



ADDRESSING RURAL DEVELOPMENT THROUGH FUNCTIONAL REGIONS

**Priority District Analyses:
High impact (catalytic) infrastructure intervention
areas for economic transformation**

Cluster 3 Report: For Priority Districts in KwaZulu-Natal

Districts of uMkhanyakude, Zululand, Amajuba, uMzinyathi, uThungulu, iLembe, uThukela and uMgungundlovu

October 2013

Prepared For:

Department of Rural Development and Land Reform
Rural Infrastructure Development
Clinton Heimann
cheimann@ruraldevelopment.gov.za

Prepared By:

CSIR, Built Environment
Elsona van Huyssteen
Johan Maritz



**rural development
& land reform**

Department:
Rural Development & Land Reform
REPUBLIC OF SOUTH AFRICA



Table of Contents

1	Introduction.....	C1
2	Perspective on projects.....	C4

List of Tables

Table 2.1:	List of catalytic projects in the Kwa Zulu districts.....	C5
------------	---	----

List of Figures

Figure 1.1:	Catalytic projects in the Kwa Zulu cluster of districts	C3
Figure 2.1:	Project value per district in the Kwa Zulu cluster of districts	C4

PART C

First Round Catalytic Project evaluation: Cluster 3

1 Introduction

Catalytic projects can be broadly defined as projects that lead directly or indirectly to high impact in relation to employment creation, local economic development and transformation. These are mostly (but not only) infrastructure related projects where the local environment/conditions are transformed such that it enables accelerated development locally and possibly also in the wider region. These projects are identified mostly through a bottom-up process where local municipalities / districts identify projects drawn from their own local planning processes. It is expected that these projects should be integrated parts of IDPs and/or local and regionally linked initiatives.

During the first round of requesting the submission of catalytic projects by DRDLR (2012/13) no predetermined framework or structure was provided to guide and inform municipalities. As a result a wide variety of projects extending across a number of sectors was received. These projects might not all fit into the view of what a 'catalytic' project would be. It does however provide insight into the types of projects that municipalities feel are critical/relevant/important.

It is also important to note that the details of national infrastructure investments driven through the PICC are not known, as such the potential for overlap or conflict might arise. During the current project it became necessary to develop an understanding of the makeup and structure of settlements within the identified 23 districts. It is this understanding combined with the economic, environmental and social context that can be used to evaluate the feasibility of proposed projects especially in view of its catalytic nature.

The current set of proposed catalytic projects consists of the following:

- Two projects per district, thus 46 projects in total;
- Projects are spread across all 23 district municipalities;
- Comprises both large and small projects (financial costs;)
- Deals with sectors including:
 - Agriculture production;
 - Electrical infrastructure;
 - Processing (related to industry);

- Road infrastructure;
- Water and sanitation services/infrastructure; and
- Other infrastructure categorised under 'urban';
- Maps have been prepared indicating, where possible, the location of catalytic projects (those without sufficient spatial information have been placed centrally in the district and are indicated with a yellow outline); and
- A table also accompanies the mapped information listing the project, location, type, and financial cost implications.

2 Perspective on projects

Figure 1.1 shows the location of the catalytic projects listed for the Kwa Zulu cluster of districts in the spread sheet (Table 2.1) below. The size and colour of each dot indicates the projected Rand value of the project (and not the type of project). Figure 2.1 indicates the total project value per district. It is clear that uMzinyathi in Kwa Zulu has put forward catalytic projects with the highest price tag this despite being the second smallest district with respect to population. The two project deal with bulk water supply for Msinga and Dundee. The project value for uThukela and iLembe are the lowest by far this despite having larger populations than in uMzinyathi.

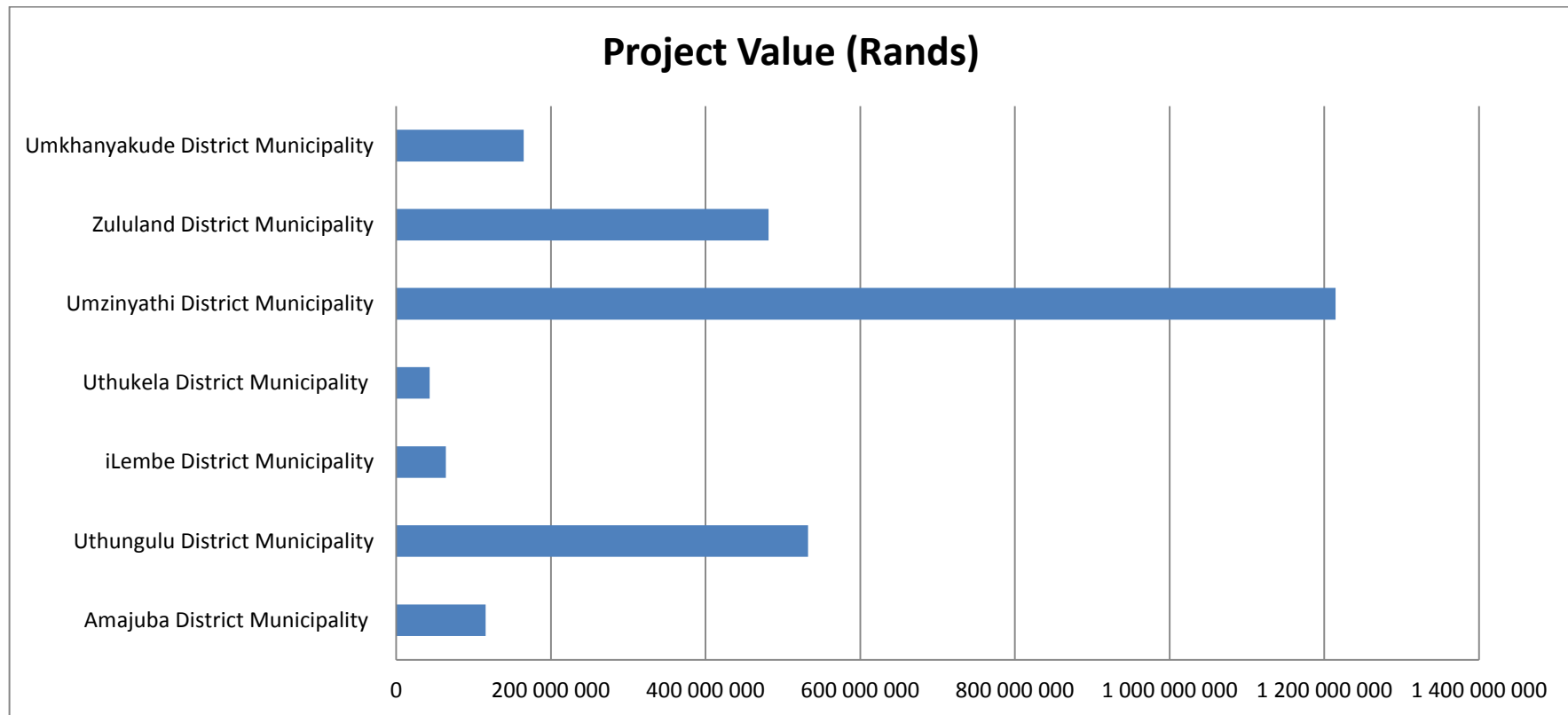


Figure 2.1: Project value per district in the Kwa Zulu cluster of districts

Projects range from provision of bulk water supply and sanitation, a hydroelectric-scheme, development of an airport, to the development of an essential oil growing venture. Some of the projects relate to provision of basic services and electricity which can support both industry and people needs, while others relate to more directly to economic development or improving agricultural production (see Tables 2.1 for all the project details that were supplied). Business plans have been submitted for most projects, however insufficient detail was provided to the research to do more than provide a superficial review of the projects.

Table 2.1: List of catalytic projects in the Kwa Zulu districts

District Municipality	Local Municipality	Settlement	Project Name	Main Project Activities/ Output	Employment Creation	Business Plans	Duration	Project Value	Amount Required by the District
Amajuba	Emadlangeni	Balenge	The Emadlangeni LM Rural Water Supply	Assess feasibility of supplying portable water	2500	Yes	36 months	R 86 125 895.00	
				Profile of Beneficiaries					
				New Boreholes					
				Re-Installation of Boreholes					
				Spring Protection					
				Install stand pipes					
				Extend Reticulation					
			The Emadlangeni LM Rural Sanitation Project	Sanitation Supply	2500	Yes	36 months	R 43 000 000.00	R 43 000 000.00
Amajuba District Municipality						Amount required by District			R 115 745 895.00
Uthungulu	Mthonjaneni	Mgabhi, Ingwenya, Eyingwenya, Thembeni, Zimbombe (Ward 2 & 3)	Greater Mthonjaneni Water Supply SSA 2	2 x 1ML Concrete Reservoirs	150	Yes	312 weeks	R 198 898 424.00	R 198 898 424.00
				3 x 500kl, 2 x 200kl Steel Tank Reservoir					
				30km of new Bulk Pipelines (110mm, 160mm, 200mm, 250mm, 300mm) diameter					
				6 x New Pump Stations to Mthonjaneni SA (Primary & Backup)					

District Municipality	Local Municipality	Settlement	Project Name	Main Project Activities/ Output	Employment Creation	Business Plans	Duration	Project Value	Amount Required by the District
				Standpipes - 200m from household service level @ 60l/c/d					
				264km New Reticulation network (75mm) diameter					
Uthungulu	All LMs	All Wards in UDM	Uthungulu Fresh Produce Market(UFPM)	Phase 1: Farmers mobilisation	1 000	Yes		R 30 000 000.00	
				Phase 2: Building and setting up				R 14 000 000.00	
				Grading House, pack house and storeroom				R 39 600 000.00	
				Construction of Market				R 250 000 000.00	R 333 600 000.00
Uthungulu District Municipality						Amount required by District			R 532 498 424.00
iLembe	Maphumulo	Balcom, KwaSizabantu Wards 3,5,6,7,8,9,10 (Maphumulo) and Wards 4,7 (Ndwedwe)	Water Provision: BalcomKwaSizabantu	Water Supply	10 596	Yes	72 months	R 113 973 489.00	R 61 201 211.00
	Mandeni	Ward 3 Mandeni (Mangetha)	Essential oil	Develop essential oil growers in the District	150	Yes	24 months	R 3 000 000.00	R 3 000 000.00
iLembe District Municipality						Amount required by District			R 64 201 211.00
Uthukela	Umtshezi	Kwanobamba 5 & 7	Kwanobamba Ezitendeni Water and Sewer	Water and Sewer Supply		Yes		No amount specified	
	Ukhahlamba	Bergville. 5,6,7,8 & 9	Bergville Sewer upgrade	Installation of a sewer reticulation system		Yes	36 months	R 43 211 580.61	R 43 211 580.61
				Construction of a new sewerage treatment					

District Municipality	Local Municipality	Settlement	Project Name	Main Project Activities/ Output	Employment Creation	Business Plans	Duration	Project Value	Amount Required by the District
				works					
				Job opportunities					
Uthukela District Municipality						Amount required by District R 43 211 580.61			
Umzinyathi	Msinga	Msinga. Ward 1-6, 10-13 & 17	Msinga Bulk Water	Water Supply		No		R 884 414 345.04	
	Endumeni & Nquthu	Endumeni & Nquthu	Dundee Bulk Water	Water Supply		No		R 329 989 139.61	
Umzinyathi District Municipality						Amount required by District R 1 214 403 484.65			
Zululand	eDumbe	eDumbe Town (Ward 5) and Bilanyoni	eDumbe Water Borne Sanitation	Septic Tank and Wetland		Yes			R 102 769 601.00
				Water Treatment Works				R 48 368 230.00	
				Fence the site area					
				Sewer Reticulation Network				R 50 389 371.00	
				Construction of sumps & pump station and +/- 4.5km of rising main					
				Septic Tank Excavation				R 52 000.00	
				Septic Tank Construction				R 2 280 000.00	
				Construction of wetland				R 1 680 000.00	
Zululand		Pongola	Pongola water borne sanitation	Supply & install an ultrasonic flow meter		No		R 20 000.00	R 378 500 601.00
				Rehabilitation of Damage embankment				R 3 000.00	
				Refurbishment of overflow boxes				R 10 000.00	
				Erect barbed wire fencing (m)				R 67 500.00	
				Supply potable water to site				R 13 000.00	
				Supply and install sluice gates				R 180 000.00	

District Municipality	Local Municipality	Settlement	Project Name	Main Project Activities/ Output	Employment Creation	Business Plans	Duration	Project Value	Amount Required by the District
				Supply new VIP Toilets				R 15 000.00	
				Renovate existing shelter				R 50 000.00	
				Construct new manholes				R 20 000.00	
				Sewer Reticulation Network					
				Sewer Treatment Works					
Zululand District Municipality						Amount required by District			R 481 270 202.00
Umkhanyakude	Jozini	Jozini (Ward 4)	Jozini Hydro Electri Scheme	Environmental Impact Assessment	1 600	Yes	48 months	R 125 000 000.00	
				Stakeholders Negotiations/ Meetings					
				Engineering/ Design					
				Tender and Contract Administration					
				Construction					
				Commissioning and Testing					
				Operations					
	uMkhuze (Ward 1)	Mkuze Airport	Construction of Critical Infrastructure	50	Yes	12 months	R 40 000 000.00		
			Earth Works						
Building Construction and Technical Services									
Umkhanyakude District Municipality						Amount required by District			R 165 000 000.00

Many of the projects listed above would not typically be regarded as catalytic projects, but the fact that they are being listed, means that they are experienced as real constraints in these districts. All districts need to expand on basic delivery of water and sanitation and to some extent electricity and as such the projects could be considered to have a catalytic impact if it transform the quality of live for citizens and ensure business have sustained supply of water and electricity.

Any catalytic project should attempt to increase the number of people employed in the economy (compared to the number of people dependent on social grants for a living) as well as the district's national contribution to the GVA.

The population in the cities and regional service centres are all growing. Large clusters of poor people are found in the big towns and cities, extending the population pressure in terms of service delivery, job creation and social welfare. In considering a catalytic project, thought should be given to how the population pressure could be relieved in the big cities and services centres through addressing job creation.

The rural areas in the north of Kwa Zulu have very few no service towns to serve the populations living here and the establishment of three rural nodes that have been identified for these area namely Nongoma, Utrecht and Jozini would benefit the people and the economy even though currently there seems to be no apparent economic potential to support the economy of such a node. A catalytic project in one of these three places could enhance and support the development rural nodes in the area, by investigating the government and economic infrastructure in these areas though increase employment in the government service sector where it can support a large number of people and have potential to supply jobs and contribute to the GVA while meeting service needs. A fourth node has been identified for Ozwathini.

Service delivery in the former homeland areas is still lacking, with water provision showing the highest backlogs in the districts. Places with high concentrations of poverty, be it cities or dense rural areas, are also areas with huge backlogs in service delivery. A catalytic project provides an opportunity to explore the application of alternative and more "green" service provision while in the case of social services, the reliance on periodic services, e-government or agency type services will have to be explored. No evidence of application of "green technologies" is found in the project lists.

In most cases the projects as supplied by the districts offer little information, making it difficult to comment on their feasibility or impact. However, comparing the spatial analysis of the study with this list of catalytic projects, one can make some comments:

- Although the project list shows that most projects create jobs and in fact the water provision for Balcom / KwaSizabantu in iLembe shows the creation of significant number of jobs for a 6 year period, most of the projects do not seem to create long term jobs and it is not clear if projects will lock some economic potential (e.g. agro processing or urban agriculture).
- The most high ambitious projects on the list are would appear to be the Jozini Hydroelectric scheme and the Mkuze Airport both in the Umkhanyakude district. A hydroelectric scheme theoretically has the potential to make the district more sustainable with regard to 'Green' energy provision and to supply energy to the region to support industry agriculture and household provision. The long term job creation potential and trickle down impacts cannot be evaluated based on the limited data provided. An airport at Mkuze can open up the area with respect to more main stream tourism and support business development in the area. It could also be used to export high quality niche vegetables etc. if such an agri-business can be developed. However no agricultural projects are planned for the area and the intended role of the airport is not clear. The airport would be subject to and EIA process as it is close to several Games reserves

and other nature areas, however the airport can have a positive impact on the tourist industry in the area. The analysis indicated that given the high quality of the environment there is limited evidence of tourism points in this area and to the north.

- The projects in Amajuba related to rural water supply and sanitation in eMadlangeni. This is the Lm with the largest backlog in water and sanitation provision in the district and one of the highest in this cluster and thus can be considered an essential project although not necessarily catalytic.
- Projects in uThungulu are for water supply in Mthonjaneni which is an area with a 46% of population still living outside of settlements and thus more distributed settlement pattern. It is also an area with major backlogs in water supply which is essential to provide. , The other project is to establish a Fresh produce market. This project is dependent on mobilising farmers to grow sufficient produce. A pack store and grading house are included, however, no cold storage facilities are indicated nor development of markets outside of the district. It is not clear if the 900 000 population of this district, most being in the lowest income group can create a sufficient market size to support the farmers adequately make a real impact to the economy of the area and the lives of the citizens.
- The projects in iLembe relate to water provision for areas such as Ndwedwe which has poor levels of water provision as well as a smaller project to establish growers to produce essential oils in the Mandeni area. The latter project should provide at least a limited number of long term jobs and can be a catalytic project for a small area and its population.
- Projects for UThukela are limited to providing water and sanitation to the population many of which have very poor access to water supply at site level.
- The projects for the Umzinyathi District are to provide of bulk water supply for Msinga and Dundee which have a growing population and significant backlogs.
- In Zululand the projects are to provide water borne sanitation for eDumbe and Pongola which each have a backlog of 2000 or more sanitation backlog points.

It may be that many of the projects listed here by the districts cannot in the strict sense be considered catalytic projects; however the provision of water, sanitation and electricity can be considered as providing citizens with essential basic services. The latter could in the long run unlock the economic potential of these districts as water supply and electricity are crucial for many sectors. It may also be necessary to review the intention of the investment in catalytic projects. Where they projects intended to meet basic developmental needs or where they intended to be truly catalytic. Given the latter intent it is necessary to address the question as to how the provision of basic water and sanitation provision should be funded. The projects that relate to water, electricity and sanitation do not always have a direct impact on the economy and its people but without essential services more broad based development and attraction of business is also not possible. Given the good potential of the area better infrastructure provision can most likely have a positive impact on the region. It is recommended that feasibility studies be conducted for those projects that have not yet done so, and that the impact and benefits of each project be calculated in relation to the potential as well as challenges described in this study.