

PLAN-8 INFINITE ENERGY GRAHAMSTOWN WIND ENERGY PROJECT



COMMUNITY NEEDS ANALYSIS & ASSESSMENT

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Report prepared for:

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1. INTRODUCTION

Plan-8 Infinite Energy, a renewable energy company, plans to develop a wind powered electricity generation facility (known as a “wind farm”) approximately 30km outside of Grahamstown along the N2 in an easterly direction towards East London, in the Eastern Cape Province of South Africa. The proposed site is on the farms Gilead, Tower Hill and Peynes Kraal, and the project area lies within the Makana Local and Cacadu District Municipal jurisdictions. The proposed wind farm is planned to comprise up to a maximum of 22 turbines, each with a nominal power output ranging between 2 and 3 MW (megawatts). The wind farm will feed power into the national electricity grid.

As part of the proposed wind energy project, Plan-8 Infinite Energy has made commitments to contribute towards social and economic development in the region. This is in line with accepted principles for Independent Power Producers promulgated by the National Department of Energy and in accordance with relevant legislation. It is anticipated that resources for such interventions would be derived from income generated through the operation of the wind energy project. It is from this background that this community needs analysis and assessment is undertaken. It is anticipated that interventions identified and discussed in this report will be located near the proposed project site as well as in the principal regional settlement node of Grahamstown. Such areas falling within the Makana municipality will constitute the study area.

This document discusses outcomes from research undertaken with regards to a community needs analysis for the proposed Infinite Plan-8 wind farm to the East of Grahamstown. The purpose of this document is to concisely present these outcomes by first providing a situation analysis of the area’s state of development. Based on the current state of development, an opportunity scan is undertaken which then feeds into the conceptualisation of recommendations for economic and social interventions into the area.

1.1. OBJECTIVES

The primary objective of this document is to discuss opportunities for the stimulation of growth and development within the Grahamstown region, as identified through research undertaken by Urban-Econ Development Economists on behalf of Infinite Plan-8 (Pty) Ltd. Such interventions will be commensurate to the scale and scope of the planned investment into the local economy as part of the construction and operation of the wind energy project. This objective is achieved through research to frame the state of development in the study area (immediate surrounds of the wind energy facility and the rest of the Makana municipal extent), providing a basis for decision making regarding key opportunities for growth and its inhibitors.

It must be emphasised that the scope and extent of this community needs analysis and assessment is based on the level of investment to be undertaken by Plan-8 Infinite Energy. As such, the level of detail is geared towards outcomes that reflect the nature of projects to be identified and undertaken by Plan-8 Infinite Energy. The focus is thus on the immediate surrounds of the proposed wind energy project, as well as the principal regional node of Grahamstown.

This community needs assessment is prepared to outline and package specific community project opportunities that could benefit from the establishment of the Infinite Plan-8 wind farm to the East of Grahamstown. The scope of the research underlying this document is limited to achievement of the following outcomes:

- Identification of key stakeholders
- Economic and demographic profiling to better understand the dynamics of the local communities
- Economic potential/gap analysis
- Market demand analysis to determine feasible projects

1.2. BACKGROUND

The government of the Republic of South Africa promulgated the Electricity Regulations on New Generation Capacity which were made by the Department of Energy (2009)¹ in terms of the Electricity Regulation Act 2006. The regulations deal generally with procurement under an IPP bid programme (defined in the Regulations to mean a bidding process for the procurement of new generation capacity and/or ancillary services from IPPs), and specify the use of a bidding process involving requests for prequalification, requests for proposals and negotiations with the preferred bidder. The regulations also prescribe that the following factors should be considered:

- Preference for a plant technology and location that contributes to local economic development;
- Compliance with legislation in respect of the advancement of historically disadvantaged individuals;

The South African Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) was issued by the Department of Energy in 2011. Economic development has been stated as one of the key objectives of the procurement programme (DoE, 2012) and criteria include job creation, local content, ownership, management control, preferential procurement, enterprise development and socio-economic development.

0.6% of the project revenue is to be dedicated to enterprise development (targeted at assisting small businesses in the local area and requires that projects make contributions that 'assist and accelerate the development and sustainability of other enterprises, [and] financial and operation independence of other enterprises). Between 1% and 1.5 % of the project value is to be allocated to socio-economic development (this can include health, education, service delivery, arts and sports programmes). Also, between 2.5 and 5% of the project shareholding is required to be owned by the community.

Based on this, Plan-8 infinite energy has committed to allocating approximately 5% of its turnover (approximately R11 514 820.00 per year for at least 20 years) to such activities.

¹ DOE, 2009. **Government Gazette No 32378**. Department of Energy, Pretoria

² DoE, 2011 **Request for Proposals Volume 5 Economic Development Requirements**, Department of Energy, Pretoria

1.3. METHODOLOGY

The methodology employed in the development of this community needs analysis is outlined in Table 1.

Table 1: Study Methodology

STEPS	DESCRIPTION
<p style="text-align: center;">1</p> <p>Community Identification</p>	<p>Through use of GIS mapping and engagements with local ward councillors and the Makana Municipality (LED Department), the project team spatially identified and quantified the extent of selected communities within a specified radius of the project development site. Visits to the site of the proposed wind energy project and surrounding land were also made.</p> <p>Through the local ward councillor, the team identified appropriate community representatives that provided inputs on behalf of the local populations in the following steps.</p>
<p style="text-align: center;">2</p> <p>Primary Research Process & Engagements</p>	<p>Where necessary, one-on-one engagements were scheduled with specific interested, affected and influential stakeholders to gauge their inputs. The nature of inputs acquired from such parties covered:</p> <ul style="list-style-type: none"> • Makana Local Municipality Directorate Local Economic Development (LED): Local government strategic priorities • Makana Local Municipality Directorate Community Services: Ward profiling process for integrated development planning • Makana Local Municipality Agriculture and Rural Development department: development projects undertaken in the past and planned for the future • Makana Local Municipality Tourism department: state of municipal support for tourism sector • Makana Local Municipality SMME department: Partnership identification

STEPS	DESCRIPTION
	<p>and support measures for local enterprises</p> <ul style="list-style-type: none"> • Makana Local Municipal Council: input from ward councillor on settlement dynamics • Ward representatives: Local asset profiling/ mapping and specific development needs • Farmers and residents: State of agriculture (commercial and emerging) and tourism in the area • Local CBOs, NGOs and NPOs: institutional mapping for social entrepreneurship, charity, welfare and other community development initiatives
<p style="text-align: center;">3</p> <p style="text-align: center;">Socio- Economic & Economic Community Profiling</p>	<p>Based on the outcomes of the engagements process, a detailed profiling exercise was complied with the intention of developing a status quo profile of all economic and socio-economic provisions within the study area. This included:</p> <ul style="list-style-type: none"> • Education facilities • Healthcare facilities • Community facilities (halls, libraries etc.) • Social infrastructure (water, sanitation etc.) • Economic Infrastructure (roads, etc.) • Informal business operations (spaza shops) • Formal business operations (retail, industrial, tourism, banking etc) <p>In addition to the above, demographic ward profiling from secondary data sources was undertaken to provide critical information regarding the population trends of the local communities selected, including:</p> <ul style="list-style-type: none"> • Population and household numbers • Skills and employment data • Household income and expenditure profiles

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STEPS	DESCRIPTION
4 Community Project Opportunity Analysis	<p>Based on the outcomes of the previous steps, a socio-economic and economic gap analysis with the objective of identifying suitable project interventions that can both enhance community upliftment and stimulate economic growth within the selected communities was undertaken. Aspects covered include:</p> <ul style="list-style-type: none"> • Potential local consumer demand • Identification of related supporting initiatives (infrastructure/services/training etc) • Identification of supply and demand factors to assess market opportunities based on the gap between existing and potential levels of development • Review the resource base for potential exploitation of local resources and beneficiation, i.e. extent, location, utilisation and opportunities • Market analysis to determine the location and segmentation of the market and the existing and potential demand for products • Identify comparative and competitive advantages/disadvantages • Business linkage opportunities with surrounding formal economic activities
5 Package Economic Development initiatives	<p>Once suitable projects were identified, the project team developed a template from which opportunities were packaged in a standardised format to ensure that each project can be taken forward to implementation, identifying the critical success factors required to get the projects off the ground. Aspects in each project write-up, include:</p> <ul style="list-style-type: none"> • Project title: A short title that would allow easy recognition of the nature of the project • Project description: A summary of the features of the project • Target Market: Potential beneficiaries • Key role players: The body or institution that would be asked to take responsibility for the project

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STEPS	DESCRIPTION
	<ul style="list-style-type: none">• Facilitation plan: What should be done by the responsible role player to ensure the implementation of the project• Indicative financial Implementation time frame: Phasing of project elements• Ongoing monitoring and support: Financial and management guidance

1.4. THEORETICAL FOUNDATIONS

The recommendations presented in the proceeding sections of this document are all founded on sound theories that relate to community development.

The working definition that will guide all subsequent sections of this document is encapsulated in the following quotation: “Needs assessment within a particular community can be defined as a process of getting involved in a community, with the aim of assisting community members to learn more about their own current situation, problems and needs, and to facilitate the development of goals and strategies for solving these problems.” (Green, Botha and Schönfeldt, 2004³).

1.4.1. APPROACHES TO COMMUNITY DEVELOPMENT

Generally accepted principles in community development see it as bringing about positive change in the social and economic wellbeing of a defined population. It seeks to improve their functionality through investments in various forms of capital to strengthen the capacity of a community. (Wasserman and Kriel, 1997⁴)

Approaches are generally people centred (ownership), involving community participation and implementation. This involves improving community awareness and skills levels to harness all available resources to achieve specific collective goals. The ultimate aim is to move away from dependency to sustainability (Butler and Howell, 1980⁵).

1.4.2. BRINGING ABOUT COMMUNITY DEVELOPMENT THROUGH NEEDS ANALYSES AND ASSESSMENTS

Activities that are generally accepted as a means of bringing about community development that satisfies the above approaches include:

³ GREEN F, BOTHA P, SCHÖNFELDT HC: 2004. **Needs assessment in a rural community on a commercial farming South Africa.** *Journal of Family Ecology and Consumer Sciences* 32, pp 46-59

⁴ WASSERMAN, I & KRIEL, JD. 1997. **Facts and fallacies. Perspectives on Community development.** Pretoria: University of Pretoria

⁵ BUTLER, L. M., AND HOWELL, R. E., 1980. **Coping with growth: Community needs assessment techniques,** Corvallis: Western Rural Development Center.

- Education
- Mobilisation of resources
- Exploitation of indigenous knowledge systems
- Policy and programme development
- Stakeholder participation
- Providing financial assistance
- Institution building
- Asset mapping
- Coordination and integration

(CDPSC, 2011⁶)

⁶ CDPSC. **Community Development Professionalisation Steering Committee 2011 Summit** Report Online. Available: <http://cdpsc.co.za/resource.htm>. Pretoria: Department of Social Development

1.5. DOCUMENT STRUCTURE

Outcomes of research conducted using the methodology from section 1.2 are presented in the following document structure:

Chapter 2- Contextualisation of community

This chapter profiles the study area in terms of its locality, economic, infrastructural, institutional and socio-economic attributes. The purpose of this chapter is to provide an informational baseline that will allow a gap-analysis to be undertaken.

Chapter 3- Opportunity analysis

Collating information from chapter 2 and factoring-in strategic policies and planning imperatives, this chapter highlights the community's developmental strengths, weaknesses, opportunities and threats. This then feeds into criteria for the selection of potential projects for the study area.

Chapter 4- Project recommendations

Proposals for projects that will advance enterprise and social development are presented in this chapter.

2. CONTEXTUALIZATION OF COMMUNITY

This chapter seeks to shed light on key developmental characteristics that define the community's current and future states of development.

Information presented in this chapter is based on a combination of the following sources:

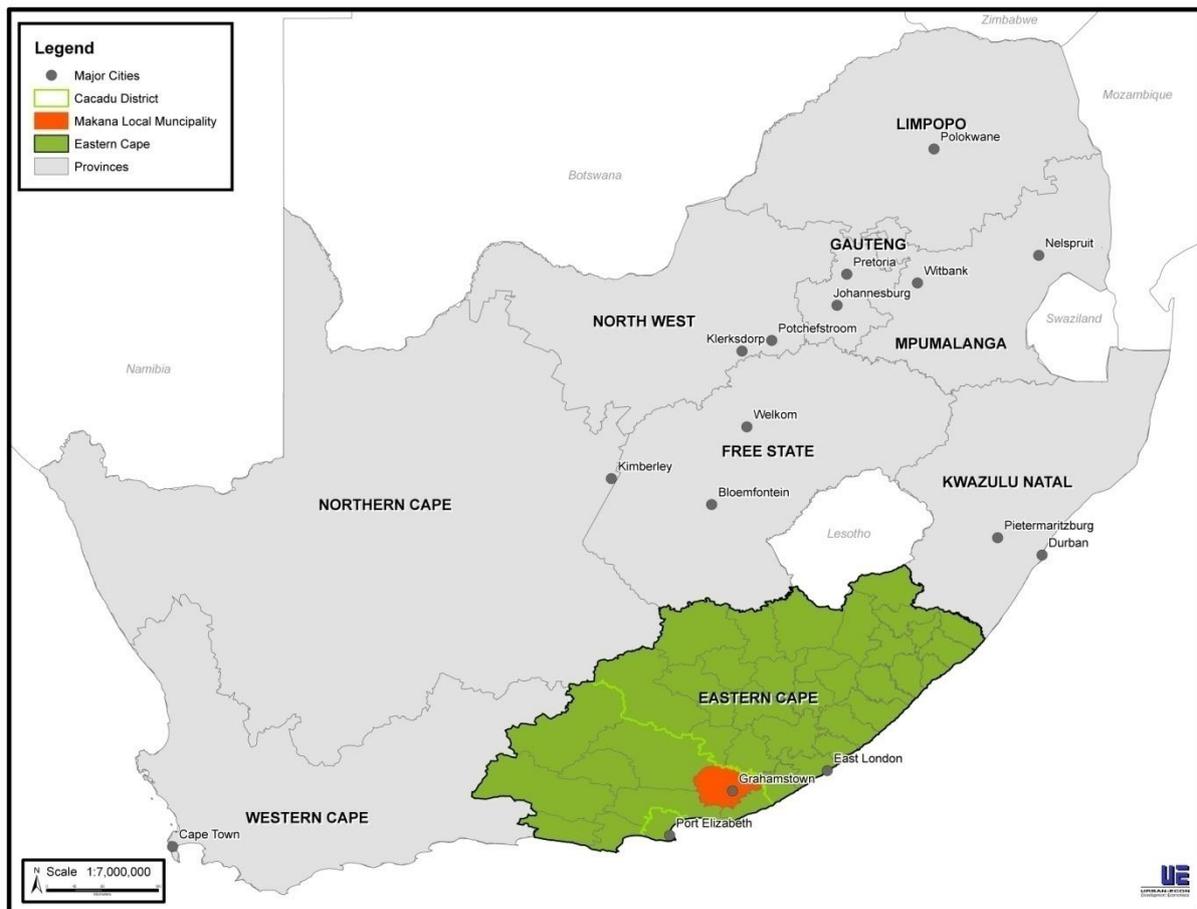
- Primary research including interviews with key stakeholders and previous research studies within the region
- Secondary research including Statistics SA (2011 Census, community Surveys, etc) planning documents (Area Based Plans, Responsible Tourism Sector Plans, Investment Incentives policies, etc) and academic output (journal articles, think-tank publications, etc)

2.1. LOCALITY

The study area for this community needs analysis is the Makana Local Municipality. As presented in Map 1, Makana is located within the Eastern Cape province. The broader municipal area will thus be taken as the study area. This accounts for the fact that communities in near proximity to the proposed wind farm have small populations and have sparse settlement configurations. As such, given the magnitude of the investment to be undertaken by Infinite Plan-8 it is more prudent to consider the greater municipal locality, than to focus entirely on the surrounding communities. These communities will however still be discussed within this chapter.

Grahamstown is the major urban settlement within the Makana municipality and is the centre of formal business, administrative capital and host to several civic, public and educational institutions. Other secondary urban settlements are found at Salem, Riebeck East and Alicedale. These have considerably smaller built urban footprints than Grahamstown and have significantly lower levels of development (economic, social, institutional etc.). Apart from these smaller settlements, the majority of the municipal population is made up of rural households. These typically engage in various forms of agriculture and tourism activities. Informal business activity largely takes place in the townships of Grahamstown and on a minor scale in villages and other rural settlements throughout the municipality.

Map 1: Locality of Makana Municipality



Source: Urban-Econ GIS

Map 2 shows the locality of the proposed wind farm in relation to the town of Grahamstown, with ward labels provided in the map also. The proposed wind farm is surrounded by commercial farms and game reserves. As such, local communities within close proximity are small and sparsely distributed. Communities in nearby villages include Collingham Towers, Trentham Towers, Pershoek, Fraser’s Camp, Coombs, Fort Brown and Committee’s Drift. It must be noted that ward boundaries and municipal demarcation delimitations do not allow for the presentation of detailed demographic or similar statistics for these communities.

The site of the proposed wind energy project is located in Ward 13 approximately halfway between Grahamstown and Peddie (a smaller town that services rural subsistence agrarian communities) in the Ngqushwa Local Municipality. The site is located on the N2 national road and is surrounded by a combination of game, livestock and crop farms. These are private ventures with limited resident populations on-site. As such, the immediate surrounds of the proposed wind energy site do not have

significant built-up footprints (these land uses typically require low labour intensities to achieve sustainable yield returns). Higher concentrations of settlement are found at Collingham Towers, Trentham Towers, Pershoek, Fraser's Camp Coombs, Fort Brown and Committee's Drift.

For this above reason, the study area is constituted of the entire Makana Local Municipality. Prior research in the area indicates that the nature of rural settlements within the local municipality is largely homogenous, which when coupled by the sole dominance of Grahamstown as an urban settlement allows the use of municipal-wide statistics in the following sections of this chapter and document. A municipal perspective to community development is thus adopted in this document.

Map 2: Locality of proposed wind farm, with ward boundaries



Source: Urban-Econ GIS

2.2. SOCIAL CHARACTERISTICS

It is important to understand a locality's population as seen through its age structure and education levels as these two factors in turn affect its labour pool and thus household income earning capacity. With regards to this community needs analysis and assessment, the process and pace of community development is predicated on the levels of human capital in an area. The representation of youth in the population and the population's education levels thus determines the nature of interventions that will flow from this document. A youthful population is more likely to benefit from enterprise development initiatives than welfare and social security initiatives. Similarly, the type of initiatives recommended for an area is linked to its educational base

2.2.1. DEMOGRAPHICS

Table 2: Demographic overview : Makana Municipality

POPULATION	TOTAL NUMBER OF HOUSEHOLDS	AREA	POPULATION DENSITY
80 388	21 390	4 378km ²	18 persons/ km ²

Source: Census 2011

The municipality's population is presented in Table 2. As intimated in section 2.1, the greater Grahamstown area accounts for approximately 81% of the total population with small rural settlements making minor contributions to the total population. It is within such a context that the small populations of villages in close proximity to the proposed wind farm site can be understood.

Table 3: Age structure: Makana municipality

AGE	0-14	15-24	25-29	30-44	45-59	60-74	75-79	80+
Contribution	24.4%	22.0%	9.3%	20.1%	15.1%	6.8%	1.1%	1.3%

Source: Census 2011

As seen in Table 3, over 66% of the population falls within the 'economically active' cohort of 15-64. The implication of the results presented in Table 3 is that the area has a large youthful population. A

large youthful population is often associated with high demand for employment and entrepreneurial opportunities.

2.2.2. EDUCATION

It is worth pointing out that Grahamstown serves the role of an educational hub within the province. As such, it hosts several educational institutions including Rhodes University, Midlands Further Education and Training College and multiple high schools of national renown.

Table 4: Education: Makana Municipality

No SCHOOLING	SOME PRIMARY	COMPLETED PRIMARY	SOME SECONDARY	GRADE 12 / FORM 5	STD 10 / HIGHER
5.3%	27.4%	6.7%	34.3%	17.5%	8.8%

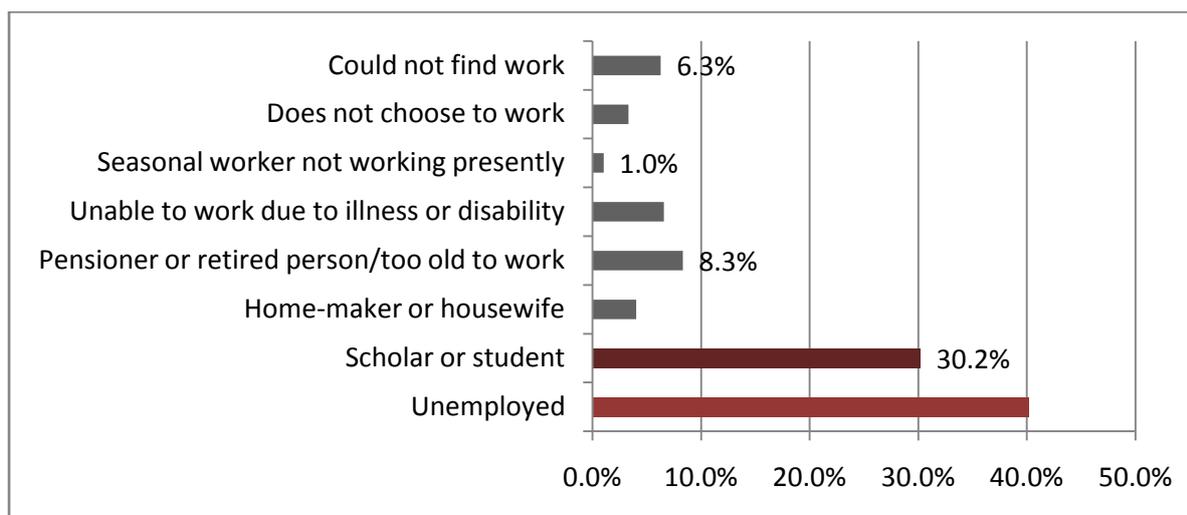
Source: Census 2011

Education levels for the Makana area are presented in Table 4. The proportion of the population with no schooling in Makana is lower than the Cacadu district (12.3%) and Eastern Cape provincial (9.4%) levels. The presence of comparatively high levels of education in Makana point to the possibility of establishing an entrepreneurial class within the region. Given Grahamstown's small industrial base, such an entrepreneurial class would have to tap into opportunities for development that align with the region's comparative and competitive advantages.

2.2.3. EMPLOYMENT

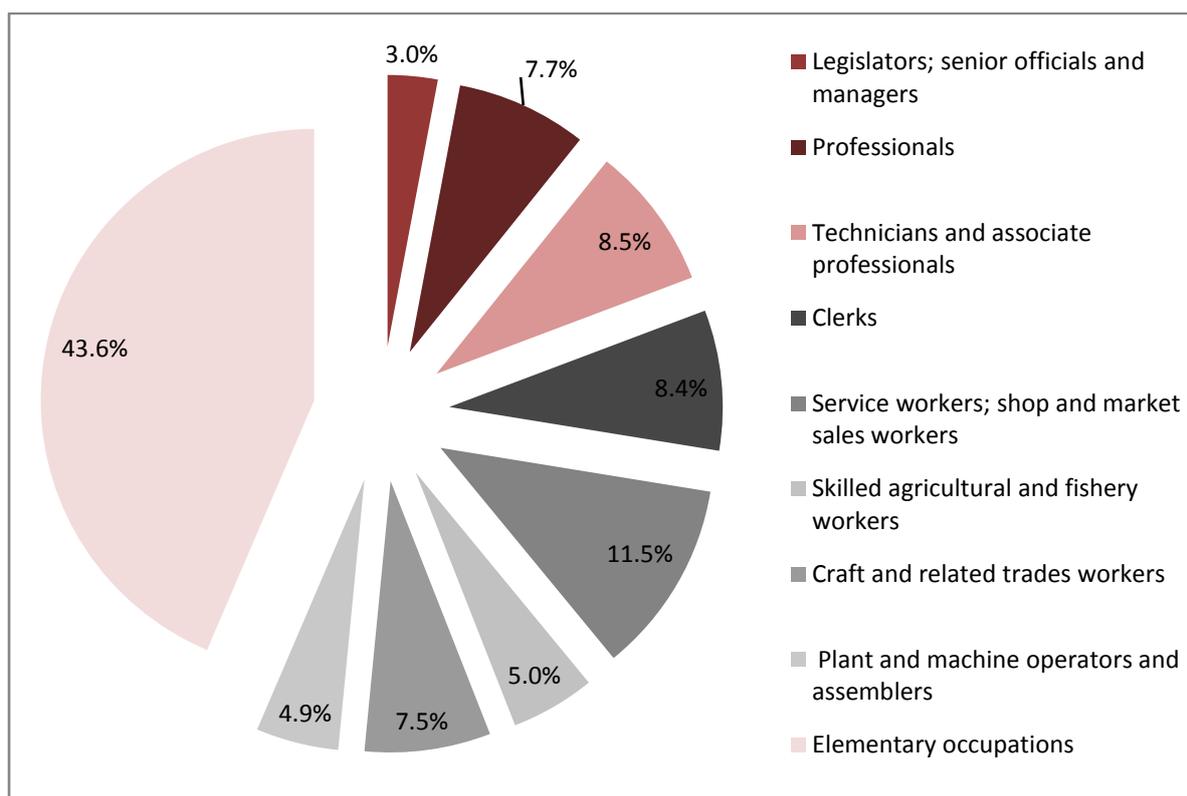
In 2011 33.1% of the population was employed, 31.3% was unemployed and 35.6% of the population was not economically active. Figure 1 provides a breakdown of reasons respondents gave for not being employed within the area. It may be observed that students and scholars make up a large percentage of those not formally employed in the area. Despite this, the area has high levels of unemployment with less than one in three people in formal employment.

Figure 1: Reasons for not working: Makana Municipality



Source: Calculations based on Quantec Research

Figure 2: Occupation: Makana Municipality



Source: Calculations based on Quantec Research

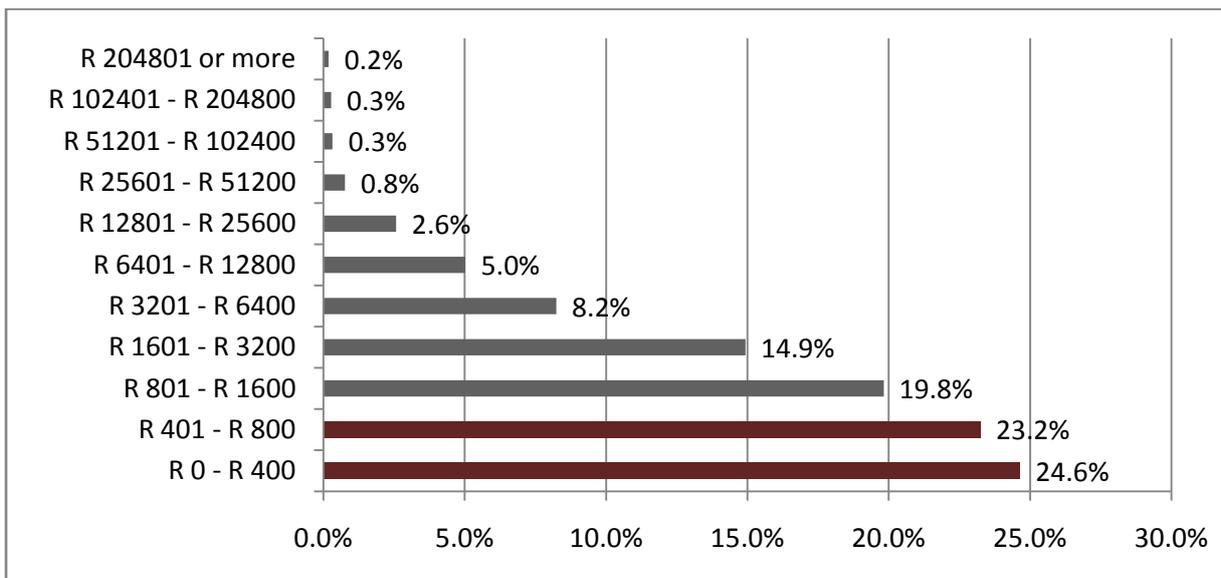
Figure 2 shows the nature of employment within the area. It may be observed that almost one in five employed persons is a highly skilled individual, while almost half the working population is employed in unskilled positions. The implication of this is that Makana has a low representation of

semi-skilled workers. This points to a large gap between highly qualified residents (as found in business and financial services) and residents with low educational attainment levels (e.g. farm workers).

2.2.4. HOUSEHOLD INCOME

Households are presented per income earning cohort in Figure 3. It may be seen that a significant percentage of the population is subsisting in income poverty. As such over 47% live below the ultra poverty expenditure minimum living level of R800 a month⁷. The implication of this is that it creates a need to income generating interventions in the local economy. Given the small industrial base (manufacturing entities typically have high labour absorbing propensities), this would most successfully be pursued through the promotion of entrepreneurial activities within the region.

Figure 3: Average monthly household income: Makana Municipality



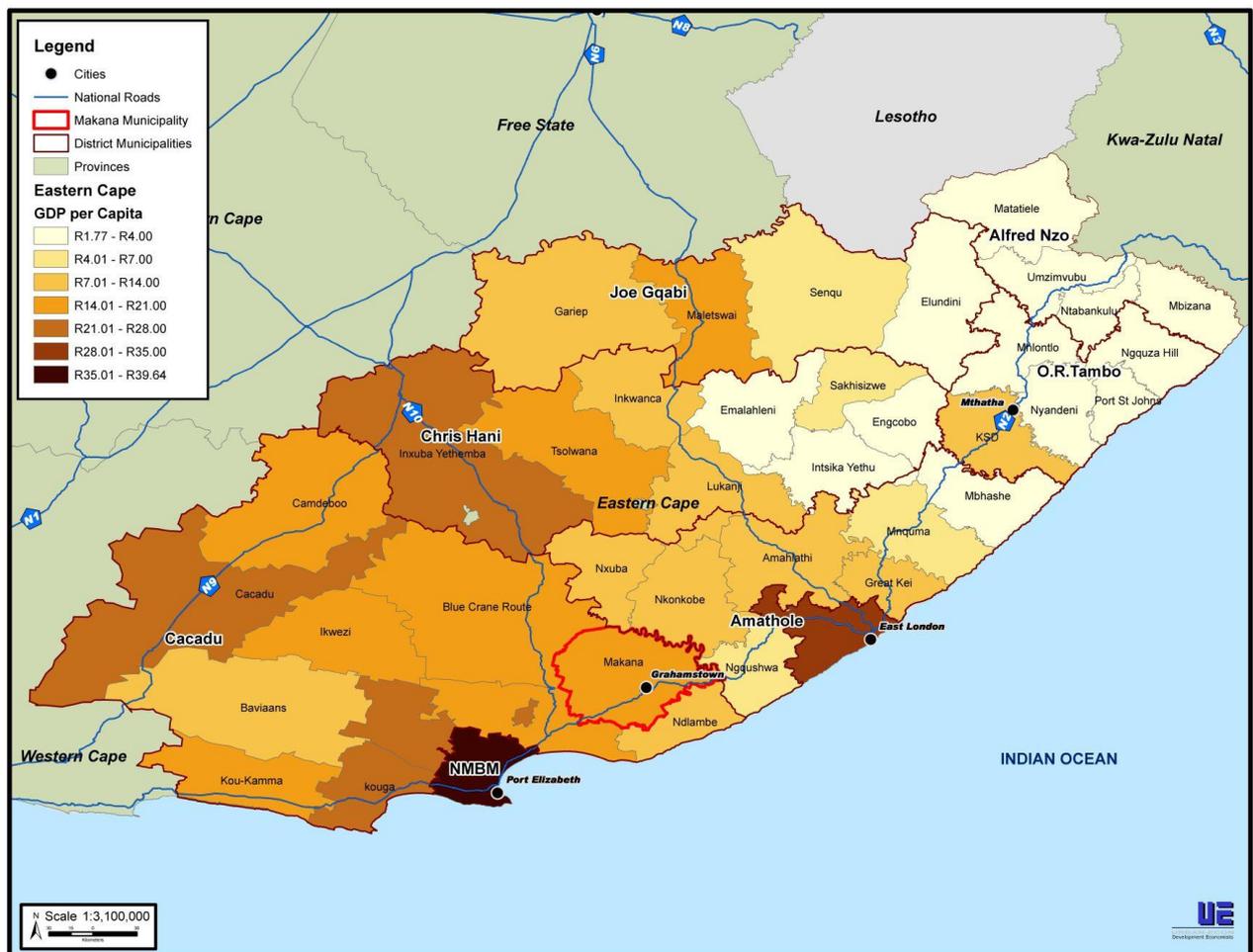
Source: Calculations based on Quantec Research

⁷ STATSSA, 2000. **Measuring poverty in South Africa**. Pretoria: Statistics South Africa.

2.3. ECONOMIC ATTRIBUTES

Map 3 compares the per capita geographic output of the Makana municipality to other local municipalities in the Eastern Cape province. It can be seen that the local economy has a median ranking on the provincial scale. A caveat must however be made that the majority of economic activity in the municipality is found in Grahamstown. Economic opportunities are thus heavily concentrated both spatially and sectorally. The implication of this is that rural dwellers and township residents (who make up the majority of the Grahamstown population) are often operating in the second economy which is characterised by low levels of output, limited value addition and marginal capital accumulation.

Map 3: GGP per capita for Eastern Cape Province: Makana Municipality



Source: Urban-Econ GIS

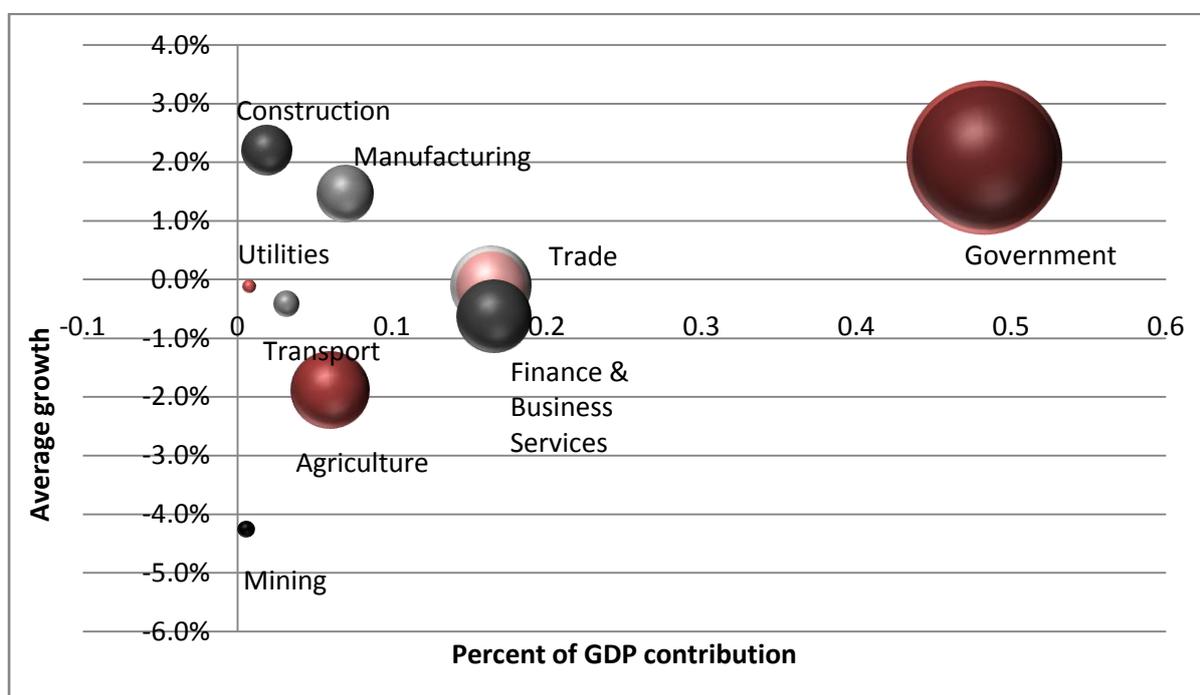
2.3.1. ECONOMIC STRUCTURE

Trends and changes in the structure and performance of the economy are visually depicted in Figure 4 as seen through:

- Average GGP growth rates from 2001 to 2011
- Average contribution to GGP from 2001 to 2011
- Average employment contribution from 2001 to 2011

The ideal situation for the local economy would be one in which the bubbles (each representing an economic sector in the study area) are of a similar size, and are clustered around a proximal region on the x-axis and high up on the y-axis. This would indicate a highly diversified economy that is characterised by high output growth, and a balanced distribution of employment creation opportunities.

Figure 4: Bubble graph- Relative importance of economic sectors in Makana



Source: Calculations based on Quantec Research

From the bubble graph it can be seen that the public sector (represented by government) provides a disproportionate contribution to the local economy. This points to an unsustainable economic

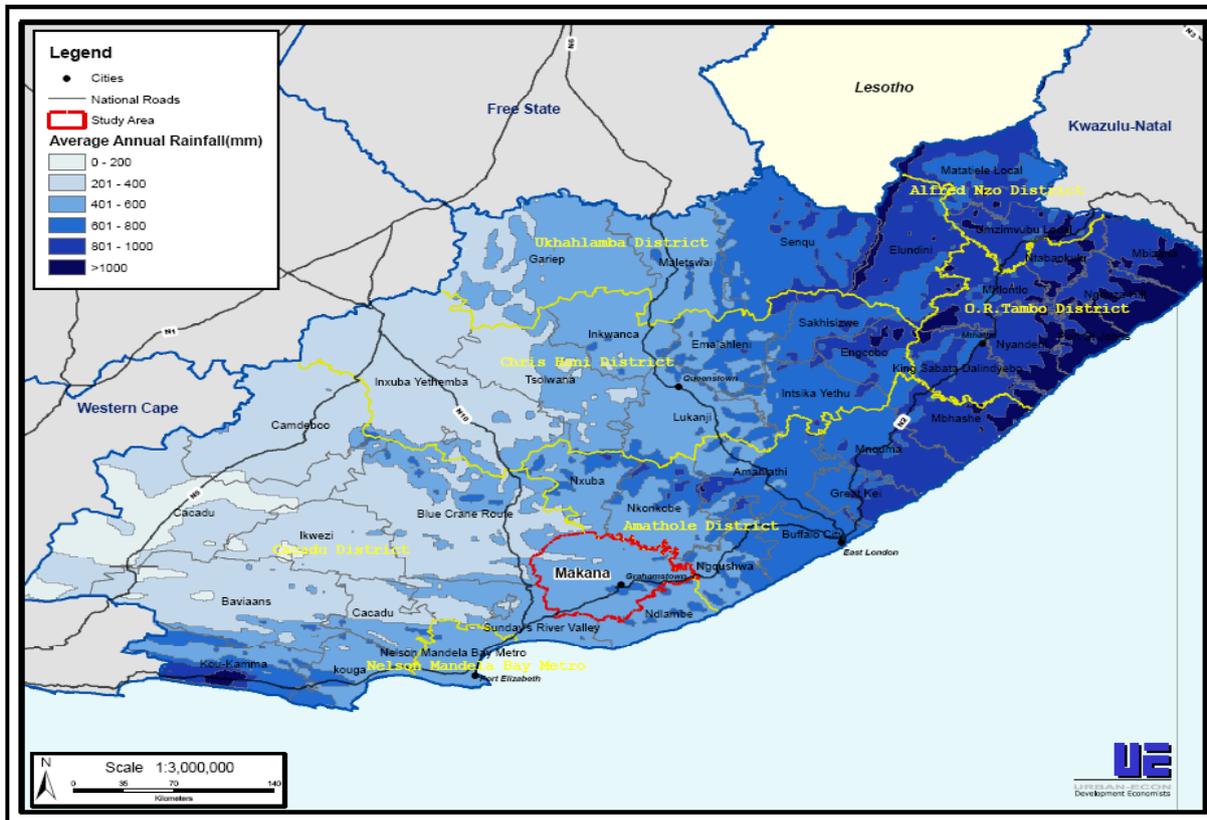
structure that lacks in private enterprise and has low levels of real participation by households (as business owners, employees, etc).

It can also be observed that the agriculture sector has a medium-sized bubble in the bottom half of the Figure, located on the extreme left. This represents low employment, low growth and low GDP contribution. Utilities is a small bubble as the energy sector is currently not making a meaningful contribution to GDP. This is likely to change if this and other proposed investments into the local energy sector are undertaken. Another notable sector is retail trade as it makes the second highest contribution to the local economy. It points to a significant consumer demand market within Grahamstown.

2.3.2.PRIMARY SECTOR ACTIVITY

The primary sector includes the extraction and production of raw resources as found in agriculture, forestry and mining.

Map 5: Rainfall for the Eastern Cape Province

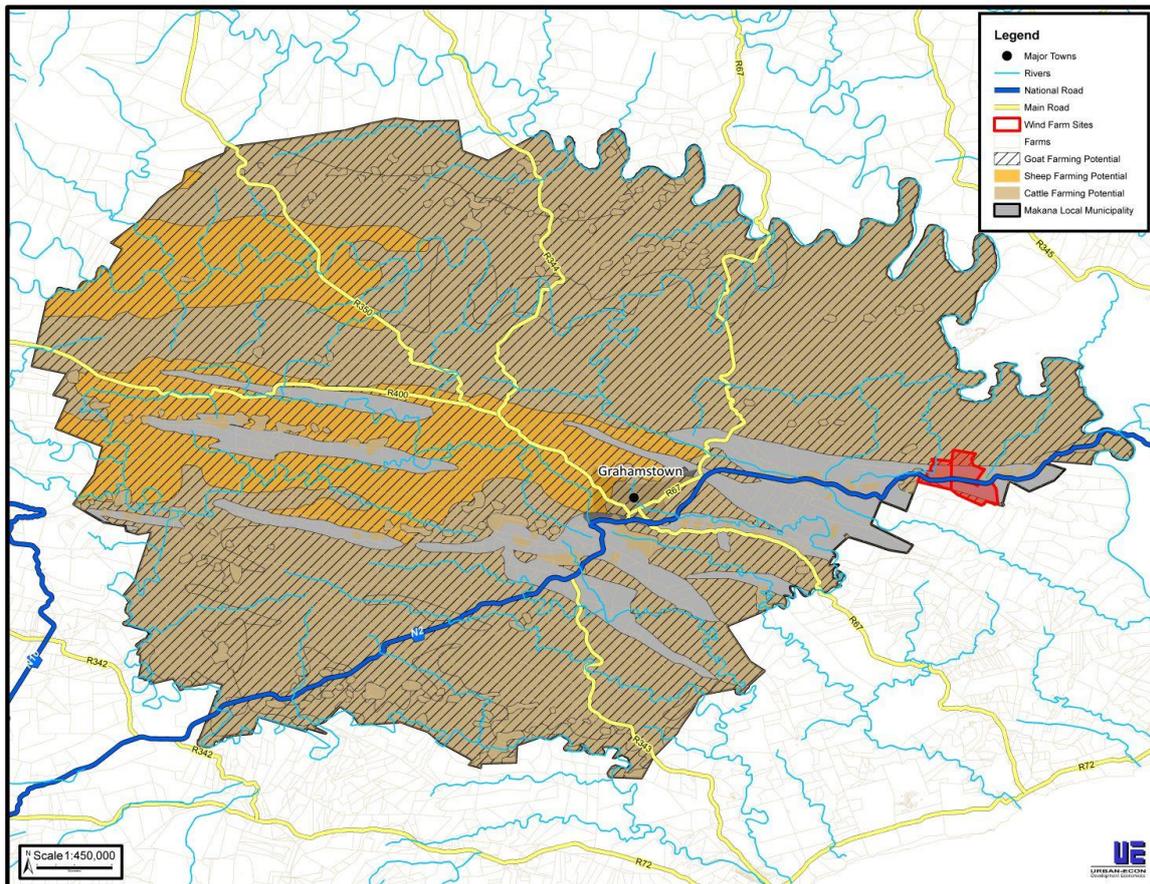


Source: Urban-Econ GIS

Map 5 shows rainfall for the Eastern Cape Province. Rainfall (hydrology) in conjunction with topography, vegetation types and soil types affect agricultural capacity.

Based on these above factors, agriculture is the dominant land use in rural Makana (together with game farming and conservation activities). The SDF states that “the agricultural sector in Makana is primarily based on grazing, while limited cultivated lands do occur. In general the Makana municipal area does not contain high potential agricultural land for intensive purposes”. Despite this, the SDF also states that Makana does have significant holdings of land with moderate potential for agricultural activities. This is illustrated in Map 6.

Map 6: Agricultural Potential in Makana



Source: Urban-Econ GIS

It is worth noting that the Makana area was historically an area of high agricultural production. This was mainly based on livestock rearing (including ostrich) and crop cultivation (mainly maize and

horticulture produce). The local agricultural industry has however experienced a consolidation of farms as properties have been restructured to operate as game farms (including reserves, hunting, conservancies, eco-tourism, etc).

Kaolin is the primary mineral mined within Makana, with several quarries located near and around Grahamstown. These kaolin mines extract material which is used in multiple industrial purposes (e.g. ceramics production). Most of the mined material is transported to factories located in the Western Cape, Kwa-Zulu Natal and Gauteng. Other mining activity in the locality takes the form of quarries for rock, sand and aggregate inputs into construction projects.

As seen in Figure 1, mining does not make a significant contribute to the local economy. Kaolin mining is not labour intensive and is based on open-cast excavation. In addition to this, global and national demand for Kaolin is not high (as compared to other high-value industrial minerals). Kaolin has however been identified (through feasibility studies and business plans) as a niche opportunity for future small scale enterprise development in Makana .

2.3.3. SECONDARY SECTOR ACTIVITY

The secondary sector includes transformation of primary inputs as found in manufacturing, construction and utilities such as energy.

Given its role as an educational hub, and its proximity to industrial centres in East London and Port Elizabeth, there is no significant manufacturing capacity in the Makana area. Resources for local manufacturing are however linked to primary sector activity within the area. This includes brick making (linked to kaolin production) and niche agro-processing (e.g. Ostrich meat processing, taxidermists, etc.).

The local construction sector is largely linked to the student accommodation market , in line with Grahamstown functioning as a provincial educational hub. Resources for this form of activity thus take the form of bricks manufactured locally and the presence of qualified human resources.

As the locality does not have significant coal resources, potential for energy production in the area is primarily based on renewable resources including wind and solar which are found in abundance.

2.3.4. TERTIARY SECTOR ACTIVITY

The tertiary sector includes service oriented activities such as retail trade, tourism and business and financial services.

Given the small manufacturing base, local resources for the trade sector are virtually non-existent, making Makana a net consumer of this form of activity. Consumption of retail trade goods sourced and manufactured locally takes the form of niche products (e.g. honey) and basic goods with no value addition (e.g. vegetables and fruits sold on the road side).

Tourism in the area is largely motivated by environmental, educational and cultural purposes. Makana has a vibrant tourism sector and this is supported by the presence of a strong resource base e.g. land for game farms, high number of people enrolled in educational institutions and reputation of festivals. Tourism in the area is inextricably linked to the growth of the private game reserve industry. Although this has its origins in agriculture (hunting is classified in SIC as part of agriculture), this has multiple offshoots to the tourism industry (e.g. transportation and accommodation).

The presence of business and financial services is in part a response to Grahamstown being an educational hub within the province. It is also in support of the growing eco-tourism industry which is primarily linked to hunting activity in the region. Resources for this sector to thrive are present in the form of highly qualified graduates of educational institutions and demand from the tourism industry.

2.4. INFRASTRUCTURE & SOCIAL SERVICES OVERVIEW

The provision of certain basic services has a direct and immediate effect on the quality of lives experienced by residents of an area. This section shall provide an overview of access to different forms of economic and social infrastructure . This profile does not seek to provide a detailed analysis of bulk infrastructure.

2.4.1.ROADS

The Makana Municipality has a road network totalling 757.4km, comprising of 588km of gravel roads and 169km are tarred roads (CDM, 2009⁸). Major roads within the municipality are shown in Map 2 and are as follows:

National Roads:

- The N2 lies adjacent to Grahamstown and links it up with East London to the East and Port Elizabeth to the West.

Main Roads:

- The R400 links up Grahamstown to Riebeeck East and the N10
- The R343 links up Salem with Kenton-on-Sea
- The R350 links up Grahamstown to Bedford
- The R344 links up Grahamstown to Adelaide

Arterial Roads:

- The R67

(Source: LED strategy, 2009⁹)

⁸ CDM, 2009. **Spatial Development Framework**. Cacadu district Municipality: Port Elizabeth

⁹ LED Strategy, 2009. **Local Economic Development Strategy**. Makana Local Municipality: Grahamstown

2.4.2.ACCESS TO WATER AND SANITATION

Table 5 shows household access to water whilst Table 6 shows household access to sanitation

Table 5: Access to Water : Makana Municipality

PIPED WATER INSIDE DWELLING	PIPED WATER INSIDE YARD	PIPED WATER ON COMMUNITY STAND: DISTANCE LESS THAN 200M FROM DWELLING	PIPED WATER ON COMMUNITY STAND: DISTANCE GREATER THAN 200M FROM DWELLING	BOREHOLE
22.3%	53.5%	9.6%	9.4%	0.4%

Source: Calculations based on Quantec Research

The fact that most Makana residents live in Grahamstown means that the municipality has high levels of access to water (at prescribed minimum RDP levels). Access to sanitation is however low.

Table 6: Access to Sanitation : Makana Municipality

FLUSH TOILET	CHEMICAL TOILET	PIT LATRINE WITH VENTILATION (VIP)	PIT LATRINE WITHOUT VENTILATION	BUCKET LATRINE
36.5%	0.2%	7.9%	14.1%	29.5%

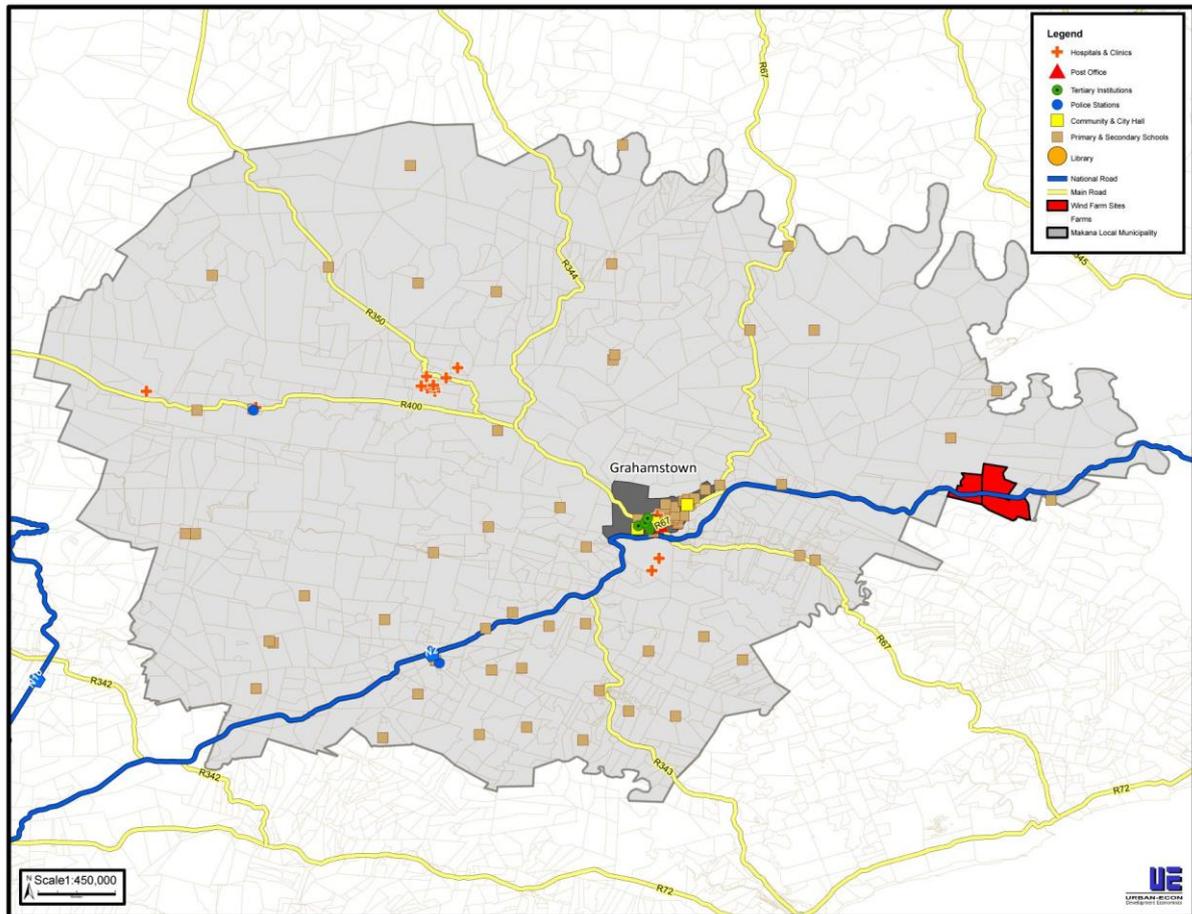
Source: Calculations based on Quantec Research

2.4.3.COMMUNITY SOCIAL INFRASTRUCTURE

Schools, police stations, public health institutions, post offices, community halls and libraries within the municipality are displayed in Map 4. This gives an indication of the supply of essential community infrastructure within the study area. The low number of community facilities in the area near the proposed wind farm may be explained by the low population numbers in surrounding villages. The low population density thus does not justify the provision of facilities such as schools and clinics, in line with CSIR red book standards.

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Map 4: Community Social Infrastructure: Makana Municipality



Source: Urban-Econ GIS

2.5. INSTITUTIONAL MAPPING

This section will briefly list institutions actively involved in social and economic development initiatives within the study area. This will be presented in Tables 7 and 8.

Table 7: Economic development institutions

ORGANISATION	ACTIVITIES
Makana Municipality Local Economic Development (LED) department	Coordination of municipal activity relating to economic development
Support partner organisations e.g. Small Enterprise Development Agency (SEDA)	Encouraging establishment and expansion of small business through various support measures
Public sector organisations e.g. Cacadu District Municipality	Investment into the area through infrastructure, public works, etc.
Private sector organisations e.g. businesses	Creation of opportunities for employment

Table 8: Social development institutions

ORGANISATION	ACTIVITIES
Makana municipality community services department	Coordination of municipal activity relating to social development
Charity organisations e.g. Entambeni soup kitchen	Providing welfare assistance to residents
Non-profit organisations e.g. Center for Social Development at Rhodes University	Programmatic support in theme areas such as education, health, community activism
Public sector organisations e.g. Department of Social Development	Community upliftment

3. OPPORTUNITY ANALYSIS

Based on the contextualisation of the community, this chapter analyses opportunities for social and economic development in Makana. Priorities identified by the public sector are identified first. This is then followed by an overview of the study area's present strengths and weakness. Opportunities for interventions that tap into opportunities and mitigate against developmental threats are then presented in the final part of this chapter.

3.1. STRATEGIC POLICY AND PLANNING REVIEW

This section outlines key outcomes of documents that influence the nature of project recommendations presented in this chapter.

3.1.1. MAKANA MUNICIPALITY INTEGRATED DEVELOPMENT PLAN 2012-2017

This document lists the municipality's priorities in terms of institutional, infrastructural, community and economic development factors. It is based on expert technical analyses and incorporates input from ward profiling exercises. With regards to this community needs analysis, issues raised as basic service community priorities for socioeconomic growth and community empowerment include:

- Agri-villages
- Skills development to address the issue of poverty and unemployment
- Youth empowerment
- Area based projects
- Access to bursaries

3.1.2. MAKANA MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK (SDF)

This document provides an overview of the region's human and physical geographic features and based on these, highlights key interventions to support balanced and sustainable development in the area. With regards to this community needs analysis the SDF indicates the following as being important:

- Facilitate economic development and growth within the rural areas
- Protect valuable high potential agricultural land
- Facilitate sustainable development

Fingo Village, Fort Brown and Eluxolweni are prioritised within the capital investment framework

3.1.3. MAKANA MUNICIPALITY LOCAL ECONOMIC DEVELOPMENT (LED) STRATEGY

The first part of the LED strategy is a situation analysis that provides a status quo of the current state of development in the area. According to this document, a general opportunity for development is from business growth through a shift in focus to townships in the East of Grahamstown. General constraints to development include separation of the first and second economy, dependence on non-productive sectors, lack of technical skills, unemployment and a high level of poverty.

The second part of the LED strategy is a strategic framework with programmes including strategic partnerships, investment attraction, SMME promotion, leveraging of educational capital and agricultural sector development. For each of these programmes, several strategic initiatives are proposed.

3.1.4. MAKANA MUNICIPALITY SMME DEVELOPMENT AND SUPPORT PLAN

Over 80% of SMMEs in Makana are considered to be either micro- or survivalist in size. This points to them being very small, with at most two employed workers but in most cases run by the owner and their family members. They often lack formality in terms of licences and accounting procedures and their proprietors usually do not have accredited skills training in the field. This is made worse by limited capital to start the business. According to this document, challenges facing SMMEs in Makana are:

- Access to finance (which negatively affects product quality)
- Access to markets (especially due to an absence of linkages with big and established operators)

- Access to skills
- Access to information (compounded by longer turnaround periods for applications for support services due to red tape)
- Regulations
- Slow pace of infrastructure developments

3.2. COMPARATIVE AND COMPETITIVE ADVANTAGES

- Function of Grahamstown as educational hub
- Well established tourism sector
- Interest levels of local population in establishing business enterprises
- Strong demand for goods and services in Grahamstown's townships
- High levels of civic participation in both urban centres and rural communities
- Scope for increased participation by local population in the tourism sector
- Presence of foundations for small scale niche industry linked to agro-processing

3.3. INHIBITORS TO GROWTH AND DEVELOPMENT

- Reliance of municipal economy on Grahamstown due to small size of other settlements
- Low representation of semi-skilled workforce in population
- Limited prospects for labour-absorptive growth prospects in the mining sector
- Social marginalisation and economic exclusion as a result of high poverty levels
- Brain drain because of perceived absence of economic opportunities
- Declining quality of trunk infrastructure in urban centres
- Land availability in both urban and rural areas may inhibit future growth and investment

3.4. POTENTIAL PROJECTS

The following criteria was used to develop specific project concepts from the broad opportunities and constraints identified in sections 3.1 and 3.2 :

- Employment creation
- Enterprise development
- Social upliftment
- Economic feasibility and financial viability
- Sustainability in rural contexts and impoverished urban settings

The spatial implication is this necessitates the conceptualisation of projects both in Grahamstown and in villages close to the proposed energy project site. This is to ensure balanced development.

Recognition is made of two key factors:

- i. Project interventions must directly impact communities in the immediate surrounds of the project
- ii. Low population densities in the immediate surrounds mean that some project interventions will need to be located in Grahamstown as this is the urban centre with the highest agglomeration of settlement functions.

The sectoral implication of these criteria is to create a requirement for projects that

- i. Recognise agriculture as a dominant form of household livelihoods
- ii. Seek to promote value-adding processes to primary or secondary products and services

The developmental implication of these criteria is to intimate community need for projects that:

- i. Support investments into human capital
- ii. Harness and mobilise local resources to create synergies

The following table lists potential projects which were considered by and for the community

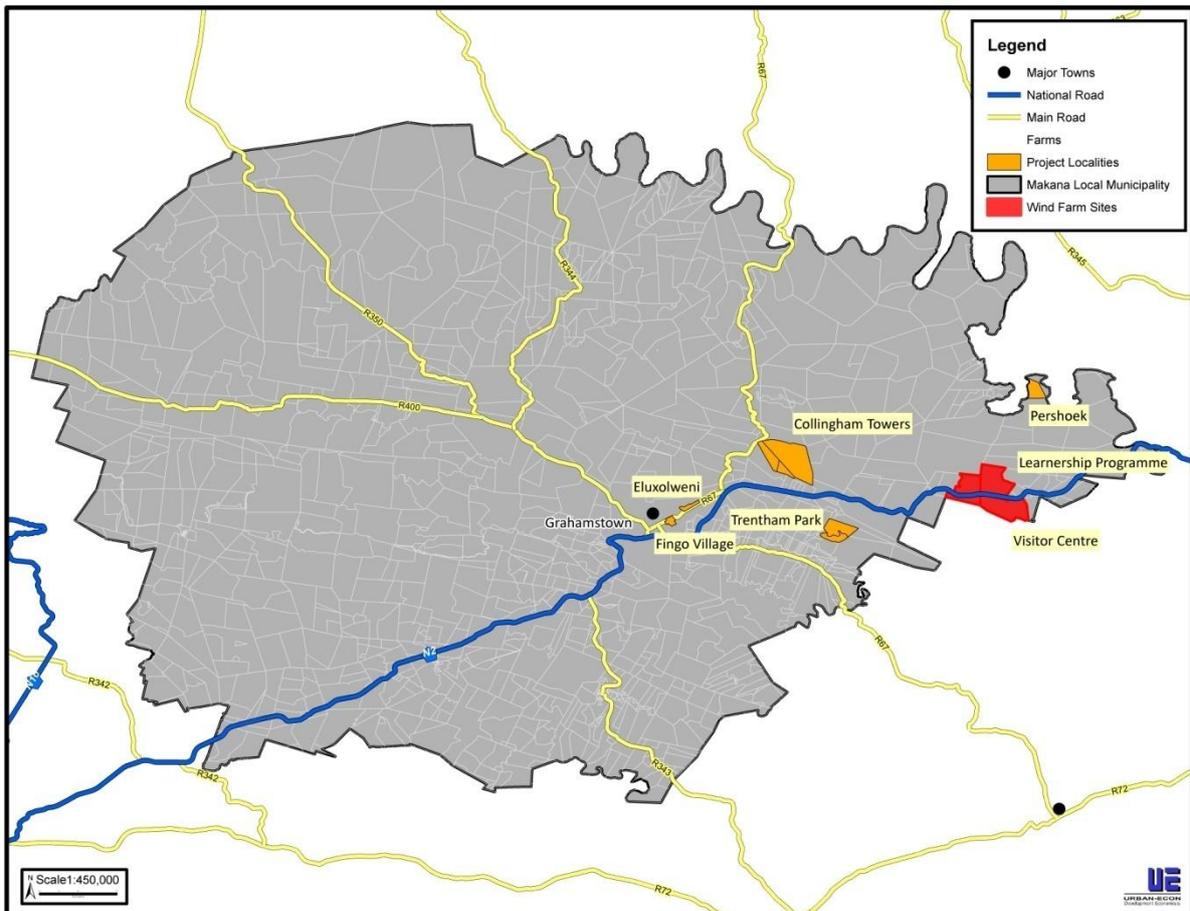
Project	Location: Grahamstown	Location: surrounding villages	Sector: Agriculture	Sector: value addition	Investments into human capital	Mobilisation of resources
Capacitation of Duna Library in Joza	X				X	
Trentham Park vegetable production training and mentorship		X	X		X	
Partnership with Rhodes University Centre of Social Development					X	
Fingo Village bee-keeping and honey harvesting	X			X	X	
Partnership with Rhodes University Centre of Social development					X	
Collingham Towers poultry training & mentorship		X	X		X	
Infrastructural upgrades to Fort Brown school		X			X	
Borehole sinking, maintenance & repair in Fraser's Camp		X				X
Eluxolweni childcare shelter support	X				X	X
Sports & recreation facilities at Coombs community Hall		X			X	X
Pershoek agri-business enterprise training		X	X		X	
Committee's Drift early childhood development centre		X			X	
Establishment of Scholarship					X	X
Wind farm learnership programme		X			X	

4. PROJECT RECOMMENDATIONS

This chapter packages areas of intervention identified in the opportunity analysis in a comprehensive format. This is done by first considering binding and guiding strategic policies and plans that affect this community needs analysis. Theoretical foundations on which the proposed project recommendations are made are then reviewed. Projects proposed for economic development are first presented, followed by those motivated by the need to address social development priorities in the area.

Map 7 shows the location of the projects proposed for the study area. It can be seen that there is an even distribution of projects between Grahamstown and rural areas in proximity to the proposed wind farm site.

Map 7: Location of projects



The projects presented in this chapter are based on the area's latent strengths and weaknesses. The projects are seen as responses to opportunities and threats to social and economic development within the region. Unless specifically stated, the projects will not involve the construction of facilities, and will utilise existing buildings within the municipalities.

The recommended projects are as follows:

- Trentham Park vegetable production training and mentorship
- Fingo Village bee-keeping and honey harvesting
- Collingham Towers poultry training and mentorship
- Eluxolweni childcare shelter support
- Pershoek agri-business enterprise training
- Establishment of Plan-8 Infinite Energy Scholarship
- Wind farm learnership programme & visitor centre

4.1. ECONOMIC DEVELOPMENT PROJECTS

Based on the theoretical foundations and strategic and policy planning review, as well as the opportunity analysis, the following project recommendations are made for economic development :

TRENTHAM PARK VEGETABLE PRODUCTION TRAINING & MENTORSHIP	
Description	The provision of practical training (AgriSETA accredited) and mentorship to local farmers on means by which to increase agricultural production and revenue from their cultivation of vegetables on their land. This will cover aspects such as soil types, fertilisation, planting preparation & times, harvesting, packaging, marketing and finance with the intention of providing farmers with hands-on experience in running their own agri-business
Location	Trentham Park is a rural village , approximately halfway between Grahamstown and the project site , bordered by N2 to the north and R67 to the south
Rationale	Villagers in the area currently produce vegetables on a subsistence basis for their household needs from home gardens. Community representatives have indicated a desire to increase the quantity and quality of vegetables produced in the area by farmers. Community representatives also communicated that there is sufficient land in the village to allow an expansion of production to quasi-commercial scales. This project would draw on indigenous knowledge systems about the area’s agricultural traits, whilst having the advantage of technical capacity to assist local farmers. The objective of this project would be to improve farming efficiency, reduce localised poverty and increase wealth creation

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Target market	<p>Research into livelihoods in Makana has revealed that crop cultivation is an activity primarily undertaken by women and youth, whilst adult males tend to engage in livestock rearing. As such, it is anticipated that the majority of beneficiaries from this project would be women and youth from the village of Trentham Park.</p>
Key activities & role players	<p>Role player: Trentham Park ward representative Activity: Ensuring that all households from the community have fair representation in the training activities- ensuring balance and impartiality in the selection of beneficiaries</p> <p>Role player: Umthathi training project Activity: As a local NPO with experience in the training and mentoring of farmers from the Makana area, this organisation would be mandated with preparation of the training modules (in conjunction with input from the MLM LED and the ward representative) as well as dispensing of the training and mentoring activities outlined in the module</p> <p>Role player: Trentham community Activity: Identification of detailed/ specific training needs: short & long term. Compilation of agricultural asset register.</p> <p>Role player: Makana Municipality Local Economic Development Directorate Agriculture Manager Activity: Inclusion of project in municipal Integrated Development Plan . Assisting beneficiaries in accessing markets</p>

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Facilitation	<ol style="list-style-type: none"> 1. Appointment of Umthathi training project as training and mentoring service provider for project (community trust) 2. Identification of beneficiaries by ward representatives (ward representative + community trust) 3. Assessment of prior, current and planned activities in the area by public sector organisation (MLM LED) 4. Incorporation of project into MLM IDP & partner identification (MLM LED) 5. Provision of input into primary research (Trentham community) 6. Preparation of training material, based on community needs assessment & resource endowment profile (Umthathi) 7. Preparation of detailed multi-year budget for approval by MLM LED & community trust (Umthathi) 8. Exploring market opportunities for project output (Umthathi, MLM LED) 9. Undertaking of initial training (Umthathi) 10. On-going mentorship and support for local farmers (Umthathi) 												
Financial requirements	Activity	Responsible	Duration	Rate									Budget
	Project administration	Umthathi	36 months	R10 000 pm									R 360 000
	Training and mentorship	Umthathi	27 Months	R50 000 pm									R 1 350 000
	Total										R 1 710 000		
Implementation time frames	This is a multi-year project envisaged to be undertaken for 3 years, with timeframes as per the facilitation steps above												
	Step	Months											
		3	6	9	12	15	18	21	24	27	30	33	36
	1												
	2												

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3													
4													
5													
6													
7													
8													
9													
10													

Monitoring & support	<p>It is envisaged that the following forms of monitoring be employed as part of this project:</p> <ul style="list-style-type: none"> • Quarterly progress reports (financial and operational) by Umthathi to community trust • Pre- and post training competency assessment of local farmers' by MLM LED agricultural office • Quarterly quality assurance feedback by local farmers on ongoing mentoring support from Umthathi (administered by ward representative) <p>The success of the project will be evaluated on the following basis :</p> <ul style="list-style-type: none"> • Improved farming efficiency (measured through higher yields per hectare) • Reduced poverty (through increase in food production for home consumption and resale, measured via changes in resource
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	<p>endowment profile)</p> <ul style="list-style-type: none">• Increase wealth creation (through improved access to markets)
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COLLINGHAM TOWERS POULTRY TRAINING AND MENTORSHIP	
Description	This project will seek to assist households with practical and theoretical support in their endeavours to produce chickens and poultry products on a for-profit basis. It is envisaged that technical training in subjects such as egg grading and handling, increasing feed nutrient utilisation, chick climate control and ongoing mentoring in areas such as optimising broiler feeding strategies and calculating costs and prices will be provided .
Location	Collingham towers is a small settlement , approximately 20km to the East from the from the project site , adjacent to the R67 and north of the N2.
Rationale	<p>Villagers in Collingham towers have relatively small arable fields for crop cultivation. As such, the community relies on small extents of land for home gardens which are used to produce food for consumption and resale. Much of the land used for home gardens is however of a degraded nature as it has been negatively affected by poor quality soils and drainage, erosion, nutrient deficiency and unsustainable agricultural practices. As a result of this, the home gardens have low yield rates.</p> <p>It is proposed that villagers in this village be trained and mentored in poultry farming as an alternative source of income to their current home gardening practices. It is believed that rates of return (per rand and man hour) will be higher for poultry farming than current horticultural practices. The objectives of this project will be to provide an alternative source of rural livelihoods, provide infrastructure for poultry farming and train local villagers in optimal production techniques. It is envisaged that poultry products will be sold to nearby villages and in other markets as an income generating activity.</p>

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Target market	It is envisaged that beneficiaries will be in the form of local cooperatives. Cooperatives are supported by public sector institutions as a means of targeting local communities for interventions, and thus will allow the project to receive additional support from partner organisations (e.g. government departments).
Key activities & role players	<p>Role player: Collingham Towers ward representative</p> <p>Activity: Encouraging community members to establish and join cooperatives . Assisting in the monitoring and evaluating of project success</p> <p>Role player: Angus Gillis Foundation</p> <p>Activity: Drawing on a decade of experience as a charitable trust working in the area, the foundation will oversee the training and mentoring of poultry farmers. The foundation has previously worked with local communities in poultry projects, and will use that experience in designing a suitable programme and appointing skilled service providers.</p> <p>Role player: Collingham Towers community</p> <p>Activity: Forming of cooperatives. Members of cooperatives must then be willing to make a nominal financial contribution as a confirmation of their commitment to the project’s outcomes</p> <p>Role player: Training and mentoring service provider</p> <p>Activity: Joint planning with the Angus Gillis foundation in the design and implementation of a training and mentoring programme</p>

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	<p>for local cooperatives. Identification and acquisition of appropriate inputs, required equipment and supporting infrastructure to take advantage of bulk buying advantages</p> <p>Role player: Makana Municipality Local Economic Development Directorate Agriculture Manager</p> <p>Activity: Inclusion of project in municipal Integrated Development Plan . Assisting beneficiaries in accessing markets</p>			
Facilitation	<ol style="list-style-type: none"> 1. Community needs analysis (Angus Gillis) 2. Establishment of community cooperatives (Ward representative) 3. Appointment of training and mentoring service provider (Angus Gillis, community trust) 4. Detailed design of for-profit poultry training and mentoring project business plan (Service provider, Angus Gillis) 5. Incorporating of project into MLM IDP & partnership identification (MLM LED) 6. Acquisition of capital goods and initial training (Service provider) 7. Continuous monitoring and support to poultry farmers (Service provider, MLM LED) 8. On-going evaluation of project (Angus Gillis, Community trust) 			
Financial requirements	Activity	Duration	Rate	Budget
	Project administration (Angus Gillis)	18 months	R10 000 pm	R 180 000
	Acquisition of capital goods & initial training (service provider)	4 months	10 cooperatives @ R50 000 each	R500 000
	Ongoing mentorship (service provider)	10 Months	R50 000 pm	R 500 000

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	Total	R 1 180 000								
Implementation time frames	This project is expected to run for one and a half years. The first 3 months will be used for the project inception, training and initial production will take 9 months and post-training support will continue for 6 months afterwards									
	Step	Months								
		2	4	6	8	10	12	14	16	18
	1									
	2									
	3									
	4									
	5									
	6									
	7									
8										
Monitoring & support	<p>It is envisaged that the following forms of monitoring be employed as part of this project:</p> <ul style="list-style-type: none"> • Cooperatives to provide weekly egg production schedules to service provider • Cooperatives to provide monthly broiler production schedule to service provider • Service provider, Angus Gillis and ward representative to review monthly financial statements of cooperatives 									

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- Angus Gillis and community trust to approve capital goods acquisitions of service provider
- Service provider to ensure capital goods are well maintained and provide bi-monthly reports to Angus Gillis & community trust
- MLM LED & Angus Gillis to ensure training and mentoring activities are adequately conducted

The success of the project will be **evaluated** on the following basis :

- Viability of poultry farming as an alternative source of rural livelihoods (business plan from service provider and monthly financial statements from cooperatives)
- Provision of infrastructure for poultry farming in the area
- Training of local villagers in poultry production (structured feedback from cooperatives, MLM LED & Angus Gillis to community trust)

FINGO VILLAGE (GRAHAMSTOWN) BEE-KEEPING & HONEY HARVESTING	
Description	<p>This income generating project will involve establishing a bee-keeping and honey-harvesting enterprise within Grahamstown. The scope of the project will include purchasing required equipment, providing beneficiaries with training and setting up off-take agreements with local markets.</p> <p>Equipment for the enterprise will be bought from locally trained manufacturing entities and will include:</p> <ul style="list-style-type: none">• Beehives• Protective bee suits sewn by blind seamstresses• Bee smokers (bellows) <p>Other inputs into the enterprise will include bees, aloe plants for winter flowering (to allow pollen/ nectar for production throughout the year) and tools such as gloves and talking calculators , honey and wax extractors</p> <p>The enterprise management training (essential business skills) will be provided to blind residents from the Makana municipal area with assistance from GADRA (Grahamstown Area Distress Relief Association). The four-week enterprise management training provided to blind beneficiaries will cover topics such as :</p>

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	<ul style="list-style-type: none"> • Business practice • How to market • Record keeping • Simulation <p>GADRA is a local NPO that works extensively with People with Disabilities from Grahamstown and surrounding areas. GADRA has experience in developing and supporting income generating projects for people with disabilities from the region and will be able to draw upon this in the planning and implementation of this project.</p> <p>Week-long basic and advanced bee-keeping courses will be provided by Makana meadery. The Makana meadery will also be a primary participant in an off-take agreement to purchase honey produced by the honey harvesting activities. The meadery would thus purchase honey produced by local entrepreneurs as an input in its brewery production activities. This has the benefit of providing a guaranteed market for honey produced, thus promoting the sustainability of the micro-enterprises established.</p>
Location	<p>Fingo village is a low-to-medium income residential area within the town of Grahamstown. Bee hives will initially be located at the offices of GADRA. As business grow, it will be possible for beneficiaries to undertake production from their homes, provided that they are safe.</p>
Rationale	<p>According to the Council for Scientific and Industrial Research (CSIR), there are approximately four million people with disabilities in South Africa. The study also indicates that only around 19% of disabled persons are employed compared to 35% of non-disabled</p>

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	<p>persons. This project has elements of both enterprise development and social upliftment and thus has the potential to impact positively on the vocational, economic, psychological and social aspects of the beneficiaries' lives. The methods of beekeeping are simple and accessible to visually impaired members of society. The learning curve for success with this project will thus not be prohibitively steep.</p> <p>The objectives of this project are to provide its beneficiaries with:</p> <ul style="list-style-type: none"> • Employment • Transferable business skills • Transferable technical skills • A means to become more independent, increase self-esteem and improve their quality of life
Target market	<p>Primary beneficiaries from this project are blind residents of the Makana area that will engage in bee-keeping for honey harvesting. Secondary beneficiaries include disabled seamstresses and manufacturers of beehives and smoker cans from the region. A tertiary beneficiary is the Makana meadery which will benefit from improved supplies of honey. It can thus be seen that this project will benefit the locality on several levels.</p> <p>Blind residents will typically be unemployed household members reliant on disability grants as a primary source of income. This group of beneficiaries will thus gain through the creation of an additional income stream</p>

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	<p>Manufacturers of equipment used in these enterprises will derive a once-off benefit through increased sales of their products. They will also potentially experience increased revenues as the micro-enterprises expand.</p> <p>By providing improved supplies of honey to the Makana meadery, this project will also contribute to local secondary-sector industrial value addition.</p>
Key activities & role players	<p>Role player: GADRA</p> <p>Activity: Training beneficiaries in business principles for income generating activities. Supporting Makana meadery in the tailoring of training courses for persons with disabilities .</p> <p>Role player: Makana Meadery</p> <p>Activity : Training of beneficiaries in bee-keeping and honey harvesting techniques. Establishment of purchases agreement with micro-enterprises</p> <p>Role player: Ward representative</p> <p>Activity: Identification of beneficiaries</p> <p>Role player: Community trust</p> <p>Activity: Monitoring and evaluating progress of micro-enterprises</p>

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Facilitation	<p>The following steps will be required to ensure implementation is successfully facilitated by various stakeholders</p> <ol style="list-style-type: none"> 1. Identification of beneficiaries (ward representatives) 2. Development of bee-keeping training programme for persons with disabilities (Makana meadery) 3. Training of beneficiaries in business skills (GADRA) 4. Manufacture and purchasing of equipment, tools and input (GADRA, Makana meadery) 5. Training of beneficiaries in bee keeping and honey harvesting 6. Production of honey and sale to Makana meadery 												
Financial requirements	Activity	Duration	Rate								Budget		
	Project administration (GADRA)	12 months	R10 000 pm								R 120 000		
	Acquisition of capital goods & training (Makana Meadery, GADRA) for 30 people	3 months	Beginner production kit @ R8 000 per person Training at R5 000 per person								R390 000		
	Total									R 510 000			
Implementation time frames	<p>This nature of this interventions is planned to be for twelve months, after which the micro-enterprises should then become self-sufficient</p>												
	Step	Months											
		1	2	3	4	5	6	7	8	9	10	11	12
	1												
	2												

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	3												
	4												
	5												
	6												
Monitoring & support	<p>The following monitoring activities are recommended:</p> <ul style="list-style-type: none"> • Feedback report from GADRA on business skills training to community trust • Feedback report from Makana meadery on beekeeping and honey harvesting training to GADRA • Feedback from beneficiaries on suitability of both training activities <p>The following evaluation activities are recommended :</p> <ul style="list-style-type: none"> • Number of beneficiaries identified for participation • Number of beneficiaries successfully trained in bee keeping • Number of beneficiaries successfully trained in business skills 												

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PERSHOEK AGRI-BUSINESS ENTERPRISE TRAINING	
Description	<p>This project will set up and implement a structured long-term skills transfer to emerging farmers in order to enable them to convert their farms into sustainable businesses.</p> <p>Hands-on and simulation based training and mentoring of agricultural cooperatives in understanding :</p> <ul style="list-style-type: none"> • Effective planning of farming operations • The economic value and potential of their enterprises • Financial flows • Specific methodology to record their transactions • Improving their application of financial management procedures • Decision making about inputs, timing of planting and harvests, crop rotation and job allocation • Operation and management of irrigation based cultivation
Location	<p>Pershoek is a small farming community approximately 15km to the West of the project site. The area is bounded by the Great Fish River</p>
Rationale	<p>Pershoek has high arability potential as it has access to irrigated water and has fertile soils. Historically the area produced significant amounts of agricultural output, but this has not been the case in the recent past. The cause of this lies in technocratic (lack of skills and capacity) as well as institutional (tragedy of the commons) factors. This is despite significant investments into the area by public</p>

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	<p>sector organisations into goat, ostrich and tomato farming. For this purpose, mentors will be provided to develop not only the production related skills of farmers but also address management, financial and marketing skills of the beneficiaries. The rationale of this project is thus to unlock the latent potential which is to be found in the land and the people that reside on it.</p> <p>The objectives of this project will be to strengthen the daily running capacity of the farmers, galvanise their decision-making ability and foster an entrepreneurial mindset as expressed in the following ways:</p> <ul style="list-style-type: none"> • Training farmers to have realistic expectations e.g. how much the land can cope with, how to cope with unexpected problems, how to get things to run smoothly • Improvement in on-farm financial management e.g. what everything will cost, how much money can be made from the land, record keeping • Tactical and strategic planning e.g. what can be planted and when, how to keep the land productive throughout the year, best options for the selling of produce
Target market	<p>Principal beneficiaries of this project will be farmers from the area. If the number of farmers from Pershoek is not sufficient to achieve a critical mass for teaching and learning, beneficiaries may also take the form of farmers from nearby villages. In order to maximise the impact of the training activities (return per rand spent as well as economies of scale) it is proposed that beneficiaries be organised into cooperatives. Given the socio-economic profile of the area, beneficiaries in projects of this nature often support a number of dependants. The project thus has the potential to positively affect many more people than its direct beneficiaries.</p>

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<p>Key activities & role players</p>	<p>Role player: Pershoek ward representative Activity: Encouraging community members to establish and join cooperatives . Assisting in the monitoring and evaluating of project success</p> <p>Role player: King Sandile trust Activity: As custodian of the communal land to be cultivated on, the trust represented through the local chief will provide guidance and advice where necessary</p> <p>Role player: Pershoek community Activity : Community members will be able to propose a suitable mentor, provided that the identified mentor has the required technical skills. Forming of cooperatives. Active participation in pre-training activities (information sharing on past successes and failures)</p> <p>Role player: Training and mentoring service provider Activity: Completion of assessment in order to determine the initial state of the agricultural sector and establish mentee skills needs. Joint planning with the MLM LED and the King Sandile Trust in the design and implementation of a training and mentoring programme for local cooperatives, with clear exit strategy</p> <p>Role player: Makana Municipality Local Economic Development Directorate Agriculture Manager Activity: Inclusion of project in municipal Integrated Development Plan</p>
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Facilitation	<ol style="list-style-type: none"> 1. Appointment of training and mentoring service provider (Community trust) 2. Community agricultural needs analysis (service provider) 3. Establishment & galvanisation of community cooperatives (Ward representative) 4. Detailed development & design of training programme for approval by community trust, MLM LED (Service provider) 5. Incorporating of project into MLM IDP & partnership identification (MLM LED) 6. Simulation (theoretical phase of training (Service provider) 7. Hands-on (on-farm post-training mentoring) phase of training (Service provider) 8. On-going monitoring & evaluation of project (Community trust, MLM LED) 			
Financial requirements	Activity	Duration	Rate	Budget
	Community needs analysis & training design	3 months	R80 000	R 80 000
	Simulation based training	6 months	R10 000 per cooperative	R100 000
	Acquisition of capital goods	1 month	R15 000 per cooperative	R150 000
	On-farm post-training mentoring	21 months	R5 000 per month per cooperative	R1 050 000
	Total			R 1 380 000
Implementation time frames	<p>This project is expected to run for three years. The first 3 months will be used for the project inception. Simulation based training (and preparation)will take 6 months and post-training support will continue for 30 months afterwards .The first year will focus on technical, production related aspects with the second year consolidating of these aspects and focusing on managerial and marketing issues. The third year will consolidate the transferred skills, complement gaps and prepare for the exit of the mentor.</p>			

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Step	Months										
	3	6	9	12	15	18	21	24	27	30	36
1											
2											
3											
4											
5											
6											
7											
8											

Monitoring & support	<p>It is envisaged that the following forms of monitoring be employed as part of this project:</p> <ul style="list-style-type: none"> • Report back on training activities by service provider on completion of simulation phase • Feedback from trained farmers on simulation phase to ward representative • Quarterly reports by service provider on on-farm mentoring support provided • Periodic feedback from farmers on nature of support provided <p>The success of the project will be evaluated on the following basis :</p>
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	<ul style="list-style-type: none">• Number of farmers that 'pass' the simulation training phase• Three-year rate of survival for cooperatives established• Utilisation rates of pre-existing irrigation infrastructure on farms• Changes in output of local farmers
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4.2. SOCIAL DEVELOPMENT PROJECTS

Based on the theoretical foundations and strategic and policy planning review, as well as the opportunity analysis, the following project recommendations are made for social development :

Eluxolweni (Grahamstown) childcare shelter support	
Description	<p>This project involves providing comprehensive sponsorship support to a childcare centre in Grahamstown . This support would take two main forms:</p> <ul style="list-style-type: none"> • Financial sponsorship in contribution towards centre’s running costs • Financial support towards career guidance and tutoring programme for centre’s residents <p>The financial sponsorship towards the center’s running costs may be allocated towards food, clothing, salaries, equipment, school fees, utilities and other such costs. Such a sponsorship would take the form of an annual grant to be paid out over the twenty year period of the wind farm’s operation.</p> <p>Financial support towards career guidance and tutoring programmes will be provided for children that stay at the centre and attend educational institutions within Grahamstown. Tutors will be assigned to children that stay at the centre to assist them with school work as well as provide career guidance. Apart from payment for tutors, the support provided will also assist with books, learning and teaching materials.</p>

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Location	The shelter is located within the Eluxolweni township of Grahamstown.
Rationale	<p>Eluxolweni is a well-established childcare shelter with a track record of providing assistance to minors in need . The childcare shelter provides a safe environment for children from unstable backgrounds, poor households, parentless families and other related circumstances. Its aim is to rehabilitate children and facilitate programmes and projects that bring relief and care to marginalised and abandoned children, particularly street children. The shelter provides children with accommodation, food, and clothing, access to education and other basic goods and services. The children at Eluxolweni are also provided with psychological counselling from the Rhodes Psychology Clinic. The centre operates in response to a need for social development activities of this nature within the town of Grahamstown.</p> <p>The rationale for this project is to advance social development within Grahamstown. It is recognised that non-profit-organisations such as Eluxolweni often struggle to meet their basic funding needs, despite their work being beneficial to the local community. It is also recognised that children from disadvantaged and fragmented backgrounds often require additional academic tuition and life skills guidance in comparison to other children. This project addresses the fact that sustainable enterprise development within Makana will be buttressed by matching interventions into social development. Such interventions has two objectives:</p> <ul style="list-style-type: none"> • To provide financial resources to assist the Eluxolweni childcare shelter with its daily operational needs • To ensure that children at Eluxolweni receive adequate career guidance and academic tutoring

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Target market	The centre has a maximum capacity of 40 children between the ages of 8 and 18. Most of the children at the shelter come from poor backgrounds, with abuse in the home or from neighbours and as a result ended up on the streets
Key activities & role players	<p>Role player: Community trust</p> <p>Activity: Monitoring and evaluation of running costs sponsorship and career guidance and tutoring</p> <p>Role player: Eluxolweni childcare shelter</p> <p>Activity: Administering of sponsorship</p> <p>Role player: Ikamva youth</p> <p>Activity: Administering of career guidance and tutoring . Ikamva is an organisation with significant experience in the design and implementation of youth tutoring and academic guidance programmes .</p>
Facilitation	<p>Eluxolweni needs sponsorship</p> <ol style="list-style-type: none"> 1. Provision of prioritised updated long term operational budget for Eluxolweni (Eluxolweni) 2. Provision of prioritised updated long term capital budget for Eluxolweni (Eluxolweni) 3. Preparation of sponsorship agreement contract (Community trust) 4. Roll-out of sponsorship programme (community trust) 5. Monitoring and evaluation of programme (Community trust)

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	<p>6. Annual review of sponsorship contract (Eluxolweni, community trust)</p> <p>Eluxolweni residents' academic guidance and tutoring</p> <ol style="list-style-type: none"> 1. Signing of MOU between Ikamva and Eluxolweni (Community trust) 2. Identification of residents' tutoring needs (Ikamva) 3. Development of tutoring programme (Ikamva) 4. Roll-out of tutoring programme 5. Monitoring and evaluation of programme (Eluxolweni, community trust) 6. Annual review of programme (Ikamva, Eluxolweni, community trust) 			
Financial requirements	Activity	Duration	Rate	Budget
	Centre needs (Eluxolweni)	Ongoing	40 children @ R30 000 per year per child	R 1 200 000
	Academic guidance & tutoring (Ikamva)	Ongoing	40 children at R5 000 per year per child	R200 000
	Total			
Implementation time frames	<p>It is envisaged that both the financial sponsorship and tutoring/ career guidance will run for twenty years. The first three steps of each of the programmes are envisaged to be completed within the first three months and will provide a preliminary baseline for all future activities. Thereafter the programs will be reviewed on an annual basis to factor in changes in the community trust's revenue, or changes in the needs of the Eluxolweni centre and its residents.</p>			

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Monitoring & support	<p>Sponsorship programme monitoring:</p> <ul style="list-style-type: none">• Quarterly financial statements to be provided by Eluxolweni to community trust <p>Sponsorship programme evaluation:</p> <ul style="list-style-type: none">• Annual review of sponsorship outcomes :successes and shortcomings (community trust and Eluxolweni) <p>Tutoring and academic guidance programme monitoring:</p> <ul style="list-style-type: none">• Academic performance of residents to be monitored each term <p>Tutoring and academic guidance programme evaluation:</p> <ul style="list-style-type: none">• Annual reviews to be provided by Ikamva to community trust and Eluxolweni
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Establishment of Infinite Plan-8 Scholarships	
Description	<p>This project seeks to establish a scholarship for learners from the area. The scholarship will be offered primarily to high school students as well as students enrolled at Rhodes University and the Midlands College FET in Grahamstown. A maximum of ten learners will be provided with full scholarships to cover tuition fees, uniforms and shoes (clothing), text books, stationery, transportation, food, sports equipment, musical instruments, camps and outings.</p> <p>Details of eligibility will be finalised in time but in general this project seeks to target promising learners from Grahamstown in genuine financial need. The election will thus be based on academic merit and financial deprivation.</p>
Location	<p>It is envisaged that recipients of the scholarship will live and come from within the Makana municipality. It is also anticipated that the scholarships will be taken up at academic institutions within the town of Grahamstown.</p>
Rationale	<p>The rationale for this project is found in the high levels of poverty in Makana, coupled with relatively low levels of educational attainment in poor households. This project thus seeks to break the link between high levels of poverty and low levels of educational outcomes by providing opportunities for high-achieving students from impoverished backgrounds. The scholarship is designed to cover most of a student's resource-based needs throughout their high school and university years. The scholarship will be renewable annually on the condition that pre-set criteria are met.</p> <p>The objective of this project will be to provide opportunities for good quality education to economically disadvantaged children who have the potential to succeed.</p>

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Target market	<p>It is envisaged that a maximum of ten learners from disadvantaged backgrounds be enrolled on the scholarship programme at any given time.</p> <p>Given the life-long impact of a good education, it is anticipated that in the long run, recipients of the scholarship will impart benefits on their households as a result of reduced financial pressure</p>
Key activities & role players	<p>Role player: Rotary club of Grahamstown</p> <p>Activity: Administration of scholarship including establishment of partnerships with local educational institutions, applications, selection, disbursements and assessment of learner performance</p> <p>Role player: Community trust</p> <p>Activity: Monitoring and evaluation of scholarship management by Rotary club of Grahamstown</p>
Facilitation	<p>The following activities will need to be undertaken to ensure successful implementation of the scholarship programme:</p> <ol style="list-style-type: none"> 1. Establishment of MoU between community trust and Rotary club of Grahamstown (Community trust) 2. Establishment of partnerships with identified educational institutions (Community trust) 3. Yearly selection of scholarship recipients and disbursement (Rotary club of Grahamstown) 4. Annual review of scholarship outcomes (Community trust)

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Financial requirements	Activity	Duration	Rate	Budget
	Project administration (Rotary club of Grahamstown)	Ongoing	R1 000 per year per learner	R 10 000
	Scholarship	Ongoing	R100 000 per year per learner	R1 000 000
	Total			R 1 010 000 per year
Implementation time frames	It is envisaged that the scholarship facility will be made available for twenty years.			
Monitoring & support	<p>The following monitoring actions will be included as part of this project :</p> <ul style="list-style-type: none"> • Periodic visits to schools (for parent-teacher meetings), home visits (to see both students and families) as well as report cards/ academic transcripts • The learners will provide feedback once a term <p>The project will be evaluated on the following aspects:</p> <ul style="list-style-type: none"> • Feedback from scholars • Number of children that drop-out from scholarship programme after initially having been selected 			

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Wind farm learnership programme and visitor centre				
Description	Opportunities for students enrolled at educational institutions within the region will be provided for . These will take the form of edu-tourism through a visitor centre constructed at the site of the wind farm and learnership opportunities for attachment students.			
Location	Both the visitor centre and the learnership programme will be located at the site of the wind farm			
Rationale	The wind farm represents significant learning opportunities for students in the fields of environmental management, sustainable development, clean energy, engineering and other such fields			
Target market	The visitor centre would organise for trips by high schools from the area to see the wind farm and learn about it. In addition, a learnership programme will provide attachment opportunities for students enrolled at tertiary educational institutions			
Key activities & role players	Role player: Makana Edutourism Activity: Oversight			
Facilitation	The following activities will need to be undertaken to ensure successful implementation of the scholarship programme: <ol style="list-style-type: none"> 1. Construction of visitor centre 2. Establishment of MoU between Makana Edutourism and educational institutions 			
Financial requirements	Activity	Duration	Rate	Budget
	Construction of visitor centre (Plan-8 infinite energy)	6 months	R 2 000 000	R2 000 000 once off
	Running costs of visitor centre	Ongoing	R600 000 per year	R600 000 per year

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	Stipend for learnership/ attachment/ internship student from tertiary educational institution	Ongoing	R70 000 per year per student	R70 000
	Total			R 2 670 000
Implementation time frames	It is envisaged that this programme run available for twenty years.			
Monitoring & support	<p>The following monitoring actions will be included as part of this project :</p> <ul style="list-style-type: none"> • Assessment of learner feedback forms • Review of learnership student reports 			

4.3 CONCLUSION

The costs of the projects are presented in the Table below:

Project	Capital expenditure	Average annual expenditure	Duration
Trentham Park vegetable production training & mentorship	Not applicable	R720 000	36 months
Fingo village bee-keeping and honey harvesting	R510 000	Not applicable	12 months
Collingham towers poultry training and mentorship	R500 000	R680 000	18 months
Pershoek agri-business enterprise training	R150 000	R409 992	36 months
Eluxolweni (Grahamstown) childcare shelter support	Not applicable	R 1400 000	240 months
Establishment of Infinite Plan-8 Scholarships	Not applicable	R 1 010 000	240 months
Wind farm learnership programme and visitor centre	R2 000 000	R670 000	240 months

This document has presented the outcomes of research into community needs linked to the proposed establishment of a wind energy project in the Makana Municipality by Plan-8 Infinite Energy Pty Ltd.

It can be observed that success in the implementation of these projects will require collaborative efforts not only by stakeholders identified, but by other potential partners as well. This will ensure that the interventions proposed in these projects contribute to efforts by other parties to bring about economic and social development in Makana.