

# CASE STUDY

## BLACKTHORN FELOANE HYDROPONICS



**NDA**

National  
Development  
Agency

### NDA Case Study in Agricultural Development



### Lessons Learned

Sources of water for irrigation should be clearly identified and water usage planned .

Projects should not be compelled to implement a project that they do not believe in .

Project members should measure risk and not fear making changes to specific objectives when changes are clearly warranted .

Keep it simple, as the simplest crop may actually be in high demand by customers and clients.

The Blackthorn hydroponics project was approved for funding by the National Development Agency ( NDA ) in February 2008. Situated in the community of Thaba Nchu , about 70 kilometres outside of Bloemfontein, the project provides employment for 14 direct beneficiaries with the aim to grow vegetables under six tunnels. The initial overall objective of the project was to establish a farming enterprise using hydroponics. An amount of R693 340, was granted to the project to achieve that purpose. Importantly, the key ingredient to farming operations was water. With the Free State being one of the driest provinces in South Africa, access to water would either make or break the project.

The project was supposed to grow marketable produce such as tomatoes and peppers. With an ability to grow these types of vegetables all year round under tunnels providing a controlled environment, the success of the project was all but guaranteed. Being able to supply the local retailers with tomatoes and peppers in the winter month gave assurance of captured clientele. Vegetables produced locally could be sold at a lower price due to the absence of transportation cost.

As part of a capacity building programme, the project members received training from the Department of Agriculture to develop agricultural skills. The Department of Social Development contributed an additional amount of R400,000.00 for the first two tunnels. A portion of tribal land was allocated to the project members. An introduction was made and linkages established with the local produce market in order that there would be a ready market for produce grown. More than adequate support was provided to the project to engage in hydroponics farming.

The expectation was that the project would be sustainable and have a positive impact. The reality, however, was that with water being scarce and the water supply being limited, there was little possibility of the hydroponics project being successful in its present form.



### Project Contact Details

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The Blackthorn Feloane Hydroponics project was funded a total amount of R693,340.00 by the National Development Agency

## Members of Blackthorn refuse to be Defeated ...



Viewing the project from a distance and recognizing its competitive advantage, it would appear that the project has everything going for it. The expectation was that the project would be sustainable and have impact. The reality, however, was that with water being scarce and the water supply being limited, there was little possibility of the hydroponics project being successful in its present form.

Blackthorn made a conscious decision to revert back to the conventional way of farming. Initiative was taken and a decision made to go against what was originally planned. Rather than growing plants in substrates with hydroponic nutrients, it was decided to grow vegetables planted directly in the ground and a bucket system would be used to irrigate and water plants. Buckets of water would be transported and used for irrigating plants. Undoubtedly, a bucket system was labour intensive but there was a realisation that this was necessary in order to sustain the project.

*Never lose faith;  
Never lose hope;  
and Never become  
weak .*

The Blackthorn project had the initial objective of using a high tech approach to growing hydroponics produce. From its inception, the project was never able to grow a diverse mix of produce. Its primary produce had always been green leafy spinach. Amazingly, the project had been able to sustain itself by implementing a simple farming approach and growing a simple produce that was in high demand in the local township, informal settlement and local hypermarket. A small patch of land has been devoted to growing onions as well but spinach will remain the primary cash crop. Tunnels meant for hydroponics now serve as greenhouses. The project is experimenting with growing tomatoes that can be sold in the winter months.

Blackthorn has shown marketing ability in developing a glossy brochure that highlights the entity as an up and coming agribusiness. A new vehicle was purchased to deliver produce to the nearby Bloemfontein produce market and to deliver produce to local clients. Nevertheless, efficient marketing and a branded vehicle is of little consequence without a definitive source of water. Consequently, two markers have been placed where water has been identified and a borehole will be drilled to enable the project to be less dependent on water being provided by the local municipality.

