

THE EBENHAEZER SEED PRODUCTION PROJECT AS A MEANS OF AIDING RESOURCE-CONSTRAINED FARMERS TO ENTER COMMERCIAL PRODUCTION

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1. PROJECT OVERVIEW

1.1 Location

Ebenhaezer is situated on the arid West Coast of South Africa on the banks of the Olifants River. The town is about 40 km North West of Vredendal and about 10 km from the sea. (31° 35' 23,18" S 18° 14' 22,14" E).

1.2 Land Ownership and Hectarage

Ebenhaezer is one of the Act 9 areas of the Western Cape. The land is currently held in Trust by the Minister, but for all practical purposes the land belongs to the community. The total size of Ebenhaezer is 18 300 ha. This is mainly arid grazing land but originally 152 farmers received 1.8 ha irrigation land each, as well. Ebenhaezer thus has a total of 257 ha water rights from the Olifants River Canal System. Each farmer "owns" a plot of about 1.8 ha with irrigation water rights. Water rights from the Canal System constitute 12200 m³ water per hectare per year. Ownership of each 1.8 ha plot is not in dispute but the owners do not have title deeds and land can be rented but cannot be sold or used as collateral.

1.3 Production Activity

Traditionally the main crops produced under irrigation in Ebenhaezer are Lucerne, dry beans, coriander and small plantings of vegetables. All these crops are not very profitable when relatively small areas are cultivated. Water scarcity during the mid summer months is a problem and it limits the production possibilities.

1.4 Participant's Profile

Three active irrigation farmers were targeted for the project. The main selection criteria were that the farmers should display active involvement in agriculture and a positive approach to their business. One farmer was educated up to grade 8, one up to grade 10 and one farmer received tertiary education (teacher). All the farmers were operating a small family farming operation on 1.8 ha. Before the start of the project the farmers mostly did all the work themselves employing seasonal labour when required.

1.5 Support Needed

In the rural area of Ebenhaezer resource-constrained farmers have been farming for more than fifty years. Despite this commercial production was extremely limited. The reasons for this situation include small pieces of land, lack of capital, lack of commercial farming experience, lack of financial management expertise, lack of complete ownership of land etc. Furthermore the water distribution system in Ebenhaezer and the control thereof has a lot of shortcomings causing water shortages especially during the mid summer months. The challenge was to find a crop that could be produced on a small piece of land profitably. Not only per hectare but the income should be sufficient so that the venture would make economic sense on a small piece of land. Production should preferably occur during the winter months.

Adjacent to Ebenhaezer are many commercial irrigation farms with an average size of about 24 ha. A number of these commercial farmers have been producing cauliflower and broccoli seed for Syngenta seed from March to November. This is a high value crop and the climate of the region is well suited to the crop. An advantage of seed production is that a contract is awarded and the price per kilogram seed is fixed at the beginning of the season. The producer carries no price risk except the exchange rate as producers are paid in Euro. Only production risk is carried by the producer. Transport of the product is easy as the seed is delivered to Syngenta in Lutzville.

One of the problems with the production of cauliflower seed is that many different cultivars are produced and each land needs to be isolated from the next by at least 3km. This meant that if producers in Ebenhaeser produced on open fields they would need to be 3km from one another limiting the number of producers. If they produced the same cultivar it would not pose a problem. Production under net structures that are bee proof was also a solution. This appeared to be the preferred solution as a high value crop could be produced on a small piece of land. As farmers only have access to 1.8 ha it meant that rotational cropping would be possible as the size of the net structures were 1500 m². A resting period of 3 years is advised for the production of cauliflower seed. Farmers did not have enough capital to purchase the net structures, irrigations system, inputs etc. Syngenta preferred that producers utilize a drip irrigation system as it offered many advantages over flood irrigation. The production of cauliflower seed requires a lot of working capital. Currently production costs amounts to about R90 000 per ha. Planting is during March and harvest takes place during late November. Payment for the crop is usually received during January/February of the next year. This meant that farmers needed to spend a lot of working capital before income was received.

One of the major stumbling blocks to overcome was access to a seed contract from the international seed company. The seed produced is exported to overseas existing markets by Syngenta. Syngenta is therefore very careful with the selection of their producers. Some years prior the start of the project Syngenta had a very negative experience with cauliflower seed production on a communal project in Ebenhaeser. This created a barrier.

2. STAKEHOLDER INVOLVEMENT AND ROLES

The project was supported by the Department of Agriculture: WC through the program Farmer Support and Development. The extension officer responsible for the creation and execution of the project was Marius du Randt from the Vredendal Office.

The other main stakeholder was Syngenta Seed, the international seed company. They supplied the contract for production to the farmers and purchased and marketed the seed. Syngenta has extension personnel who assist all the farmers who produce seed for them under contract. This includes the commercial farmers. Their personnel played an important and active role in assisting the farmers with technical knowledge about the production of cauliflower seed. Syngenta also supplied some equipment needed for planting and harvesting.

3. EXTENSION APPROACH

Taking into account the situation and possible solution that a successful seed project would offer, the Ebenhaeser Seed Project was formulated with the following objectives:

- Secure a contract for one small farmer to produce cauliflower seed for Syngenta.
- Identify and motivate an individual producer to produce seed under contract for Syngenta.
- Ensure that a direct link exist between the effort of the producer and the income that is generated by him.
- Assist the producer with an intensive extension program based on regular visits, personal interaction and demonstrations.
- Provide the producer (project) with the required net structure, drip irrigations system and production inputs for year 1. Production inputs include soil preparation, fertilization, pest and disease control chemicals, bees, harvesting equipment and transport.
- Ensure that the producer understand that successful production is of utmost importance for future production as well as the transfer of the capital goods to him.
- Select and motivate a second producer for seed production during year 2.

- Negotiate a contract for the second producer with Syngenta.
- Repeat the objectives for year 2 and ensure that both producers are successful.
- Select and motivate a third producer for seed production during year 3.
- Negotiate a contract for the third producer with Syngenta.
- Repeat the objectives for year 3 and ensure that all three producers are successful.
- Establish a centre of success in agriculture creating interest and aspirations among other farmers in Ebenhaezer.
- Establish at least 3 commercial seed producing farmers in Ebenhaezer.

The extension approach was based on intensive regular visits. The Syngenta employees also visited producers regularly and supplied technical advice. They were Mr. Oubaas Kersop and Mr. Francois Hugo. The farmers were supplied with the irrigation systems and net structures and it was installed by contractors. Extension actions included the supply of fertilizer programs, crop protection programs, irrigation programs, budgets and general program planning. The extension officer was present during planting, crop manipulation, crop protection, irrigation, fertilizer application, pollination, harvesting and threshing. Actions were discussed and it was ensured that producers understood the different management actions. Planning for the coming year was done together. The project stretched from 2005 to 2007.

4. RESULTS

By negotiations with the seed company a contract was awarded to one farmer in the first year. The support of the Department of Agriculture to the farmer, Mr. N le Roux, was set as a prerequisite for the awarding of the contract. Mr. Le Roux was successful with production in an open field in the first year. The quantity and quality of the seed was acceptable to Syngenta. A net structure was not needed during the first year as the field was isolated.

During the second year a second producer was awarded a contract and Mr. Le Roux and J Love produced cauliflower seed under a shade netting structure on 3000 m². The two producers were now working together as Mr. Love had access to more land than Mr. Le Roux. The Le Roux land often gets flooded during the winter when the river is in flood. Production under net with a drip irrigation system was more challenging, especially disease control. Although a bumper crop was not harvested at the end of 2006, good quality seed was produced and the work ethic of the farmers helped secure a third set of contracts for 2007. During 2007 another farmer Mr. P Love was awarded a contract so that three farmers now produced seed on 4500 m² under netting. At the end of 2007 a bumper crop was harvested with the farmers producing far in excess of what their contracts required. A firm relation between the farmers and the seed company had now been established and during 2008 the three farmers produced successfully for Syngenta again. During 2009 the farmers were awarded not only contracts to produce under net but also on 3 ha open fields. This could be done as the same cultivar was produced on open fields by all three farmers. The 2009 season was excellent and the farmers produced much more than their contracts. Syngenta is happy with the quality of the seed. Since 2008 the farmers have been negotiating their contracts with Syngenta without the assistance of the Department, illustrating the independence of the farmers.

The farmers have since expanded their businesses by producing onion seedlings, spring onion seed, dry bean seed and carrot seed. They are renting land in order to do this. The expansion of farming activities in Ebenhaezer is placing stress on the current systems, especially the water supply system which is not managed well. A lot of repairs and maintenance or redesign also needs to be done on the system.

The three farmers now employ 5 people on a permanent basis with many seasonal labourers that work for them during the season. Total labour per hectare of cauliflower seed, excluding management, amounts to about 300 labour days per season.

In essence the Department supported the farmers with the net structures, drip irrigation systems and production inputs excluding labour for the first year. The farmers provided labour at their own expense. From the second year running costs were for the account of the farmers. The farmers were supported with extension services throughout the 3 years. In total for 3 years running the Department of Agriculture: WC spent close to R336 000 on the project mostly in the

form of capital costs. For the 2007 season the three farmers earned a turnover in excess of R280 000. The turnover for the 2009 season was a little more than R700 000.

The success of the seed farmers is highly noticed and debated in the Ebenhaezer community. A number of new farmers have approached the Department for assistance in order to start seed production or other ventures. We have not been able to secure funding for further expansion of seed production in Ebenhaezer. It has probably been a long time since the community has seen farmers bettering their circumstances through agricultural production. Unfortunately the successful farmers also receive a lot of criticism from some community members who see them as “particular favourites” of the Department. The assumption is that their success has more to do with the assistance they received than with hard work. They are also seen as people who want to keep everything to themselves. This creates a considerable amount of stress in the community.

5. KEY LESSONS LEARNED

- Debt should not be incurred during the first production season when a new venture is embarked upon with small farmers.
- Government should fund individual farmers.
- The selection of the candidates for a new venture is crucial.
- The project should make economic sense and be sustainable over the long term.
- It is of great assistance if the extension officer has thorough knowledge and practical experience of the crop.
- The involvement of the private sector can be very positive.
- Working with an individual farmer is a million times easier than working with a group.
- Group responsibility does not exist.
- Ensure that there is a direct link between the efforts of the individual and the income that he will receive.
- A good harvest and reasonable profit is a great motivator for producers.
- Build a solution for specific circumstances.
- Produce crops that are suitable for the climate and agricultural resources of the region.
- First find the market and then produce.
- It is better to do a small thing well than to attempt big things without the ability to do it very well.
- With the correct assistance and resources emerging farmers can produce as well as any commercial farmer.
- When emerging farmers develop they have the same needs and problems as commercial farmers. Their businesses are subject to similar economic forces.