



# The Greater Tzaneen Farmers Facilitation Centre **BUSINESS CASE**



2017



**Greater Tzaneen  
Local Municipality**



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## SECTION 1: INTRODUCTION

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### 1.1. Introduction

Urban-Econ was appointed by Greater Tzaneen Local Municipality (LM) to develop a business case for a farmer facility aimed at supporting local farmers. This report will focus at assessing the current situation and recommend an appropriate facility that will be best suited for supporting local farmers.

### 1.2. Purpose

The purpose of the assignment is to produce **Strategic Business Case for Greater Tzaneen farmers**. The specific objectives of which will be to:

- ❖ Identify commodities that can be supported
- ❖ Assess the level of support each commodity can be given (production capacity and potential),
- ❖ Identify the number of farmers that can be supported in the area (both commercial and emerging),
- ❖ Identify support needed by farmers
- ❖ Recommend the facility purpose and function

### 1.3. Project Rationale

Agriculture is one of the key activities driving the economy of Greater Tzaneen LM where the municipality has competitive advantage within the district. The municipality Integrated Development Plan (IDP) indicates that agriculture, tourism and agro-processing are sectors with local economic potential (Greater Tzaneen, 2017). The Local Economic Development (LED) Strategy is aligned with the IDP in identifying agriculture as the potential sector.

### 1.4. Project Site

The site analysis applies various criteria, which assist in determining the site's suitability to facilitate Centre functions. It is recommended that the site selection meets the following criteria:

- ❖ Ownership of Property
- ❖ Size of Property
- ❖ Suitable land use and surrounding land use
- ❖ Accessibility on-site infrastructure
- ❖ Proximity to smallholder farmers
- ❖ Proximity to existing support services/ infrastructure
- ❖ Possibility to refurbish existing buildings and infrastructure

### 1.5. Project Location

Greater Tzaneen LM is situated in the Mopani District Municipality (DM) of the Limpopo Province. The map below indicates Tzaneen LM location in context to Mopani DM as indicated in the Map below.



## SECTION 2: SITUATIONAL ANALYSIS

### 2.1. Introduction

This Section will analyse the situation in the area by assessing surrounding farming activities in the Greater Tzaneen. The aim is to assess commodities produced, available land space, mechanization needs, input requirements as well as challenges faced by the farmers.

This section will assess status quo of the agriculture in Greater Tzaneen by making use of Urban-Econ survey results. The data analysis will inform the development of the facility centre as follows:

- ❖ The farmer support required by the farmers
- ❖ Current production as well as potential future production
- ❖ Functions to be carried out by the facility

### 2.2. Farmer Survey Results

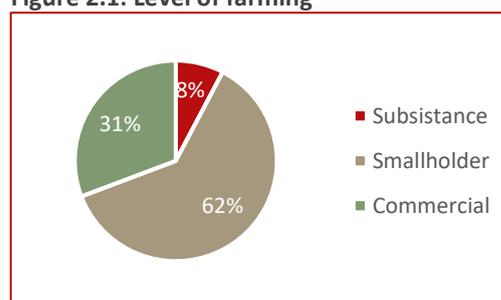
Data collection on the farming situation in Greater Tzaneen was conducted in a form of questionnaire completed by 39 respondents. The questionnaire aimed at gathering information on the following:

- ❖ Level of farming
- ❖ Types of livestock or crops produced
- ❖ Water sources
- ❖ Inputs required on the farm
- ❖ Market that the farmer is currently supplying its produce
- ❖ Assistance or support received
- ❖ Any infrastructure or assistance that is required by the farmers in the area

#### 2.2.1. Level of farming

Most farmers in the area are smallholder farmers who are either individual farmers or in a co-operative. Survey indicates that 31% of the surveyed respondents are commercial farmers and only 8% are subsistence farmers. This indicates that the industry is growing and thus the need to support emerging farmers

**Figure 2.1: Level of farming**



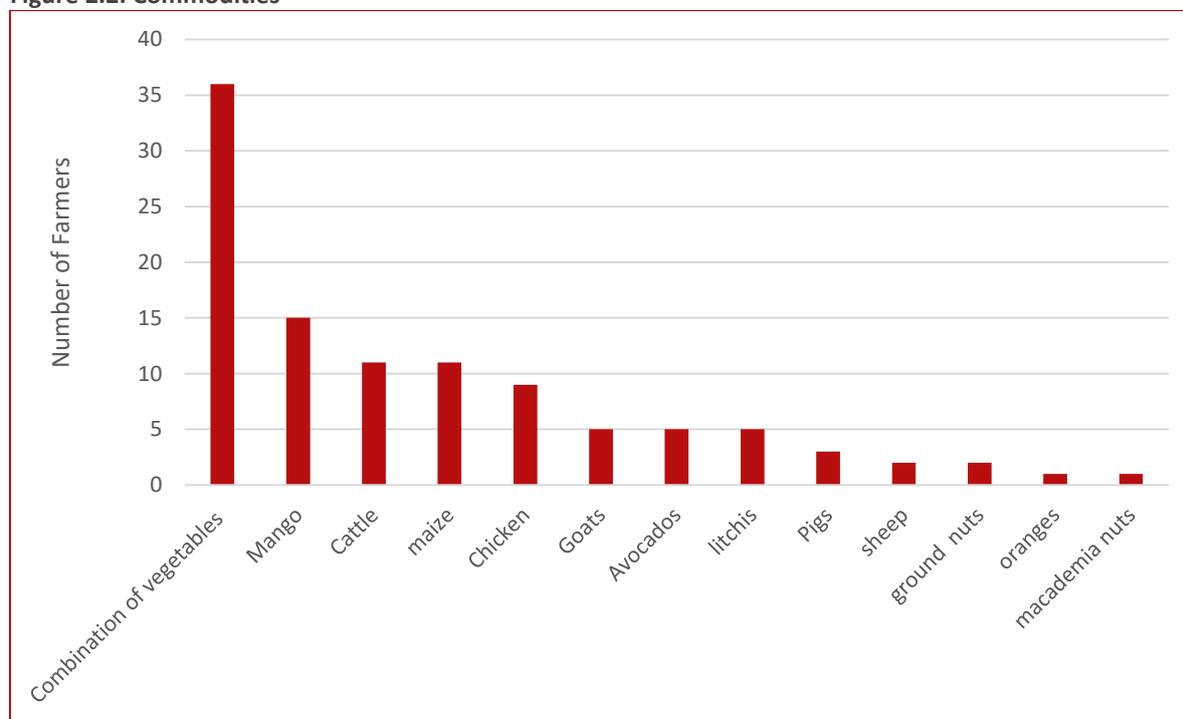
*Source: Urban-Econ farmer survey, 2016*

#### 2.2.1. Commodities

It is common for farmers not to specialise on one commodity but farm in various products such as a combination of vegetables rather than specialising in cucumber only. It is also common for farmers to combine crop with livestock farming.

The primary commodities produced by surveyed farmers are vegetables followed by mango and cattle. The Figure below indicates the breakdown of produce in the area based on the number of farmers producing the commodity.

**Figure 2.2: Commodities**



Source: Urban-Econ farmer survey, 2017

The breakdown of vegetables indicates that the key vegetables in the area are:

- ❖ Butternut
- ❖ Green pepper
- ❖ Chilli pepper
- ❖ Tomato

These are not the only vegetable, but rather the main ones. Other vegetables include spinach, cabbage, cucumber, green beans and baby marrow.

### 2.2.1. Production area

Co-operatives, as well as individual farmers, may have vast land allocated for farming activities but fail to fully utilise the farming land due to various reasons such as lack of inputs. An adverse is also true where a farmer has the capacity to farm but required additional land. The survey indicated that the total area for farming amongst co-operatives and individual farmers that were part of the survey is 1 311 hectares. Currently only 56% (730 ha) of this area is being utilised for either grazing and other livestock usage such as chicken or planting purposes.

The production area represented below indicates the total available farming area of 1 311 ha of land of which only 56% is under production and 44% is not utilised for agricultural purposes.

**Table 2.1: Area Usage**

| Area usage                   | Ha   | Percentage |
|------------------------------|------|------------|
| <b>Total available land</b>  | 1311 | 100%       |
| <b>Land under production</b> | 730  | 56%        |
| <i>Planting area</i>         | 430  |            |
| <i>Other uses</i>            | 300  |            |
| <b>Non-Productive land</b>   | 581  | 44%        |

Source: Urban-Econ Farmer Survey, 2017

### 2.3. Market

Greater Tzaneen local farmers sell their produce to local individuals, local businesses (including schools, creches) as well as national markets. National markets refer to Johannesburg markets, Pretoria and other fresh produce markets. The market supply is indicated on the Table below.

**Table 2.2: Market Supply**

| Market            | Number of farmers | Percentage of farmers supplying to the market |
|-------------------|-------------------|---|
| Local individuals | 23                | 59%   |
| Local businesses  | 18                | 46%   |
| Own consumption   | 8                 | 18%   |
| National Markets  | 18                | 46%   |

Source: Urban-Econ Farmer Survey, 2017

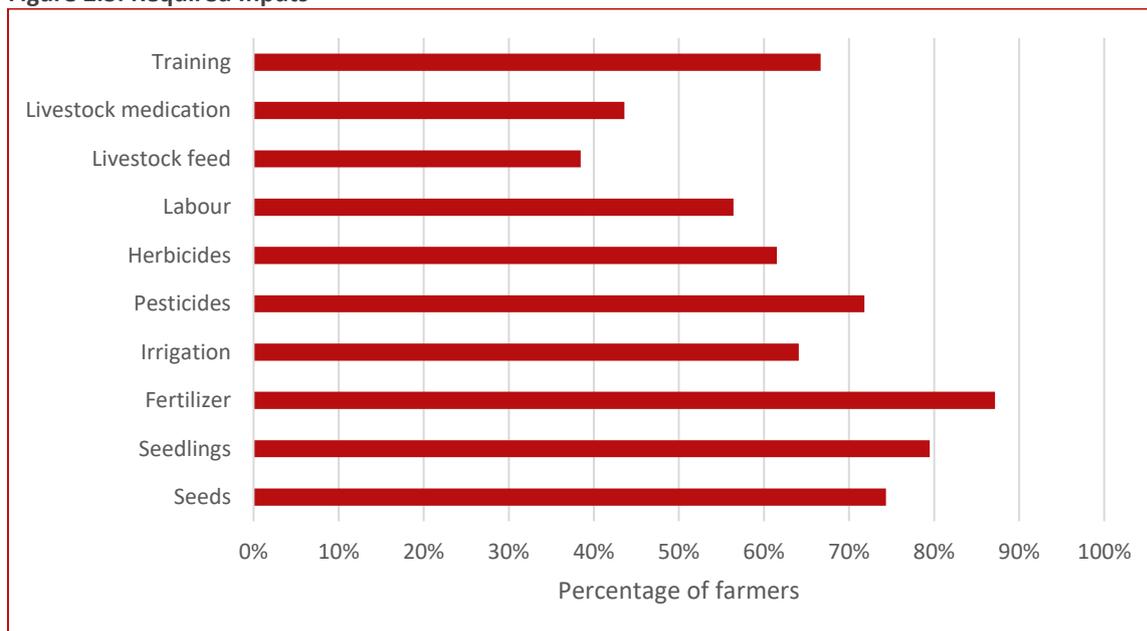
#### 2.3.1. Inputs support

The prominent inputs that that were identified by more than 60% of the farmers are fertilizer, seedlings, seeds, pesticides, training, irrigation and herbicides. Most farmers buy their own input and some have received support from DARDLEA in the past. The survey indicated that 54% of the farmers buy their inputs from mainly the following suppliers:

- ❖ Hygrotech
- ❖ NTK
- ❖ WD Nursery
- ❖ Agrochem
- ❖ Start Ares

The Figure below indicates the required inputs needed by farmers.

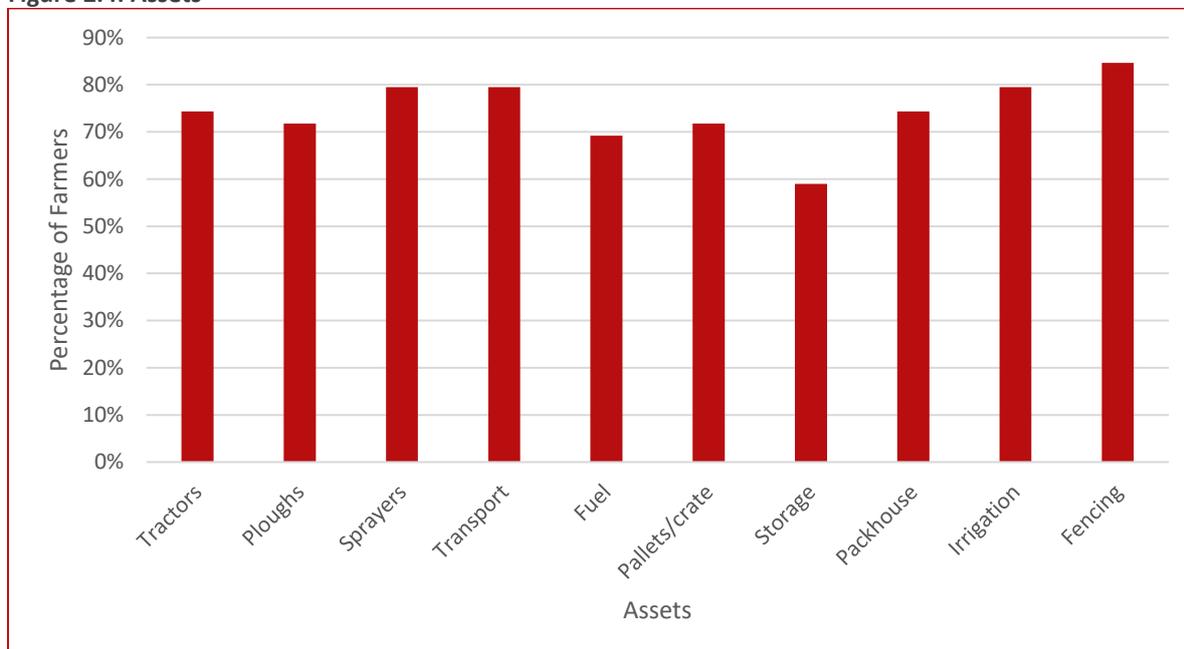
**Figure 2.3: Required Inputs**



Source: Urban-Econ Farmer Survey, 2017

Assets, including machinery are also one of the key inputs required in agriculture. The breakdown of required assets is indicated on the Figure below.

**Figure 2.4: Assets**



Source: Urban-Econ Farmer Survey, 2017

Fencing, sprayers, tractors and transport are critical needs identified by the farmers. Vegetable and maize fields require fencing from the animals that damage the crops. Vegetables are need lots of water and have a short

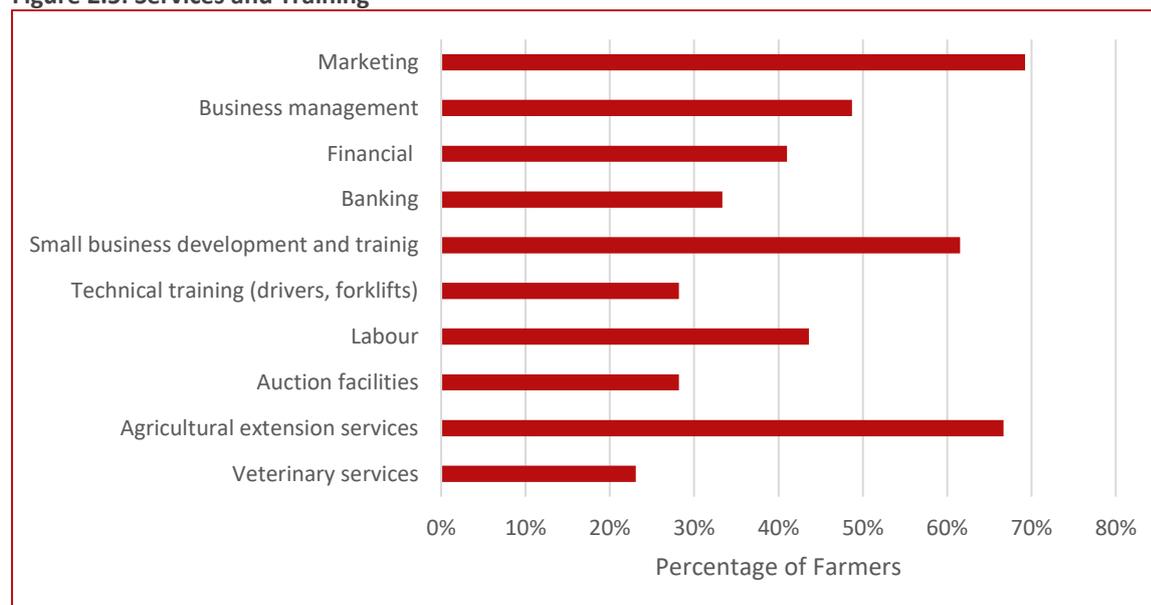
shelf life, hence the identified need for water availability and storage, preferably a cold room. A cool room ideally needs to be constructed with a pack house.

One of the major challenge facing the farmers is the lack of available assets. Currently farmers hire machinery such as tractors and implements.

### 2.3.2. Required services

Other services and training that may be required by the farmers to develop them and assist in other skill are illustrated on the Figure below.

**Figure 2.5: Services and Training**



Source: *Urban-Econ Farmer Survey, 2017*

Marketing is identified as key training that is needed by 69% of the surveyed farmers, followed by training on small business development and training and agricultural extension services.

### SECTION 3: COMMODITY ANALYSIS

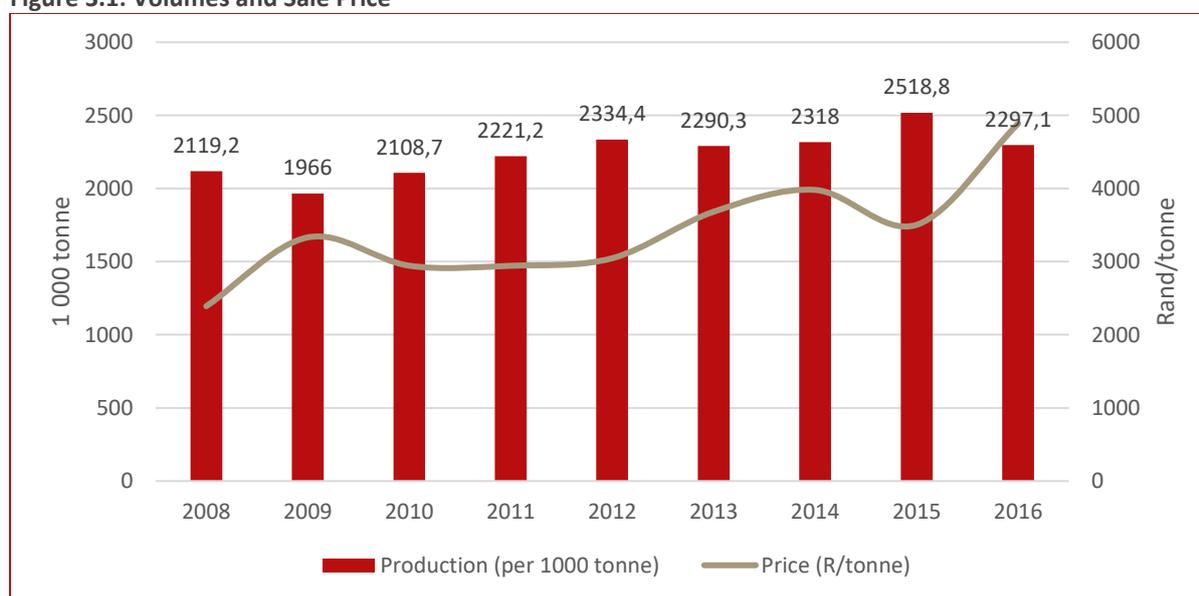
#### 3.1. Introduction

This Section will analyse the vegetables commodity market as the key commodity identified from the assessment conducted. The Section will analyse a group of vegetables mainly sold at the major National Fresh Produce Markets (NFPM) rather than assess individual vegetables. Legislation will also be briefly outlines on this section.

#### 3.2. Vegetables

In South Africa, volumes vegetables sold at the major 16 Fresh Produce Markets (FPM) has increased on average by 0.8 % per annum between 2008 and 2016 from 2 119 million ton (2008) to 2 297 million ton (2016). The most popular vegetables (based on volume sold at fresh produce markets) are potatoes, onions, tomatoes and green mealies.

Figure 3.1: Volumes and Sale Price



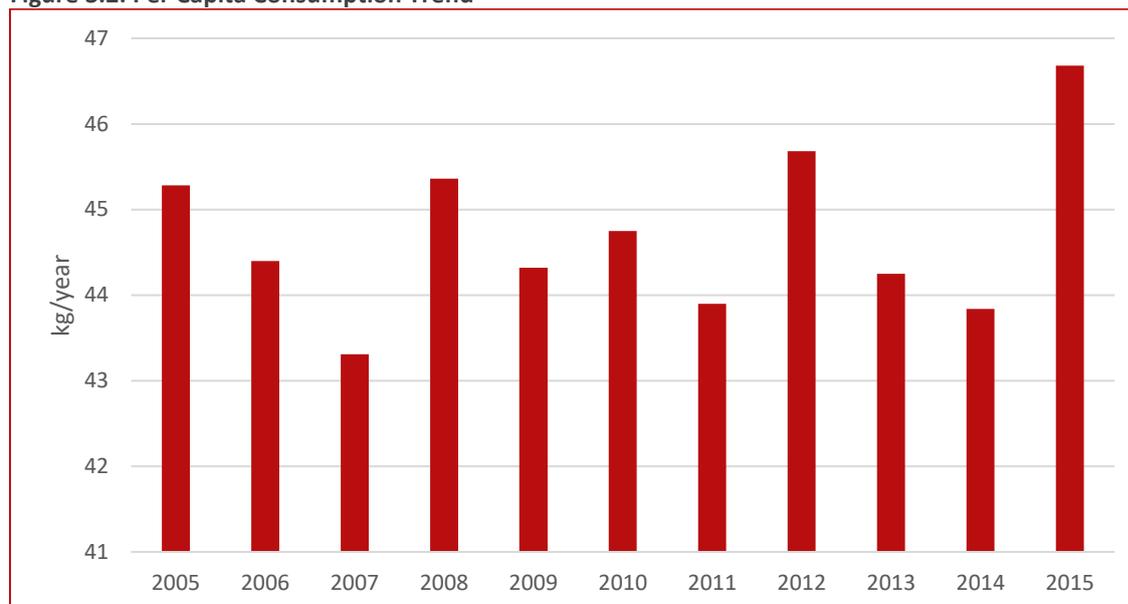
Source: DAFF, 2017

From Above, it is evident that the sale of vegetables at fresh produce markets has increased at an estimated 0.8% per annum while the price (Rand/ton) increased from R2 391.00 per ton in 2008 to R4 88700 per ton in 2016, an average increase of 8%.

The main distribution channels for vegetables in South Africa is direct sales from the farm (which accounts for roughly 43% of sales) and sales at fresh produce markets (46% of sales). Only 7% of vegetables are processed in South Africa and 4% are exported. The main export markets for South African vegetables are Mozambique, Namibia, Botswana, Lesotho and Angola.

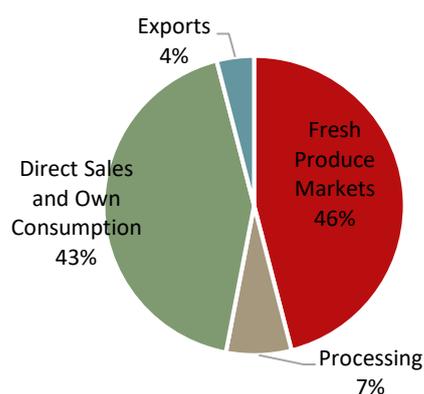
Per capita consumption of vegetables has remained relatively stable over the last 10 years, ranging between 43.01kg per year to 45.68kg per year, except in 2015 when consumption per capita increased to 46.7 kg per annum. Figure 3.10 illustrates the fluctuations in per capita consumption of vegetables between 2005 and 2015.

**Figure 3.2: Per Capita Consumption Trend**



Source: Abstract of Agricultural Statistics, 2017

**Figure 3.3: Distribution Channels, 2015**



Source: Abstract of Agricultural Statistics, 2017

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### 3.3. Legislation

The various Acts and policies which apply to the vegetable industry that need to be taken into consideration:

- ❖ Draft Plant Health (Phytosanitary) Bill 2014
- ❖ Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 Of 1947)
- ❖ National Water Act, 1998 (Act No.36 Of 1998)
- ❖ The Food Safety Management System FSSC 22000 Certification
- ❖ Hazard Analysis and Critical Control Points (HACCP)
- ❖ Marketing of Agricultural Products Act, 1968 (Act No. 59 Of 1968)
- ❖ Conservation of Agricultural Resources Act, 1983 (Act No. 43 Of 1983)
- ❖ Plant Breeders' Right Act, 1976 (Act No. 15 Of 1976)
- ❖ Agricultural Credit Act, 1966 (Act No. 28 Of 1966)

- ❖ Agricultural Development Fund Act, 1993 (Act No. 175 Of 1993)

Other general legislation that are applicable for the operation and management of the pack house include:

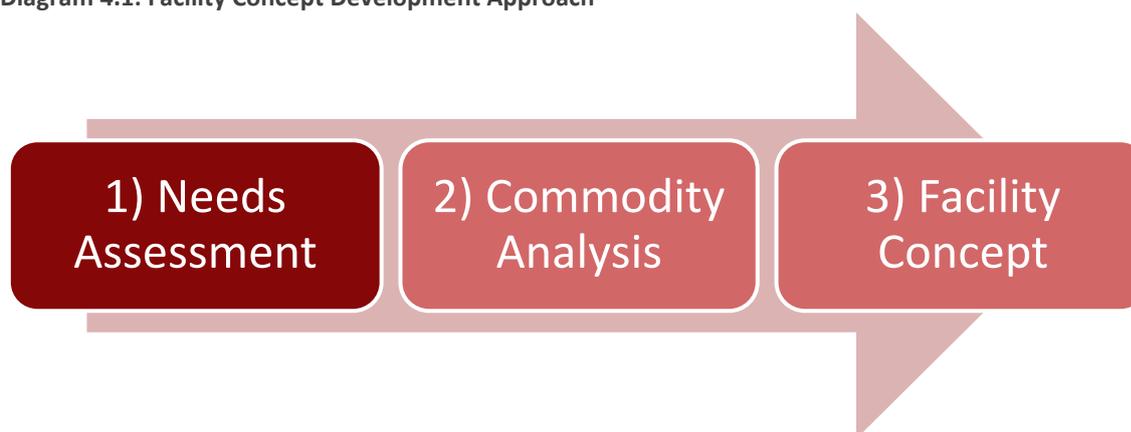
- ❖ Basic Conditions of Employment Act, 1983 (Act No. 3 Of 1983)
- ❖ Municipal By-Laws and Regulations, (*where relevant*)
- ❖ Consumer Protection Act

## SECTION 4: FACILITATION CENTRE CONCEPT

### 4.1. Introduction

The Centre should be designed to assist farmers during the entire production process. The concept has been developed using the information and data presented in the preceding Sections. The facility concept was developed with a focus on five key elements that will be required to improve the production and quality of the prioritised commodities in the Tzaneen. **Error! Reference source not found.** demonstrates the approach used in developing the concept.

Diagram 4.1: Facility Concept Development Approach



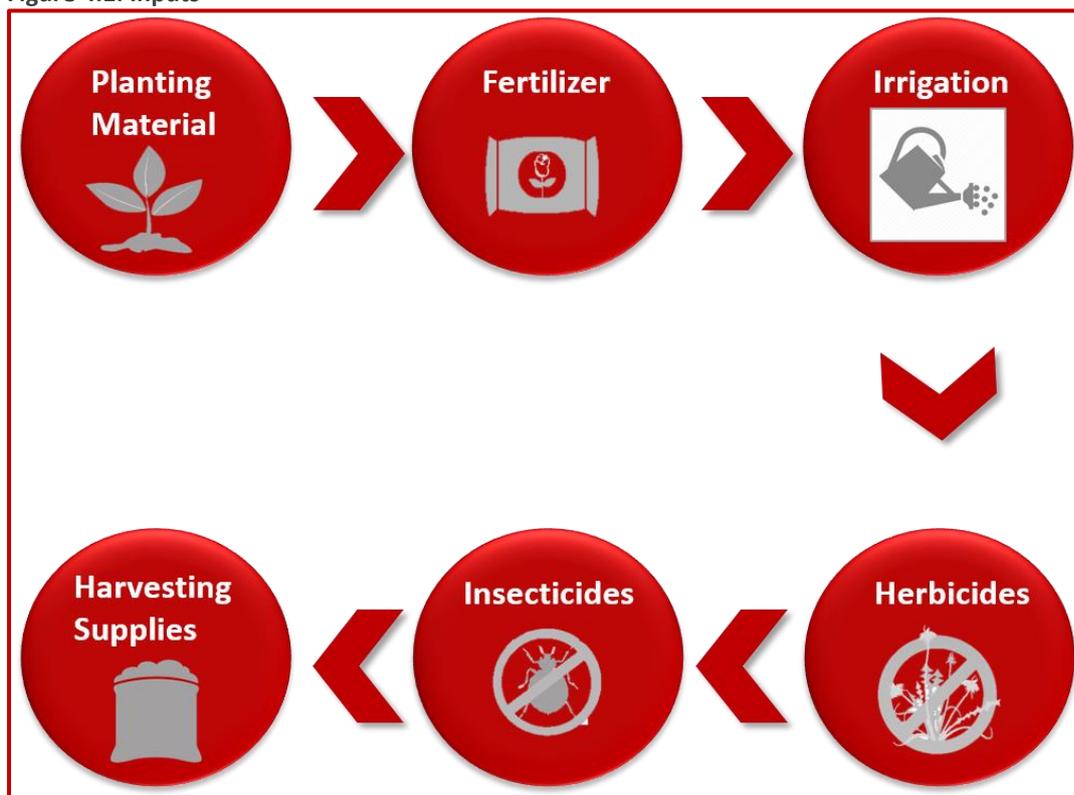
The three-step approach illustrated in the Figure above was followed to ensure a comprehensive understanding of the farmer needs as well as the unique requirements for key commodity. The concept outlines five specific aspects the Centre will focus on to ensure the improvement of quality and production levels of the commodities as well as improving the knowledge and skill level of farmers. The five aspects are the following:

1. Input support,
2. Mechanisation support
3. Proposed facilities,
4. Training, and
5. Market intelligence

### 4.2. Input Support

Input support can be divided into five main components, namely: planting material; fertilizer; irrigation (water availability); insecticides; herbicides; and harvesting supplies. All the components are necessary to increase the quality and quantity of smallholder farmers. The required inputs were determined by the needs assessments conducted, as well as the specific requirements of each of the selected commodities. The various inputs that farmers require are illustrated on the following figure.

Figure 4.1: Inputs



The input requirements that are indicated on the following table are general recommendation, which will be influenced by the individual farm's or area's characteristics. Soil conditions are an influential characteristic that will impact the specification of inputs such as seeds/seedlings and fertilisers. It is important that the correct inputs are used correctly to ensure optimum production. The estimated quantities and input may not all be used at once, but require proper consultation from agricultural specialist to recommends an input where various products are available on the market.

Harvesting supplies needed may include the following:

- ❖ Crates to transport the commodities harvest to the market
- ❖ Hand tools: Spades, garden forks, rake and pick hoe for harvesting and maintenance
- ❖ Basic packaging for marketing
- ❖ Transportation of produce

**The site should be big enough to accommodate storage area for storing all inputs according to regulations**

The Table below only indicates a few vegetables found in the surveyed area which are butternut, green beans and tomato.

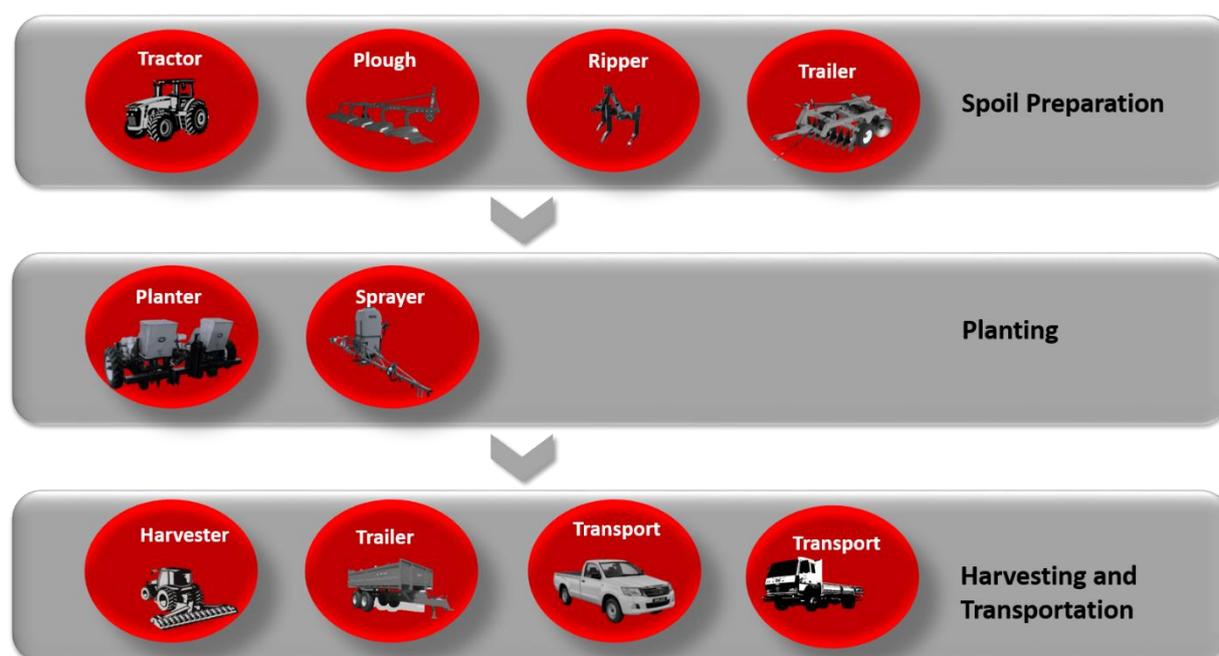
Table 4.1: Inputs Quantity and Costs (per Ha)

| Input                    | Quantity/Ha | Cost (R)  |
|--------------------------|-------------|-----------|
| <b>Butternut</b>         |             |           |
| Seed                     | 3 kg        | 1 259,04  |
| Fertilizer: LAN 28%      | 0,25 ton    | 1 278,40  |
| 234(30)                  | 0,4 ton     | 1 278,40  |
| Herbicides: Focus Altra  | 4 litres    | 1 553,80  |
| Insecticides: Decis      | 0,15 litres | 107,20    |
| Fungicides: Benlate      | 3kg         | 701,79    |
| Mancozeb                 | 4 kg        | 286,57    |
| wetting agent            | 1 litre     | 56,61     |
| Irrigation               | 375 mm      | -         |
| <b>Green Beans</b>       |             |           |
| Seed                     | 70kg        | 6 998,60  |
| Fertilizer: Lan 28%      | 0,3 ton     | 1 534,08  |
| 232(22)                  | 0,5 ton     | 2 629,35  |
| Dolomitic Lime           | 1 ton       | 967,96    |
| Herbicides: Dual S Gold  | 1,3 litre   | 285,81    |
| Basagran                 | 3 litre     | 583,85    |
| Insecticides: Karate     | 0,1 litre   | 22,89     |
| Patron                   | 0,03kg      | 44,58     |
| Decis                    | 0,25 litre  | 178,66    |
| Dursban                  | 0,5 litre   | 59,02     |
| Fungicides: Mancozeb     | 4kg         | 513,00    |
| Irrigation               | 33mm        | -         |
| <b>Tomato</b>            |             |           |
| Seedling                 | 18000       | 11 160,00 |
| Fertilizer: LAN 28%      | 0,1 ton     | 511,36    |
| Pot. Nitrate SG          | 0,66 ton    | 10 986,16 |
| Urea 46%                 | 0,35 ton    | 1 786,56  |
| Dolomitic lime           | 1 ton       | 967,96    |
| Map (33) + 0,5zn         | 0,2 ton     | 1190      |
| Agric Gypsum             | 0,3 ton     | 421,35    |
| Herbicides: Triflirarin  | 2 litre     | 165,81    |
| Cato                     | 0,09kg      | 667,8     |
| Insecticides: Alphathrin | 0,1 litre   | 12,2      |
| Nemacur                  | 20kg        | 4280      |
| Methomax                 | 1kg         | 120,32    |
| Patron                   | 0,1kg       | 148,6     |
|                          |             | 859,71    |
| Fungicides: Mancozeb     | 12kg        | 859,71    |
| Kocide                   | 23kg        | 2 767,36  |
| Ridomil MZ               | 8kg         | 3 130,37  |
| Bravo                    | 15 litre    | 3 110,78  |
| Irrigation               | 400 mm      | -         |

### 4.3. Mechanisation Support

The following figure provides a description of the various tractors and implements that need to be available at the Centre to provide support to farmers. **The site should be big enough to accommodate mechanization storage area for implements.**

Figure 4.2: Mechanisation Support



### 4.4. Training

It is clear from the farmer surveys that farmers are in need of further training. This will include technical training to ensure that farmers are able to produce the maxim yield from available input. Aspects of technical training can include:

- ❖ Soil preparation methods
- ❖ Use of fertiliser
- ❖ Irrigation
- ❖ Use of herbicides and pesticides
- ❖ Proper harvesting techniques
- ❖ Crop rotation and production schedule planning

Other training that should be provided to farmers:

- ❖ Business and financial management
- ❖ Administration skills
- ❖ Marketing

#### 4.5. Facilities

The facilities proposed for the farmer support centre consider all elements covered on the centre concept and is based on the results from the survey conducted. All the inputs and functions of the Centre will be accommodated by the proposed facilities.

Table 4.2: Proposed Facilities

| Facility   | Functions   |
|--|---|
|  <p><b>Administrative</b></p> | <ul style="list-style-type: none"> <li>- Administration of input supply and machinery</li> <li>- Training facility for theoretical training of the vegetable producers</li> <li>- Logistics and distribution of input supplies</li> </ul> |
|  <p><b>Packhouse</b></p>     | <ul style="list-style-type: none"> <li>- Storage of seed, fertiliser, pesticides, herbicides and lime</li> <li>- Specific design to ensure safe storage of chemicals</li> <li>- Packing activities</li> </ul>                             |
|  <p><b>Nursery</b></p>      | <ul style="list-style-type: none"> <li>- Seedlings to be grown</li> <li>- Year-round supply of seedlings</li> <li>- Specifically designed for growing tomatoes</li> <li>- Part of the training demonstration programme</li> </ul>         |
|  <p><b>Workshop</b></p>     | <ul style="list-style-type: none"> <li>- Storage of implements and machinery</li> <li>- Maintenance of equipment</li> <li>- Fuel storage</li> </ul>   |

It is important to note that the size of the site should be sufficient to accommodate all of the above facilities.

#### 4.6. Market Intelligence

Market intelligence aims to provide smallholder farmers with the necessary information on market access; news and development as well as specific commodity related information. Providing up-to-date market information will equip the farmers with the necessary knowledge to make informed decision in the short, medium, and long term which ultimately contributes to the sustainability of their farms.

Four aspects will be covered in the market intelligence component, described below.

Table 4.3: Market Intelligence

| Component  | Description  |
|--|--|
| <b>Market and Price Intelligence</b>                   | Market access information will cover the latest market trends, prices and market conditions as well as explore the various market requirements in terms of packaging, labelling, and grading specifications. Additional information essential to farmers would be the seasonal/off season demands that link strongly to the export market demand.  |
| <b>News &amp; Development</b>                          | Farmers will have access to the latest agricultural trends, innovation and equipment that enters the market as well as any relevant news that may be of use and/or interest to the smallholder farmers.  |
| <b>Commodity Specific Information</b>                  | Commodity specific information covering different cultivars, possible disease, or pest outbreaks as well any new developments within the commodity field will assist farmers in improving their productivity and quality as well as gain a better understanding of the complete commodity value chain.   |
| <b>Meteorological and Disaster related information</b> | Disease and meteorological information should be available to farmers to assist with planning and mitigation measures. Without such information, farmers may be unable to use timely measures to stem losses from climate shocks and poor yields caused by crop diseases. Mobile phones can serve as the backbone for early warning systems to mitigate these risks and safeguard incomes. |

## SECTION 5: OPERATIONAL PLAN

### 5.1. Introduction

The Centre requires an operational plan to clearly outline activities and the procedures to be followed to support local farmers. The guide to the daily activities and management of the Centre can be divided into components as illustrated in the Diagram below.

Diagram 5.1: Operational Plan components



This Section will discuss each of the components for the operation as outlined in the Diagram above.

### 5.2. Registration Process

All farmers that are farming any of the prioritised commodities are required to register to qualify for input and mechanisation support, as well as training, and market intelligence. If farmers are not registered they will not be able to access the services provided by the facility. The table below describes the registration process to be followed.



Table 5.1: Registration Guidelines

| Step | Description   |
|------|---|
| 1    | Farmers must fill in registration forms and provide relevant information  |
| 2    | Farmers can only register for support if the following is in order: <ol style="list-style-type: none"> <li>1) Copy South African ID/Passport</li> <li>2) Co-operative Registration Number</li> <li>3) Farm Details (name, size, GPS co-ordinates)</li> <li>4) Production Information</li> <li>5) Production Schedule</li> </ol> |

|   |  |
|---|--|
|   | 6) Market Information  |
| 3 | Farmers will be issued with an “Smart Card” to store all information and use at the centre     |
| 5 | Smart Card will be loaded with allocated points determined by the farmer classification.       |
| 6 | Database should be kept updated with production information after every two production cycles. |

### 5.3. Credit System

All operations should operate on a points/credit rating system that will allocate points based on the registered farmer’s production, farm size and farmer classification. The Centre should focus on providing full support to smallholder and emerging farmers, while providing basic support to household/subsistence and commercial farmers. As each commodity has specific equipment and machinery requirements, some more intensive than others, a credit system specific to each commodity should be developed with the following guidelines in mind:



1. Farmers will be allocated credits according to: 1) area of land under production; b) current yields; c) Potential land to expand production; d) number of growing seasons per year
2. Points should be awarded monthly with a set expiration date, i.e. points start being awarded on 1st January and expire on 31st December.
3. All inputs and machinery should be assigned a point value relative to a monetary value. When “buying” or “hiring” from the Centre, points will be Credits should be awarded specific to each commodity
4. Deducted from the farmer’s balance by swiping the smart card.
5. Training sessions are incentive based. Farmers who attend and complete training courses can be awarded points
6. Should the farmer deplete their point, they will have the option to buy inputs and hire equipment that they can pay for themselves.

### 5.4. Mechanisation Support

The mechanisation support aims to make the farming and production of commodities more efficient and time saving for farmers. As detailed in the concept each commodity has specific equipment that will be available to the farmers. Although the farmers will be able to access the mechanisation support, the following guidelines and requirements need to be met:

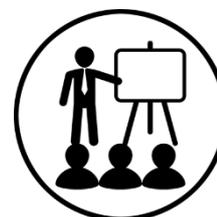


1. All equipment to be booked and rented to registered farmers
2. All equipment will be allocated specific points value, which will be deducted off the farmer’s smart card.
3. All equipment to be operated by employed drivers and/or operators.
4. All equipment to be refuelled at the Centre
5. A maximum hire period should be established for each commodity.

6. Responsible people will be allocated to manage equipment, as well as record keeping, and service requirements for all vehicles.

### 5.5. Training

Commodity specific training important and an emphasis should be placed on the day-to-day management of a farm as well as business management to ensure long term sustainability and financial stability of farmers. The proposed training courses are indicated on the Table below.



**Table 5.2: Proposed Training Courses**

|   | PRACTICAL TRAINING | THEORETICAL TRAINING |
|---|--------------------|----------------------|
| <b>COMMODITY SPECIFIC</b>                   |                    |                      |
| 1. Soil Preparation & Analysis              | Yes                | Yes                  |
| 2. Use and Application of agro-chemicals    | Yes                |                      |
| 3. Crop selection                           | Yes                | Yes                  |
| 4. Sustainable farming methods              | Not Applicable     | Yes                  |
| 5. Improving crop quality and production    | Not Applicable     | Yes                  |
| 6. Irrigation Methods & Management          | Yes                | Not Applicable       |
| 7. Propagation of seedlings                 | Yes                | Not Applicable       |
| <b>BUSINESS AND ADMINISTRATION TRAINING</b> |                    |                      |
| 1. Marketing of commodities                 | Not Applicable     | Yes                  |
| 2. Production schedules vs market demand    | Not Applicable     | Yes                  |
| 3. Financial Management                     | Not Applicable     | Yes                  |
| 4. Day-to-day business management           | Not Applicable     | Yes                  |

All training courses will take place at the Centre as either practical training on demonstration plots or theoretical training in the training facility. Stakeholders such as the ARC, Agricultural colleges, the University of Limpopo, as well as commercial producers should be consulted with to form an important part of the training programme.

### 5.6. Market Intelligence and Support

Market intelligence aims to provide smallholder farmers with the necessary information on market access; news and development as well as specific commodity related information. Providing up-to-date market information will equip the farmers with the necessary knowledge to make informed decision in the short, medium, and long term which ultimately contributes to the sustainability of their farms. Market intelligence and support is important for future development as well as assist farmers in selecting the right cultivars and determine the commodity production schedules in accordance with market demand and prices.



### 5.7. Logistics

Challenges faced by farmers include produce transportation costs to the market as well as high production input costs. The Centre can assist with delivering inputs that are exceeding a specific weight measure, i.e. delivering inputs if exceeding 100 kg per delivery.



Arrangement of deliveries is key in minimise costs, therefore input distribution should be arranged in such a way that will reduce costs by supplying neighbouring farms on a single delivery as opposed to arranging deliveries per farm. During the harvesting period, farmers should be assisted with transport of produce from the farm to the storage facility for processing or packaging.

## SECTION 6: PROJECT COST ESTIMATION

### 6.1. Capital Expenditure

The capital costs do not include acquiring land that is needed to ensure that the Centre can accommodate all the facilities and equipment to make it necessary to function. These costs are estimated on the Table below.

Table 6.1: Capital Expenditure

| ITEM  | PRICE    | QUANTITY | TOTAL                 |
|---|----------|----------|-----------------------|
| <b>INFRASTRUCTURE</b>                                     |          |          |                       |
| Administration and training facility (600m <sup>2</sup> ) | R7 368   | 600      | R4 420 800.00         |
| Packhouse (1500m <sup>2</sup> )                           | R7 368   | 1500     | R11 052 000.00        |
| Workshop (400m <sup>2</sup> )                             | R4 892   | 400      | R1 956 800.00         |
| Cold Storage (300m <sup>2</sup> )                         | R14 677  | 300      | R4 403 100.00         |
| Nursery (300m <sup>2</sup> )                              | R2 875   | 300      | R862 500.00           |
| <b>Subtotal</b>   |          |          | <b>R22 695 200.00</b> |
| <b>ASSETS</b>   |          |          |                       |
| Fencing (400m)  | R1 975   | 400      | R790 000.00           |
| Fuel Pump   | R12 000  | 2        | R24 000.00            |
| Refrigerated trucks                                       | R500 000 | 1        | R500 000.00           |
| Packhouse equipment                                       |          |          | R5 724 500.00         |
| Bakkie  | R380 000 | 2        | R760 000.00           |
| <b>Subtotal</b>   |          |          | <b>R7 798 500.00</b>  |
| <b>IMPLIMENTS</b>   |          |          |                       |
| Tractors (Heavy)  | R860 499 | 3        | R2 581 498.00         |
| vegetable transplanter                                    | R140 000 | 2        | R280 000.00           |
| Planter   | R211 300 | 2        | R422 600.00           |
| Trailer   | R79 200  | 3        | R237 600.00           |
| Seed drills   | R152 874 | 3        | R458 622.00           |
| <b>Subtotal</b>   |          |          | <b>R3 980 320.00</b>  |
| <b>WORKSHOP EQUIPMENT</b>                                 |          |          |                       |
| Work station  | R26 995  | 1        | R26 995.00            |
| Tool kit  | R14 495  | 1        | R14 495.00            |
| Service trolley   | R795     | 3        | R2 385.00             |
| Oil management equipment                                  | R9 495   | 1        | R9 495.00             |
| washing equipment   | R2 395   | 2        | R4 790.00             |
| Jack/fixture and lubrication equipment                    | R15 995  | 1        | R15 995.00            |
| Fuel Pump   | R5 795   | 1        | R5 795.00             |
| Fuel storage tank   | R70 000  | 1        | R70 000.00            |
| service equipment   | R395     | 5        | R1 975.00             |
| Cleaners  | R6 895   | 1        | R6 895.00             |
| <b>Subtotal</b>   |          |          | <b>R158 820.00</b>    |
| <b>ADMINISTRATION ITEMS</b>                               |          |          |                       |
| Office Desk   | R1 999   | 5        | R9 995.00             |
| Office chair  | R800     | 7        | R5 600.00             |
| Reception chairs  | R300     | 6        | R1 800.00             |
| Filing Cabinet  | R1 899   | 5        | R9 495.00             |

## FARMER FACILITATION CENTRE

|                       |        |     |                   |
|-----------------------|--------|-----|-------------------|
| Computer              | R5 000 | 5   | R25 000.00        |
| Training chairs       | R99    | 100 | R9 900.00         |
| Training tables       | R899   | 25  | R22 475.00        |
| Stationary            | R2 000 | 1   | R2 000.00         |
| Office printer        | R2 499 | 1   | R2 499.00         |
| <b>Subtotal</b>       |        |     | <b>R88 764.00</b> |
| <b>GRAND TOTAL</b>    |        |     |                   |
| <b>R34 721 604.00</b> |        |     |                   |

The estimated cost assumes that the building structures will be new designed and build structures rather than using an existing facility. The estimated total capital costs for the farmers supporting facility is R34 721 604.00. The cost of infrastructure development is R 22 695 200.00 which 65% of the grand total.

### 6.2. Production Cost

The production expenditure outlines the expenditure of the facility for one planting season assuming that it supports farmers occupying **total available land of 1 311 ha**. The production expenditure was estimated using production costs for the following vegetables:

- ❖ Butternut
- ❖ Green beans
- ❖ Tomato
- ❖ Spinach
- ❖ Onion
- ❖ Lettuce
- ❖ Green peas
- ❖ Carrots

The Table below estimates production expenditure on vegetables production inputs.

**Table 6.2: Production Expenditure**

| Production Input | Average Cost per Ha | Total Cost            |
|------------------|---------------------|-----------------------|
| Seeds/seedlings  | R6 113.00           | R8 013 948.00         |
| Fertilizer       | R2 476.00           | R3 246 342.00         |
| Herbicides       | R1 063.00           | R1 392 948.00         |
| Insecticides     | R245.00             | R321 550.00           |
| Fungicides       | R786.00             | R1 030 963.00         |
| <b>Total</b>     | <b>R10 683.00</b>   | <b>R14 005 752.00</b> |

The total production expenditure that is required by farmers is **R14 005 752.00** for each production cycle.

## SECTION 7: CONCLUSION

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Urban-Econ was appointed by Greater Tzaneen Local Municipality (LM) to develop a business case for a farmer facility aimed at supporting local farmers. The situation of the surrounding farming activities in the Greater Tzaneen area was assessed using surveys to collect information. It is common for farmers not to specialise on one commodity but farm in various products such as a combination of vegetables rather than specialising in cucumber only. It is also common for farmers to combine crop with livestock farming. The primary commodities produced by surveyed farmers are vegetables followed by mango and cattle.

The total available farming area is **1 311 ha** where only 56% (430 ha) is under production and 44% (300 ha) is not utilised for agricultural purposes. The survey indicates the need for planting inputs such as seeds, fertilizer, insecticides and irrigation. Mechanization support is also needed by the farmers on the surrounding areas of Greater Tzaneen. Other services that are of importance to the farmers are marketing, small business development training and agricultural extension services.

The Centre should be designed to assist farmers during the entire production process. The concept has been developed using the information and data. The concept outlines five specific aspects the Centre will focus on to ensure the improvement of quality and production levels of the commodities as well as improving the knowledge and skill level of farmers. The five aspects of the facility concept are; input support, mechanisation support, facilities, training and market intelligence.

The estimated total capital costs for the farmers supporting facility is **R34 721 604.00**. The estimated cost assumes that the building structures will be new designed and build structures rather than using an existing facility. Capital expenditure also includes machinery to be utilised for supporting farmers.

The total production expenditure that is required by vegetables farmers is **R14 005 752.00** for each production cycle for land size of 1 311 ha.