

BUSINESS PLAN FOR GREENING CHIEF ALBERT LUTHULI MUNICIPALITY



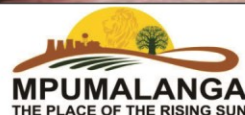
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Business Plan For Greening Of Chief Albert Luthuli Municipality

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LAND AND ENVIRONMENTAL AFFAIRS

12 August 2021

Approved by:.....

Mr. CM Chunda: Head of Department (DARDLEA)

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EXECUTIVE SUMMARY



The President of the Republic of South Africa presented an Economic Recovery Plan that outlines interventions for building a new economy and ensuring recovery from the effects of the COVID-19 pandemic in response to economic and social challenges faced by the country. In light of this and other plans by various structures of Government, the Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs is initiating the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme as part of a broader Turning Mpumalanga Green initiative.

Through this initiative, DARDLEA will ensure an increase in primary production and improve market access for farmers in Mpumalanga through intensive and comprehensive farmer support throughout the value-chain. A total of 78 farms have been selected in the Chief Albert Luthuli Local Municipality due to its favourable agro-ecological conditions. The selected projects will benefit 798 females, 333 youth and two (2) persons with disabilities and create a total of 1 428 sustainable jobs.

A total of 12 174 hectares will be developed for the production of vegetables, maize and dry beans (450ha in the first year, 2700ha in the second year and 9024 in the third year). Support to be provided by the Department includes infrastructure, mechanization, production inputs and structured training. The produce will be supplied, primarily, to the Government Nutrition Programme through the Agri-hubs as well as other markets through the Mpumalanga International Fresh Produce Market. The period will be funded over a period of three years through various means of funding.

The programme requires an investment of **R993 378 315** to provide the required support to the identified farmers. The programme is economically viable with a payback period of 4 years, a positive Net Present Value of **R7 647 032 879.92** and a reasonable Cost Benefit Ratio of **R0,79** over a ten-year period.

1. Introduction

1.1 Background

The COVID-19 global pandemic has had a number of immediate and long-term effects on the population of South Africa, the most significant being job losses and its concomitant impact on livelihoods. Many industries have been struggling to survive and sustain operations since the beginning of the pandemic in March 2020. Consequently, the country has seen the largest annual change in the rate of unemployment ever recorded in the 2020/2021 period as depicted in Table 1.¹

Table 1: Unemployment Rate - Historical Data

Year	Unemployment Rate (%)	Annual Change
2021	32.60%	4.12%
2020	28.48%	-0.30%
2019	28.18%	1.26%
2018	26.92%	-0.15%
2017	27.07%	0.52%
2016	26.55%	1.40%
2015	25.16%	0.26%
2014	24.90%	0.33%
2013	24.57%	-0.16%
2012	24.73%	0.08%
2011	24.65%	-0.04%
2010	24.69%	1.16%
2009	23.54%	1.11%
2008	22.43%	-4.23%
2007	26.67%	-1.82%
2006	28.49%	-0.76%

¹ World Bank, <https://www.macrotrends.net/countries/ZAF/south-africa/unemployment-rate>. South Africa Unemployment Rate 1991-2021. Retrieved 2021-08-04.

To address these impacts, the President tabled an Economic Recovery Plan that outlines interventions for building a new economy and ensuring recovery from the effects of the pandemic.

Following this, Minister Thoko Didiza delivered a speech on Economic Recovery and Employment Stimulus in October 2020, focusing on agriculture and food security contributions post the effects of COVID-19.

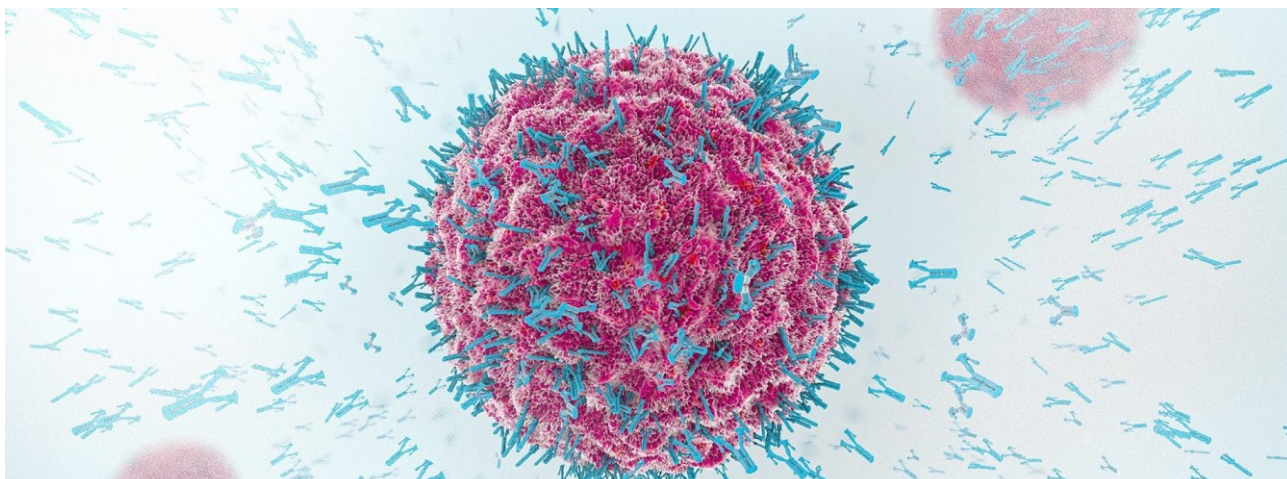
The Honourable MEC Mandla Msibi is determined to transform the agriculture sector in order to advance the lives of the majority poor within the context of the twin-challenge of COVID-19 and climate change. The Minister highlighted the importance of both smallholder and commercial producers in safeguarding food security and promoting employment in rural and peri-urban areas.

The beginning of the lockdown and restrictions in March 2020 revealed the importance of the agricultural sector in championing the reconstruction and re-industrialization of the economy as it focuses on employment, food localization and expanding production capacity in all scales of farming.

The National Department is also focusing on a district-based commodity value-chain development approach to stimulate mass employment. Furthermore, in the 2021 State of the Province Address, Honourable Premier Refilwe Mtshweni-Tsipane emphasizes the importance of agriculture and transformation in the sector by saying –

“Agriculture is one of the employment intensive sectors of our economy. It is the only industry that has the potential of propelling our people from abject poverty into prosperity. The question is how to grow this sector which is often referred to as the backbone of our economy to its full potential”.

It is against this background that DARDLEA is initiating the ‘Turning Mpumalanga Green Programme’. The “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme will be a pilot for the initiative because of the municipality’s relatively favourable Agro-ecological zone for horticultural production. The programme will then be rolled throughout the province.



Through this initiative, DARDLEA will ensure an increase in primary production and improve market access for farmers in Mpumalanga through intensive and comprehensive farmer support throughout the value-chain.

Previous initiatives by the Department, such as the Phezukomkhono Mlimi, Agrihubs and the Mpumalanga International Fresh Produce Market will play a pivotal role in the implementation and success of the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme.

A minimum of 78 farms were selected to receive assistance through the programme within the Chief Albert Luthuli Local Municipality (see herein attached Annexure A). Emphasis was placed on women and youth during the selection of beneficiaries.

It has also been noted that some farmers have experience and aptitude to expand but are constrained by resources – these farms were also prioritized.

The selection depended on security of tenure and land capability as well. The capability of farmers to manage the farms after the support provided by the programme is important, preferential advantage was given to farmers who possessed basic farming skills and/or demonstrated a willingness to acquire such skills. DARDLEA will undertake a skills audit and offer agricultural training to ensure capacity building of all farmers supported by the initiative.

1.2 Overview of Chief Albert Luthuli Municipality (hereinafter ‘CALM’)

The Chief Albert Luthuli Municipality is a Category B municipality situated within the Gert Sibande District in the Mpumalanga Province. It is one of seven municipalities in the district. The municipality is named after Chief Albert John Mvumbi Luthuli, Africa’s first Nobel Peace Prize Laureate in 1960, who was President-General of the African National Congress (ANC) from December 1952 until his death in 1967. Carolina is the seat of the municipality.

The N17 cuts through the southeastern part of the area, as well as other regional mobility routes, namely the R36, R33 and R38. The majority of rural settlements occur in the eastern part of the municipality, with access provided by the R541, N17 and various secondary routes. Other key features include forestry areas in the central and southern areas of the CALM, a river system, and the Nooitgedacht and Vygeboom Dams, as well as the edge of a greater wetland region.

Economic activities that are dominant spatially in the municipality include agriculture, forestry and mining. Retail and services are concentrated in Carolina and also in smaller centers such as Elukwatini and eManzana (previously Badplaas). Figure 1 depicts farms within the CALM area of responsibility including all the selected farms for support through the initiative.

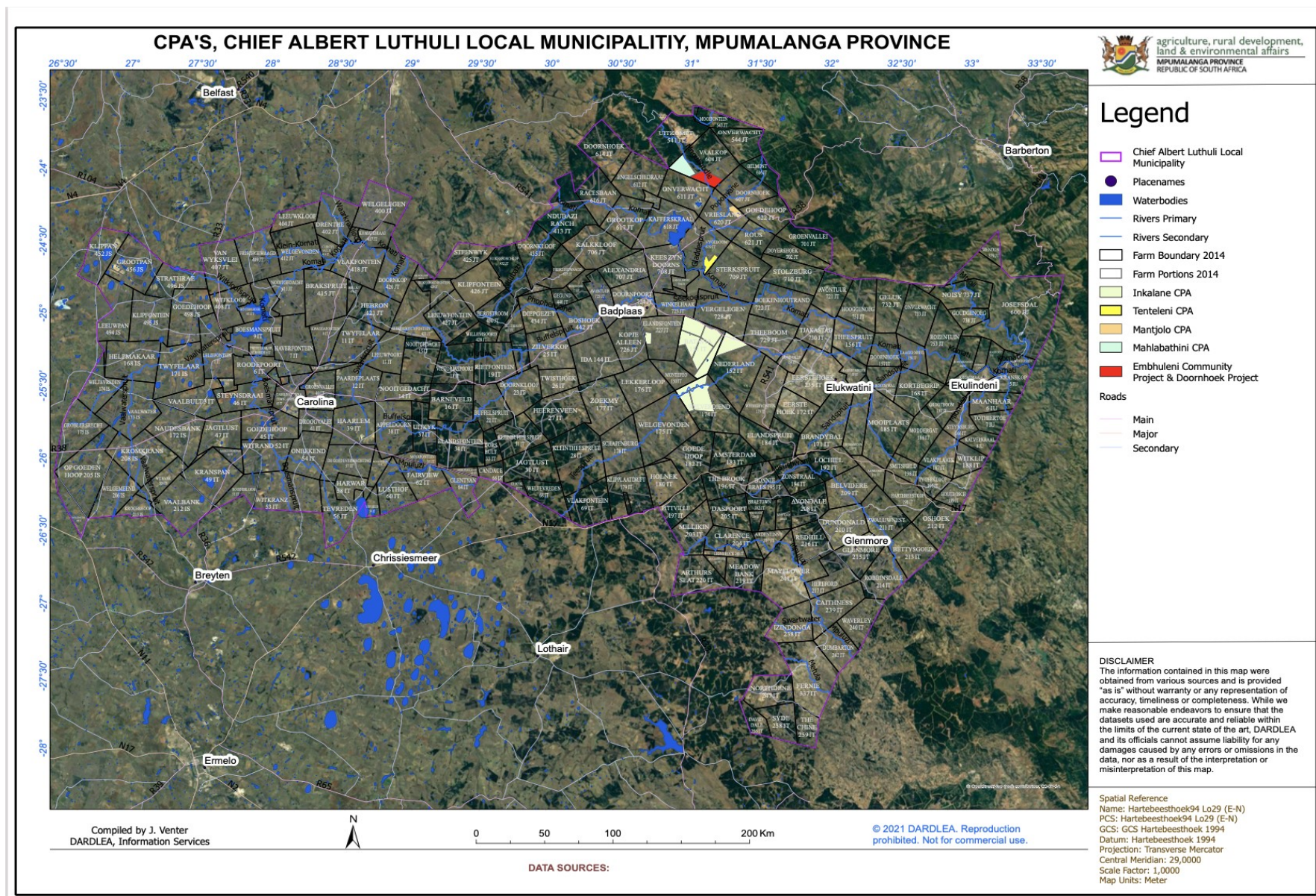


Figure 1: CA

The area covers 5 559 km² and the main cities/towns are Carolina, Emanzana, Empuluzi and Ekulindeni. The municipality's main economic sectors are agriculture, mining, tourism, forestry and manufacturing. The municipality is most suitable for production of livestock and vegetables. The Highveld areas of the Gert Sibande District Municipality utilize dryland farming and prioritize crops such as summer grains, oil seeds and deciduous fruit.² The Gert Sibande District, and particularly CALM, has high growth potential due to the under-utilized agricultural land and favourable soil and climatic conditions.

1.3 Poverty Rate

According to Statistics South Africa, the poverty rate in the Municipality is high at 40% or 74,500 poor people in 2012; 60.7% in 2001; 58.8% in 2004; and 49.0% in 2009 respectively, with a poverty gap of R333 million in 2012. The percentage of people living in poverty increased from 32.3% in 2012 to 48% in 2014 and 50% in 2017. The Human Development Index (HDI) of the Municipality is rated low at 0.46%, and is the third lowest in Mpumalanga Province. An HDI of 0.5% and above is rated high.

The proportion of income earned by the poorest 40% of the population was 10% in 2011, which is an improvement from 7.9% in 2001 (The target of the NDP/Vision2030 is 10% plus). The majority of the population earns less than R38 000 per annum;

individuals with no income is 80,219 (0.43%), and individuals with an income of up to R400 is 51,595 (0.03%). The Municipality is ranked 14th lowest out of 18 municipalities in the Province with an average household income of R48 790 per annum (R4 065 per month). The low average household income is directly linked to the low employment rate of 32.4% (Statistics SA 2011).

1.4 Climatic Conditions

The climate is subtropical and is characterized by hot, humid summers and warm winters. Frost does not occur. Rainfall is high with a modelled annual mean of 869 mm. There is 10 mm of precipitation in June. With an average of 166 mm, the most precipitation falls in December. The driest month is June. The highest temperature is reached in December and is around 27 °C.

The rainfall and temperature conditions are suitable for crop growth for longer periods in the year. However, climate change is predicted to negatively impact on the agricultural sector in Gert Sibande District Municipality and the Province at large. Increased temperatures, drought, and the increase in frequency and severity of storm events will impact on the crops that can be grown and potentially result in a loss of livestock. This will have a direct impact on food security in the District. Climate Smart Agriculture will therefore be implemented in the area as well.

² *Mpumalanga Climate Change Vulnerability Assessment report, 2015.*

Figure 2 below indicates the mean monthly Rainfall and temperature data of the proposed area for greening.

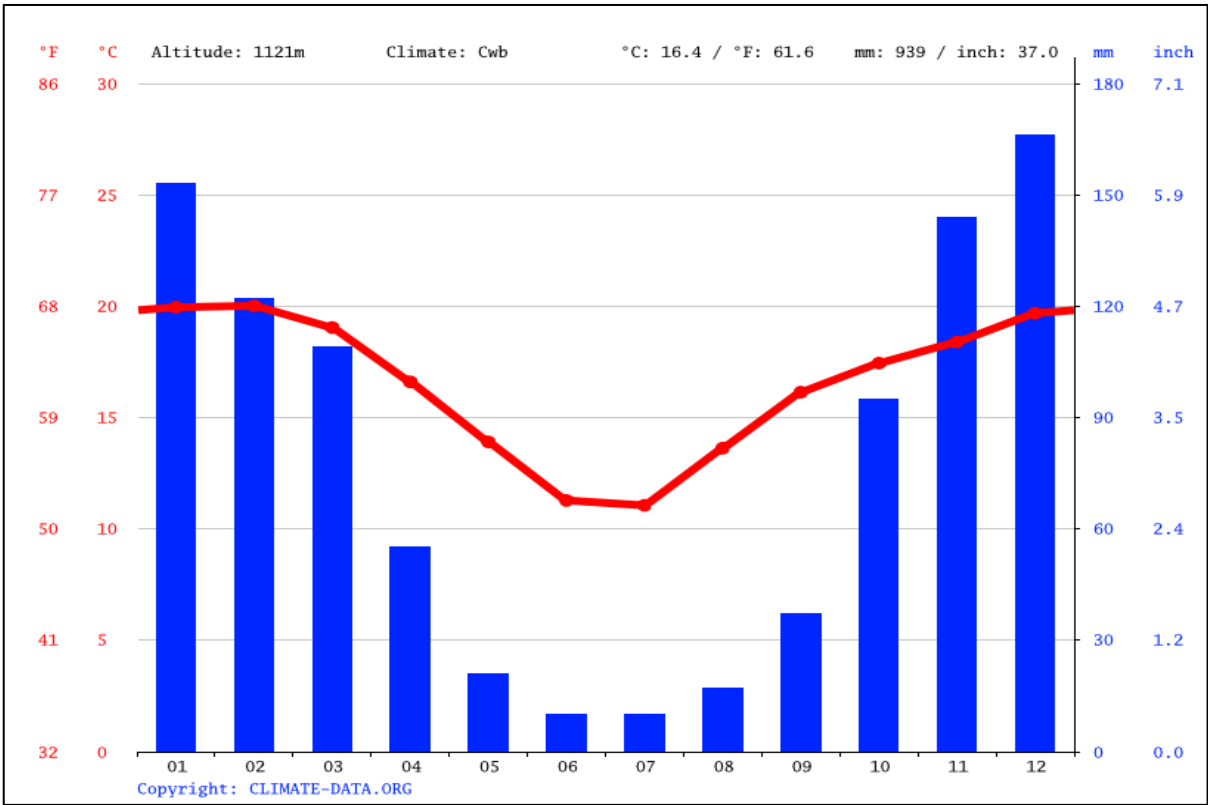


Figure 2: Mean Monthly Rainfall and Temperature data

1.5 Soils

Most areas in the municipality consist of well-drained and/or organic soils. A few areas are characterized with poorly drained soils in wetlands and seasonally inundated areas. The soils in CALM have good textures, water holding capacity and inherent soil fertility. These conditions play an important role in crop performance. The Department is conducting site-specific soil surveys to better inform the production plans.



2. VISION, GOALS AND OBJECTIVES OF THE PROJECT

2.1 Vision

The overall vision of government as set out in the National Development Plan (NDP) is to eliminate poverty and reduce inequality, which directly contributes to the world's sustainable development goals (SDG's) of a united nation with zero poverty and no hunger. This flagship Programme has as its vision, an increased agricultural production and broader participation in agro-processing through intensified farmer support in order to directly contribute to the realization of both the NDP vision and the SDG s.

2.2 Goal

To eliminate poverty, hunger and reduce inequality and unemployment.

2.3 Objectives

2.3.1 Short term objectives

- ✓ To support the development of farmers through ploughing and planting of an initial minimum 450 hectares, supply production inputs and supporting infrastructure;
- ✓ To increase the volumes of high-quality products that will be supplied to the government nutrition programme (GNP) by black producers;
- ✓ To create green jobs (permanent, EPWP & seasonal) for local community members;
- ✓ To unlock SMMEs, Co-ops, and rural enterprise potential;
- ✓ To generate income through community enterprises.
- ✓ to provide extension service support to farmers and transform the sector;
- ✓ To provide a sustainable market for farmers satisfying both the SA & Global GAP;
- ✓ To revitalize agriculture and agro-processing in the province; and
- ✓ To make productive use of state restituted land laying fallow in the programme sites.

2.3.2 Medium to long-term objectives

- ✓ To plough and plant a further 11 724 ha for increased volumes of agricultural produce for *Agri-hubs and the Mpumalanga International Fresh Produce Market (MIFPM)*;
- ✓ To improve the standard of living of beneficiary households;
- ✓ To ensure access to affordable and safe nutrition;
- ✓ To create an exit strategy for grant beneficiaries working together with the Department of Social Development (DSD).

3. SWOT Analysis

STRENGTHS (+)



- Accessible comprehensive support services from the Department and other Government institutions
- Variety of commodities cultivated
- Inclusive participation and farmer involvement
- Role of DARDLEA as a driving agent
- Continuous support, mentorship and training
- Access to natural resources (land and water)

WEAKNESSES (-)



- Varying degree of crop intensity and uniformity
- Budget and funding limitations / constraints
- Lack of beneficiary contribution
- Poor participation by Persons with Disabilities

OPPORTUNITIES



- High demand for produce by the GNP and other institutions
- Favourable agro-ecological conditions
- Media coverage and exposure through Greening CALM Programme
- Poverty and high level of underdevelopment
- Low competition for commodities cultivated

THREATS (-)



- Limited resources due to budgetary constraints
- Conflict and politics
- Aging farmer population
- Theft and vandalism of infrastructure

4. Proposed Project Activities

4.1. The Projects

The guiding principle towards farmer selection and prioritization is the need to revitalise all farms laying fallow on lands restituted and redistributed by the state to previously disadvantaged South Africans to realise section 25 constitutional imperatives. In Mpumalanga approximately 402 CPAs are registered with significant tracts of land restituted and redistributed to historically disadvantaged communities by government through the CPAs (See Annexure “CALM-01”).

4.1.1. Nkalane CPA

The Nkalane CPA Reg. No 99/0155/A was constituted in 1999 with 379 (three hundred and seventy-nine) aspirant farmer beneficiaries redistributed an estimated **12 338,55** (Twelve thousand three hundred and thirty-eight) hectares of land comprising the following farms - Welverdiend 174 It Portion 4 (302.48816 ha); Welverdiend 174 It Portion 6 (8770.3381 ha); Batavia 151 It Portion 3 (592.0381 ha); Batavia 151 It Portion 4 (592.0281 ha); Batavia 151 It Portion 5 (529.0376 ha); Batavia 151 It Portion 1 (529.0359 ha); Elandsfontein 727 It Portion 6 (226.981 ha); and Nederland 152 It Portion 3 (670.6049 ha) as depicted in Figure 3.

Of the total hectares redistributed, the aspirant farmers have hardly had any support to cultivate these vast fields of arable land. The flagship programme will at the initial phase of providing comprehensive plant agronomy develop, plough and plant a minimum of 100 (hundred) hectares constituting **0,81%** of the total land redistributed and **1,67%** of potential crop production land (about 6000 Ha).

The selected **100ha** for crop production will only service an estimated **4,45%** of the weekly demand for cabbages; **1,22%** demand for onions; **3,26%** demand for tomatoes; **0,45%** demand for butternut; and **0,5%** demand for pumpkin based on the projected weekly demand for yellow and green vegetables as received from the provincial Department of Education. To meet the demand for both the Depts of Education and Health, a minimum of **3458ha** from Nkalane CPA must be cultivated, which means an additional **3358ha** must be developed constituting about **28%** of the total productive land redistributed to the community.



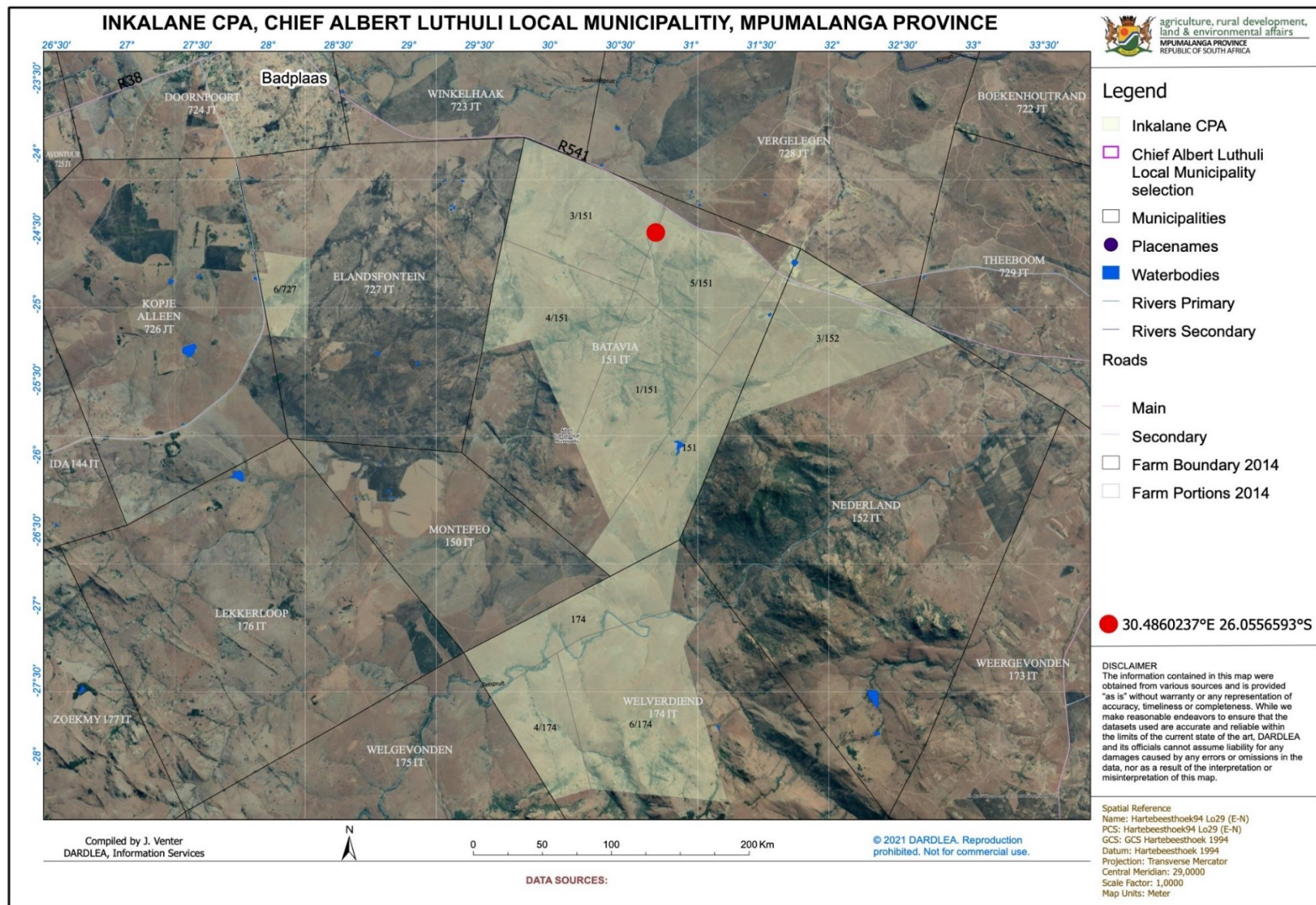


Figure 3: Nkalane CPA Farms per Title Deed Redistributed - 12338Ha

Table 2: Size of land required for cultivation at Nkalane CPA

Nkalane CPA 12338 Ha	Commodity Ha identified						
	<i>Cabbage</i>	<i>Onions</i>	<i>Tomatoes</i>	<i>Pumpkins</i>	<i>Butternut</i>	<i>Total</i>	<i>%</i>
Production Ha	30	15	20	15	20	100	0,8
Required	234	500	217	1007	1500	3458	28
Shortall	204	485	197	992	1480	3358	27,2
Total	234	500	217	1007	1500	3458	28
% of total							

It is recommended therefore, that an investment to support the development of the 3458ha in order to effectively contribute to meeting the demand from the Government Nutrition Programme is supported since the project has a significant return on investment at an estimated **R1,38 for every R1,0** invested (see attached Annexure CALM-02"). Furthermore, the project will ensure the provision of sustainable increased agricultural production given the secured government market in addition to the private sector markets.

4.2. Other Community Projects

Similarly, to the stated facts on Nkalane CPA, the Mantjolo Community Project (Vriesland 620 JT Rem, Portion 4) T66316/1997; Tenteleni CPA (Schoeman) Community Project (Vygeboom 619 JT, Portion 16); Mahlabathini CPA (Vaalkop 608 JT); Embhuleni Community Project (Vaalkop 608 JT, Portion 3), among others, all exhibit similar characteristics in being land redistributed through government's land reform program and now laying fallow for lack of targeted support, training and equipping all the beneficiary aspirant farmers to become commercial farmers productively cultivating the vast tracts of land and creating sustainable green jobs for the advancement of the local communities and economic growth and development of the Mpumalanga Province.

Figures 4 to 6 depicts some of the significant tracts of land laying fallow constituting the above listed Communal Property Associations and tribal land tracts for immediate support through this Flagship Programme.

There is within these farms, adequate tracts of arable land to meet the total demand for yellow and green vegetables for the GNP at a minimum of 12174ha required. The expected economic revenue that will be generated from the projects under the Programme will create much needed jobs and economic activity impacting in excess of 30% of the population of CALM.

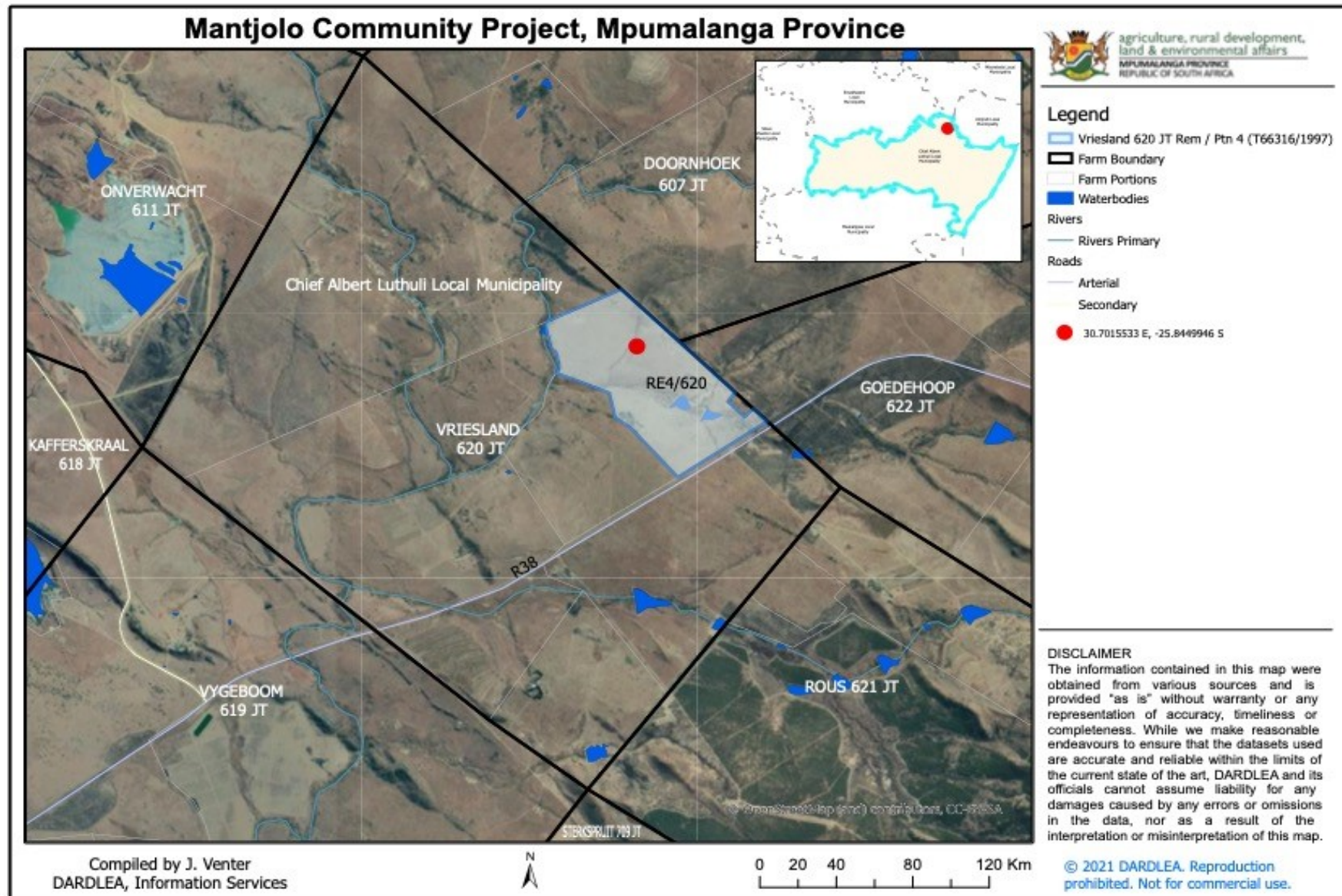


Figure 4: Mantjolo Community Project -Farms

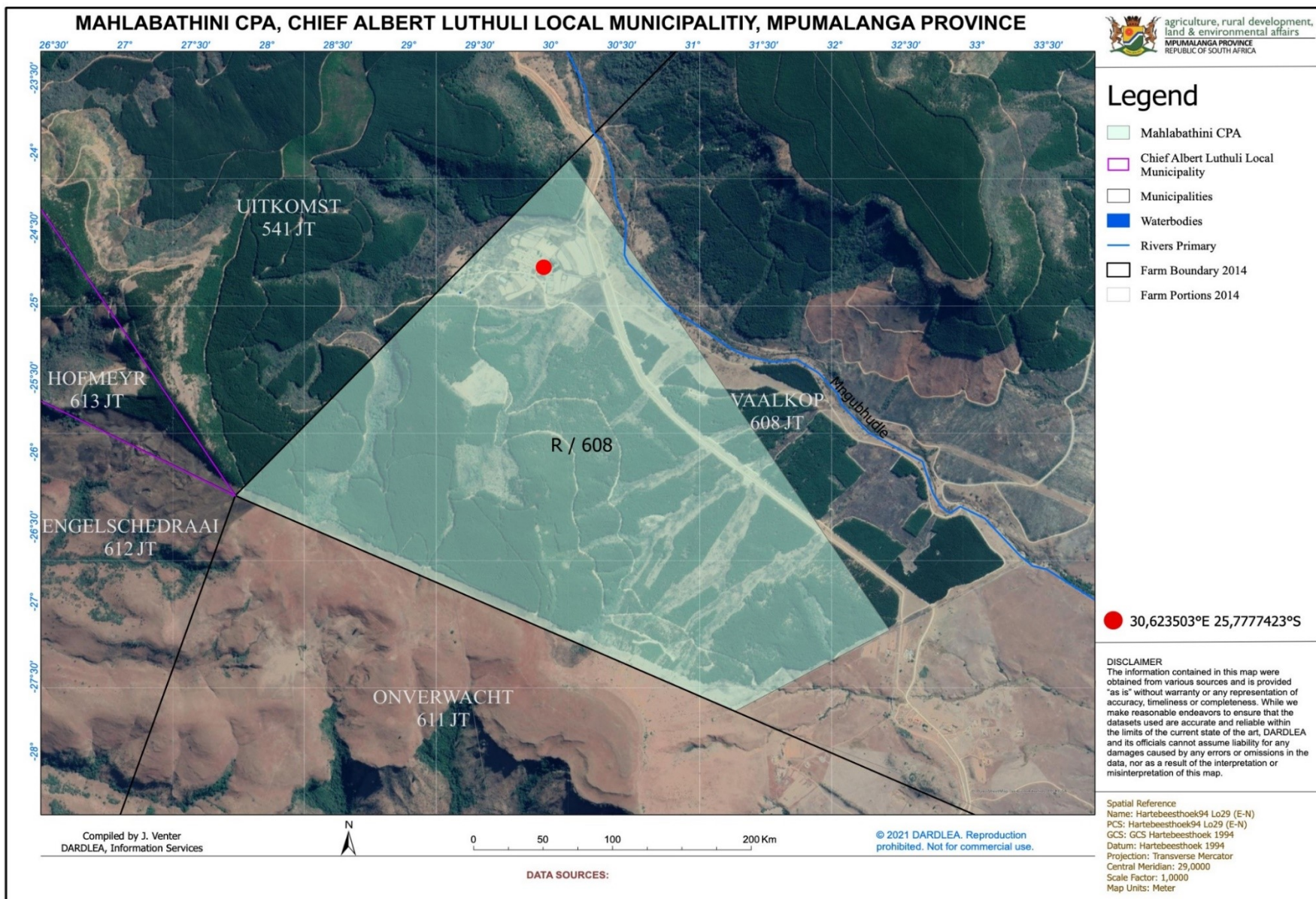


Figure 5: Mahlabathini Community Project Farms

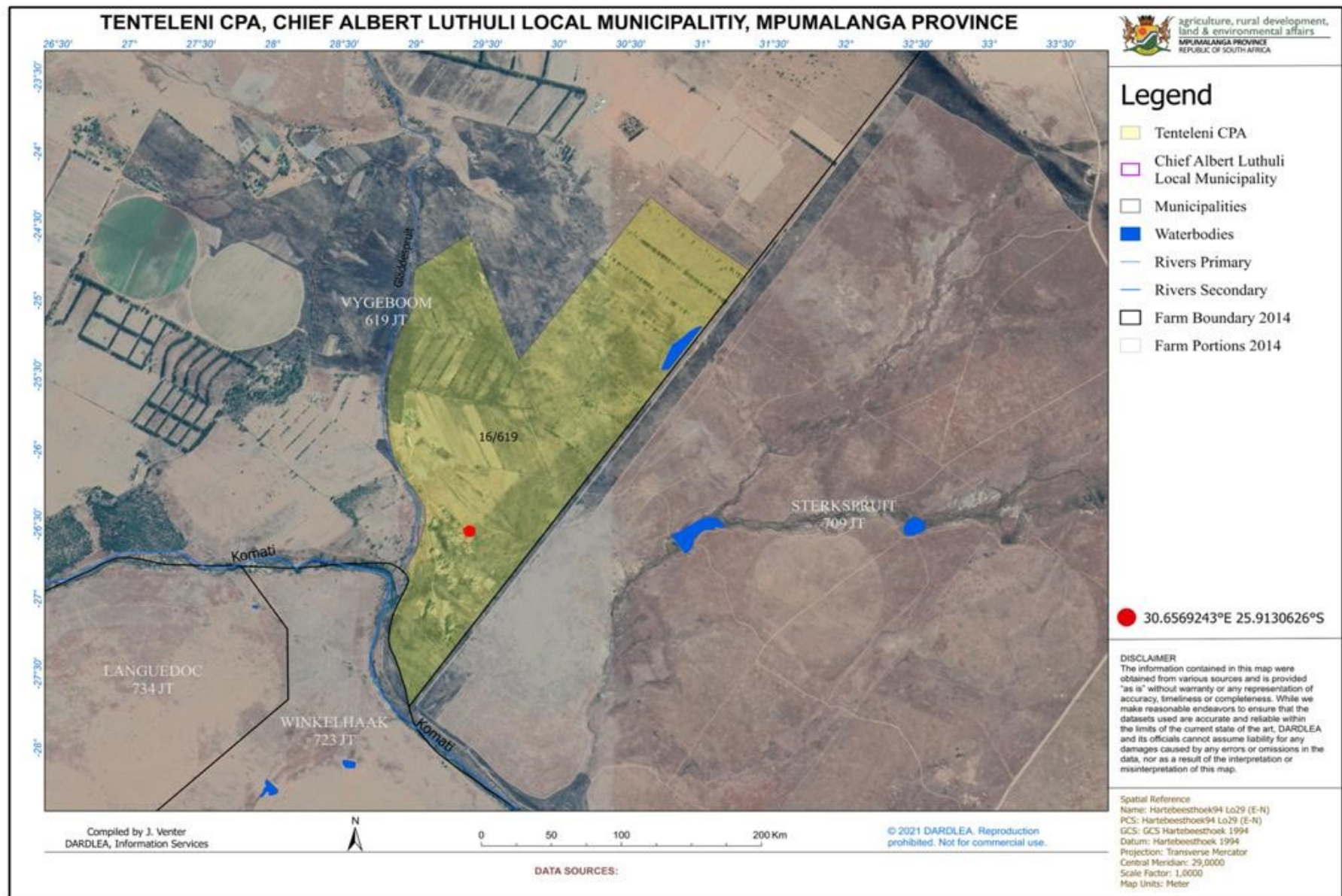


Figure 6: Tenteleni CPA Farms

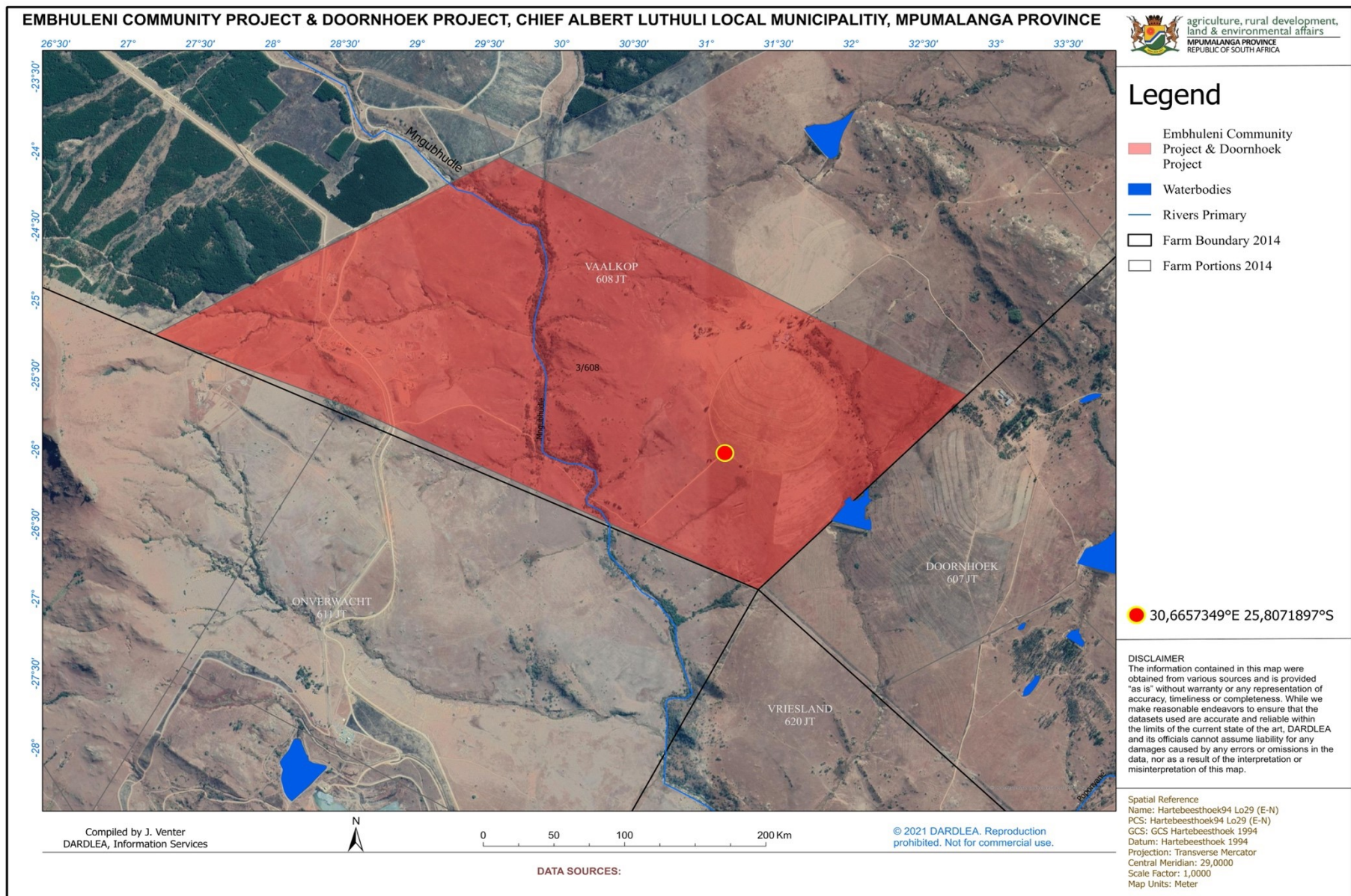


Figure 7: Embhuleni Community Projects- Farms

4.3. *Production Inputs*

The aspirant farmer entrepreneurs will be supported with infrastructure, production inputs, mechanization, training and market linkage for production on a combined initial total of 450ha to 2700ha on commissioning of the project with an upscaling to the required total of 12 174 hectares from the 2021/22 until 2023/24 financial years (See Annexure “**CALM-03**”). The project beneficiaries have title deeds issued for all the Communal Property Associations (CPA) by the Department of Agriculture, Land Reform and Rural Development; as well as permissions or rights to occupy (P.T.O/RTO) for all tribal lands where no CPA has been registered and title deed issued.

4.4. *Infrastructure*

The aspirant farmer entrepreneurs will be supported with infrastructure, which includes development of irrigation systems, fencing for security and demarcation, water development (refurbishment and cleaning of dams and borehole drilling), power supply, and development of hydroponic tunnels at an estimated cost of **R730 440 000.00**.



4.5. *Mechanization*

The aspirant farmer entrepreneurs will be supported with mechanization, which includes but not limited to farm de-bushing, ripping, discing, ploughing, planting and spraying. In addition to private mechanization provided through appointed service providers, the Department in collaboration with the national department will strive to provide farmer specific plant in a form of tractors and implements.

4.6. *Training*

4.6.1. *Farmer technical skills training*

Aspirant farmer entrepreneurs will be trained on on-field ploughing and planting techniques including irrigation techniques and application to optimise the use of limited water resources for maximum yields at a minimum 90% efficiency rate in an effective and efficient manner. A mixture of inorganic and organic planting techniques to meet industry requirements for horticultural produce in particular will be prioritised including climate smart agriculture.

4.6.2. Entrepreneurial skills transfer

Aspirant farmer entrepreneurs will be trained on general business and specific farming business etiquette in order to appreciate the pertinent differences between operating a commercial and professional business as opposed to the traditional 'hand-to-mouth' farming practices.

Among others these entrepreneurs will be equipped and supported to open business accounts for the CPA's, appoint Tax Consultants, basic interpretation of financial statements and financial data to understand the business status including liquidity and insolvency implications. Insurance for crop production and risk management techniques to protect themselves against business loss, among others.

4.6.3. Local Global Gap certification

Since it is expected that, the farmer entrepreneurs should be self-sufficient within a period of three years from commencement of the program, training and related certification to meet the requirements of SA GAP, local and Global GAP standards for quality assurance of the produce, the training and certification programme will be paramount in the training of the farmers from commissioning of the project with clearly defined project training deliverables for appointed service providers being the delivery of the certification within agreed upon time frames.

4.7. Market linkage

4.7.1. Government Nutrition Programme (GNP)

Central to the apparent lack of interest and farmer apathy to cultivate the vast tracts of land given to them, is the difficulty in accessing markets. The provincial government took a conscious resolution to use government procurement spent to advance and help revitalise agriculture in the province. The farmers supported through the program will supply vegetable crops to the GNP through the Agri-hubs with strategically selected distribution centres and the MIFPM.

The Department has signed Service Level Agreements with the Depts of Education, Health, Social Development and Community Safety to act as the principal agent for the sourcing and supply of fresh produce to the GNP. The current demand for produce from the GNP exceeds production (see Table 3)





Table 3: Supply & Demand for immediate GNP needs v Flagship Programme

Commodity	Ha under production	DOE Demand Vegetables (weekly)	DOH Demand Veg	2700ha supply per week	Surplus/deficit	Required Ha to meet demand and extinguish deficit
Cabbage	418	700 709	129	434 077	-266 761	700
Onion	59	63 766	156	3 063	-60 858	1500
Green pepper	60	0	73	2 077	2 004	60
Tomato	174	31 883	163	9 035	-23 012	650
Spinach	140	0	134	33 923	33 789	140
Lettuce	94	0	99	39 046	38 947	94
Beetroot	89		36	3 697	3 661	89
Cucumber	32	0	65	13 292	13 227	32
Butternut	200	184 046	224	8 308	-175 962	4500
Dry beans	200	0	26	1 038	1 012	200
Maize	800			55	55	800
Potato	317		116	137	21	317
Pumpkin	25	122 697		1 038	-121 659	3000
Gem squash	18	0	45	748	703	18
Green beans	30	0	37	415	379	30
Carrots	18	0	164	1 246	1 082	18
Baby-Marrow	20		11	554	543	20
Crushed garlic	5		4	2 423	2 419	5
Mushrooms	1		30	35	5	1
TOTAL	2700	1 103 100				12174

Supply statistics from the GNP through the Mpumalanga Economic Growth Agency (MEGA, 2019); indicate that 61% of the commodities supplied are sourced solely from commercial farmers. Only spinach was sourced 100% from black farmers with the rest of yellow and green vegetables partially sourced from black farmers (see table 4).

Table 4: Supply Statistics for Commodities Required by the GNP

GNP Produce Requirements	Supply by DARDLEA Farmers	Sourced from Commercial farmers
Cabbages	80%	20%
Butternut	35%	65%
Onions	0%	100%
Tomatoes	68%	32%
Oranges	0%	100%
Banana	0%	100%
Apples	0%	100%
Pears	0%	100%
Potatoes	0%	100%
Gem Squash	0%	100%
Sweet potatoes	0%	100%
Hubbard Squash	0%	100%
Green Pepper	30%	70%
Green Beans	10%	90%
Cucumber	0%	100%
Spinach	100%	0%
Beetroot	10%	90%
Carrots	0%	100%

(Source: MEGA, 2019)

The flagship programme is thus deliberately targeted at transforming the above statistic and afford black farmers supported by government to produce all the key commodities for the GNP market to stimulate local SMME's.

Table 5: Commodities to be supplied to GNP through the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme

Commodity	Ha under production	2700ha supply per week	Required Ha to meet demand and extinguish deficit	12174ha supply per week
Cabbage	418	434 077	700	726 923
Onion	59	3 063	1500	77 885
Green pepper	60	2 077	60	2 077
Tomato	174	9 035	650	33 750
Spinach	140	33 923	140	33 923
Lettuce	94	39 046	94	39 046
Beetroot	89	3 697	89	3 697
Cucumber	32	13 292	32	13 292
Butternut	200	8 308	4500	186 923
Dry beans	200	1 038	200	1 038
Maize	800	55	800	55
Potato	317	137	317	137
Pumpkin	25	1 038	3000	124 615
Gem squash	18	748	18	748
Green beans	30	415	30	415
Carrots	18	1 246	18	1 246
Baby-Marrow	20	554	20	554
Crushed garlic	5	2 423	5	2 423
Mushrooms	1	35	1	35
	2700		12174	

4.7.2. Private Markets

In addition to meeting the GNP demands, the black farmers will be supported to access private local, national and international markets through the *Agrihubs* and the *Mpumalanga International Fresh Produce Market*.



5. Production Plan

5.1. CALM Production Plan

Vegetables will be produced in two rotations per year on the 450 in the first year, then 2700 and eventually 12174 hectares. Maize, dry beans and potatoes are produced in a one rotation cycle per year. The production plan shown in Table 6 is based on the cool climatic conditions of the Chief Albert Luthuli Municipality.

Table 6: Production Plan to meet GNP Demand Production plan for the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme

Commodity	Ha under production	Sowing Time		Rotations per year	Effective land area worked	Yield/ha	Unit	Quantity/6 Month Cycle	Quantity/12 Month cycle	Units per annum at production efficiency level (90%)
		Ideal	Possible							
Cabbage	700	Dec – Feb	Aug – Feb	2	1400	30 000	head	21 000 000	42 000 000	37 800 000
		Sep – Oct								
Onion	1500	Feb – Mar	Jan – Apr	2	3000	1 500	10kg bag	2 250 000	4 500 000	4 050 000
Green pepper	60	Sep – Oct	Sep – Nov	2	120	1 000	20kg create	60 000	120 000	108 000
Tomatoes	650	Oct	Sep – Nov	2	1300	1 500	20kg create	975 000	1 950 000	1 755 000
Spinach	140	Aug – Nov	Aug – Mar	2	280	7 000	bunch	980 000	1 960 000	1 764 000
		Feb								
Lettuce head	94	Jan – Feb	Aug – Mar	2	188	12 000	head	1 128 000	2 256 000	2 030 400
		Sep – Oct								
Beetroot	89	Aug – Feb	Aug – Apr	2	178	1 200	10kg bag	106 800	213 600	192 240
Cucumber	32			2	64	12 000	each	384 000	768 000	691 200
Butternut	4500	Oct	Sep – Oct	2	9000	1 200	10kg bag	5 400 000	10 800 000	9 720 000
Dry beans	200			1	200	300	10kg bag	60 000	60 000	54 000
Maize	800			1	800	4	ton	3 200	3 200	2 880
Potato	317	Aug – Oct	Jul – Feb	1	317	25	ton	7 925	7 925	7 133
		Jan								



Commodity	Ha under production	Sowing Time		Rotations per year	Effective land area worked	Yield/ha	Unit	Quantity/6 Month Cycle	Quantity/12 Month cycle	Units per annum at production efficiency level (90%)
		Ideal	Possible							
Pumpkin	3000	Oct	Sep – Oct	2	6000	1 200	10kg bag	3 600 000	7 200 000	6 480 000
Gem squash	18	Oct	Sep – Oct	2	36	1 200	10kg bag	21 600	43 200	38 880
Green beans	30	Oct – Nov	Sep – Feb	2	60	400	20kg create	12 000	24 000	21 600
		Jan								
Carrots	18	Jan – Mar	Sep – Mar	2	36	2 000	10kg bag	36 000	72 000	64 800
		Sep – Nov								
Babby Marrow	20			2	40	800	10kg bag	16 000	32 000	28 800
Crushed garlic	5			2	10	14 000	kg	70 000	140 000	126 000
Mushrooms	1			2	2	1 000	0,2kg	1 000	2 000	1 800

5.2. Job Creation

The Agriculture and Agro-processing Master Plan aims at creating 317 000 jobs countrywide, a majority of which are from private sector players in fruit, nuts, wine, vegetables and agro-processing. To this, the 78 projects to be supported by the programme are expected to contribute 37 950 jobs, of which about 4% will be permanent and 96% will be seasonal.

5.3. Grain Market Analysis

5.3.1. The South African Maize Market

South Africa is the largest and most active producer of maize in Africa. South Africa has a relatively dry climate, this contributes to a unique hardness and whiteness, which in turn is of great importance to the milling industry.

Hard maize ensures a higher-quality product and yield per ton, while whiteness is of importance to the consumer market. In South Africa, approximately 65.0% of the maize produced for human consumption is white, whereas the remaining 35.0% is yellow and used for animal feed. However, maize production in the region is continuously and severely affected by threats, such as weeds, insects, bacteria, viruses, nematodes, fungi, low-quality seed, and low levels of mechanization, suboptimal post-harvest management, drought, and climate change.

Even among all these factors, South Africa remains the top maize producing country in the region, which boosts the demand for the African Maize market in the forecast period.

Maize is produced throughout South Africa with Free State, Mpumalanga and North West provinces being the largest producers, accounting for approximately 73% of total production. Almost 90% of maize in South Africa is produced under dry land condition and the remaining 10% is produced under irrigated conditions.

The South African maize market has matured considerably since deregulation of agricultural marketing. Producers, traders and other intermediaries interact freely in the marketing of maize. Most of the maize produced in South Africa is consumed locally and as a result, the domestic market is very important to the industry. More than two thirds of the locally-produced maize is consumed by the local market in the following pattern: humans (50%); the animal feed industry (40%) and the rest is used for seed and industrial uses (10%).



Before deregulation the maize price was set by the marketing boards. The price was set lower at around R300/ton.

Since the implementation of deregulation policy, the price of maize increased gradually because of the adoption of perfect competition in the maize marketing environment in which the prices are determined by market forces i.e., supply and demand factors. As maize is an internationally traded commodity, it is also subjected to the international market conditions. The demand and supply conditions of maize in the international market influence domestic prices directly.

5.3.2. South African Potatoes Market

Potatoes are the most important vegetable crop in South Africa and the world's recognized staple food consumed by many people. It is grown in more than 125 countries and consumed almost daily by more than a billion people. In 2016, potato industry contributed approximately 52% to the total gross value of vegetable production 10% of horticultural products and 3% of total agricultural products.

Processing of potatoes has grown at a rapid rate over the past ten years, but it is still behind in size when compared to the potato processing industries in the developed countries. According to Potatoes South Africa, the processing industry represented 20% of the total potato crop. The rapid increase in potato processing can be attributed to consumer need for convenience ready to eat foods.

The domestic processing sector uses potatoes primarily for, fried chips, crisps, and frozen products. Potatoes are also fat and cholesterol free and high in fibre, Vitamin C and essential minerals like potassium, phosphorus and calcium. In most parts of the world, potatoes are a staple food since they are used in preparation of a diverse variety of meals from chips to mashed cuisine.

Potatoes are produced from sixteen production regions which are spread throughout South Africa. The main producing regions are situated in the Limpopo, Free State, Western Cape, Mpumalanga, Kwa-Zulu Natal and Eastern Cape.



In South Africa potatoes are sold through different marketing channels such as national fresh produce market, informal trade (street hawkers), directly to retailers and processors for manufacturing of dry, frozen and fresh chips. Lastly potatoes are also exported to other countries through export agents and marketing companies. Sales of potatoes at the National Fresh Produce Markets (NFPMs) have been declining over the years, but NFPMs remain an important channel for the sale of fresh potatoes in South Africa.



In 2016, Johannesburg fresh produce market with 33% share is the biggest potato market, followed by Tshwane with 15%, Durban with 8.2% and Cape Town with 7.8% share. Johannesburg market share has decreased by 5%, while Tshwane and Durban market shares have dropped by 3% and 1.1% respectively. According to Potatoes South Africa, 33% of potatoes were distributed through formal market, 31% through informal markets (hawkers), 20% were processed, 8% were seed and 8% was exported in 2016.

Potatoes are probably the most suitable vegetables for the export market (easy to grade and pack under correct conditions, their shelf life is much longer than most other vegetables). However, South Africa is not considered to be a major exporter of potatoes, primarily because it contributes 1.4% and it is ranked number 16 in the world potato exports.

In 2016, South Africa position in the world potato export has slightly changed in terms of competitiveness and it was ranked number 16. During 2016, Mozambique is still the leading recipient of South Africa potato exports with 39.9% share followed by Namibia with 18.1%, Botswana with 14.9% and Angola with 9.3% share.

RSA potato prices saw marginal gains this week, owing to relatively lower stock levels. More specifically, this week RSA potato price gained 1% from the level seen on Thursday last week, closing at R45.62 per 10 kilograms in yesterday's session. At the same time, the stocks were reported at 812 524 bags (10 kilograms bags), slightly below last week's stock levels of 891 915 bags (10 kilograms bags). In addition, it is important to highlight that there are variations in regional fresh produce market prices due to dissimilarities of potato sizes and classes.

Despite these recent gains, we maintain our short-term view that RSA potato prices could remain slightly bearish due to increasing domestic supplies on the back of ongoing harvest process. That said, in the medium term prices could normalise on the back of an anticipated increase in domestic demand

5.3.3. Vegetable Market size and growth



The South African vegetable industry plays an important role in providing vegetables for the local market as most of the vegetables are sold locally. It also contributes significantly to vegetable supply to other African countries. Weather and climatic conditions enable the country to cultivate a variety of fresh vegetables, which plays a vital role in quality, and lifespan of most produce. South Africa is responding to expanding domestic demand producing potatoes, tomatoes and onions in large volumes.

The demand of vegetables is also derived from the increasing number of middle-class consumers in Southern Africa, along with consumer preferences towards healthy products.

According to GAIN (2013) South Africa sells its vegetables through fresh produce markets and export channels. Large multinational companies (Pick 'n Pay and Shoprite) distribute fruits and vegetables across Sub Saharan Africa through their outlets and this helps increase the demand for extra production and purchase of these products.

According to the MIFPM feasibility study that was commissioned by MEGA in 2019, the total consumption volumes for Mpumalanga is currently at 343 031.2 tons/annum for potatoes, onions, tomatoes, apples, bananas, oranges, carrots, pumpkins and butternut. However, in terms of the current production levels within the province, there is a shortfall of 250 000 tons/annum. This means that the province is currently a importer of these agricultural products.

5.4 Marketing Mix (Product, Price, Place and Promotion)

5.4.1 Product Strategy

The business product/service strategy is based on the sustainable production and supply of products with an acceptable profit margin that meets and satisfies consumer/distributors standards, needs and preferences. Acceptable profit margins will be determined by means of gross margin compilation and comparative market trend analysis for the related products/ services rendered. Meeting and satisfying the distributor/ consumer needs will be attained by strictly following the production, grading and quality requirements as set by the distributor and/or consumer.

5.4.2 Pricing strategy

Pricing, although ultimately controlled by supply and demand, is largely influenced by what consumers are willing to pay. For the GNP market, production and pricing will be based on demand and acceptable prices from participating Departments. For other markets, planning and research assistance will be provided by DARDLEA before production begins to help farmers make informed decisions on the following:

- ✓ What to produce;
- ✓ How much to produce;
- ✓ How much of the product at various price levels is expected to be sold; and
- ✓ Whether or not those sales will provide adequate returns to cover all costs and yield a profit.

Prices will be kept competitive with other sellers in the market, regardless of costs and desired margins or markups in order to maintain large volumes of produce over a long period of time. For the direct markets, prices will be kept between the current wholesale and retail price, bearing in mind the operating budget and competitors. As improvements are made in the programme and data is periodically updated on market leaders, prices will be based on quality, i.e., high quality produce will be priced at a certain level and low-quality produce to meet the competition.

5.4.3 Place of marketing strategy

The programme and its supported farmers currently have a secured market with the Government Nutrition Programme, which supplies fresh vegetables, grains and dry goods to schools and hospitals.

The businesses will be linked to the Mpumalanga International Fresh Produce Market once it is completed and operational. The project is also aiming to explore more markets within South Africa as well as neighbouring countries such as Swaziland, Mozambique and Botswana. The project will also be selling to hawkers and retailers who will then supply the final consumer.

5.4.4 Promotion Strategy

The business is to promote its produce by creating popular demand through exceptional quality and consistent supply of produce to its customers.

5.4.5 Transport and Storage

The projects will be supplying the Agri-hubs as a group (group marketing) to minimize the transportation costs. The Agri-hubs will then provide storage, handling, packaging for the produce and distribute to the final customer.

6. Risk Analysis

Agriculture is highly dependent, not only on soils and on water, but also on climatic conditions. This is one of the reasons why it is characterized by high volatility of prices, volumes and quality, which may at times be influenced by unforeseen economic instability, unstable environmental conditions and natural disasters.



RISK TYPE	DESCRIPTION	RATING	MITIGATION
Market Risk	The market risk is associated with the inability to compete and sustain market by producers. Where the access to market is gained; farmers may be unable to produce the market required quality/standard of produce which may lead to them losing their markets thereof.		Timely information on market demands, appropriate market outlets and the going prices of vegetable is always available. This project must strive to produce high quality products for the market to receive the price on offer. Participating farmers will also be audited and assisted for SAGAP compliance.
Production Risk	Natural disaster is usually a problem associated with crop production. Crop losses and damages caused by crop handling as well as natural hazards such as storm/hail, fire and drought.		The beneficiaries and the farm workers will be periodically trained by relevant stakeholders on strategies to prevent reduce and mitigate natural disaster. Also, Early warning information on weather and disaster will be retrieved from SAWS.
Theft and Vandalism	Agricultural developments are prone to vandalism and theft of produce and infrastructure.		Each project is fenced to secure the assets and to mitigate loss from theft and security personnel will be introduced to reduce theft.

7. Sustainability Assessment

7.1. Financial Sustainability

The focus is to invest in the project infrastructure and production inputs in the first three years of implementation. The cashflow projections show that the project will be operating at a gain from the first year of implementation (refer to the annual cost income cost breakdown summary).

7.2. Technical Sustainability

In ensuring technical sustainability, farmer support services will focus on skills transfer to the project beneficiaries. These skills will be transferred training and extension and advisory services. Sufficient opportunities will be provided to the beneficiaries of the project in order to evaluate their level of competency.

7.3. Social Sustainability

In achieving social sustainability, each project will source its labour force from the community within which it operates. This will contribute to household income for the community members through employment opportunities by each project.

8. Monitoring And Evaluation

The business plan is one of the most critical monitoring and evaluation tools during implementation. Once the business plan is endorsed and a consensus is reached on which production scale to implement the projects on, monitoring of all plans will resume. The project management team will monitor and evaluate the projects to ensure that disparities and deviations do not divert the project from the plan; otherwise, if the change is unavoidable control as one the management tasks will take place. The monitoring & evaluation plan consists of the following elements:

Site visits: The extension officers and project management team will record all site visits for reporting purposes to the Department of Agriculture, Rural Development, Land and Environmental Affairs principals.

- ✓ **Production planning:** The extension officers, in consultation with farmers and the market, have developed production programs for the project as below.
- ✓ **Production monitoring:** The mentor will develop planting, spraying, fertilizer & harvesting programme in order to monitor productions.
- ✓ **Reporting:** The extension offices and project management team has the responsibility to generate **monthly reports**.

9. Financial Plan

9.1. Sources of Funds

The main purpose of this business plan is to source funds for the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme amounting to **R993 378 315.00**. The project will be funded through Conditional Grants, Equitable Share and self-funds from a ring-fenced percentage (12,5%) of the total revenues generated through Agri-hubs, the trading entities of the Department.

The Department is also collaborating with other government departments that have similar goals of alleviating poverty in the Province like the DSD, DRLRRD in order to finance the capital and production expenses, while also exploring possible private investor funding through Private-Public Partnerships and related risk sharing funding models.

9.2. Project Budget

The project needs cash amounting to **R993 378 315.00** for fixed capital improvements and to cover production costs over a period of 3 years.

Table 7: Project Budget

Commodity	Ha under production 12174	Rotations per year	Effective land area worked 22979	Production cost/ha in Rands	Total production cost in Rands
Cabbage	700	2	1400	40 000,00	28 000 000,00
Onion	1500	2	3000	25 000,00	37 500 000,00
Green pepper	60	2	120	28 000,00	1 680 000,00
Tomato	650	2	1300	32 400,00	21 060 000,00
Spinach	140	2	280	23 466,00	3 285 240,00
Lettuce	94	2	188	31 723,00	2 981 962,00
Beetroot	89	2	178	13 627,00	1 212 803,00
Cucumber	32	2	64	35 000,00	1 120 000,00
Butternut	4500	2	9000	22 000,00	99 000 000,00
Dry beans	200	1	200	9 630,00	1 926 000,00
Maize	800	1	800	7 680,00	6 144 000,00
Potato	317	1	317	70 000,00	22 190 000,00
Pumpkin	3000	2	6000	11 683,20	35 049 600,00
Gem squash	18	2	36	27 500,00	495 000,00
Green beans	30	2	60	20 500,00	615 000,00
Carrots	18	2	36	18 195,00	327 510,00
Babby Marrow	20	2	40	17 560,00	351 200,00
Crushed garlic	5	2	10	0,00	0,00
Mushrooms	1	2	2	0,00	0,00
Sub-total (production costs)				433 964,20	262 938 315,00
Capital Costs (as per specifications attached)					730 440 000,00
Total					993 378 315,00

9.3. Input Production Costs

Farmers supported through the programme will be provided with fertilizers, seedlings, seeds and herbicides to ensure production for the first cycle and generation of revenue for the farmers to sustain future production cycles. The total production cost estimate for one production season is R262 938 315

9.4. Mechanization

The Department will procure 13 tractors and implements to support farmers through the Phezukomkhono Mlimi Mechanization Support Programme. The implements to be procured are shown in Table 4.4 below. The total estimated cost for mechanization support is **R48 397 533.00**, to assist in this and other programmes in the Department. It is envisaged that 13 jobs will be created through mechanization support, these are; nine (9) tractor drivers, two (2) mechanics and two (2) assistant mechanics.

Table 8: Implements for mechanization and procurement by the Department

Implements		
Hydraulic disc plough	24 row	3
Ripper with	13 times	3
Boom sprayer	800L	3
Planter	4 row	3
Rotavator	1	1
Diesel	62 000L	62 000L

9.5. Training

The Department has conducted training needs and skills gap analysis for the projects that will be supported this financial year. Training to be provided includes vegetable production and packaging, financial management, post-harvest handling and pests, weeds and disease management.





Table 8: Training Needs for Aspirant Farmers in CALM

NAME OF PROJECT	TRAINING PROGRAMME/UNIT STANDARD NAME	NQF LEVEL	NUMBER OF CREDITS	TOTAL BENEFICIARIES	ESTIMATED COST OF TRAINING
Masiphula CPA	Vegetable Production Pests, weeds and diseases Management	3	18	20	R365 750.00
Sgededze Farming	Vegetable Production Pests, weeds and diseases Management	3	18	20	R365 750.00
Mafuyanduna	Vegetable Packaging & Post Harvest Handling	2	19	25	R288 000.00
	Financial Management	3	15	15	R247 100.00
Ebukhosini Farm	Financial Management	3	15	15	R247 100.00
Vygeboom	Financial Management	3	15	15	R247 100.00
Mantjolo Doornhoek	Vegetable Packaging & Post Harvest Handling	3	19	25	R288 000.00
Inkalan CPA Schoeman	Vegetable Production Pests, weeds and diseases Management	3	18	25	R365 750.00
Imvelo yesintfu Vaalkop	Vegetable Production Pests, weeds and diseases Management	3	18	20	R365 750.00
Embhuleni Community Project	Vegetable Packaging & Post Harvest Handling	3	19	25	R288 000.00
Mathebula Elizabeth	Vegetable production (Organic)	3	18	12	R219 700.00

9.6 Funding Model

Funding will be sought from the Comprehensive Agricultural Support Programme (CASP), the Department of Rural Development and Land Reform, Equitable Share and the revenue that will be generated from the Agrihubs. Table 4.3 below shows a summary of the funding model for the infrastructure required.

Table 10: Summary of Funding Model for Infrastructure Support

	Rural Development	CASP	Equitable Share	Revenue	Total
Year 1	tbc	54 622 955,00		7 983 427,12	62 606 382,12
Year 2	231 515 806,79	43 228 248,18	14 409 416,06	44 625 013,94	333 778 484,97
Year 3	231 515 936,79	14 409 416,06	14 409 416,06	73 720 364,00	334 055 132,91
TOTAL	463 031 743,58	112 260 619,24	28 818 832,12	126 328 805,06	730 440 000,00

9.7 Return on Investment (RoI)

The project has a significant positive return on investment, enabling it to self-fund within a period of one (1) year as illustrated in tables 12 and 13 on the net incomes from the various commodities plus the projected revenue contributions to the Department ring-fenced 12,5% for infrastructure maintenance and new irrigation systems development, Provincial Treasury contributions, agent's fees for operating the Agrihubs as well as the revenues for the farmers.

Table 11: Production Cost/Ha v Income/Ha

Commodity	Ha under production (12174)	Rotations per year	Effective land area worked (22979)	Yield/ha	Unit	Price/unit in Rands	Gross income/ha	Production cost/ha in Rands	Net income/ha	Total production cost in Rands	Total production cost for 1 cycle in Rands
Cabbage	700	2	1400	30 000	head	12,00	360 000,00	40 000,00	320 000,00	56 000 000	28 000 000
Onion	1500	2	3000	1 500	10kg bag	45,00	67 500,00	25 000,00	42 500,00	75 000 000	37 500 000
Green pepper	60	2	120	1 000	20kg create	280,00	280 000,00	28 000,00	252 000,00	3 360 000	1 680 000
Tomato	650	2	1300	1 500	20kg create	163,00	244 500,00	32 400,00	212 100,00	42 120 000	21 060 000
Spinach	140	2	280	7 000	bunch	8,02	56 140,00	23 466,00	32 674,00	6 570 480	3 285 240
Lettuce	94	2	188	12 000	head	9,80	117 600,00	31 723,00	85 877,00	5 963 924	2 981 962
Beetroot	89	2	178	1 200	10kg bag	55,00	66 000,00	13 627,00	52 373,00	2 425 606	1 212 803
Cucumber	32	2	64	12 000	each	14,20	170 400,00	35 000,00	135 400,00	2 240 000	1 120 000
Butternut	4500	2	9000	1 200	10kg bag	49,00	58 800,00	22 000,00	36 800,00	198 000 000	99 000 000
Dry beans	200	1	200	300	10kg bag	120,00	36 000,00	9 630,00	26 370,00	1 926 000	1 926 000
Maize	800	1	800	4	ton	3 000,00	12 000,00	7 680,00	4 320,00	6 144 000	6 144 000
Potato	317	1	317	25	ton	5 000,00	125 000,00	70 000,00	55 000,00	22 190 000	22 190 000
Pumpkin	3000	2	6000	1 200	10kg bag	39,80	47 760,00	11 683,20	36 076,80	70 099 200	35 049 600
Gem squash	18	2	36	1 200	10kg bag	30,00	36 000,00	27 500,00	8 500,00	990 000	495 000
Green beans	30	2	60	400	20kg create	342,76	137 104,00	20 500,00	116 604,00	1 230 000	615 000
Carrots	18	2	36	2 000	10kg bag	76,77	153 540,00	18 195,00	135 345,00	655 020	327 510
Babby Marrow	20	2	40	800	10kg bag	101,10	80 880,00	17 560,00	63 320,00	702 400	351 200
Crushed garlic	5	2	10	14 000	kg	22,93	321 020,00	0,00	321 020,00	0	0,00
Mushrooms	1	2	2	1 000	0,2kg	28,03	28 030,00	0,00	28 030,00	0	0,00
TOTAL Exl. Loan repayment								433 964,20		262 938 315	
Total after loan repayment										550 312 910	

Table 9: Return on Investment

Units per annum at production efficiency level (90%)	DOE Demand Vegetables (weekly)	DOH Demand Veg	Gross income [®]	Net income	Return on investment over a period of 12 Months in Rands	Market fee 17.5% (DARDLEA)	5% Provincial revenue of the 17.5% market fee	Balance available on Market fee	Agent fee 12.5% (AGRIHUBS)	Balance (PRODUCERS)
37 800 000	700 709	129	453 600 000	397 600 000	7	69 580 000	3 479 000	66 101 000	49 700 000	278 320 000
4 050 000	63 766	156	182 250 000	107 250 000	1	18 768 750	938 438	17 830 313	13 406 250	75 075 000
108 000	0	73	30 240 000	26 880 000	8	4 704 000	235 200	4 468 800	3 360 000	18 816 000
1 755 000	31 883	163	286 065 000	243 945 000	6	42 690 375	2 134 519	40 555 856	30 493 125	170 761 500
1 764 000	0	134	14 147 280	7 576 800	1	1 325 940	66 297	1 259 643	947 100	5 303 760
2 030 400	0	99	19 897 920	13 933 996	2	2 438 449	121 922	2 316 527	1 741 750	9 753 797
192 240		36	10 573 200	8 147 594	3	1 425 829	71 291	1 354 538	1 018 449	5 703 316
691 200	0	65	9 815 040	7 575 040	3	1 325 632	66 282	1 259 350	946 880	5 302 528
9 720 000	184 046	224	476 280 000	278 280 000	1	48 699 000	2 434 950	46 264 050	34 785 000	194 796 000
54 000	0	26	6 480 000	4 554 000	2	796 950	39 848	757 103	569 250	3 187 800
2 880			8 640 000	2 496 000	0	436 800	21 840	414 960	312 000	1 747 200
7 133		116	35 662 500	13 472 500	1	2 357 688	117 884	2 239 803	1 684 063	9 430 750
6 480 000	122 697		257 904 000	187 804 800	3	32 865 840	1 643 292	31 222 548	23 475 600	131 463 360
38 880	0	45	1 166 400	176 400	0	30 870	1 544	29 327	22 050	123 480
21 600	0	37	7 403 616	6 173 616	5	1 080 383	54 019	1 026 364	771 702	4 321 531
64 800	0	164	4 974 696	4 319 676	7	755 943	37 797	718 146	539 960	3 023 773
28 800		11	2 911 680	2 209 280	3	386 624	19 331	367 293	276 160	1 546 496
126 000		4	2 889 180	2 889 180	#DIV/0!	505 607	25 280	480 326	361 148	2 022 426
1 800		30	50 454	50 454	#DIV/0!	8 829	441	8 388	6 307	35 318
	1 103 100		1 805 099 652	1 310 185 422		229 282 449	11 464 122	217 818 326	163 773 178	917 129 795
				759 872 512	1,38	132 977 690	6 648 884	126 328 805	94 984 064	531 910 758

Table 13: Department of Health' Hospitals Demand

HOSPITALS WEEKLY DELIVERIES JUNE 2021													
QUANTITIES													
ITEMS	BARBERTO N	MATIKWAN A	MATIBI DI	MAPULANEN G	ROB S	SABI E	TINTSWAL O	THEMB A	TONG A	TOTA L	Monthly Average		Weekly
Baby Marrow (kg)	0	0	0	15	24	0	0	0	0	39	44		11
Beetroot (10kg)	10	0	1	6	6	2	0	60	0	85	146		36
Butternut (1kg)	20	30	30	120	80	40	90	80	0	490	895	90	224
Cabbage each	0	10	15	90	80	6	110	40	0	351	518		129
Carrots (kg)	20	0	20	75	55	20	100	50	0	340	655	66	164
Crushed garlic	2	0	0	3	3	0	10	0	0	18	16		4
Cucumber each	6	0	15	26	23	9	30	35	0	144	260		65
Green Beans (kg)	0	0	0	130	0	0	25	0	0	155	148	15	37
Green Pepper (kg)	0	5	10	85	70	5	40	40	0	255	293	15	73
Lettuce (each)	6	0	10	27	41	9	110	40	0	243	397		99
Mushroom (kg)	0	0	0	60	60	0	0	0	0	120	120		30
Onions (10kg)	20	10	4	130	140	30	80	120	0	534	624		156
Potatoes (10kg)	30	6	4	35	30	6	30	200	0	341	466		116
Spinach (kg)	0	10	20	80	90	40	90	0	0	330	535		134
Tomatoes (kg)	20	10	20	79	56	30	120	100	0	435	654	22	163
Beans (kg)	0	0	0	0	70	0	0	0	0	70	105	11	26
Gem Squash (kg)	20	0	0	0	0	0	0	60	0	80	180	18	45
Apples	12	40	40	900	684	30	250	100	0	2056	2522		630,50

HOSPITALS WEEKLY DELIVERIES JUNE 2021													
QUANTITIES													
ITEMS	BARBERTO N	MATIKWAN A	MATIBI DI	MAPULANEN G	ROB S	SABI E	TINTSWAL O	THEMB A	TONG A	TOTA L	Monthly Average		Weekly
Banana (kg)	20	20	20	0	160	30	180	100	0	530	885		221,25
Naartjies	0	0	0	0	200	0	0	0	0	200	300		75,00
Pears	0	30	20	0	260	30	210	100	0	650	1035		258,75
Oranges	0	0	0	0	230	30	110	0	0	370	595		148,75
Eggs (15 Dozen)	1	250	3	0	14	4	5	0	0	277	285,5		71,38
Full Cream Milk Long Life (L)	0	0	0	210	556	1200	0	0	360	2326	5009		1252,25
Low fat milk (L)	0	0	0	120	0	0	0	0	60	180	714		178,50
Fresh Juice	0	0	0	0	264	0	0	0	0	264	1668		417,00
Mageu Cream	0	0	0	0	180	0	0	60	0	240	390		97,50
Yoghurt	6	5	0	0	0	0	0	0	0	11	16,5		4,13
Cheese Cheddar	0	0	0	0	0	0	0	20	0	20	15		3,75
Rama Margarine	0	0	0	0	0	0	0	0	0	0	60		15,00
Maize meal	0	0	0	0	0	0	0	0	20	20	75		18,75
Maize Mabele (kg)	0	0	0	0	0	0	0	0	10	10	105		26,25
Samp (10kg)	0	0	0	0	0	0	0	0	10	10	45		11,25
Maize Rice (10kg)	0	0	0	0	0	0	0	0	0	0	90		22,50
Oats	0	0	0	0	0	0	0	0	0	0	15		3,75

10. Institutional Arrangement

The projects consist of a minimum 1428 beneficiaries from 22 villages around the Chief Albert Luthuli Municipality. Each village will form primary cooperatives for vegetables, potatoes and grains cooperatives that will affiliate to a Secondary Cooperative.

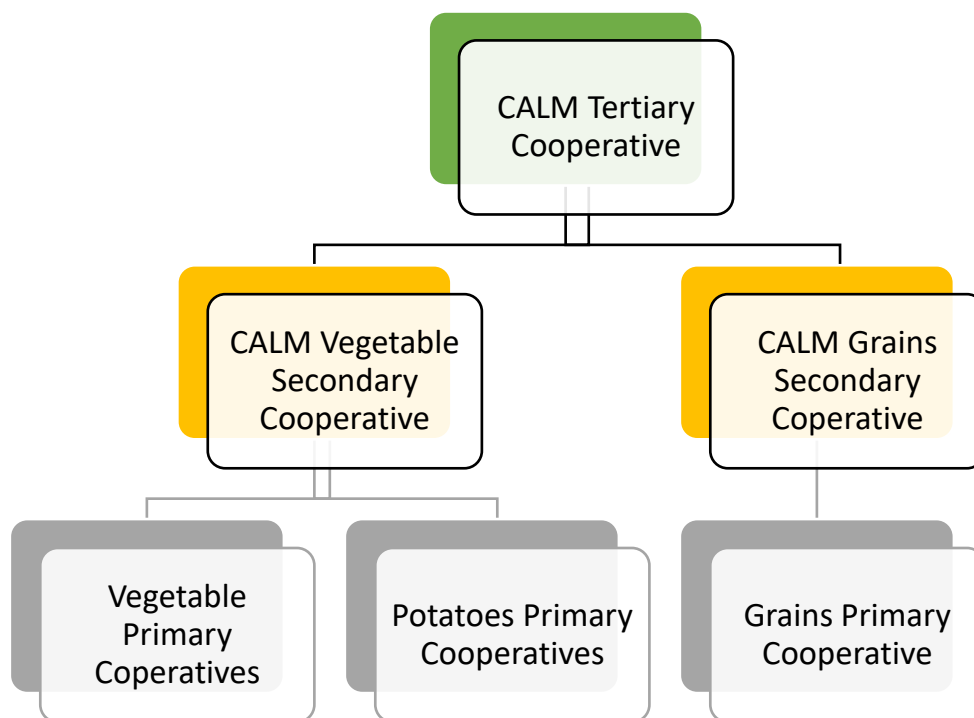


Figure 8: Institutional Arrangements

Members of each cooperative will appoint its Board of Directors, Manager and the Workers. Among other things, their role includes the following;

- ✓ Ensuring that all members have fair chance of supplying the market (clear market/ GNP driven production plans),
- ✓ Checking the quality of produce before delivery or collection by customers
- ✓ Managing conflicts,
- ✓ Ensuring farmers follows cropping calendar,
- ✓ Arranging trainings,
- ✓ Regular market survey,
- ✓ Follow up on outstanding payments,
- ✓ Taking production inputs orders on behalf of the famers, and
- ✓ Logistical arrangements for the farmers.

11. Institutional Arrangements

The projects consist of a minimum 1428 beneficiaries from 22 villages around the Chief Albert Luthuli Municipality. Each village will form primary cooperatives for vegetables, potatoes and grains cooperatives that will affiliate to a Secondary Cooperative.

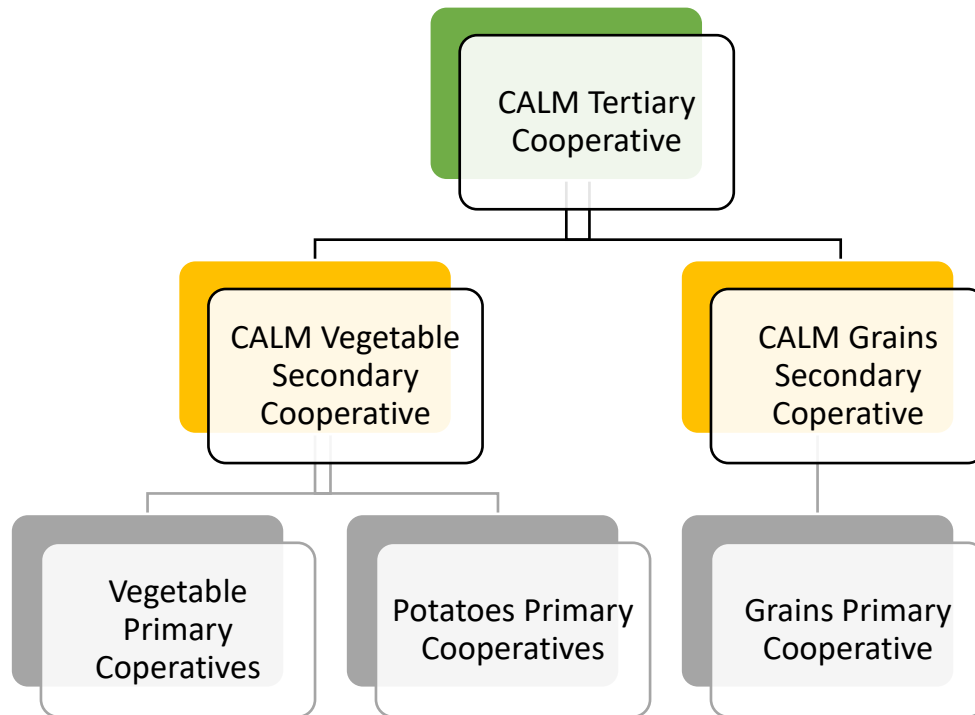


Figure 9: Institutional Arrangements

Members of each cooperative will appoint its Board of Directors, Manager and the Workers. Among other things, their role includes the following;

- ✓ Ensuring that all members have fair chance of supplying the market (clear market/ GNP driven production plans),
- ✓ Checking the quality of produce before delivery or collection by customers
- ✓ Managing conflicts,
- ✓ Ensuring farmers follows cropping calendar,
- ✓ Arranging trainings,
- ✓ Regular market survey,
- ✓ Follow up on outstanding payments,
- ✓ Taking production inputs orders on behalf of the famers, and
- ✓ Logistical arrangements for the farmers.

12. Exit Strategy

The project will be implemented over a period of three (3) to five (5) years. The following factors were considered when developing the exit strategy for the programme:

- ✓ Beneficiaries sense of ownership/commitment to continue programme activities;
- ✓ Level of demand for the commodities produced;
- ✓ Knowledge and skills needed to implement the project activities;
- ✓ Sufficiency of institutional and human resource capacity;
- ✓ Project's resilience to changes in the political and social environment; and
- ✓ Viable plan to generate the consumable supplies (e.g. maintenance parts/inputs) that are required to sustain activities.

The criteria used to determine whether to exit the projects or programme depends on the following:

- ✓ **Time Limit**
 - This depends on the funding cycle, it is therefore recommended that the project be funded in full for the next three (3) financial years to ensure sustainability.
 - The activities outlined in the business plan are to ensure sustainability of the individual projects and the programme, to fully achieve the planned objectives.
- ✓ **Achievement of project impacts**
 - The infrastructure development, mechanisation support and provision of production inputs will result intensive use of agricultural land.
 - Training will ensure that farmers employ good agricultural practice in farming activities resulting in production of good quality and nutritional produce and well as self-sufficiency of the farmers



	Assessment Criteria	[Tick appropriate block]		
		Low	Acceptable	High
1	Are the project objectives be achieved after full funding is received?			
2	How is ownership/commitment to continue programme activities?			
3	Has the livelihood of beneficiaries improved?			
4	Is land used to its full capacity?			
5	How sufficient is the development and human resource capacity to sustain the project?			
6	Are beneficiaries able to meet market demands and/or participate in other markets independently?			
7	Is there a viable plan to sustain the project?			
8	Is the project creating and maintaining sustainable job?			

- ✓ The availability of markets will improve the economy of the municipality and the overall livelihood of the community.
- ✓ The programme will result in sustainable job creation, elimination of poverty and reduction of inequality.



Figure 10: Summary of the Exit Strategy

13. Conclusion And Recommendation

For the success of the plan outlined in this document; it is important that the required financial investment of **R993 378 315** be made available as required by the Business Plan. It is recommended that DALRRD considers this plan for **R112 260 619,24** funding of the “Greening Chief Albert Luthuli Municipality – An Agricultural Food Basket” programme through Conditional Grants. An amount of **R463 031 743,58** is further requested from the DRDLR. The project will also contribute **R126 328 805,06** from the 12,5% revenue that will be generated from the Agri-hubs. The Department (DARDLEA) will contribute the balance towards the initiative. It is furthermore recommended that the project be funded for the following reasons:

- ✓ It has a short payback period of **4** years (Payback period is the length of time required for cumulative incoming returns to equal the cumulative costs of an investment).
- ✓ The project has a positive Net Present Value (NPV= **R7 647 032 879,92**) over 10 years (An investment whereby the $NPV < 0$, subtract value from the organization/company therefore it must be rejected but an investment with $NPV > 0$ adds value to the organization/company, therefore it is acceptable).
- ✓ The project has a reasonable Cost Benefit Ratio of **R0,79** over a ten-year per

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