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Agwalla Hydroponics Farm Business Plan

Executive Summary

**Introduction**  
Agwalla Farm will be a project built around a highly successful businessman and the development and training of skilled and semi-skilled staff in the hydroponics and instant turf market. The project aim is to carry out intensive and high turnover production, off a small area, while providing work and leadership experience for local women.

The company is a combination of cutting edge, high quality, efficient food technology and production. It is committed to the improvement of taste in vegetables and excellent quality and nutritional value.

The company will provide education, experience and research in the hydroponic field. It has the experience and extensive knowledge of well-known grower Mike Shelly as a consultant.

This project will be KZN-based, and will supply vegetables for the national and international markets, and instant turf for the local market.

**Products**  
The 4 main crops to be grown will be instant turf, long life tomatoes, cucumbers, and coloured peppers.

Tomatoes: 4ha under plastic which will produce 2100 000 kgs per year  
Cucumbers: 1ha under plastic which will produce 205 000 kgs per year  
Peppers: 1ha under plastic which will produce 250 000 kgs per year  
Turf: 30ha in the open.

**Financial considerations**  
The company is seeking both short-term and long-term funding to finance the purchase of a new farm and development costs of the project.

This will cover startup expenses and first year loses. It is estimated that the company will begin to make a profit in year 2 of operations.

The project is expected to begin production within 8 months from start of the first tunnel being erected.

1.1 Objectives

The objective of this project is to establish an intensive farm, producing high-quality produce for both the national and international market year round.

1.2 Mission

Agwalla Farm is a KZN-based company with a two-fold mission:

* to produce high quality, nutritional, and flavourful vegetables for consumption in both local and international markets.
* to create opportunities for leadership and highly productive teamwork for local women who work on the farm.

The women working on the farm will be organized into intensive work groups, and each group will be paid incentives on production and performances, in addition to the standard wages.

1.3 Keys to Success

* Efficient production utilizing greenhouses.
* No existing projects of this magnitude in the KZN region.
* Experience in the vegetable industry goes back to 1996.

Company Summary

Agwalla Farm will be a partnership of successful businessmen developing a small farm into a highly productive hydroponics and instant turf project.

Hydroponics is the growing of high-quality vegetables in high-tech, multi-span greenhouses. The produce is grown in 15L bags with a medium used to support the root system. The plants are automatically fed nutrients through irrigation systems.

The plants are grown in the best suitable growing conditions, which allows each plant to produce the maximum fruit possible.

Instant turf will be grown out in open field production. The turf will be irrigated via overhead spray units, using the run-off fertilizer from the multispan tunnels.

This fertilizer is highly effective and will provide all the requirements the instant turf will require. The turf will be cut and sold by the square meter, and is harvested with a sod cutter.

The company will concentrate on the production of tomatoes, peppers and cucumbers in the tunnels, and in time will pursue more selective vegetables and the fresh cut flower market.

2.1 Company Ownership

Agwalla Farm is owned jointly by its two founders, one of whom will serve as the project manager.

2.2 Start-up Summary

The company is seeking to raise investment for the purpose of financing the acquisition of the vegetable farm, facilities modifications, multi-spans and equipment, and funding operating expenses.

**Facilities**

The operation will utilise :

* Six large greenhouses enclosing the vegetable area
* irrigation, fertilization, temperature control and water treatment devices
* outdoor production of instant lawn
* pack houses and washbay facilities
* business office building

An additional portion of the operation will be the growing of instant lawn. Local landscape operations have trouble with meeting the demands of instant turf supply, and the company has recognised the need in the market.

The company plans to supply the local nurseries and landscapers with top quality, premium garden lawn.

The largest portion of the start-up requirements is for purchase of the site and construction of the necessary buildings and infrastructure, including well-digging. These are listed below as long-term assets.

The start-up period is five months long, and includes construction and one and a half months for growing the first crops, to be sold beginning in July.

Products

Hydroponics is the production of vegetables in state-of-the-art, temperature-controlled, multi-span tunnels. The structures being used are richelle multi-spans, which come complete with computer temperature sensors, automatic opening and closing vents, automatic misting units and temperature controlled fans. The advantages of growing in high-tech tunnels are:

* faster, longer growth
* harvest labour reduced by 80%
* harvest time reduced, and by doing so:
* decrease loss in weight gain
* eliminate weight loss from shock
* allow greater yield per plant
* provide optimum temperature for plant growth

**Vegetables**  
Agwalla Farm’s first line of production will be tomatoes, peppers and cucumbers. The farm will have the capacity sufficient to produce in excess of 2 550 000 kg of vegetables per year.

**Instant lawn**  
The company’s outdoor horticultural aspects include the production of 30ha of instant lawn. The company will sell between 20 – 25ha per annum.

**Research and development**  
The company will seek contact with local and international companies in order to learn about and acquire new hybrids of vegetables that are hardier and grow faster in our local climate. These and other available species and systems will be constantly tracked.

In addition to the above, the company will seek contacts at universities and researchers that are involved in greens, and will continue the quest for the best flavoured, large, and firm vegetable throughout the year.

**Future product plans**  
In the future the company would like to explore the possibility of flower production. Agwalla Farm believes this to be a high revenue venture, which, if successful, could become our number one endeavour.

We are also considering the production of bananas. Currently there is a huge shortage of bananas, and the selling price has been above average for the past 2 years.

Market Analysis Summary

In an era of big-box food stores, when 4 major grocery chains control the purchase of vegetables, the proliferation of open air markets has come out of nowhere, giving more consumers an option to purchase fresh vegetables.

Such markets include retailers such as Fruit and Veg City and VegExpress. Agwalla Farm will not only supply the major supermarkets, but also the markets mentioned above.

With these trends in mind, Agwalla Farm will also concentrate on wholesale live vegetable markets that sell hydroponic produce, fresh farmers’ markets, and export to neighbouring states and international markets.

4.1 Market Segmentation

For the purposes of this plan, we are focusing on retail outlets and VegCity shops within 45 miles of our location.

4.2 Target Market Segment Strategy

The target customers include the major retail outlets and export markets for the vegetables.

The target customers for instant lawn include nursery and garden centres, landscapers, and private customers.

4.3 Industry Analysis

The hydroponic industry is still fairly new in the Nigerian market, in terms of research and the number of completely developed farms. The biggest negative is the start-up costs to erect a fully state-of-the-art project. Therefore, if a project is going to be developed, two major factors need to be taken into account.

Selected Markets. Due to high quality, vegetables must be sold retail outlets, etc. to retrieve highest price.  
Project size. The project must be able to supply produce all year round; if not, retail outlets will not be interested.

The Industry is still small, and therefore a project of this magnitude will create interest among all the major veg outlet markets.

4.3.1 Competition and Buying Patterns

Agwalla Farm aims to be the biggest growers of hydroponics in the KZN region. At present there are very few big growers, minimizing the competition.

The advantage of hydroponics on a large scale is the availability to produce vegetables all year round in large quantities. This immediately becomes a positive factor with major retail outlets and exporters.