorities the rest of innovation solutions to deliver basic services in municipalities such as water, sanitation, energy, education and connectivity.	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	2	Enhance policy coherence and programme development in the RSI	Outcome 6: Innovation in support of a capable and resilient national system of innovation	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	Spatial Development, Human Settlements and Local Government (Priority 5)	Yes	Yes		
National	National	SARCO Human Capital Development	To develop a community of scientists, engineers and astronauts who will participate in the Astronomy Programme in South Africa and beyond, including participation in the SAA project		Increase the number of Astronomers, Scientists and Engineers	1337 students funded in total	Human Capital Development	National	Started 2005- ongoing	Active		72 million funded by the SARAO, Higher Education	SARAO	Hubert	Infrastructure Engineering	Skills, Training and (P&D) and (M&M), and business development	High Impact (3) One Plan (D&P); Medium Term Strategic Framework Priorities (MTSF); Policy Interventions (PI); Sustainable Development Goal (SDG); 5 Year Strategic Outcome (B&M); Decadal Plan (D&P)	2	Improve the research system output of human capabilities.	Outcome 2: Human capital, skills and jobs for the economy and for development	Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Economic Transformation and Social Development (Priority 1)	Yes	Yes			

Analysis of the Current Portfolio of DSI DDM Projects by Province and District Municipalities

NO OF PROJECTS PER PROVINCE												
Province	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
No of Projects	20	4	14	39	11	3	6	7	6	11	3	1

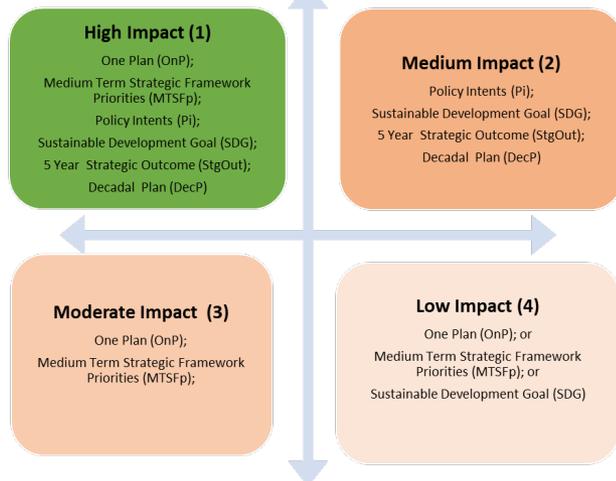


DDM Projects- Impact Extent Summary

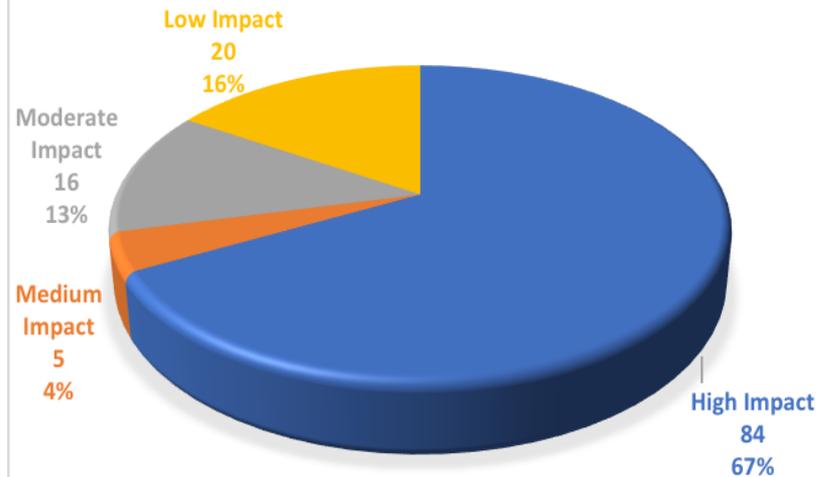
DDM PROJECTS - IMPACT EXTENT												
High Impact	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
	15	4	8	22	7	2	4	7	6	8	1	
Medium Impact	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
			1	2							1	1
Moderate Impact	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
			4	9	1					1	1	
Low Impact	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
	5		1	6	3	1	2			2		

Summary

High Impact	84
Medium Impact	5
Moderate Impact	16
Low Impact	20
	125

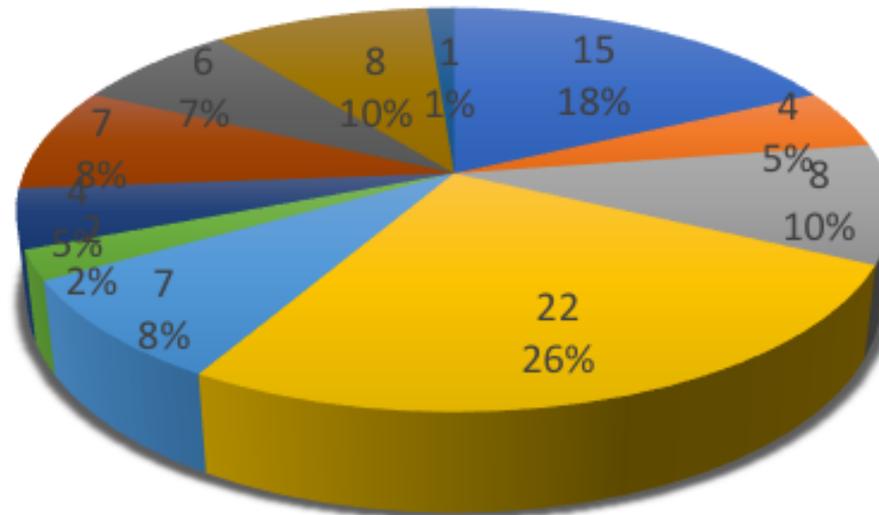


SUMMARY OF THE IMPACT EXTENT



DDM Projects- Impact Extent by Province

High Impact



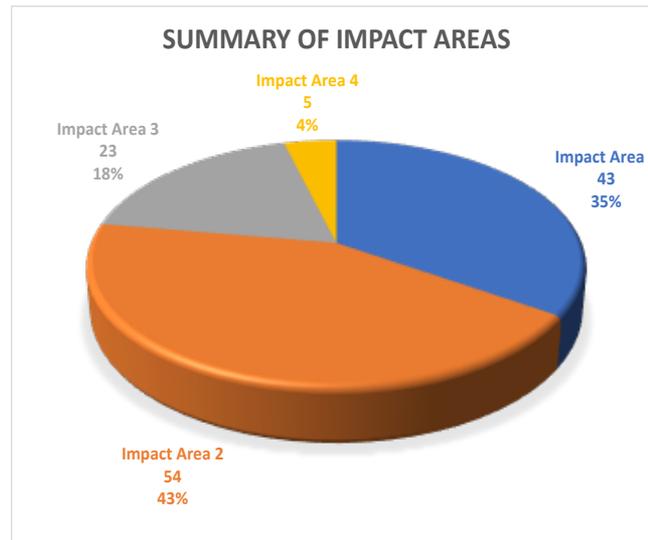
- Eastern Cape
- Free-State
- Gauteng
- Kwa-zulu Natal
- Limpopo
- Mpumalanga
- North West
- Northern Cape
- Western Cape
- National
- Unknown
- TBC

DDM Projects- Impact Area Summary

DDM PROJECTS ACCORDING TO IMPACT AREA

Impact Area	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
Impact Area 1	9	4	3	11	3	1	2	3	4	3		
Impact Area 2	10		7	18	6	1	1	4	1	3	2	1
Impact Area 3	1		4	9	2	1	3			3		
Impact Area 4	1								1	2	1	

SUMMARY OF IMPACT AREAS



Summary	
Impact Area 1	43
Impact Area 2	54
Impact Area 3	23
Impact Area 4	5
	125

Impact Area (1)

Life Changing Opportunities

- skills development;
- training, innovation leadership skills;
- entrepreneurship support;
- digital skills;
- incentives and support for tech start ups, innovation SMME's, cooperatives;
- support for unemployed youth, women
- youth innovation incentive schemes

Impact Area (2)

Economic Competitiveness and Recovery

- local systems of innovation and production;
- circular economy;
- innovation for local economic development;
- innovation support for existing economic sectors such as mining, agriculture, tourism and manufacturing;
- support for new sources of growth;

Impact Area (3)

Access to Basic Services and Infrastructure

- basic service delivery such as water, energy, human settlements, education, waste management, health and sanitation;
- innovation infrastructure;
- community innovation, science support centres;
- community broadband connectivity;
- Research infrastructure;
- support for new sources of growth;
- smart cities, smart settlements and neighbourhoods

Impact Area (4)

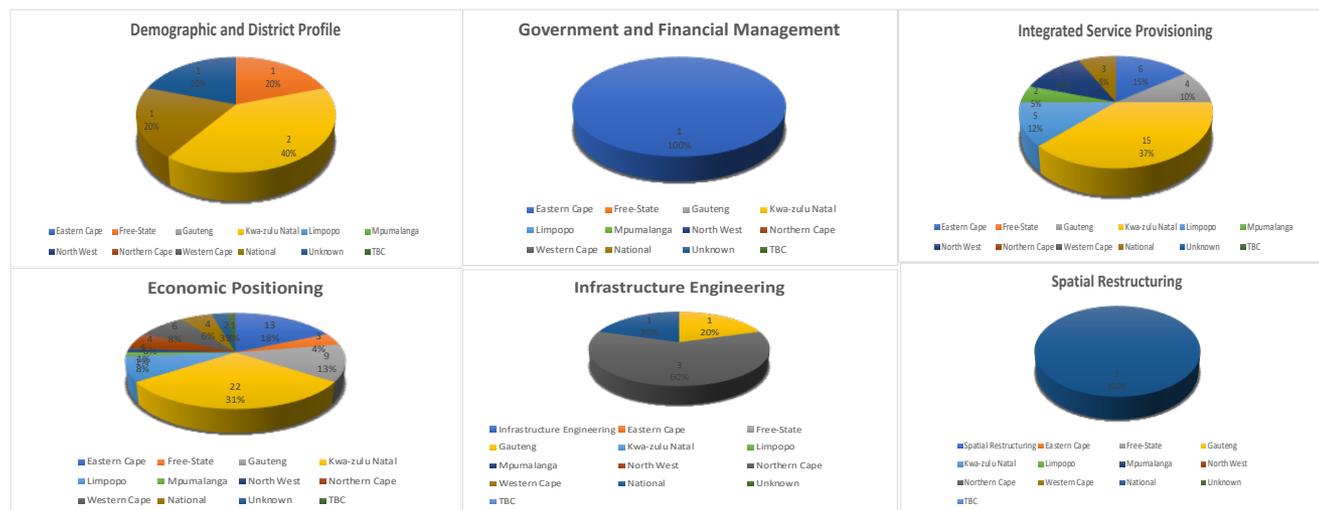
Societal Problems, Challenges and Decision Support

- youth in drugs;
- environmental pollution and degradation;
- climate change and drought;
- safer cities and communities;
- social development;
- decision support tools;
- policy research

DSI Selected DDM Projects- One Pillar Analysis

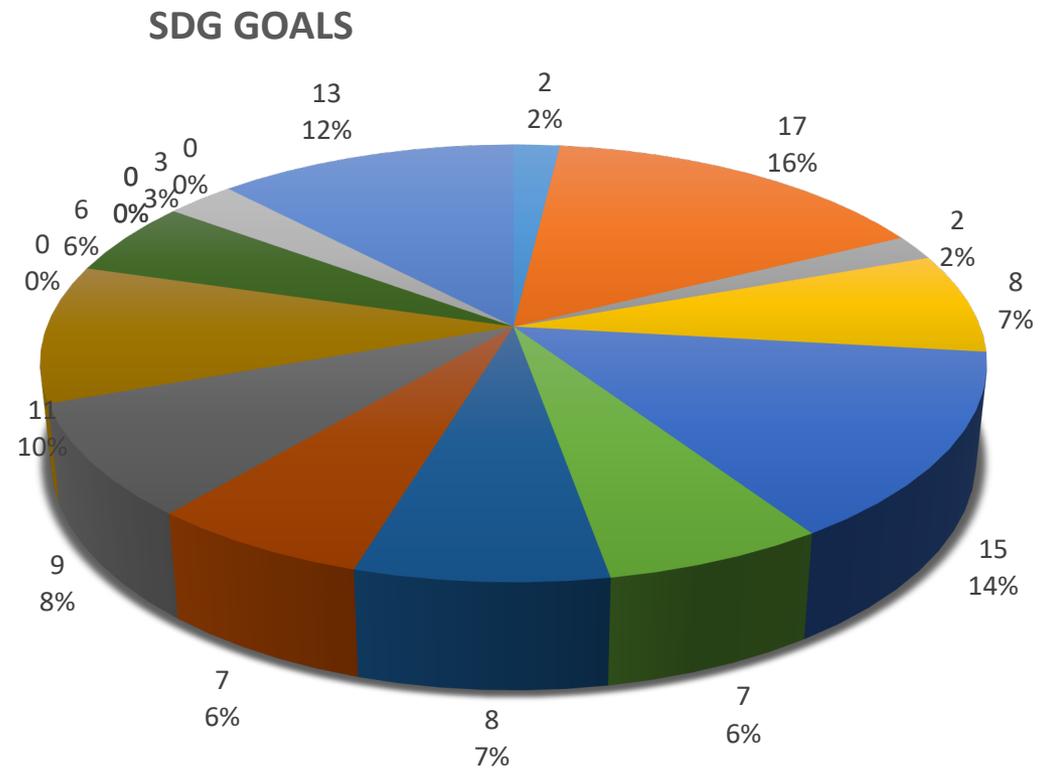
One Plan Pillar Addressed												
Demographic and District Profile	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
		1		2						1	1	
Government and Financial Management	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
	1											
Integrated Service Provisioning	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
	6		4	15	5	2	5			3		
Economic Positioning	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
	13	3	9	22	6	1	1	4	6	4	2	1
Spatial Restructuring	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
										2		
Infrastructure Engineering	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
			1					3		1		

Summary	
Demographic and District Profile	5
Government and Financial Management	1
Integrated Service Provisioning	40
Economic Positioning	72
Spatial Restructuring	2
Infrastructure Engineering	5
	125



DSI DDM Interventions by SDGs

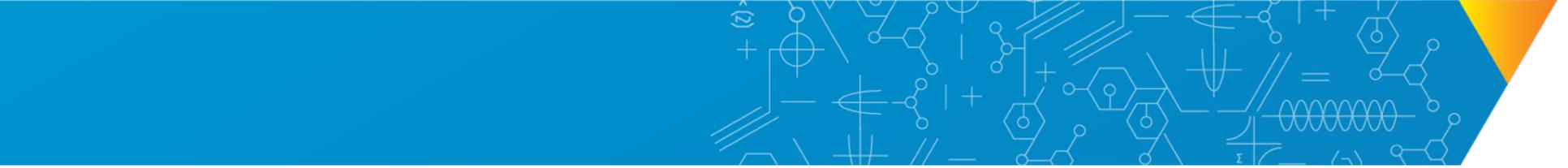
Summary	
Goal 1: End poverty in all its forms everywhere	2
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture	17
Goal 3: Ensure healthy lives and promote well-being for all at all ages	2
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	8
Goal 5: Achieve gender equality and empower all women and girls	15
Goal 6: Ensure availability and sustainable management of water and sanitation for all	7
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all	8
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	7
Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9
Goal 10: Reduce inequality within and among countries	11
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable	0
Goal 12: Ensure sustainable consumption and production patterns	6
Goal 13: Take urgent action to combat climate change and its impacts	0
Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development	0
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	3
Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	0
Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development	13



DSI DDM Interventions by White Paper Policy Intents in Provinces

White Paper Policy Intents												
	Eastern Cape	Free-State	Gauteng	Kwa-zulu Natal	Limpopo	Mpumalanga	North West	Northern Cape	Western Cape	National	Unknown	TBC
Improve inclusion and build more linkages across the NSI			3	4				2		2	1	
Enhance policy coherence and programme coordination in the NSI										1		
Strengthen the governance of public NSI institutions										1		
Expand the NSI				1								
Upgrade the M&E and policy capacity of the NSI:	5			6	3							
Brand South Africa as an innovative country												
Adopt a broader conceptualisation of innovation beyond R&D	1										2	
Adopt a whole-of- society approach to innovation	3	3						4	4			
Use public procurement as a vehicle to further innovation			1	2								
Increase support for and collaboration with the business sector	2	1	2	3	1	1		2	2	1		
Support commercialisation of publicly funded intellectual property												
Ensuring that legislation on intellectual property rights from publicly financed research and development responds to the changing policy context				1						1		
Increase the spatial footprint of innovation in South Africa				1								
Support innovation for social and grassroots innovation				2								
Exploit new sources of growth					1					1		
Innovation to revitalise existing sectors			1									
Strengthen government's role as an enabler for innovation	1			2	3	1	3			1		1
Expanding research outputs and transforming the research institutional landscape.			2	4								
Transform the profile of the researcher base.												
Improve the research system's output of human capabilities.										1		
Strengthen skills in the economy.	8		2	9						1		
Ensure an open, responsive and diverse knowledge system												
Support a science-literate and science-aware society												
Upgrade and expand research infrastructure			1		3							
Expand internationalisation and science diplomacy			1	2								
Increase levels of funding												
Develop funding priorities												
Institutionalise a framework for guiding public STI investment												
Improve funding efficiencies												

Page 1



DDM Process 1:

Examples of Current, High Impact and Responsive Initiatives to the Districts to achieve inclusion and improve service delivery

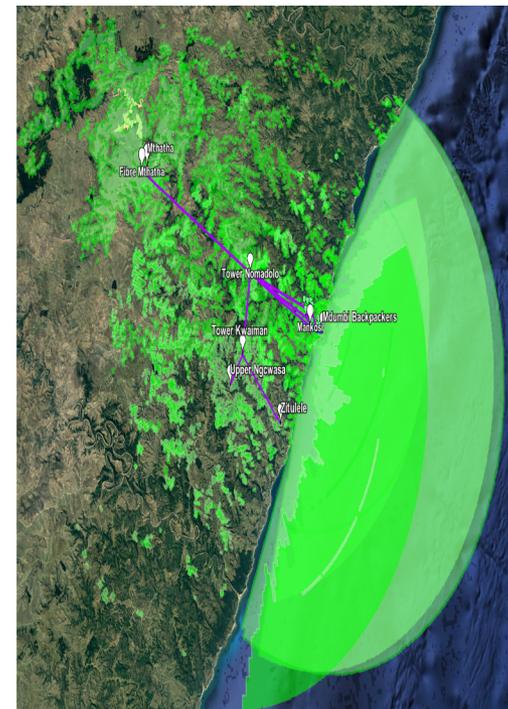
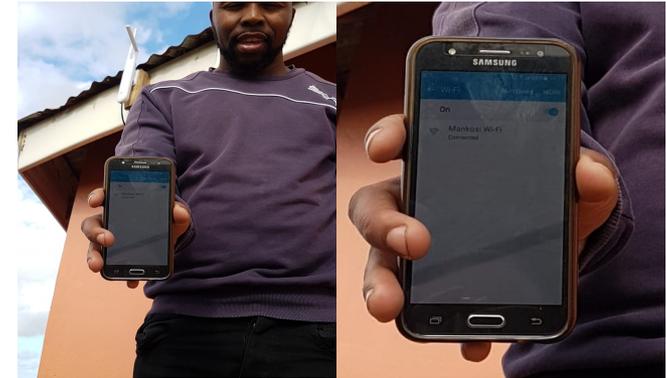
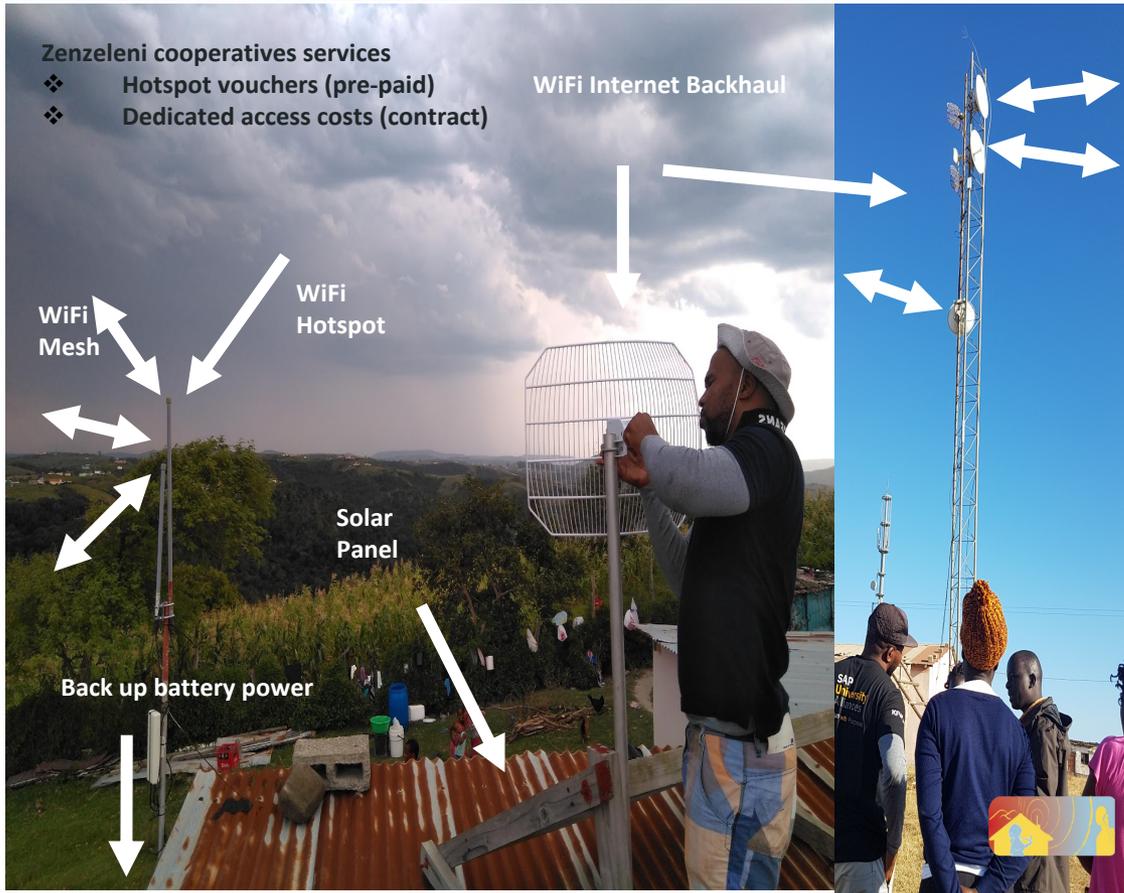
Reprioritization of the Most Strategic, Impactful and Responsive Initiatives for the District Development Model

One Plan Pillar / Focal Area	DSI Programme or Project Intervention	Objective
Economic Positioning	Innovation for Local Economic Development (Township innovation hubs, living labs, LED Innovation Champions);	Support for community actors and stakeholders acting together to develop Innovation LED (ILED, Living Labs) projects to support township and rural economic activities and boosting local systems of production.
Economic Positioning	Youth Innovation & Incentives Schemes (business development support, skills dev, youth innovation enterprises, SMME, green circular economy, ICT and mobile apps, Youth science journalism)	Create innovation entrepreneurship opportunities, skills development, access to tooling stations and support their business development across sectors i.e. drones, mobile apps, enviropreneurship etc
Economic Positioning	Grassroots Innovation	Support to youth innovators to produce market ready products from ideas that solve social challenges and problems.
Infrastructure Engineering	Zenzeleni Community Wireless Network	Support cooperatives to provide internet connectivity to communities using a community ownership model
Integrated Service Provisioning	Innovations for the Delivery of Basic Service	Demonstration of technologies that can improve access to quality basic services (water, sanitation, energy, human settlements, waste management, connectivity and alternative building technologies).

Reprioritization of the Most Strategic, Impactful and Responsive Initiatives for the District Development Model

One Plan Pillar / Focal Area	DSI Programme or Project Intervention	Objective
Economic Positioning	Youth In Science Journalism	To recruit unemployed graduates with science related degrees and provide them with skills and work experience in science journalism to write articles in their local languages on the science activities taking place in their Municipalities
Economic Positioning	Imvelisi Youth Enviro-preneurship Programme	To harness opportunities of the Green Economy by providing pre-incubation and ideation support to aspiring entrepreneurs to responds to the need to prepare water and biodiversity entrepreneurs for mainstream incubation and to participate in the circular economy
Integrated Service Provisioning	Corrective Action Request and Reporting System (CARRS)	To provide an ICT systems to communities to report service delivery interruptions / incidents to the municipality and receive real time feedback on their phones regarding the reported incident
Governance	Municipal Innovation Maturity Index (MIMI)	To support municipalities measure innovation practices and develop innovation plans
Integrated Service Provisioning	Schools ICT Readiness Assessment Tool	To help schools assess and audit their levels of readiness (i.e. infrastructure, connectivity, energy) to receive and use technology for teaching and learning
Integrated Service Provisioning	Technology Acquisition and Deployment Fund (TADF)	
Integrated Service Provisioning	District Development Model Innovation Fund	To mobilize various public and private sector funding to support the DDM economic recovery by contributing investment directed towards a DDM Innovation Fund and fund imoactful innovation programmes at District level.
Integrated Service Provisioning	District Development Model Innovation Plans	To assist the District Municipalities to develop strategies, plans and policies that will encourage and promote the use of technology and innovation.

Zenzeleni Community Wireless Network



Community Wireless Network Coverage

100,000 people
93% unemployed, 90% not completed school

Non/poor basic infrastructure and services

Most people live on 1USD daily threshold, up to 25% of monthly income spent on Telecoms

South Africa's first Cooperative Owned Community Internet Service Provider (IPS) Telecommunications Network

Remotely Piloted Aircraft System (RAPS / Drones)– spatial monitoring of the impact of disaster in informal settlements

KZN Spatial Monitoring of Informal Settlements Using RPAS /Drones (Immediate intervention)

The KZN RPAS/Drones for Spatial Monitoring of Informal Settlements is project funded by the DSI to assist the KZN Department of Human Settlements to monitor land invasion and informal settlements expansion using drones. The project is implemented by the CSIR. The project has acquired flying and operator licence and trained local SMMEs and 4 pilots. The project has one drone that will be deployed to assess the impact of the floods disaster and provide high resolution images and geospatial profiles of the impact of selected informal settlements that cannot be reached due to the disaster. 3 additional drones will be deployed immediately through the project.

The objectives of the KZN Spatial Monitoring Project will be to:

- Deploy four drones to support KZN Human Settlements to assess the impact of the disaster in informal settlements;
- Deploy fully licenced drone SMME and 4 pilots to profile the impact of the disaster in prioritised informal settlements in partnership with the KZNDoS, CSIR and Industry Partners
- Provide the real time images and management reports of the assessment of impact of the disaster on informal settlements and identify affected beneficiaries.



Innovation Partnership for Rural Development – innovations for service delivery programme

Low Pour Flush Sanitation

Over 900 units rolled out in EC, KZN, MP and NC; improved access to sanitation, communities; app.17% of the budget spent in the beneficiary communities; provision of security and accommodation, community liaison, transport of materials, labour for the sites, construction of leach pits and installation of the structures, and health and hygiene education. On average, 60 people are employed at each demonstration site.



Point of Use Technology

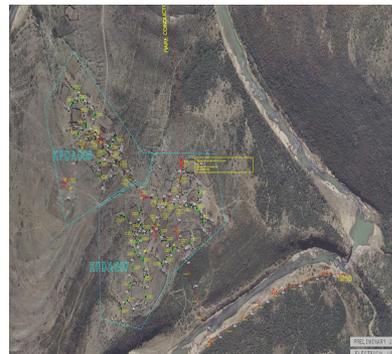
Over 1000 units rolled out. Surveys undertaken at the two villages where the units were installed, as well as from municipal officials, have seen an overwhelmingly positive uptake of the technology by the users.



Small scale hydropower

Demonstrates rural electrification through an off grid hydropower system.

- ✓ Dept of Energy
- ✓ DST
- ✓ WRC
- ✓ Beneficiary Municipalities
- ✓ University Pretoria



Grassroots Innovation Programme Beneficiary – Youth Innovation entrepreneurs

Moonshine

Founded by Memphis Kaotsane, Moonshine is a non-toxic reflective spray paint designed to make stray animals visible at night to assist motorists to avoid accidents or collision. The Grassroots Innovation Programme funding is supporting to further improve the formulation of the paint and the development of a proof of concept. Currently supplying the Road Accident Fund.



Hotspot Geyser Sock

Sandiswa Qayi's invention has already begun making a difference in her community. Sandiswa, from East London has devised a silicone sleeve the "Hot-Spot" which is fitted to a geyser's element to heat water in the tank more efficiently. To further her dedication to the community, Sandiswa has become an ambassador for the Grassroots Innovation programme, by conducting roadshows and visiting communities to encourage them to become rural innovators themselves.



Motorized bicycles

Nkosana Madi was born in Kwa Thema, Springs. The innovator's idea was born when he returned to his home a mere 18 kilometers from Springs – when his father asked him why invest money in a vehicle and save by travelling by bicycle. As an avid motorcyclist, Nkosana said once the bug has bitten, 'it's hard to get off those two-wheels'. "The concept is very simple, I sourced a motor from a local dealer, chopped and welded a bicycle at home and managed to create a mode of transport that works for me and can work for those in my community," Nkosana added. Nkosana's innovation could drastically speed up the time for those in rural communities to reach their destination, while at the same time creating jobs if bicycles could be mass produced. Nkosana now has a goal to mass produce these motorised bicycles in an environmentally friendly manner and enable mobility of multitudes through the Grassroots Innovation Programme.



DSI Innovation Incentive Schemes

Introduction

The Imvelisi Enviropreneur Programme is an ideation entrepreneurship support programme that focuses on supporting South Africa to transition to a greener, more prosperous economy by nurturing early-stage entrepreneurs focusing on water and biodiversity opportunities. Imvelisi is a partnership initiative between GreenMatter and the South African Young Water Professionals Network (YWP-ZA) which is a division of the Water Institute of Southern Africa (WISA) and International Water Association (IWA). This programme is supported by the DST, DEA, WRC and the Innovation Hub.

What the programme offers

The Imvelisi Programme is structured around 2 main offerings:

1. Ideation Bootcamps: This provides specialised training and support to Enviropreneurs. Training is run by ideation training specialists and a highly specialised and selective selection process is run to recruit participants to this programme.
2. Mentor match-making: links the participants that perform the best on the Ideation Bootcamp to technical and/or business mentors.

How to apply for the programme

The Call for Proposals is issued twice in a calendar year and circulated through government and private networks in the environmental management sector.

Contact Details

Contact person : Janavi Da Silva Tel : 011 575 4268
Email : janavi@greenmatter.co.za Website : www.greenmatterza.com

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Introduction

The Science, Technology and Youth Journalist Programme intends to promote interest in science and technology amongst the disadvantaged youth. The programme uses indigenous languages to cover science and technology stories for the community media in all the provinces in order to improve public awareness and engagement in science, technology and innovation. The South African Agency for Science and Technology Advancement (SAASTA) was appointed to develop, implement and manage the Science Technology Youth Journalist Programme within the Innovation Partnership for Rural Development Programme (IPRDP).

Objective

SAASTA aims to be the leading science advancement agency in the country by promoting and communicating the value and impact of science, technology, and innovation in a dynamic knowledge economy. It also intends to contribute significantly towards building a science, engineering, and technology (SET) human resource base.

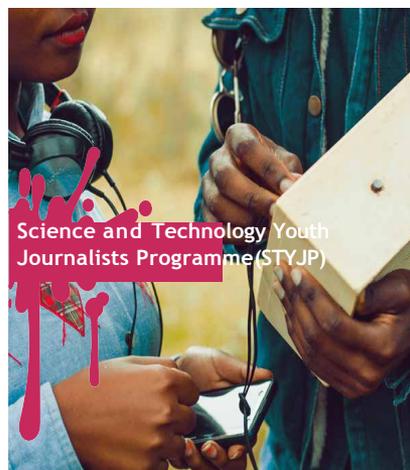
How to apply

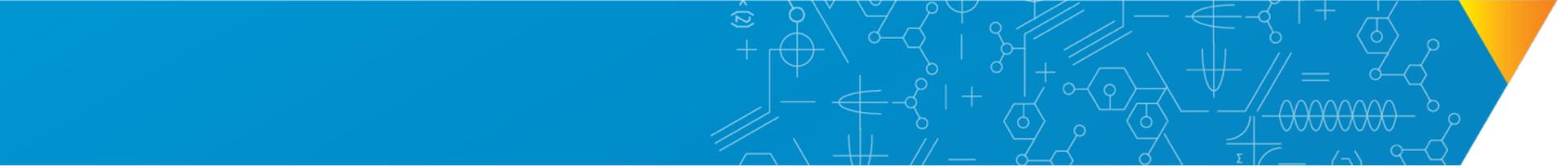
Visit SAASTA website in May or August annually to find out whether calls for positions are advertised, follow SAASTA on social media such as Facebook @NRFSAASTA and Twitter @NRF_SAASTA, or look out for adverts in the national newspapers such as the Sowetan, City Press and Sunday World.

Contact Details

Contact person : Zamuxolo Matiwana Tel : 012 392 9319
Email : Zamuxolo@saasta.ac.za
Website : www.saasta.ac.za (under media room)

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DDM Process 2:

SBS Innovations for Service Delivery (VVISDP)-

(Bottom up approach where municipalities registered their service delivery challenges that require technology and innovation)

Main Activities of VVISDP

II) Viability and validation of innovation for Service Delivery

The activities of the Viability and Validation of Innovations for Service Delivery work component entails selecting and supporting a small number of pilot projects that will serve to demonstrate the systemic viability of innovation(s) (or specific technologies) - notably those that have received public funding to improve access to basic services with a view of promoting the realization of socio –economic rights for all and in particular women and other vulnerable groups.

In so doing,

- a) enhance the ability of **municipalities to integrate innovative technology solutions** in the delivery system;
- b) **gather evidence through these pilot demonstration** projects and contribute towards improved decision-making by municipalities; and
- c) address **systemic requirements for the adoption** of demonstrated technologies.

VVISDP: Project Objectives

Project Name	Objectives
Innovative Technology Solutions for Basic Service Delivery (Project 1)	Demonstration of appropriate innovative technology solutions for improving access and quality of basic services i.e. water resources management, waste management, green and renewable energy solutions, sanitation and connectivity.
Decision Support Tools (Project 2)	Introduction of new decision support tools to support the functioning and performance of municipalities and government departments or enhancement of existing decision-support interventions in the areas of energy, sanitation procurement, spatial planning, human settlements, service delivery, infrastructure, risk and disaster management, health, crime prevention.
Innovation Capacity and Innovation Measurements (Project 3)	Develop and strengthen innovation capacity for the delivery of basic services in municipalities.
Integration of Innovation in the Municipal Policy Environment (Project 4)	Integrate innovation in the delivery of basic services across municipalities through creating an enabling environment.
e-Participation and Policy Modelling Platforms for Municipalities (Project 5)	Development, testing and piloting of a Public Policy Modelling Platform for local government to enable open collaboration in modelling public policies through e-Participation tools and mechanism.
Dialogues, Monitoring & Evaluation, Impacts, Lessons Learned (Project 6)	Enhance the learning and capacity building across the targeted municipalities on technology and innovation management through learning forums and policy dialogues; conduct an evidence based evaluation approach of the performance of the activity projects against contracted Key Result Areas of individual projects, assess the impact of the activity on govt.

Innovation for Service Delivery – Municipal Expression of Interest (Bottom up approach to Support the DDM)

Municipalities	Innovative Technology Solutions for Basic Service Delivery	Decision-support Tools	Innovation Capacity and Innovation Measurements	Integration of Innovation into the Municipal Policy Environment	E-Participation and Policy Modelling Platform For Municipalities	
West Rand Municipality	X					1
City of Mbombela	X					1
Mbhashe Local Municipality	X					1
Chris Hani Municipality	X					1
Colins Schabane Local Municipality			X		X	2
Nyandeni Local Municipality	X		X		X	3
Mangaung Metropolitan Municipality	X	X			X	3
Waterberg District Municipality	X	X				2
Ekurhuleni Metropolitan Municipality	X					1
City of Tshwane Metropolitan Municipality	X		X			2
Emfuleni Local Municipality	X	X			X	3
Buffalo City Municipality	X					1
City of Johannesburg Municipality	X		X			2
Kokstad Municipality						0
Sekhukhune District Municipality						0
Zululand District Municipality						0
Ugu District Municipality						0
Emalahleni Local Municipality	X				X	2
Ekurhuleni Discript Municipality	XXXX	X	X	XX		8
Swellendam Local Municipality	X					1
Drakenstein Local Municipality	XXXX			X		5
Waterberg Discript Municipality		XX	X			3
Namakwa District Municipality		X				1
Umlhathuze Local Municipality	XX	X		X		4
Walter Sisulu Local Municipality	X				X	2
Nongoma Local Municipality	X	X				2
BUFFALO CITY METROPOLITAN MUNICIPALITY	X					1
Emfuleni Local Municipality	X					1
Rustenburg Local Municipality	XXXX	X				5
Amathole District Municipality	XXXX	XX	X			7
Dannhauser Local Municipality	X				X	2
Ethekwini Discript Municipality	XX	XX	X	X	X	7
City of Cape Town	XXXXXXXX	X			XX	11
uMgungundlovu District Municipality	X	X	X	X		4
	48	16	9	6	10	89

VVISDP: Expression of Interest Summary

Application Summary		Phase 1	Phase 2
Total Applications	108		
Total Recommended	64		
Total Rejected	44		
Recommended for Project 1	24	17	7
Recommended for Project 2	18	14	4
Recommended for Project 3	8		
Recommended for Project 4	7		
Recommended for Project 5	7		

Total Number of Assessed Applications	
Total Number of Applications Phase 1	
Recommended for Project 1	17
Recommended for Project 2	14
	31
Total Number of Applications Phase 2	
Recommended for Project 1	7
Recommended for Project 2	4
	11
Total Number of Applications Not Recommended	14

Project 1 and 2: Phase 1: 31 Projects recommended
 Project 1 and 2 Phase 2: 11 Projects recommended

Total : 42 Projects recommended pending the due diligence and further consultations with Municipalities to clarify requirements.

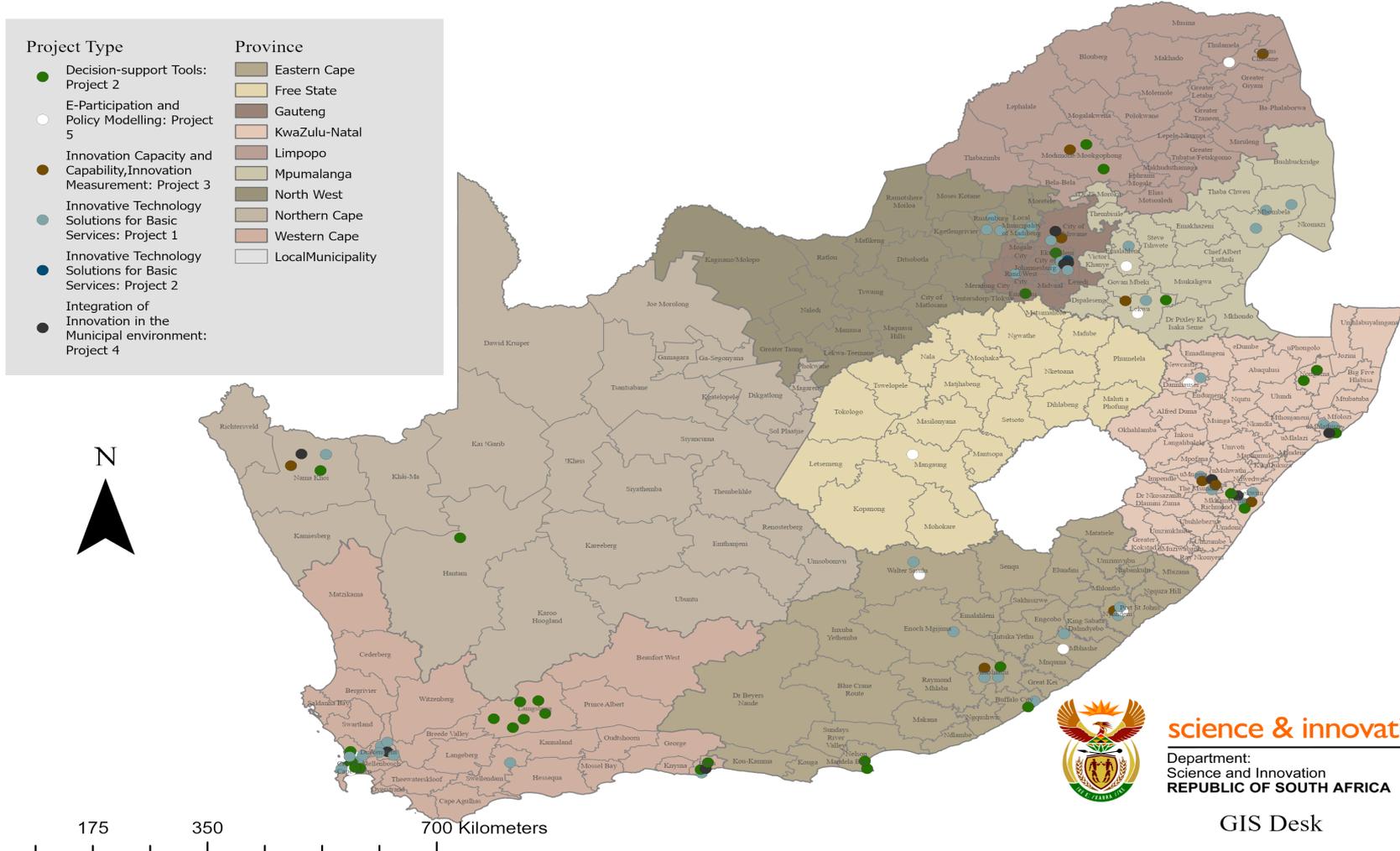
Breakdown of Selected Projects

Project 1: (Innovations for Service Delivery) and Project 2: (Decision Support Tools)

PROJECT 1: Innovations for Service Delivery					
Phase 1		17	Phase 2		7
all sectors		3	All sectors		0
connectivity		0	connectivity		1
Energy		4	Energy		1
Human settlement		2	Human settlement		0
Waste and Environment		2	Waste and Environment		3
Water and Sanitation		6	Water and Sanitation		2
PROJECT 2: Decision Support Tools					
Phase 1			Phase 2		
Decision support tool		14	Decision support tool		4
GIS		2	GIS		1
Utility systems		1	Utility systems		0
Business processes		4	Business processes		0
management system		1	management system		1
Mobile app		1	Mobile app		0
Dashboards		1	Dashboards		0
Field staff systems		1	Field staff systems		0
Monitoring System		1	Monitoring System		1
All Decision support tools		2	All Decision support tools		1

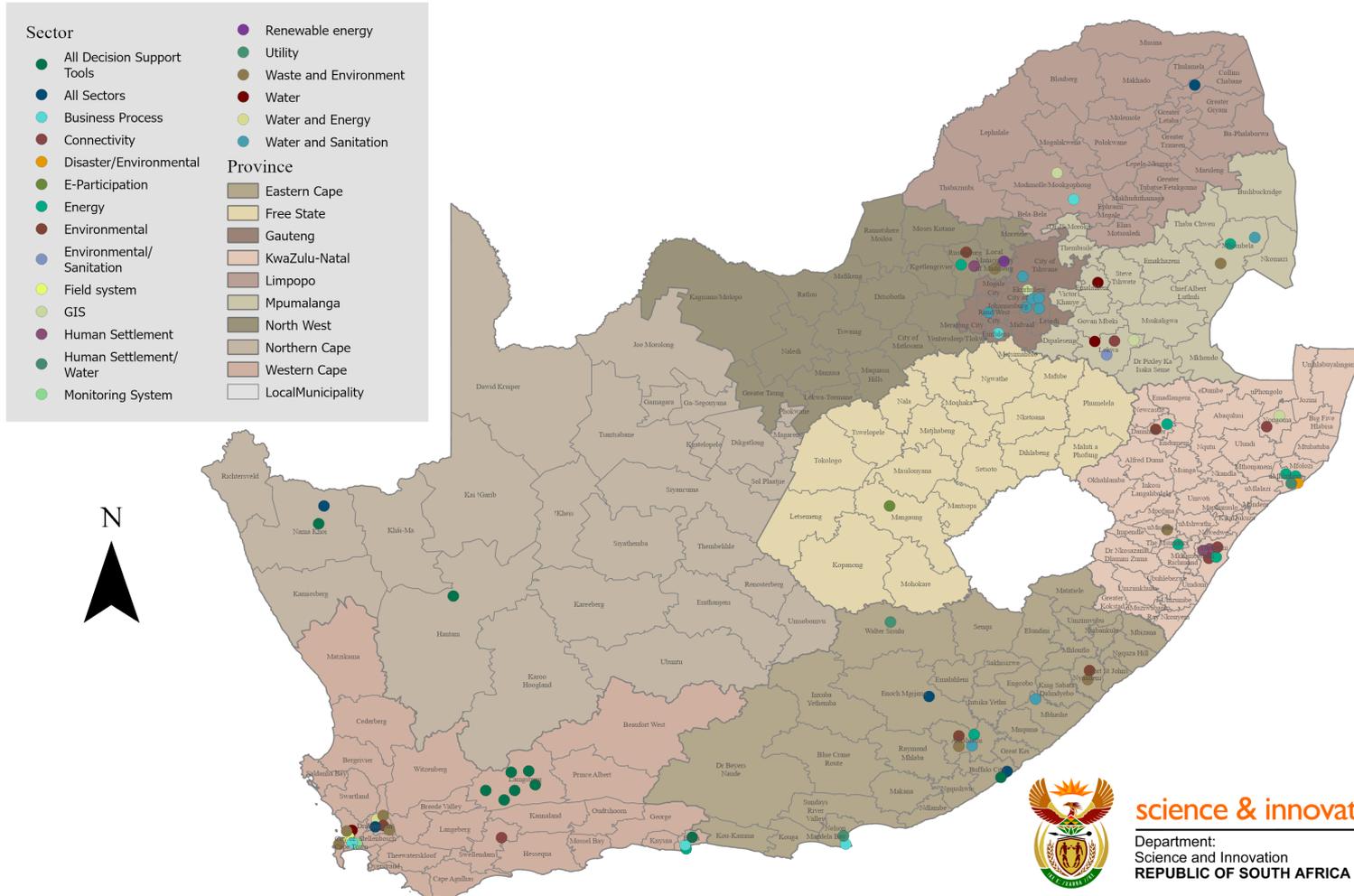
SBS Project 1 - 5: Viability and Validation of Innovations for Service Delivery Programme (VVISDP)

Innovations for Service Delivery Programme Projects



science & innovation
 Department:
 Science and Innovation
 REPUBLIC OF SOUTH AFRICA

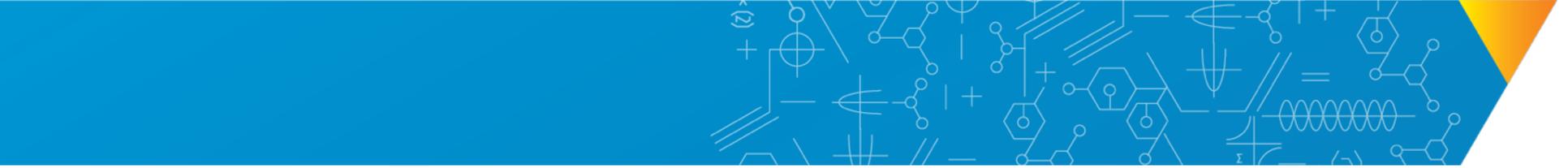
Innovations for Service Delivery Programme Projects



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA

GIS Desk



DDM Process 3:

DDM as a Platform for Innovation for Inclusivity and the Implementation of the Decadal Plan

Characterization of exclusion in the SA context

- The existence of a legacy of ineffective social capital that manifest in blocked pathways of upward mobility that leaves large numbers of people trapped in poverty is consistent with the patterns of inequality identified by **the International Monetary Fund (IMF)**. Using six charts, the IMF (2020) **characterised inequality** in South Africa as follows:
 - **Income inequality** has remained high and decoupled from the average for emerging economies.
 - **Income distribution is skewed** towards the **richest 20% who hold over 68%** of the income, while **the bottom 40% share only 7%**.
 - There are significant **spatial disparities in the poverty demographic** with the **incomes per capita of the richest provinces** (Gauteng and the Western Cape) twice as high as those of the poorest provinces.
 - The **stagnant growth** over the past decade has effectively derailed measures for addressing inequality.
 - The **high rate of unemployment**, particularly among the youth, is a major factor behind economic exclusion.
 - There are **indications that fiscal policy has been effective in reducing inequality**; however, this is being constrained by the country's high level of indebtedness.

Inclusion – Perspective of the Decadal Plan

- *Inclusion* means that all people, regardless of gender, race, age, disability, socio-economic status or geographical location, share in the benefits derived from the NSI, as well as that all people can also meaningfully participate in the NSI, either directly or indirectly.
 - Inclusion should be about **demographic transformation**, extending geographic footprint of innovation, address innovation spatial inequality (e.g. with STI activity being concentrated in urban areas, and areas centred around HEIs,
 - **Rural areas and local authorities** i.e. municipalities should be empowered to be enablers and **drivers of inclusive innovation**;
 - Inclusion is about **transforming the ownership profile of the economy** e.g. through leveraging Intellectual Property from publicly funded R&D and other means;
 - **Inclusion should be enabled in every aspect of the STI system in Municipalities**

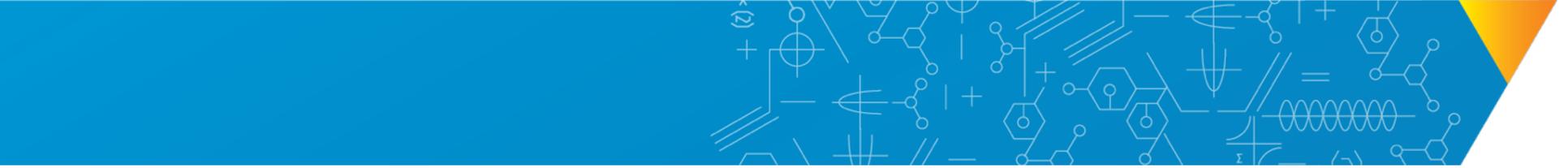
Limitations of the current Policy Environment to achieve inclusivity

- The **current policy discourse**; socio-economic system **can be improved to increase inclusion of the marginalised** through innovation;
- *Innovation is not being used to innovate / adapt policies in order to be responsive to innovation for inclusion;*
- The **current policy environment has been limited in enabling inclusivity through the uptake of STI** through a whole-of-society approach;
- *The culture of entrepreneurship and innovation across the society should be increased, especial at district level;*
- **Innovation for Inclusivity Programmes are key for the ECONOMIC outcome at a district level;**
- **Municipalities and sector departments** have to be innovative and **use innovation to improve policies and adapt policies to be more supportive to inclusion**

- ***Information Communication Technology and Wide Hailing applications for inclusive development.*** as i.e. MPESA, Uber-like applications in agriculture, drone based delivery of services and across a wide range of sectors with low-cost operating and start-up capital to build broad based entrepreneurship opportunities;
- ***4th Industrial Revolution for Inclusive development.*** This could involve supporting inclusivity agenda in robotics, artificial intelligence, block chain and certain application areas such as precision farming;
- ***South -South trade opportunities and free trade economic zones between African countries to enable innovation driven trade opportunities to achieve inclusive growth*** i.e. special economic zones;
- ***Circular and green economy provides opportunities for meaningful inclusive growth with green interventions.*** This includes circular economy and renewable energy technologies and the opportunities these sectors provide in creating jobs in new value chains;

Decadal Plan - Creating an Enabling Environment for Innovation for inclusivity

- **Positioning the DDM as a platform for innovation for inclusivity** will result in the use of knowledge and innovation **to address poverty, unemployment and inequality through innovation at a district level;**
- Creating an **enabling environment for innovation for inclusivity at a district level** is about putting in place enablers for:
 - **Policy coherence** –synchronising municipal policies to support the use of innovation to achieve inclusion;
 - Using the **NSI’s innovation programmes, levers** to support municipalities to **achieve inclusivity;**
 - **Creating a space for** innovating policies to be **responsive to inclusivity;**
 - **Modernize the existing economic sectors of districts** in an inclusive manner;
 - **Supporting new sources of growth** in an inclusive manner in each district municipality;
 - **Procuring locally developed technologies** to achieve inclusion;
 - **Commercialize public funded intellectual property through partnerships with local universities;** and



Summary and Conclusion

Summary

- **A macro analysis** of DSI current **initiatives in provinces** by districts was conducted to select the most responsive and high impact projects to respond to development challenges through innovation;
- **DSI identified 125** most responsive and **high impact DDM projects** following a “selection criteria” and desired “impact areas” by DSI in districts (**Process 1**);
- **DSI Packaged and profiled** these **interventions into a database**, showing planned, proposed, budgeted, budget requiring DSI DDM interventions in the districts;
- **DSI also implemented a bottom up approach** – understanding what challenges are municipalities experiencing in service delivery where innovation and technology could be exploited (**Database of municipal Expression of Interest – 108 submissions from Municipalities**) (**Process 2**);
- **DDM process** is already **helping DSI’s Decadal Plan** and **STI White Paper Policy intent 4.13** to position the government as an enabler of innovation and **policy intent 4.4** to ensure a whole of government approach to innovation; **Ensure Municipalities have a role to play as partners in the NSI**
- **Contracted CSIR** to develop a **DDM Impact Simulator - conceptualisation**
- **DSI’s objective is about positioning the innovation agenda as part of the District Development Model and work with municipalities to implement the Decadal Plan Interventions in municipalities;**

Bilateral engagements with each District by the **DSI** for **inclusion of DSI projects** on One Plans;

Packaging Model of the **Decadal Plan initiatives** to be implemented in **each district** using the DDM project packaging model developed last year; this will **help achieve geographic concentration** and positioning the DDM as a platform for innovation;

DSI to look at optimal institutional arrangement / governance arrangement to engage with district municipalities;

Aligning the DSI DDM interventions with other **government departments initiatives** and the **private sector initiatives** that can help **leverage innovation** at a District level (**Strategic Partnerships for the DDM interventions**);

DDM Innovation Governance at a district level and explore arrangements for Provincial Budget Coordination to support Innovation in municipalities;

Conclusion

How can the District Development Model be positioned as an engine for innovation for inclusivity in order to address poverty, unemployment and inequality and become innovative districts to achieve inclusivity?